

## **Devon Local Transport Plan** **'Making Roads Safer'**

### **Devon road safety strategy 2006-2010**

Draft for consultation. July 2005.

#### Introduction

Road accidents are one of several highly undesirable features of our motorised society. The effects on people of a road collision are immediate and often traumatic and life changing. They can also have expensive outcomes in terms of delays and disruption to the road network. In the public consultation for the Devon Local Transport Plan, high emphasis was given by consultees to the need for an effective road safety programme.

In 2004 there were 3,219 people recorded by the police as having been injured in Devon as a result of a road collision. There are many other injuries that were not brought to the attention of the police, and many times more collisions that resulted in no injury.

Devon County Council is responsible for the highways in Devon, other than the motorway and trunk roads, and for creating an effective programme of road safety measures. It achieves this by working alongside other organisations, especially the Highways Agency and the Devon and Cornwall Constabulary.

This strategy will guide the activities and resources of road safety professionals in Devon for the next 5 years, 2006-2010. But it is our wish that as many Devon people as possible read this important document, especially those who by their position can influence others.

It will be available in print, and as a CD. An audio tape of the text can be provided on request, and written versions can be made available in other languages for residents who do not have English as their first language.

It has been written to be as free of jargon as possible. However, it does contain statistics, diagrams, and some abbreviations.

Before we finalise this document, we will welcome your views about its content.

- Have we covered the main problems concerning safety on Devon roads?
- Do you agree that we should make priorities on the basis of evidence of 'what works'?
- Is there anything you think we have missed?
- Is the balance right between trying to change 'hearts and minds' and improving the physical highway?
- Are there any opportunities you think we are missing?

Please reply with any comments to [peter.gimber@devon.gov.uk](mailto:peter.gimber@devon.gov.uk), or Peter Gimber, Head of Road Safety, Lucombe House, County Hall, Topsham Road, Exeter, EX2 4QW.

## Index.

### Vision

#### **Devon County Council's commitment to road safety.**

**Part 1** contains casualty data, from which broad conclusions are drawn to guide strategic priorities.

- **Devon's achievements in casualty reduction**
- **Snapshot of 2004 casualty data and costs**
- **Comparing 2004 data to the 'base-line' year**
- **Casualties by road type**
- **Severity of injury for each major form of travel**
- **Fatalities**
- **Casualties by District area in Devon**
- **Primary causations of collisions**
- **Factors that contribute to the collisions**

**Part 2** raises some of the main issues that arise from the data

- **Improving the data**
- **Improving the use of the data**
- **Improving the identification of sites for treatment**
- **Improving measures for urban and rural routes**
- **Improving public satisfaction**

**Part 3** deals in more detail with the safety needs of each type of road user. It also sets out proposals regarding priorities .

- **Safer children**
- **Safer drivers**
- **Safety of pedestrians, cyclists and equestrians**
- **Safer motorcyclists**

**Part 4** sets out in more detail how Devon will use its Engineering and Education resources, and support police Enforcement activity

- **Safer road infrastructure**
- **Safer speeds**
- **Promoting Safer Use of Roads**
- **Promoting Vehicle safety**
- **Supporting Enforcement**

## **Vision**

It is the vision of the County Council that Devon meets all its casualty reduction targets, and in addition is to be consistently among the top three safest counties in England and Wales for travel by road.

This vision is to be achieved alongside other aims of the County Council, particularly an increase in travel by foot, two wheels and public transport. The vision should result in everyone, no matter what age or means of travel, being able to make their essential journeys in the knowledge that they are at less risk of being killed or seriously injured than anywhere else.

## Devon's commitment to Road safety

This road safety strategy will be managed by the Environment Directorate of the County Council , but is integrated with other relevant County Council programmes, including

**1. The Devon Strategic Partnership**, includes the goal 'Making Devon an even safer place to live'.

**2. The Devon Local Area Agreement (2005-8)** includes themes of

**'Every Child Matters'**

Devon road safety will give necessary support to the 'Wheels to work' initiative.

**'Safer and Stronger communities'**

Managing safety and speed on Devon's roads.

**Older people access to services**

Success include a measure of the number of people who have access to refresher driver training

**Regeneration of 25% of most deprived wards**

road safety is one outcome measure of a successful programme.

**Other themes will also benefit from linking with road safety:**

Alcohol and drug related crime

Increase feelings of safety

More people volunteering and engaged with local communities

People feeling safe walking alone and after dark.

**3. Road Safety Challenge Grant**

Although this Grant from the Department for Transport is not available to highway authorities, Devon will support and encourage any other agency wishing to bid for money to develop a local initiative.

**4. Devon County Council Local Transport Plan**

Making Roads Safer is one of four 'shared objectives' between the County Council and the Department for Transport.

## **Devon County Council's record of delivering good road safety.**

### **.....a quality road safety service :**

Best Value A Best Value review of road safety in Devon was carried out in 2003/4. and an improvement plan delivered.

Centre of Excellence Devon County Council received recognition from the Department for Transport in March 2005 as a Centre of Excellence in the delivery of transportation, highlighting road safety and public transport.

Quality Assurance The training services run by the county council's unique Devon Drivers' Centre are anticipated to receive ISO 9000 accreditation in 2005.

Peer recognition Devon's approach to road safety is nationally and internationally recognised, (visits and study tours from Eire, Cyprus, Bulgaria, Fiji)

Integration. The Road Safety Team delivers safety services that also support the objectives of TravelWise and School Travel Planning in encouraging more safe walking, cycling and motorcycling.. Officers are fully integrated within the 8 Devon Local Service groups to bring road safety direct to the communities.

### **..... innovation:**

Devon was the first authority outside London to trial speed cameras with the police

Devon was a vanguard exponent of good practice in 'traffic calming', publishing an acclaimed guide.

Devon's excellent and long standing relationship with the police resulted in the trialling, research and promotion of the Driver Improvement Scheme, now available in every police force in GB

Devon trialled the use of Vehicle Activated Signs at Safety Camera Sites

Devon has completed a successful Home Zone project

Devon is the only local authority to invest in a Drivers' Centre and has led the way nationally to encourage road safety practitioners to improve driving standards.

Devon was the first authority to sponsor a new service , 'Road User Support Scheme', for the emotional needs of people traumatised as a result of witnessing, or involvement in, a road traffic collision.

### **.....working with others**

DCC already plays a strong role in road safety nationally and regionally as well as locally.

Nationally, with its officers having acted in recent times as

- Chairman of ADDAPT (Association of Drink Drive Approved Providers of Training),
- Secretary of the ACPO/DfT Steering Group for Driver Offender Retraining,
- Member of Parliamentary Advisory Committee for Transport Safety (PACTS) road user behaviour working group,
- Road Safety External Research Adviser to the DfT.
- Member of DfT At-Work road safety group
- Member of National Motorcycle Safety Benchmark Initiative (TRL)

Regionally, Devon plays a strong part in

- the strategic multi agency Standing Committee for Traffic and Safety (SCOTS), with the Police, Cornwall CC, Devon CC, Plymouth, Torbay, Highways Agency,
- the Devon and Cornwall Safety Camera Partnership.
- The SW Motorcycle Casualty Reduction Group

Locally,

- The Devon Strategic Partnership has supported the formation of a Road Casualty Reduction Partnership that involves a range of stakeholder bodies to add value to the formulation and delivery of safety programmes. Through this partnership, essential links are made with District Councils and crime and disorder reduction partnerships.

**Devon County Council has an acknowledged strength and commitment to road safety that is reflected in quality output, higher than average casualty reduction outcomes, and in its dealings with many agencies locally and nationally**

## PART 1.

### Devon's casualty reduction performance

#### Devon's performance in relation to the national target

Target. To reduce Killed and Serious Injuries by 40% by 2010  
Performance. In 2004, Devon had already exceeded its target to reduce KSI casualties by 40%, five years ahead of its schedule.

Target. To reduce the number of children killed and seriously injured by 50% by 2010  
Performance. Devon is on course to meet the 50% reduction in child casualties earlier than the target date.

Target. To reduce the rate of slight injuries as expressed in terms of the growth of traffic.  
Performance. Slight casualties in Devon, although rising slightly, are being contained well within the growth of traffic.

#### Devon's performance in comparison to other counties

National data for 2003 shows that Devon ranks 3<sup>rd</sup> in terms of KSI per 100,000 population, and 4<sup>th</sup> with overall casualties, in comparison with 33 other counties. (comparisons between counties and metropolitan authorities are difficult to make, due to the very different circumstances.)

#### Devon's performance as perceived by the Devon public

There is evidence that the public recognises the relative safety of Devon.

In a survey of 1200 adult citizens (2005),

- 63% felt that travelling in Devon was safer than in other authorities. Only 3% felt it was more dangerous.
- 44% said the County Council was improving the safety of roads around schools – only 13% said it wasn't. (remainder – no views expressed)
- 59% felt that traffic calming was reducing danger - 19% disagreed. (remainder – no views expressed).

### **Key Point**

Devon's good performance in reduced KSI casualties, and positive feedback from citizens, puts it in a good position to realise its Vision, set a more challenging target, and fulfil expectations as a Centre of Excellence.

## **Snapshot of 2004 data**

In 2004, there were a total of 3219 recorded casualties in Devon.  
These comprised 37 deaths, 245 serious injuries, 2937 slight injuries

Using costs provided by the Department of Transport (June 2003), the total value of prevention of these collisions in Devon is £ 135,920,200 (see glossary for calculations)

Note: All data in this document includes injury collisions that occurred on Highways Agency roads, unless otherwise stated.

## **Comparing 2004 casualties to the 'base-line' (1994-8 average).**

(the 1994-8 average was a baseline figure set by the government to assess progress towards its national target).

- In 2004 there were 282 KSI casualties, which is the lowest on record. These compare to the baseline 1994-8 figures of 514, thus showing a **45% reduction**.
- A slightly different picture emerges with 'slight' injuries. These have risen by 2% compared to the 1994-8 base line.
- Every category of road user had its KSIs reduced over this period,

Pedestrians by	62%
Pedal cyclists by	61%
Motorcyclists by	30%
Car occupants by	41%
'Other' by	77%
- There are significant downward trends for KSI collisions among car occupants and pedestrians. Assuming these trends continue at a similar rate, the overall drop in KSIs will be sufficient to achieve a 50% reduction by the target year of 2010.

These achievements should be seen in the context of a growth of traffic.

## Casualties by road type

Category		A road		B road		C road		Unclassified		Trunk road	
% of network		7.4%		5.1%		34.4%		50.7%		2.4%	
Casualties		No.	%	No.	%	No.	%	No.	%	No.	%
1994-98 Average	KSI	174	33.8%	100	19.4%	95	18.4%	58	11.3%	88	17.1%
	Slight	912	31.8%	518	18.1%	616	21.5%	402	14.0%	421	14.7%
2004	KSI	105	37.2%	50	17.7%	38	13.5%	38	13.5%	51	18.1%
	Slight	979	33.3%	465	15.8%	527	17.9%	528	18.0%	438	14.9%

From the data above, it can be seen that.

- A- roads have seen an impressive drop in KSI collisions since 1994-8 base average.
- However, the highest proportion of KSI collisions still remains on A- roads, and its slight casualties have also risen
- The greatest improvements in overall collisions since 94-98 have occurred on B- and C- roads.
- Unclassified roads have seen a decrease in KSIs but a large increase in slight casualties.
- the risks of being involved in a serious and slight injury collision, per kilometre travelled, are by far the highest on trunk roads and A- roads

## Severity Ratios

A severity ratio is a calculation about the likelihood of a collision in which you are injured resulting in fatal or serious injuries.

Class of Road User	Likelihood of being seriously injured or killed in an injury collision
Pedestrian	11.9%
Pedal-Cyclist	10.8%
Motorcyclist	26.3%
Car Occupant	8.5%

(based on 2002-2004 Devon data)

From the table above it can be seen from the injury severity ratio that if you are injured in a collision:

- you are least likely to be killed or seriously injured as a car occupant,
- you are most likely to be killed or seriously injured as a motorcyclist.
- You are at similar risk as a pedestrian as you are as a cyclist

While the risks to cyclists and pedestrians of death or severe injury from a collision are slightly greater than for car occupants, this is not as great as many people might think.

## Fatal casualties

The number of fatal collisions in Devon each year are such that it can be difficult to draw too many conclusions about 'patterns'. The requirements of the government to combine deaths and serious injury (KSI) data for statistical purposes does make sense in order to establish trends.

However, deaths as a category deserve individual analysis. Road deaths naturally receive special public and media attention, and the frequency of unofficial roadside shrines is a constant reminder to the travelling public of the death toll.

It is reasonable that the agencies responsible for the road network act on fatalities with appropriate vigour, not inconsistent with that expected for air, ship or rail investigations. While the police will investigate primarily for human culpability, the County Council will seek to learn from the episode what measures would have made a difference at that site, and how any behaviour changes may be promoted to the public at large.

### A summary analysis of fatal collisions based on attendance reports.(2004)

In the last 10 years there have been many large fluctuations in the number of fatal casualties. It is however encouraging that they have dropped from 51 to 37 in the last 5 years.

#### **Total fatal casualties 1995-2004**

1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
28	48	44	45	38	51	46	45	37	37

Devon has found advantages in sending a specialist officer to the scenes of fatal collisions in order to obtain high quality first hand information. The table below is a summary of the data gained for 2004.

#### **Fatals attended by a DCC Officer**

Not attended	Attended by a DCC investigation officer
9 ( 4 on HA roads )	27

#### **Road Class**

M Way	A road	B road	C road	Unclassified
2	20	7	3	4

#### **Ownership of road**

Devon County Council	Highways Agency
32	4

#### **Speed limit of road**

70 mph	60 mph	40 mph	30 mph
3	25	2	6

#### **Victim (road user type)**

Driver	Passenger	Powered Two wheeler	Pedal cyclist	Pedestrian	Equestrian
11	5	14	1	4	1

#### **Likely causes (from police description and from officer attendance)**

Probably associated with traffic violation or high risk behaviour	Probably associated with an error or lapse
16	20

#### **Fault (subject to coroner's findings)**

Victim probably at fault	Victim probably not at fault
15	20 ( 1 unknown )

#### **Fatal sites having had injury collisions (not fatal) in previous 5 years**

0 collisions	1 collision	2 collisions	3 collisions	4 collisions	5 collisions	6 collisions
17	9	4	2	2	1	1

**Fatal sites where highway improvements are being assessed..**

None	One or more improvements
25	11

Devon will develop its current practices to 2010 by::

*Continuing attendance by trained DCC accident investigation personnel at as many active fatal collision scenes as possible (Devon CC roads only), with the agreement of the police.*

*Work with the police accident investigators to establish likely contributory factors, and add to this knowledge in liaison with the coroners' offices.*

*Review sites of fatal collisions over long (ten year) periods to detect any clusters or routes for possible treatment.*

*Inform the public of the risk factors that have been revealed in these fatalities, eg not wearing seat belts.*

*Devon will work with the police and coroners to highlight any recurring factors that emerge from fatal casualty investigations.*

**Casualty rates by District in Devon**

From the table below it can be seen that there is some variation between the casualty rates in the eight district areas in Devon.

Area	Population	KSI Rate	Casualty Rate
East Devon	126700	44.20	475.93
Exeter	113300	16.77	341.57
Mid Devon	71200	49.16	419.94
North Devon	88900	51.74	506.19
South Hams	81800	29.34	475.55
Teignbridge	122600	44.86	477.16
Torridge	60900	42.69	385.88
West Devon	49600	42.34	546.37
<b>Devon</b>	<b>715000</b>	<b>39.44</b>	<b>450.21</b>

Rates expressed as injuries / 100,000 population

From this snapshot of 2004 data it can be seen that West Devon has the highest overall casualty rate per head of population. North Devon and Mid Devon have the highest rate of deaths and severe casualties. Exeter is notable because of its very low casualty rates.

*Where districts show consistently above- average KSI rates, these will be referred for the attention of the Community Safety Partnership.*

## Primary causations.

Of all recorded casualties in Devon , 94% are attributed to human error  
1% are attributed to vehicle defect  
5% are attributed to an environmental factor such as  
road defect, weather or animal in carriageway.

## Contributory factors of all casualties

Where police identify contributory factors (in 88% of casualty records), the following pictures emerge. See table.

Qualifiers (all severities)	No.	%
Negligent Manoeuvre	1390	43.2%
Speeding Related	1008	31.3%
Skid or Jack-knife	745	23.1%
Learner / Inexperienced	269	8.4%
Pedestrian crossing heedless of traffic	174	5.4%
Alcohol Related	133	4.1%
Contravention of line or sign	100	3.1%
Slippery Road (not weather)	80	2.5%
Vision Dazzled	67	2.1%
Vision Obscured by permanent object or vegetation	49	1.5%
Vision Obscured by temporary object or stationary vehicle	39	1.2%
Fatigue Related	38	1.2%
Icy Road Surface	34	1.1%
Tyre Blow-out	30	0.9%
Dark clothing (rider or pedestrian)	19	0.6%
Animal	13	0.4%
Open Door	10	0.3%
At Roadworks	6	0.2%
Defective Road Surface	6	0.2%
Towing Caravan	6	0.2%

From the top three Qualifiers above, it is clear that the greatest proportion of factors in injury collisions is associated with drivers' or motorcyclists' errors and violations.

This also remains true when the Qualifiers related just to KSI collisions – the only major difference in the order is an increase in the ranking of alcohol related collisions (12% of KSI casualties, as opposed to 4.1% for All casualties)

*Devon County Council will :*

*implement an action plan to improve the skills and knowledge of drivers and riders,*

*take reasonable steps, where the opportunities arise, to mitigate the severity of injuries by lessening the danger from roadside objects,*

*maintain the surface of the carriageway such that it will not provide hazards for two wheelers, or lead to excessive braking distances following a driver error,*

*take steps to review that necessary signs and markings are in place on the higher speed network to assist drivers to assess dangers ahead*

## **Key Points**

**The road casualty trends in Devon suggest that:**

**Devon County Council will now adopt a more stretching target than it did in 2000. The new target will be enhanced to achieve a 50% reduction in KSI (Killed and Seriously Injured) casualties by 2010, based on the average 1994-8 figures (equivalent to a 30% reduction based on 2001-2004 average).**

**Child casualty reductions will remain challenging at a 50% reduction.**

**The greatest overall casualty reductions will come from measures targeted at drivers. 'Soft' measures to improve their skills, with at-risk drivers targeted in particular. Both 'hard' and 'soft' measures to improve their choice of speeds.**

**The risks to motorcyclists of severe injuries call for sustained, innovative and multi-agency activity.**

**The proportion of severe collisions on A roads should also call for sustained and innovative activity.**

## **PART 2**

### **Improving the Data**

In common with the wider national picture, casualty data collected in Devon by the police is not always sufficiently robust to give confidence in detailed analyses. There are problems both in the accuracy of data coded by police, and the under reporting of certain types of casualty, particularly children.

*Devon will seek to negotiate a new agreement with the police to support greater accuracy of recording initial data, and greater understanding by the police of the uses to which Devon puts to the data..*

*Devon will assess the usefulness and availability of Ambulance and Hospital data for special studies*

### **Improving the use of the Data**

Devon CC is in final stages of commissioning a new data management system that will enable easier interrogation of all network management functions. For road safety this will mean that specialist safety officers will now be able to quickly access a wide range of data pertaining to the sites in question, such as street lights, road maintenance history, speed limit. Digitising the network will also release new possibilities for future innovation, such as in-car technology picking up transponder signals about speed limits.

*Devon will seek to negotiate an agreement with the police such that an approved bank of collision data will be made available direct to the public, through the Devon County Council internet site.*

*Devon will consider seeking interest from potential funding partners to develop an innovative pilot programme that makes use of the digitisation of the network and speed limits.*

*Devon will work with the police to integrate IT systems wherever possible for smoothness, speed and accuracy of transfer, as well as end of year data reconciliation.*

### **Improving the identification of sites and routes for treatment.**

It is becoming more difficult to identify Casualty Reduction Schemes (CSR) with as high an economic rate of return (ERR) as in earlier years, due to the success Devon has already had in treating cluster sites. Route strategies will be an important process in 2006-10 for collisions to be considered along a greater length of road than is traditionally used for CSR clusters. The impetus created nationally by EuroRAP for the principal road network, leads to some interesting possibilities for the classification of the wider route network in Devon according to risk of travel per unit of exposure.

*Devon will incorporate safety within all its route management strategies, and bid for funding to implement pro-active measures to reduce danger along routes as well as at site clusters.*

**Improving measures to address both urban and rural routes.**

45% (no 1439 ) of total casualties occur on roads with a 30mph or 40mph speed limit (urban). While this shows the scale of the collision problem in urban areas, it may disguise problems in rural settlements that have these lower limits. Most injuries to the ‘vulnerable’ road users occur on these roads.

55% (no 1780) of total casualties occur on roads with a speed limit of 50, 60 or 70mph (rural). Of all Devon casualties, 15% (no 489) occur on rural roads managed by the Highways Agency.

The severity ratios for these roads are:

Type of road	Likelihood of being killed or seriously injured in any collision in which there was an injury.
Urban (30 40 mph)	6%
Rural (50, 60, 70mph)	11%
Devon Average	8.8%

*Devon will implement a new speed management strategy, and deploy a variety of measures to regulate speeds for suitability to the conditions*

*Devon will work closely with the Highways Agency to implement its responsibilities within the Traffic Management Act to establish protocols for traffic diversions, and support DfT safety publicity campaigns.*

*Devon will Improve the way casualty data is overlaid with other data sources to join up initiatives targeted at road users at particular risk.*

*Devon will explore further ways that its road maintenance programme adds road safety value and takes the needs of all modes into account*

**Improving public satisfaction with the real and perceived safety of the road network**

While casualty data will guide most safety interventions, the views and opinions of the public are also an important part of the equation. The evidence provided by the public does however need to be balanced and set in its strategic context.

Views from the general public about road safety are regularly obtained from Citizens Panel Surveys., and specific dialogue with user groups is obtained from Cyclists Forums and a Motorcyclist Forum.

Within communities, perceptions of danger, usually related to vehicle speeds, are taken seriously .There is every likelihood that collisions have occurred that have not been reported to the police, but perceived dangers can also inhibit local travel by foot and bicycle.

Providing inexpensive measures to tackle perceived highway problems that blight the quality of life of citizens is addressed wherever possible and reasonable.

*Devon will renew its Driving Speeds Down in Devon campaign, and offer soft measures, including temporary use of Vehicle Activated signs, to help alleviate anxieties in local communities.*

## PART 3.

### **Road Safety Strategy (2006-10)**

#### ***Effective road safety planning in relation to the needs of all road user groups***

The strategy for safety actions will be set out by road user type, in a similar way to Tomorrow's Roads – Safer for Everyone (DfT March 2000), the government's road safety strategy, viz

#### ***Safer children – Safer drivers (training and testing, drink drugs and drowsiness – Safer motorcycling – Safety for pedestrians, cyclists and equestrians***

Cross referencing will also be made to the role Devon County Council will play in respect of ***Safer Speeds, Safer Infrastructure***, promoting ***Safer Vehicles*** and ***supporting Better Enforcement***

The format for each section in the strategy is broadly the same.

**Casualty profile and trends** – what are the problems? Is there evidence that the situation is getting better, or likely to deteriorate further?

**Strategic aims** – *what are the key challenges that need addressing with this group/mode?*

**Rationale for prioritising resources** – *within available resources, what measures will make the most impact on the problem?* This may result in some hard choices being made. Where possible, research evidence can shed light on what measures have a proven benefit and which are either unproven or else which have proof of no effectiveness.

**Partnership opportunities** – *Can any added value be gained by joining up with other bodies, for example Police, Highways Agency, Fire and Rescue, private sector sponsors?* This is particularly important for road safety publicity and education. However, there are also benefits in regarding local communities as natural partners in local engineered solutions. Sharing initiatives with other local authorities in Devon, particularly districts, is conducted through community safety action teams. Sharing initiatives across the Devon border has many advantages in relation to the wider Constabulary and Strategic Health Authority area, as well as presenting a regional perspective with local television.

**Performance Indicators** – *How can we measure the effectiveness of what we have done?* The government sets a Best Value Performance Indicator (BVPI 99) to measure the progress of all highway authorities against casualty reduction targets. There are also locally agreed Performance Indicators that allow internal measurement of safety activity. Where possible these measure outcomes (ie, what practical difference has resulted from the measure), but sometimes it is also useful to measure outputs (ie, what measures have we delivered)

The measures Devon plans to take in the period 2006-10 relevant to each section are marked in *italic*.

Where the risks to road users may be affected by social disadvantage, this is explored in more detail. It is particularly important for children.

## 1. Safer Children (under 16 years of age)

### **Casualty profile and trends**

A very detailed study ' Road Safety and Young Road Users in Devon' was written in 2004, and draws upon available hospital data, deprivation scores, road casualty data and national research evidence. This child road safety audit was prepared by a statistician, currently on the academic staff of Plymouth University, and includes a number of recommendations. A summary is available

This study has informed much of the strategy summarised below.

Deaths to children on Devon roads are thankfully very rare, with an average of 1.6 per annum since 1994. It is reasonable for Devon County Council to lead society's aspirations to achieve a **Zero Child Fatality target**. The part played by the County Council will be addressed by a balanced programme of child safety education, environmental improvements, vehicle speed reduction and in-vehicle safety (to include transport provided by the County Council for children).

Road safety education will be delivered effectively through the School Travel Plan process , which has already been introduced to 49% of Devon schools, and which will be rolled out to all remaining schools subject to continued government funding.

As with the severity of all injuries, there is a vital role to be played by people such as parents who can administer immediate care within the first few minutes of the incident, and the subsequent care offered by paramedics and hospitals. Devon has already given first aid training to many of its School Crossing Patrol staff.

### **Strategic aims**

To achieve the targeted reduction in child KSI and slight casualties, within an overall programme to encourage safe travel among more children by foot and bicycle.

To provide advocacy for the safety needs of children in residential areas, around schools and other sensitive areas, through design, planning control, enforcement, engineering of the carriageway and safety training.

To achieve and maintain 100% school involvement with the School Travel Plan programme, such that these regular and important child journeys are both sustainable and safe.

To monitor and review the effectiveness of measures, and their reach to children who may be most vulnerable through their situation, location, ethnicity or health.

### **Rationale for prioritising resources**

Despite the relatively small numbers of child KSI casualties, there are special reasons for investing in the safety of children, even if measuring immediate outcome is not easy.

- Children should have the right to protection from hazards that they are not yet fully equipped to understand or cope with in safety.
- Protection of children from hazardous environments such as highways should be appropriate to their age and stage of maturation. Protection that denies older children controlled exposure to risk may be counter-productive.
- The experiences children have of the road environment, and observations of adult behaviour (especially their parents/carers) can significantly affect their own later safe behaviour as adult road users.
- It is reasonable to assume that young children can grow up to expect to make safe independent travel by foot or bicycle in residential areas and on key journeys, especially the journey to the local school.

Access of all children to accurate and well-informed road safety education should be a given. Notwithstanding this, there are several different approaches to where emphases should be placed by the County Council for its own allocation of resources to child casualty reduction.

In a Devon Citizens Survey of 1200 people in 2005, the majority of respondents felt that resources to reduce child casualties would best be spent developing road safety education in schools. In the same survey, least favour was given to investing in the safety design of residential areas.

Research evidence does not necessarily support this way of prioritising resources, and Devon will be careful to devote proportionate revenue resource to classroom based safety education. Evidence points to significant benefits of parental activity, and to practical training conducted in the real highway environment.

It is important to recognise the benefits of safe residential areas, safer environments around schools, and better informed parents

*Devon will make available free safety resources, advice and support for parents, carers and teachers in nurseries and schools.sufficient for their delivery of safety education programmes.*

*Devon will support its School Crossing Patrol Service and other measures such as Walking Buses to encourage safe and sustainable accessibility to schools.*

*Devon will offer direct safety interventions to parents and children in areas of special risk, to include pedestrian training, cyclist training, in-vehicle safety.*

*Devon will take forward the experiences from the Exeter Home Zone to advise planners, consultants and engineers associated with new build developments on residential design that allows safer access of children to the highway.*

*Devon will recognise the needs of children in its Speed Management Strategy and in the driver training programmes of the Devon Drivers' Centre*

### **Performance indicators**

BVPI 99. Reduction in child casualties compared with the previous year and with 1994-8 baseline

Local PI (South west authorities) Numbers of children undertaking approved cyclist training courses

Local PI (South West Authorities) Achieve a coverage of 98% School Crossing Patrol duty hours

Internal indicator. To deliver 60% of schools with a Travel plan by 2006

### **Countering effects of disadvantage**

Devon has undertaken detailed work on the matter of disadvantage and child road casualties, and its findings published in the British Medical Council Public Health Journal (Vol 4)

*Deprived children or deprived neighbourhoods? A public health approach to the investigation of links between deprivation and injury risk with specific reference to child road safety in Devon County, UK*

Paul Hewson Devon County Council 2004.

The study considered whether any apparent association between deprivation indices and child pedestrian casualty rates are due to the child, or to the area where the collision occurred. The results of the study are to be treated with some caution, but there is a statistical suggestion that the environment where the collision took place is of some importance in terms of explaining the variable casualty risk. The fact that many children from disadvantaged families are likely to live in and travel in disadvantaged areas begs the question how much resources should be prioritised to safety education needs of the children or to the environment, in which children of any social-economic background would be at extra risk.

**Road Safety and childhood deprivation. Case study.  
Devon Healthy Travel Project**

The project began in 6 schools in Devon initially focusing on 3 areas where indicators show that there is particular deprivation. Three more schools are now involved in the programme.

The project evolved in 2003 through close links between the Environment Directorate's School Travel Plan Co-ordinator and the Education Directorate's Healthy Schools officer for Working with Vulnerable Children and Drugs Prevention. The project uses the theme of transport to focus the group on a topic on which they can work together.

Schools identify a group of up to 30 pupils who exhibit signs of early vulnerability such as being withdrawn, poor concentration or poor attendance. The group at times from more than one school are formed into a Travel Team and are trained with their teachers and Learning Support Assistants about the issues surrounding sustainable travel and road safety. The themes are Be Safe, Be Healthy. The training involves a walkabout around their local area to identify danger spots on the journey to school.

The team is charged with the task of carrying out surveys and taking the messages they have learnt out to the school community and the wider community where they live. This involves running campaigns e.g. Walk to School, holding assemblies, producing posters and leaflets and involving parents in consultations about proposed road safety improvements to the local area. The children meet engineers, work closely with their Road Safety Officer and take a high degree of responsibility for the project within their school. Their work feeds into the School Travel Plan and the teacher with responsibility for this then draws the final plan together with the support and advice of the Devon County Council officers involved.

The project meets targets set out in:

- Local Transport Plans (modal shift)
- National Healthy Schools Standard (reducing health inequalities, promoting social inclusion, raising pupil achievement)
- OFSTED framework (seeking, acting and valuing all pupils' views)
- National Service Framework for Children (promoting health & well-being, preventing ill health etc) and the Every Child Matters agenda
- Local Preventative Strategies, Drug Action Team Young Person Plan, Community Safety Plans, Primary Care Trust Local Delivery Plans etc

The benefits of the project are that a School Travel Plan is created that has the school community's involvement from the start. The benefits to the children involved are significant, resulting in them taking responsibility for their safety on independent journeys, developing an enthusiasm for learning through work on a 'real life' project, working with members of the adult working world, learning to work as part of a team, using literacy, numeracy and communication skills in an applied way, working with other children of different ages and much more in terms of gains in confidence, reliability and a positive self image.

The School Travel Plans are adopted by the schools, linked to the School Development plan and acted upon by the schools themselves and Devon County Council to support the increasing safe use of walking, cycling and public transport to get to school.

*Devon will investigate urban wards with higher than average child casualties and deprivation indices. A multi agency and multi disciplinary programme will be implemented at locations where a measurable outcome is feasible, based where possible on the Devon Healthy Travel Project.*

*Devon road safety group will maintain the links already made with the Education Arts and Libraries Directorate over the School Travel Plan programme, and support initiatives to improve the behaviour of children on school transport.. .*

*Devon will work with Social Services to develop the road safety of its looked-after children, and will play a part in the networks supporting Every Child Matters to target safety interventions at children identified as being particularly vulnerable.*

### **Partnerships**

Social Services,  
Education Arts and Libraries Directorate  
DCC Transport Co-ordination Services  
Devon Schools

### **Key Points**

**In view of the high importance attached to the safety of children, Devon will promote a societal aspiration for zero deaths to children on the road, in addition to the 50% reduction in seriously injured casualties.**

**There will be a proactive programme of road safety for areas of disadvantage, and the experience of the Devon Home Zone will be promoted widely.**

**Adults with responsibilities for other children, especially parents, guardians and teachers, will be offered sufficient free materials and support to enable good safety education to take place. This will include the responsibilities of Devon County Council's for its looked-after children.**

**In-car safety will be increased, with child seat fitting initiatives being given more space and also emphasising the wearing of seat belts for all occupants.**

## **2. Safer drivers** (including car passengers) Training, testing, occupational road risk, drink, drugs and drowsiness.

### **Casualty profile and trends**

Car occupant KSIs have been on a significant downward trend since 1997, and the toll of 164 KSI casualties in 2004 is the lowest on record, down 35% since 1995.

When factoring in all the slight casualties, the picture changes somewhat, and the total number of injuries in cars was 3% higher in 2004 compared with a decade previously in 1994. But with the growth in traffic of approximately 20% this is still a significant achievement.

***Maintaining the downward trend in car occupant KSIs will be critical to the success of meeting the overall KSI targets.***

### **Strategic aims**

To improve the quality of driving in Devon by providing or commissioning education and training opportunities targeted at drivers at higher than average risk. Specifically those aged 17-25, those aged over 70, those who drive very high mileages for a living, those who have committed offences such as speeding and those who drive while under the influence of drugs or alcohol.

To improve the safety of the road network by identifying locations where injury collisions reoccur, and schedule practical improvements to the highway where these would make a difference, and fall within a value for money calculation (see Safer Infrastructure)

To improve the speed choices of drivers through a speed management strategy that includes full participation in the Devon and Cornwall Safety Camera Partnership (see Safer Speeds)

### **Rationale for prioritising resources**

**Car drivers.** As well as reducing impact severity for themselves and their passengers, car drivers also have the responsibility to avoid collisions with pedestrians and cyclists, who can suffer disproportionate injuries at much lower speeds. The casualty reduction strategy for Devon will place the highest emphasis upon improving safe driving behaviour. The gains will be measured not only in reduced casualties for car occupants, but in fewer casualties to vulnerable road users.

Psychologists have categorised blameworthy collisions into driver errors, driver lapses and driver violations, each of which will require a particular safety intervention.

- Tackling violating behaviour, especially drink and drugs, high speeders.  
In 2004, there were 133 casualties involving drivers, riders or pedestrians who were under the influence of alcohol or drugs. There were also 38 who received injury as a result of someone drowsy. The trends since 94-98 suggest that these have been reducing in Devon in the last 3 years. However, national data shows an increase in serious drink and drug injuries, so local programmes should remain important.
- Tackling driver errors.  
Errors and lapses are prevalent among the whole driving population, but perhaps most among the young and inexperienced driver, and the elderly driver. The consequences of a simple error of judgement can be as serious as violating behaviour, and resources need to be put to these drivers.

Passengers. Passengers are injured either through the fault of the driver of their vehicle, or another vehicle, or sometimes the failure of their driver to reduce the consequences of a crash caused by some other person.

However, passengers can themselves increase risks by distracting the driver, or urging the driver to perform in a way he or she is not comfortable with. Failure of rear seat passengers to wear belts can cause injury to the driver during rapid deceleration.

On the other hand, passengers can also exert a positive influence in the car by giving feedback to the driver about the speed or risks that they are taking, or indeed praising careful driving.

While this is a sensitive area for safety campaigning, it is felt that this could be a largely untapped and innovative approach to drivers, useful for car sharers, children and those concerned about the safety of very elderly or ill parents.

Devon will incorporate the following measures in its 2006-10 strategy:

*Deliver training courses for drivers, including offenders as referred by the police (Driver Improvement Scheme) and by courts (Drink Drive Rehabilitation Scheme)*

*Schedule publicity campaigns in association where possible with Department for Transport (Government News Network), police and other local authorities.*

*Offer Devon Approved Driving Instructors a programme of voluntary professional development to enhance the safety service they offer new drivers*

*Energise a programme to offer larger businesses in Devon support and training for their drivers to reduce occupational road risk*

*Continue car seat safety checks for children, and extend to general seat belt awareness.*

*Devon will maintain its revenue commitment to running courses for drink drive offenders referred by the courts. It will also use its expertise to schedule awareness courses on alcohol for businesses, and public sector workers*

*Work with the police to support deterrence and enforcement initiatives*

*Devon will explore the scope for an 'active passenger' safety programme, especially for the 17-25 year old age group.*

*Devon will offer programmes of safer driving for older drivers as part of its objectives to increase accessibility to services (within the Devon Local Area Agreement)*

### **Partnership Opportunities**

Police  
Highways Agency  
Government News Network

Approved Driving Instructors  
Devon Fire and rescue service  
Devon Ambulance Service  
Youth Offending Teams  
Sponsors  
Motor Trade  
Devon and Cornwall Safety Camera Partnership

### **Performance Indicators**

#### Local PI (South West Authorities)

Number of people in the 17-25 year old age group who receive significant road safety information or experience (in addition to driving instruction for their licence)

Local PI Increase the take up rate of offenders for the Drink Drive Rehabilitation Scheme

#### **Note.**

Devon County Council is particularly well placed to deliver a very robust programme aimed at improving the quality of driving due to its unique **Devon Drivers Centre**. It is a cost recovery operation, which means that its services require only a modest draw upon County Council revenue budget. See [www.devon.gov.uk/roadsafe](http://www.devon.gov.uk/roadsafe)

### **3. Safety of pedestrians cyclists and equestrians**

**Note – this section is still in the process of being researched. The next version of the Strategy will contain fuller text for these important groups.**

#### Strategic aims

To improve the behaviour of drivers (including lorry and bus drivers) and motorcyclists when sharing the carriageway with vulnerable road users

To ensure the needs of all vulnerable road users are assessed within the safety auditing of highway improvements

To encourage responsible and safe behaviour among all vulnerable road users, including adult cyclists.

To improve the built highway environment for the protection of vulnerable road users

#### Rationale for prioritising resources

While there is more limited scope for significant casualty reductions with these groups, the very fact that they are at the top of the County Council's preferred hierarchy of travel means that there should be a suitable resource allocation. Unless these groups can participate in reasonable safety on our roads, the territory of the carriageway will become one for motorised users only.

#### Partnership Opportunities

Public Rights of Way (Rights of Way Improvement Plan)

Primary Care Trusts

## 4. Safer Motorcyclists

### Casualty profile and trends

A detailed study of rider crashes on the Devon network,

“An exploratory data analysis of fatal and serious motorcycle collisions within Devon between 1996 and 2001”

was published by Devon County Council, August 2003. ISBN 1-85522-894-7.  
The research combined local data analysis with current UK and European research.

### Rationale for safety interventions

In common with many other UK local authorities Devon is experiencing a disproportionately high number of motorcycle casualties. Motorcyclists represent approximately 2% of Devon's traffic but 25% of fatal casualties in the County. There were 312 collisions involving motorcyclists in 2004 resulting in 314 motorcycle rider or passenger casualties (14 fatal, 56 serious and 244 slight). [More...](#)

The Devon road network lends itself to both leisure and work-related or commuter riding and certain routes are also used by visiting recreational riders. Social inclusion factors play a key role in choosing motorcycling over other forms of transport and, consequently, underpin Devon's commitment to maintaining motorcycling as a viable but safe mode.

The Strategy has been designed to progress locally each of the 4 key motorcycle safety aims outlined in “Tomorrow's Roads - safer for everyone”, namely:

1. Working with representatives of interested organisations... to look at issues of concern.
2. Improving training and testing for all learner riders.
3. Publishing advice for people returning to motorcycling after a break, and people riding as part of their work.
4. Helping drivers become more aware of how vulnerable motorcyclists are.

The publication of the Government's Motorcycling Strategy in February 2005 offers a further opportunity to review the future focus and objectives of Devon's motorcycle safety programme, once again reflecting our commitment towards achieving national goals in a local context. [More...](#)

### **Bringing Bikers Out Of The Blindspot**

Launched in 2003 the Devon County Council 'Blindspot' programme, which forms the basis of the Authority's Strategy for Motorcycle Safety, has been designed to run in 4 phases. Phase 1 was research and consultation; Phase 2 is concerned with implementation and delivery and runs in parallel with Phase 3, which comprises audit and review.

**Phase 4 will take motorcycle safety interventions in Devon up to 2010** and will represent a consolidation of projects already started, the introduction of new initiatives in liaison with our partners in the Devon and Cornwall Constabulary force areas and with UK partners through national benchmarking.

This is an **overtly pro- safe biking** strategy - and is based on the environmental, congestion, accessibility and social inclusion benefits to be accrued from this mode, providing measurable and sustained improvements can be achieved in rider safety.

## Involving users in the development and delivery of the strategy

It is essential to gather qualitative data on rider experience, needs and aspirations to supplement our crash analyses. Since much of the Strategy will necessarily rely on rider support for development and implementation it is vital that user views are harvested alongside 'hard' data mining. On-line and paper questionnaires have already reached 500 riders and gathered thousands of pieces of data on riding experience, riding styles and purpose, crash histories, ideas for future interventions and demography. [More...](#)

To complement the gathering of structured data we have also introduced an innovative **on-line discussion forum** for bikers wanting to share views and experiences on, primarily, safety issues. The Forum has been already proved to be highly successful in generating interest (c60,000 hits to date) and commentary (over 330 contributions to over 60 different subject areas). The Forum enables Devon officers to seed discussion and monitor independent user views and this, or a similar mechanism, will provide direct contact with riders over the period of the Strategy. [More...](#)

To develop the programme in 2006-10, Devon County Council will:

**Offer new Bike Sense training courses** - two separate training programmes, for novice licence holders and experienced riders who are either graduating to a larger machine or returning to riding after a period of absence. Each is run by Devon County Council's Devon Drivers' Centre. [More...](#)

**Offer Rider Risk Reduction Courses** - developed in conjunction with Exeter University School of Psychology and Devon and Cornwall Police this highly innovative course seeks to address the risk taking behaviour of riders stopped for prosecutable offences in Devon and Cornwall. The course will avoid addressing machine handling skills and will concentrate instead on the psychology of high risk behaviour and risk avoidance. [More...](#)

**Increase awareness of diesel spillages** - Spiller Killer is- a project that works on two levels. Firstly the campaign encourages drivers, hauliers and other large fleet operators to reduce the incidence of diesel spills. Secondly, a hot line for diesel spills and road defects has been introduced for motorcyclists to improve user communications and maintenance response times. Though crash data would suggest that diesel spills are not a significant causal factor this was clearly an area of serious concern amongst many riders [More...](#)

**Deliver multi-media promotions** to raise awareness of motorcyclists amongst car drivers, and raise the issue of high risk behaviour amongst riders. Promotions will be run with the support of key partners and will include testimony from crash victims, bereaved families and support services wherever possible and appropriate. [More...](#)

**Investigate feasibility of introducing motorcyclists into bus lanes** on the Devon network, without compromising safety. A decision and, if appropriate, implementation will be undertaken by April 2006.

**Improve awareness of the needs of motorcyclists among engineers, technicians, road safety officers, accident investigators and police officers** in designing and auditing for the vulnerable road user with specific reference to the needs of powered two wheelers. Specialist audit teams will be trained and utilised throughout the network.

**Evaluate the benefits of temporary safety signing:** two approaches will be adopted reflecting crash analyses along principal commuter and leisure routes. Firstly, routes involving single vehicle crashes and higher speed collisions will be marked with experimental and temporary signing indicating a rider fatality problem. Secondly, urban commuter routes will be identified with higher incidences of low speed overtaking and vehicle crossing path collisions. Signing for these routes will primarily alert drivers to the presence of riders. [More...](#)

*Seek to improve **motorcycle parking**.*

*Input into the development of **production and performance standards for inspection covers** (in particular in the context of Skid Resistance Value) for a forthcoming BS EN standard. This work is led by Devon's County Materials Engineer and Science Officer. When the new standards are adopted at UK and EU level Devon will take a lead role in adopting the standards and persuading other organisations with responsibility for highway ironmongery to follow suit.*

*Ensuring that **awareness of vulnerable road users is a standard feature of driver training courses** delivered by Devon County Council's Devon Drivers' Centre. As training services for other road users develop we will ensure that due regard is always given to VRUs, and especially motorcyclists, in the information, education and training we provide for others.*

#### Partnership Opportunities

Devon and Cornwall Police

Motorcycle Action Group

Local Advanced Rider groups

Rider Training Providers

Motorcycle retailers

Devon and Cornwall Safety Camera Partnership

Transport Research Laboratory (and through the national benchmarking initiative, in which Devon is acting as a founder member, a wide variety of other local authorities and constabularies).

## Safer Infrastructure

### Evidence led Casualty Severity Reduction (CSR) scheme programme

Devon has a rolling programme of in-depth analysis of casualty sites that collect 4 personal injury collisions in 3 years (Casualty Severity Reduction Schemes) over a short length of road, typically less than 100m.

The stretching new target for reduction in deaths and serious injuries (KSI), increases the target from a 40% reduction by 2010 to a 51% reduction. The current downward trend in KSIs is attributable to a number of factors, some of which lie outside the remit of the County Council. However, there is little doubt that the annual round of Casualty Severity Reduction (CSR) schemes are effective, with an average reduction of around 140 casualties saved over three years from one year's investment in treating 'cluster sites'. Of the casualties saved by CSR schemes, around 20% are statistically likely to have been serious injury collisions. It is however rare for a cluster site to include a history of a fatal collision.

CSR reviews are conducted locally in each Local Service Group, and involve specialist accident investigation staff, local traffic engineers, police casualty reduction officers, and DCC road safety officers working together.

The focus on 'clusters' is driven by the fact that they are more likely to contain highway characteristics that can be improved to reduce the likelihood of a driver error reoccurring again at that location.

When treating collisions that are widely dispersed, the CSR process requires a different approach, due to the problem of insufficient evidence that a similar collision with a similar cause and effect will occur at each site again.

*Devon will continue to supply data to, and draw upon the results of, the MOLASSES programme, to guide the likely effectiveness of low cost engineering measures.*

### Route Casualty Reduction Schemes

The proposed route safety programme for 2006-11 has arisen from an analysis of A roads in Devon. In 2004, A roads collected 60% of fatals in Devon, and 37% of KSI collisions, yet comprise just 7.4% of the network.

The process for identifying routes for consideration was:

1. All A roads were split into natural lengths, usually between main settlements. Typically the lengths were between 4km and 19km.
2. The analysis of the lengths in terms of KSI casualties per km produced an initial long list of 76 routes. The average casualty rate was established,(0.43 KSI per km) and all route lengths above the average were moved into the second long list for more detailed consideration.
3. The second long list of 35 possible routes was then appraised to remove lengths that
  - a. had already been studied as part of a Route Management Strategy,
  - b. were scheduled to have major works in the near future,
  - c. were identified as having a high proportion of its KSIs at specific urban sites
  - d. had recent maintenance or other improvements.
4. The final list of 11 routes was then considered for prioritisation. This was made on the basis of further analysis:
  - a. Adding slight casualty data, and establishing a severity ratio.
  - b. Reviewing the casualty data to establish the modes, including pedestrian and cyclist injuries.
  - c. Matching the routes against plans for Route Management Strategies in 2006-2011.

- d. Categorising the routes by sector within Devon. The routes were spread across 5 Local Service Group areas
  - e. 'Other considerations', such as feedback from local officers as to the likelihood of the route lending itself to soft and hard measures.
4. A draft list of routes for 2006-10 is set out below. Two routes have been identified through the Cluster Review process for early action in 2006, so that experience can be gained for the fuller list.

### Priority A Roads – KSI / km rates for 2002-2004

Road	Length (km)	KSI	Rate	Slight	Total	Rate	Severity Ratio	Description
A380	4.702	8	1.70	65	73	15.53	0.11	Penn Inn to Torbay
A382	6.136	9	1.47	50	59	9.62	0.15	Newton Abbot to Drum Bridges rbt
A3015	4.277	6	1.40	58	64	14.96	0.09	Exeter: Countess Wear to Exe Bridges
A380	18.1	17	0.94	82	99	5.47	0.17	Telegraph Hill to Penn Inn
A377	9.271	8	0.86	26	34	3.67	0.24	Cowley Bridge to Crediton
A358	5.896	5	0.85	16	21	3.56	0.24	Boshill Cross to Axminster
A381	5.961	5	0.84	22	27	4.53	0.19	Teignmouth to Newton Abbot
A381	14.782	11	0.74	77	88	5.95	0.13	Newton Abbot (Penn Inn) to Totnes
A38	7.145	5	0.70	18	23	3.22	0.22	M5 jct 27 to County border
A383	5.703	4	0.70	9	13	2.28	0.31	Newton Abbot to Goodstone (rural)
A396	19.098	11	0.58	31	42	2.20	0.26	Cowley Bridge to Tiverton (Ashley Rise)

#### Wet skid resurfacing programme

An annual study of collision data is carried out relating to sites where there is evidence of injury or non-injury collisions resulting from skidding in the wet. A resurfacing programme is implemented at sites that do not have adequate skid resistance

#### Safety Audit

Devon has adopted the new Highways Agency guidance for conducting safety audits, with some approved exceptions that make it more suitable for the local network.

*Devon will deploy a new central team to manage the compliance with the safety audit policy, and implement a quality assurance programme.*

#### Highway maintenance and safety

The routes for winter gritting are well publicised, and a leaflet is produced annually to promote safe driving on routes that are not on the gritting schedule.

#### Improved safety of materials.

The Devon County Council Materials Laboratory provides intelligence on the suitability of various materials used on the highway. Its work on the importance of gritting immediately after resurfacing with Stone Mastic Asphalt should improve the safety of newly laid surfaces. Similarly, its work on improved grip on the surface of ironware on the carriageway will in due course help the safety of motorcyclists.

## Safer Speeds

### **Speed Management, including Safety Camera Partnership**

In 2004 there were..... casualties resulting from a collision where excess or inappropriate speed was cited as the qualifying causation. As the second largest causation of collisions as reported by the police, considerable scope to reduce casualties lies in regulating speeds in both urban and rural areas.

The Devon Speed Management Strategy involves a multi-disciplinary approach to achieving speeds that are appropriate to the circumstances. It includes a revised Devon policy on the **setting of speed limits**, provisional upon further advice from the Department for Transport. This policy clearly links the limit to the type of road, to encourage consistency. The exceptions to the policy will be for sites where a lowered limit is justified on evidence of collisions.

Devon plays a full part in the **Safety Camera Partnership**, and is the employing authority for the Project Manager. The work of the Safety Camera Partnership permits a new approach to keeping drivers within the speed limit at sites where there have been collisions, yet where no other engineering feature is possible or cost –effective.

There is evidence from Devon County Council public surveys that there is majority local public support for the programme. Further work is needed to bring home to disaffected drivers the reasonableness of the speed limits, and the risks to others, particularly vulnerable road users, of exceeding speed limits.

*Devon will work with the Partnership to monitor the effectiveness of all of its camera sites, and agree an appropriate course of action at any sites that are not achieving the expected results.*

*Devon will work with the Partnership to deploy Vehicle Activated Signs at higher risk sites within the mobile enforcement programme.*

*Devon will work with the Partnership to keep public opinion supportive of compliance with speed limits, and the role of camera technology to achieve this.*

*Devon will explore with the Partnership any scope to deploy cameras along a route, as part of the Route Safety and Management Programme for 2006-10*

### Performance Indicators

Devon County Council has a corporate strategic target for road safety:

**To reduce the number of fatal and serious casualties attributed to vehicle speeds**

Target 04/05	Actual 04/05	Target 05/06	Target 06/07	Target 07/08	
118	102	113	108	103	

## **Promoting Vehicle Safety**

One of the most important factors in the severity of injury for a car occupant is the interior design of the vehicle, its crashworthiness rating and the correct wearing of belts.

*Devon will incorporate in its programmes of education and training at Devon Drivers Centre safety advice about seat belts, head rests and loose objects in the vehicle. References will be given to crash worthiness data such as EuroNCAP#*

With regard to motorcyclists, there is more limited scope for passive safety features. This fact is probably well known among riders. While innovations such as the application of air-bag technology to riding suits may be useful, the message to riders must be to ride in a way that minimises their chances of leaving their machine at speed.

*Devon will be supportive to the needs of those riders who use two wheel travel in a way such that they are integrated with reasonable safely within traffic.*