

2009 Herefordshire Road Casualties Summary Report



1. Introduction

1.1 Summary

- Overall, 2009 has been another relatively successful year in the reduction of road casualties within Herefordshire. All our current casualty targets for 2009 were surpassed including Killed or Seriously Injured (KSI), Child KSI, and Slight casualties which indicate that the authority should successfully meet the 2010 target reductions set by Central Government in 2000 and the revised “stretches” to these targets proposed from 2004. However, whilst targets for the year have been surpassed it is apparent that 2009 suffered a marginal increase in the year on year figures compared to 2008. In some respects, this is not surprising given the exceptionally low casualty returns that 2008 exhibited and the “outside” influencing factors explained in the previous report; however this does give cause for concern and it is important that we identify and understand any underlying issues that may be tackled in future.
- Looking at the overall statistics, it’s apparent that the primary factor for the increase of KSI casualties in comparison to 2008 appears in the Trunk Road statistics. These suffered a 50 % increase (20 to 30 casualties) compared to the previous year whilst our County Road network suffered an increase of 3% (73 to 75 casualties). A more detailed breakdown of these issues can be found in the Trunk Road section of the report.
- Overall “young road users” (16 – 25 age group) remain a concern with disproportionately high representations within the KSI casualty statistics, as could be seen in 2008. More worrying is their over representation in the Fatal casualties, with this age group accounting for 54% (7 of 13) of road fatalities within the County.
- 2009 saw a notable increase in “drink drive” related accidents compared to previous years, with more than double the number (30 compared to 14) recorded in 2009 compared to 2008. This number is also the highest recorded since 2005.
- Whilst motorcycle casualties still account for 18% of the overall KSI casualty figure, these have exhibited a marginal decrease compared to 2008, with small reductions in all severities for this vehicle class.

1.2 Introduction

This is the second annual Road Casualty Summary report prepared by Herefordshire Council that provides an overview of all Road Casualties within the County over the preceding calendar year. Copies of this document are available on the Accident Investigation page of the Herefordshire Council website.

This report will aim to briefly summarise the accident and casualty numbers that have occurred on the entire road network within Herefordshire during 2009. It shows our current performance against the headline targets, which have been set to form our Road Safety Strategy, and meet the national road safety targets set by central Government in 2000. It will aim to highlight any areas within these figures that may be considered “emerging issues”.

It will also provide an overview of safety improvement schemes carried out in 2009 together with completed monitoring records for all sites treated since 2002 that now have a complete 5 year “After” period. This will help to highlight the casualty reductions achieved relating to specific schemes which contribute a significant proportion to the ongoing reductions.

2. Headline casualty statistics

We are able to report the successful meeting of all our target casualty statistics for 2009, which indicates that the authority should successfully meet the 2010 target reductions set by Central Government in 2000 and the revised "stretches" to these targets proposed from 2004.

Compared to our 1994 – 98 average casualty figures (249 KSI, 22 CKSI, 719 Slight) that form the baseline for our overall 2010 target we currently show: -

- 58 % reduction in KSI's casualties
- 59 % reduction in Child KSI's casualties
- 2 % reduction in Slight casualties

A summary can be seen in Table 1 below:

	Total KSI cas				Child KSI cas				Slight cas				Total casualties
	Target	Actual	% Change over previous year	% Change over 1994 - 98 Average	Target	Actual	% Change over previous year	% Change over 1994 - 98 Average	Target	Actual	% Change over previous year	% Change over 1994 - 98 Average	Actual
2005	187	147	4%	-41%	17	13	63%	-41%	804	732	-6%	2%	879
2006	134	119	-19%	-52%	15	10	-23%	-55%	788	663	-9%	-8%	782
2007	130	133	12%	-47%	14	11	10%	-50%	772	713	8%	-1%	846
2008	123	93	-30%	-63%	13	6	-45%	-73%	756	632	-11%	-12%	725
2009	116	105	13%	-58%	12	9	50%	-59%	740	707	12%	-2%	812

Table 1

Whilst targets for the year have been surpassed, it is evident that 2009 suffered a marginal increase in the year on year figures compared to 2008. This gives cause for concern and it is important that we identify and understand any underlying causes if these exist, so that these may be tackled in the coming year. Given the exceptionally low 2008 KSI figure this has come as no surprise taking into account the "outside" influencing factors explained in the previous report; however it is important that we try to understand and clarify any contributing elements.

Looking in a positive sense, 2009 still exhibits a statistically significant reduction compared to the average over the last 5 years as shown in Table 2 below. It is also apparent from our statistics that overall, Fatal casualties reduced by 19% (16 to 13) compared to 2008.

Statistical Poisson test – KSI Casualties, last 5 years.

No of years	119.4 Av accidents per year					
5					1%	V high Confidence
					5%	High Confidence
Year no	Year	Accident total	Significance			
1	2005	147	0.8%	V high Confidence	of increase over the average	
2	2006	119	47.3%	Not Significant	of decrease below the average	
3	2007	133	11.6%	Indicative (not stat significant)	of increase over the average	
4	2008	93	0.5%	V high Confidence	of decrease below the average	
5	2009	105	8.4%	Fair Confidence	of decrease below the average	
6						
7						
8						
9						
10						

Table 2

3. National and local casualty comparisons

National Comparison

Comparing our overall performance for KSI casualties against the recently released 2009 national statistics contained in Road Casualties Great Britain 2009 – Statistics Bulletin, we can see the following from Table 3 below:

Percentage Reductions KSI casualties totals compared to 94 - 98 Ave. Baseline.							
		94-98 Av	2005	2006	2007	2008	2009
Great Britain KSI Cas Including Herefordshire	Total KSI Cas	47656	32155	31845	30720	28572	26906
	% Reduction		-33%	-33%	-36%	-40%	-44%
Great Britain KSI Cas Excluding Herefordshire	Total KSI Cas	47407	32008	31726	30587	28479	26801
	% Reduction		-32%	-33%	-35%	-40%	-43%
Herefordshire KSI Cas	Total KSI Cas	249	147	119	133	93	105
	% Reduction		-41%	-52%	-47%	-63%	-58%

Table 3

We have consistently achieved a greater reduction in KSI casualties against the 1994 – 98 baseline figures than the rest of Great Britain. Taking account of our small percentage increase over our 2008 KSI figure, we still show a 14% greater reduction than the rest of Great Britain as a whole. It also shows that our 2008 to 2009 increase is also at odds with the national trend, however this is more likely due to our very low 2008 totals (explained in the previous report) rather than a particularly poor 2009.

4. 3 Year rolling average casualty figures

In order to give a broader overview of the County casualty trend a “3-year rolling average” method can be applied. This uses an average of the preceeding 3 calendar years (including latest year) figures to give average number at the current year. This method provides a more robust data set to provide an overview of the overall casualty trend, which negates any casualty “peaks” and “troughs” which individual years may contain, as shown in Chart 1.

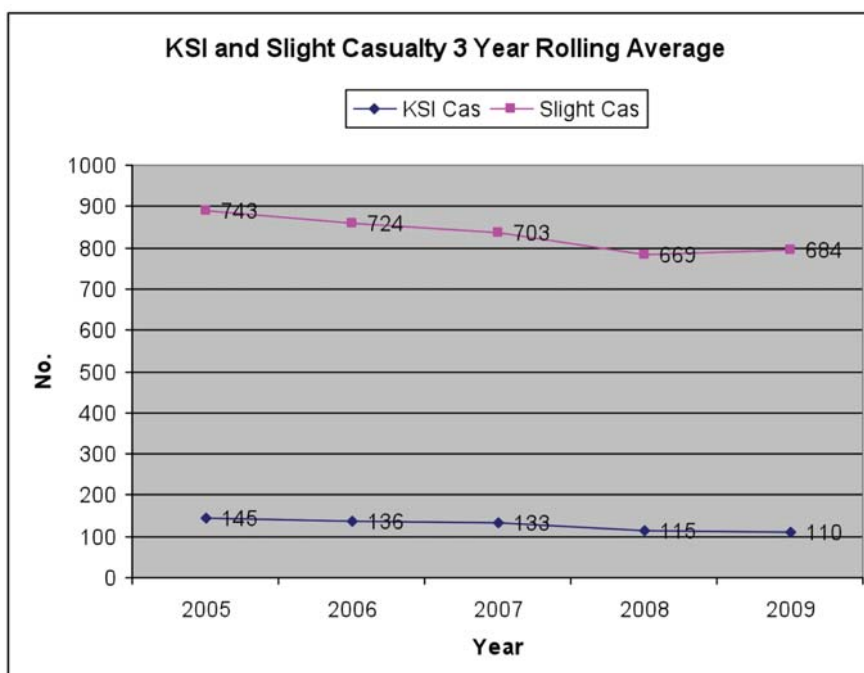


Chart 1

5. Headline casualty and collision breakdown and comparisons.

The following tables show a breakdown of KSI Collisions (Table 4) and Casualties (Table 5) between Fatal and Serious and Slight severities and total figures for each respective year.

Comparisons between the two tables are useful in highlighting the actual numbers of Collisions (Accidents) that have happened compared to the casualty figures shown. This helps to highlight if any unusually high "multiple casualty" incidents may have occurred, which adversely influence casualty figures. On occasion further investigation of these incidents may highlight particular elements, such as age groups, or behaviours that may benefit from further targeted road safety educational campaigns, in a bid to further reduce casualty numbers.

Table 4					
	KSI Collisions			Slight Collisions	Total Collisions
	Fatal	Serious	Total KSI		
2005	16	105	121	446	567
2006	11	92	103	448	551
2007	20	94	114	467	581
2008	14	65	79	440	519
2009	10	79	89	485	574

Table 5					
	KSI Casualties			Slight Casualties	Total Casualties
	Fatal	Serious	Total KSI		
2005	17	130	147	732	879
2006	12	107	119	663	782
2007	22	111	133	713	846
2008	16	77	93	632	725
2009	13	92	105	707	812

6. County / trunk road casualty split

Herefordshire's reportable casualty figures cover all roads within the County, including the Trunk Road network, managed and maintained by the Highways Agency and its Managing Agents. Due to this arrangement, Herefordshire Council are unable to directly influence these casualties from an engineering perspective; however the figures do represent a significant proportion of our casualty returns.

Table 6 below shows a breakdown of KSI casualties across the Trunk Road network within Herefordshire together with a comparison of road lengths and County Road KSI's and their percentage of the overall KSI's within the County. This shows that in 2009 the Trunk roads accounted for just 2% (approximately 47 miles) of the total highway network, but contributed 29 % of our overall KSI's, with the A49 alone contributing 24 % of this figure.

Further analysis of the overall statistics highlights that the primary factor for the increase of Herefordshire's total KSI casualties in comparison to 2008 is attributable to the Trunk Road statistics. Trunk road KSI casualties suffered a 50% increase (20 to 30 casualties) compared to the previous year whilst our County Road network suffered a less significant increase of 3% (73 to 75 casualties). It is also apparent from these figures that the two additional KSI casualties on the County Road network can be

Table 6						
Trunk Road	Approx Length (Miles)	KSI Casualties by Year				
		2005	2006	2007	2008	2009
A49	33 mi	26	13	20	14	25
A465 (De-trunked 2009)	0 mi (12 pre 2009)	6	6	3	4	De- Trunk
A449	0.5 mi	0	0	0	0	0
A40 (part De-trunked 2009)	9 mi (15 pre 2009)	6	2	8	2	4
M50	4.5 mi	0	0	0	0	1
Trunk Rd Total	47 mi	38	21	31	20	30
County Rd Total	2033 mi	109	98	102	73	75
Overall Total	2080 mi	147	119	133	93	105
Trunk Rd % of Overall Total	2%	26%	18%	23%	22%	29%

directly attributed to the recently de-trunked section of the A465 from Hereford to Llangua. In order to put this into perspective, looking at the comparable 2009 and 2008 County road network (without the newly de-trunked A465) this would contain the same numbers of KSI casualties as 2008, hence no increase.

Looking historically over previous years, any noticeable increase in our total KSI casualty figures usually correlates to a significant fluctuation in the Trunk road statistics. The only increase exhibited in County road figures since 2003 is a rise of 4 in 2007; every other year has shown a reduction.

Chart 2 below shows a graphical representation of the KSI casualty numbers and resultant “trend” for reductions on both the County maintained road network (light blue line) and Trunk road network (yellow line). The chart clearly indicates the improved performance in reducing KSI casualties on County maintained roads over that of the Trunk roads. The chart also illustrates the similar growth in traffic volumes on both road categories (data taken from DfT website on traffic volumes). This shows that the traffic growth on County roads has marginally exceeded that on the Trunk roads which rules out increased Trunk road traffic growth, as a reason behind their lesser casualty reduction performance.

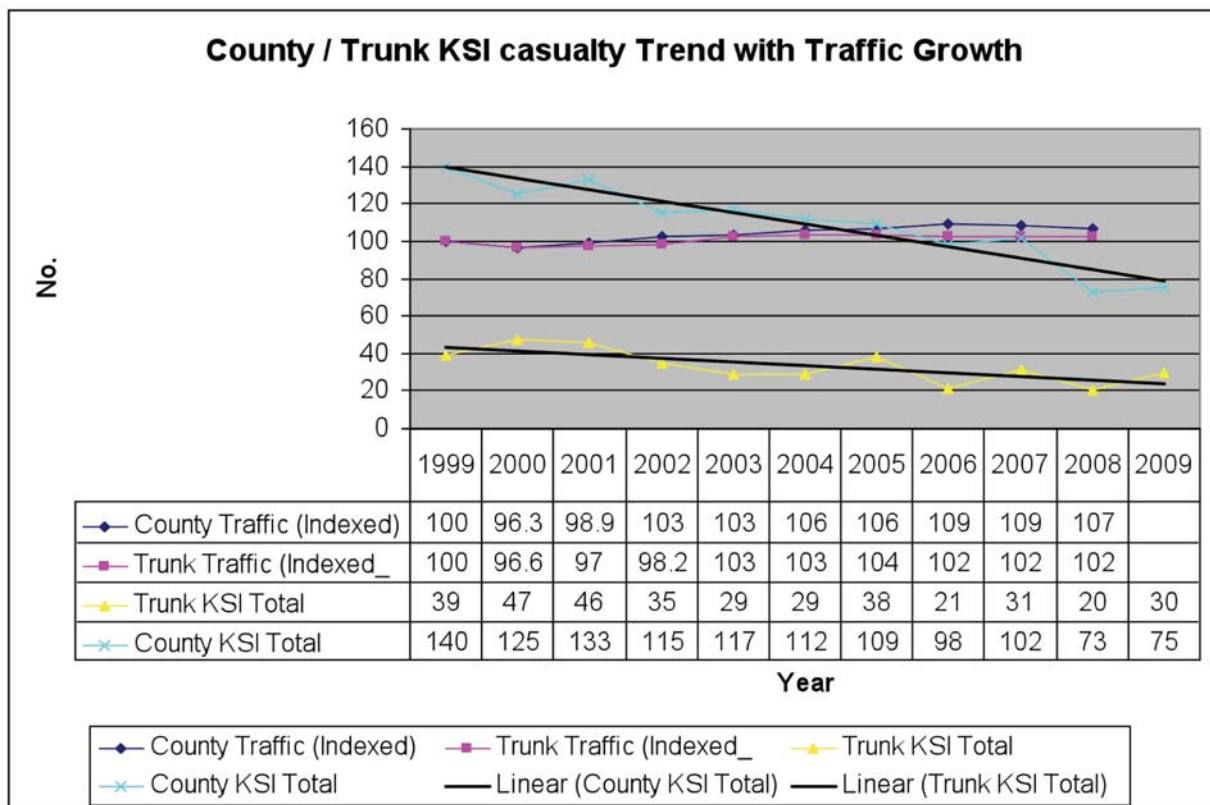


Chart 2

A further concern with the Trunk road statistics is the percentage of fatal casualties that this network contributes to the County total. These roads accounted for four fatal collisions, resulting in six fatal casualties which equates to 46% of the total county fatalities in 2009. The A49 accounted for five of the six fatalities, with the A40 featuring the remaining one.

It is also important to take account of the incident in March on the A49 at Much Birch which attributed three fatal casualties from the one collision which has adversely influenced the totals. However, looking back over recent years these types of “multiple fatality” incident have not been an isolated occurrence in the A49’s history.

7. 2009 Accident and casualty analysis - emerging issues

The marginal increases in casualty numbers in Herefordshire during 2009 are reflected throughout the majority of casualty classes, vehicle types and age groups. Other than the trunk road issues mentioned previously, it is difficult to attribute the increases to one specific issue; however there are a number of collision / casualty categories that are notable in their variations. Given the general minor increases over 2008 we will also look for changes over the preceding years in order help quantify any emerging issues.

7.1 2009 Overall Contributing Influence – KSI Accidents

For the purpose of this report, in order to give a general flavour of the more significant accident patterns, a simplified breakdown of accident types shows the following:

Total county KSI Accidents – 89 (105 KSI casualties)

- 38% (34) Accidents involved drivers aged 16 to 25
- 30% (27) Accidents involved “loss of control” manoeuvre on bend with 56% (15) of these involving drivers aged 16 – 25.
- 24% (21) Accidents happened at junctions
- 14% (12) Accidents involved “overtaking” manoeuvres with 29% (6) of these involving drivers aged 16 – 25

7.2 16 to 25 (Young Road User) Age group (All classes)

Our further analysis of the 2008 data brought to light a “hybrid” age group which encompasses the official Department for Transport age groups of 16 – 19 and part of the 20 – 29 groups. As shown in **Table 7** below, this 16 – 25 age group accounts for 36% (38 of 105) of the total KSI casualties within the County which is the largest percentage of all age groups. More worrying is the “over representation” in the Fatal casualty figures, with this age group accounting for 54% (7 of 13) of all fatal casualties in 2009.

This is also at odds with the remaining West Mercia Police force area in which this group account for 32% of fatal casualties, although it is broadly similar for overall KSI’s. Primarily the “Car driver / passenger” casualty type is where the bulk of the

statistics can be found and whilst these have remained static with 21 compared to 2008, these figures are remaining high compared to previous years. It is also worth reiterating that all three fatal casualties in the March collision on the A49 (T) at Much Birch belonged

Table 7			
	2009 KSI Cas		
Casualty Severity	Fatal	Serious	KSI
County Total	13	92	105
16 - 25 age group	7	31	38
16 - 25 age group as % of County Total	54%	34%	36%

to this age group which may partially explain the statistical variation with surrounding areas.

Ultimately, it appears that improved education will be the primary means of addressing this issue, with engineering offering limited assistance in a supporting role.

7.3 Drink Drive Accidents

There was a notable increase in “drink drive” related collisions with more than double the number (30 compared to 14) recorded in 2009 compared to 2008. It is also important to note that this number is the highest recorded since 2005. Analysis shows that 47% are attributed to combined Saturday’s and Sunday’s, with the hours between 1am and 3am being the highest offence time period. We can also see from the statistics that there has been a significant increase in this issue amongst the 20 – 29 age group with these

accounting for 47% (14 of 30) of total incidents. Reasoning behind the increase will be more difficult to robustly determine. This may be linked to the uncertain economic climate leading to greater alcohol misuse, resulting in a greater incidence of risk taking which may also illustrate the tip of a growing social issue.

7.4 Accidents involving surface condition - Ice

Accidents involving an “Ice” road surface condition once again suffered a significant increase during 2009. As mentioned in the previous summary report, 2008 exhibited a marked increase in these accident numbers and 2009 has continued this trend as can be seen in **Table 8** below. There may be many influences on this figure, including the overall severity of the winter in general, and the number of days that freezing conditions were prevalent. Initial analysis of the 2008 and 2009 data and collision locations is underway to identify issues that require further investigation in combination with Amey’s Winter Service and will be subject to ongoing monitoring over future winter periods.

Table 8					
Accidents by Road Surface Condition					
	2005	2006	2007	2008	2009
Dry	347	330	368	304	356
Wet	206	207	197	193	182
Snow	1	2	3	0	1
Ice	13	11	9	21	35
Flood	0	1	4	1	0

7.4 Powered Two Wheeler (motorcycles / mopeds)

2009 revealed a decrease in both collisions and casualty numbers for this group compared to previous years. Whilst it should be born in mind that whilst these numbers are relatively small compared to overall total collision and casualty numbers, they still accounted for 13% of all collisions, 18% of KSI casualties and 7% of Slight casualty numbers.

The most noticeable reduction within the Powered Two Wheeler classes can be found in the “over 500cc” category. In 2009 there were no fatalities within this group, whilst Serious casualties showed a marginal increase (7 to 10) and Slight casualties reduced by 44% (16 to 9) compared with 2008. This may indicate a reduction in use of these large

Table 9						
	94-98 Av	2005	2006	2007	2008	2009
PTW Collisions	84	57	61	60	65	57
% of Total collisions		10%	11%	10%	13%	13%
PTW KSI Cas	37	26	23	20	21	17
PTW Slight Cas	47	28	40	39	47	34
PTW Total Cas	84	54	63	59	68	51
% of Tot KSI casualties		18%	19%	15%	23%	18%
% of Total All casualties		6%	8%	7%	9%	7%

capacity machines, which may be linked to the worsening financial climate. Given that this type of machine is primarily used for “leisure activities”, the associated running costs can be significant which may have deterred some usage during 2009. There is also a general link between prevailing weather conditions during the summer months which further influence the overall use. Whilst the reductions are welcomed, it is important that a focus is maintained on this group of users, to ensure the reducing trend continues in the future.

The following Chart 3 illustrates the overall trend exhibited over recent years by the powered two wheeler casualties.

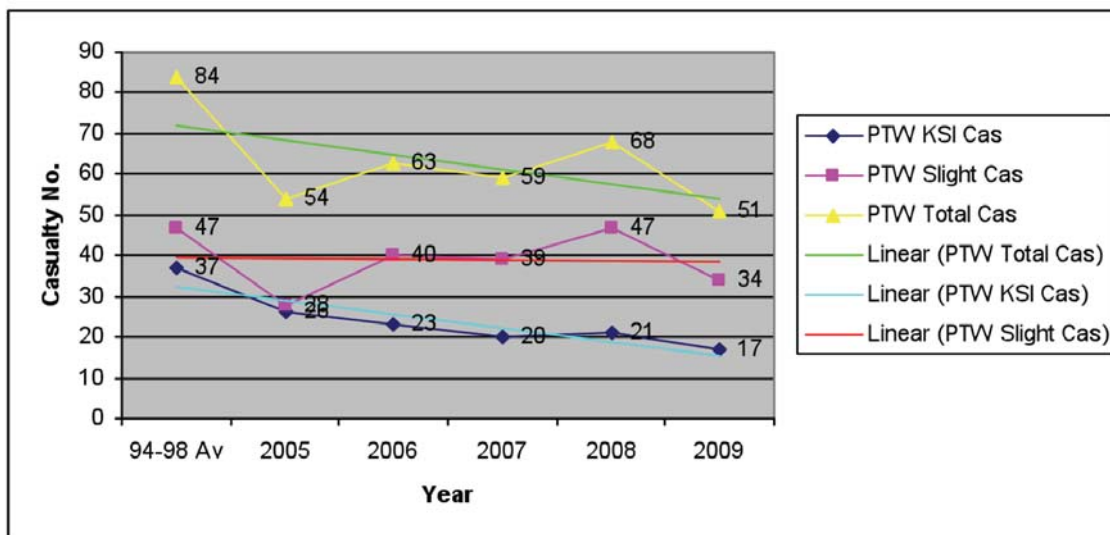


Chart 3

8. 2009 AIP SAFETY SCHEME IMPLEMENTATION

During 2009, 20 low cost safety schemes were implemented throughout the County aimed at addressing accident and casualty problems. All sites appeared on the ranked 2009 Cluster Site Listing and were subject to detailed investigation prior to implementation.

Table 10 below gives details of the treated sites together with the 5 year “before period” casualty numbers associated with each. These sites will now be subject to ongoing detailed monitoring over future years.

Works Completion	Road Number	Site Location	Before Period Casualties					Total Site Casualties
			Year 1	Year 2	Year 3	Year 4	Year 5	
21-Jan-09	A0044	A44 Bend E Of Ent to Burton Court	0	0	4	0	1	5
27-Jan-09	A4103	A4103 J/W B4219 Cowleigh Rd, Storridge	1	0	0	4	0	5
30-Jan-09	A0465	A465 J/W B4214 Panniers Lane, Nr. Bromyard	0	0	1	2	0	3
11-Feb-09	A0417	A417 Bend at Fillings Bridge	0	0	6	1	0	7
21-Mar-09	A4111	A4111 Cemetary Bend Nr. Kington	0	4	0	0	0	4
22-Mar-09	B4361	B4361 Bend on Wharton Bank	2	0	2	5	2	11
27-Mar-09	A4111	A4111 Bend Nr. Eardisley Wooton	3	0	1	1	0	5
15-Apr-09	A0449	A449 Bend Nr. Ludstock Bridge	1	0	4	3	0	8
01-Jul-09	A4110	A4110 Bend Nr. Ent to Stretford Court	0	0	2	2	0	4
16-Jul-09	B4349	B4349 Bend Nr. Ent to Arkstone Court	0	2	0	1	0	3
16-Jul-09	A0417	A417 At Ullingswick Crossroads	1	0	1	1	0	3
31-Jul-09	A0438	A438 J/W U/C to Staunton on Wye - inc. Ent to Oakchurch Farm Shop	8	5	1	2	3	19
03-Aug-09	A0466	A466 Bend South of Wormelow Village	1	1	0	0	4	6
15-Aug-09	A4110	A4110 Bend Nr. Stretford Bridge (LOC Site)	0	0	1	1	0	2
20-Aug-09	A0044	A44 J/W A4110 Bainstree Crossroads	1	1	1	5	6	14
15-Sep-09	A4103	A4103 Bend Nr. Ent. To Wyche View	0	0	7	7	1	15
30-Sep-09	A449	A449 J/W B4224 Old Gore Crossroads	2	4	1	3	6	16
07-Oct-09	A4111	A4111 J/W A4112 Nr. Eardisley	2	1	0	1	0	4
30-Nov-09	A4137	A4137 J/W B4521 At St. Owens Cross	0	0	0	1	3	4
10-Dec-09	B4362	B4362 'S' Bend Bet. Bircher and Rosebank	0	0	2	2	0	4
Total Casualties All Sites							142	

9. AIP SAFETY SCHEME MONITORING

All sites subject to treatment with accident remedial measures are subject to a detailed monitoring process. This involves comparisons between the casualty data from the actual “before” period from the date of implementation of the works (which differs marginally from the original search period that brought the site into being) and the following 5 years casualty data. This allows us to monitor the relative successes of the schemes, which also help to inform decisions on measures used in future works.

The following **Table 11** shows a summary of implemented schemes that have completed their 5 year after monitoring period during 2009. A full list of all sites implemented since 2002 that now have a completed “5 year after period” of casualty monitoring data, can be found in **Appendix 1** at the rear of the document.

Table 11														
Completion Date	Road	Description	Yr1	Yr2	Yr3	Yr4	Yr5	Before Total	Yr1	Yr2	Yr3	Yr4	Yr5	After Total
18-Oct-04	B4361	B4361 - Turn to Brierley at Elms Green	1	5	1	2	0	9	0	0	0	1	0	1
03-Nov-04	A4110	A4110 J/W C1109, Turn to Wellington	0	0	6	7	4	17	0	1	0	0	2	3
16-Nov-04	A0044	A44 J/W Green Lane Nr. Bromyard	0	0	1	1	2	4	0	1	0	0	2	3
01-Dec-04	A0044	A44 J/W Tickbridge Lane	0	0	2	2	0	4	0	0	0	0	1	1
01-Dec-04	A4103	A4103 J/W A417 Newtown Crossroads	1	4	2	5	4	16	0	0	0	0	0	0
20-Dec-04	A0044	A44 Drum Xrds	3	0	3	1	0	7	0	1	0	0	0	1
TOTALS								57						9

Safety Scheme Monitoring

In summary, the sites feature a combined total of 57 Casualties over their 5-year “before” period. Since treatment, over the following 5 years this number has reduced to 9 Casualties, which equates to a total reduction of 48 casualties (84 % saving) over the same “after” period. Hopefully this illustrates the success of the approach and measures used. Whilst ideally we would look to reduce casualties at all sites to zero, we must accept that the random multi factor nature of road accidents combined with the “human behaviour” element makes it difficult to guarantee influence with engineering. With this in mind, all levels of reduction that are achieved should be considered beneficial.

10. ACTIVITY AND FOCUS IN 2010/11

We have made excellent progress in reducing the number of the most serious road casualties on Herefordshire’s roads over the past 10 years with a significant reduction in the most recent two years; the challenge is to continue on this trend and our focus for 2010/11 is summarised below.

10.1 Targeted Engineering Treatment

Addressing the road safety problems on the highway network is a continuous process and it is essential that we maintain up to date and accurate data. It is vital that we understand this data and that our analysis enables us to derive clear information on how to target and tackle the accidents in a practical sense. We have made many changes over recent years, in order to further improve the effectiveness of data analysis and scheme design and delivery. Continual assessment of performance has enabled the introduction of more sophisticated criteria for identifying sites where treatment would be effective. This is enabling us to target sites more proactively, ensuring intervention and treatment at an earlier stage. This means that our approach is now shifting the emphasis of engineering work towards prevention of serious accidents. An overview of the Accident Investigation process used can be found in **Appendix 2** attached. Our approach has been recognised as best practice which previously resulted in award of Centre of Excellence.

10.2 Improving Scheme Design and Maintenance Practice

Over recent years we have implemented more comprehensive treatments at collision sites. Whilst this approach may have a greater initial cost of implementation, we are confident that the more complete treatment will provide increased long-term benefits. We will be able to monitor the success of this approach very closely and will be able to provide before and after data.

Integrated working with the Highways Service is also bringing road safety benefits. In particular, there is an increasing shift to data led prioritisation of maintenance programmes utilising technical data (SCRIM which provides skid resistance information) and casualty data. The prioritisation of maintenance programmes in this way has enabled greater integration with safety schemes, meaning that increased road safety benefits will be

achieved. This has ultimately moved towards a more casualty focused maintenance programme, and has informed the programme for 2010/11.

10.3 Delivering with Partners

A great deal of the work involved in identifying and treating collision sites is strengthened through close working with key partners. Strong working relationships have been developed with West Mercia Police, through close liaison with the Collision Intelligence, Collision Investigation and Traffic Management units. This approach has benefited all involved sharing skills and experience, through regular meetings that allow detailed discussions on the various collision issues within the County.

We also work closely with neighbouring authorities and this has assisted in tackling a number of safety issues. We work with Powys County Council in order to generate cross border ties with our Safer Roads Partnership (SRP) and the ongoing motorcycle safety campaigns, which prove particularly important for both Herefordshire and the Mid Wales region.

There is ongoing partnership work with the SRP to look at the effectiveness and targeting of safety camera enforcement. The SRP have identified a range of site locations with a specific collision history where speed enforcement takes place. In 2010/11 we will work with the SRP to develop a new route corridor approach to speed enforcement on the A465 Abergavenny road which will target the whole route. We will also help develop the programme of Community Concern Sites – locations where speed enforcement is targeted with the support of local communities – and coordinate this with our Speed Indicator Device programme.

As is highlighted in this report, there is an increasing divergence between the reductions of the most serious casualties on the County road network maintained by the Council and the trunk road network and in particular the A49. That is why we will endeavour to work closely with the Highways Agency in 2010/11 to affect a similar downward trend on the trunk roads.

10.4 Promotional Campaign

The casualty data and analysis summarised in this report forms a key resource for developing and delivering a coordinated campaign of road safety

education, training and publicity. The data is providing us with very clear evidence to target our campaign at specific groups and activities which carry a higher risk of involvement in road traffic accidents. A focus of the campaign is coordination between key partners and in particular the West Mercia Safer Roads Partnership and the local Safer Herefordshire Partnership. Along with our partners we will target key groups including:

- Young drivers – disproportionately represented amongst most serious casualties
- Older drivers – a large and increasing group in Herefordshire and statistically at greater risk of involvement in road traffic accident
- Impaired drivers – noting the increase in drink driving seen in 2009
- Vulnerable users (children, pedestrians and cyclists) – responding to some increase in pedestrian casualties and also in support and coordination with sustainable transport promotions

The campaign programme for 2010/11 is set out in more detail in **Appendix 3**.

10.5 Road Safety Strategy Review and the National Road Safety Strategy

In 2010/11 we will be reviewing the current road safety strategy set out in the Local Transport Plan. This review will take into account the progress we have made during the current national strategy period of 2000 to 2010 and will be informed by the emerging national road safety strategy. Government has published its consultation 'A Safer Way' which sets out proposals for the new strategy to make Britain's roads the safest in the world by 2020. The consultation provides guidance on headline targets for 2020 and more detailed guidance on best practice. We will prepare a draft road safety strategy during the summer 2010 which takes up the challenge set out in the Government consultation and identifies proposed targets for further reducing road traffic casualties by 2020. Further details of the review will be available on the Council's website at www.herefordshire.gov.uk/ltp.

**Accident Investigation & Prevention Team
Transportation Unit, 2010**

APPENDIX 1

AIP SAFETY SCHEME MONITORING – ALL COMPLETED SITES

The following table shows a summary of all schemes implemented since 2002 that now have a completed “5 year after period” of casualty monitoring data.

In summary, the sites feature a combined total of 399 Casualties over their 5-year “before” period. Since treatment, over the following 5 years this number has reduced to 106 Casualties, which equates to a total reduction of 293 casualties (73 % saving) over the same “after” period.

Completion Date	Road	Description	Yr1	Yr2	Yr3	Yr4	Yr5	Before Total	Yr1	Yr2	Yr3	Yr4	Yr5	After Total
31-Jan-02	A0449	A449 Ridgeway Lodge, British Camp	0	4	0	2	0	6	0	0	1	1	0	2
05-Feb-02	A0449	A449 Coldborough Park (Site 1 Bend near Hillington)	0	0	0	0	0	0	0	0	0	0	0	0
19-Feb-02	A0438	A438 Stoke Edith Crossroads	4	2	0	2	1	9	1	0	0	1	2	4
14-Mar-02	B4399	B4399 Bend at Dinedor Court	0	1	1	2	3	7	0	0	0	0	0	0
15-Mar-02	A0044	A44 Outside 'The Ovals' Penrhos nr Kington	1	2	3	0	3	9	0	0	0	3	0	3
15-Mar-02	A0449	A449 Coldborough Park - Perrystone 's' bends	1	3	0	2	0	6	1	0	0	0	0	1
20-Mar-02	A0044	A44 J/W B4220 Linton Turn, Bromyard	1	5	0	3	0	9	1	2	0	0	0	3
20-Mar-02	A0044	A44 J/W Unclassified Road to Burley, Bromyard	0	0	5	0	0	5	0	0	0	0	0	0
08-Jul-02	A0449	A449 Pond Farm and North Bends	0	4	2	12	0	18	1	0	0	1	0	2
02-Oct-02	A0417	A417 Bodenham	0	3	8	1	0	12	3	0	4	1	0	8
28-Oct-02	A0456	A456 Brimfield Cross	1	3	0	1	4	9	0	1	0	0	4	5
05-Nov-02	A0438	A438 Whitney-on-Wye	1	0	3	3	0	7	0	1	0	0	0	1
27-Nov-02	A0044	A44 Bend East of Junction with B4220	0	1	0	2	1	4	0	0	0	0	0	0
27-Nov-02	A0044	A44 Whitbourne Bend near County Boundary	3	0	0	2	0	5	0	0	2	0	0	2
27-Nov-02	A0044	A44 Eaton Hill Bend	1	0	1	6	12	20	3	4	0	0	1	8
01-Dec-02	A0480	A480 Sarnesfield Bend	0	3	0	0	1	4	0	0	0	0	0	0
05-Dec-02	A0044	A44 Bringsty Common - Bend near Moorhall Farm	1	1	11	0	5	18	0	0	0	0	0	0
31-Dec-02	A0044	A44 Bromyard to Linton Trading Estate	4	7	3	5	1	20	2	2	1	1	6	12
10-Jan-03	B4349	B4349 McIntyres Bend, Clehonger	0	0	2	7	13	22	1	0	0	0	0	1
14-Jan-03	A0438	A438 - Sugwas Pool Nr. Kites Nest P.H.	0	2	1	1	7	11	0	1	0	0	0	1
24-Mar-03	B4224	B4224 Oldway Chapel	2	4	2	0	0	8	0	0	0	0	0	0
25-Mar-03	B4224	B4224 Route Study, Lucksall Caravan Park	0	1	1	0	0	2	0	0	0	0	0	0
28-Mar-03	B4224	B4224 J/W A449 Old Gore Crossroads	5	10	1	2	3	21	5	2	4	1	0	12
31-Mar-03	A0044	A44 Bringsty Garage 'S' Bends	2	1	3	3	3	12	3	0	0	0	0	3
31-Mar-03	B4224	B4224 Bends East of Hampton Bishop	0	2	2	3	3	10	2	0	0	0	0	2
31-Mar-03	A0044	A44 Grendon Manor	0	0	3	6	3	12	0	0	0	0	0	0
31-Mar-03	B4224	B4224 Falcon Bend	0	0	0	0	0	0	0	1	0	0	3	4
25-Feb-04	A4112	A4112 - Gorsty Farm Bend Nr. Leysters	0	2	0	3	0	5	0	0	0	0	0	0
31-Mar-04	A0449	A449 - Knapp Lane	3	0	0	7	1	11	0	0	0	0	0	0
31-Mar-04	A0438	A438 J/W A4111 At Willersley	1	2	0	2	0	5	1	0	0	1	0	2
31-Mar-04	A0044	A44 - Bends Nr. Ent to Cotmore Farm	0	0	2	2	5	9	0	0	0	3	0	3
31-Mar-04	A0044	A44 - Bend Nr. Burton Court	0	0	5	0	0	5	0	0	0	3	0	3
31-Mar-04	A0044	A44 - Moseley Farm	3	0	5	0	2	10	0	0	0	0	0	0
31-Mar-04	A4103	A4103 Cotts Lane, Lumber Lane and Radway Road.	6	6	5	9	5	31	4	2	3	5	1	15
18-Oct-04	B4361	B4361 - Turn to Brierley at Elms Green	1	5	1	2	0	9	0	0	0	1	0	1
03-Nov-04	A4110	A4110 J/W C1109, Turn to Wellington	0	0	6	7	4	17	0	1	0	0	2	3
16-Nov-04	A0044	A44 J/W Green Lane Nr. Bromyard	0	0	1	1	2	4	0	1	0	0	2	3
01-Dec-04	A0044	A44 J/W Tickbridge Lane	0	0	2	2	0	4	0	0	0	0	1	1
01-Dec-04	A4103	A4103 J/W A417 Newtown Crossroads	1	4	2	5	4	16	0	0	0	0	0	0
20-Dec-04	A0044	A44 Drum Xrds	3	0	3	1	0	7	0	1	0	0	0	1
		TOTALS						399						106

APPENDIX 2

ACCIDENT INVESTIGATION - THE PROCESS

The following summarises the process used by Herefordshire Council in defining and developing treatments to address collision and casualty problems within the County. Taken from the Road Safety Strategy found within the latest Local transport Plan (LTP2), the following highlights our procedures which resulted in our award of Centre of Excellence status for safety scheme delivery.

Overview

The identification of Road Safety schemes follows a well-developed and established process. First adopted in 1999, the process was improved in 2002 and has since been further refined to take account of improvements in data availability and supporting technology but remains focussed on its core objective: **the development and implementation of robust schemes that address the underlying causes of accidents and improve road safety.**

The process flows sequentially from the receipt of accident data from the local Police Authority at the onset to the implementation of safety schemes on the ground, and is repeated annually with ongoing refinement and adjustment.

Intelligence: receipt of monthly Personal Injury accident information from West Mercia Police. High-quality data with full details of possible contributory factors is received approximately 6 weeks from the date of an incident.

Validation & verification: Police Accident Record data is loaded on to Herefordshire Council systems. Once validated and verified, the data becomes live and generates the Council's Accident Records. This data is built up month by month to create annual records.

Site generation: accident records for the preceding five years are interrogated to generate Accident Cluster sites. Separate criteria are applied for urban and rural sites to ensure the appropriate level of focus on each site and to ensure a balanced outcome.

urban - sites with a limit of 40mph or less, require: 6 personal injury accidents within 5 years, clustering within a radius of 25 metres

rural - sites with a limit of 50mph or more, require: 3 personal injury accidents within 5 years, clustering within a radius of 100 metres

Ranking: cluster sites are ranked to determine scheme priorities. The ranking formula gives greater priority to accidents in most recent years. Rural accident clusters receive an increased weighting to make up for the lesser number of accidents at each site and to ensure a balanced representation against urban sites, in keeping with the rural nature of the County.

Site investigation: an experienced member of the team, with indepth knowledge of the county and the road network, undertakes detailed site assessments to determine the most appropriate package of measures to deliver a robust scheme.

Scheme delivery: close liaison with teams delivering the programme of planned maintenance, ensures a co-ordinated and comprehensive approach.



Signing and marking scheme using a red central strip to guide drivers through the hazard.

Highlights

Quality data: excellent working relationship with West Mercia Police underpins fast turnaround of high quality data and partnership working.

Differentiation: separate criteria for determining rural and urban sites ensures a balanced outcome, reflecting the true balance of accident sites across the county.

Underlying causes: the precision of formulae used to determine sites generates accurate clusters to pinpoint the underlying cause of accidents.

Focus: scheme generation is focused to target sites where relatively low cost safety schemes can generate the highest return.



Combined bend improvement schemes, including signing, surfacing and visibility measures to provide a complete treatment.

Consistency: this is now an established process with inbuilt momentum. Consistent, rigorous application of the guiding principles delivers genuine and ongoing improvements

The Way Forward

The success of the Safety Projects Team in delivering schemes that have reduced road casualties has been widely recognised and the Team have already shared their learning with other local authorities via innovative web chats and via face-to-face meetings.

Within Herefordshire, there is now increased joint-working with Highway Maintenance colleagues which is extending the sphere of influence for road safety. The Annual Maintenance Programme includes accident priority data as a key guide. The identification of casualty rates linked to low skidding resistance plays an increasingly important role in developing the annual highway maintenance plan. This has led to the development of combined schemes, with the teams working together to deliver a complete site solution.

Results orientation

Throughout the process, the focus is on targeting resources on where they can have the maximum effect in terms of casualty reduction.

Clustering: the adoption of different selection measures for urban and rural criteria delivers workable clusters that encompass sites with a real underlying cause to the accidents. In urban cases, a tighter radius captures the precise problem areas and avoids defining entire central districts as clusters, where, in reality, many differing and unlinked causes may be in operation. At rural sites, a more generous radius ensures identification of the underlying source of the problem. Recorded accident locations at rural bend sites can vary greatly. The same 'bend' can produce a dispersion of accidents dependent upon the nature of the loss of control and the direction of vehicle travel.

Ranking: without the increased weighting that rural sites receive, urban sites could artificially skew the priorities due to their higher number of initial accidents. These could then dominate and take all available funding. This would produce a considerable reduction in overall scheme effectiveness. A large number of urban sites have

at their roots the inter-play of multiple factors, many of which may not lend themselves to engineering solutions. This is generally at odds with rural sites, where, in the main, causes are more readily identifiable and more responsive to engineering solutions.

This combination delivers an appropriate balance of schemes, where genuine priorities are highlighted and relatively low-cost safety schemes can deliver real improvements in road safety.



APPENDIX 3 - ROAD SAFETY EDUCATION

Training and publicity programme 2010/11

Young Drivers

Issues

A review of the Accident and casualty statistics for Herefordshire show that young drivers disproportionately represented in the figures with over 37% of our road deaths occurring among the 17-25 year olds. This is broadly in line with national figures where the 16-29 age group account for over a third of all deaths. Research by the IAM has shown that the risk of being in a crash peaks immediately after passing the driving test and declines steadily over the following 12 months(1)

Interventions required

Support and improvement of skills in the period after passing the driving test
Attitude and behavioural changes with particular focus on risk taking

Proposed Campaigns/Projects

To help to address this problem we intend to continue to offer a subsidy towards the cost of Pass Plus but we will add value to the scheme by introducing a two hour theory session. We are currently researching the content of theory sessions provided by other local authorities and are working in partnership with Shropshire Council to plan the content and delivery of these sessions.

Older Drivers

Issues

Research shows that while older drivers have fewer accidents per year than those in other age groups they have more accidents per mile driven. Older people injure more easily, more severely and take longer to heal. Their risk of a fatal injury increases by 1.75 times at age 60 plus and 2.6 times at age 70.(2) Population forecasts for Herefordshire estimate that there will be 55,700 people over the age of 60 living in the county by 2011, out of a total population of 182,400, that is almost 30%.

Interventions required

Support and improvement of driving skills and education on current driving practices and laws

Proposed Campaigns/Projects

We will continue to offer our subsidised Older Driver Refresher Training in order to enable them to review safe driving practices and enable them to stay current on today's driving practices and laws.

Young Road Users

Issues

While the numbers of child casualties continues to show a downward trend there was still an average of 37 children were killed or seriously injured every week on roads in Great Britain in 2007, with the numbers in the 11-15 age group decreasing at a slower rate than for other age groupings (4) In Herefordshire in 2008 approx 20% of pedestrian casualties and 23% cycling casualties occurred in the 11-17 age group with failure to look properly being a contributory factor in all but one incident. Research shows that the risk of being involved in an accident rises when children start school and again when they move up to secondary school.(4) Most children under the age of nine cannot judge how fast a vehicle is travelling or how far away a vehicle is.(3)

Interventions required

Research has shown that children who receive pedestrian training show better skills in such areas as general observation, crossing at junctions and crossing near parked cars (3) and we intend to pilot a practical pedestrian training scheme for year 3 children, the aim being to keep the number of casualties among young children at the current low level.

The DFT states that "education is the main way of getting road safety messages to children" and an educational package needs to be developed for use with secondary age children

Proposed Campaigns/Projects

In order to reinforce our excellent relationship with primary schools and to reinforce road safety messages we will continue to offer a range of educational presentations to schools including Crucial Crew. In addition we are proposing to pilot a pedestrian training for year 3 children scheme at one Hereford city school. Depending on the school chosen this will train between 70 and 100 children.

We are working in Partnership with officers from West Mercia Constabulary and Hereford and Worcester Fire & Rescue to develop a road safety package for high schools and colleges. This is in line with the recommendations of the audit commission 2007 report Changing Lanes which states that local authorities should "raise awareness among local secondary schools of road safety issues for pupils, and the resources available to them."

We will continue to offer cycle training to children in year 6.

Adult Road Users

Issues

Local data shows an increase of 57% in the numbers of pedestrian casualties from 2007 to 2008 occurring in the 30-57 years age group.

Interventions required

As there were broadly similar numbers of drivers and pedestrians at fault we have decided that an education campaign aimed at both groups would be appropriate.

Proposed Campaigns/projects

We will work with partners in the Herefordshire Road Safety Group to develop a multi-agency campaign aimed at this group.

Speed Indicator Devices

Issues

Inappropriate and excessive speed continues to be a major concern for parish councils within the county

Interventions required

Driver education to make them aware of both the speed limit and their own speed

Proposed campaigns/projects

We will continue to offer the subsidised scheme to all parish and town councils. It is hoped that the Safer

Roads Partnership will add value to the initiative by carrying out enforcement at those sites where speeding is shown to be an issue.

Farm Vehicles

Issues

A lack of road safety awareness by drivers of farm vehicles demonstrated by inappropriate speed, lack of signals to other road users and mud on the road.

Interventions required

An education campaign to raise awareness among farm workers on road safety issues regarding farming and the use of the public highway.

Proposed Campaigns/Projects

A leaflet aimed at farm workers to raise awareness of the issues. This will be distributed through a mix of direct mailing and partners agencies

Campaigns led by the Safer Roads Partnership

Publicity campaigns for the West Mercia region are led by the Safer Roads Partnership. The calendar for the next year will focus on the following areas:-
Motorcyclists – the Think Bike campaign of 2009 will be continued.

Pedestrians and cyclists – both the 11-20 and the 70 plus age groups will be targeted.

Impaired driving – Focusing on 16-25 year olds with media launches in June and November

Young drivers – focusing on speed and rural roads

We will be working with local partner agencies to promote these campaigns and at the same time highlight local issues, one example being the issue of pedestrian casualties among the 30-57 year olds in Herefordshire.

School Crossing Patrols

We will continue to manage the school crossing patrol service and actively recruit where vacancies appear.

References

1. Young Drivers – where and when they are unsafe, I.A.M 2008
2. Older Drivers: a literature review(No.25), DFT 2001
3. Evaluation of the national network of child pedestrian training pilot projects – Findings, DFT
4. Child Road Safety Strategy 2007, DFT

www.herefordshire.gov.uk