



## **Shropshire Local Transport Plan 3**

### **Evidence Base**

#### Part 6: Safety and Security

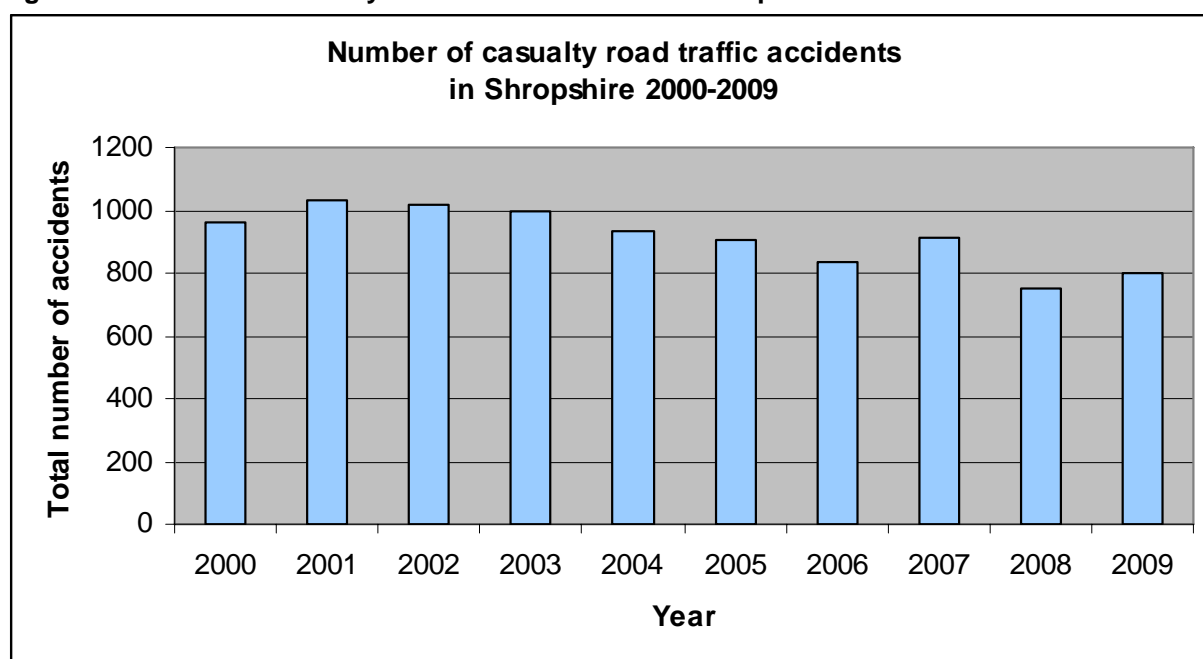
December 2010

# 1. Accident and casualty rates

Over the last 15 years there have been very significant reductions in the number of people killed or injured on Shropshire roads. However in 2009 there were still 27 people killed, 117 seriously injured and 993 slightly injured in road accidents in Shropshire. Road accidents are still the most significant cause of accidental death in Shropshire making up 46% of accident deaths for all ages and 89% of deaths in the 0-24 year age group<sup>1</sup>.

The number of road accident casualties in Shropshire reduced by 30% between 1994-98 and 2009. The number of people killed or seriously injured (KSI) reduced by 70% over the same period. The reduction in casualties and particularly the decrease in KSI's has been greater in Shropshire than in Great Britain as a whole.

**Figure 6.1 Number of casualty road traffic accidents in Shropshire 2000-09**

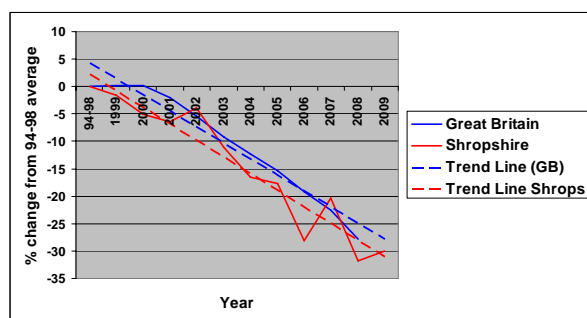


**Table 6.1 Number of casualty road traffic accidents in Shropshire 2000-09**

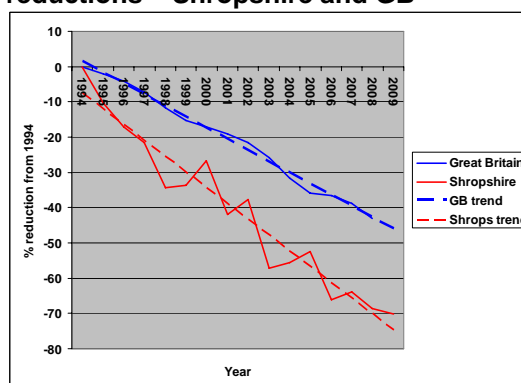
Year	Number of accidents
2000	961
2001	1029
2002	1017
2003	998
2004	935
2005	904
2006	834
2007	910
2008	753
2009	797

<sup>1</sup> Draft Shropshire Accident Prevention Strategy for Children and Young People, July 2010

**Figure 6.2 All casualty reductions – Shropshire and GB**



**Figure 6.3 Fatal and serious casualty reductions – Shropshire and GB**



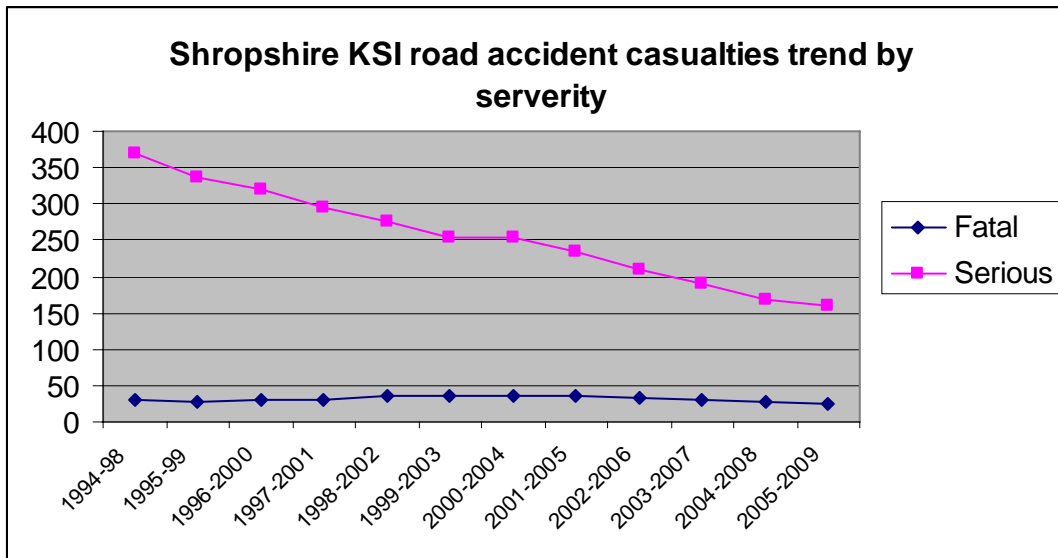
Comparing 2009 road accident data for Shropshire with other 12 other rural English counties shows that Shropshire has one of the lowest rates of road accidents and casualties, with an accident rate of 35 accidents per 100 million vehicle km driven, and one casualty per every 4.6km of road. However, the proportion of all casualty accidents which resulted in a fatality (2.4%) was the highest of all authorities.

**Table 6.2 Accident and casualty rates in rural English counties- based on 2009 data**

Local authority area	Accident rate per 100 million vehicle kilometres	Accident rate per 100,000 population	Accident rate per thousand licensed vehicles	Km's of road per casualty	Km's of road per fatality	Km's of road per Seriously Injured	Km's of road per Slight Injury	Fatal as % of all casualties
Norfolk	34	332	3.9	3.7	202	29	4.3	1.8%
North Yorkshire	35	464	5.0	3.4	218	19	4.2	1.6%
Shropshire	35	371	3.6	4.6	193	45	5.3	2.4%
East Riding of Yorkshire	36	357	4.0	3.0	150	20	3.6	2.0%
Devon	37	376	4.2	4.7	437	82	5.0	1.1%
Cumbria	39	440	5.1	4.0	352	36	4.5	1.1%
Herefordshire	39	404	4.0	4.1	258	36	4.7	1.6%
Dorset	47	442	4.4	2.7	188	18	3.2	1.4%
Suffolk	47	393	4.4	2.6	166	21	3.0	1.6%
Cornwall and Isles of Scilly	48	424	4.5	3.5	323	46	3.8	1.1%
North Lincolnshire	52	542	5.7	1.8	179	16	2.1	1.0%
Northumberland	53	464	5.7	3.9	292	31	4.5	1.3%
Lincolnshire	53	447	4.9	2.7	170	22	3.1	1.6%

Looking at the breakdown of fatal and serious casualties (using 5 year rolling average figures to eliminate year on year variations) it can be seen that the dramatic decrease in KSI's has been a result of a fall in the number of serious injuries, whilst the number of fatalities has not fallen very significantly, and in fact rose in the early 2000's.

Figure 6.3 Shropshire KSI road accident casualties trend by severity



## Accidents and casualties by mode

Figure 6.4 All Shropshire road casualties by mode

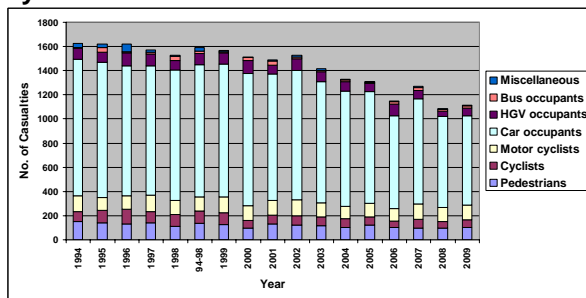
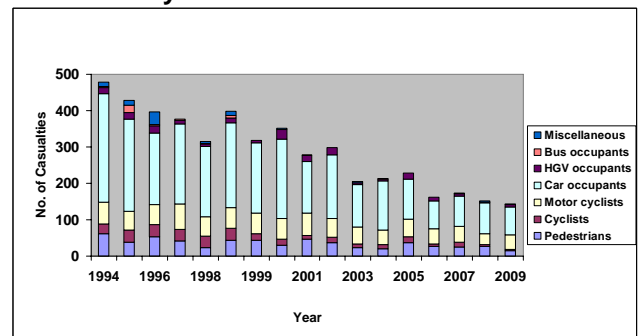


Figure 6.5 Fatal and serious road casualties by mode



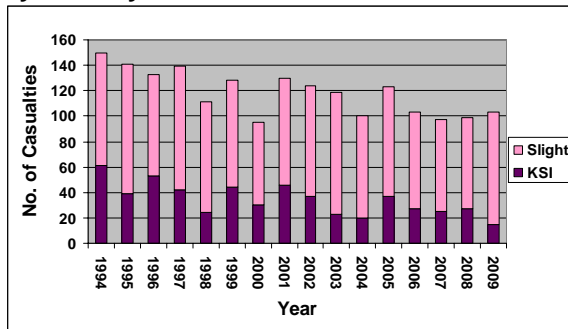
There is significant variation in risk depending upon travel mode used. Whilst the majority (69%) of all casualties, and 50% of KSI's are car users, the proportion of all road travel that is by car is significantly higher (approx 87%), travel by car is therefore the safest mode. Conversely less than 1% of all km travelled are by motorcycle, but 10% of all casualties, 23% of KSI's, and 24% of fatalities are motorcyclists, making this the highest risk mode.

In the last 15 years although the total number of road accident casualties has reduced, the modal split has not changed very significantly. There has been an increase in the proportion of motorcyclist casualties (8% in 1994-98 increasing to 10% in 2005-09) and a small decrease in cyclist casualties (6% to 5%). Also the proportion of casualties that are car passengers has reduced (26% to 16%), whilst the proportion that are car drivers has increased (43%-50%).

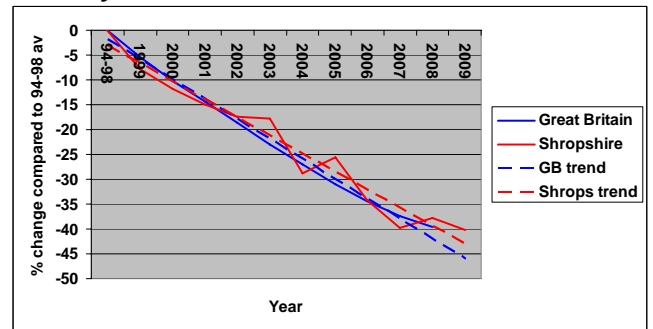
However, there has been a significant change in the modal distribution of KSI casualties. Whilst the number of car occupants killed or seriously injured has reduced significantly, the reduction in casualty numbers for other modes has not been as significant. Therefore the proportion of KSI casualties that are car occupants has decreased from 58% to 50%, whilst the proportion of motorcyclists has increased from 15% to 23% and the proportion of pedestrians has increased from 11% to 15%. The proportion of KSI's that are cyclists has reduced from 8% to 5%.

## Pedestrian casualties

**Figure 6.6 Shropshire pedestrian casualties by severity 1994-2009**



**Figure 6.7 Fatal and serious pedestrian casualty reductions**



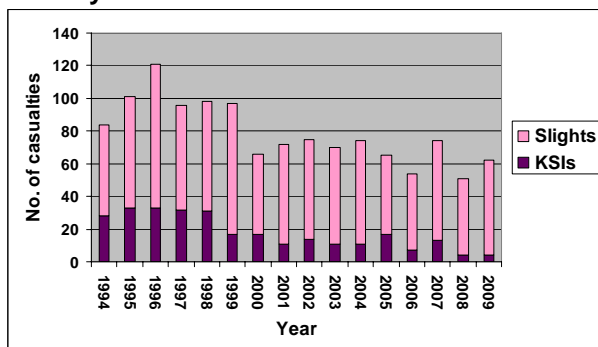
Around 5% of all travel is by foot, but pedestrians make up 9% of all casualties and 15% of people killed or seriously injured (KSI's). There has been a reduction of about 40% in pedestrian KSI's between 1994-98 and 2005-09, roughly mirroring the national trend.

85% of accidents involving a pedestrian occur in urban areas, whilst a higher proportion of pedestrian accidents resulting in a death or serious injury where in a rural location (29%). The majority of pedestrian accidents occurring in Shropshire's urban areas involved a car, 9% involved HGV's and 5% buses.

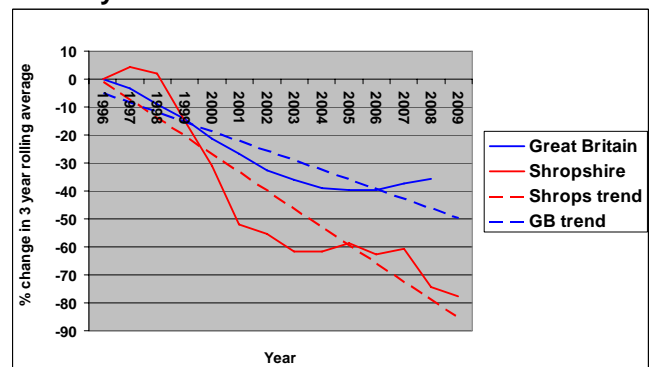
A quarter of pedestrian casualties are children aged under 15. There is a marked difference between the causal factors involved in child and adult pedestrian accidents. Of those accidents that involve child pedestrians, approximately 80% are the result of the pedestrian's actions – stepping out without looking and stepping out from between parked cars were the main factors. Conversely, of those accidents involving adult pedestrians, about 30% are the result of the pedestrian's actions, with over 40% being the result of a car driver's actions.

## Cyclist casualties

**Figure 6.8 Shropshire cyclist casualties by severity 1994-2009**



**Figure 6.9 Fatal and serious cyclist casualty reductions**



Less than 1% of all travel is by cycle, but cyclists make up 5% of all casualties and KSI's. There has been a very significant reduction of nearly 80% in cyclist accidents resulting in a death or serious injury between 1994-98 and 2005-09. This is a much more significant reduction than seen at a national level.

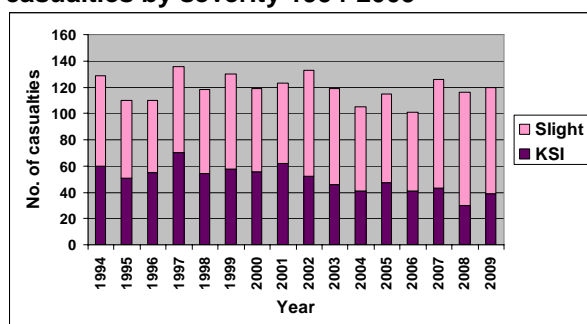
The majority (76%) of cyclist accidents occur in urban areas, although 32% of those resulting in serious injury or death are in rural areas.

The majority of cycle accidents in Shropshire's urban areas involved a car (78%) and 13% involved HGV's. The majority (72%) of collisions took place in the vicinity of junctions.

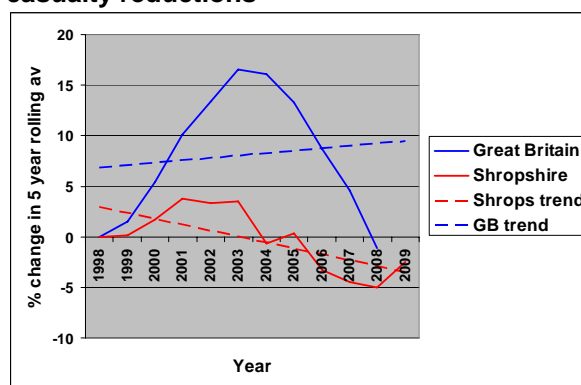
30% of cyclist casualties are children aged under 15. There is a marked difference between the causal factors involved in child and adult cycle accidents. Of those accidents that involve child cyclists, approximately 70% are the result of the cyclist's actions. The main factors are the cyclist joining the road from the pavement without looking, and crossing a road junction from pavement to pavement (i.e. crossing side roads when cycling on the pavement). Conversely, of those accidents involving adult cyclists, only about 20% are the result of the cyclist's actions with approximately 60% being the result of a car driver's actions.

### Motorcyclist casualties

**Figure 6.10 Shropshire motorcyclist casualties by severity 1994-2009**

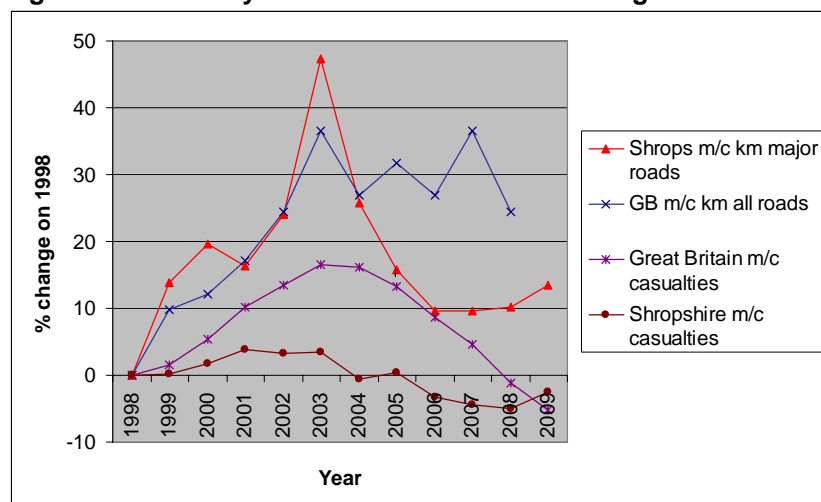


**Figure 6.11 Fatal and serious motorcyclist casualty reductions**



Motorcyclists make up less than 1% of all the distance travelled, but 23% of all people killed or seriously injured on Shropshire road are motorcyclists. The number of motorcyclist casualties has not reduced significantly over the last 15 years, and there has been just a 5% reduction in KSI's. However, this compares well with the national trend which was for a significant increase in motorcyclists casualties in the early 2000's and no overall reduction by 2008. The lack of progress in reducing motorcyclist casualties is partly explained by the fact that motorcycle use has increased more significantly in recent years than general traffic growth.

**Figure 6.12 Motorcycle km and casualties % change on 1998 – Shropshire and GB**



62% of accidents involving a motorcyclist occur in rural areas, and 74% of those resulting in serious injury or death are in rural areas. Around half of motorcyclist accidents are as a result of motorcyclists' actions, predominantly loss of control or not being aware of other road users. The other half of motorcyclists accidents are as a result of car driver actions, with car drivers not being aware of motorcyclists at junctions being a significant cause of accident.

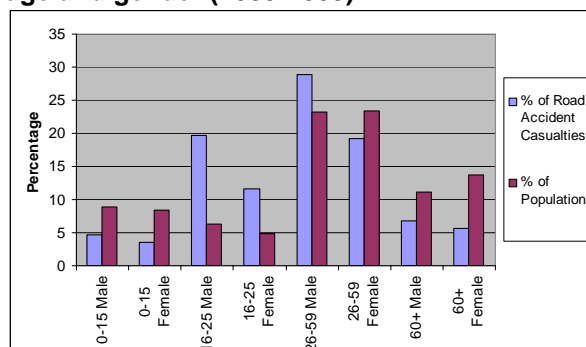
In LTP2 we set a target for reducing the risk of casualty accidents for motorcyclists as they were identified as a high risk group. The target of keeping casualties to 120 or less each year has been achieved. However, motorcyclists remain the highest risk group of road users in Shropshire, and an increasing proportion of road accident casualties.

### Equestrian casualties

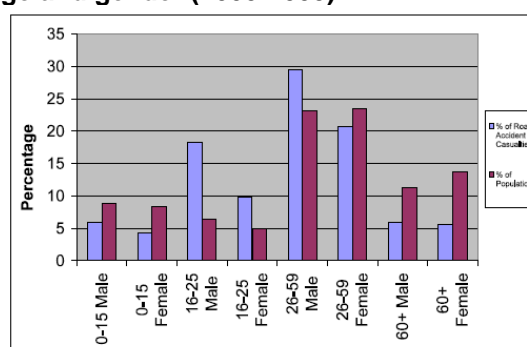
There is no evidence of a significant number of horse rider casualties in Shropshire. Over the five year period 2005- 2009 there were no fatalities, one serious casualty and six slight equestrian casualties. For this reason, horse rider casualties have not been singled out for further analysis.

### Age and gender of casualties

**Figure 6.13 Shropshire road casualties by age and gender (2005-2009)**



**Figure 6.14 Shropshire road casualties by age and gender (2000-2005)**



Analysis of all road accident casualties by gender and age group shows that people injured are more likely to be male (60%) than female(40%), and 73% of people killed or seriously injured on the roads are male.

Males aged 16- 25 have the highest casualty rate. This group represents less than 6% of Shropshire's population yet account for 20% of all casualties. They are also more likely to have accidents with serious consequences and represent 24% of all fatal and serious casualties.

Females aged 16 to 25 also have a high casualty rate, they make up 5% of the population but 12% of all casualties; however they are much less likely to have a fatal or serious injury, representing just 5% of KSI's.

The trend over time is for an increasing proportion of road accident casualties to be young adults. Comparing data from 2000-05 and data from 2005-09, the proportion of casualties which are people aged 16-25 has increased from 28% to 32%.

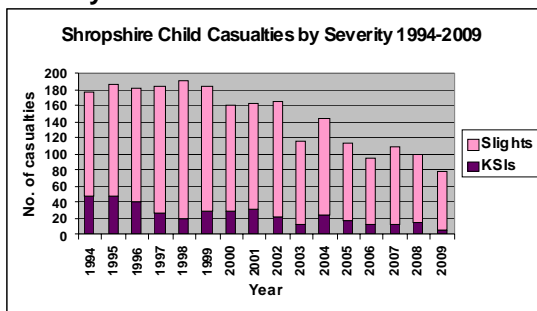
Men between the ages of 25 and 59 account for 23% of the population, but make up 29% of all accident casualties and 37% of fatal and serious casualties. Females of this age group make up 19% of all casualties and just 11% of KSI's.

Older people aged over 60 make up a quarter of the population, but 13% of all casualties and 15% of those killed or seriously injured. However women aged over 60 if involved in an accident have a higher mortality rate with 13% of all fatalities being women in this age group.

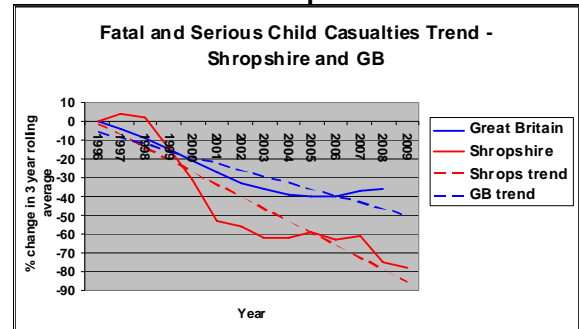
### Child accidents

Children make up a small and decreasing proportion of all casualties, 9% of all casualties and 7% of KSI's. The rate of child casualties has reduced considerably over recent years at a faster rate than all casualty reductions. There have been reductions in child casualties for all modes, including cycling, walking and car passengers.

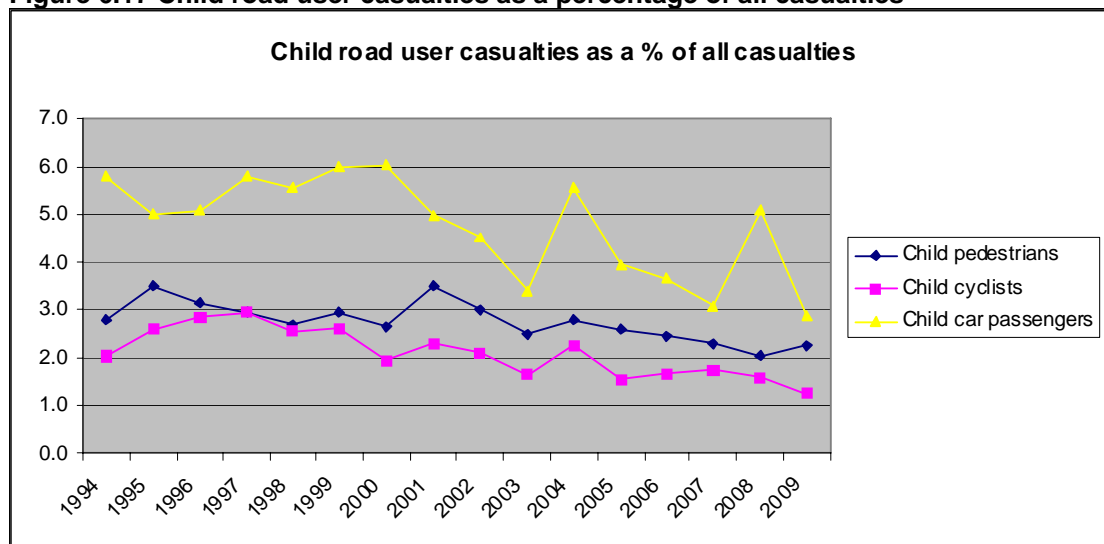
**Figure 6.15 Shropshire child casualties by severity 1994-2009**



**Figure 6.16 Fatal and serious child casualties trend – Shropshire & GB**



**Figure 6.17 Child road user casualties as a percentage of all casualties**



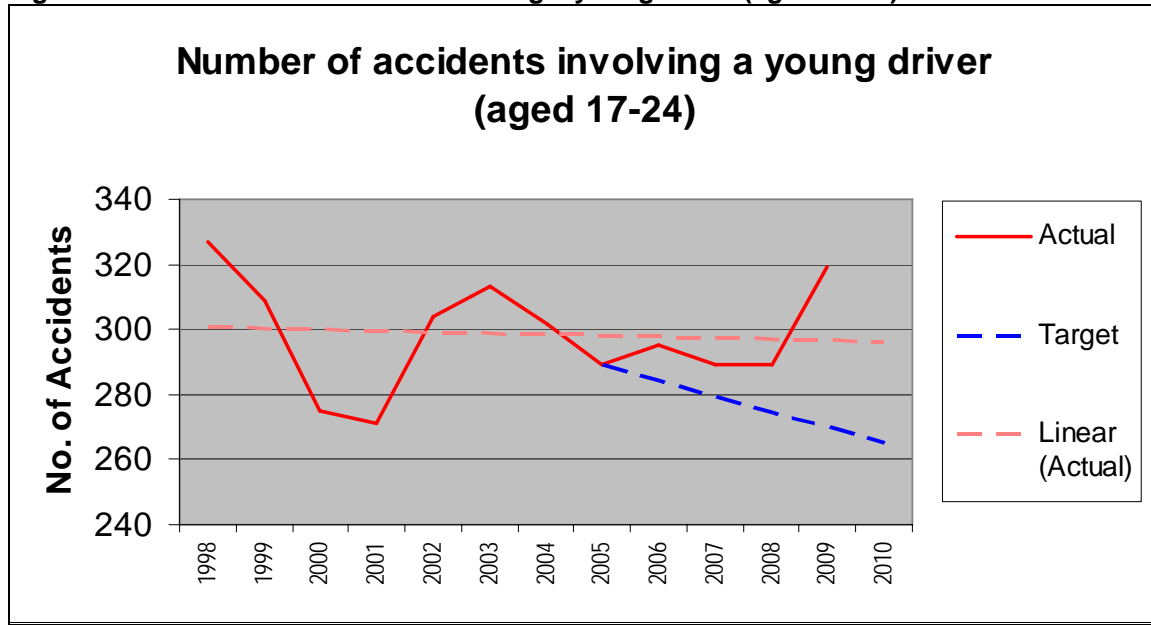
### Young drivers

Young people are becoming an increasing large proportion of the people injured on Shropshire's roads. Drivers aged 17-24 are more than twice as likely to be involved in an accident as older drivers.



In LTP2 we set a target for reducing the number of road traffic accident involving a young driver aged 17-24, as they were identified as a high risk group. The target aimed for a 27% reduction from 1994/98 to 2010. This target has not been achieved and in fact there has not been any significant reduction in the number of accidents involving young people over this period.

Figure 6.18 Number of accidents involving a young driver (aged 17-24) 1998-2009



## National Research and Guidance

The DfT have undertaken a significant amount of research into road safety and have recently consulted on a new national road safety strategy<sup>2</sup> and issued guidance to local authorities on their roads safety strategies going forward<sup>3</sup>:

The guidance identifies the key road safety challenges as:

- **reducing the number of road deaths**, which have fallen at a slower rate than serious injuries. There are three key groups which together constituted more than half of the deaths in Great Britain in 2007:
  - young (17 to 24) car drivers and passengers;
  - motorcyclists; and
  - pedestrians in urban areas.
- **pedestrian and cyclist casualties in our towns and cities** – particularly in deprived communities;
- **protecting children**, particularly in deprived areas, and **young people**, who are greatly over-represented in the casualty statistics;

<sup>2</sup> [A Safer Way: Consultation on Making Britain's Roads the Safest in the World](#), Dft, 2009

<sup>3</sup> Advice about Local Road Safety Strategies , DfT, 2009

- **protecting motorcyclists**, who represent 20% of road fatalities but just 1% of traffic;
- **safety on rural roads**: 62% of all road fatalities in 2007 occurred on rural roads, which carry only 42% of traffic;
- **variations** in safety from area to area and road to road;
- **poor road user behaviour** amongst a minority, where drink-driving and failure to wear a seatbelt remain a problem;
- **illegal and inappropriate speed**: excessive speed was recorded as a contributory factor in 26% of road fatalities in 2007.

The DfT Guidance notes that the relative importance of particular issues reflected in a road safety strategy will vary between localities, depending on local casualty problems and priorities

In terms of engineering interventions the DfT consider that there is still much scope for engineering to play a significant role beyond 2010. 'In rural environments, most benefits are to be gained from speed management, road restraint systems, simple measures at bends such as the WYLIWYG (Where You Look Is Where You Go) approach, vehicle-activated signs (VAS) and crash-friendly signposts/columns. For urban roads, the best benefits are likely to come from passive furniture, speed cushions and 20 mph zones'.<sup>4</sup>

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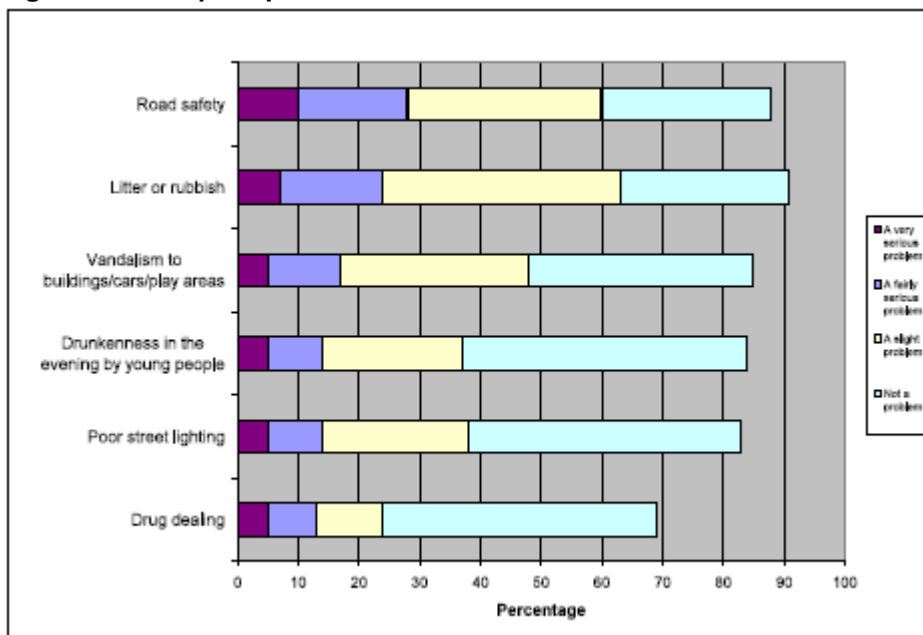
<sup>4</sup> Road Safety Strategy Beyond 2010: A Scoping Study

## 2. Feeling safe and secure

### Road safety

The 2004 Shropshire Crime, Disorder and Substance Misuse Audit identified that road safety was the number one safety concern of Shropshire residents. It was the top concern in all areas of the county except Shrewsbury, where it was the second most significant concern after litter. Overall 28% of respondents considered road safety to be a very or fairly significant problem in their local area.

**Figure 6.19 People's problems in their local area**



The Safer Stronger Communities Partnership Delivery Plan 2010 – 2011 strategic assessment identifies that the key concerns of the public in relation to crime and disorder are still related to speeding traffic.

The following table shows the concerns raised by residents at PACT (Partners and Community Together) meetings. Speeding traffic is the most commonly raised concern in most areas and illegally and inconveniently parked cars are also an important issue.

**Table 6.3 Concerns raised by residents at PACT meetings**

Shropshire	North Area	Central Area	South Area
VEHICLE RELATED - SPEEDING TRAFFIC	VEHICLE RELATED - SPEEDING TRAFFIC	YOUTH RELATED - YOUTHS INAPPROPRIATE GATHERING	VEHICLE RELATED - SPEEDING TRAFFIC
YOUTH RELATED - YOUTHS INAPPROPRIATE GATHERING	VEHICLE RELATED - CARS PARKED ILLEGALLY / INCONVENIENTLY	VEHICLE RELATED - SPEEDING TRAFFIC	YOUTH RELATED - YOUTHS INAPPROPRIATE GATHERING
VEHICLE RELATED - CARS PARKED ILLEGALLY / INCONVENIENTLY	ASB - OTHER	ASB - OTHER	VEHICLE RELATED - CARS PARKED ILLEGALLY / INCONVENIENTLY

Consultation undertaken by West Mercia Police through their community survey identifies that speeding traffic is consistently the number one concern of local residents.

**Table 6.4 Main concerns of residents from Community survey 2005-2009**

Rank	2009/2010(Q1)	2009	2008	2007	2006	2005
1	Speeding Traffic	Speeding Traffic	Speeding Traffic	Speeding Traffic	Speeding Traffic	Speeding Traffic
2	Under Age Drinking	Under Age Drinking	Under Age Drinking	Under Age Drinking	Groups of people loitering or hanging around in public places	Vandalism or damage to property
3	Groups of people loitering or hanging around in public places	Groups of people loitering or hanging around in public places	Groups of people loitering or hanging around in public places	Vandalism or damage to property	Under Age Drinking	Under Age Drinking

Public consultation for Local Transport Plan 2 identified that the main solutions called for to improve the perception of road safety are reduced speed limits in built up areas and much better enforcement of speed limits.

Speed cameras are viewed with scepticism; with many consultees taking the view that only 'hidden' and mobile speed cameras have any impact. The use of many conventional "traffic calming" measures such as red paint markings and speed cushions are also viewed by many people as being ineffective and often seen as being visually intrusive and damaging to the local environment.

Other measures which people suggested to improve safety include more pedestrian crossings, new rural footways, restrictions to HGVs, speed restrictions on country lanes, restrictions to vehicles around schools and new bypasses, as well as better testing and education of drivers.

The state of repair of particularly minor rural roads was also of concern to some people raising fears about damage to vehicles, and potential for accidents. The condition of footways is also of concern to pedestrians raising fears about trips and falls.

It should be noted that people’s fears in relation to road safety extend to concerns about damage to property and vehicles as well as personal injury.

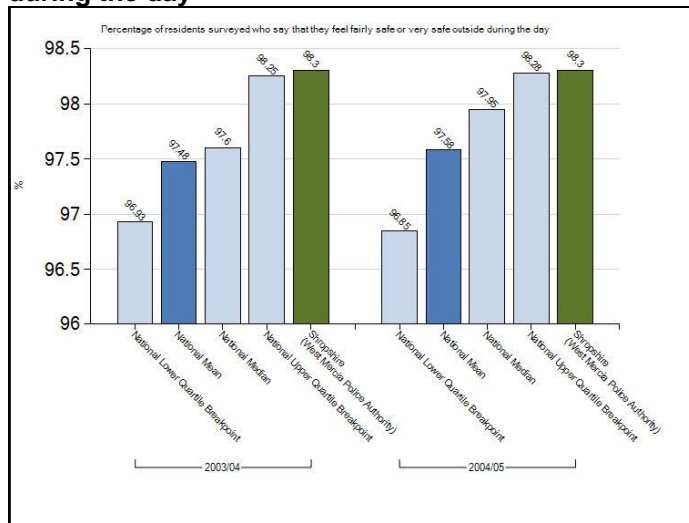
### Personal security

The 2004 Safer Shropshire Partnership survey asked a number of specific questions on personal security and how safe people felt in their locality during the day and night. Responses show that perceptions of safety are high compared to other areas of the country.

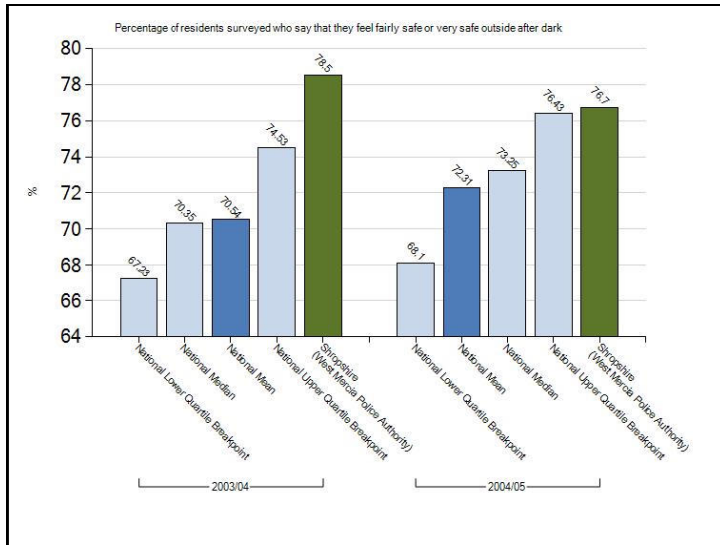
Most people feel very safe during the day, whether this is walking in their local area (94%), walking in their town centre (89%), travelling around (87%) and waiting for public transport (83%). However, this level reduces slightly for those feeling safe using footpaths and alleyways during the day (70%).

Perceptions of safety reduce at night time when 71% feeling safe walking in their local area; 60% walking in their town centre; 51% travelling around; 45% waiting for public transport, and only 33% feeling safe using footpaths and alleyways.

**Figure 6.20 Percentage of residents who say that they feel fairly safe or very safe outside during the day**



**Figure 6.21 Percentage of residents who say that they feel fairly safe or very safe outside at night**



### 3. Swot analysis

<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• Shropshire has a low rate of both road accidents and casualties compared to comparable English Authorities, and rates have fallen significantly in recent years.</li> <li>• The number and severity of cyclist casualties has been significantly reduced, at a much greater rate than other areas of the country.</li> <li>• Shropshire is generally a low crime area. Fear of crime is low, with the vast majority of Shropshire residents feeling very safe within their neighbourhood.</li> </ul>	<p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• Shropshire residents consider road safety to be the biggest community safety concern in their local neighbourhood. The speed of traffic through villages and in urban areas is the main concern.</li> <li>• Road accidents are the most significant cause of accidental death in Shropshire, accounting for 46% of all accidental deaths.</li> <li>• Motorcyclists and young drivers have a significantly higher risk of being in an accident than other road users, and accident rates for these groups have not reduced in recent years.</li> <li>• People living in the most deprived areas are significantly more likely to suffer poor health outcomes compared to those in the least deprived areas. They are more likely to have long term conditions, to be physically inactive and to be obese.</li> <li>• Speeding traffic remains residents' main crime and disorder concern. This is a barrier to active travel as people perceive cycling and walking to be unsafe.</li> </ul>
<p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• Integration of public health function and local authorities</li> </ul>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• The most effective actions to tackle high risk road user groups and further reduce road accidents may not be the same as the actions required to enhance the perception of road safety of Shropshire residents.</li> </ul>