



Child Road Safety Audit

A study of child casualty trends with child casualty rates in the Derbyshire County Council area

and a comparison of Derbyshire towns with Derby City Wards.

Update to 2009

Introduction

The Department for Transport's (DfT) Road Safety Strategy , 'Tomorrow's Roads – Safer for Everyone', published in 2002, asked Local Authorities to carry out 'Child Safety Audits' in order to identify the child road safety problems within their area so that policies, initiatives and campaigns can be carried out in order to deal with those problems. The DfT strategy stated 'Road traffic collisions are the leading cause of accidental injury amongst children' and 'We want to make it safer for everyone to encourage healthy travel choices'.

To this end, Derbyshire County Council produced its first Child Safety Audit using data up to the end of 2006 and was then updated to June 2008. The current Audit, relating to casualty data up to the end of 2009, is a more comprehensive audit and includes the geographical area of Derby City as part of the Derby and Derbyshire Road Safety Partnership. Also, new developments have allowed a more detailed look at the socio-economic groups involved in child casualties within each Local Authority District.

Reducing the toll of children hurt in road collisions is a priority of the Derby and Derbyshire Road Safety Partnership and the Child Safety Audit enables an evidence led strategy towards reducing child casualties to be implemented.

Unless otherwise stated, all collision data in this report refers to the five year period January 2005 – December 2009 to track any recent changes to trends etc.

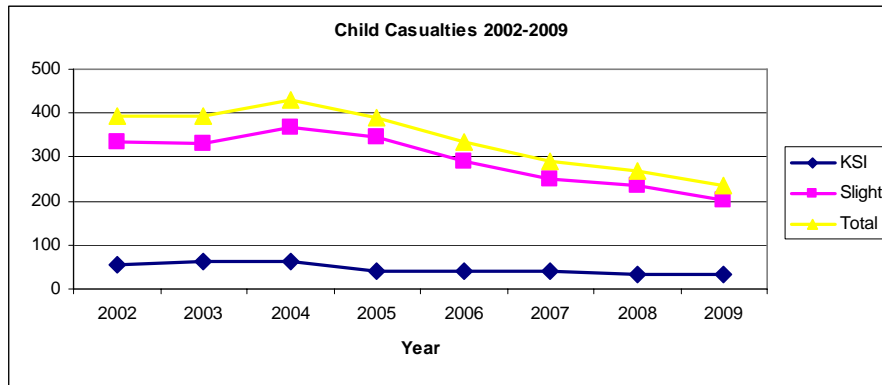
**Tables of Child Casualty Data
Derbyshire (excluding Derby City)
2005-2009**

	2005					2006					2007					2008					2009					2005-09									
	Fat	Ser	KSI	Sli	Tot	Fat	Ser	KSI	Sli	Tot	Fat	Ser	KSI	Sli	Tot	Fat	Ser	KSI	Sli	Tot	Fat	Ser	KSI	Sli	Tot	Fat	Ser	KSI	Sli	Tot					
0-5 yrs																																			
Pedestrians	0	3	3	14	17	0	7	7	8	15	1	5	6	7	13	0	1	1	10	11	0	2	2	5	7	1	18	19	44	63					
Pedal Cyclists	0	0	0	1	1	1	0	1	2	3	0	0	0	2	2	0	1	1	2	3	0	0	0	0	0	1	1	2	7	9					
Car Passengers	0	2	2	41	43	0	2	2	26	28	1	4	5	26	31	0	2	2	37	39	0	0	0	25	25	1	10	11	155	166					
Bus Passengers	0	0	0	3	3	0	0	0	3	3	0	0	0	2	2	0	0	0	1	1	0	0	0	2	2	0	0	0	11	11					
Other	0	0	0	1	1	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	2					
Total	0	5	5	60	65	2	9	11	39	50	2	9	11	37	48	0	4	4	50	54	0	2	2	32	34	4	29	33	218	251					
6-10 yrs																																			
Pedestrians	0	5	5	33	38	0	4	4	22	26	0	7	7	25	32	0	5	5	2	17	0	1	1	13	14	0	22	22	105	127					
Pedal Cyclists	0	2	2	20	22	0	0	0	10	10	0	5	5	11	16	0	2	2	12	14	0	0	0	8	8	0	9	9	61	70					
Car Passengers	1	2	3	48	51	0	1	1	58	59	1	2	3	30	33	0	1	1	40	41	1	3	4	30	34	3	9	12	206	218					
Bus Passengers	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1	0	0	0	4	4					
Other	0	0	0	3	3	0	0	0	0	0	0	0	0	2	2	0	0	0	2	2	0	0	0	2	2	0	0	0	9	9					
Total	1	9	10	104	114	0	5	5	92	97	1	14	15	68	83	0	8	8	67	75	1	4	5	54	59	3	40	194	385	428					
11-15 yrs																																			
Pedestrians	0	10	10	65	75	1	13	14	47	61	0	5	5	41	46	0	12	12	40	52	0	12	12	45	57	1	52	53	238	291					
Pedal Cyclists	0	6	6	36	42	0	3	3	33	36	1	3	4	32	36	0	4	4	27	31	0	6	6	24	30	1	22	23	152	175					
Car Passengers	0	7	7	64	71	0	6	6	71	77	1	5	6	60	66	1	4	5	39	44	1	8	9	37	46	3	30	33	271	304					
Bus Passengers	0	0	0	12	12	0	1	1	9	10	0	1	1	5	6	0	0	0	8	8	0	0	0	2	2	0	2	2	36	38					
Other	0	4	4	6	10	0	2	2	1	3	0	0	0	6	6	0	1	1	3	4	0	0	0	8	8	0	7	7	24	31					
Total	0	27	27	183	210	1	25	26	161	187	2	14	16	144	160	1	21	22	117	139	1	26	27	116	143	5	113	118	721	839					
Tot cas																																			
Pedestrians	0	18	18	112	130	1	24	25	77	102	1	17	18	73	91	0	18	18	62	80	0	15	15	63	78	2	92	94	387	481					
Pedal Cyclists	0	8	8	57	65	1	3	4	45	49	1	8	9	45	54	0	7	7	41	48	0	6	6	32	38	2	32	34	220	254					
Car Passengers	1	11	12	153	165	0	9	9	155	164	3	11	14	116	130	1	7	8	116	124	2	11	13	92	105	7	49	56	632	688					
Bus Passengers	0	0	0	15	15	0	1	1	14	15	0	1	1	7	8	0	0	0	10	10	0	0	0	5	5	0	2	2	51	53					
Other	0	4	4	10	14	1	2	3	1	4	0	0	0	8	8	0	1	1	5	6	0	0	0	10	10	1	7	8	34	42					
Total	1	41	42	347	389	3	39	42	292	334	5	37	42	249	291	1	33	34	234	268	2	32	34	202	236	12	182	194	1324	1518					

Child Safety Audit Derbyshire County Council Area

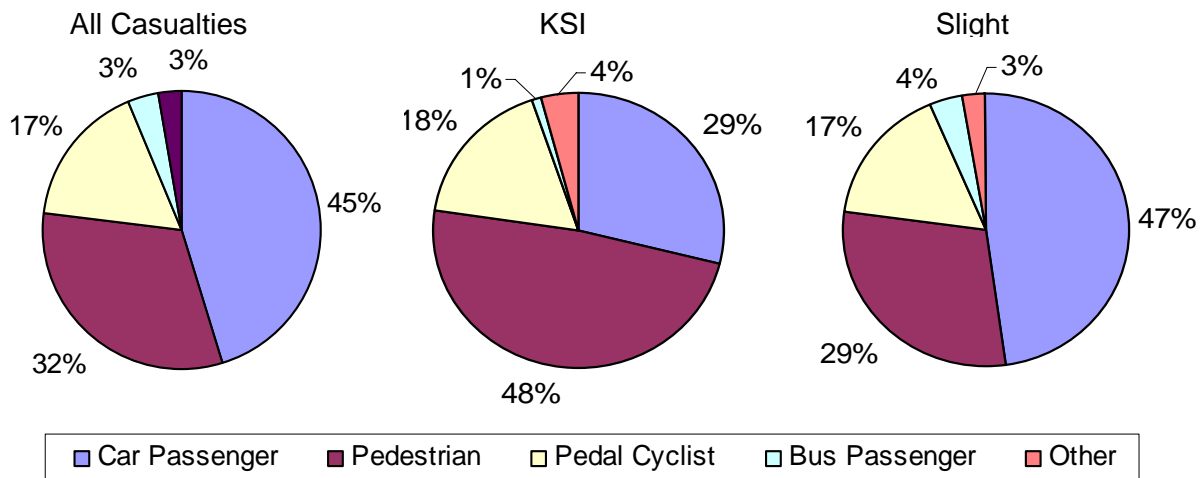
General Analysis

Child casualties have been falling consistently since 2004. In the five years up to December 2006 there were 1,940 child casualties in Derbyshire. In the five years up to December 2009 there were 1,518, a reduction of 22%.



In the five year period 2005-2009:

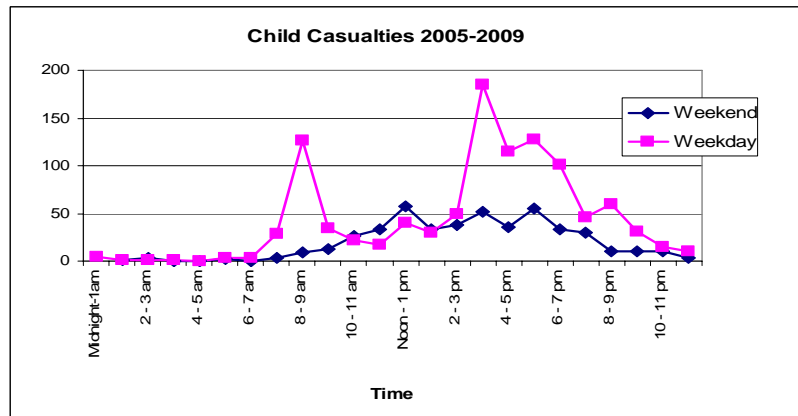
- 0-15 year olds make up 20% of the population but only 9% of all casualties and 8% of KSI casualties.
- 55% of casualties are of secondary school age. Collisions involving this age group have reduced at a slower rate than those involving primary aged children. Although numbers are small, collisions involving preschool aged children have reduced by the smallest amount.
- 48% of KSI casualties are pedestrians. The highest percentage of slight casualties are car passengers (48%).



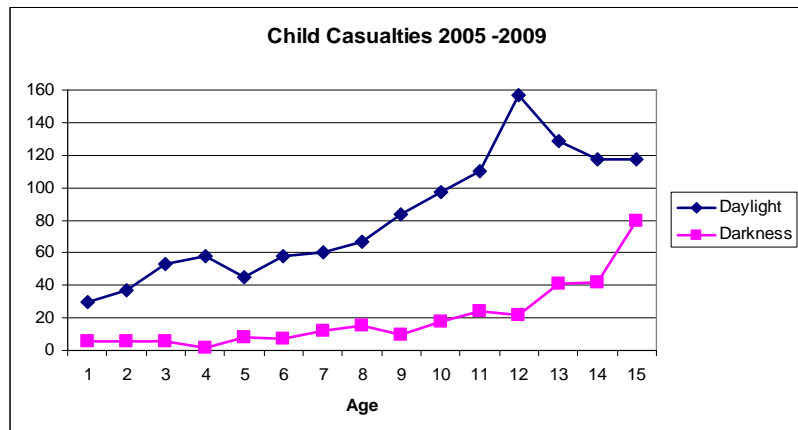
- Slightly more boys are injured than girls, but the difference is getting less; in the time period 2002-2006, 42% of casualties are girls, whereas in 2005-2009 this increases to 45%.

- There is a sharp increase in the number of collisions involving boys at age 12, then numbers decrease. Girl casualties increase most sharply at age 13 and continue to increase at ages 14 and 15. There are more girls than boys injured aged 14-15.
- Fridays have the highest numbers of collisions and Saturdays the next highest. Collisions at weekends, particularly Saturdays, have reduced less than collisions on weekdays.
- For pedestrians, the months of September to November have the highest numbers of collisions. Pedal cyclists are more likely to be injured in the summer months, May to September. Car passenger casualty numbers are more even throughout the year but August and December have slightly more than other months.
- Just under half of car passenger casualties are injured on urban roads but over 95% of pedestrians and pedal cyclists are injured on urban roads. Collisions on rural roads have not reduced as much as collisions on urban roads.

- On weekdays, there is a peak of collisions between 8 and 9 am and between 3 and 4 pm. This coincides with the start and finish of the school day. At weekends, there are no large peaks, most collisions occur between 12 noon and 6 pm.



- The number of collisions in the daylight increases as children get older, until the age of 12, then they decrease sharply. Collisions in darkness are low until age 12, then increase each year, most sharply at age 15.

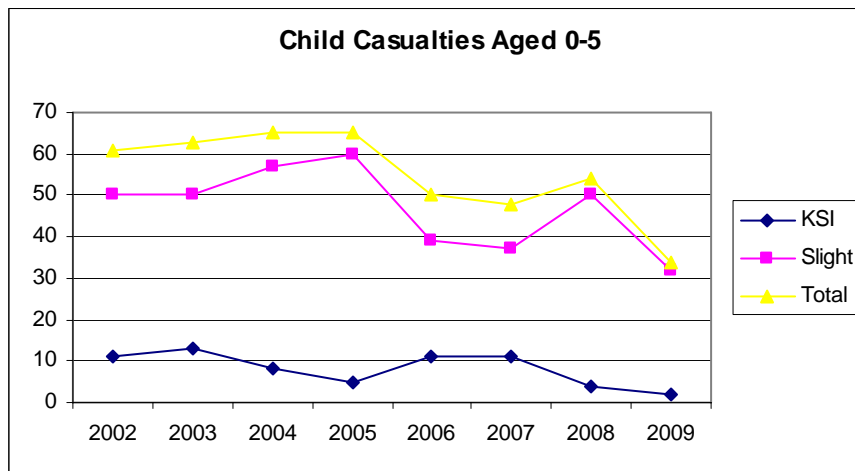


- Only 4% of child casualties are injured as bus passengers. This is less of a concern than for older people; 6% of people aged 60 and over are injured as bus passengers.
- Less than 0.1% of child casualties occurred at or near the locations of School Crossing Patrols.

Child Safety Audit Derbyshire County Council Area

0-5 Year Old Casualties

Pre-school casualty numbers have reduced by 44% between 2002 and 2009. In 2009, they were at their lowest level in the last eight years at 34 casualties.



In the five year period 2005-2009:

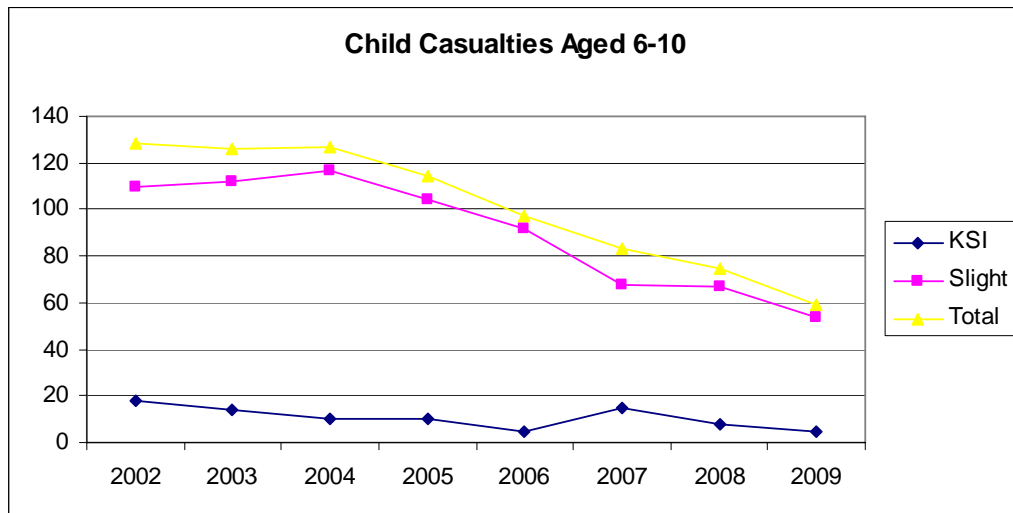
- 0-5 year olds make up 17% of all child casualties.
- Chesterfield district has the most casualties overall and Erewash the least.
- Chesterfield, Bolsover and Amber Valley have higher than average numbers of child pedestrians and South Derbyshire has the least.
- Two thirds of casualties are car passengers. Numbers are fairly equal over all ages. Over 80% are rear seat passengers.
- More car passengers are injured on Saturdays than on other days.
- A quarter of casualties are pedestrians. Most casualties are aged 4, followed by 3 and 5 year olds.
- There is an increase in pedestrian casualties between 3 and 4 pm and a smaller increase between noon and 1 pm. Pedestrians are most likely to be injured on a Friday.
- Nearly three quarters of pedestrian collisions involve a child crossing in the path of a car. In nearly half of these, the child is crossing between parked cars.
- 90% of pedestrians are injured on 30mph residential roads and the rest are all injured on 30mph roads in towns.
- Most pedal cyclist casualties are aged 4-5.

- All child pedal cyclists are injured in residential streets/housing estates.
- Over half of pedal cyclist collisions involve the child entering the road, into the path of a car.
- Boys are nearly twice as likely to be injured as pedestrians and pedal cyclists than girls.
- The percentage of bus passenger casualties is higher than other age groups. Most are aged 2-3.
- Almost all bus collisions involve the bus braking suddenly and the child falling off the seat, or a standing child falling over.

Child Safety Audit Derbyshire County Council Area

6-10 Year Old Casualties

Primary age casualty numbers have reduced steadily between 2002 and 2009. In 2009, they were 54% lower than in 2002 at 59 casualties.



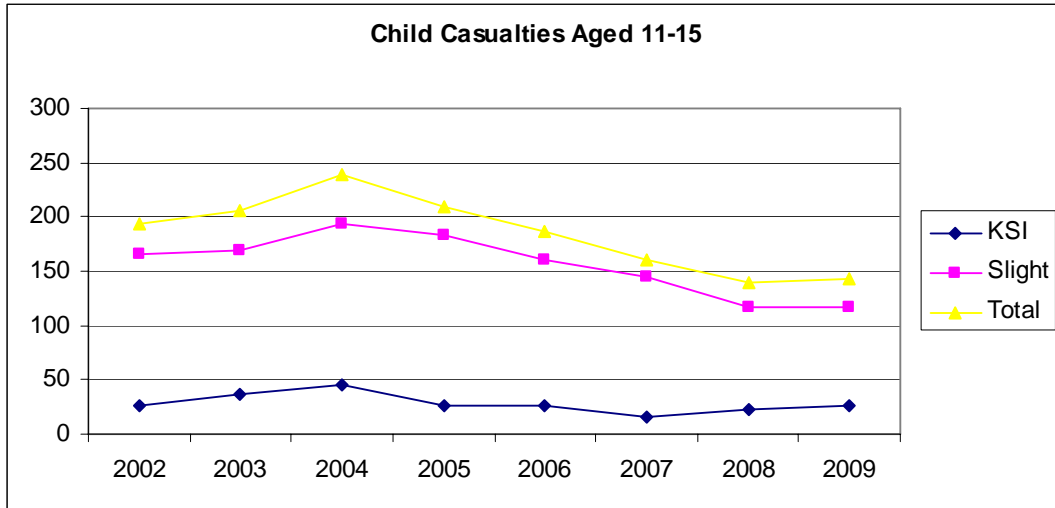
In the five year period 2005-2009:

- 6-10 year olds make up 28% of all child casualties.
- Chesterfield district has the most casualties overall and Derbyshire Dales the least.
- Amber Valley has much higher numbers of pedestrian casualties, 30 in the last five years. High Peak has 17 and Chesterfield and Erewash 16. Amber Valley also has the highest number of pedal cyclist casualties.
- Half of casualties are car passengers. Numbers are fairly equal over all ages. There are equal numbers of boy and girl casualties.
- Nearly 70% of car passengers are rear seat passengers. The number of front seat passengers increases with age.
- Fridays, Saturdays and Sundays are the days with most car passenger casualties.
- Nearly a third of casualties are pedestrians. Slightly more boys were injured than girls. Most casualties are aged 9 and 10.
- Pedestrians are much less likely to be injured at the weekend.
- Over 80% of pedal cyclist casualties are boys. The numbers increase with age. Most cyclists are injured between 4 and 7pm.

Child Safety Audit Derbyshire County Council Area

11-15 Year Old Casualties

Secondary aged casualty numbers rose between 2002 and 2004 but since then have reduced steadily. In 2009, they were 26% lower than in 2002 at 143 casualties.



In the five year period 2005-2009:

- 11-15 year olds make up 55% of all child casualties. Boys and girls have almost equal numbers of slight collisions but nearly two thirds of KSI casualties are boys.
- Erewash district has the most casualties overall and Derbyshire Dales the least.
- Amber Valley and Chesterfield have the highest numbers of pedestrian casualties. Erewash has the highest number of pedal cyclist casualties.
- A third of casualties are car passengers. Numbers are fairly equal between the ages of 11 and 14 but at 15, numbers increase sharply. Nearly two thirds of casualties are girls.
- Over half of 14 and 15 year old car passenger casualties are injured in a car being driven by a young driver aged 17-25 years old and three quarters of these passengers are girls.
- Sundays are the days with most car passenger casualties, followed by Fridays and Saturdays.
- There are peaks of car passenger and pedestrian casualties at school start and finish times.
- Just over a third of casualties are pedestrians. Slightly more boys are injured than girls. Most casualties are aged 12.

- Pedestrians are most likely to be injured on a weekday, particularly Mondays and Fridays.
- 90% of pedal cyclist casualties are boys. Numbers gradually increase to age 11, then there is a very sharp increase at age 12. Numbers reduce at each age after that. Most cyclists are injured between 3 and 7pm.
- In the last five years, 71 pedestrians and 14 pedal cyclists aged 11-15 injured on weekdays before 5pm (and not including August) were injured within 500 metres of a secondary school. This makes up a third of all secondary school aged pedestrian and pedal cyclist casualties. Just 5 car passenger casualties were injured at these times within 500 metres of a secondary school.
- The schools with the most casualties within 500 metres were Wilsthorpe Community School (7 casualties), Swanwick Hall School (6 casualties) and The Pingle School (5 casualties).

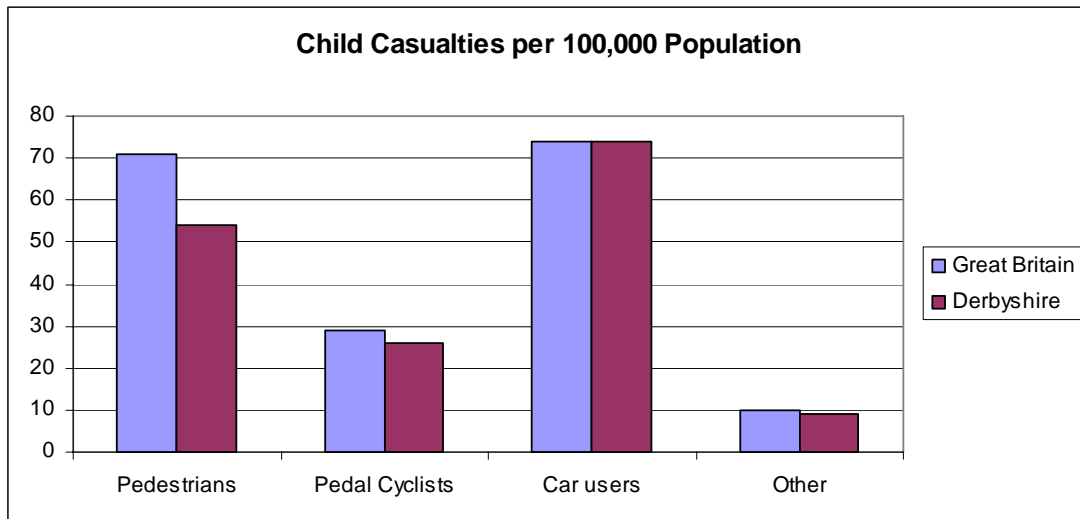
Child Safety Audit Derbyshire County Council Area

Comparisons with Great Britain

In 2009, the rate of child casualties in Great Britain was 184 per 100,000 population. In Derbyshire in 2009, the rate was 164 per 100,000 population. This is 10% below Great Britain's level. In 2005, Derbyshire's rate was 10% above Great Britain's level.

In Great Britain and in Derbyshire, the rate for child KSI casualties was the same in 2009, 24 per 100,000 population.

Pedestrians have a 24% lower rate and pedal cyclists an 8% lower rate of collisions in Derbyshire than Great Britain. Car user rates are almost the same in Derbyshire and Great Britain. In 2005, the rate of car user casualties was 22% higher in Derbyshire than in Great Britain.



In Derbyshire, a greater proportion of pedal cyclist casualties are children than in the whole of Great Britain, 24% compared with 19% in Great Britain. The percentage of child pedestrian casualties is the same for Derbyshire and Great Britain (30%) and almost the same for car user casualties (5% in Derbyshire and 6% in Great Britain).

In Great Britain, 13% of child casualties are KSI; in Derbyshire this is slightly higher at 14%.

Child Safety Audit Derbyshire County Council Area

Postcodes Analysis

Postcode information is only available for the year 2009. There were 239 child casualties in Derbyshire (excluding Derby City) in this year, 79% of which have a postcode recorded.

The postcode information consists of the first half of the postcode, the postcode district.

Of the casualties with recorded postcodes:

- 158 (84%) lived within Derbyshire (including Derby City) and 29 (16%) lived outside Derbyshire.
- The home postcodes with the greatest numbers of casualties were:

S43	Brimington, Staveley, Barlborough, Clowne	19 casualties	19 schools
DE7	Ilkeston	13 casualties	25 schools
NG10	Long Eaton	11 casualties	18 schools
DE11	Swadlincote	10 casualties	16 schools
DE4	Matlock, Wirksworth, Crich	9 casualties	25 schools
DE5	Ripley	8 casualties	11 schools
S41	Chesterfield East	8 casualties	17 schools
DE55	Alfreton	6 casualties	32 schools

Most home postcodes correlate with towns with above average levels of child casualties, although Ilkeston is an anomaly with high home postcode figures but below average numbers of children involved in collisions.

- 61 casualties were pedestrians and 92% of these were injured in the postcode where they live.
- Of the five pedestrian casualties who were injured in a different postcode to where they live, four were from Derbyshire and were injured in a postcode adjacent or close to their home address. There were all aged 12 or 13.
- Just one pedestrian from out of the County was injured, a 13 year old from Nottinghamshire, injured in Heanor.
- The home postcodes with the most pedestrian casualties were S43 (Staveley/ Clowne) – seven casualties, DE5 (Ripley) – four casualties and DE7 (Ilkeston) – four casualties.
- 30 casualties were pedal cyclists and 97% of these were injured in the postcode where they live.
- Only one pedal cyclist casualty was injured in a different postcode to where they live, a 13 year old from south east Derby City, injured in Elvaston, the adjacent postcode.

- The home postcodes with the most pedal cyclist casualties were DE7 (Ilkeston) – five casualties and NG10 (Long Eaton) – five casualties.
- 87 casualties were car passengers:
 - 37% of these were injured in the postcode where they live;
 - 35% were injured in an adjacent postcode or less than and 10 miles from their home address;
 - 16% were injured between 10 and 50 miles from their home address;
 - 13% were injured more than 50 miles from their home address.
- The home postcodes with the most car passenger casualties were S43 (Staveley/Clowne) – seven casualties and DE4 (Matlock) – five casualties.

Child Safety Audit Derbyshire County Council Area and Derby City

Casualties in Individual Towns/Wards

The numbers of child casualties in the period 2005-2009 in different towns/wards were compared with the towns'/wards' child populations (taken from the 2001 census).

Child pedestrians and pedal cyclists are much more likely to be injured in the town/ward where they live. Using the latest available data, 92% of pedestrians and 97% of pedal cyclists were injured within the Postcode District where they live.

Car passengers are likely to be further from home when they are injured, with just 37% injured within the Postcode District where they live. The numbers, therefore, are less likely to show casualties from that particular town/ward than pedestrian and pedal cyclist casualties, particularly in towns/wards with major routes running through them.

Initiatives and campaigns aimed at pedestrians and pedal cyclists could be targeted towards the residential areas with the worst problems. For car passengers, campaigns would be general and cannot be targeted geographically.

For some categories numbers of casualties are small and may fluctuate. Also, numbers in some towns/wards may be higher when compared with population because of the numbers of visitors and tourists in the town/ward.

In the following Tables, the 5-10 year old and 11-15 year old categories include all types of road user casualties.

A table for Derby City wards is included in this section.

The four rankings shown below, "Well above average" to "Below average" are calculated using child casualties per 1,000 of child population.

Average for total child casualties:	10.1 per 1,000 population.
Average for child pedestrian casualties:	4.5 per 1,000 population.
Average for child pedal cyclist casualties:	2.1 per 1,000 population.
Average for child car passenger casualties:	3.0 per 1,000 population.
Average for 5-10 year old casualties:	9.0 per 1,000 population.
Average for 11-15 year old casualties:	16.8 per 1,000 population.

Well above average =	More than 40% above the figure for all towns and wards added together.
Above average =	Between 10% above and 40% above the figure for all towns and wards added together.
Average =	Between 10% below and 10% above the figure for all towns and wards added together.
Below average =	More than 10% below the figure for all towns and wards added together.

In the following tables the figures in each box show the actual number of casualties. However, the rankings are based on casualties per 1,000 population which is why towns/wards with smaller numbers of collisions may be above those with larger numbers.

^d = Within or alongside a 'deprived ward'.

North West Area

Town	All Child Casualties	No.	Pedestrians	No.	Pedal Cyclists	No.	Car Passengers	No.	5-10 Year Olds	No.	11-15 Year Olds	No.
New Mills	Above average	20	Above average	10	Below average	1	Well above average	9	Average	6	Above average	12
Matlock	Above average	23	Well above average	13	Average	4	Below average	5	Average	7	Average	12
Glossop ^d	Average	60	Average	25	Below average	11	Average	20	Average	21	Below average	30
Darley Dale	Below average	8	Below average	2	Average	2	Average	3	Below average	2	Above average	6
Ashbourne	Below average	10	Below average	4	Below average	1	Average	5	Below average	4	Below average	5
Buxton	Below average	24	Below average	14	Below average	4	Below average	6	Below average	10	Below average	11
Bakewell	Below average	4	Below average	2	Below average	0	Below average	2	Below average	1	Below average	3
Chapel-en-le-Frith	Below average	3	Below average	3	Below average	0	Below average	0	Below average	0	Below average	3
Wirksworth	Below average	2	Below average	0	Below average	0	Below average	2	Below average	1	Below average	1

North East Area

Town	All Child Casualties	No.	Pedestrians	No.	Pedal Cyclists	No.	Car Passengers	No.	5-10 Year Olds	No.	11-15 Year Olds	No.
Staveley ^d	Well above average	37	Above average	12	Well above average	12	Above average	8	Well above average	12	Well above average	19
Chesterfield ^d	Above average	155	Above average	59	Average	27	Well above average	55	Above average	54	Above average	79
Holmewood ^d	Above average	9	Above average	5	Below average	0	Well above average	4	Above average	4	Above average	5
Brimington ^d	Average	20	Below average	4	Average	4	Above average	7	Average	7	Below average	9
Pinxton ^d	Average	8	Below average	1	Well above average	5	Below average	2	Below average	0	Well above average	8
Bolsover ^d	Average	21	Below average	9	Below average	3	Average	7	Below average	7	Below average	10
Clay Cross ^d	Average	14	Below average	3	Average	3	Well above average	8	Above average	7	Below average	7
Creswell ^d	Below average	10	Above average	6	Below average	2	Below average	0	Above average	5	Below average	3
Eckington ^d	Below average	12	Below average	4	Below average	1	Well above average	6	Below average	4	Below average	5
North Wingfield ^d	Below average	8	Average	5	Below average	1	Below average	2	Below average	3	Below average	4
Clowne ^d	Below average	10	Above average	7	Below average	2	Below average	1	Below average	2	Average	7
South Normanton ^d	Below average	13	Below average	6	Average	4	Below average	3	Below average	4	Below average	7
Killamarsh ^d	Below average	13	Below average	3	Below average	3	Below average	5	Below average	4	Below average	8
Shirebrook ^d	Below average	12	Below average	4	Average	5	Below average	3	Below average	4	Below average	7
Dronfield	Below average	18	Below average	9	Below average	2	Below average	7	Below average	5	Below average	10

South East Area

Town	All Child Casualties	No.	Pedestrians	No.	Pedal Cyclists	No.	Car Passengers	No.	5-10 Year Olds	No.	11-15 Year Olds	No.
Alfreton ^d	Above average	61	Above average	29	Above average	12	Above average	16	Above average	22	Above average	33
Heanor ^d	Above average	50	Above average	27	Above average	11	Below average	11	Above average	17	Above average	29
Swadlincote	Average	69	Above average	36	Above average	15	Below average	12	Below average	20	Above average	44
Long Eaton	Below average	78	Below average	24	Well above average	34	Below average	9	Below average	19	Above average	56
Ripley ^d	Below average	31	Above average	21	Below average	4	Below average	5	Below average	8	Below average	17
Ilkeston ^d	Below average	60	Average	33	Below average	15	Below average	9	Below average	22	Below average	33
Duffield	Below average	7	Above average	5	Below average	1	Below average	1	Below average	1	Average	6
Borrowash	Below average	10	Below average	2	Below average	2	Above average	5	Below average	2	Below average	6
Belper	Below average	18	Below average	7	Below average	4	Below average	6	Below average	11	Below average	7

On average child casualties in towns/wards have fallen by 17% comparing July 2003-June 2008 to 2005-2009.

Towns where casualties have increased

Clay Cross	Child casualties increased from 12 to 14 (17%). This is still less than the 2002-2006 figure of 17. Car passenger casualties are higher than average and all are aged between 10 and 14.
Matlock	Child casualties increased from 20 to 23 (15%). This is a further increase from 2002-2006 when there were 15 casualties. Pedestrians are the particular concern; the numbers of casualties are spread fairly evenly over all ages.
Heanor	Child casualties increased very slightly from 49 to 50 (2%). This is still less than 2002-2006 when there were 59 casualties. There is particular concern regarding pedestrians aged 12-14 and pedal cyclists aged 10-13.

Towns where casualties have stayed the same or decreased less than average

Ashbourne	Child casualties stayed the same at 10. There were 11 casualties in 2002-2006. Car passengers are the largest group of casualties.
Creswell	Child casualties stayed the same at 10. There were 15 casualties in 2002-2006. Pedestrians aged 4-7 years have the most collisions.
Dronfield	Child casualties decreased from 19 to 18 (-5%). This is still higher than 16 in 2002-2006. Pedestrian casualties aged 12-13 are slightly higher than other groups.
Long Eaton	Child casualties decreased from 85 to 78 (-8%). This continues the downward trend from 105 casualties in 2002-2006. Pedal cyclists are of particular concern; the largest group of casualties is 12-15 year olds.
Clowne	Child casualties decreased from 11 to 10 (-9%). This is a further reduction from 17 in 2002-2006. Pedestrians, particularly aged 12, are of concern.
Holmewood	Child casualties decreased from 10 to 9 (-10%). This is a further decrease from 11 in 2002-2006. Pedestrian and car passenger casualties are higher than average.
Glossop	Child casualties decreased from 67 to 60 (-10%). This makes the number similar to the 2002-2006 level of 59. Pedestrians aged 12-13 are a high group, as are primary aged car passengers.

Alfreton	Child casualties decreased from 68 to 61 (-10%). This is a further decrease from 2002-2006 when there were 76 casualties. There is particular concern regarding pedestrians of both primary and secondary school age (the highest number of casualties is at age 10) and also, 12 year old pedal cyclists.
Staveley	Child casualties have decreased from 41 to 37 (-10%). This is the first decrease since the 2002-2006 report. Of particular concern are 15 year old pedestrians and 12 year old pedal cyclists. Car passenger casualties are also higher than average.
Duffield	Child casualties decreased from 8 to 7 (-13%). There were also 8 casualties between 2002 and 2006. Most casualties are secondary school aged pedestrians.
Bolsover	Child casualties decreased from 24 to 21 (-13%). This is a further decrease from 30 in 2002-2006. Most of the collisions involve 13 year olds, half of whom are pedestrians.
Eckington	Child casualties decreased from 14 to 12 (-14%). This is a further decrease from 19 in 2002-2006. Car passenger casualties are higher than average, as are pedestrians aged 11-14.
Ilkeston	Child casualties decreased from 70 to 60 (-14%). This is a further decrease from the 2002-2006 level of 85. Pedestrians aged 10-15 have the highest number of collisions.

Towns where casualties have decreased more than average

Borrowash	Child casualties have decreased from 12 to 10 (-17%). Between 2002 and 2006, there were 12 casualties. Car passenger casualties are higher than average.
Darley Dale	Child casualties decreased from 10 to 8 (-20%). This is a further decrease from 15 in 2002-2006. Pedal cyclist casualties are higher than average but numbers are very small.
Pinxton	Child casualties decreased from 10 to 8 (-20%). This is a further decrease from 15 in 2002-2006. Pedal cyclists aged 11 are a particular concern.
Brimington	Child casualties decreased from 25 to 20 (-20%). This is also lower than the 2002-2006 figure of 22 casualties. Car passengers are of concern, particularly the 4 year old age group.
Swadlincote	Child casualties decreased from 88 to 69 (-22%). This is a further decrease from 2002-2006 when there were 95 casualties. Of particular concern are 10-13 year old pedestrians.

Chesterfield	Child casualties decreased from 202 to 155 (-23%). This is also below the 2002-2006 casualty number of 197. Secondary school aged pedestrians and pedal cyclists aged 12-13 are a particular concern, as are the high numbers of car passenger casualties.
Ripley	Child casualties decreased from 41 to 31 (-24%). This is a continuing decrease from 52 in 2002-2006. Pedestrians, particularly aged 12-15, are the main concern.
Shirebrook	Child casualties decreased from 16 to 12 (-25%). This is another large decrease from 22 in 2002-2006. Children aged 14 and 15 have the greatest proportion of collisions. Pedal cyclists of all ages are also a concern.
Belper	Child casualties decreased from 24 to 18 (-25%). A continuing decrease from 37 in 2002-2006. There are more pedestrian casualties than other types.
Buxton	Child casualties decreased from 32 to 24 (-25%). This is another significant decrease as in 2002-2006 there were 56 casualties. Pedestrians aged 9 and 13 have the highest number of casualties.
South Normanton	Child casualties decreased from 18 to 13 (-28%). This is another significant decrease as in 2002-2006 there were 29 casualties. Pedal cyclist casualties are higher than average but numbers are still low.

Towns where casualties have decreased significantly more than average

Killamarsh	Child casualties decreased from 19 to 13 (-32%). Between 2002 and 2006 there were 18 casualties. Children aged 12-15 have the most collisions.
Wirksworth	Child casualties decreased from 3 to 2 (-33%). This is a further reduction from 8 in 2002-2006. Both casualties are car passengers but numbers are too small to show any patterns.
New Mills	Child casualties decreased from 31 to 20 (-35%). This is a further decrease from 34 in 2002-2006. Pedestrians are the main concern, with casualties covering all ages. Car passenger casualties are also higher than average.
North Wingfield	Child casualties decreased from 14 to 8 (-43%). Between 2002 and 2006 there were 13 casualties. Pedestrians aged 13-15 are a concern.
Chapel-en-le-Frith	Child casualties decreased from 6 to 3 (-50%). This is a further large reduction from 14 in 2002-2006. All 3 casualties are secondary school aged pedestrians.
Bakewell	Child casualties decreased from 10 to 4 (-60%). This is a further large reduction from 15 casualties in 2002-2006. The numbers are now too small to show any patterns.

Derby City Area

Ward	All Child Casualties	No.	Pedestrians	No.	Pedal Cyclists	No.	Car Passengers	No.	5-10 Year Olds	No.	11-15 Year Olds	No.
Arboretum ^d	Well above average	102	Well above average	53	Above average	9	Well above average	34	Well above average	39	Well above average	40
Normanton ^d	Well above average	57	Well above average	39	Below average	3	Above average	14	Well above average	25	Average	18
Alvaston	Well above average	48	Above average	16	Well above average	13	Well above average	14	Well above average	17	Above average	22
Sinfin ^d	Above average	53	Above average	24	Well above average	14	Average	12	Well above average	20	Well above average	29
Darley	Above average	22	Below average	5	Below average	3	Well above average	13	Average	6	Well above average	12
Abbey	Above average	28	Well above average	14	Above average	6	Above average	7	Above average	10	Above average	14
Blagreaves	Above average	33	Above average	13	Well above average	11	Average	8	Below average	7	Well above average	26
Boulton	Above average	36	Well above average	21	Well above average	11	Below average	4	Average	12	Above average	22
Derwent ^d	Above average	38	Average	15	Well above average	10	Above average	13	Well above average	21	Below average	13
Spondon	Above average	24	Average	9	Below average	2	Well above average	12	Below average	6	Above average	16
Chaddesden	Average	28	Above average	14	Average	6	Average	8	Above average	11	Average	15
Chellaston	Average	23	Below average	9	Above average	7	Below average	6	Below average	6	Above average	17
Allestree	Below average	19	Below average	6	Below average	2	Well above average	11	Average	8	Below average	8
Mackworth	Below average	20	Average	11	Below average	2	Below average	5	Below average	8	Below average	10
Littleover	Below average	20	Below average	5	Below average	3	Above average	11	Below average	4	Below average	12
Oakwood	Below average	15	Below average	3	Average	6	Below average	6	Below average	7	Below average	6
Mickleover	Below average	11	Below average	2	Below average	2	Average	7	Below average	6	Below average	4

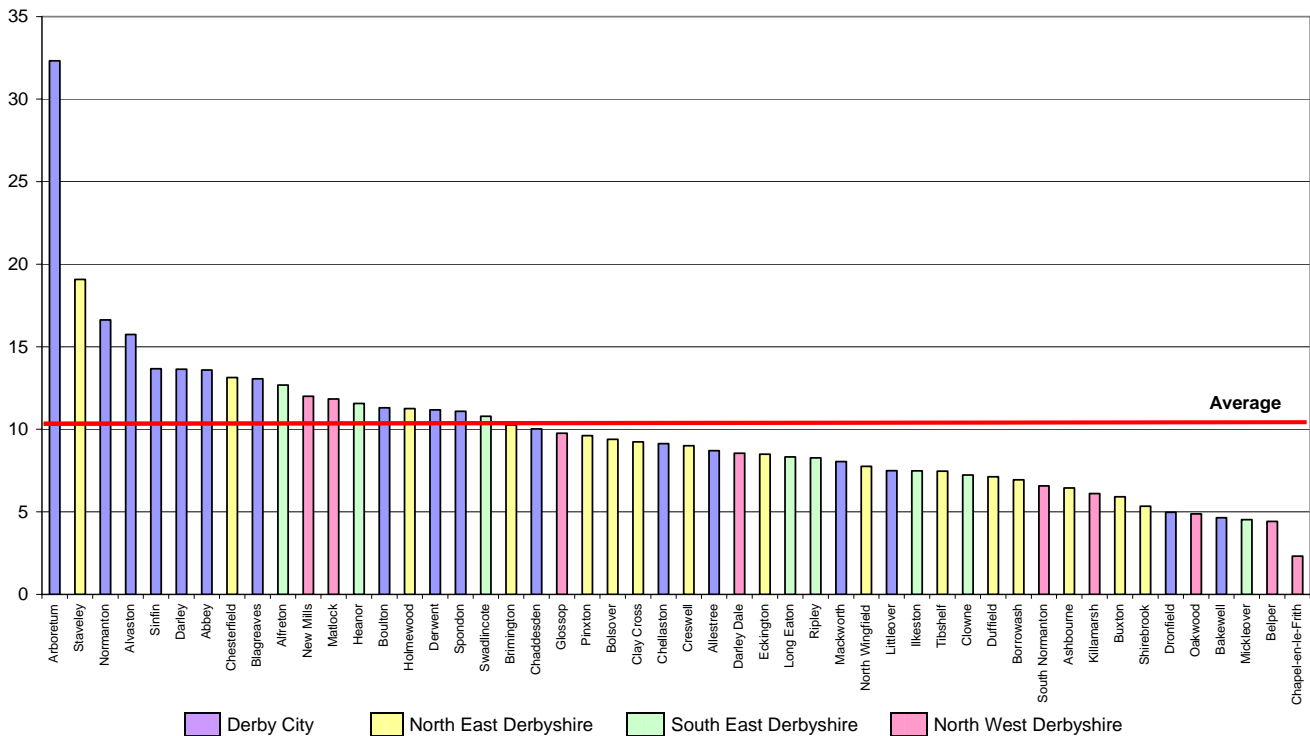
Child Safety Audit Derbyshire County Council Area and Derby City

Comparison of Derbyshire Towns with Derby City Wards

Data relating to Derby was not included in earlier Child Safety Audits but the current audit looks at the area covered by the Derby and Derbyshire Road Safety Partnership and therefore includes an analysis of Derby City Wards. With Derby being largely urban, collision patterns are different to the County. In the last five years, child casualties made up 12% of all casualties and 14% of all KSI casualties in the City, compared with 9% and 8% in the County.

- There is a much higher rate of child pedestrian casualties in the City. A total of 45% of child casualties are pedestrians, compared with 32% in the County.
- The percentages are reversed for car passengers. In the County, 45% of child casualties are car passengers and in the City 32%.
- Percentages of pedal cyclist casualties are similar, 19% in the City and 17% in the County.
- The four most deprived wards in Derby are Arboretum, Normanton, Sinfyn and Derwent. Two out of these four have well above the average level of child casualties. The other two wards are above the average level.
- Looking at child casualties compared to population, out of the 10 worst towns/wards, 7 are in Derby City. The worst city ward, Arboretum is over 200% higher than the County average. The next worst (Staveley) is 89% higher than average. The 10 worst towns are:
 - Arboretum – 32.3 per 1,000 population.
 - Staveley - 19.1 per 1,000 population.
 - Normanton – 16.6 per 1,000 population.
 - Alvaston - 15.7 per 1,000 population.
 - Sinfyn - 13.7 per 1,000 population.
 - Darley - 13.6 per 1,000 population.
 - Abbey - 13.6 per 1,000 population.
 - Chesterfield - 13.1 per 1,000 population.
 - Blagreaves - 13.1 per 1,000 population.
 - Alfreton - 12.7 per 1,000 population.
 - The average for all towns/wards is 10.1 per 1,000 population.

Child Casualties per 1000 Population



- Four out of the five worst towns/wards for pedestrians per 1,000 population are in Derby City and one in the County.
 - Arboretum – 16.8 per 1,000 population.
 - Normanton – 11.4 per 1,000 population.
 - Abbey - 6.8 per 1,000 population.
 - Matlock - 6.7 per 1,000 population.
 - Boulton - 6.6 per 1,000 population.
 - The average for all towns/wards is 4.5 per 1,000 population.
- Two out of the five worst towns/wards for pedal cyclists per 1,000 population are in Derby City and three in the County.
 - Staveley - 6.2 per 1,000 population.
 - Pinxton - 6.0 per 1,000 population.
 - Blagreaves - 4.4 per 1,000 population.
 - Alvaston - 4.3 per 1,000 population.
 - Long Eaton - 3.6 per 1,000 population.
 - The average for all towns/wards is 2.1 per 1,000 population.
- Three out of the five worst towns/wards for car passengers per 1,000 population are in Derby City and two in the County.
 - Arboretum – 10.8 per 1,000 population.
 - Darley – 8.1 per 1,000 population.
 - Spondon - 5.6 per 1,000 population.
 - New Mills - 5.4 per 1,000 population.
 - Clay Cross - 5.3 per 1,000 population.
 - The average for all towns/wards is 3.0 per 1,000 population.

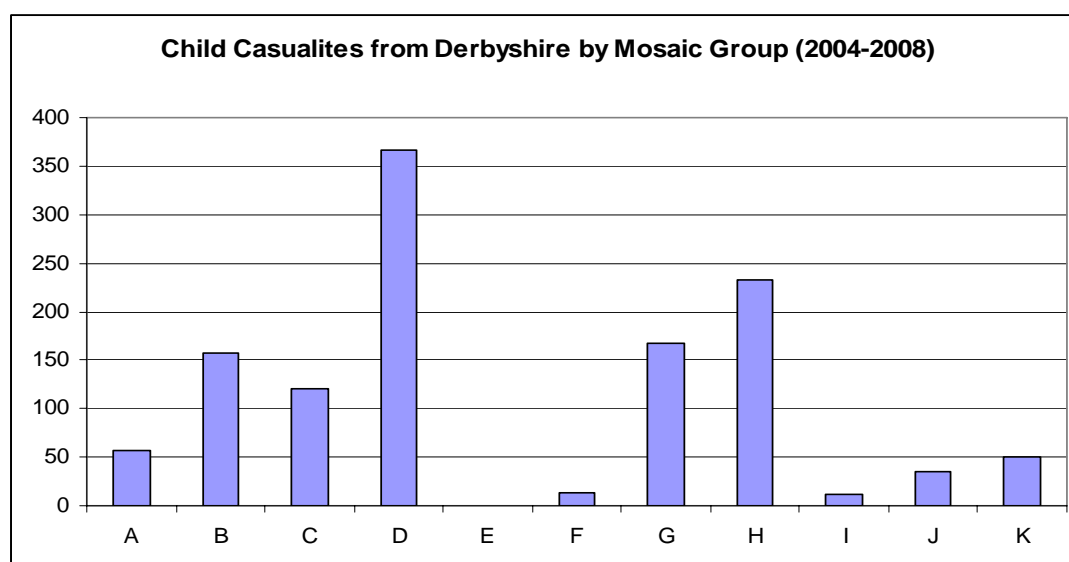
Child Safety Audit Derbyshire County Council Area

Mosaic Analysis

Mosaic Public Sector is a socio-demographic classification system covering the whole of the United Kingdom. It is intended to provide an accurate and comprehensive view of citizens and their needs by describing them in terms of demographics, lifestyle, culture and behaviour.

Mosaic was devised under the direction of Professor Richard Webber, a leading authority on consumer segmentation, using data from a wide range of public and private sources. It is used to enable policy decisions, communications activity and resources strategies across the public sector and has recently been linked to casualty data within MAST (Marketing Analysis Segmentation Tool) software.

Communities represented by postcodes are classified into 11 groups and 61 types.



Mosaic groups for child casualties in the County of Derbyshire

- 30% of children are group D (close-knit, inner city and manufacturing town communities), which comprises 16% of the population of the UK.
 - The majority come from sub group D23 (owners of affordable terraces built to house 19th century heavy industrial workers).
- 19% of children are group H (upwardly mobile families living in homes bought from social landlords), which comprises 11% of the population of the UK.
 - The majority come from sub group H44 (manual workers in low rise houses in ex-manufacturing towns).
- 14% of children are group G (low income families living in estate based social housing), which comprises 7% of the population of the UK.
 - The majority come from sub group G42 (families with school age children, living in very large social housing estates on the outskirts of provincial cities).

Mosaic Analysis in Great Britain, Derbyshire County Council Area and Derby City

The 'Child Casualties Report 2010', produced by Road Safety Analysis Ltd, shows the difference across Britain in child casualty rates from the highest rate of 1 in 206 children injured per year to the lowest rate of 1 in every 1,158 children injured per year. The average rate in Great Britain is 1 in 427, significantly lower than the comparable rate for casualties of all ages of 1 in 231.

To put Derbyshire's Districts into context, in the national study the worst ranked District in Derbyshire was Chesterfield, 47th worst out of 407 Districts with a rate of 1 in 324, followed by Erewash at 79th with 1 in 348, Bolsover at 84th with 1 in 354, North East Derbyshire with 1 in 386, Amber Valley with 1 in 390, Derby also with 1 in 390 and South Derbyshire with 1 in 443.

It is interesting to note that although individual wards in Derby were ranked worse when compared with towns in the County Council area, when considered as a whole, Derby has a lower child casualty rate compared with population than Chesterfield, Erewash, Bolsover and North East Derbyshire.

The national study shows that socio-economic Group D has the highest number of child casualties, the same as the highest group in Derbyshire. As well as casualty numbers, the National Report highlights the need to look at groups that may not have the highest casualty numbers but which are the most over-represented. The national study shows that Group D is 22% over-represented but Group G is over-represented by 54% and Group H by 111%. In Derbyshire, Group D is 9% over-represented, Group G 78% and Group H 55%.

The over-representation measure is based on casualty rates at the expected level based on the national average, using an index of 100. For example, a measure of 139 is 39% above the average.

MAST has been used to ascertain both the highest casualty numbers split into the Mosaic groups for the County Council area and for Derby and where numbers are sufficiently large a measure of over-representation is available. The table on the following page aims to show, at a glance, the combination of groups with high numbers and high over-representation. In order to ascertain which Mosaic groups are worthy of further study for the targeting of road safety campaigns, the County Council area and Derby have been looked at individually as it is apparent that child casualties are from different groups in Derby than the County.

Four Mosaic groups have been looked at further as part of this Child Safety Audit.

Group D23 – the highest overall number of casualties in the County, 4th highest by over-representation at 39% over, and the highest number in Amber Valley, Erewash, High Peak and South Derbyshire. It is the second highest group in Chesterfield and Bolsover. It is also the largest group of child pedestrian casualties and child pedal cyclist casualties in the County.

Group H44 – the second largest group of child casualties in the County and over-represented by 82%. It features in the largest four groups in Chesterfield, Bolsover, Amber Valley, Erewash and High Peak. It is the second largest group of child pedestrian casualties in the County and the most over-represented group for child pedestrian casualties. It is also the second highest group for County child pedal cyclists and the highest in Derby for child car passengers.

Group G42 – the third highest number of casualties overall in the County, but highest for over-representation in both County and Derby. It has high numbers of casualties in Chesterfield and North East Derbyshire. It also has high child passenger casualties in the County and child pedestrian casualties in Derby.

Group G41 – the highest number of casualties and second highest over-representation in Derby but does not feature highly in the County. This group consists of ‘Families, many single parent, in deprived social housing on the edge of regional centres’.

MAST Analysis to Show Mosaic Groups for Different Road Users and Districts

	Highest (1st)	2nd	3rd	4th
County all child casualties				
County				
Groups with highest numbers of casualties	D23 (189)	H44 (123)	G42 (90)	D22 (79)
Groups with highest over-representation and %	G42 (200)	H47(200)	H44 (182)	D23 (139)
County child pedestrian casualties				
Groups with highest numbers of casualties	D23 (53)	H44 (38)	D24 (32)	G42 (28)
Groups with highest over representation and %	H44 (208)	D24 (200)	D23 (142)	
County child pedal cyclist casualties				
Groups with highest numbers of casualties	D23 (39)	H44 (25)	G42 (13)	D24 (12)
County child car passenger casualties				
Groups with highest numbers of casualties	D23 (90)	H44 (42)	D22 (35)	G42 (34)
Derby				
Derby all child casualties				
Groups with highest numbers of casualties	G41 (46)	D26 (37)	D24 (37)	G42 (36)
Groups with highest over representation and %	G42 (255)	G41 (244)	D26 (231)	D24 (164)
Derby child pedestrian casualties				
Groups with highest numbers of casualties	G41 (28)	D26 (18)	D24 (15)	G42 (14)
Derby child pedal cyclist casualties				
Groups with highest numbers of casualties	G41 (10)	D24 (8)	H44 (7)	D23 (7)
Derby child car passenger casualties				
Groups with highest numbers of casualties	D24 (15)	D23 (14)	G42 (13)	D26 (12)
Districts				
Chesterfield				
Groups with highest numbers of casualties	G42(34)	D23 (26)	H44 (19)	G43 (17)

County all child casualties	Highest (1st)	2nd	3rd	4th
North East Derbyshire Groups with highest numbers of casualties	G42 (16)	G43 (14)	C15 (11)	
Bolsover Groups with highest numbers of casualties	H44 (28)	D23 (22)	D24 (17)	
Amber Valley Groups with highest numbers of casualties	D23 (39)	H44 (21)	D22 (19)	
Erewash Groups with highest numbers of casualties	D23 (40)	D24 (21)	D22 (19)	H44 (17)
South Derbyshire Groups with highest numbers of casualties	D23 (28)	D22 (12)	B9 (10)	
Derbyshire Dales Groups with highest numbers of casualties	K58 (13)	C17 (12)	K59 (8)	
High Peak Groups with highest numbers of casualties	D23 (23)	D21 (14)	H44 (13)	

Note: Over-representation data only available for certain groups.

Summary and Conclusions

- 1 Child casualties per 100,000 of child population comprised a higher proportion in Derbyshire than in Great Britain in the Audit of 2002-2006 but have reduced in 2009 to a proportion 10% lower in Derbyshire than Great Britain.
- 2 Compared with Great Britain, Derbyshire's rates for 2009 are good for pedal cyclists and pedestrians but not quite as good for car passengers.
- 3 Child pedestrians and child pedal cyclists comprise higher proportions of killed and seriously injured casualties than of slight casualties.
- 4 Nearly half of all children killed and seriously injured are pedestrians, 29% are car passengers and 18% are pedal cyclists.
- 5 The most common age of children injured as pedestrians is 12 years old.
- 6 The most common age of children injured as pedal cyclists is also 12 years old. In the Child Safety Audit of three years ago, 15 years was the predominant age, followed by 13 years.
- 7 Higher levels of child pedestrian casualties occur in the months of September to November.
- 8 Higher levels of child pedal cyclist casualties occur in the months of May to September.
- 9 On weekdays, collisions involving children coincide with the start and end of the school day.
- 10 The most common age group of children injured in collisions during the hours of darkness is 12 to 15 years.
- 11 One of the most common problems for pedestrian casualties aged 0-5 years is crossing between parked cars.
- 12 Amber Valley has the highest number of 6 to 10 year olds injured as pedestrians or pedal cyclists.
- 13 For casualties aged 11 to 15 years old, Amber Valley has the highest number of pedestrian casualties and Erewash has the highest number of pedal cyclist casualties.
- 14 The child casualty problem should be considered in conjunction with the young driver issue. Over half of 14 and 15 year old car passenger casualties are in cars driven by 17 to 25 year olds.
- 15 There are higher proportions of child and child pedestrian casualties in the most deprived wards compared to non deprived.
- 16 A total of 58% of towns/wards with the highest child pedal cyclist and child pedestrian casualties, are either deprived areas or share a boundary with a deprived area.

- 17 All of the towns with well above average casualty levels in the north east of the County are in or next to a deprived area.
- 18 Pedestrian and pedal cyclist casualties are more likely to occur on urban roads, close to where the child lives.
- 19 In Derbyshire County Council's area, the postcodes where most child casualties live correlate with the towns with the highest numbers of child casualties, particularly Brimington, Staveley and Clowne.
- 20 The towns/wards with the highest numbers of above average child pedestrian casualties were mostly wards in Derby – Arboretum, Normanton, Abbey and Boulton. The town with the highest above average level of child pedestrian casualties outside of Derby was Matlock. Heanor, Sinfyn and Alfreton also had above average levels.
- 21 In a comparison of child pedestrian casualties in Derby City wards and Derbyshire County Council towns, this group made up a higher proportion of all child casualties in the City wards. The proportion of child pedestrian casualties in Derby is 45%, compared with 32% in the County.
- 22 The towns/wards with the highest numbers of above average child pedal cyclist casualties were Staveley and Pinxton followed by Blagreaves, Alvaston and Long Eaton.
- 23 Child casualties as a whole have decreased during the last few years and most towns have seen reductions in levels since the first Child Safety Audit three years ago but there are a few towns with an increasing trend of child casualties such as Clay Cross, Matlock and Heanor.
- 24 MAST analysis shows a different pattern of socio-economic groups involved in child casualties in the County and in Derby, but there are also a few similar groups involved.
- 25 There are common threads in the characteristics of the four predominant socio-economic groups which are worth considering further, for example, all are unreceptive to the internet, yet the children like computer games.

Glossary

Derbyshire County Council	The County of Derbyshire, excluding the area of Derby administered by Derby City Council from April 1997 onwards.
Derby and Derbyshire Road Safety Partnership (DDRSP)	A Partnership formed in 2007 to co-ordinate road safety issues covering the geographical County of Derbyshire.
Derby City	The area administered by Derby City Council from April 1997 onwards.
Injury Collision	A collision on the public highway (including footways) which is reported to the Police where one or more persons is killed or injured.
Casualty	A person killed or injured in a collision. One collision may result in several casualties.
Fatal Casualty	A casualty who sustains fatal injuries and dies within 30 days of the collision.
Serious Casualty	A casualty who sustains injuries of a severe nature eg: cuts, shock, burns, concussion, crushing, or who is treated in hospital as an "in-patient".
KSI (Killed and Seriously injured) Casualty	A casualty who sustains fatal or serious injuries.
Slight Casualty	A casualty who sustains injuries of a minor character eg: sprains, bruising, cuts, whiplash, shock.
Child	Person aged 15 years or under.
School Age children	Data in this Report includes pupils aged 5 to 15 years.
Car Users	Includes cars and taxis.
Urban Roads	Roads with a speed limit of 40mph or less.
Rural Roads	Roads with a speed limit of 50mph or over.
Darkness	From half an hour after sunset to half an hour before sunrise ie: "lighting up time".
Deprived Ward	Worst 20% of wards in the County – 38 wards
MAST	Marketing Analysis Segmentation Tool.
Mosaic	A socio-demographic classification system covering the whole of the United Kingdom.