

Hertfordshire's Local Transport Plan 2006/07 – 2010/11

Road Safety Plan 2006 - 2010

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1 INTRODUCTION

This Road Safety Plan will deliver the Local Transport Plan (LTP) 2006/7-2010/11 objective “To improve safety for all by giving the highest priority to minimising the number of collisions and injuries occurring as a result of the transport network”. It will also deliver Hertfordshire’s casualty reduction targets:

- to reduce the number of people killed or seriously injured in road collisions to no more than 600 by 2010
- to reduce the number of children killed or seriously injured in road collisions to no more than 56 by 2010
- no increase in slight casualties (5509)

The Road Traffic Act 1988 (amended by the Road Traffic Act 1991), places a statutory responsibility for road safety on highway authorities. The Act requires local authorities to “prepare and carry out a programme of measures designed to promote road safety”, and enables “contributions to be made towards the cost of measures for promoting road safety taken by other authorities or bodies”. Appropriate measures include education and training, road safety engineering, and safety audits.

The overall strategy is summarised in the LTP. This Road Safety Plan is a daughter document to the LTP and sets out the strategy in more detail. The document also outlines the programmes that are developed to achieve casualty reduction through a range of prevention and reduction measures.

Road safety education and training, safety audit and engineering measures are used to address both casualty reduction and prevention. The safety engineering programme is specifically funded and developed to address known casualty sites. All of these programmes, together with enforcement, contribute to Hertfordshire’s casualty reduction targets.

The development of this Plan is led by the County Council’s Environment Department. However, successful delivery relies on the input of other organisations, including Hertfordshire Highways, Hertfordshire Constabulary, Hertfordshire Safety Camera Partnership, Children Schools and Families (CSF), Hertfordshire Fire and Rescue Service, the Highways Agency, and partners in the NHS and private sector.

2 TARGETS

2.1 Development of Targets

The starting point for the development of Hertfordshire's road casualty reduction targets was those set by the Government to the year 2010, published in "Tomorrow's Roads Safer For Everyone" in 2000 that were:

- 40% reduction in the number of people killed or seriously injured (KSI) in road accidents (1084 reduced to 650 for Hertfordshire)
- 50% reduction in the number of children killed or seriously injured (KSI) in road accidents (113 reduced to 56 for Hertfordshire)
- 10% reduction in the slight casualty rate, expressed as the number of people slightly injured per 100 million vehicle kilometres. (This target has since been amended from a rate to an absolute number – 5509 reduced to 4959 for Hertfordshire) from a 1994-98 average base.

These were used as the basis of the County Council's targets adopted in the 2001/2-2005/6 LTP. The targets for the 2006/7-20010/11 LTP are a development of these.

Performance so far shows good reductions in KSIs and child KSIs but there has been little change in the number of people slightly injured. The reset targets below reflect current performance and our ability to further influence reductions over the life of this Plan.

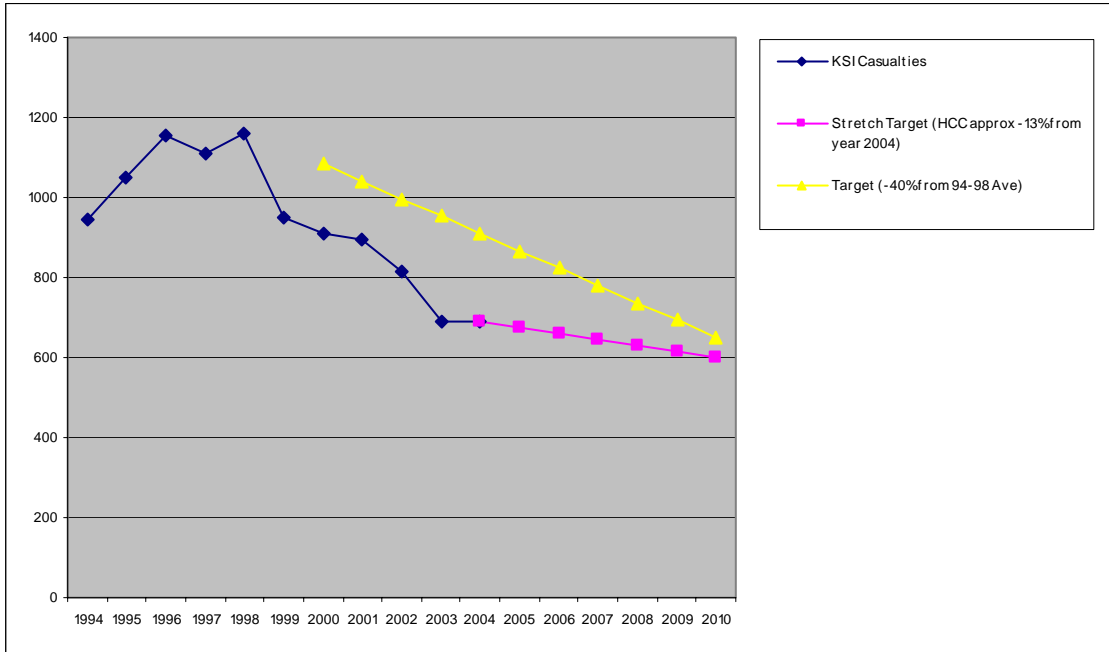
2.2 Targets to 2010

The County Council has set three targets for road safety to 2010, derived from the national casualty reduction targets set in 2000.

2.2.1 Total Killed and Seriously Injured

Indicator	Baseline	Target (2010)
Number of people killed or seriously injured on roads in the authority (all ages)	1084 casualties (1994-98 average)	Reduce to no more than 600 casualties

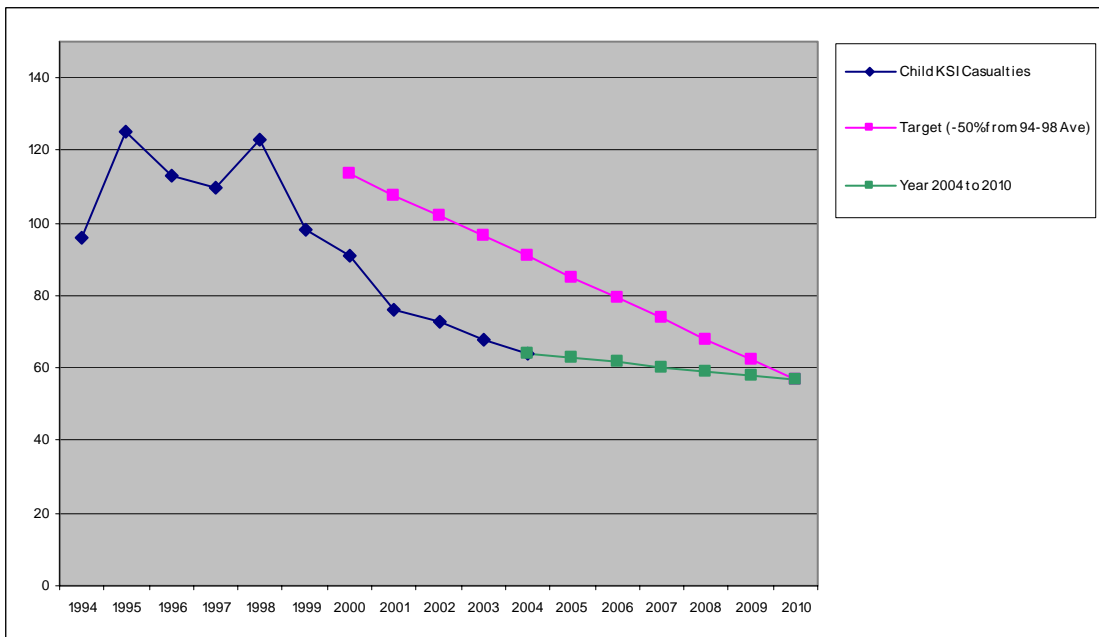
KSI Trajectory



2.2.2 Child Killed or Seriously Injured

Indicator	Baseline	Target (2010)
Number of children (aged less than 16) killed or seriously injured in the authority	113 casualties (1994-98 average)	Reduce to no more than 56 casualties

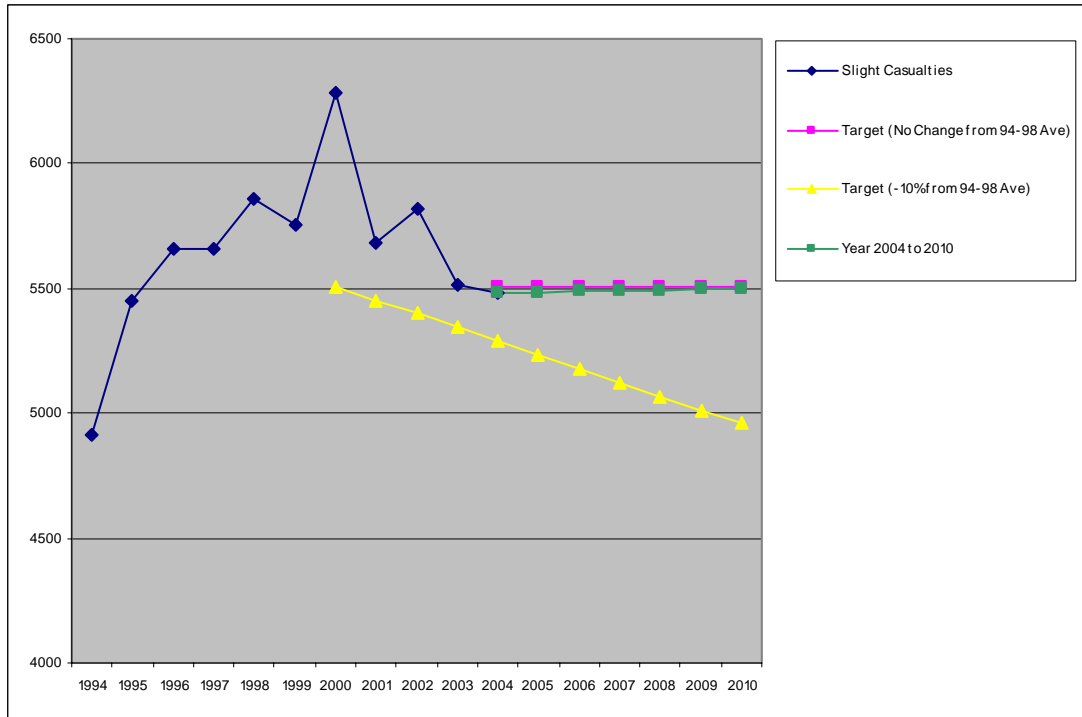
Child KSI Trajectory



2.2.3 Total Slight Casualties

Indicator	Baseline	Target (2010)
Number of slight injuries (all ages)	5509 casualties (1994-98 average)	No increase in slight casualties (5509)

Slight Trajectory



2.3 Current Performance

The tables below show the original targets to 2005 and 2010, together with the actual numbers achieved so far.

2.3.1 Overall KSI Casualties

	Base	2001	2002	2003	2004	2005	2010
Original 2010 Target	1084	1041	997	954	911	867	650
Actual Performance		894	814	688	691		

2.3.2 Child KSI Casualties

	Base	2001	2002	2003	2004	2005	2010
Original 2010 Target	113	108	102	96	91	85	56
Actual Performance		76	73	68	64		

2.3.3 Slight Casualties

	Base	2001	2002	2003	2004	2005	2010
Original 2010 Target	5509	5454	5399	5344	5289	5234	4959
Actual Performance		5679	5819	5514	5483		

Overall KSI and child reductions have exceeded expectations. In contrast, there has been very little change in the number of slight collisions and casualties.

2.3.4 LPSA Stretched Overall KSI Target

In 2003, Hertfordshire County Council entered a three year Local Public Sector Agreement, agreeing to stretch the casualty reduction target for those killed or seriously injured on all roads in the county except motorways by the end of 2005. The table below shows performance against the target.

	Base	2001	2002	2003	2004	2005	2010
LPSA Stretched 2005 Target *				799	751	703	
Actual LPSA Performance *				584	583		

* Excluding motorways

2.4 How Do We Compare?

2.4.1 KSI Casualties

Hertfordshire compares well with the regional index of KSI casualties having reduced numbers by 36% to 2004 from the 1994-98 average. This is the second highest reduction in the region.

KSI casualties by local authority in Eastern Region

	1994-98 average	1999	2000	2001	2002	2003	2004	Change cf. baseline
Bedfordshire	309	309	285	268	230	226	194	-37%
Cambridgeshire	597	534	562	523	511	470	527	-12%
Essex	1179	1077	1125	1107	1090	1170	1075	-9%
Hertfordshire	1084	948	912	894	814	688	691	-36%
Luton	89	86	70	63	59	57	57	-36%
Norfolk	862	769	721	710	618	546	560	-35%
Peterborough	161	117	158	131	134	128	122	-24%
Southend-on-Sea	115	86	106	87	99	101	88	-23%
Suffolk	478	480	524	467	403	442	416	-13%
Thurrock	123	124	96	129	114	164	116	-6%
East of England	4997	4530	4559	4379	4072	3992	3845	-23%

2.4.2 Child KSI Casualties

Hertfordshire also compares well with the regional index of Child KSI casualties having reduced numbers by 43% to 2004 from the 1994-98 average.

Child KSI casualties by local authority in Eastern Region

	1994-98 average	1999	2000	2001	2002	2003	2004	Change cf. baseline
Bedfordshire	31	27	29	14	12	13	18	-42%
Cambridgeshire	48	41	39	33	36	33	32	-33%
Essex	145	120	119	124	111	108	78	-46%
Hertfordshire	113	98	91	76	73	68	64	-43%
Luton	21	25	18	11	13	14	17	-19%
Norfolk	90	68	78	67	45	41	38	-58%
Peterborough	27	20	17	12	13	16	15	-45%
Southend-on-Sea	18	14	22	16	20	14	10	-44%
Suffolk	51	40	43	44	27	56	38	-25%
Thurrock	21	11	15	10	10	12	18	-14%
East of England	565.2	464	471	407	360	375	328	-42%

2.4.3 Slight Casualties

Hertfordshire compares less well with the regional index of Slight casualties having reduced numbers by just 1% to 2004 from the 1994-98 average.

Slight casualties by local authority in Eastern Region

	1994-98 average	1999	2000	2001	2002	2003	2004	Change cf. baseline
Bedfordshire	1827	1756	1915	1850	1601	1522	1560	-15%
Cambridgeshire	2908	2811	3116	3185	3027	2962	2869	-1%
Essex	6121	6265	6483	6161	5715	5519	5533	-10%
Hertfordshire	5509	5754	6287	5679	5819	5514	5470	-1%
Luton	734	685	633	665	666	602	526	-28%
Norfolk	3134	3206	2959	3334	2979	3015	3190	2%
Peterborough	942	926	1071	1047	1061	1108	1148	22%
Southend-on-Sea	756	814	819	774	718	655	615	-19%
Suffolk	2443	2616	2664	2783	2765	2729	2567	5%
Thurrock	809	858	919	826	770	684	725	-10%
East of England	25183	25691	26866	26304	25121	24310	24203	-4%

3 PRIORITIES FOR HERTFORDSHIRE 2006/7-2010/11

Hertfordshire will continue to focus over the life of this Plan on the reduction of fatal and serious injuries (KSI) as a priority. This priority reflects the high cost to the individual and to society of such casualties (Government figures show that an average fatal road casualty has a cost to society of £1.57m).

Safety engineering programmes in Hertfordshire are selected by ranking sites using a weighting system that places greater emphasis at locations where the collision has been either fatal or serious and this prioritisation will continue.

With regard to user groups involved in KSI collisions in Hertfordshire during 2004, there are three main priority areas:

- Car, PSV and Goods users (58%)
- Powered Two Wheelers (19%)
- Pedestrians (15%)

Specific casualty reduction priorities for Hertfordshire during the life of this Plan are:

- reduce the number of people not wearing seatbelts
- tackle the range of speed issues that lead to collisions and casualties
- reduce the number of powered two wheeler casualties
- reduce the number of pedestrian casualties
- develop a work related road safety programme with local business.

The specific issues facing Hertfordshire are expanded in points 3.1 to 3.4 below.

3.1 Seatbelts

Although national data indicates that seatbelt compliance is high, the picture in Hertfordshire does not support that case. Seatbelt wearing has been identified as a key issue because recent figures show that not wearing a seatbelt is a major factor in fatal casualties in Hertfordshire. At least 38% of people killed in vehicles in one year were not wearing seatbelts.

Research into fatalities in a three year period, carried out by the Constabulary, showed that 50% of drivers and 75% of passengers killed in road collisions were not wearing seatbelts. Research undertaken into attitudes towards seatbelt wearing showed that many young drivers feel that the presence of an airbag is sufficient to save them in the event of a collision. There is also a widespread lack of awareness of the law and penalties with regard to seatbelt wearing, established during recent roadside checks. These checks were carried out in September 2005 during nine, two hour sessions, when 5397 unrestrained vehicle occupants were spotted.

3.2 Speed

The effect on casualties of excessive and inappropriate driving speeds has been confirmed by Government research. In relation to pedestrians who are hit by cars:

- at 40mph 85% are killed
- at 30mph 45% are killed and many seriously injured
- at 20mph 5% are killed, most injuries are slight and 30% suffer no injury at all.

Exceeding the speed limit and travelling too fast for the conditions was a contributory factor in 23% of KSI's in 2004. Misjudging speed and distance continues to be the top factor in collisions in the county.

Feedback from safety camera public attitude surveys indicates a widespread lack of knowledge of speed limits, especially in 30mph areas.

3.3 Powered Two Wheelers

The risk of collision and injury to motorcyclists remains high although motorcyclist KSI casualties in Hertfordshire have levelled at around 20% over the last few years but moped riders have risen recently. However this is disproportionately high as powered two wheelers are only 1.7% of the road user population in Hertfordshire.

3.4 Pedestrians

On average, 50% of child KSI's in Hertfordshire are pedestrians, with 30 children being involved in 2004. With regard to adults, there were 74 adult KSIs in 2004 with the twenty to twenty nine year olds being the highest group for pedestrian injury. A breakdown shows that they are most likely to be injured at weekends between the hours of 10pm and 2am, indicating the likelihood that alcohol is involved.

3.5 Work Related Road Safety

A new focus for this Plan will be Work Related Road Safety as a result of Government research and advice. A third of collisions involve someone travelling as part of their employment, according to national data. In Hertfordshire 89% of casualties were in vehicles in 2004. Under the Health and Safety at Work Act, employers and employees, including those of the County Council, are required to manage their duty of care whilst on the road, with the aim of reducing the number of work related collisions and casualties.

Companies and organisations that have adopted proven risk management strategies to promote work related road safety report 25-30% reductions in vehicle operating costs. A pilot project in Hertfordshire achieved a 16% reduction in insurance claims due to driver error for road collisions involving County Council employees, following a programme of practical driver assessment and training.

4 KEY PROGRAMMES FOR 2006/7-2010/11

The key programmes for the KSI casualty reduction targets are set out in Tables 1 and 2. These are explained in more detail below.

Although these Tables show the programmes on which most emphasis will be placed over the lifetime of this Plan, there are many other programmes that will continue to form an important part of the County Council's road safety strategy. Details of these programmes are also set out in this Plan.

4.1 Key KSI Programmes

Table 1 shows the key priorities to address KSI casualties and the three elements of engineering, education training and publicity (ETP), and enforcement that will be implemented to reduce and prevent such casualties. However, as mentioned above there are many other programmes that will continue to have an important role to play.

Table 1

KSI Casualties			
Programme	Engineering	ETP	Enforcement
Seatbelts		✓	✓
Speed	✓	✓	✓
Powered Two Wheelers	✓	✓	✓
Pedestrians	✓	✓	
Work Related RS		✓	✓

4.1.1 Seatbelts

The severity of injury is frequently increased by failure to either wear seatbelts or to use properly designed restraints. A DHSS report in 1985 established that there had been a 15% reduction in patients brought to hospital since seatbelt wearing had become compulsory. Seatbelt wearing has been identified as a key issue with recent figures showing that not wearing a seatbelt is a major contributory factor in fatal casualties in Hertfordshire. At least 38% of people killed in vehicles in one year were not wearing seatbelts, and 50% of drivers and 75% of passengers killed in vehicles in a three year period in Hertfordshire were not belted.

The County Council and the Police are very concerned about the number of people observed not wearing seatbelts and the fact that high numbers of people killed in vehicles are not wearing seatbelts. The Road Safety Unit commissioned research into the reasons why people do or do not wear seatbelts. The results are currently

being used to develop a long term strategy that will include joint education and enforcement programmes with the Police as well as work with regional partners. Campaign activity to raise awareness of the issues is linked to the national THINK! campaign, both locally and regionally. A new campaign “Dying for an Excuse” is currently in development as a direct result of Hertfordshire’s research findings. The research also showed that many young drivers feel that the presence of an airbag is sufficient to save them in the event of a collision. This will be further tested and relevant awareness raising activity will be carried out to challenge this misconception.

Recent roadside checks have shown that 5397 unrestrained vehicle occupants were spotted during nine, two hour sessions in September 05. Joint education and enforcement campaigns will continue at selected sites across the county. Schools will be targeted as well as the general motoring public and opportunities will be taken to raise awareness of the law and penalties relating to seatbelt wearing.

Providing correct and timely information on child car safety seats to ensure parents receive sound advice before buying child safety seats is a focus for training of staff at retail outlets and work with health centres and ante-natal clinics across the county. Any changes to legislation will be supported by a programme of information using a variety of media including the county council website, Herts Direct.

Hertfordshire Police have begun to record data about seatbelt wearing on Stats 19 forms, as a local project, which will provide data to further inform casualty reduction and prevention programmes.

4.1.2 Speed

Exceeding the speed limit and travelling too fast for the conditions was a contributory factor in 23% of KSI’s in Hertfordshire in 2004. Exceeding the speed limit was a factor in 16% of KSI’s on 30mph roads. Misjudging speed and distance continues to be the top factor in collisions in the county.

Safety Cameras

Increasingly, the use of technology such as speed cameras has become a key strategy in tackling the problem of speeding drivers in urban areas. The Year 4 report on the National Safety Camera programme showed Hertfordshire achieved the third highest reduction in KSI casualties (69.7%) at its safety camera sites. There was also a reduction in personal injury collisions of 37.7%.

The success of the deployment of safety cameras has helped Hertfordshire achieve its LPSA target and contributed to the excellent reduction in KSIs and will continue to be a measure employed during the life of this Plan. The County Council will continue to use safety cameras as a measure to reduce casualties and collisions and to play a key role in the Hertfordshire Safety Camera Partnership.

The planned changes to funding for safety camera partnerships through the LTP, announced by the DfT in December 2005, will ensure that safety camera activity is integrated into the wider road safety delivery process. The aim is to provide

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additional flexibility to target local road safety problems in the most appropriate and cost effective manner.

To further develop our road safety strategy, so as to maximise the benefits of the new funding arrangements when they come into effect in April 2007, we will be working closely with our existing partners (including police and the Highways Agency) through a new Road Safety Partnership. We will extend this partnership to include other stakeholders where appropriate, particularly in health and fire safety. It is anticipated that during the period of this Plan, targeted enforcement activity will be maintained and developed so as to build on the very positive results achieved by the strategic data led approach of the Hertfordshire Safety Camera Partnership.

Speed Awareness

The North Report (Road Traffic Law Review 1988) stated “Retraining of traffic offenders may lead to an improvement in their driving, particularly if their training is angled towards their failings”. It also stated “It must be in the public interest to rectify a fault rather than punish the transgressor”.

National Speed Awareness courses were launched at the end of 2005. Hertfordshire Constabulary will introduce Speed Awareness courses and will refer some drivers, who are caught exceeding the speed limit, to the Road Safety Unit where drivers will be offered the opportunity of attending a course in lieu of receiving points on their licence. Hertfordshire, along with a number of other authorities, has volunteered to take part in initial DfT research into the effectiveness of the scheme.

Education programmes, including media campaigns, will continue to be run, during the lifetime of this Plan, in conjunction with regional colleagues and the Safety Camera Partnership in order to raise awareness of the dangers of excess and inappropriate speed. Feedback from safety camera public attitude surveys indicates a widespread lack of knowledge of speed limits, especially in 30mph areas. The 06/07 Hertfordshire Safety Camera Partnership promotional activity will focus on “Street lights = 30mph”.

Speed Management

Many local communities request speed reduction measures. The County Council has adopted a speed management strategy that provides a comprehensive toolkit of appropriate measures that are available for use across the road hierarchy structure. Part of the strategy will be to review speed limits by 2011 as outlined in the DfT announcement in December 2005. Enforcement, through the Safety Camera Partnership is an integral part of this strategy.

Safety camera enforcement in Hertfordshire occurs mainly on roads with 30mph and 40mph limits. This reflects the number of casualties that occur on these roads, as the criteria for camera enforcement are governed by the number of KSI's. Safety cameras, together with physical and awareness raising measures will continue to be used to encourage slower speeds.

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In order to keep the county moving, rural areas have been included in the road hierarchy. Due to the nature of rural roads, casualties and collisions tend to be more predominantly spread along a route, rather than clustered at individual sites or junctions. Where appropriate we will consider links to a variety of Rights of Way in order to encourage vulnerable road users to use routes that are more suitable for their transport needs. The county has implemented a number of “quiet lanes” as part of the STRAP project.

4.1.3 Powered Two Wheelers

The risk of collision and injury to motorcyclists remains high although motorcyclist KSI casualties in Hertfordshire have levelled at around 20% over the last few years but moped riders have risen recently. However this is disproportionately high as powered two wheelers are only 1.7% of the road user population in Hertfordshire.

A county wide study of powered two wheel KSI collisions will be undertaken, experience indicating that an area or route strategy will be the likely outcome for the safety engineering programme.

Education and training programmes to reduce the number of casualties will continue to be promoted. The Road Safety Unit will continue to work in partnership with the Hertfordshire Police in delivering both Advanced Motorcycle Rider courses and assessment rides under the national BikeSafe banner. It is intended to increase the number of Bikesafe events conducted against previous years and attract a wider spectrum of participants, including those riders with the least experience. Assessment rides will be offered and safety checks on motorcycles.

A number of Compulsory Basic Training (CBT) and other basic training schemes are available for prospective and new riders around the county run both by voluntary and commercial organisations. Help and advice will remain available from the Road Safety Unit and information on training courses will continue to be available through the Herts Direct website.

Motorcycling groups will be invited to participate in the development of a county motorcycling strategy through a motorcycling forum.

Hertfordshire has set up a “Wheels to Work” project as part of the Access to Work scheme. The Road Safety Unit has supported the project manager through providing road safety guidance and advice.

4.1.4 Pedestrians

There were 74 adult KSIs in 2004 with the twenty to twenty nine year olds being the highest group for pedestrian injury. A breakdown shows that they are most likely to be injured at weekends between the hours of 10pm and 2am, indicating the likelihood that alcohol is involved. However pedestrian casualties also occur across all the adult age bands. Further in depth studies will be undertaken in order to establish appropriate methods to reduce the number of adult pedestrian casualties.

4.1.5 Work Related Road Safety

A new focus for this Plan will be Work Related Road Safety as a result of Government research and advice. National data shows that a third of collisions involve someone travelling as part of their employment. "Tomorrows Roads – Safer for Everyone", draws particular attention to Work Related Road Safety. It states that company car drivers are 30% to 50% more likely to be involved in a collision than other drivers. In Hertfordshire 89% of casualties were in vehicles in 2004.

During the life of this Plan, Hertfordshire intends to develop and implement a programme to encourage business and fleet managers to introduce risk management systems and driver training programmes as part of Work Related Road Safety. This will include the County Council addressing the operation of its own vehicle fleet and is in line with Government, Health and Safety Commission (HSC) and the Health and Safety Executive (HSE) guidance.

A pilot project in Hertfordshire achieved a 16% reduction in insurance claims due to driver error for road collisions involving County Council employees, following a programme of practical driver assessment and training. Journey type is now being recorded on Stats 19 forms and will provide data that will identify interventions for the workplace.

Opportunities will be taken, where appropriate, to link with the Business TravelWise initiative to promote business travel planning as part of this process.

4.2 Child KSI Programmes

Table 2 below shows the key priorities to address Child KSI casualties and the three elements of engineering, education training and publicity (ETP), and enforcement that will be implemented to reduce and prevent such casualties. However there are many other programmes that will continue to have an important role to play.

Table 2

Child KSI Casualties			
Programme	Engineering	ETP	Enforcement
Seatbelts		X	X
Pedestrian	X	X	

On average 50% of child KSI's are pedestrians, 30% are car passengers and 20% are cyclists. A child safety audit of KSI casualties revealed there were very few cluster sites in the county hence an area approach will be adopted during the life of this Plan that identifies specific areas for engineering measures with high child KSI collisions.

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4.2.1 Seatbelts

About 50% of all children injured on the county's roads are travelling in vehicles. Included in this calculation are fatal, serious and slight injuries. The severity of injury is frequently increased by failure to either wear seatbelts or to use properly designed restraints. A DHSS report in 1985 established that there had been a 15% reduction in patients brought to hospital since seatbelt wearing had become compulsory.

Seatbelt wearing has been identified as a key issue with recent figures showing that not wearing a seatbelt is a major contributory factor in fatal casualties in Hertfordshire. At least 38% of people killed in vehicles in one year were not wearing seatbelts, and 50% of drivers and 75% of passengers killed in vehicles in a three year period in Hertfordshire were not belted.

The County Council and the Police are very concerned about the number of people, including children, observed not wearing seatbelts and the fact that high numbers of people killed in vehicles are not wearing seatbelts. The Road Safety Unit commissioned research into the reasons why people do or do not wear seatbelts. The results are currently being used to develop a long term strategy that will include joint education and enforcement programmes with the Police as well as work with regional partners. A new campaign "Dying for an Excuse" is currently in development as a direct result of the research findings. The research also showed that many young drivers feel that the presence of an airbag is sufficient to save them in the event of a collision.

Recent roadside checks have shown that 5397 unrestrained vehicle occupants were spotted during nine, two hour sessions in September 05. Joint education and enforcement campaigns will continue at selected sites across the county. Schools will be targeted as well as the general motoring public and opportunities will be taken to raise awareness of the law and penalties relating to seatbelt wearing.

The County Council will continue to run an in car safety education programme with parents and children, in conjunction with partners such as Primary Care staff, schools and Police. Emphasis will remain on the correct fitting of child car safety seats and ensuring children wear seat belts on every trip. Campaign activity to raise awareness of the issues is linked to the national THINK! campaign, both locally and regionally.

As part of Hertfordshire's focus on seatbelt wearing for all, further curriculum support initiatives will be developed during the life of this Plan.

Providing correct and timely information on child car safety seats to ensure parents receive sound advice before buying child safety seats is a focus for training of staff at retail outlets and work with health centres and ante-natal clinics across the county. Any changes to legislation will be supported by a programme of information using a variety of media including the county council website, Herts Direct.

Hertfordshire Police have begun to record data about seatbelt wearing on Stats 19 forms, as a local project, which will provide data to further inform casualty reduction and prevention programmes.

4.2.2 Pedestrians

Children are more likely to be seriously injured as pedestrians in Hertfordshire. On average 50% of child KSIs are pedestrians.

Children need to be equipped with the skills to cope with today's road environment and given the tools to develop safe strategies. A Child Pedestrian Skills Training programme for Hertfordshire children, "Streetwise", has been developed and early evaluation supports the findings published in DfT's "Tomorrow's Roads – Safer for Everyone". Children that received the training showed more road safety skills and had a better understanding of those skills than children from a control group. More of the children involved in the training walked to school.

In line with Government guidance and best practice the County Council will further develop and extend its Child Pedestrian Skills Training programme. This will also support health objectives by encouraging physical activity and with congestion being a major concern to the public in the county (64%, MORI Poll, 2004) encouragement to walk, together with supporting safety training will make a contribution to the range of programmes designed to address congestion.

The County Council will continue to work with children aged 3 – 5 years and their parents, carers and teachers, to help adults understand children's capabilities and limitations, and to enable them to actively develop the child's understanding of road safety issues, and particularly help them develop their pedestrian skills. This will be achieved through working with pre-school and reception classes, engaging with leaders and parents, and through college courses where those wishing to work with children are trained.

The County Council has recruited staff to focus specifically on spreading Hertfordshire's child pedestrian skills training programme across the county. The programme is already running in 33 schools at Key Stage 1 and has recently been extended to 12 schools at Key Stage 2. Successful implementation will rely on buy in from the whole school community. We will focus on areas of high child pedestrian KSIs and take social deprivation into account when extending the scheme.

School Travel Plans and Safer Routes to School

The Road Safety Unit will continue to support and encourage the School Travel Planning process and Safer Routes to School programme through the promotion of child pedestrian skills training, Walking Buses and cycle training. This will support Hertfordshire's TravelWise policies of persuading parents to walk their children to school rather than use a car, in order to reduce congestion and pollution. The Unit will also give active support to Walk to School activities by providing teachers with supporting road safety education resources.

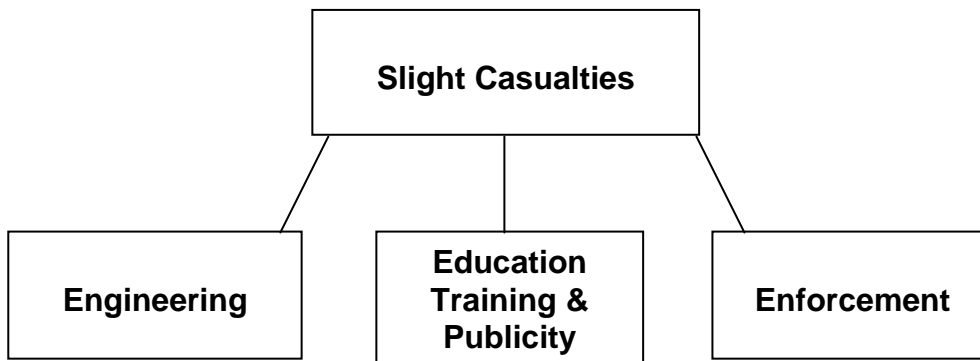
Safety is an integral part of Safer Routes to School schemes. Engineering measures that encourage children to use alternative modes of travel will continue to be considered. Programmes such as child pedestrian and cycle skills training, together with curriculum support focussed on road safety will also be encouraged.

4.3 Slight Programmes

The figure below shows that the three key elements to address slight casualties are engineering, education training and publicity (ETP), and enforcement.

There are many programmes that contribute to reducing slight casualties, including all those targeted at KSIs and it is only through a combination of all these programmes that we will meet our target.

Slight Casualty Reduction



5 ENGINEERING MEASURES

5.1 Safety Engineering Programme

The Safety Engineering programme is the principal means of tackling casualty reduction through physical alterations to the road layout. The process for site selection is set out below, based on three year casualty and collision data. Following implementation, schemes are monitored for three years in order to establish effectiveness.

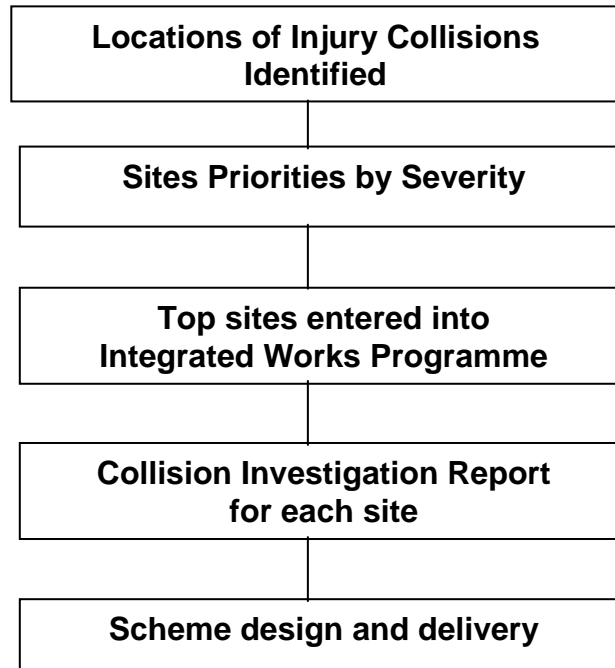
Three year monitoring of safety schemes implemented during 2000/01 resulted in total savings of 248 collisions over the three year period after they were built. The schemes cost a total of £1.8m and produced savings of £21.8m, using DfT Highways Economic Note (HEN) calculations (Appendix 1). Year on year this equates to an annual saving of more than £7.2m.

Identification of sites to address injury collisions can be grouped into five distinct methods:

Area Study:	considers geographical areas, not necessarily ward or district areas, with high incidences of severe injury collisions
Route Study:	considers routes with high incidences of severe injury collisions
Speed Related:	considers routes with high incidences of severe injury collisions that are speed related. Speed related can include misjudgement (the most frequent identified), too fast for the conditions, inappropriate or excessive. Close links are made here with the Safety Camera Partnership
Cluster Sites:	identifies injury collisions that have been clustered closely together. This data is collated in the annual Hazardous Sites report
Mass Action:	identifies small clusters where the contributory factors identified are common such as bend, dark conditions, wet conditions or skidding. This data is collated in the annual Hazardous Sites report

The process for determining which schemes should be delivered each year is set out in the figure below. The first step is to gather casualty data and to rank sites in the Hazardous Sites Report. The top sites are then entered into the Integrated Works Programme (IWP), which sets out all of the County Council's highways works. This enables cross-benefits between different programmes to be identified. The scheme design for each safety engineering site is determined through a Collision Investigation Report. Further details of all these processes are set out in Appendix 2.

Decision Making Process



Cost benefit

One of the aspects considered during the investigation process is the economic evaluation of the remedial measures proposed. This is a requirement that determines how quickly the cost of implementing the project is returned in terms of collisions and casualties saved.

A first year rate of economic return of 100% is generally sought for most projects with an estimated casualty reduction saving of 40% of those collisions targeted. The three year monitor of safety schemes in Appendix 1 shows that a 44% reduction in casualties was achieved for schemes implemented in 2000/01.

Member and Public Engagement

There is a three stage process for members, where initial information of locations under investigation comes through the IWP that is circulated in January each year identifying sites for the following year. The second stage, after officers have completed a preliminary investigation, is reported to members in the form of a spreadsheet for a whole district area. The third stage is by letter direct to members informing them of collision investigation findings and proposals in their area. Members are offered the opportunity to meet with officers at this stage. Engagement with the public is carried out after contact with members. Where significant differing views cannot be resolved, the Development Control Committee will consider the scheme and make recommendations.

Monitoring

Collision remedial schemes are monitored for a period of at least three years after completion to ensure they meet their operational targets. This data is submitted to the DfT's Molasses database, where it is used to monitor the effectiveness of different approaches to remedial work and to provide guidance on design best practice.

Future Development

Consideration will be given during the life of LTP2 to using collision and casualty data and/or risk assessment information to add value and influence other transport programmes such as Integrated Transport Projects (ITP) and maintenance schemes. Casualty data is already one of the issues considered when prioritising and developing modal shift programmes such as Safer Routes to School and School Travel Plans.

The core of the next five years' strategies will be a continued focus on a balance of casualty reduction measures but with an increasingly heavy emphasis on route studies. Additional cost benefits will be achieved from treating a larger number of injury collisions along a route than would be found at a specific site. The strategy will take into account the availability of a range of effective engineering measures, suitably qualified and experienced staff and financial resources. This balance requires an annual review of the programmes adopted to support the Government targets.

5.2 Network Management

Network management includes on-going programmes of maintenance and a full range of traffic and environmental schemes. This not only contributes to casualty reduction but also to casualty prevention.

Whilst the goals of casualty reduction by engineering are often centred on collision remedial work, without the work of area offices, safety schemes that are installed and the general local road infrastructure would not operate safely and effectively. The following list gives examples of the type and scale of work carried out by the Area Highway offices, which directly affects safety:

- Routine maintenance of verges for visibility requirements
- Patching to repair potholes in carriageways and footways
- Gulley emptying for efficient water run-off which is particularly important in winter conditions
- Drainage repairs and improvements to deal with flooding
- Footway repairs to deal with trips and dropping of kerbs for disabled access
- Provision of tactile paving at crossing points, for people with visual impairments
- Street lighting inspections and repairs which not only contribute to the safety of road users, but also impact greatly on personal security
- Winter maintenance, salting of essential routes and clearing of snow
- Carriageway and footway resurfacing
- Sign cleaning and maintenance

- Road marking schemes and maintenance
- Traffic and environmental schemes which amongst other objectives aim to improve safety
- Traffic calming schemes
- Monitoring the implementation of safety engineering schemes

All of the items above are implemented in accordance with DfT technical standards and in Hertfordshire's Transport Asset Management Plan (TAMP).

To help people we have a 24 hour fault line number 01438 743270 and our customer service centre is widely publicised to ensure easy access for the public. Faults can be reported online at www.hertsdirect.org where there is also a list of all the winter salting routes.

5.3 Area Transport Plans

Although Area Transport Plans are not specifically developed to address injury collisions and casualties, many of the elements, such as traffic calming measures, new pedestrian and cycle facilities and the like, incorporated into such schemes will have an effect on casualty reduction and prevention.

5.4 Safer Routes to School

Safety is an integral part of Safer Routes to School schemes. Engineering measures, similar to those mentioned above, that encourage children to use alternative modes of travel will continue to be considered. Programmes such as child pedestrian and cycle skills training, together with curriculum support focussed on road safety will also be encouraged.

5.5 Safety Audit

Collision prevention is achieved through the systematic application of safety principles to highway schemes. This process should include the provision, improvement and maintenance of the public highway and is usually known as safety audit.

RoSPA has estimated that up to 30% of collisions could be prevented on major road schemes, by the consistent applications of safety audit techniques. Hertfordshire was at the forefront of development of the policies, principles and practice of road safety audit, and all new schemes and highway improvements are safety audited at up to four key stages in the design process.

The Hertfordshire Safety Audit procedure is being reviewed in the light of the new Highways Agency safety audit procedure, to ensure that the process remains thorough and up-to-date.

6 EDUCATION, TRAINING AND PUBLICITY - ADULTS

6.1 Seatbelts

The severity of injury is frequently increased by failure to either wear seatbelts or to use properly designed restraints. A DHSS report in 1985 established that there had been a 15% reduction in patients brought to hospital since seatbelt wearing had become compulsory. Seatbelt wearing has been identified as a key issue with recent figures showing that not wearing a seatbelt is a major contributory factor in fatal casualties in Hertfordshire. At least 38% of people killed in vehicles in one year were not wearing seatbelts, and 50% of drivers and 75% of passengers killed in vehicles in a three year period in Hertfordshire were not belted.

The County Council and the Police are very concerned about the number of people observed not wearing seatbelts and the fact that high numbers of people killed in vehicles are not wearing seatbelts. The Road Safety Unit commissioned research into the reasons why people do or do not wear seatbelts. The results are currently being used to develop a long term strategy that will include joint education and enforcement programmes with the Police as well as work with regional partners.

Campaign activity to raise awareness of the issues is linked to the national THINK! campaign, both locally and regionally. A new campaign "Dying for an Excuse" is currently in development as a direct result of the research findings. The research also showed that many young drivers feel that the presence of an airbag is sufficient to save them in the event of a collision.

Recent roadside checks have shown that 5397 unrestrained vehicle occupants were spotted during nine, two hour sessions in September 05. Joint education and enforcement campaigns will continue at selected sites across the county. Schools will be targeted as well as the general motoring public and opportunities will be taken to raise awareness of the law and penalties relating to seatbelt wearing.

Providing correct and timely information on child car safety seats to ensure parents receive sound advice before buying child safety seats is a focus for training of staff at retail outlets and work with health centres and ante-natal clinics across the county. Any changes to legislation will be supported by a programme of information using a variety of media including the county council website, Herts Direct.

Hertfordshire Police have begun to record data about seatbelt wearing on Stats 19 forms, as a local project, which will provide data to further inform casualty reduction and prevention programmes.

6.2 Speed

Speed Awareness

The North Report (Road Traffic Law Review 1988) stated "Retraining of traffic offenders may lead to an improvement in their driving, particularly if their training is angled towards their failings". It also stated "It must be in the public interest to rectify a fault rather than punish the transgressor".

National Speed Awareness courses were launched at the end of 2005. Hertfordshire Constabulary will introduce Speed Awareness courses and will refer some drivers, who are caught exceeding the speed limit, to the Road Safety Unit where drivers will be offered the opportunity of attending a course in lieu of receiving points on their licence. Hertfordshire, along with a number of other authorities, has volunteered to take part in initial DfT research into the effectiveness of the scheme.

Education programmes, including media campaigns, will continue to be run, during the lifetime of this Plan, in conjunction with regional colleagues and the Safety Camera Partnership in order to raise awareness of the dangers of excess and inappropriate speed. Feedback from safety camera public attitude surveys indicates a widespread lack of knowledge of speed limits, especially in 30mph areas. The 06/07 Hertfordshire Safety Camera Partnership promotional activity will focus on "Street lights = 30mph".

6.3 Powered Two Wheelers

The risk of collision and injury to motorcyclists remains high although motorcyclist KSI casualties in Hertfordshire have levelled at around 20% over the last few years but moped riders have risen recently. However this is disproportionately high as powered two wheelers are only 1.7% of the road user population in Hertfordshire.

A county wide study of powered two wheel KSI collisions will be undertaken, experience indicating that an area or route strategy will be the likely outcome for the safety engineering programme.

Education and training programmes to reduce the number of casualties will continue to be promoted. The Road Safety Unit will continue to work in partnership with the Hertfordshire Police in delivering both Advanced Motorcycle Rider courses and assessment rides under the national BikeSafe banner. It is intended to increase the number of Bikesafe events conducted against previous years and attract a wider spectrum of participants, including those riders with the least experience. Assessment rides will be offered and safety checks on motorcycles. BikeSafe events will also involve local training organisations and retailers.

A number of Compulsory Basic Training (CBT) and other basic training schemes are available for prospective and new riders around the county run both by voluntary and commercial organisations. Help and advice will remain available from the Road Safety Unit and information on training courses will continue to be available through the Herts Direct website.

Motorcycling groups will be invited to participate in the development of a county motorcycling strategy through a motorcycling forum.

Hertfordshire has set up a "Wheels to Work" project as part of the Access to Work scheme. The Road Safety Unit has supported the project manager through providing road safety guidance and advice.

6.4 Pedestrians

There were 74 adult KSIs in 2004 with the twenty to twenty nine year olds being the highest group for pedestrian injury. A breakdown shows that they are most likely to be injured at weekends between the hours of 10pm and 2am, indicating the likelihood that alcohol is involved. However pedestrian casualties also occur across all the adult age bands. Further in depth studies will be undertaken in order to establish appropriate methods to reduce the number of adult pedestrian casualties.

On average, 50% of child KSI's in Hertfordshire are pedestrians, with 30 children being involved in 2004. Children need to be equipped with the skills to cope with today's road environment and given the tools to develop safe strategies. Parents and carers will be specifically targeted to ensure they continue and reinforce the lessons learnt by children taking part in Hertfordshire's child pedestrian skills training programme, "Streetwise".

6.5 Work Related Road Safety

A new focus for this Plan will be Work Related Road Safety as a result of Government research and advice. National data shows that a third of collisions involve someone travelling as part of their employment. "Tomorrows Roads – Safer for Everyone", draws particular attention to Work Related Road Safety. It states that company car drivers are 30% to 50% more likely to be involved in a collision than other drivers. In Hertfordshire 89% of casualties were in vehicles in 2004. During the life of this Plan, Hertfordshire intends to develop and implement a programme to encourage business and fleet managers to introduce risk management systems and driver training programmes as part of Work Related Road Safety. This will include the County Council addressing the operation of its own vehicle fleet and is in line with Government, Health and Safety Commission (HSC) and the Health and Safety Executive (HSE) guidance.

A pilot project in Hertfordshire achieved a 16% reduction in insurance claims due to driver error for road collisions involving County Council employees, following a programme of practical driver assessment and training.

Journey type is now being recorded on Stats 19 forms and will provide data that will identify interventions for the workplace.

Opportunities will be taken, where appropriate, to link with the Business TravelWise initiative to promote business travel planning as part of this process.

6.4 Other Road User Behaviour

Car Users

90% of road traffic collisions involve some form of driver error. Engineering measures such as additional signing or road marking can help to reduce driver error as can a range of awareness raising education measures.

Casualties to car users continue to dominate the casualty figures accounting for between 70-75% of the total. Improving driving standards in the county will therefore

continue to be one of the County Council's key approaches to casualty reduction, both in terms of improving actual driving skills, and perhaps more importantly, changing drivers attitudes and increasing their hazard perception skills.

Driver training programmes offered by the Road Safety Unit will continue to run with help and sponsorship from other departments, voluntary and commercial organisations, including the Hertfordshire Constabulary, the Institute of Advanced Motorists (IAM), the Royal Society for the Prevention of Accidents (RoSPA), West Herts Training and Approved Driving Instructors (ADIs).

Programme focus will include providing a National Driver Improvement Scheme for the Hertfordshire Police (delivered by qualified ADIs). The overall aim of the Driver Improvement Scheme will be to reduce the number of road traffic collisions in Hertfordshire by offering a re-training opportunity. Research shows that traffic offenders often exhibit both deficiencies in driving skills, and inappropriate attitudes and behaviour. With theoretical and practical training inputs, the scheme is designed to address both these areas and will continue to be provided by the Road Safety Unit. Drivers involved in traffic incidents will be referred to the scheme as an alternative to prosecution for driving without due care and attention.

As mentioned in 6.2, the County Council is due to introduce Speed Awareness courses on behalf of the Police in 2006.

Other programmes include:

- advising the county council on best practice in operating its own vehicle fleet
- providing Advanced Driver courses in partnership with IAM, RoSPA and the Police
- managing the county minibus driver permit scheme
- working with organisations with access to older drivers to arrange specialist "Driving Advantage" courses delivered in partnership with a doctor and physiotherapist.

Alcohol and Drugs

"Alcohol or drugs" was a factor in 57 KSI collisions in 2004, a reduction from 64 in 2003. 156 drivers gave positive breath tests or refused/failed to provide a breath test during 2004, a reduction of 17 compared with 2003. Alcohol or drugs is also a feature in adult pedestrian KSI casualties.

The Road Safety Unit has begun a research project with students to establish knowledge and attitudes toward driving after taking drugs. Initial indications appear to show that a majority of those taking part feel that it is acceptable to drive after smoking cannabis as it could reduce the incidence of "road rage". Further testing and research is required but the outcome will help us to develop awareness raising messages for this "at risk" group.

The County Council will continue to work with other agencies such as the Police and drug and alcohol agencies to raise awareness of these issues through campaigning and other education measures.

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The Constabulary will conduct enforcement campaigns for drink and drug driving in the summer and prior to Christmas. These campaigns will be accompanied by publicity at a national level.

General Behaviour

Publicity campaigns will continue to bring the safety message to adults, as well as young people and children, with the objective of encouraging safer behaviour. Collision investigations will identify major behavioural causation factors and the appropriate target groups.

Campaign activity will continue to address identifiable issues such as seatbelts, drink and drug driving, driver fatigue, use of mobile phones, driving in bad weather and motorcycle safety. Interventions will be based on data and research or best practice information.

The County Council will continue to support and promote DfT THINK! campaigns that aim to bring home to all the importance of safer road user behaviour and the part that everyone can play in reducing death and injuries. THINK! road safety messages will be disseminated through a variety of organisations.

Publicity campaigns will also continue to be carried out on a regional basis, an example being the For My Girlfriend (FMG) campaign aimed at drivers aged 17-24. This campaign was developed by eight Eastern Region authorities on the basis of joint research which showed that drivers of this age group were more concerned about injuring or killing a loved one than danger to themselves. The campaign has been running for four years and planning is underway for extensions of the FMG brand.

In the course of traffic enforcement duties, the Police will also use appropriate opportunities to educate members of the public.

Hertfordshire Fire and Rescue Service will work actively with partners in the Police and Ambulance Services, County Council and other agencies to reduce road traffic collisions during the life of this Plan through involvement in a Strategic Road Casualty Reduction Group. They will work to reduce road traffic collisions and the consequent deaths and injuries by encouraging fire stations and specialist departments to enter into local multi-agency initiatives, where appropriate and to assist in the dissemination of road safety education messages. The Service is currently exploring a number of projects ranging from safety videos for new drivers, to local fire station education and awareness events. The Service will continue to explore a number of further initiatives over the coming years.

7 EDUCATION, TRAINING & PUBLICITY - CHILDREN

7.1 Strategy

“Tomorrow’s Roads – Safer for Everyone” states that road traffic collisions are the biggest single cause of death and serious injury to young people. The continuing objectives of providing programmes of road safety education throughout the life of this Plan will be to help minimise the number of road collisions and subsequent injuries. Whilst the major responsibility for a child’s safety rests with parents, schools will be encouraged to promote safe behaviour and ensure that children have the skills needed to use roads safely.

Hertfordshire’s approach to road safety education will continue to include all of the Government recommendations below:

- Teaching children basic road skills and offering advice to parents and teachers
- Giving advice to parents on in-car safety and teaching children to behave safely on roads
- Encouraging schools to teach road safety in PSHE (Personal, Social and Health Education) at Key Stages 1, 2 and 3
- Increase access to road safety materials via the Internet
- Provision of roadside pedestrian training schemes and cycle training schemes
- Provision of information to pupils and parents at secondary school transfer age
- Help for schools in developing travel plans
- Provision of advice on independent mobility to older teenagers
- Education and publicity, particularly about the dangers of driving too fast

7.2 Child Restraints and Seatbelts

About 50% of all children injured on the county’s roads are travelling in vehicles. Included in this calculation are fatal, serious and slight injuries. The severity of injury is frequently increased by failure to either wear seatbelts or to use properly designed restraints. A DHSS report in 1985 established that there had been a 15% reduction in patients brought to hospital since seatbelt wearing had become compulsory.

The County Council and the Police are very concerned about the number of people, including children, observed not wearing seatbelts. Recent roadside checks in September 2005 resulted in 299 unrestrained children being spotted during nine, two hour sessions. Joint education and enforcement campaigns will continue at selected sites across the county. Schools will be targeted as well as the general motoring public and opportunities will be taken to raise awareness of the law and penalties relating to seatbelt wearing.

Providing correct and timely information on child car safety seats to ensure parents receive sound advice before buying child safety seats is a focus for training of staff at retail outlets and work with health centres and ante-natal clinics across the county. Any changes to legislation will be supported by a programme of information using a variety of media including the county council website, Herts Direct.

Hertfordshire Police have begun to record data about seatbelt wearing on Stats 19 forms, as a local project, which will provide data to further inform casualty reduction and prevention programmes.

7.3 Pedestrians

Children are more likely to be seriously injured as pedestrians in Hertfordshire. On average 50% of child KSIs are pedestrians.

A Child Pedestrian Skills Training programme for Hertfordshire children, "Streetwise", has been developed and early evaluation supports the findings published in DfT's "Tomorrow's Roads – Safer for Everyone". Children that received the training showed more road safety skills and had a better understanding of those skills than children from a control group. More of the children involved in the training walked to school.

The County Council has recruited staff to focus specifically on spreading Hertfordshire's child pedestrian skills training programme across the county. The programme is already running in 33 schools at Key Stage 1 and has recently been extended to 12 schools at Key Stage 2. Successful implementation will rely on buy in from the whole school community. We will focus on areas of high child pedestrian KSIs and take social deprivation into account when extending the scheme.

In line with Government guidance and best practice the County Council will further develop and extend its Child Pedestrian Skills Training programme to ensure children are equipped with the strategies required to cope with today's road environment. This will also support health objectives by encouraging physical activity and with congestion being a major concern to the public in the county (64%, MORI Poll, 2004) encouragement to walk, together with supporting safety training will make a contribution to the range of programmes designed to address congestion.

The County Council will continue to work with children aged 3 – 5 years and their parents, carers and teachers, to help adults understand children's capabilities and limitations, and to enable them to actively develop the child's understanding of road safety issues, and particularly help them develop their pedestrian skills. This will be achieved through working with pre-school and reception classes, engaging with leaders and parents, and through college courses where those wishing to work with children are trained.

Child pedestrian skills training and Walking Buses will also be promoted through the School Travel Planning process and Safer Routes to School programme. This will support Hertfordshire's TravelWise policies of persuading parents to walk their children to school rather than use a car, in order to reduce congestion and pollution. The Unit will also give active support to Walk to School activities by providing teachers with supporting road safety education resources.

7.4 School Crossing Patrols

For many parents, an important part of the decision about whether a child can walk to school often centres on whether a School Crossing Patrol will be there to help the child across busy roads. The Road Safety Unit will continue to manage the School Crossing Patrol service throughout the life of this Plan. Patrols will be provided at schools that meet Hertfordshire's criteria, although recruitment continues to be an issue.

The agreed criteria for the provision of School Crossing Patrols in Hertfordshire includes reducing the nationally recommended PV² of 4 million to 3 million where only primary aged children are crossing. Consideration will continue to be given to providing Patrols on a temporary basis at schools where the criterion is not quite met, but the parents agree to increase walking levels. The site will be monitored for six months to ensure that increased numbers of parents and children are walking before the patrol is made permanent.

Patrols will be monitored at least once a term, and all sites risk assessed.

The service is valued by parents and children, evidenced by high public concern and often media interest when a site is vacant. Since a change in legislation, patrols are now allowed to cross adults during the periods of duty, thus providing a valuable service to the community.

Unfortunately the service suffers from relatively high vacancy rates, with some sites remaining without a patrol for some time. The reasons for this will be constantly reviewed in the hope of retaining or employing more patrols. Further initiatives will be developed to encourage new recruits, including regional and local campaigns. The service will take part in the County Council recruitment campaign, Herts Heroes.

Drivers who refuse to stop to allow the children to cross the road safely cause one of the main problems experienced by Patrols. Hertfordshire developed the regional "Stop Means Stop" campaign that continues to run annually. New approaches to highlight the presence of school crossing patrols to drivers have been implemented as part of a child safety initiative. The Police will support prosecution of drivers reported to them by the School Crossing Patrol Service.

7.5 Curriculum Support

Road safety education in Hertfordshire will continue to be based on researched and documented practices, policies and guidance to address more than skills attainment, but also develop a person's knowledge, attitudes and beliefs. To this end the Road Safety Unit will continue to encourage all primary and secondary schools to plan and implement a co-ordinated programme of road safety education within the curriculum and through inclusion of road safety issues within in-service training, curriculum and topic planning.

The Unit will provide support, information, advice and resources to teachers, enabling them to implement structured road safety education programmes and will form working partnerships with other agencies and professionals to actively promote road safety education. An example of this is the Megadrive programme for pre-

drivers involving a host of other agencies in a vehicle focussed event which gives the opportunity to promote safe attitudes and behaviour. This programme will be developed further on a local basis during the life of this Plan.

From time to time the Police will provide an input to road safety education in schools, in liaison with the Road Safety Unit.

7.6 Cycle Training

The County Council will continue to provide Young Cyclist Training that includes on-road cycle training and off-road cycle skills for children.

The new National Cycle Training Standard was launched in 2004 and the Road Safety Unit is keen to develop its cycle training programme in line with the Standard. There are three distinct stages, including level three which offers advanced training for teenagers and adults. However our ability to meet the Standard could be compromised by the costs involved. The Road Safety Unit has undergone accreditation to be the first National Cycle Training Standard Training Provider in the region.

All adults and children taking part in cycling courses must wear a cycle helmet.

8 ENFORCEMENT

8.1 Hertfordshire Constabulary - Operational Objectives

Hertfordshire Constabulary has adopted the joint Roads Policing Strategy agreed by ACPO, the Highways Agency and the Department for Transport. This strategy has road safety as a key priority and also denying criminals the use of the road. Research in Hertfordshire, in relation to road deaths and also death by dangerous offences, shows that there are strong links between criminal behaviour and road collisions.

The prime objective of enforcement programmes will be the reduction of road collisions, particularly those that result in death or injury. A major objective will be to channel efforts towards preventing road users from committing offences that contribute to death and injury.

Enforcement will continue to focus on speed, seat belts, mobile phone use and drink / drug driving. In addition, use of powers to seize vehicles driven by uninsured or unlicensed drivers will be maximised. Approximately 50% of seized vehicles are scrapped, contributing significantly to road safety by removing unroadworthy vehicles from continued use.

The use of Automatic Number Plate Recognition (ANPR) is being developed across the County in terms of mobile deployment and static sites, as another form of enforcement camera. ANPR has a deterrent affect and also assists the police in tackling offenders for disqualified driving, no insurance and other criminal offences.

It will be important to note that the extent of Police involvement in these activities will always be subject to overall operational requirements and commitments.

In addition the Constabulary has set up a strategic Road Risk Management Group focusing on reducing the collision rates of the Force's own vehicles and where necessary, implement appropriate changes to the already stringent driver training programmes and standing orders relating to the use of police vehicles.

8.2 Hertfordshire Constabulary - Enforcement Programmes

Hertfordshire Police will take into account collision and casualty levels associated with infringement of road traffic laws when making decisions about enforcement programmes. This will ensure that enforcement resources are used to the best effect in relation to the prevention of injury collisions.

Hertfordshire Police will liaise closely with the Environment Department on all matters affecting road safety, such as traffic management, collision investigation and education. Joint monitoring of injury collisions will take place, so that engineering, education and enforcement issues can be identified.

Where appropriate, the Police will plan enforcement campaigns in association with the Road Safety Unit. This will enable complementary publicity campaigns to be implemented around issues such as low seat-belt wearing levels and the use of mobile phones while driving.

The PACTS document “Policing Road Risk” states that there is much evidence indicating links between enforcement, compliance with road traffic law and road casualty reduction. Traffic camera enforcement technology will increasingly be used to enforce traffic law in the county, through the use of speed and red light cameras as well as Automatic Number Plate Recognition (ANPR). ANPR is proving to be an effective tool in detecting and prosecuting disqualified, unlicensed and uninsured drivers.

8.3 Hertfordshire Safety Camera Partnership

The partners in the Hertfordshire Safety Camera Partnership, Hertfordshire County Council, Hertfordshire Constabulary and Her Majesty’s Courts’ Service, were accepted into the national safety camera partnership scheme in October 2002 with the Highways Agency becoming a Partner in April 2005.

Enforcement of speed limits and red light offences will remain the responsibility of the Hertfordshire Safety Camera Partnership during the life of this Plan. Camera technology will continue to be used to identify motorists exceeding the speed limit, and motorists who fail to stop at red traffic lights. There are currently 57 static speed sites with 117 housings, 48 mobile speed sites and 7 red light camera sites across the county.

Safety camera operations, including where safety cameras can be deployed, are governed by the DfT Handbook of Rules and Guidance and approval for continued safety camera enforcement during 06/07 will be sought through the Operational Case submission. Further detail of the criteria for speed and red light cameras are in Appendix 2.

The safety camera scheme currently enables funds from fines to be used to further increase safety camera provision at injury collision sites. The planned changes to funding for safety camera partnerships through the LTP, announced by the DfT in December 2005, will ensure that safety camera activity is integrated into the wider road safety delivery process. The aim is to provide additional flexibility to target local road safety problems in the most appropriate and cost effective manner.

To further develop our road safety strategy, so as to maximise the benefits of the new funding arrangements when they come into effect in April 2007, we will be working closely with our existing partners (including police and the Highways Agency) through a new Road Safety Partnership. We will extend this partnership to include other stakeholders where appropriate, particularly in health and fire safety. It is anticipated that during the period of this Plan, targeted enforcement activity will be maintained and developed so as to build on the very positive results achieved by the strategic data led approach of the Hertfordshire Safety Camera Partnership.

The Year 4 evaluation study by UCL demonstrated Hertfordshire had achieved a 69.7% reduction in KSIs at camera sites in the county and a 37.7% reduction in personal injury collisions at camera sites.

9 LINKS TO OTHER AREAS OF WORK

Herts Forward, the countywide strategic partnership, has set out a shared vision for the future and identified the important issues and challenges faced in Hertfordshire. The reduction of death and injury from road traffic collisions is one of the identified objectives and also features in a number of local district community strategies. Links will be made to those strategies and, where relevant, links will also be made to Local Health Improvement Plans (HIMPS) and Community Safety Strategies where road safety has been raised as an issue.

The Constabulary traffic management officers work in partnership with Hertfordshire Highways, the Highways Authorities and local authorities on road safety and community safety initiatives. This vital link assists in ensuring that the responsibilities under the Crime and Disorder Act are considered.

A Road Safety Partnership, including partners such as Police, Fire and Rescue Service, Ambulance and Paramedic Trust and the Health Authority is to be developed. The aim is to bring added value to casualty reduction programmes through an agreed overarching strategy with supporting individual annual action plans that will address specific areas of concern to the partners. This will be achieved through sharing of data, identification of agreed priorities and relevant support, together with appropriate training where required and responds to the steer from DfT with regard to changes to the Safety Camera Partnership scheme.

Hertfordshire's Children and Young People's Plan, the county's response to the DfES document "Every Child Matters", has also identified road safety as an objective.

10 FUTURE ISSUES

The County Council is aware of the Road Safety Bill currently going through Parliament. We will consider the outcomes when it is enacted and incorporate amendments to this Plan as necessary. The proposal to bring in graduated penalties for speeding fines, together with new powers regarding foreign drivers, will affect the operation of the Safety Camera Partnership, if it is agreed.

11 FUNDING

The majority of the funding needed to deliver this Plan will be secured from the Local Transport Plan block allocation for new capital projects. Further capital and revenue funding will be sourced from the County Council's budget.

From 07/08 funding for the Hertfordshire Safety Camera Partnership will be through the LTP. Indicative financial planning guidelines are:

£ms	2007/08	2008/09	2009/10	2010/11
Capital	£508,732	£495,624	£485,958	£478,378
Revenue	£2,289,293	£2,230,306	£2,186,810	£2,152,700
Total additional financial planning guideline	£2,798,025	£2,725,930	£2,672,768	£2,631,078

12 Monitoring

Progress towards the key targets will be published in the LTP Progress Report.

Details of individual programmes will be set out in the annual Road Safety Plan Review.

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- Hertfordshire Road Safety Unit Service Plan
- Hertfordshire Road Safety Plan 2000 - 2005
- Handbook of Rules and Guidance for the National
Safety Camera Programme for England and Wales DfT, November 2004
- The National Safety Camera Programme,
Four-year evaluation report UCL/PA Consulting December 2005
- Policing Road Risk PACTS, September 2005
- The North Report (Road Traffic Law Review) Dr Peter North, 1988
- Driving at Work – Managing WRRS DfT/HSE, September 2003

APPENDIX 1

Safety Schemes 2000/2001: 3 Year Scheme Monitor

SCHEME NAME	STUDY PERIOD (Years)	STUDY PERIOD (BEFORE)	TOTAL ACCIDENTS BEFORE	OPTIMISTIC PREDICTED REDUCTION	PESSIMISTIC PREDICTED REDUCTION	AVERAGE PREDICTION REDUCTION	WORKS COMPLETE	WORKS COSTS	STUDY PERIOD AFTER	Total Accidents After	3 YEAR ACCIDENT SAVING	ANNUAL ACCIDENT SAVINGS	ADDITIONAL COMMENTS
A414 St Albans Road West – Speed Camera Maintenance	3	Jan 98- Dec 00	63	8.00	4.00	6.00	Mar 2001	126500	Mar 01-Feb 04	47	16	5.33	Safety Cameras
A412 Uxbridge Road J/W Cedars Avenue, Rickmansworth	3	Jan 96 – Dec 98	6	1.00	0.50	0.75	Sep 2000	6000	Oct 00- Sep 03	2	4	1.33	
St Vincents Drive/Mile House Lane/A1081 London Road, St Albans	3	Jan 94 – Dec 96	9	6.00	3.00	4.50	Mar 2000	195000	Apr 00 - Mar 03	14	-5	-1.67	Alternative layouts under consideration to address continuing accident trend.
Adeyfield Road, Hemel H (Longlands to Everest Way)	3	Dec 95 – Nov 98	12	6.00	3.00	4.50	Nov 2000	63000	Dec 00- Nov 03	6	6	2.00	Check Dates/Study Area
Boundary way (N-S) J/W Boundary Way (E-W), Hemel Hempstead.	3	Dec 95 – Nov 98	10	6.50	3.50	5.00	Nov 2000	46000	Dec 00- Nov 03	1	9	3.00	Check Dates/Study Area
Shire Lane/Lower Rod (Station Approach), Chorleywood.	3	May 96 – Apr 99	9	5.00	4.00	4.50	May 2001	30000	Jun 01- May 04	6	3	1.00	
A1081 Harpenden Road, Ancient Briton Junction.	3	Jan 95 – Dec 97	24	10.00	8.00	9.00	Jan 2001	110000	Feb 01- Jan 04	12	12	4.00	
B656 Mansells Bend, Codicote	33	Jun 99 – May 00	12	3.00	2.25	2.63	Dec 2000	70000	Jan 01- Dec 03	0	12	4.00	Accident numbers and savings are pro rata to reflect a 3 year period.
B1383 Stansted Road/Parsonage Lane, Bishops Stortford	3	Apr 96 – Mar 99	8	4.00	2.00	3.00	Jul 2001	61000	Aug 01- Jul 04	4	4	1.33	
A505 Baldock Road (Bowershot) Letchworth	3	Aug 95 – Jul 98	9	6.00	3.00	4.50	Jun 2000	11100	Jul 00- Jun 03	1	8	2.67	Check Study Area
B5378 Black Lion Hill, Shenley	3	Mar 96 – Feb 99	19	7.00	4.00	5.50	Nov 2000	30000	Dec 00- Nov 03	6	13	4.33	Check Study Area
Birdshill/Norton Way Roundabout, Letchworth	3	Oct 95 – Sept 98	17	4.80	2.00	3.40	Jun 2000	21500	Jul 00- Jun 03	10	7	2.33	Check Study Area
Queen Street/Hermitage Road, Hitchin	3	Feb 95 – Jan 98	18	6.00	4.00	5.00	Jun 2000	20000	Jul 00- Jun 03	2	16	5.33	Check Study Area
A505 Moormead Hill, Offley Bypass, Hitchin.	3	Sep 95 – Aug 98	9	6.00	4.00	5.00	Jun 2000	60000	Jul 00- Jun 03	6	3	1.00	
Broadwater Crescent (Phase 1), Stevenage.	3	Apr 96 – Mar 99	23	12.50	8.00	10.25	Jul 2001	180000	Aug 01- Jul 04	11	12	4.00	
A411 Sparrows Herne (School Lane to Elstree Road), Bushey.	3	Feb 96 – Jan 99	21	8.00	5.00	6.50	Oct 2000	42000	Nov 00- Oct 03	10	11	3.67	Additional measures to be considered to target new accident cluster at Elstree Road junction.
Bedford Road and Archers Way, Letchworth	3	Nov 96 – Oct 99	14	9.80	6.00	7.90	Apr 2001	75000	May 01- Apr 04	5	9	3.00	SRTS Scheme
Danestrete, Stevenage	3	Jul 95 – Jun 98	8	3.00	2.00	2.50	Aug 2000	40000	Sep 00- Aug 03	3	5	1.67	Check Dates/Study Area
A1184 Cambridge Road (@ Leventhorpe Sch), Sawbridgeworth.	3	Nov 96 – Oct 99	19	4.00	2.00	3.00	Mar 2001	15000	Apr 01- Mar 04	21	-2	-0.67	Large increase in accidents at the Parsonage Lane junction (scheme designed)
Horsehoe Lane, Garston, Watford	3	Sept 95- Aug 98	21	13.00	8.00	10.50	Apr 2001	105000	May 01- Apr 04	9	12	4.00	Newhouse Crescent to Harding Close
B158 Lower Hatfield Road, Hertford	3	Jan 96 – Dec 98	22	5.00	2.00	3.50	Apr 2001	26500	May 01- Apr 04	11	11	3.67	
Various sites (re-tex, anti-skid, signs and marking).	3	Nov 96 – Oct 99	107	52.00	33.00	42.50	Apr 2001	60000	May 01- Apr 04	64	43	14.33	CS99 shows 121 Accidents (Before) but not all sites treated under that Works Order
A414 Gascoyne Way, Hertford	3	Nov 96 – Oct 99	13	3.50	3.00	3.25	Jul 2001	31450	Aug 01- Jul 04	14	-1	-0.33	Subsequent treatment of bends with anti-skid surfacing.
A5183 Redbourn Road/Batchwood Drive roundabout, St Albans	3	Mar 96 – Feb 99	9	5.00	2.25	3.63	Jun 2001	53000	Jul 01- Jun 04	4	5	1.67	
A4008 Oxhey Lane J/W by the Wood, Oxhey	5	Jan 95 – Dec 99	8	2.70	2.10	2.40	May 2001	19500	Jun 01- May 04	6	2	0.67	Accident numbers and savings are pro rata to reflect a 3 year period. Additional anti-skid measures proposed to target remaining accidents.
B176 Cheshunt Wash J/W Mill Lane, Cheshunt.	3	Apr 96 – Mar 99	11	3.00	1.50	2.25	May 2001	9500	Jun 01- May 04	15	-4	-1.33	Safety Cameras
B656 Walsworth Road/Verulan Road	3	Jan 98 – Dec 00	5	2.00	1.00	1.50	Jun 2001	21750	Jul 01- Jun 04	5	0	0.00	
A1000 from Red Lion to A1 (M) Hatfield.	3	Apr 96 – Mar 99	27	6.00	2.60	4.30	Jun 2001	75000	Jul 01- Jun 04	11	16	5.33	
Bedmond Road/Blackwater Lane	3	Jul 95 – Jun 98	8	4.00	2.00	3.00	Jun 2000	27000	Jul 00- Jun 03	1	7	2.33	Check Dates/Study Area
A414 Stanstead Abbots (Acorn Street).	3	May 97 – Apr 00	24	8.00	6.00	7.00	Apr 2000	175000	May 00- Apr 03	10	14	4.67	Safety Camera
TOTALS			565	220.80	133.70	177.25		1805800		317	248.00	82.66	

APPENDIX 2

Engineering Programmes

Safety Engineering Process

The **Hazardous Sites report** is produced each year (July) and provides data with ranking on following criteria:

- Six or more injury collisions, any severity, in the previous three year period, in a 75m circle
- Four or more injury collisions, any severity, in a one year period, in a 75m circle
- Three or more Child KSI collisions, in the previous three year period, in a 75m circle
- Three or more KSI collisions, in the previous three year period, in a 75m circle
- Two or more KSI collisions, in a one year period, in a 75m circle
- Three or more injury collisions, any severity, in the previous three year period, in a 75m circle, with a contributory factor identified as a bend, dark conditions, wet conditions, or skidding (Mass Action)
- Three or more injury collisions, any severity, in the previous three year period, in a 75m circle, with a contributory factor of misjudged speed, inappropriate speed or too fast for conditions
- Three or more injury collisions, any severity, in the previous three year period, in a 75m circle, with a contributory factor of excessive speed

Ranking of these sites uses a weighting system that places a greater emphasis at locations where the collision has been either fatal or serious. The weighting process uses the DfT annual HEN note that calculates the costs to the community of the different severities of collisions. The calculation provides a point scoring system for slight, serious or fatal collisions. The HEN note is also used to calculate the first year rate of economic return of a scheme by providing the average cost of an injury accident.

A collision investigation report is subsequently produced for each possible scheme that considers each of the individual collisions recorded, and aims to establish a pattern or trend behind the collisions that are occurring. This is very much a police collision data led process, carried out in an independent and impartial manner without bias and involves the use of confidential data. Each assessment provides a pessimistic and optimistic view of the possible collision savings the project may be expected to produce.

Collisions are by their nature random and multi-factored. As such there is no method or system available to predict when the next one may occur. However, if collisions have occurred and a pattern of some type is established, the problem is likely to persist until such time as the fundamental causation factors behind the injury collisions are addressed. The ratio between damage only and injury collisions has been quoted as six to one (Circular Road No 12/75). This has now increased to just over 18 in urban areas (Highways Economic Note 2004).

Cost benefit Analysis

An example of a cost benefit calculation is shown below:

The collision savings have been predicted by individually considering each collision and how the proposals would address the causation factors. A pessimistic and optimistic assessment is undertaken and the average taken. In this instance the scheme is considered to be able to save 24 injury collisions over a three year period.

Using costs identified by the DfT HEN Note 2000, table 4a, the cost of the scheme is considered to be £251,000 with the average cost of an injury collision calculated to be £72,560. The predicted first year rate of return collision savings are shown below:

$$\text{Predicted 1}^{\text{st}} \text{ year ERR} = \frac{24 \times 72,560}{3 \times 231,000} \times 100\% = 251\%$$

APPENDIX 3**Criteria for the use of safety cameras (2005/06)****Rule 7: Rules for proposed core sites**

Each proposed core site for 2005/06 must meet all of the rules below.

Rule	Fixed camera sites	Mobile speed camera sites	Red-light speed and combined (speed and red light) camera sites*
1 Site length requirements	Between 0.4 and 1.5 km ¹⁰	Between 0.4 and 5 km	0.05 km (50 metres)
2 Number of fatal and serious collisions (KSI)	At least 4 KSI collisions per km in the baseline period ¹¹ . For information, the partnership should provide the total number of PIC (collisions)	At least 2 KSI collisions per km in the baseline period ¹¹ . For information, the partnership should provide the total number of PIC (collisions)	At least 2 KSI collisions within the junction in the baseline period ¹¹ . For information the partnership should provide the total number of PIC (collisions)
3 85th percentile speed at proposed sites	Speed survey shows free-flow 85th percentile speed ¹² is at or above ACPO threshold ¹³		Not applicable
4 Percentage over the speed limit	At least 20% of drivers are exceeding the speed limit, ¹³ excluding congestion periods.		Not applicable
5 Site conditions that are suitable for the type of enforcement proposed	Loading and unloading of camera can take place safely	Location for mobile enforcement is easily accessible and there is space for enforcement to take place in a visible, legal and safe manner	Loading and unloading the camera can take place safely
6 No other engineering solutions can be implemented	There has been a site survey carried out by a road safety engineer confirming that no other cost effective engineering solution can be implemented to improve road safety along this stretch of road.		

* For a combined (speed and red-light) site the number of KSI collisions per km must meet the requirements of a fixed camera site, measured over the length of a fixed site (rather than the length of the red-light site). In addition the speed criteria for a fixed camera must be met.

New Criteria – December 2005

We will review the new criteria issued in December 2005 in the light of the impact it will have on the county. Early indications are that the relaxation of the criteria will mean a very large number of sites across the county could now qualify for camera enforcement. This will have major financial implications and we may need to introduce a local policy to deal with this.

APPENDIX 4 – Casualty Data**Hertfordshire COLLISIONS by Severity**

Year	Fatal	Serious	KSI	Slight	Total
1994	51	734	785	3482	4267
1995	44	845	889	3673	4562
1996	52	910	962	3827	4789
1997	53	864	917	3980	4897
1998	55	899	954	3979	4933
1999	48	761	809	3934	4743
2000	49	730	779	4180	4959
2001	43	714	757	3821	4578
2002	54	625	679	3842	4521
2003	36	563	599	3648	4247
2004	48	534	582	3649	4231

Hertfordshire CASUALTIES by Severity

Year	Fatal	Serious	KSI	Slight	Total
1994	60	885	945	4916	5861
1995	45	1003	1048	5454	6502
1996	58	1099	1157	5657	6814
1997	58	1053	1111	5660	6771
1998	57	1103	1160	5857	7017
1999	53	895	948	5754	6702
2000	54	858	912	6287	7199
2001	49	845	894	5679	6573
2002	58	756	814	5819	6633
2003	38	650	688	5514	6202
2004	51	640	691	5483	6174
1994/98 Ave	55.6	1028.6	1084.2	5508.8	6593

Hertfordshire CHILD Casualties by Severity

Year	Fatal	Serious	KSI	Slight	Total
1994	2	94	96	575	671
1995	1	124	125	645	770
1996	3	110	113	678	791
1997	3	107	110	615	725
1998	5	118	123	671	794
1999	1	97	98	578	676
2000	2	89	91	619	710
2001	3	73	76	559	635
2002	3	70	73	563	636
2003	1	67	68	510	578
2004	2	62	64	540	604
1994/98 Ave	2.8	110.6	113.4	636.8	750.2

Hertfordshire FATAL Casualties by User Class and Severity by Year

Hertfordshire, 1994 to 2004

Year	Pedestrian	Cyclist	Car User	PSV	Goods	Other	Motorcyclist	Moped	Total
1994	10	3	41	0	1	1	4	0	60
1995	16	3	20	0	1	0	5	0	45
1996	13	4	32	1	2	0	6	0	58
1997	10	2	36	0	2	0	8	0	58
1998	12	3	34	0	2	0	6	0	57
1999	12	5	21	0	5	1	9	0	53
2000	13	0	30	0	3	0	8	0	54
2001	9	2	28	0	0	0	10	0	49
2002	14	3	29	0	2	0	9	1	58
2003	6	0	19	0	3	0	8	2	38
2004	9	4	27	0	2	1	8	0	51

Hertfordshire SERIOUS Casualties by User Class and Severity by Year

Hertfordshire, 1994 to 2004

Year	Pedestrian	Cyclist	Car User	PSV	Goods	Other	Motorcyclist	Moped	Total
1994	148	61	499	6	33	3	120	15	885
1995	167	85	552	12	43	2	127	15	1003
1996	160	82	656	10	38	6	134	13	1099
1997	165	73	640	7	33	0	128	7	1053
1998	162	86	662	6	56	2	119	10	1103
1999	136	76	490	12	39	2	133	7	895
2000	138	61	458	3	40	2	144	12	858
2001	126	50	485	7	24	0	138	15	845
2002	108	46	421	3	37	2	123	16	756
2003	101	43	325	11	27	4	122	17	650
2004	95	45	342	4	28	3	98	25	640

Hertfordshire KSI Casualties by User Class and Severity by Year

Hertfordshire, 1994 to 2004

Year	Pedestrian	Cyclist	Car User	PSV	Goods	Other	Motorcyclist	Moped	Total
1994	158	64	540	6	34	4	124	15	945
1995	183	88	572	12	44	2	132	15	1048
1996	173	86	688	11	40	6	140	13	1157
1997	175	75	676	7	35	0	136	7	1111
1998	174	89	696	6	58	2	125	10	1160
1999	148	81	511	12	44	3	142	7	948
2000	151	61	488	3	43	2	152	12	912
2001	135	52	513	7	24	0	148	15	894
2002	122	49	450	3	39	2	132	17	814
2003	107	43	344	11	30	4	130	19	688
2004	104	49	369	4	30	4	106	25	691

Hertfordshire SLIGHT Casualties by User Class and Severity by Year

Hertfordshire, 1994 to 2004

Year	Pedestrian	Cyclist	Car User	PSV	Goods	Other	Motorcyclist	Moped	Total
1994	368	346	3640	63	175	9	245	70	4916
1995	396	334	4121	84	192	13	267	46	5454
1996	399	333	4289	78	231	23	258	45	5657
1997	378	369	4268	84	212	18	289	42	5660
1998	405	315	4384	186	255	9	252	51	5857
1999	420	315	4397	98	208	9	267	40	5754
2000	375	291	4834	74	305	23	319	66	6287
2001	345	213	4418	90	236	13	279	85	5679
2002	349	228	4498	92	227	7	320	98	5819
2003	347	233	4197	86	226	11	296	118	5514
2004	311	288	4139	65	249	19	278	134	5483

Child Casualties by Severity, User Class and Severity

Hertfordshire, 1994 to 2004

Severity and User Class	Year											
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	
Fatal	Pedestrian	1	1	1	1	3	0	0	0	2	0	2
	Cyclist	0	0	1	1	1	1	0	0	0	0	0
	Car User	1	0	1	0	1	0	2	3	1	1	0
	Motorcyclist	0	0	0	1	0	0	0	0	0	0	0
	Total	2	1	3	3	5	1	2	3	3	1	2
Serious	Pedestrian	45	61	53	62	63	50	58	46	37	40	28
	Cyclist	18	27	24	20	21	18	13	15	10	10	11
	Car User	28	28	26	24	31	26	18	6	18	14	21
	PSV	2	2	2	0	1	0	0	4	0	1	0
	Goods	1	2	0	0	2	1	0	0	2	1	0
	Other	0	1	0	0	0	0	0	0	0	0	0
	Motorcyclist	0	3	4	1	0	2	0	2	1	1	0
	Moped	0	0	1	0	0	0	0	0	2	0	2
	Total	94	124	110	107	118	97	89	73	70	67	62
	Slight	Pedestrian	165	170	159	139	169	141	147	142	124	125
Cyclist		122	110	135	127	93	90	99	66	87	85	98
Car User		272	338	361	318	326	325	349	294	318	265	305
PSV		5	16	12	19	78	15	8	50	27	22	6
Goods		8	5	4	7	4	3	8	3	1	3	3
Other		1	1	0	1	1	1	5	0	1	0	3
Motorcyclist		2	3	4	3	0	2	1	2	3	7	7
Moped		0	2	3	1	0	1	2	2	2	3	3
Total		575	645	678	615	671	578	619	559	563	510	540

APPENDIX 6

Strategic Environmental Assessment (SEA) Statement

The Strategic Environmental Assessment (SEA) of the LTP raised issues around road safety of light pollution and the effects of construction on the environment. We recognise these issues and have the following processes in place to consider the impacts through an environmental assessment issued with every engineering scheme:

- provision of down lighting is part of the maintenance policy to ensure that light pollution is controlled, especially in sensitive environments.
- comprehensive Environmental Management System (EMS 14001) that assesses noise and vibration, dust, emissions and odour, flora and fauna, ground contamination and pollutants, presence of watercourses, use and storage of materials, waste management, effect on the community, archaeology and designated landscapes such as AONB.