
CHAPTER 6

Reducing road casualties

Introduction

6.1 This chapter explains our strategy to deliver the LTP objective of:

Reducing road casualties through local safety schemes and speed management activities as well as continuing road safety education, training and publicity campaigns.

6.2 It includes:

- An overview of our strategy
- A summary of the national context
- An assessment of the extent of the problem and the progress made during the first LTP period
- An outline of the means of reducing road casualties
- Our strategy for providing a safer environment
- Our strategy for managing speed
- Our strategy for improving safety for vulnerable road users
- Our strategy for improving safety for people in the more disadvantaged communities
- Our strategy to encourage safer driving
- The performance indicators we will use to measure and monitor progress
- A summary of the contribution that our road safety strategy will make to our other LTP objectives and to quality of life issues.

Overview of our road safety strategy

6.3 We place a continuing high priority on improving road safety and this is reflected in the Leicestershire Community Strategy, our Medium Term Corporate Strategy and our Local Public Service Agreement (PSA) with the Government in which we have successfully achieved a greater reduction in killed and seriously injured road casualties (KSIs) than the national target.

6.4 Our strategy is set in the context of the national strategy and has been informed by the monitoring and review of that strategy. It focuses on tackling the causes of all types and severity of road casualties so that our roads are safer for everyone. The strategy has developed continuously as casualty figures and trends are monitored both in Leicestershire and nationally. It has also been informed by the progress we have made in LTP1, our experience of what has been worked well and what has not worked so well, and how our progress compares with that of other comparable authorities.

6.5 The government identified three national performance indicators, all of which were included in LTP1. These are for all KSI casualties, child KSIs and slight casualties. For our PSA for all KSIs on the County Council's own roads, and for slight casualties, we set more stretching targets than the Government's. We also set a local target for pedestrian and cyclist KSIs which was in line with the overall government target.

6.6 In 2004 we were on track to achieve all our targets and in many cases were well ahead of trajectory, and our child KSIs have fallen dramatically. We have performed exceptionally well compared with comparable authorities and now have one of the lowest casualty rates per 100,000 population in all categories of casualties where national comparisons can be made.

6.7 Within this overall picture there are however a number of areas of continuing and increasing concern, both nationally and in Leicestershire, which we address in our strategy. Fatal casualties are not falling as much as KSIs, motorcycle KSIs now account for 20% of the total, and rural casualties are not falling at the same rate as urban casualties.

6.8 Our strategy for the next five years has been developed to build on our experience and progress so far and sets out how we will achieve our objective through:

- A safer road environment
- Lower and more appropriate traffic speed
- Improved safety for vulnerable road users
- Improved safety for people in the more disadvantaged communities
- Better driver behaviour and skills.

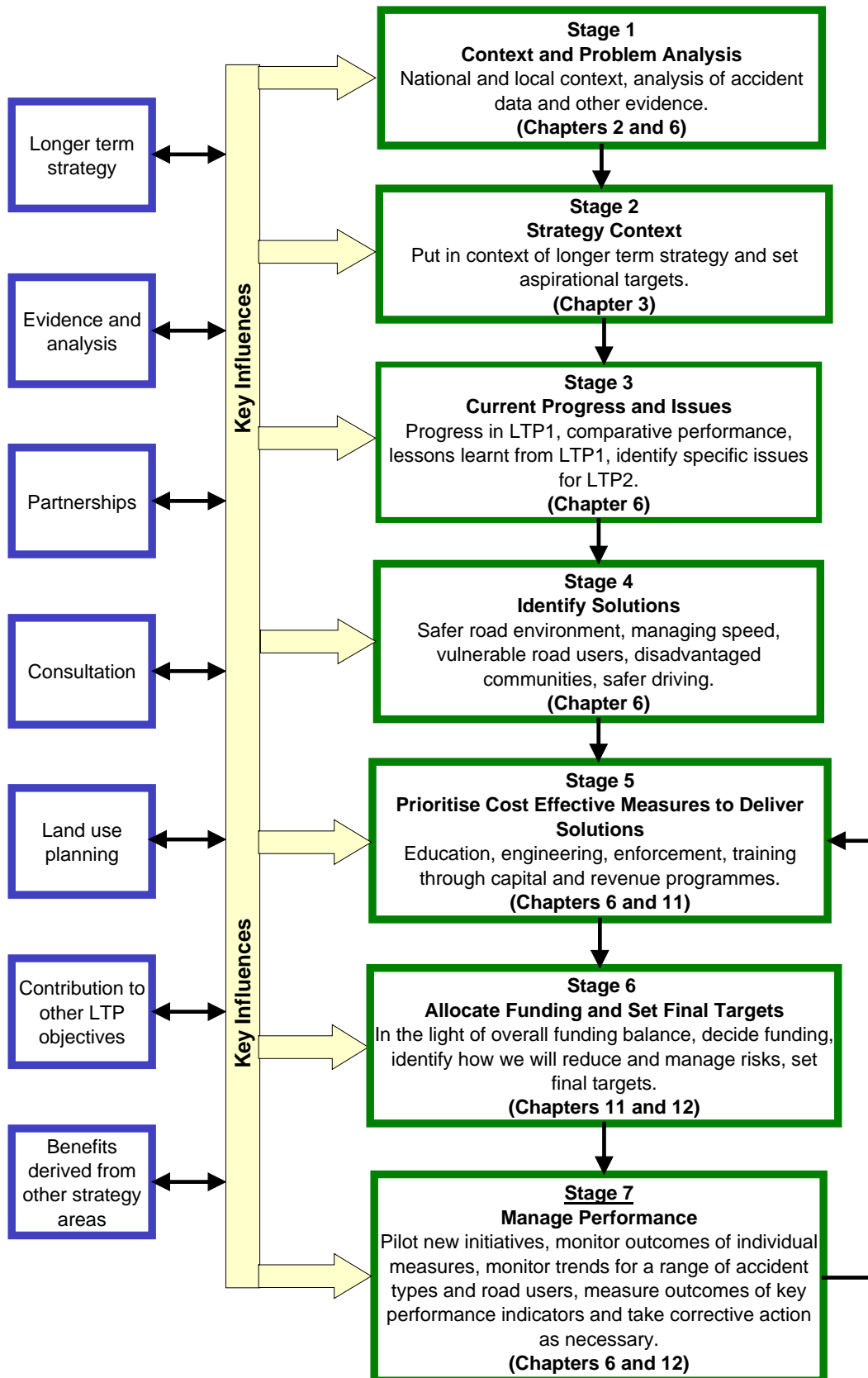
Chapter 11 draws together the measures for safer roads with those needed to deliver other objectives into a prioritised capital and revenue programme.

6.9 The safety strategy shows how we work with our partners, particularly through the Leicester, Leicestershire and Rutland Road Safety Partnership, to deliver our strategy, and we explain the increasing importance we attach to our substantial revenue funded education, training and publicity work.

6.10 We also explain how we ensure best value by continually monitoring the effectiveness of our measures, by seeking additional resources to supplement our own and by introducing new and innovative techniques. Finally we explain how we will monitor and manage our performance through a range of performance indicators and show how our road safety strategy will contribute to the achievement of our other LTP objectives and help improve other aspects of quality of life.

6.11 The overall approach we have adopted in the development and delivery of our road safety strategy is shown in Figure 6.1.

Figure 6.1 Development and delivery of our reducing road casualties strategy



National context

6.12 In March 2000 the Government published its road safety strategy “Tomorrow’s Roads - Safer for Everyone”. This outlined the significant progress already made in reducing road casualties despite substantial growth in traffic. Since the initial target was set in 1987, to reduce road casualties by one-third by 2000, road deaths had fallen by 39% and serious injuries by 45%. However, there had been no such decline in slight injuries. In light of this, new targets were set to be achieved by 2010. Compared with the average for 1994-98, these called for:

- A further 40% reduction in the number of people killed or seriously injured
- A further 50% reduction in the number of children killed or seriously injured
- A 10% reduction in the slight casualty rate expressed as the number of people slightly injured per 100 million vehicle kilometres.

6.13 When setting these targets the government expressed particular concern about the country’s poor child pedestrian record. It also made clear that many partners, including local authorities, would need to work together to achieve these challenging targets.

6.14 The strategy contained the following ten main themes:

- Safer for children
- Safer drivers – training and testing
- Safer drivers – drink, drugs, drowsiness
- Safer infrastructure
- Safer speeds
- Safer vehicles
- Safer motorcycling
- Safer pedestrians, cyclists and horse riders
- Better enforcement
- Promoting safer road use.

6.15 In 2002, DfT’s road safety PSA objective was enhanced to address the significantly higher number of road accident casualties that occur in disadvantaged areas. Following this, in 2004, DfT published the first three year review of its road safety strategy. This concluded that good progress had been made towards the national targets and that they remained appropriate, although it highlighted the fact that casualties were falling more slowly in rural areas and that motorcyclists continued to be disproportionately represented in casualty numbers. It highlighted a number of notable successes relevant to local authority strategies including the continuing effectiveness of local safety schemes and the introduction of safety cameras. It did however identify areas requiring continuing attention including:

- The levelling off of the reduction in road accident fatalities
- Driver or rider behaviour which is contributing to both car and motorcyclist casualties
- Motorcycle casualties
- The need to engage more employers to develop at work related road safety policies for employees who drive or ride at work
- Excessive or inappropriate speed, particularly in rural areas.

Review of current progress

6.16 We maintain a comprehensive database of personal injury accidents on behalf of the Leicester, Leicestershire and Rutland Road Safety Partnership. This database is used extensively to monitor casualty trends and to target the effective use of resources to reduce road casualties, not only for the programme of local safety schemes but also across the wider programme, including road maintenance. The graphs in figures 6.2 to 6.6 show the progress we have made against our LTP1 targets for:

- KSIs (All roads)
- KSIs (excluding motorways and trunk roads)
- Child KSIs
- Pedestrians and cyclists KSIs
- Slight casualties.

6.17 For consistency with LTP2, all figures are for the county as a whole, not just the more restricted LTP1 area (which excluded Central Leicestershire). Because road casualties can fluctuate significantly year on year, the graphs and summary of our progress which follow have used three year rolling averages to provide a more robust assessment of the position. For example, the position in 2004, which is the latest year for which casualty figures are available nationally, and represents the progress made in the first four years of LTP1, is taken from the average of 2003-2005. The vertical scale for each of the graphs has been selected so that the gradients of the graphs can be compared. In this way, if one category of casualties has experienced a greater percentage change than another, it will be evident from the relative gradients of the graphs.

Figure 6.2 Killed and seriously injured casualties – all roads

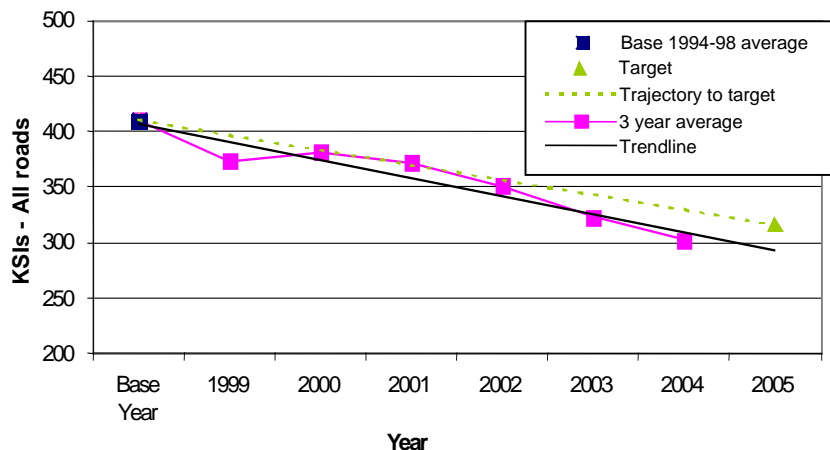


Figure 6.3 Killed and seriously injured casualties – county roads

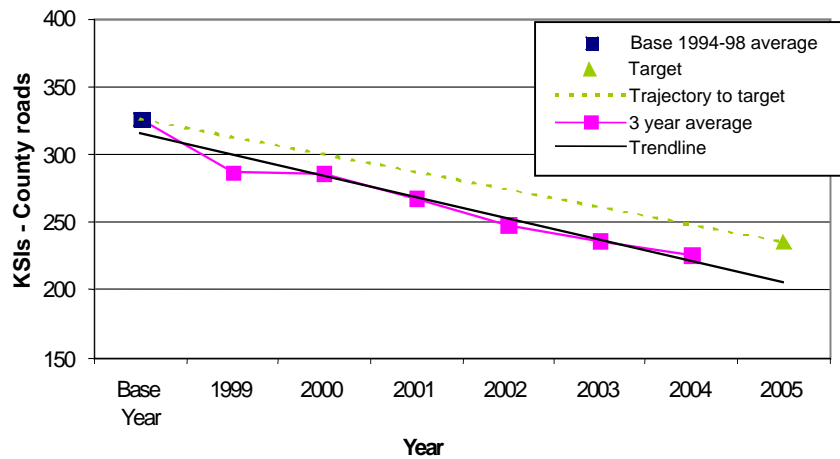


Figure 6.4 Child killed and seriously injured casualties

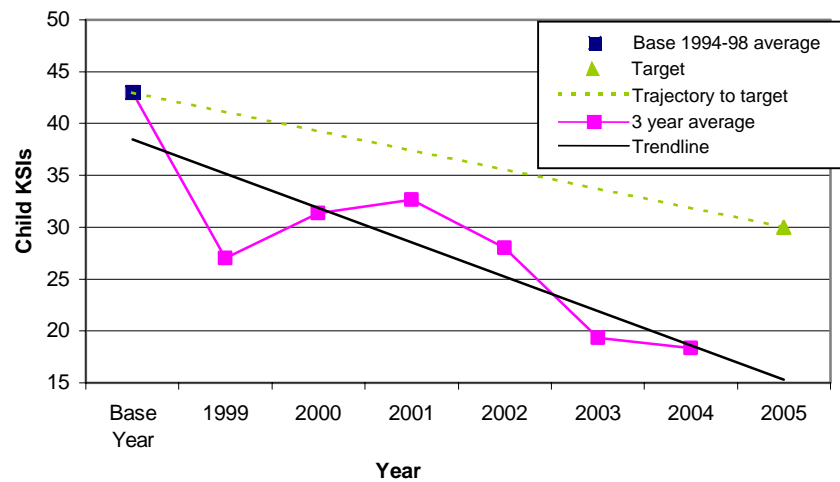


Figure 6.5 Pedestrian and cycle killed and seriously injured casualties

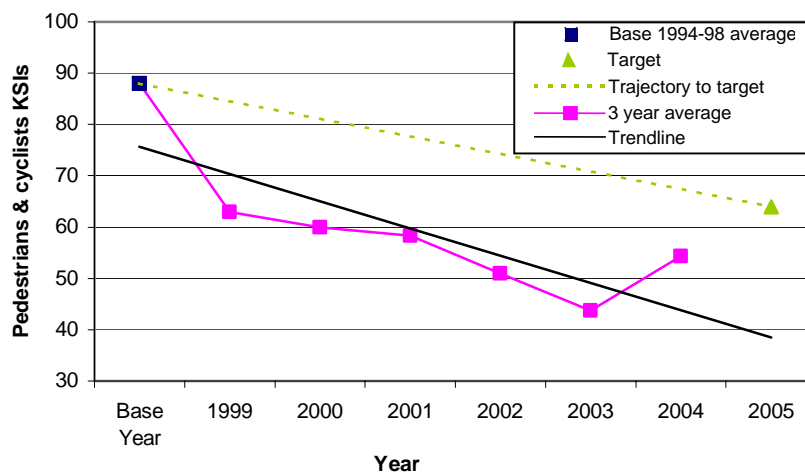
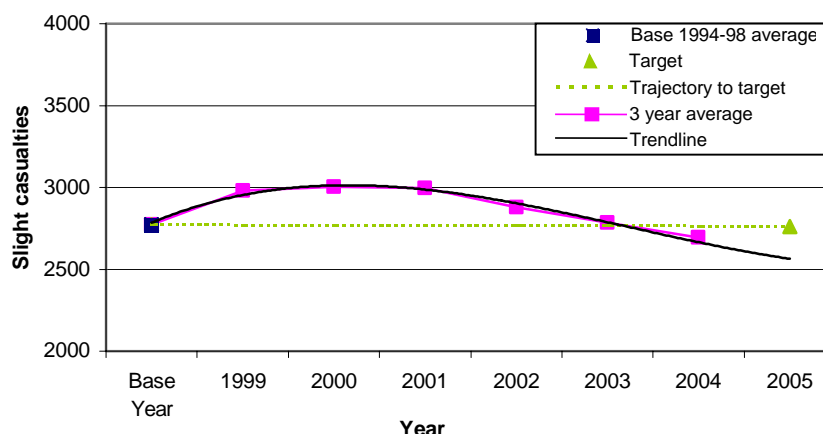


Figure 6.6 Slight casualties



6.18 By 2004 the number of KSIs had fallen from a 1994-98 average of 410 to 298, a reduction of 27%. This is well ahead of our target reduction of 20% by 2004 and leaves us well on track to achieve our target of a 40% reduction by 2010. It also leaves Leicestershire with a KSI casualty rate per 100,000 population which is the second lowest of 13 comparable authorities used by the Audit Commission to benchmark performance, and 30% less than the average of those authorities. Closer to home, we now have a rate only a little over half that of the two other shire counties in the Three Cities sub area, despite having more traffic in terms of vehicle kilometres travelled per head of population. This overall success, however, masks considerable variations across the network as a whole and there remain specific casualty problems of continuing concern.

6.19 KSI casualties on the motorways in Leicestershire have actually risen by 16% from the 1994-98 average whereas nationally there has been a reduction of 14%. When combined with Leicestershire's trunk roads, the reduction over the motorway and trunk road network as a whole was only 14%. In contrast, the reduction over that part of the network under our control was 31%. This followed our PSA with the Government in which we agreed to set a more demanding target for the reduction in KSI casualties on that part of the network for which we were the highway authority. The target was to achieve a 28% reduction from the 1994-98 average by 2005: we anticipate achieving a reduction of 36%.

6.20 We are clearly well on track to achieve our current stretched target of a 40% reduction by 2008, two years earlier than the government's target. Within this overall success, as is the case nationally, casualties have fallen more on urban roads than on rural roads and the ratio of fatal to KSI casualties on rural roads is twice that on urban roads. Motorcycle KSIs in Leicestershire have remained at the 1994-98 level compared with a 3% rise nationally. This is against a backdrop of a 33% rise in motorcycle mileage. As a result, motorcycle KSI casualties now represent about 20% of all KSI casualties both nationally and in Leicestershire. Although our motorcycle casualty rate per 100,000 population is still 30% below the average of our 13 comparable authorities, we have already responded to these trends by placing a greater emphasis within our road safety strategy on rural route assessments focussed on those routes with a high casualty severity ratio and by increasing our education, training and publicity activities to tackle the high incidence of motorcycle KSIs.

6.21 In line with the national target, during LTP1 we sought a greater reduction in child KSIs both through an extensive programme of road safety education and training and through a programme of safer routes to school, increasingly in association with schools developing travel plans to encourage more walking and cycling. This has contributed to a 58% reduction in child KSIs from the 1994-98 average which is well beyond our target of 25%. There has been a similar reduction of 58% in child pedestrian and cyclists KSIs to an average of only 13 in the last three years. This has resulted in Leicestershire having one of the lowest rates of child pedestrian casualties in the country, with a rate per 100,000 population half the average of the 13 comparable authorities and less than 30% of the average of the two other shire counties in the Three Cities sub area. This gives encouragement that our work, particularly on child road safety education and training, is reaping considerable rewards in casualty reduction.

6.22 During LTP1 we also set out through our road safety strategy to ensure that pedestrian and cyclist KSIs were reduced by at least the same amount as all KSIs. This was to support the wider transport strategies to encourage a move away from car travel to walking and cycling for shorter journeys. The average of the last three years is a very encouraging 58% below the 1994-98 average and we will endeavour to continue this trend through the LTP2 period.

6.23 Slight casualties have reduced by 3% from the 1994-98 average. Whilst we are ahead of both our local and the national target to reduce the rate of slight casualties by 10% by 2010, this does not reflect locally the national reduction in slight casualties which has been about 9% to date. However, there has been a consistent year on year reduction since 2000 with an overall 13% reduction in these five years. Our road safety strategy needs to build on this more recent success to maintain a downward trend in slight casualties.

6.24 Table 6.1 summaries the progress outlined above that we have made towards our LTP1 road safety targets. As stated earlier, these targets reflect the national targets, with the exception of KSIs on County Council roads and slight casualties on all roads, both of which were made more stretching than the government's targets.

Table 6.1 Summary of progress against local safety targets

| Summary of Progress Against Local Safety Targets | | | |
|--|-----------------------------------|-------------|-----------------|
| Target description | 1994-98 Average base line figures | 2004 Target | 2003-05 Average |
| KSI casualties | 410 | 329 | 302 |
| KSI casualties (county roads only) | 326 | 248 | 226 |
| KSI children | 43 | 32 | 18 |
| Slight casualties | 2772 | 2763 | 2696 |
| KSI pedestrians and cyclists | 88 | 67 | 54 |

Means of improvement

6.25 As with many transport issues, we need to continue to tackle road safety issues in a holistic way to maximise the benefits of the individual components in the road safety programme and to maximise the road safety benefits of the wider transport strategy.

6.26 The three Es – education, engineering and enforcement - combined with road safety training, are important components of our road safety strategy and are used in combination to:

- Provide a safer road environment
- Manage speed
- Improve safety for vulnerable road users
- Improve safety for people in disadvantaged communities
- Encourage safer driving.

6.27 In developing and implementing the strategy, we make full use of the accident database and share best practice both nationally and locally.

6.28 The County Council is a member of the Leicester, Leicestershire and Rutland Road Safety Partnership, which includes, as well as the three local highway authorities, the Leicestershire Constabulary, the Leicestershire Health Authority and the Highways Agency. This partnership, as well as facilitating the sharing of best practice, operates the safety camera scheme and acts as the co-ordinating body for the activities of all partners across the police force area.

6.29 Additionally, we have identified a range of activities needed to deliver the joint health priorities of ourselves and the primary care trusts, where the work of the different bodies together can deliver improved performance. One of the priorities is accident prevention, and we have prepared action plans to develop and co-ordinate work programmes for this.

Providing a safer road environment

6.30 We will continue to implement a programme of local road safety schemes, based on an analysis of accident data, to provide a safer road environment.

6.31 Although the primary cause of most road accidents is driver behaviour, the design and layout of roads and footways is critical to achieving a safe road environment. There are many national standards applicable to road layout and design where safety is the main objective. Infrastructure design, traffic regulation and control, highway maintenance and access to new development all have a part to play. However, much of the existing road network does not meet current standards for new roads. Where there is evidence of a particular safety problem, or where changes to the environment can contribute to influencing driver behaviour or improving safety for pedestrians and cyclists, we will continue to make cost-effective changes to the road environment.

Review of casualty reduction programme

6.32 As part of our PSA action plan, in 2003 we carried out a comprehensive review of our casualty reduction programme. Its objective was to ensure that we continued to build on casualty reduction achievements, using the most cost-effective and efficient methods to reduce road casualties, and learning from best practice elsewhere. A number of recommendations from this review have fed into our road safety strategy, in particular:

- Wider use of accident data to inform the development and implementation of the wider transport programme, particularly road maintenance, to maximise casualty benefits from that programme
- Improved use of the accident database to inform and develop a wider range of local safety schemes
- Organisational changes to provide an increased focus on casualty reduction schemes to maintain and if possible increase the rate of return on road safety capital investment
- Improved monitoring techniques to assess and learn from the effectiveness of schemes implemented in the programme.

6.33 In the past, our programme of local safety schemes has focussed largely on an analysis of clusters of accidents, and treatments to address issues identified through well-established techniques. Our monitoring of the effectiveness of these schemes during the early part of LTP1 (where sufficient data is available following completion of schemes) has shown that our spend of about £3 million has achieved an annual benefit of nearly £7 million per year, an annual rate of return of about 230%. However, as casualty numbers have reduced, particularly KSIs, and a greater emphasis has been needed on reducing fatal, motorcycle and child casualties, we have adopted a wider range of techniques, including:

- A continuation of cluster site analysis and treatment
- Route analysis and treatment, prioritising investment on those routes with high severity ratios and significant motorcycle casualties. Treatment tackles specific identified accident locations, provides an environment with consistent speed limits and road safety features that drivers recognise and respond to, and addresses feedback from motorcyclists on problems they face on the route
- A wide-ranging analysis of the accident database to identify cost-effective mass action treatments, for instance high skid resistance surfacing, street lighting and bend warning signs
- Urban area-wide investigation and treatment focussing on those areas with a concentration of accidents involving a high proportion of pedestrian and cycle casualties, particularly children. The improvements tackle both dispersed and clustered accidents in a comprehensive package of measures.

6.34 To achieve value for money from this programme, schemes are prioritised on a predicted rate of return both within and between the different programmes. We assess scheme performance to ensure that predicted accident savings are achieved. If this is not the case, lessons are learnt to maximise returns from future investment.

Trunk roads and motorways

6.35 As explained under our review of current progress, the fall in KSIs on trunk roads and motorways has been significantly less than on the network as a whole and they have actually risen on motorways from the 1994-98 average. Whilst it is difficult to be clear as to the causes of this, it will undoubtedly be due in part to the increasingly congested conditions on the M1. Elsewhere, traffic flows on the older section of the A46 north of Leicester have risen by about 70% since the opening of the Leicester Western Bypass in the mid 1990s and during this time both KSI and slight casualties have doubled on this road.

6.36 The motorway widening proposals will not be delivered in the LTP2 period. Therefore, whilst accepting that the Highways Agency must prioritise all its work on a national basis, we will work with them, both directly and within the Road Safety Partnership, to seek the casualty reductions that will be necessary if we are to get close to our initial aspirational target. We will also take the opportunities now open to us to take any necessary direct action on the recently detrunked A6 and A47 routes.

Safety audits

6.37 It is important to ensure that all our transport improvement schemes, whether directed towards road safety or other benefits, do not unintentionally add to accident dangers for road users. To that end we use a three-stage safety audit system for all such schemes, administered by staff acting independently of those responsible for scheme design and construction. For all but the smallest schemes, audit takes place at the preliminary design stage, again when the design is complete, and again following construction. Any necessary remedial action is taken at each stage.

The wider programme

6.38 Other transport improvement schemes can often produce valuable road safety benefits, even if safety enhancement is not the main motivation for undertaking the investment. We evaluate all improvement and maintenance schemes to ensure that, in deciding priorities and in our design of those schemes, we look at their scope for delivering wider benefits, particularly in road safety.

6.39 Other measures which will help to provide a safer road environment include:

- The appropriate use of high skid resistant surfaces and high polished stone value chippings in both surface dressing and new road surfaces
- Our work under our network management duty to improve safety at road works
- Our work to improve accessibility and community safety, particularly improved pedestrian and cycle links and community safety lighting.

6.40 We also have a large team of people working on the development and application of our land use policies with the District councils, both through the local development framework process and in our advice to them on individual planning applications. As well as seeking to reduce the amount of car travel resulting from new developments, road safety is a specific and major consideration in the location and more particularly the detailed layout and access arrangements for new developments. This work has undoubtedly contributed significantly to our progress towards our casualty reduction targets.

Managing speed

6.41 We will continue to implement a speed management strategy to reduce the incidence of excessive or inappropriate speed in road accidents.

6.42 Excessive or inappropriate speed contributes to about 30% of road traffic casualties and this makes speed management a vital tool in our overall casualty reduction strategy. We will implement a range of measures as set out below to encourage driving at speeds appropriate to the road environment.

Safety camera scheme

6.43 The safety camera scheme was introduced by the Leicester, Leicestershire and Rutland Road Safety Partnership in 2002. Through the scheme we currently enforce speed limits at 53 sites within the county where there is a combination of road casualties and excessive speed. The latest figures for the enforcement sites show a 33% reduction in casualty accidents and a 71% reduction in KSIs in the period following introduction, compared with the three year period before. This compares with 29% and 55% reduction respectively a year ago. This reflects the increasing effectiveness of the scheme, resulting in part from the comprehensive programme of communications and public relations work carried out by the County Council on behalf of the partnership to enhance the road safety message that excessive speed is unacceptable.



6.44 We will keep existing and potential new camera sites under continuous review to ensure that cameras are used only at places where they will be most effective in reducing road casualties. Much work has already been done to increase the effectiveness of those few sites not achieving the benefits realised elsewhere. In particular we have recently reinforced five of the less effective sites with vehicle activated speed limit signs and this has already resulted in a further 10% reduction in speed.

6.45 We recognised that we could achieve maximum impact and exposure in this area of work by working in collaboration with our counterparts throughout the Midlands. We therefore enlisted the help of Warwickshire County Council and the West Midlands to form the Midlands Safety Camera Partnership, and this has now grown to eight members across the East and West Midlands. This approach is unique within the national safety camera scheme and was born out of a shared commitment to using education, advertising and publicity to its greatest effect and to achieving best possible results from limited budgets. The partnerships involved believe, like us, that effective communication and publicity underpin the drive to reduce casualties through changing driver behaviour.

6.46 Collaborative work such as this will become increasingly valuable as the new funding arrangements for the safety camera scheme are brought in and we will therefore continue to encourage the remaining authorities to join this partnership.

6.47 In December 2005 the government announced changes to the way safety camera schemes are operated nationally. These changes will end the current ring-fencing or netting-off of funding for safety cameras from 2007/08 so that camera activity and partnership can be integrated more effectively into the wider road safety delivery process. To replace the netting-off of funds, in February 2006 the government announced additional financial planning guidelines to be integrated into the LTP system from 2007/08. These are shown in Table 6.2 for the partnership area.

Table 6.2 Safety camera scheme funding

| | Year 2 2007/08 | Year 3 2008/09 | Year 4 2009/10 | Year 5 2010/11 | 3 Year Reduction |
|----------------------------|-------------------|-------------------|-------------------|-------------------|---------------------|
| | £000s | | | | |
| Capital expenditure | | | | | |
| County | 217 | 207 | 199 | 191 | |
| City | 90 | 86 | 82 | 79 | |
| Rutland | 20 | 19 | 18 | 18 | |
| Sub total | 327 | 312 | 299 | 288 | -39,026 |
| Revenue expenditure | | | | | |
| County | 976 | 931 | 893 | 859 | |
| City | 405 | 387 | 371 | 357 | |
| Rutland | 90 | 86 | 82 | 79 | |
| Sub total | 1,471 | 1,404 | 1,347 | 1,295 | -175,619 |
| Total expenditure | | | | | |
| County | 1,192 | 1,138 | 1,092 | 1,050 | |
| City | 495 | 473 | 453 | 436 | |
| Rutland | 110 | 105 | 101 | 97 | |
| Total | 1,797 | 1,716 | 1,646 | 1,583 | -214,645 |

6.48 We very much welcome the flexibility to bring the safety camera activity into the wider road safety work. In the time available since the announcement, however, it has not been possible to assess in any detail the financial implications of the changes and therefore how they might affect the way the authorities in the partnership area will put the new flexibility to use. The additional funds currently allocated to the three local authorities in 2007/08 would leave a shortfall in excess of £70,000 revenue funding to administer the current scheme without additional funds being provided by the Highways Agency. The shortfall will increase as revenue funding decreases in the later years of the plan period (by a further £175,000 by 2010/11) and costs rise in line with inflation. This will clearly have significant implications for the operation of the safety camera scheme.

6.49 The current scheme has led to a substantial reduction in casualties and positive publicity in the local media has undoubtedly contributed to a wider acceptance that inappropriate speed leads to road accidents. For these reasons we wish to continue with the scheme, in line with DfT guidance. However it is clearly regrettable that insufficient revenue funds appear to have been allocated to the partnership to run it. We will need to adapt it to allow for this shortfall but in doing so will seek to ensure that its current benefits are not diminished.

Review of the road safety partnership

6.50 The road safety partnership which currently oversees the safety camera scheme is already considering how it should adapt to the changed circumstances to achieve even greater co-operation and collaboration both with existing partners and across a wider range of other organisations. In doing so, we will be seeking even closer working arrangements with existing community safety groups and other organisations involved in road safety.

6.51 The partnership in its new form will also need to develop to become more accountable for all the road safety operations it runs and oversees. The focus of all changes will be to achieve and if possible better the casualty reduction targets set out in the three authorities' LTPs. This will be done in a way that places the safety camera scheme within the wider work of the organisations involved and uses the combined expertise of those organisations to deliver on the targets.

6.52 The first progress report due in 2008 will give more detail on how these changes have been put in place.

Countywide speed limit review

6.53 The DfT has published a consultation document about the setting of local speed limits in both rural and urban areas and it intends to publish shortly its revised guidance to traffic authorities. This will request authorities to review speed limits on A and B roads by 2011 and to give priority to reviewing the limit on any road on which there is a poor casualty history or there is widespread disregard for the current speed limit.

6.54 As part of our ongoing safety and traffic management programmes, we work in partnership with the police to ensure that all speed limits are realistic and appropriate to the road environment. In a recent review, we ensured that all Leicestershire villages have a speed limit below the national speed limit for single carriageway roads and that any new speed limits introduced were both realistic and appropriate to the road environment. We welcome the publication of new guidance and will carry out a further review in light of this. We will also integrate this work into the operation of the safety camera scheme and our route and area-wide safety scheme programme described earlier in this chapter. We anticipate completing this work in advance of the 2011 date requested by DfT.

Vehicle activated signs

6.55 Whilst it is important to ensure that all speed limits are appropriate to the road conditions, speed limits are by their nature inflexible and there are situations that require drivers to travel below the speed limit. There are also many villages and urban routes where there is insufficient compliance with the speed limit. Vehicle activated signs, which display a simple message relating to road conditions (presence of bends, junction, speed limit) to those drivers exceeding a set speed, have been shown from a national study (TRL report "Vehicle Activated Signs – A Large Scale Evaluation") to reduce vehicle speeds significantly, to reduce road accidents by one third and to be supported by the majority of drivers passing them.



6.56 We have therefore adopted a policy of introducing these signs within our road safety programme where there is evidence of injury accidents that could have been prevented by a reduction in driver's speed, or where they would prove effective as part of a comprehensive package of road safety measures. We have found them to be most effective when the speed at which they are activated is progressively reduced over time so that at any given time it is only the higher speed traffic that activates them. In this way we have achieved an average reduction in the 85 percentile speed of approaching 10% and intend to improve on this during the LTP2 period as we monitor and assess their effectiveness. Although it is too early to have robust accident data from the sites already put in place, where that data is available we have achieved substantially greater accident savings than was apparent in the national study. The signs can be introduced at a cost of about £15,000 per site and, with sites prioritised on their potential to reduce road casualties, we expect them to offer excellent value for money in making a significant contribution to our road safety targets.

6.57 We are increasingly looking to use innovative techniques and, in collaboration with the sign manufactures, we recently introduced a series of linked vehicle speed activated chevron boards, believed to be the first in the country, along a series of bends on the A606 which was experiencing an average of about five casualties each year. Nearly all were single vehicle accidents. These signs are triggered by inappropriate speeds, warning of the bends and guiding drivers through them. We will be closely monitoring the effectiveness of this approach and if successful will look to apply this innovative use of technology more widely.

School 20 mph zones

6.58 Safety around the school gate is a major concern and is receiving a good deal of attention through our school travel planning work. In appropriate circumstances we can support this by implementing 20mph zones on roads directly outside the school. Experimental work over the last couple of years involved the provision of a mix of statutory and advisory limits at a selection of schools across Leicestershire. We have now reviewed the trial and concluded that the most effective control is by advisory speed limits, operational at school opening and closing times and coupled with amber flashing lights. We will continue to introduce new advisory limits in appropriate circumstances through the LTP2 period and will convert present statutory limits to advisory ones. We have adopted a policy of integrating these advisory limits into our school travel plan programme and, unless there are specific road safety reasons otherwise, they will now only be introduced when a school has an approved, adopted and robust travel plan. This both maximises the benefit of the limit and also provides an additional incentive for schools to join our travel plan programme.

Speed awareness courses

6.59 In 2004, Leicestershire's was one of the first road safety partnerships to offer a speed awareness course as an alternative to prosecution for drivers caught speeding at lower thresholds by safety cameras. We run these self-financing courses on behalf of the partnership and they are currently attended by about 8,000 drivers a year. They aim to highlight the dangers of speeding, to show why speed limits are needed and to examine the effects of inappropriate speed in collisions. The course is being monitored for its effectiveness in changing driver attitudes to speeding and in reducing re-offending rates. Surplus funds from the workshops are channelled back into new road safety initiatives in the partnership area which cannot realistically be funded by other means.



Community speedwatch

6.60 We strongly believe in involving our partners and communities in our initiatives, campaigns and scheme development in order to maximise both community satisfaction and scheme effectiveness. One example is the Community Speedwatch initiative. We are implementing a trial of Community Speedwatch, which will be formally launched in Spring 2006. This scheme empowers parishes to contribute towards speed reduction in their communities. Volunteers are sought, pledges given by parishes and individuals, and training provided by us and Leicestershire police. We intend to introduce at least eight pilots in the first year. We will closely monitor the effectiveness of this new initiative both in terms of speed reduction and the perception of speed within the community.

6.61 It is anticipated that this will encourage more proactive community involvement in speed monitoring and will help encourage drivers within those communities to take greater responsibility for their own actions. This work is being funded from a growth item within our revenue budget, with match funding from the partnership speed awareness courses.

Improving safety for vulnerable road users

6.62 We will continue to implement specific measures to target vulnerable road users, to tackle the higher incidence of serious and fatal casualties and encourage more walking and cycling.



6.63 Children, pedestrians, cyclists, riders of two wheelers, people with disabilities, older people and horse riders are more vulnerable in road collisions than other groups. We pay careful attention to these road users to make sure that their special needs are taken into account, and standards of provision often need to be enhanced to ensure a safe environment. Pedestrians need safe and convenient facilities for crossing busy roads and protection from intimidation by motorised vehicles. Children need special training in pedestrian and cycle skills if they are to develop safe and confident independent travel.

6.64 Many of the transport measures in LTP2 contribute to improving conditions for these road users, particularly those to reduce traffic speeds, improve the pedestrian environment, improve cycle facilities and provide safer routes to school. But we need to take specific additional steps to complement these measures, particularly in the field of education and training.

6.65 We currently have five full time officers dedicated to the development and management of our extensive education, publicity and training programmes. They manage a revenue budget of nearly £200,000. During LTP1 the County Council provided this service to the City Council and in LTP2 period we will work through the partnership with both the City Council and Rutland, and with adjoining authorities, to run joint campaigns where possible and so produce greater cost-effectiveness. We are increasingly focussing our work with school children at schools which have developed, or are developing, travel plans, so as to maximise the benefits achieved and also to encourage more schools to develop travel plans.

6.66 To provide even better value for money, we also seek contributions to the cost of providing training programmes. We seek funding from other organisations in the form of sponsorship or match funding, and we provide our resources widely to other local authorities at a modest charge. In total this provides additional income in excess of £100,000 a year, which is fed directly back into our education, publicity and training programmes.

Child safety

6.67 Although excellent progress has been made in recent years to reduce the number of child KSIs, road traffic accidents are still the leading cause of accidental injury among children under 16 years of age. An analysis of total child casualties shows that some 40% are car passengers, 23% pedestrians and 17% cyclists. We will continue to provide an extensive programme of road safety education and training to children including:



- Promotion of the safe use of child restraints through practical help, advice and local publicity campaigns linked to police enforcement
- Encouragement of safe walking through the 'Tiny Steps' nursery and playgroup programme, which is used to engage mothers and very young children in road safety issues. In-school pedestrian training is directed at Key Stage 1 pupils, and the 'First Steps' practical pedestrian training encourages 5/6 year olds to make their own decisions about crossing strategies. The move to secondary school, with changes to journey patterns and reduced supervision, means that children are particularly vulnerable at ages 11-12, and transition programmes are now offered to all secondary schools
- Cyclist training, which is primarily targeted at year 6 (10-11 year old children). Unlike many schemes run by other authorities, our Bike 4 Life scheme includes on-road training and the children are assessed throughout the six-session course. Currently nearly 60% of year 6 pupils benefit from this training. In addition, cyclist training at secondary schools is being increasingly promoted
- A new safety centre, called "Warning Zone" is being established by the partnership. The centre will be part funded by money received from speed awareness workshops. It will target mainly children in Year 6 (10-11 year olds) and will cover a range of road safety scenarios. We have made a presentation to the East Midlands Region Road Safety Team and in the future consideration will be given to marketing the centre to the rest of the region
- Participation of over 170 primary schools in the Junior Road Safety Officer (JRSO) scheme where year 6 pupils spread a variety of road safety messages through the school with support from the Junior Road Safety Co-ordinator at the County Council. This scheme is now in its 19th year. A DfT funded report "Guidelines for Evaluating Road Safety Education Interventions" specifically evaluated our JRSO scheme and was very positive about its benefits. It concluded that JRSOs and other children in their school benefited in terms of increased knowledge and safer attitudes towards road safety. The author endorsed this view at the RoSPA Road Safety Congress in Cardiff. As a result of this positive evaluation, we launched our Junior Road Safety Officer Website in April 2003. This site was designed by children through competitions, continues to be a great success, and provides valuable help to the Junior Road Safety Officers in the work they do. The London Borough of Richmond has quoted the website as good practice in presentations they have carried out. In addition, we are increasingly integrating our road safety education and training with the work we do to help schools develop and deliver travel plans. A recent example is the expansion of the role of our JRSOs to encourage and promote the benefits of the 'Star Walkers' initiative in travel plans

- Participation in annual Junior Citizen and Safety Squad events with other agencies where older primary school children are taught vital safety messages, including road safety, in a variety of real life situations
- Educational programmes delivered to pre and young drivers as risk of injury shifts at age 14-15 to car passengers, with the car often driven by inexperienced 17-18 year olds. We are setting up a series of driver days at Mallory Park, for new and aspiring drivers. The day will consist of both workshops and accompanied drives and it is anticipated that the venue will prove attractive to young drivers, therefore maximising attendance. The move away from the previous school venues will also help to reduce the risk of mixed messages being given when school travel plan and young driver training is undertaken in the same venue.

6.68 We work closely with local and national companies on many of these initiatives. One example is our work with the Loughborough based company '3M Heath Care'. They recently donated 8,000 high visibility vests to 7-10 year olds in the Loughborough area in order to highlight the importance of wearing clothing that can be easily seen by vehicle drivers in the winter months.

Motorcyclists

6.69 As outlined earlier, motorcycle riders represent 20% of all KSIs but represent only 1% of all road traffic. Fatal casualties in the last three years have risen by about 50% compared with the 1994-98 base period. To tackle this issue and to reduce motorcycle casualties we undertake a wide range of education and training initiatives.

6.70 We are members of the Leicester and Leicestershire Motorcycle Forum. This has delegates from the motorcycle trade, bikers' groups, highway authorities and the police and was set up to give powered two wheeler users a voice in transport issues which affect them, particularly road safety. Through this forum the bikers contribute to the rural route assessments described earlier. We are also leading members of the regional Shiny Side Up partnership of six East Midlands transport authorities which develops and shares best practice in education and publicity and the training of motorcyclists. This partnership received the 2003 Prince Michael International Road Safety Award.

6.71 Through the partnership we undertake a range of activities including the targeting of sports bike riders at key events featuring a campaign called 'Fatal Attraction'. A video wall is used at motorcycling events and competitions are used as a mechanism to gather user data to improve the targeting of specific campaigns. As a result of learning from this experience we utilised the idea of competitions as a method of collecting data about near-miss motorcycle incidents. We used an exhibition trailer at a British Motorcycle Federation Rally on an 'Act of Blind Faith' theme. The data collected and the trailer will be shared with a national campaign and the 'Shiny Side Up' partnership.

6.72 We also run poster campaigns on routes with the most motorcycle casualties, to encourage motorcyclists to take responsibility for their own safety and to encourage other road users to 'Think Bike'.



6.73 Another important initiative is our 'Blind Faith' display, relating to a specific motorcycle accident in the county. We take this to numerous bikers' events, with the motorbike involved in the accident; the rider involved in the accident helps us to put the safety message across effectively. Competitions run in tandem with the display have allowed us to build up a database of 4,000 motorcyclists, to whom we now send safety promotional material. We also loan the display to other local authorities.

6.74 Other ongoing initiatives being undertaken currently include:

- Articles in the County Council's publication 'Leicestershire Matters' which is distributed to all households in Leicestershire
- Car park ticket advertising
- Cinema magazine advertising
- With contributions from Nottinghamshire to ensure greater coverage, local radio advertising to coincide with large local motorcycle events at Donington Park and Mallory Park.

6.75 Since the introduction of our motorcycle casualty reduction target in the Provisional LTP2, we have commissioned consultants to carry out an independent review of our work in this area. The review will cover:

- An analysis of recent KSI accidents
- A review of our current initiatives
- A review of current best practice elsewhere
- A review/survey of motorcyclists' attitudes to road safety and of other drivers to motorcyclists.

It will then make further recommendations for our future activities.

6.76 We have also recently launched two new initiatives. The first, 'Bike Safe', was launched in March 2006. This initiative involves assessed rides with off duty police motorcyclists who have reached advance standard in motorcycle riding, awareness and technique or similar training organisations such as 'The Shires'. Riders will receive invaluable feedback on their riding and advice on how to minimise risk and use bikes safely as an alternative to car travel.

6.77 We are also in the process of setting up a similar scheme with approved training organisations and motorcycle dealers whereby, when riders buy large-engined bikes, they will be offered at the point of sale a free voucher for refresher training funded by the County Council but with match funding from the dealer to provide better value from our own resources.

Cyclists and pedestrians

6.78 Pedestrian KSIs in Leicestershire have fallen by 40% in the past three years, compared to the 1994-98 base, and cyclist KSIs by 37%. Nevertheless pedestrian KSI casualties still account for 13% of the total and cyclists a further 6%. 90% of all pedestrian casualties and 83% of all cyclist casualties occur in the built up areas. Many of the measures described earlier in this section and elsewhere, to encourage more walking and cycling, will improve safety for pedestrians and cyclists. Additional measures include cycle training in line with the Cycle Training UK model, which is to be offered to adult cyclists, and road safety education and awareness initiatives, co-ordinated with the police, targeting cyclists and pedestrians and urging drivers to accept responsibility for the continued safety

of these vulnerable road users. We will continue to provide improved road crossing facilities where they will be cost-effective in reducing road casualties.

Equestrians

6.79 Although very few of our road casualties involve equestrians, those that do can often involve serious injury. Our new rights of way improvement plan seeks to promote off road riding as far as possible. To do this we will ensure that paths are available, well promoted and easy to use. We will also, in conjunction with the Leicestershire Local Access Forum, develop guidance notes and proposals for improved use of roadside verges for both pedestrians and cyclists.

6.80 Whilst our strategies for managing the speed of traffic will help horse riders, crossing busy roads with a horse can be a significant barrier and potentially dangerous. We have in the past installed a pegasus crossing in Blaby. This is similar to a pelican crossing but includes additional request controls and displays at a higher level for horse riders. These are, however, quite expensive and can only really be considered in a very limited number of cases. Much lower cost alternatives can also have a considerable impact, such as horse turning areas that allow users to open gates while staying safely away from traffic and these will be investigated and implemented where appropriate as part of our rights of way improvement plan.

Improving safety for people in disadvantaged communities

6.81 We will take particular steps to ensure that pedestrian, child and cyclist casualties for people living in disadvantaged areas are tackled through the measures in this LTP.

6.82 There is strong evidence nationally that people from the most disadvantaged communities are more likely to become road accident victims. In response to this, DfT is seeking a greater reduction in casualties in the 10% most disadvantaged areas nationally, as measured by the Index of Multiple Deprivation. Although none of these lie within Leicestershire, we have made an assessment of the accident record in the seven Leicestershire wards which were in the 25% most deprived in the country, to determine whether they exhibited a higher incidence of road casualties. This revealed no apparent correlation with the total number of casualties, but there was some evidence to suggest higher than expected pedestrian, child and cyclist casualties.

6.83 Our urban area-wide investigation and treatment, which focuses on those areas with a high proportion of pedestrian, cycle and child casualties, will also address those disadvantaged areas with a higher than expected accident record. We will monitor the work and its outcomes carefully to ensure that this is indeed achieved.

6.84 We will also seek to ensure that schools in our more disadvantaged areas take full advantage of our road safety education and training programmes and develop school travel plans; this will help to improve safety on the journey to school. Again there will be specific monitoring to ensure this is achieved.

Encouraging safer driving

6.85 Through our programme of road safety education publicity and training we will continue to influence driver behaviour and improve driving skills for those groups most at risk of accidents.

6.86 The primary cause of most road casualties is driver error. Influencing and improving driver attitude and behaviour is key to the success of any road safety strategy. In addition to our speed management strategy and work with motorcyclists, we seek to improve driving standards through a range of measures. We will develop these further through LTP2 but they currently include:



- The 'Safer Driving with Age' (SAGE) scheme run in conjunction with local health centres, optometrists and driving instructors to provide a service for drivers aged 60 and over. This includes medication review, eyesight check and driving assessment. Currently about 150 older drivers benefit from this each year and the scheme has a continuing increase in uptake
- Leicestershire Motorway Drivers' evenings, held throughout the year, to which all new drivers in Leicestershire are invited
- Driver improvement courses offered to drivers who might otherwise be prosecuted for driving without due care. We are one of only four authorities to offer this course which has now been running for 8 years with approximately 200 drivers taking it up each year. In January 2006 we started a profiling exercise, to identify the type of offences and person typically sent on the course. On completion we will review the course, amending as necessary to target our audience better and provide maximum benefits
- Use of the business register to target medium sized companies to encourage and promote safer driving at work. Distribution of over 450 CD Roms on work related road safety has recently taken place to both local and national companies. As a result several companies have asked us to run driver attitude training for them
- Road safety publicity campaigns run throughout the year using radio, leaflets, posters, bus backs and colour buses. These often follow DfT national campaigns and are co-ordinated with other partnership members to achieve more effective outcomes and better use of resources. In 2005/06 we ran approximately 40 campaigns, an increase of 25% on previous years. Regular liaison meetings with the police help co-ordination with police enforcement, and evaluation is a built-in element, enabling road safety officers to make value for money judgements to maximise the effectiveness of future campaigns.



Performance management

6.87 We have identified a range of outcome performance indicators which reflect the issues and areas of concern raised in the development of our strategy. We will use these to monitor and manage our performance, in addition to monitoring the outcomes of individual measures. We have kept the number of indicators to the minimum we consider necessary to ensure there is a clear focus on what we need to achieve over the next five years.

6.88 We propose performance indicators for all roads in line with each of the three national indicators for KSIs, child KSIs and slight casualties. However, because our motorway and trunk road casualties have been falling at a much slower rate than on the roads for which we are responsible, we also propose separate indicators for our own roads. We also propose a separate indicator for motorcycle KSIs on all roads, since this must be a particular focus of our strategy over the next five years. The indicators we propose are therefore:

- KSIs on all roads
- Child KSIs on all roads
- Slight casualties on all roads
- KSIs on County Council roads
- Child KSIs on County Councils roads
- Slight casualties on County Council roads
- Motorcycle KSIs on all roads.

6.89 Details of our target and trajectories towards those targets and our performance management regime are given in Chapter 12 for all performance indicators.

Contribution to other LTP and quality of life objectives

6.90 Whilst our road safety strategy has been developed specifically to achieve its stated objectives, it will also contribute to other LTP and quality of life objectives. The contribution it can make has been borne in mind in the development of the strategy. Table 6.3 summarises these contributions.

Table 6.3 Road safety strategy contribution to other LTP and quality of life objectives

| Objective | Contribution of road safety strategy | |
|--|--------------------------------------|---|
| Tackling congestion. | ✓✓ | Reducing the number and severity of road accidents will reduce delays caused by these incidents. Improved road and community safety and our road safety education and training of young people will also encourage them to walk, cycle or use public transport, which in turn will result in fewer cars on the roads. |
| Improving access to facilities | ✓✓ | If road safety and security in general are improved it will encourage vulnerable road users and disadvantaged groups to walk, cycle and use public transport to access facilities. |
| Improving air quality | ✓ | By reducing the number and severity of pedestrian and cycle casualties we will encourage more people not to use their cars which will contribute to an improvement in air quality. |
| Reducing the impact of traffic | ✓✓✓ | Safer roads and our road safety education and training will encourage more people to walk, cycle and use the bus. Our speed management strategy, although targeted at casualty locations, will reduce vehicle speeds in many vulnerable communities. |
| Managing transport assets. | ✓ | Measures implemented to improve safety such as high skid resistance surfaces will also help to reduce the damage to the network caused by accidents. |
| Quality of public spaces and better streetscapes | ✓ | Improved road safety has the potential to increase the numbers of people walking, cycling and using public transport. This in turn will help reduce traffic levels and improve the quality of outdoor public spaces leading to their greater use therefore helping to create an increased sense of place. |
| Landscape and biodiversity | - | Limited contribution |
| Community safety, personal security and crime | ✓✓✓ | Improving road safety and reducing the speed of traffic, particularly in communities, will help people feel more secure. |
| Healthy communities | ✓✓ | By making it safer and more pleasant to walk and cycle there will be health benefits as people exercise more regularly. |
| Sustainable and prosperous communities | ✓ | Encouraging greater use of more sustainable modes of transport by making them safer will help to create more prosperous communities. |
| Noise | ✓ | More walking and cycling will result in less traffic related noise. |
| Climate change and greenhouse gases | ✓ | Making it safer to walk and cycle should reduce the production of traffic related greenhouse gases. |

✓ = Modest contribution

✓✓ = Moderate contribution

✓✓✓ = Significant contribution

