

Better Routes and Places Directorate Topic Factsheet 2010-1

March 2010

Child casualties in Greater London

This factsheet looks into the scale and nature of road traffic collisions resulting in injury to children in the Greater London area. It gives an overview of child casualties for the period 1986 to 2008 and then looks in detail at the profile of the casualties and factors relating to the collisions that occurred in 2008. Data for the whole of London, including the City of London have been available since 1986 and 2008 is the latest year for which finalised data are available at the time of writing.

It provides background information to support the Government and Mayor for London's targets to reduce road casualties by the year 2010. Following a review in 2006, the target in London for children was stretched from a 50% reduction to a 60% reduction in the number of children killed or seriously injured (KSI) by 2010 from a baseline of the average number of child KSIs for 1994-98.

The data provided are for personal injury road traffic collisions that occurred on the public highway and were reported to the police in accordance with the *STATS 19* national reporting system. Under *STATS 19* a child is defined as a person under 16 years of age.

Key facts

- 1,938 collisions in Greater London in 2008 resulted in injury to 2,064 children; these represented 8% of all collisions and 7% of all casualties.
- Child KSI casualties accounted for 9% of all KSI casualties in 2008.
- In terms of the casualty reduction targets for London, child KSI casualties fell by 67% between the 1994-98 average and 2008, all child casualties fell by 60%.
- In 2008 more than half (53%) of all child casualties, and nearly three quarters (73%) of child KSIs were pedestrians.
- Just under a quarter (23%) of child casualties in 2008 were 11 or 12 years of age.
- In 2008, 65% of child casualties were injured on roads in the outer London boroughs.
- Child casualties averaged 6 per day in Greater London during 2008.

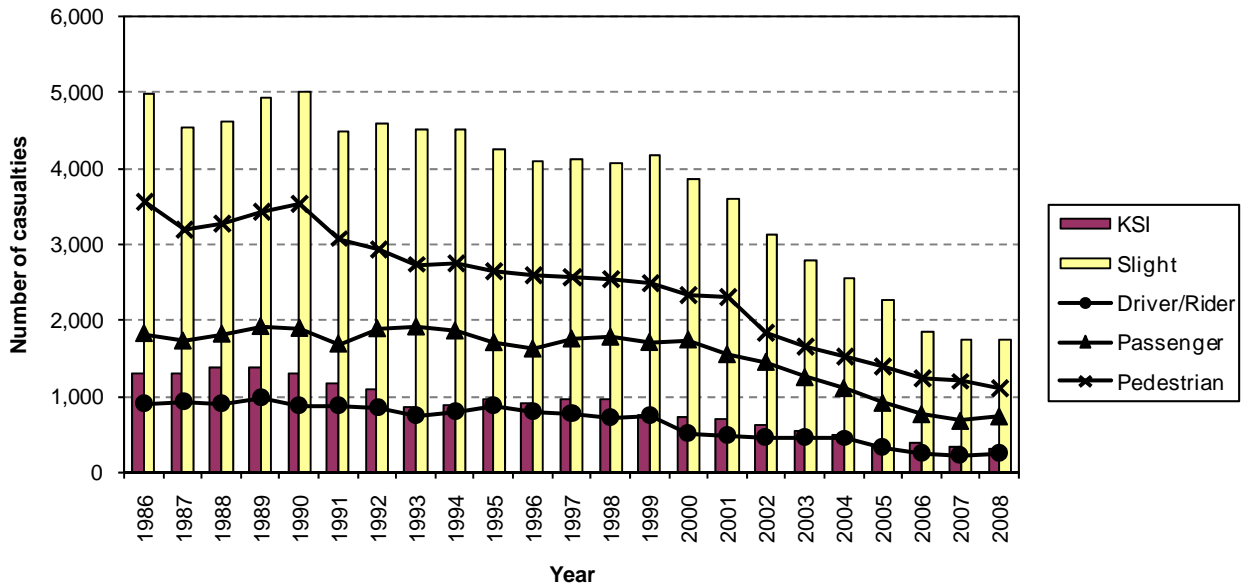
Annual Trends 1986 to 2008

Table 1 and Figure 1 show the number of child casualties by year, severity and casualty class in Greater London from 1986 to 2008.

Table 1: Child casualties by year, casualty class and severity in Greater London 1986 to 2008

| Year | Child | | Casualty class | | | Severity of casualty | | | Severity | |
|---|----------------|--------------|----------------|----------------|-------------|----------------------|----------------|----------------|------------|--|
| | collisions | Driver/Rider | Passenger | Pedestrian | Fatal | Serious | Slight | Total | ratio | |
| 1986 | 5,943 | 904 | 1,822 | 3,565 | 28 | 1,271 | 4,992 | 6,291 | 21% | |
| 1987 | 5,501 | 923 | 1,725 | 3,196 | 33 | 1,270 | 4,541 | 5,844 | 22% | |
| 1988 | 5,617 | 900 | 1,814 | 3,282 | 43 | 1,340 | 4,613 | 5,996 | 23% | |
| 1989 | 5,910 | 976 | 1,914 | 3,424 | 43 | 1,346 | 4,925 | 6,314 | 22% | |
| 1990 | 5,907 | 883 | 1,889 | 3,540 | 28 | 1,283 | 5,001 | 6,312 | 21% | |
| 1991 | 5,324 | 881 | 1,685 | 3,078 | 30 | 1,135 | 4,479 | 5,644 | 21% | |
| 1992 | 5,236 | 843 | 1,884 | 2,935 | 21 | 1,062 | 4,579 | 5,662 | 19% | |
| 1993 | 4,999 | 729 | 1,907 | 2,736 | 21 | 835 | 4,516 | 5,372 | 16% | |
| 1994 | 5,002 | 797 | 1,855 | 2,748 | 13 | 866 | 4,521 | 5,400 | 16% | |
| 1995 | 4,908 | 878 | 1,703 | 2,637 | 12 | 946 | 4,260 | 5,218 | 18% | |
| 1996 | 4,704 | 786 | 1,621 | 2,601 | 14 | 907 | 4,087 | 5,008 | 18% | |
| 1997 | 4,732 | 777 | 1,751 | 2,561 | 17 | 940 | 4,132 | 5,089 | 19% | |
| 1998 | 4,676 | 726 | 1,774 | 2,531 | 8 | 954 | 4,069 | 5,031 | 19% | |
| 1994 to 1998 average | 4,804.4 | 792.8 | 1,740.8 | 2,615.6 | 12.8 | 922.6 | 4,213.8 | 5,149.2 | 18% | |
| 1999 | 4,577 | 741 | 1,705 | 2,480 | 14 | 751 | 4,161 | 4,926 | 16% | |
| 2000 | 4,195 | 517 | 1,738 | 2,330 | 18 | 710 | 3,857 | 4,585 | 16% | |
| 2001 | 4,024 | 474 | 1,547 | 2,308 | 21 | 696 | 3,612 | 4,329 | 17% | |
| 2002 | 3,464 | 451 | 1,448 | 1,836 | 20 | 594 | 3,121 | 3,735 | 16% | |
| 2003 | 3,103 | 448 | 1,249 | 1,634 | 12 | 530 | 2,789 | 3,331 | 16% | |
| 2004 | 2,852 | 439 | 1,107 | 1,507 | 16 | 471 | 2,566 | 3,053 | 16% | |
| 2005 | 2,449 | 321 | 915 | 1,383 | 11 | 344 | 2,264 | 2,619 | 14% | |
| 2006 | 2,087 | 240 | 769 | 1,232 | 16 | 376 | 1,849 | 2,241 | 17% | |
| 2007 | 1,927 | 216 | 681 | 1,185 | 8 | 323 | 1,751 | 2,082 | 16% | |
| 2008 | 1,938 | 232 | 740 | 1,092 | 17 | 293 | 1,754 | 2,064 | 15% | |
| % change 1986 to 2008 | -67% | -74% | -59% | -69% | -39% | -77% | -65% | -67% | - | |
| % change 1994-98 average to 2008 | -60% | -71% | -57% | -58% | 33% | -68% | -58% | -60% | - | |
| % change 2007 to 2008 | 1% | 7% | 9% | -8% | 113% | -9% | 0% | -1% | - | |

Fig. 1: Child casualties by year, severity and casualty class in Greater London 1986 to 2008



Child casualties rose from 6,291 in 1986 to a peak of 6,314 in 1989 and have since been on a general downward trend, falling rapidly from 4,926 in 1999 to an all time low of 2,064 in 2008. Overall child casualties fell by 67% between 1986 and 2008.

Fatal and serious injuries fell by 39% and 77% respectively between 1986 and 2008, while slight casualties fell by 65%. Overall, collisions resulting in injury to children fell by 67% during this period.

Comparing 2008 with the 1994-98 average (the period against which progress towards the current casualty reduction targets is measured); all child casualties fell by 60%, serious injuries fell by 68% and slight by 58%. Child fatalities rose by 33% from the 1994-98 mean of 12.8 to 17 in 2008. Year on year fluctuations in fatalities are not uncommon and numbers have varied from a high of 43 in 1988 and 1989 to a low of 8 in 1998 and 2007, averaging 20 per year over the period 1986 to 2008. Overall child KSIs fell by 67% in this period.

Comparing 2008 with 2007, all child casualties fell by 1%, with serious casualties falling by 9%. Slight injuries were virtually unchanged (1,754 in 2008 compared to 1,751 in 2007); however fatalities increased from 8 to 17. KSIs fell by 6%.

The severity ratio (the percentage of fatal and serious injuries to all injuries) has generally been declining throughout this period, from a high of 23% in 1988 to a low of 15% in 2008.

The majority (an average of 53% per year) of child casualties during this period were pedestrians; vehicle passengers averaged 33% per year and driver/riders 14% per year. Driver/rider casualties showed the biggest reduction between 1986 and 2008, a decrease of 74%, while pedestrian casualties fell by 69% and passengers by 59%. Child driver/rider casualties fell by 71% between the 1994-98 average and 2008, while pedestrian casualties decreased by 58% and passengers by 57%. Comparing 2008 with 2007, child passenger casualties fell by 9%, pedestrians by 8% and driver/riders by 7%.

Casualty mode of travel

Table 2 and Figure 2 show child casualties by mode of travel in Greater London 1986 to 2008. As mentioned in the previous section, the majority of child casualties throughout this period were pedestrians. Numbers have been declining quite steadily from a high of 3,565 in 1986 to a low of 1,092 in 2008 – a reduction of 69%, with reductions of 58% between the 1994-98 average and 2008 and 8% between 2007 and 2008.

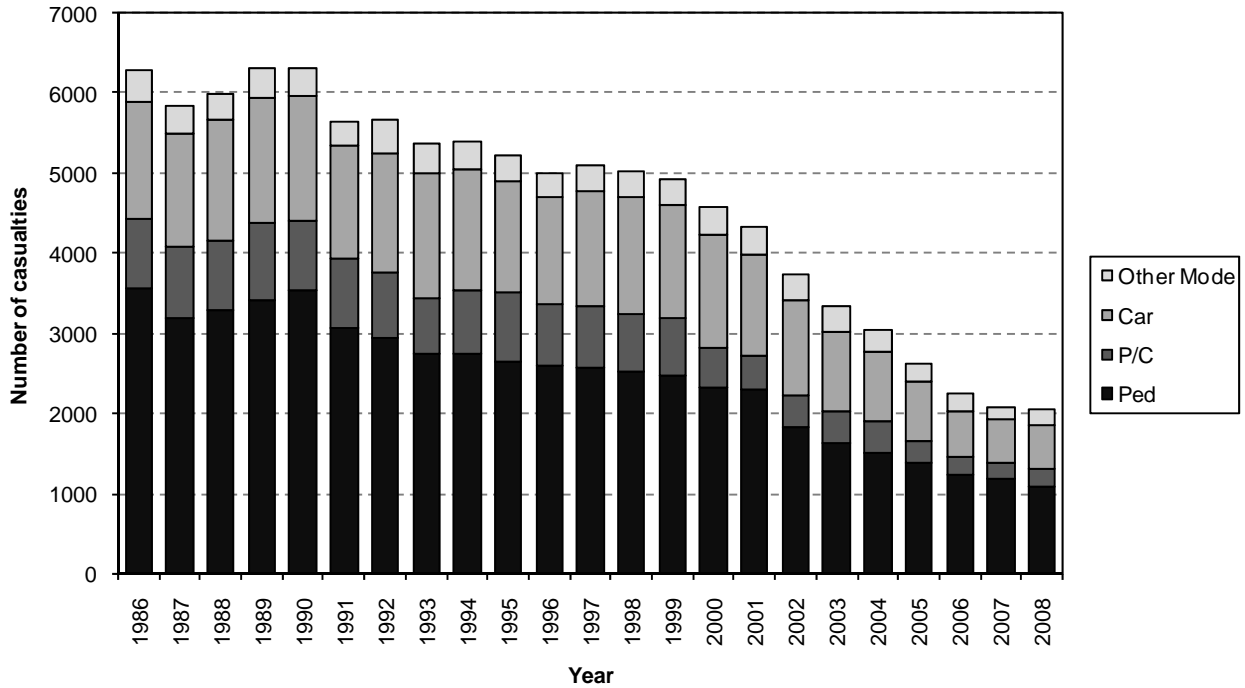
Car passengers formed the next largest group of child casualties, averaging 27% per year between 1986 and 2008. This category has also shown a general decline throughout this period, falling by 63% between both 1986 and 2008 and between the 1994-98 average and 2008. There was a very small increase (1%) in child car occupant casualties between 2007 and 2008 (531 to 537 casualties).

The third largest group of child casualties were pedal cyclists who made up an average of 13% of all child casualties per year. Numbers in this group fell by 74% between 1986 and 2008 and by 71% between the 1994-98 average and 2008. However, numbers rose by 9% (209 to 228) between 2007 and 2008.

Table 2: Child casualties by year and casualty mode of travel in Greater London 1986 to 2008

| Year | Casualty mode of travel | | | | | | | | Total |
|---|-------------------------|--------------|---------------------|----------------|--------------|--------------|---------------|---------------|----------------|
| | Pedestrian | Pedal Cycle | Powered Two Wheeler | Car | Taxi/Private | Bus/coach | Goods Vehicle | Other Vehicle | |
| 1986 | 3,565 | 866 | 46 | 1,445 | 17 | 248 | 71 | 33 | 6,291 |
| 1987 | 3,196 | 897 | 43 | 1,407 | 8 | 212 | 65 | 16 | 5,844 |
| 1988 | 3,282 | 879 | 37 | 1,510 | 19 | 202 | 52 | 15 | 5,996 |
| 1989 | 3,424 | 948 | 45 | 1,568 | 11 | 226 | 73 | 19 | 6,314 |
| 1990 | 3,540 | 855 | 46 | 1,565 | 9 | 227 | 48 | 22 | 6,312 |
| 1991 | 3,078 | 865 | 31 | 1,392 | 14 | 207 | 49 | 8 | 5,644 |
| 1992 | 2,935 | 828 | 40 | 1,493 | 18 | 261 | 41 | 46 | 5,662 |
| 1993 | 2,736 | 713 | 52 | 1,555 | 24 | 219 | 53 | 20 | 5,372 |
| 1994 | 2,748 | 786 | 37 | 1,518 | 13 | 257 | 29 | 12 | 5,400 |
| 1995 | 2,637 | 867 | 37 | 1,403 | 9 | 215 | 25 | 25 | 5,218 |
| 1996 | 2,601 | 773 | 39 | 1,335 | 21 | 204 | 21 | 14 | 5,008 |
| 1997 | 2,561 | 775 | 36 | 1,441 | 8 | 213 | 41 | 14 | 5,089 |
| 1998 | 2,531 | 709 | 39 | 1,463 | 11 | 243 | 25 | 10 | 5,031 |
| 1994 to 1998 average | 2,615.6 | 782.0 | 37.6 | 1,432.0 | 12.4 | 226.4 | 28.2 | 15.0 | 5,149.2 |
| 1999 | 2,480 | 720 | 50 | 1,403 | 7 | 215 | 40 | 11 | 4,926 |
| 2000 | 2,330 | 492 | 57 | 1,407 | 6 | 255 | 23 | 15 | 4,585 |
| 2001 | 2,308 | 423 | 89 | 1,262 | 8 | 210 | 17 | 12 | 4,329 |
| 2002 | 1,836 | 395 | 94 | 1,173 | 10 | 176 | 23 | 28 | 3,735 |
| 2003 | 1,634 | 389 | 77 | 992 | 6 | 193 | 21 | 19 | 3,331 |
| 2004 | 1,507 | 393 | 72 | 870 | 6 | 162 | 20 | 23 | 3,053 |
| 2005 | 1,383 | 283 | 56 | 727 | 1 | 143 | 12 | 14 | 2,619 |
| 2006 | 1,232 | 218 | 32 | 586 | 8 | 146 | 6 | 13 | 2,241 |
| 2007 | 1,185 | 209 | 21 | 531 | 7 | 121 | 6 | 2 | 2,082 |
| 2008 | 1,092 | 228 | 20 | 537 | 3 | 156 | 8 | 20 | 2,064 |
| % change 1986 to 2008 | -69% | -74% | -57% | -63% | -82% | -37% | -89% | -39% | -67% |
| % change 1994-98 average to 2008 | -58% | -71% | -47% | -63% | -76% | -31% | -72% | 33% | -60% |
| % change 2007 to 2008 | -8% | 9% | -5% | 1% | -57% | 29% | 33% | 900% | -1% |

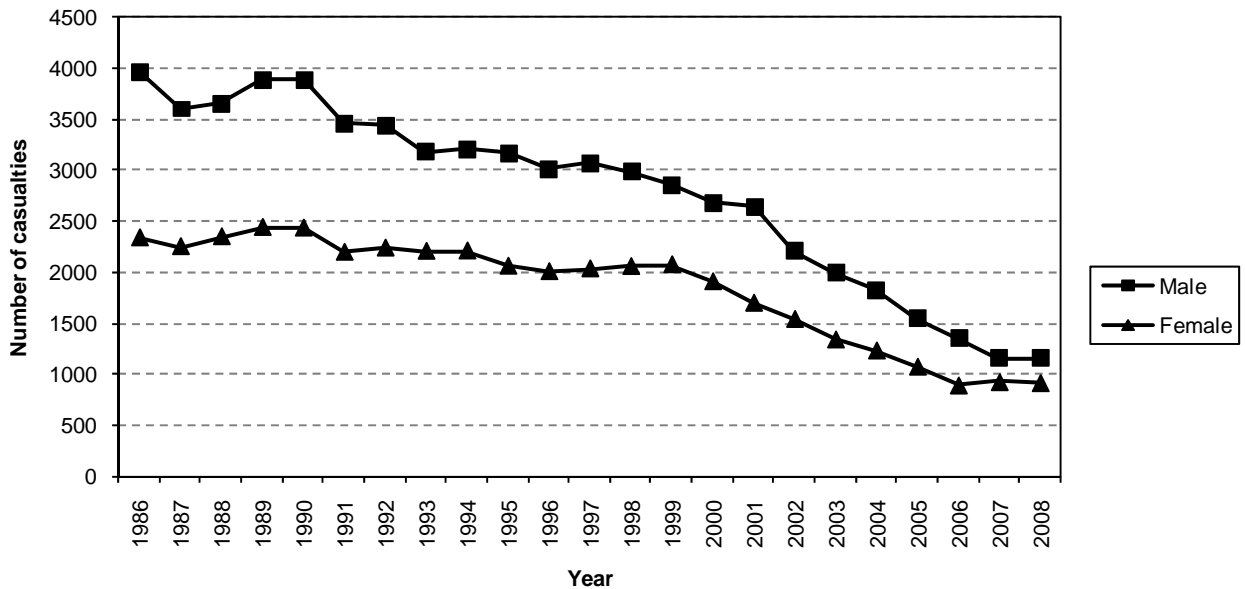
Fig. 2: Child casualties by year and mode of travel in Greater London 1986 to 2008



Casualty gender

Figure 3 shows child casualties by gender in Greater London 1986 to 2008.

Fig. 3: Child casualties by year and gender in Greater London 1986 to 2008

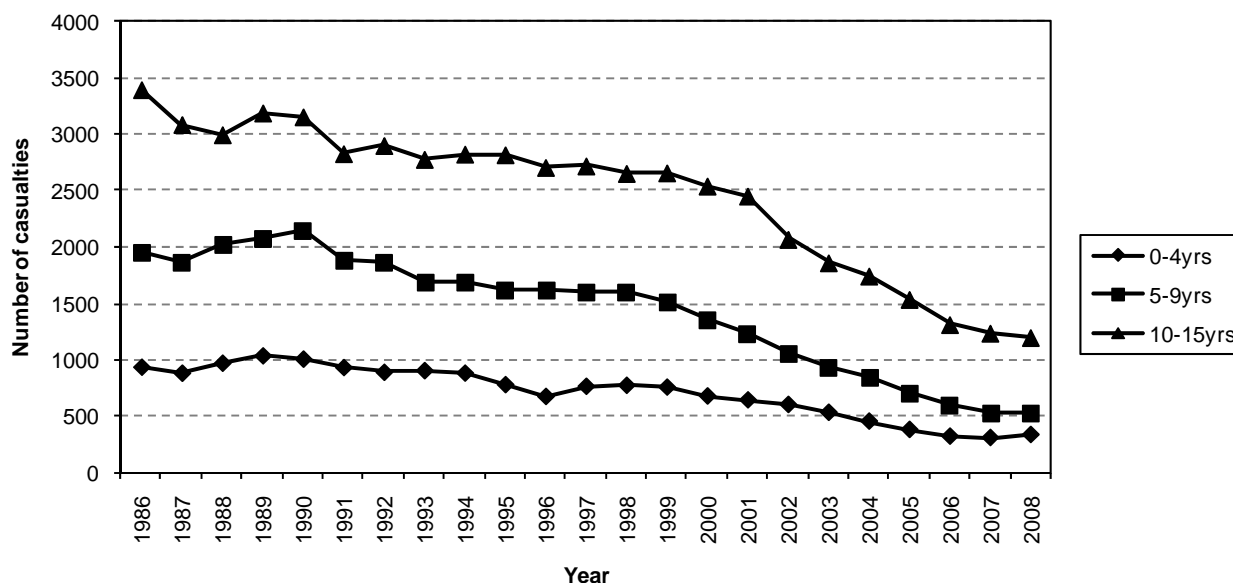


Over the whole period males accounted for an average of 60% of child casualties and females 40%. However, the male-female split has narrowed during this time - males made up 63% and females 37% of child casualties in 1986, but by 2008 males represented 56% and females 44% of the total. Both male and female child casualties have shown a general downward trend since 1986, reducing by 71% and 67% respectively between 1986 and 2008, 63% and 60% respectively between the 1994-98 average and 2008. Both genders fell by 1% between 2007 and 2008.

Casualty age

Figure 4 shows child casualties by year and age (banded) in Greater London from 1986 to 2008.

Fig. 4: Child casualties by year and age (banded) in Greater London 1986 to 2008



On average throughout this period just over half (52%) of child casualties were aged between 10 and 15 years. 0 to 4 year olds averaged 15% of child casualties and 5-9 year olds 29%. The distribution of casualties across these age bands remained quite consistent throughout this period.

Casualty numbers have fallen in each of the age bands, with 0-4 year olds falling by 64%, 5-9 year olds by 73% and 10-15 year olds by 65% between 1986 and 2008. There were reductions of 57%, 67% and 56% respectively between the 1994-98 average and 2008. 5-9 year old casualties fell by 1% between 2007 and 2008 and 10-15 year olds by 3%. There was however a 9% increase in casualties in the 0-4 year old age band between 2007 and 2008 (a rise of 27 casualties).

Child casualties in Greater London in 2008

The remainder of this factsheet provides a more detailed analysis of child casualties in Greater London in 2008. This is the most recent year for which finalised data are available.

How many?

During 2009 there were 23,116 personal injury road traffic collisions reported to the police in the Greater London area. Of these collisions, 1,938 (8%) involved injury to children and resulted in 2,064 child casualties. Children represented 7% of the total casualties in Greater London in 2008. In contrast in Great Britain as a whole, child casualties accounted for 9.5% of all casualties in 2008.

Table 3 shows child casualties by class, gender and severity in Greater London in 2008. The majority (85%) of child casualties were slightly injured, with 14% suffering serious injury and 1% being killed. In total, child casualties killed or seriously injured accounted for 9% of all road user KSIs in Greater London.

56% of child casualties were male with 44% female. 53% of children injured were pedestrians (57% male, 43% female), 36% were passengers in vehicles (46% male, 54% female) and 11% were driver/riders (84% male, 16% female).

Table 3: Child casualties by casualty class, gender, severity & severity ratio in Greater London 2008

| | | Severity of casualty | | | Total | Severity ratio |
|--------|--------------|----------------------|------------|--------------|--------------|----------------|
| | | Fatal | Serious | Slight | | |
| Male | Driver/Rider | 1 | 32 | 163 | 196 | 17% |
| | Passenger | 1 | 21 | 318 | 340 | 6% |
| | Pedestrian | 12 | 119 | 486 | 617 | 21% |
| | Total | 14 | 172 | 967 | 1,153 | 16% |
| Female | Driver/Rider | 0 | 4 | 32 | 36 | 11% |
| | Passenger | 2 | 23 | 375 | 400 | 6% |
| | Pedestrian | 1 | 94 | 380 | 475 | 20% |
| | Total | 3 | 121 | 787 | 911 | 14% |
| All | Driver/Rider | 1 | 36 | 195 | 232 | 16% |
| | Passenger | 3 | 44 | 693 | 740 | 6% |
| | Pedestrian | 13 | 213 | 866 | 1,092 | 21% |
| | Total | 17 | 293 | 1,754 | 2,064 | 15% |

Who?

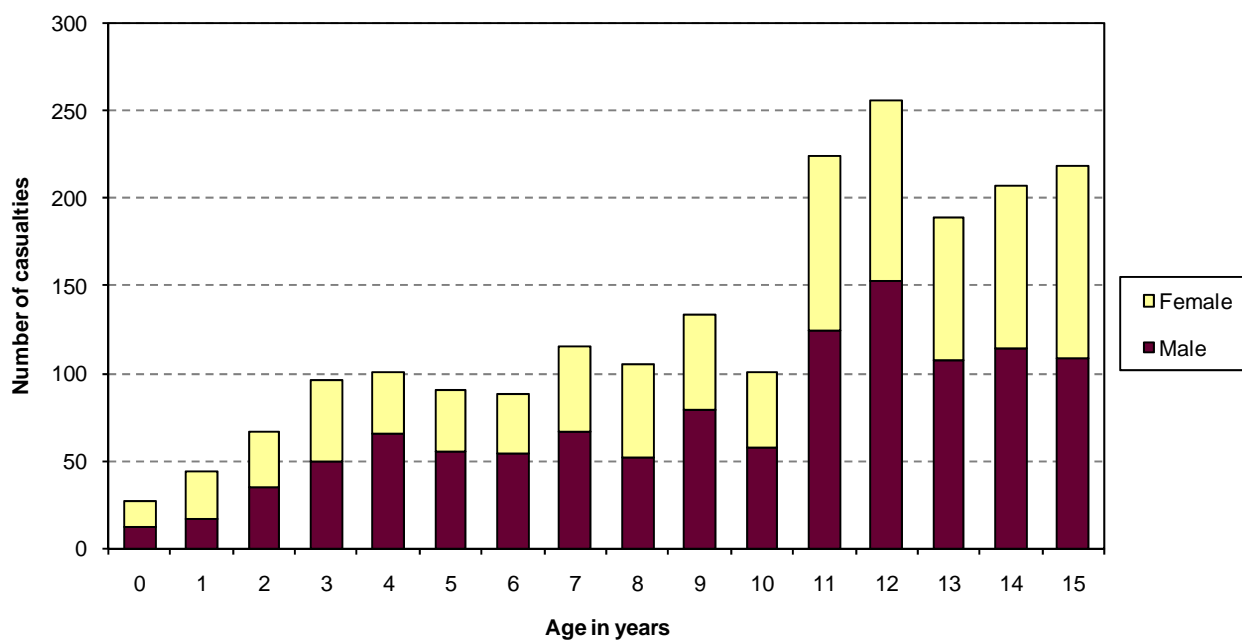
Age and gender

Table 4 and Figure 5 show the number of child casualties by age, gender, severity and whether they were recorded as being on a school journey in Greater London in 2008.

Table 4: Child casualties by age, gender, severity and school journey in Greater London 2008

| Casualty age | Casualty gender | | Severity of casualty | | | Total | % of Total | Severity ratio | School Journey |
|--------------|-----------------|------------|----------------------|------------|--------------|--------------|-------------|----------------|----------------|
| | Male | Female | Fatal | Serious | Slight | | | | |
| 0 | 13 | 14 | 1 | 5 | 21 | 27 | 1% | 22% | 1 |
| 1 | 17 | 27 | 3 | 5 | 36 | 44 | 2% | 18% | 0 |
| 2 | 35 | 32 | 1 | 6 | 60 | 67 | 3% | 10% | 0 |
| 3 | 50 | 46 | 0 | 20 | 76 | 96 | 5% | 21% | 2 |
| 4 | 66 | 35 | 1 | 14 | 86 | 101 | 5% | 15% | 18 |
| 5 | 55 | 36 | 1 | 10 | 80 | 91 | 4% | 12% | 15 |
| 6 | 54 | 34 | 0 | 13 | 75 | 88 | 4% | 15% | 10 |
| 7 | 67 | 48 | 0 | 15 | 100 | 115 | 6% | 13% | 11 |
| 8 | 52 | 53 | 0 | 7 | 98 | 105 | 5% | 7% | 17 |
| 9 | 79 | 55 | 0 | 13 | 121 | 134 | 6% | 10% | 25 |
| 10 | 58 | 43 | 1 | 15 | 85 | 101 | 5% | 16% | 20 |
| 11 | 124 | 100 | 3 | 37 | 184 | 224 | 11% | 18% | 69 |
| 12 | 153 | 103 | 1 | 39 | 216 | 256 | 12% | 16% | 100 |
| 13 | 107 | 82 | 1 | 23 | 165 | 189 | 9% | 13% | 37 |
| 14 | 114 | 93 | 1 | 29 | 177 | 207 | 10% | 14% | 53 |
| 15 | 109 | 110 | 3 | 42 | 174 | 219 | 11% | 21% | 47 |
| Total | 1,153 | 911 | 17 | 293 | 1,754 | 2,064 | 100% | 15% | 425 |

Fig. 5: Child casualties by age and gender in Greater London 2008



Over half (53%) of children injured in road traffic collisions were aged between 11 and 15 years, of these 55% were boys and 45% girls. 28% of casualties in this age range were injured on their journey to or from school.

Just under a quarter (23%) of child casualties were aged 11 or 12 years (58% male and 42% female). 35% of these casualties were injured on the school journey. This peak coincides with the age that most children move from primary school to secondary school and therefore may be travelling greater distances independently for the first time.

The highest severity ratio (22%) was recorded for casualties under one year old. There was however a very small number of casualties of this age, representing just 1% of the total (6 KSIs out of 27 casualties). Casualties aged 15 years, who represented 11% of the total child casualties (45 KSIs out of 219 injured), had the next highest severity ratio (21%).

Mode of travel

Table 5 and Figure 6 show child casualties by mode of travel, gender and severity.

Over half (53%) of all child casualties were pedestrians (57% male and 43% female). Child pedestrians accounted for just over three quarters (76%) of child fatalities and for just under three quarters (73%) of serious child casualties. Overall, child pedestrian KSI casualties accounted for 73% of all child KSI casualties in Greater London in 2008.

Car occupants were the next largest group, making up just over a quarter (26%) of all child casualties (45% male and 55% female) and 9% of child KSIs.

11% of child casualties were pedal cyclists, many more boys than girls were injured using this mode – 83% male to 17% female. Pedal cyclists made up 10% of child KSIs.

16 of the 17 child fatalities were pedestrians or car occupants; the remaining fatality was an underage (15 years old) moped rider.

Table 5: Child casualties by gender, severity and mode of travel in Greater London 2008

| Mode of Travel | Casualty gender | | Severity of casualty | | | Total | % of Total | Severity ratio |
|-------------------|-----------------|------------|----------------------|------------|--------------|--------------|-------------|----------------|
| | Male | Female | Fatal | Serious | Slight | | | |
| Pedestrian | 617 | 475 | 13 | 213 | 866 | 1,092 | 53% | 21% |
| Pedal Cycle | 190 | 38 | 0 | 32 | 196 | 228 | 11% | 14% |
| Powered 2 Wheeler | 14 | 6 | 1 | 7 | 12 | 20 | 1% | 40% |
| Car | 239 | 298 | 3 | 24 | 510 | 537 | 26% | 5% |
| Taxi | 0 | 3 | 0 | 0 | 3 | 3 | 0% | 0% |
| Bus Or Coach | 76 | 80 | 0 | 15 | 141 | 156 | 8% | 10% |
| Goods Vehicle | 3 | 5 | 0 | 1 | 7 | 8 | 0% | 13% |
| Other Vehicle | 14 | 6 | 0 | 1 | 19 | 20 | 1% | 5% |
| Total | 1,153 | 911 | 17 | 293 | 1,754 | 2,064 | 100% | 15% |

Fig. 6: Child casualties by mode of travel and severity in Greater London 2008

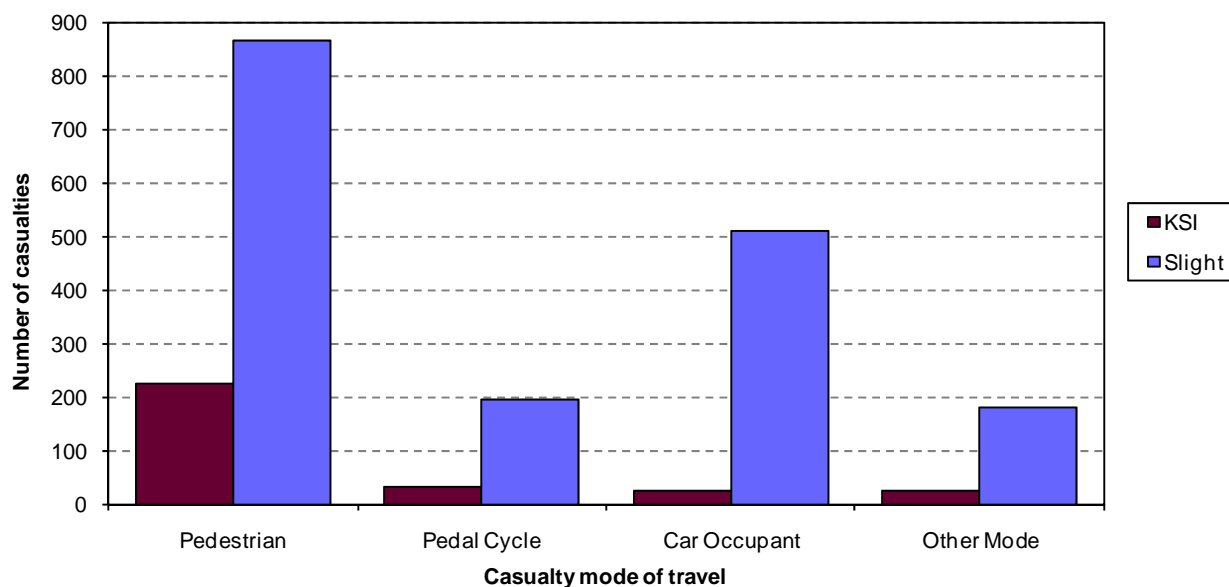


Table 6 shows child casualties by age and mode of travel. 79% of child pedal cyclist and 55% of child pedestrian casualties were aged between 11 and 15 years, illustrating again the peak in casualties in this age group as children generally move to secondary school from age 11.

Table 6: Child casualties by age and mode of travel in Greater London 2008

| Casualty age | Pedestrian | Pedal cyclist | Car Occupant | Other Mode | Total | % of Total |
|--------------|--------------|---------------|--------------|------------|--------------|-------------|
| 0 | 4 | 0 | 12 | 11 | 27 | 1% |
| 1 | 17 | 0 | 16 | 11 | 44 | 2% |
| 2 | 24 | 1 | 26 | 16 | 67 | 3% |
| 3 | 47 | 2 | 25 | 22 | 96 | 5% |
| 4 | 54 | 2 | 29 | 16 | 101 | 5% |
| 5 | 57 | 4 | 21 | 9 | 91 | 4% |
| 6 | 55 | 1 | 24 | 8 | 88 | 4% |
| 7 | 65 | 9 | 33 | 8 | 115 | 6% |
| 8 | 55 | 7 | 36 | 7 | 105 | 5% |
| 9 | 65 | 12 | 44 | 13 | 134 | 6% |
| 10 | 45 | 11 | 39 | 6 | 101 | 5% |
| 11 | 128 | 24 | 60 | 12 | 224 | 11% |
| 12 | 151 | 48 | 48 | 9 | 256 | 12% |
| 13 | 101 | 44 | 35 | 9 | 189 | 9% |
| 14 | 109 | 33 | 46 | 19 | 207 | 10% |
| 15 | 115 | 30 | 43 | 31 | 219 | 11% |
| Total | 1,092 | 228 | 537 | 207 | 2,064 | 100% |

School journey

Table 7 shows child casualties by casualty class, school journey and severity. Overall, 21% of child casualties were recorded as being injured on their journey to or from school. Three quarters (75%) of children injured on the school journey were pedestrians, 18% vehicle passengers and 7% pedal cyclists.

Table 7: Child casualties by casualty class, journey to/from school and severity in Greater London 2008

| | | Severity of casualty | | | Total | Severity ratio |
|------------------------|--------------|----------------------|------------|--------------|--------------|----------------|
| | | Fatal | Serious | Slight | | |
| Other Journey | Driver/Rider | 1 | 31 | 172 | 204 | 16% |
| | Passenger | 3 | 39 | 620 | 662 | 6% |
| | Pedestrian | 9 | 156 | 608 | 773 | 21% |
| | Total | 13 | 226 | 1,400 | 1,639 | 15% |
| Journey to/from school | Driver/Rider | 0 | 5 | 23 | 28 | 18% |
| | Passenger | 0 | 5 | 73 | 78 | 6% |
| | Pedestrian | 4 | 57 | 258 | 319 | 19% |
| | Total | 4 | 67 | 354 | 425 | 17% |
| Total | Driver/Rider | 1 | 36 | 195 | 232 | 16% |
| | Passenger | 3 | 44 | 693 | 740 | 6% |
| | Pedestrian | 13 | 213 | 866 | 1,092 | 21% |
| | Total | 17 | 293 | 1,754 | 2,064 | 15% |

Where?

Table 8 shows the number of child casualties by borough, severity and percentage change in KSI casualties in 2008 over 1994-98 average.

Just under two thirds (65%) of child casualties were injured on roads in outer London boroughs, this included 59% of fatalities, 62% of serious injuries and 65% of slight injuries. Despite these numbers, the average severity ratio was slightly higher in inner London (16% compared to 14% in outer London).

Regarding progress towards the 2010 casualty reduction targets, KSI casualties fell by 67% between the 1994-98 average and 2008 in both inner and outer London.

Table 8: Child casualties by borough, severity and KSI percentage change in 2008 over 1994-98 average in Greater London

| Borough | Fatal | Serious | Slight | Total | Severity ratio | 1994-98 KSI average | 2008 KSI total | % change 1994-98 average to 2008 KSI |
|-----------------------------|------------|------------|--------------|--------------|----------------|---------------------|----------------|--------------------------------------|
| City of London | 0 | 1 | 3 | 4 | 25% | 2 | 1 | -50% |
| Westminster | 1 | 7 | 42 | 50 | 16% | 22.6 | 8 | -65% |
| Camden | 0 | 4 | 23 | 27 | 15% | 24.6 | 4 | -84% |
| Islington | 0 | 7 | 28 | 35 | 20% | 18.6 | 7 | -62% |
| Hackney | 0 | 17 | 65 | 82 | 21% | 38.8 | 17 | -56% |
| Tower Hamlets | 0 | 12 | 74 | 86 | 14% | 27.4 | 12 | -56% |
| Greenwich | 3 | 13 | 75 | 91 | 18% | 37 | 16 | -57% |
| Lewisham | 2 | 14 | 67 | 83 | 19% | 41.4 | 16 | -61% |
| Southwark | 0 | 8 | 64 | 72 | 11% | 34 | 8 | -76% |
| Lambeth | 1 | 11 | 70 | 82 | 15% | 45 | 12 | -73% |
| Wandsworth | 0 | 9 | 43 | 52 | 17% | 28.8 | 9 | -69% |
| Hammersmith & Fulham | 0 | 5 | 27 | 32 | 16% | 18.4 | 5 | -73% |
| Kensington & Chelsea | 0 | 2 | 28 | 30 | 7% | 11.2 | 2 | -82% |
| Total inner London | 7 | 110 | 609 | 726 | 16% | 349.8 | 117 | -67% |
| % of Greater London | 41% | 38% | 35% | 35% | - | - | - | - |
| Waltham Forest | 1 | 16 | 79 | 96 | 18% | 30 | 17 | -43% |
| Redbridge | 1 | 7 | 71 | 79 | 10% | 26 | 8 | -69% |
| Havering | 0 | 8 | 62 | 70 | 11% | 35.6 | 8 | -78% |
| Barking & Dagenham | 0 | 5 | 62 | 67 | 7% | 30 | 5 | -83% |
| Newham | 0 | 17 | 78 | 95 | 18% | 43 | 17 | -60% |
| Bexley | 0 | 14 | 61 | 75 | 19% | 24.6 | 14 | -43% |
| Bromley | 1 | 15 | 58 | 74 | 22% | 33.6 | 16 | -52% |
| Croydon | 1 | 15 | 81 | 97 | 16% | 41.8 | 16 | -62% |
| Sutton | 0 | 7 | 40 | 47 | 15% | 21.6 | 7 | -68% |
| Merton | 0 | 2 | 35 | 37 | 5% | 20.8 | 2 | -90% |
| Kingston | 0 | 2 | 37 | 39 | 5% | 13.4 | 2 | -85% |
| Richmond | 0 | 4 | 26 | 30 | 13% | 14.2 | 4 | -72% |
| Hounslow | 0 | 9 | 73 | 82 | 11% | 29.2 | 9 | -69% |
| Hillingdon | 1 | 8 | 66 | 75 | 12% | 37.4 | 9 | -76% |
| Ealing | 1 | 11 | 52 | 64 | 19% | 34.8 | 12 | -66% |
| Brent | 2 | 11 | 47 | 60 | 22% | 42.4 | 13 | -69% |
| Harrow | 0 | 5 | 38 | 43 | 12% | 19.8 | 5 | -75% |
| Barnet | 1 | 11 | 72 | 84 | 14% | 31 | 12 | -61% |
| Haringey | 1 | 8 | 47 | 56 | 16% | 23.2 | 9 | -61% |
| Enfield | 0 | 8 | 60 | 68 | 12% | 33.2 | 8 | -76% |
| Total outer London | 10 | 183 | 1,145 | 1,338 | 14% | 585.6 | 193 | -67% |
| % of Greater London | 59% | 62% | 65% | 65% | - | - | - | - |
| Total Greater London | 17 | 293 | 1,754 | 2,064 | 15% | 935.4 | 310 | -67% |

Table 9 shows child casualties by borough, casualty class, gender and casualty rate per 1,000 child population in Greater London in 2008. The split between inner and outer London was similar for all casualty classes, with approximately one third of child driver/riders, passengers and pedestrians being injured in inner London (34%, 34% and 36% respectively), and two thirds in outer London (66%, 66% and 64% respectively). The same proportions applied to casualty gender, with 35% of both male and female children being injured in inner London and 65% in outer London.

In terms of casualty rate, there were 1.40 child casualties per 1,000 child population in Greater London, with 1.49 in inner London and 1.36 in outer London. The high rate recorded for the City (5.93) is down to the very low child population registered for the Square Mile (only 674 children – ONS 2008 mid year estimate).

Table 9: Child casualties by borough, casualty class, gender and rate per 1,000 child population in Greater London 2008

| Borough | Gender | | Casualty class | | | Casualty rate per 1,000 | |
|-----------------------------|--------------|------------|----------------|------------|--------------|-------------------------|-------------|
| | Male | Female | Driver/rider | Passenger | Pedestrian | Total child population | |
| City of London | 1 | 3 | 0 | 3 | 1 | 4 | 5.93 |
| Westminster | 29 | 21 | 3 | 19 | 28 | 50 | 1.63 |
| Camden | 14 | 13 | 3 | 9 | 15 | 27 | 0.75 |
| Islington | 20 | 15 | 5 | 10 | 20 | 35 | 1.15 |
| Hackney | 50 | 32 | 12 | 29 | 41 | 82 | 1.77 |
| Tower Hamlets | 49 | 37 | 7 | 39 | 40 | 86 | 1.94 |
| Greenwich | 53 | 38 | 3 | 34 | 54 | 91 | 1.94 |
| Lewisham | 42 | 41 | 13 | 35 | 35 | 83 | 1.61 |
| Southwark | 46 | 26 | 12 | 16 | 44 | 72 | 1.46 |
| Lambeth | 43 | 39 | 10 | 19 | 53 | 82 | 1.69 |
| Wandsworth | 29 | 23 | 5 | 16 | 31 | 52 | 1.15 |
| Hammersmith & Fulham | 16 | 16 | 0 | 11 | 21 | 32 | 1.13 |
| Kensington & Chelsea | 16 | 14 | 5 | 15 | 10 | 30 | 1.08 |
| Total inner London | 408 | 318 | 78 | 255 | 393 | 726 | 1.49 |
| % of Greater London | 35% | 35% | 34% | 34% | 36% | 35% | - |
| Waltham Forest | 58 | 38 | 9 | 37 | 50 | 96 | 2.01 |
| Redbridge | 48 | 31 | 2 | 37 | 40 | 79 | 1.41 |
| Havering | 36 | 34 | 11 | 34 | 25 | 70 | 1.60 |
| Barking & Dagenham | 36 | 31 | 8 | 19 | 40 | 67 | 1.62 |
| Newham | 55 | 40 | 5 | 28 | 62 | 95 | 1.59 |
| Bexley | 36 | 39 | 15 | 22 | 38 | 75 | 1.67 |
| Bromley | 40 | 34 | 10 | 30 | 34 | 74 | 1.24 |
| Croydon | 51 | 46 | 10 | 36 | 51 | 97 | 1.37 |
| Sutton | 24 | 23 | 8 | 14 | 25 | 47 | 1.25 |
| Merton | 22 | 15 | 8 | 15 | 14 | 37 | 1.00 |
| Kingston | 25 | 14 | 6 | 16 | 17 | 39 | 1.34 |
| Richmond | 21 | 9 | 8 | 9 | 13 | 30 | 0.84 |
| Hounslow | 45 | 37 | 15 | 26 | 41 | 82 | 1.87 |
| Hillingdon | 41 | 34 | 7 | 29 | 39 | 75 | 1.45 |
| Ealing | 29 | 35 | 6 | 22 | 36 | 64 | 1.09 |
| Brent | 34 | 26 | 5 | 15 | 40 | 60 | 1.17 |
| Harrow | 26 | 17 | 7 | 11 | 25 | 43 | 1.01 |
| Barnet | 46 | 38 | 4 | 34 | 46 | 84 | 1.24 |
| Haringey | 35 | 21 | 4 | 18 | 34 | 56 | 1.27 |
| Enfield | 37 | 31 | 6 | 33 | 29 | 68 | 1.10 |
| Total outer London | 745 | 593 | 154 | 485 | 699 | 1,338 | 1.36 |
| % Greater London | 65% | 65% | 66% | 66% | 64% | 65% | - |
| Total Greater London | 1,153 | 911 | 232 | 740 | 1,092 | 2,064 | 1.40 |

Source of population data: Population Estimates Unit, ONS: Crown Copyright.

Table 10 shows child casualties by highway authority and severity. By far the greatest number (81%) of injuries occurred on borough roads. These accounted for 88% of fatalities, 83% of serious and 80% of slight child casualties. The highest severity ratio (15%) was also recorded for casualties injured on borough roads. Just under 19% of child casualties were injured on the Transport for London Road Network (TLRN), with less than 1% on Highways Agency (HA) roads.

Table 10: Child casualties by highway authority, severity and severity ratio in Greater London 2008

| | Severity of casualty | | | Total | % of total | Severity ratio |
|----------------------|----------------------|------------|--------------|--------------|-------------|----------------|
| | Fatal | Serious | Slight | | | |
| TLRN | 1 | 50 | 332 | 383 | 19% | 13% |
| Highways Agency Road | 1 | 0 | 13 | 14 | 1% | 7% |
| Borough Road | 15 | 243 | 1,409 | 1,667 | 81% | 15% |
| Total | 17 | 293 | 1,754 | 2,064 | 100% | 15% |

Table 11 shows child casualties by road class and severity. 49% occurred on 'A' class roads, 42% on 'C' class or unclassified roads, 9% on 'B' class roads and less than 1% on motorways. The highest severity ratio (18%) was recorded on unclassified roads. The vast majority (96%) of child casualties were injured on roads subject to a 30mph speed limit.

Table 11: Child casualties by road class, severity and severity ratio in Greater London 2008

| First road class | Severity of casualty | | | Total | % of total | Severity ratio |
|------------------|----------------------|------------|--------------|--------------|-------------|----------------|
| | Fatal | Serious | Slight | | | |
| Motorway | 1 | 0 | 13 | 14 | 1% | 7% |
| A | 4 | 133 | 875 | 1,012 | 49% | 14% |
| B | 4 | 24 | 150 | 178 | 9% | 16% |
| C | 3 | 39 | 247 | 289 | 14% | 15% |
| Unclassified | 5 | 97 | 469 | 571 | 28% | 18% |
| Total | 17 | 293 | 1,754 | 2,064 | 100% | 15% |

Table 12 shows child casualties by junction detail and junction control. 66% were injured at or within 20m of a junction. Of these 60% occurred at a 'T' or staggered junction and 21% at a crossroads. Of those injured at a junction, 75% occurred where the junction control was 'Give Way' and 24% were at a junction controlled by automatic traffic signals.

Table 12: Child casualties by junction control and junction detail in Greater London 2008

| Junction detail | Junction control | | | | | Total |
|---------------------------|------------------|-------------------|---------------------------|-----------|--------------------------|--------------|
| | Not applicable | Authorised Person | Automatic Traffic Signals | Stop Sign | Give Way or Uncontrolled | |
| Roundabout | 0 | 0 | 11 | 0 | 60 | 71 |
| Mini-Roundabout | 0 | 0 | 0 | 0 | 18 | 18 |
| T & Staggered Jct | 0 | 5 | 115 | 2 | 686 | 808 |
| Slip Road | 0 | 0 | 3 | 2 | 20 | 25 |
| Crossroads | 0 | 1 | 166 | 0 | 119 | 286 |
| Multi Junction | 0 | 0 | 17 | 0 | 8 | 25 |
| Private Drive | 0 | 0 | 1 | 0 | 34 | 35 |
| Other | 0 | 1 | 13 | 1 | 69 | 84 |
| Total at junctions | 0 | 7 | 326 | 5 | 1,014 | 1,352 |
| No junction in 20m | 712 | 0 | 0 | 0 | 0 | 712 |
| Total | 712 | 7 | 326 | 5 | 1,014 | 2,064 |

Road surface/weather

The majority of child casualties were injured on a dry road surface (83%) and in fine weather conditions (86%).

When?

Figures 7, 8 and 9 show the number of child casualties by time of day, day of week and month in Greater London in 2008. They also indicate the proportions occurring during the hours of darkness.

Time of day

82% of child casualties were injured between 7am and 7pm. Within this 12 hour period there were two clear peaks, a single hour in the morning – 8am to 9am, resulting in 10% of child casualties, and a three hour period in the afternoon – 3pm to 6pm, resulting in 37% of child casualties. The highest single hour was between 3pm and 4pm with 15% of child casualties being injured. These peak periods coincide with peak traffic times and school arrival and departure times.

81% of child casualties were injured during daylight hours.

Day of week

Child casualties were quite evenly spread through the week with 75% being injured on a week day, an average of 15% per day. 14% of child injuries occurred on a Saturday and 11% on a Sunday.

The highest proportion of child casualties injured in the dark (24%) occurred on a Saturday.

Month of year

There were two noticeable peaks in child casualties through the year, the first from May to July (31%) and then the second from September to October (19%). The highest single month was May with 11% of child casualties and the lowest was January with 5%. Child casualty numbers fell during August to 7% while the months either side were higher (10% in July and 9% in September).

Over a third of casualties in January, November and December were injured during the hours of darkness, peaking in December with 43%.

Fig. 7: Child casualties by time and light conditions in Greater London 2008

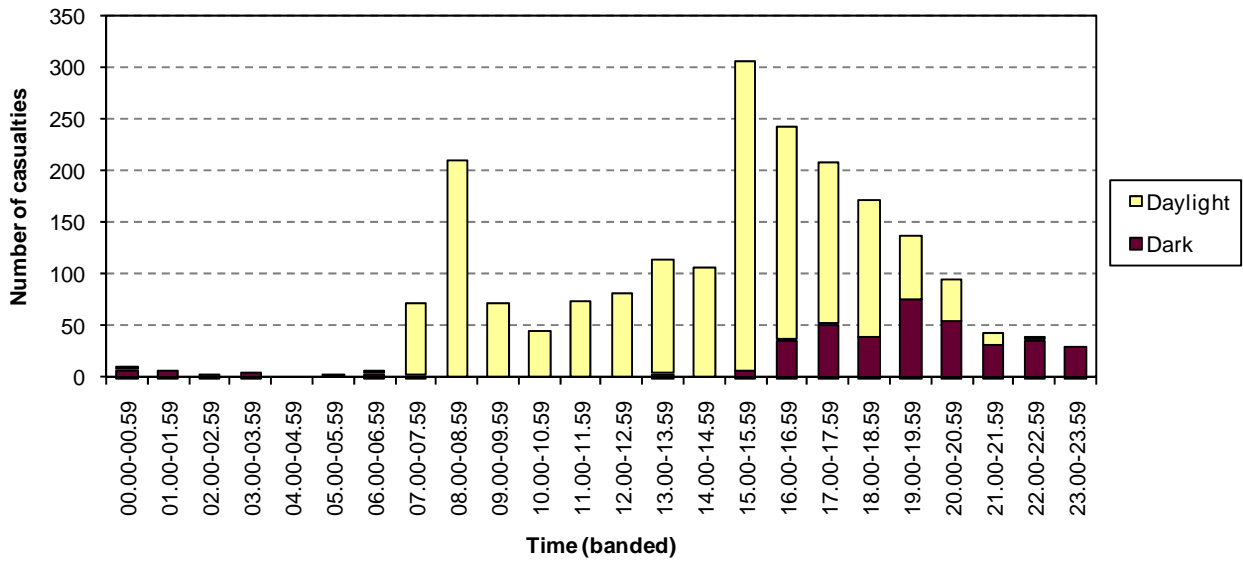


Fig. 8: Child casualties by day and light conditions in Greater London 2008

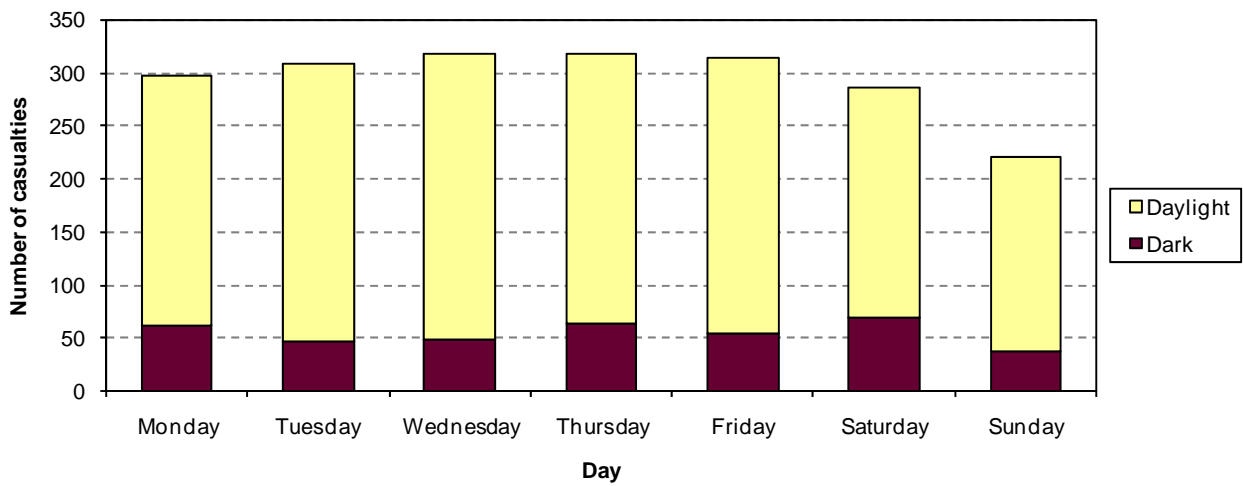
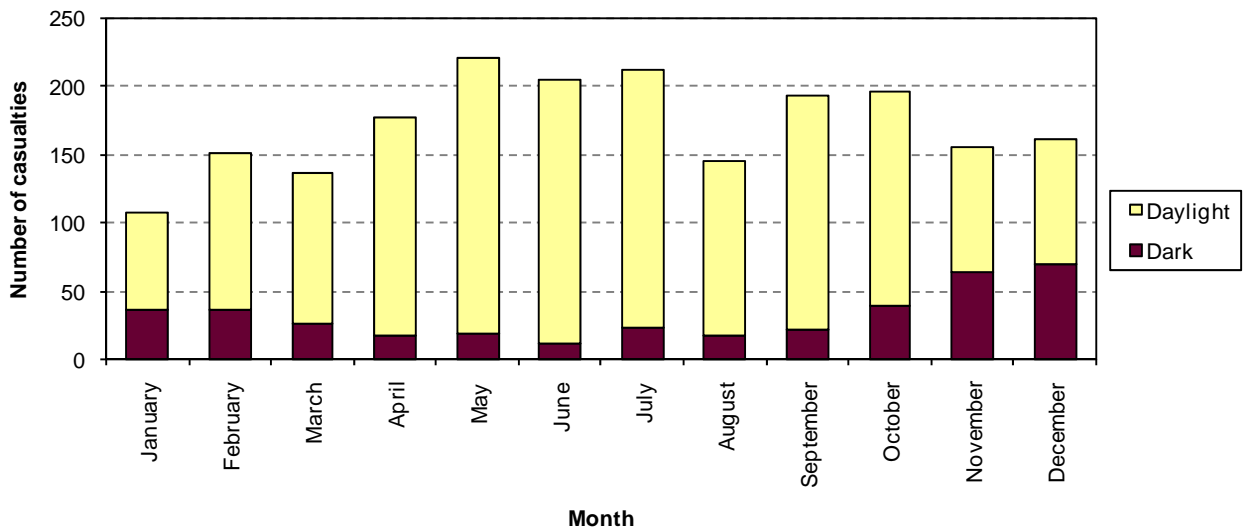


Fig. 9: Child casualties by month and light conditions in Greater London 2008



Vehicle involvement

This section looks briefly at the vehicles involved in some of the collisions resulting in child casualties – those involved in conflict with child pedestrians; pedal cycles ridden by children i.e. where the child was in control of the vehicle, and finally children injured as bus/coach passengers.

Vehicle involvement in child pedestrian collisions

Table 13 shows child pedestrian casualties by severity and the vehicle they were in direct conflict with. By far the largest number of child pedestrians were injured by cars (79%), this included 69% of fatalities, 77% of serious injuries and 80% of slight injuries. 6% of child pedestrians were injured by a bus or coach (15% fatal, 6% serious and 5% slight). A further 6% were injured in conflicts with powered two wheelers and 4% were injured in conflicts with light goods vehicles (3.5T or under).

Table 13: Child pedestrian casualties by vehicle in conflict with and severity in Greater London 2008

| Vehicle Type | Severity of casualty | | | Total | % of Total |
|---------------------------|----------------------|------------|------------|-------------|-------------|
| | Fatal | Serious | Slight | | |
| Pedal Cycle | 0 | 0 | 11 | 11 | 1% |
| M/C <= 50cc | 0 | 2 | 8 | 10 | 1% |
| M/C 50-125cc | 0 | 3 | 20 | 23 | 2% |
| M/C 125-500cc | 0 | 1 | 8 | 9 | 1% |
| M/C > 500cc | 1 | 1 | 16 | 18 | 2% |
| Private Hire - Licensed | 0 | 2 | 2 | 4 | 0% |
| Private Hire - Unlicensed | 0 | 0 | 3 | 3 | 0% |
| Taxi | 1 | 6 | 13 | 20 | 2% |
| Car | 9 | 164 | 692 | 865 | 79% |
| Bus/Coach | 2 | 13 | 47 | 62 | 6% |
| Other Motor Vehicle | 0 | 6 | 13 | 19 | 2% |
| Other Non Motor Vehicle | 0 | 0 | 1 | 1 | 0% |
| Agricultural Vehicle | 0 | 0 | 1 | 1 | 0% |
| Goods Vehicle =< 3.5t | 0 | 11 | 30 | 41 | 4% |
| Goods Vehicle 3.5-7.5t | 0 | 1 | 1 | 2 | 0% |
| Goods Vehicle => 7.5t | 0 | 3 | 0 | 3 | 0% |
| Total | 13 | 213 | 866 | 1092 | 100% |

Child pedal cyclists

Table 14 shows child pedal cyclist casualties by manoeuvre and severity. Over 80% of child pedal cyclist casualties were either 'going ahead' or 'going ahead but held up', i.e. not carrying out any particular manoeuvre. 9% of child cyclists were injured when turning or waiting to turn either left or right (5% left and 4% right). A further 3% were injured when moving off from a stationary position.

Table 14: Child pedal cyclist casualties by vehicle manoeuvre & severity in Greater London 2008

| Vehicle manoeuvre | Severity of casualty | | | Total | % of Total |
|---------------------------------------|----------------------|------------|--|------------|-------------|
| | Serious | Slight | | | |
| Reversing | 0 | 1 | | 1 | 0% |
| Going Ahead But Held Up | 0 | 6 | | 6 | 3% |
| Slowing or Stopping | 0 | 2 | | 2 | 1% |
| Moving Off | 3 | 3 | | 6 | 3% |
| Turning Left | 1 | 7 | | 8 | 4% |
| Waiting to Turn Left | 1 | 1 | | 2 | 1% |
| Turning Right | 2 | 7 | | 9 | 4% |
| Changing Lane To Right | 0 | 3 | | 3 | 1% |
| Overtaking Moving Vehicle Offside | 0 | 3 | | 3 | 1% |
| Overtaking Stationary Vehicle Offside | 0 | 1 | | 1 | 0% |
| Overtaking Nearside | 1 | 2 | | 3 | 1% |
| Going Ahead Right Bend | 0 | 2 | | 2 | 1% |
| Going Ahead Other | 24 | 158 | | 182 | 80% |
| Total | 32 | 196 | | 228 | 100% |

Child bus/coach passengers

Table 15 shows child bus/coach passenger casualties by vehicle manoeuvre and passenger action, i.e. what the child was doing at the time of the collision. 44% of child passengers were injured while the bus/coach was 'going ahead', with a further 21% injured while the bus was slowing or stopping and 18% when it was moving off. Over half (59%) of child casualties were injured while seated on the bus/coach. A further 26% were injured while standing on the bus/coach, 9% while boarding and 6% while alighting from the vehicle. Over three quarters (78%) of child passengers injured as the bus/coach was slowing or stopping were seated and over a third (39%) injured as the bus/coach moved off were standing.

Table 15: Child bus/coach occupant casualties by vehicle manoeuvre & passenger action in Greater London 2008

| Vehicle manoeuvre | Passenger action | | | | Total | % of Total |
|-------------------------|--------------------|---------------------|-----------------------|---------------------|------------|-------------|
| | Boarding bus/coach | Alighting bus/coach | Standing on bus/coach | Seated on bus/coach | | |
| Parked | 2 | 2 | 5 | 1 | 10 | 6% |
| Going Ahead But Held Up | 4 | 1 | 7 | 2 | 14 | 9% |
| Slowing or Stopping | 0 | 0 | 7 | 25 | 32 | 21% |
| Moving Off | 8 | 5 | 11 | 4 | 28 | 18% |
| Turning Left | 0 | 0 | 2 | 1 | 3 | 2% |
| Waiting to Turn Left | 0 | 0 | 1 | 0 | 1 | 1% |
| Turning Right | 0 | 0 | 1 | 9 | 10 | 6% |
| Changing Lane To Right | 0 | 0 | 1 | 1 | 2 | 1% |
| Overtaking Nearside | 0 | 0 | 0 | 1 | 1 | 1% |
| Going Ahead Left Bend | 0 | 0 | 1 | 0 | 1 | 1% |
| Going Ahead Right Bend | 0 | 0 | 0 | 4 | 4 | 3% |
| Going Ahead Other | 0 | 2 | 4 | 44 | 50 | 32% |
| Total | 14 | 10 | 40 | 92 | 156 | 100% |

What is the cost?

Based on the average cost per casualty for all severities, as published by the Department for Transport in Reported Road Casualties Great Britain: 2008, the cost to the community of child casualties in 2008 is estimated at £108.5 million, at June 2008 prices.

Child casualties averaged six a day in Greater London, with a subsequent cost to the community of £315,600 per day.

Background documents

Reported Road Casualties Great Britain: 2008 Annual Report (Department for Transport)
<http://www.dft.gov.uk/adobepdf/162469/221412/221549/227755/rrcgb2008.pdf>

Population data – Office of National Statistics (ONS) – Estimated resident population mid-2008 by single year of age and sex (as at 1 April 2008)

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