

Reported Road Casualties Great Britain: 2013 Annual Report

Overview and trends in reported road casualties



Department for Transport

Key findings

The key findings from this article include:

- ▶ **Road deaths** decreased by 2 per cent compared to 2012, to 1,713. This is the lowest figure since national records began in 1926.
- ▶ The number of people **seriously injured** decreased by 6 per cent to 21,657 in 2013, compared to 2012.
- ▶ The **total number of casualties** in road accidents reported to the police in 2013 was 183,670, down 6 per cent from the 2012 total.

- ▶ **Total reported child casualties** (ages 0-15) fell by 9 per cent to 15,756 in 2013. The number of children killed or seriously injured also fell, decreasing by 13 per cent to 1,980 in 2013.

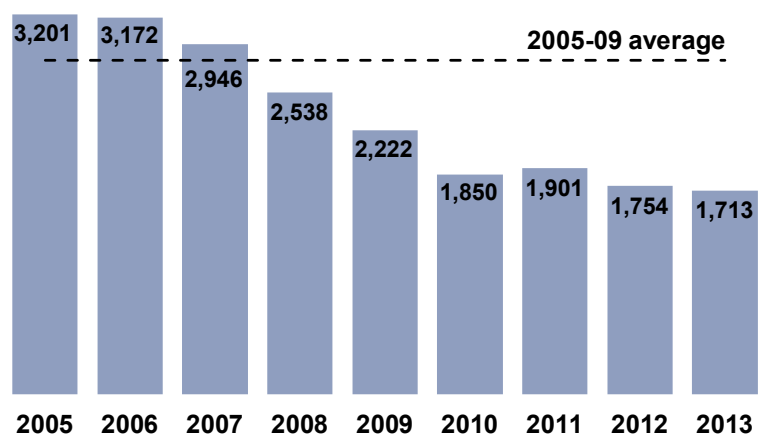
- ▶ A total of 138,660 personal-injury **road accidents** were reported to the police in 2013, 5 per cent lower than in 2012.

- ▶ **Vehicle traffic levels** have remained broadly stable with a small increase of 0.4 per cent between 2012 and 2013.

About this article

This article reviews the main trends in the number of reported road accident casualties in Great Britain in 2013 compared with recent years. Figures are primarily derived from information about accidents reported to the police.

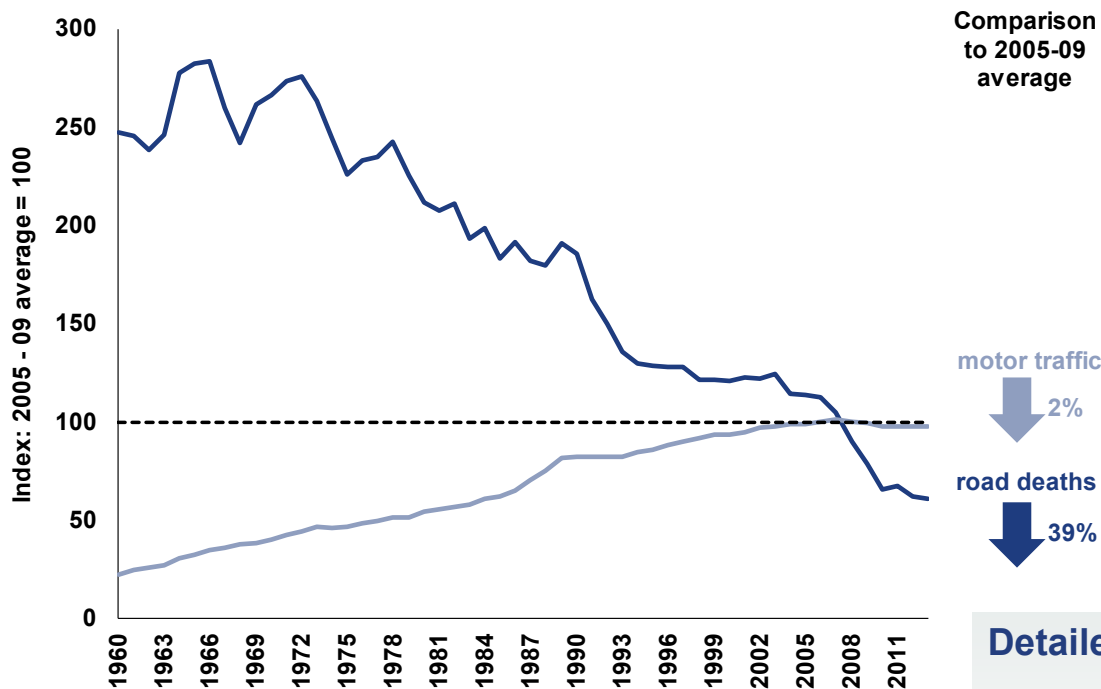
Killed casualties in reported accidents, GB, 2005-2013



Long-term casualty trends

- In 2013, 1,713 people in Great Britain were **killed** on the roads, the lowest since detailed reporting began and almost 5 times lower than the peacetime peak of almost 8,000 deaths in the mid-1960s.
- Aside from cycles of fluctuation over several years, **road deaths have fallen fairly steadily since this 1960s peak**. Over this period, road deaths have fallen by almost 80 per cent, whilst motor traffic has more than doubled. This means that the relative risk of road death, as well as the overall number of deaths, has fallen.

Chart 1: Killed casualties in reported road accidents and motor traffic, GB: 1960 to 2013¹



¹Traffic estimates from 1995 onwards were produced on a new, more accurate basis and are not directly comparable with previous years

Detailed statistics...

For a long term time-series of road deaths, see table [ras40001](#).

- Since 1979, detailed data on non-fatal road casualties have also been recorded. **Seriously injured** casualties have fallen steadily over the past 3 decades by a factor of around 70 per cent, from around 80,500 in 1979 to around 21,700 today.
- In contrast, reported **slightly injured** casualties saw a slight upward trend from 1979 before reaching a peak of 281,220 in 1997. In the early 2000s, slightly injured casualties started to fall steadily year-on-year, reaching 160,300 in 2013, around 40 per cent lower than the 1997 peak.

- However, it is worth noting that, unlike deaths, the trends for non-fatal casualties, particularly slightly injured casualties are likely to be affected by **under-reporting**, particularly for pedal cyclists and pedestrians.

Shorter-term trends

- With the exception of 2011, **road deaths** have fallen every year since 2004 and in 2013, were 39 per cent lower than the 2005-09 average.
- Since the early 2000s, the fastest decrease in deaths occurred **between 2008 and 2010**, with an average year-on-year decrease of over 10 per cent. Since 2010, the overall trend has been downward (albeit with a fluctuation in 2011) but slower.
- **Seriously injured** casualties have also fallen over the past decade, again showing a period of steady year-on-year decline between 2004 and 2010 before starting to slow. Seriously injured casualties in 2013 were 20 per cent lower than the 2005-09 average.
- **Casualties of all severities** fell between 2012 and 2013. Road deaths fell by 2 per cent in 2013, serious casualties by 6 per cent and total casualties by 6 per cent.

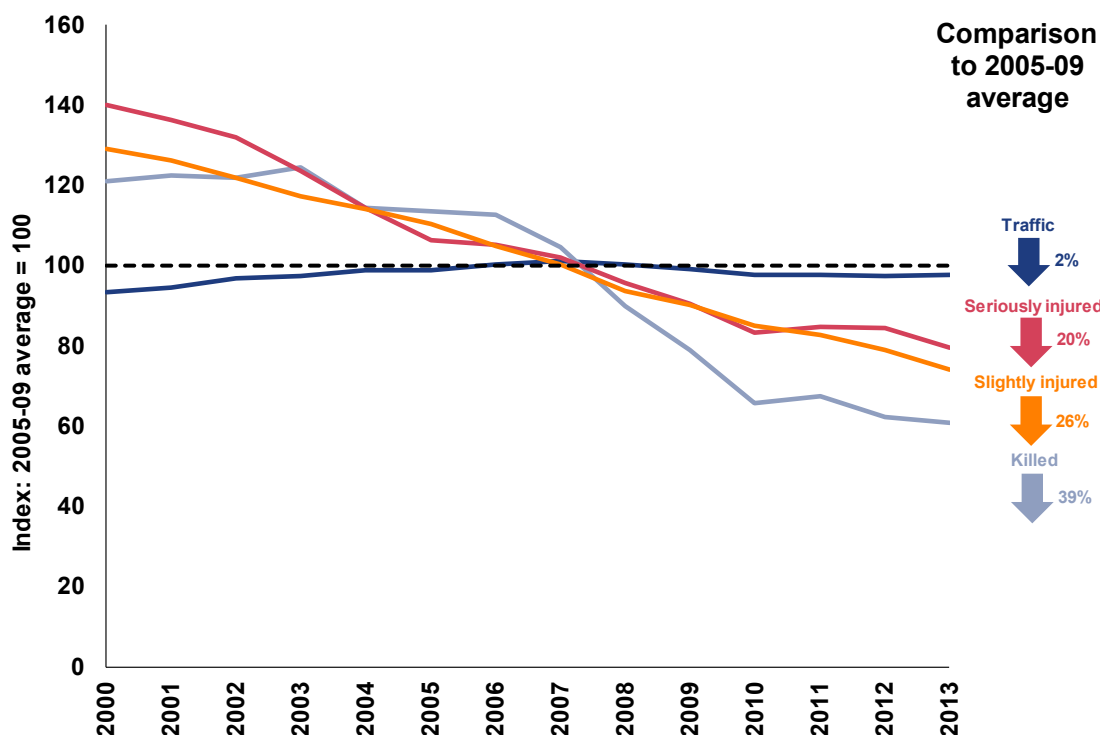
2005-2009 average

2005 -2009 average is the baseline for the [Strategic Framework for Road Safety Outcomes](#).

All road users casualties compared to the 2005-2009 average:

Killed	39%
Serious	20%
KSI	22%
All casualties	25%
Accidents	23%

Chart 2: Traffic and reported casualties by severity, GB: 2000-2013



The latest picture

- Last month, the **first casualty data for 2014** were published: [provisional estimates for the first quarter for 2014](#). They show a reversal of the downward trend seen in 2013. In the year ending March 2014, there was a 4 per cent increase in killed casualties and 2 per cent increase in killed or seriously injured (KSI) casualties, compared to the previous 12 month period.
- The **reasons for the increase are not yet clear**, but it is worth noting that the same quarter in the previous year was unusually low and changes in the weather and traffic levels may have contributed to the rise. As more data become available later this year, we will be able to see whether this is a one-off or the start of a longer term trend.

What affects the casualty trends?

- It is very difficult to isolate the impact of a single factor in the casualty trends, but broadly, the long-term decrease is likely to have been driven by a **combination** of:
 - Road safety education and training
 - Improved vehicle and highway technology / engineering
 - Reduction in speeds (there is evidence that speed limit compliance has improved over the last decade and average free-flow speeds have decreased)
 - Improved post-accident care to improve outcomes (e.g. the creation of major trauma centres in England)
- These factors will have both reduced the **likelihood** of an accident in the first place, as well as reducing the **severity** and number of casualties when they do occur.
- **Shorter term trends can also be driven by economic factors**. There is evidence that economic recessions have accelerated decreases in road deaths, although the relationship between GDP and fatalities is neither simple nor linear. For a more detailed discussion of this, please see last year's Reported Road Casualties Great Britain Annual Report.
- Another important factor in understanding year-on-year trends is the **weather**. There is evidence that particularly cold or wet weather can affect both road user exposure and driver behaviour, both of which will affect the number of casualties. A more detailed discussion of weather effects can be found in the weather chapter of this report.

Further information...

For a history of road safety interventions from the 1900s onwards, see the Calendar of Events at the back of this report.

Last year's Reported Road Casualties Great Britain Annual Report can be found [here](#).



The weather article for this report can be found [here](#).

Casualties by road type

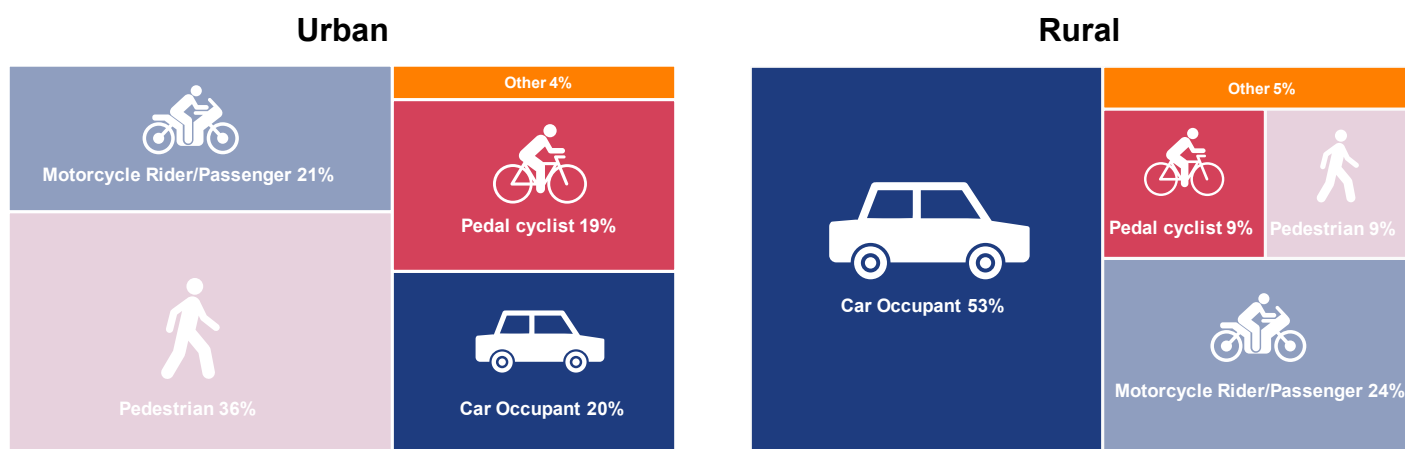
Urban and rural roads

- In recent years, **non-motorway traffic** has been split roughly 50-50 between **rural and urban roads**. However, the two road types show markedly different casualty patterns.
- Deaths are disproportionately likely to occur on rural roads:** in 2013, they carried 53 per cent of traffic, but accounted for around two thirds of road deaths. A similar split has been seen over the last decade. Mile-for-mile, the risk of death on rural roads is around 1.7 times that on urban roads and around 2 per cent of reported accidents on rural roads are fatal, compared to less than 1 per cent in urban areas.
- In contrast, **serious and slight injuries** are more likely to occur on urban roads. In 2013, urban roads accounted for 47 per cent of traffic, but 57 per cent of seriously injured and almost two thirds of slightly injured casualties.
- In summary: whilst personal injury accidents are more likely to occur on urban roads, where they do occur on rural roads, they are more likely to have fatal outcomes.
- The breakdown of casualty types also differs between urban and rural roads. **On urban roads, pedestrians account for around a third of KSIs**, with car occupants, motorcyclists and pedal cyclists each comprising a roughly a fifth.
- On rural roads, in contrast, car occupants are the majority of KSI casualties** (53 per cent in 2013) with motorcyclists a further quarter and pedal cyclists and pedestrians each accounting for around 10 per cent.



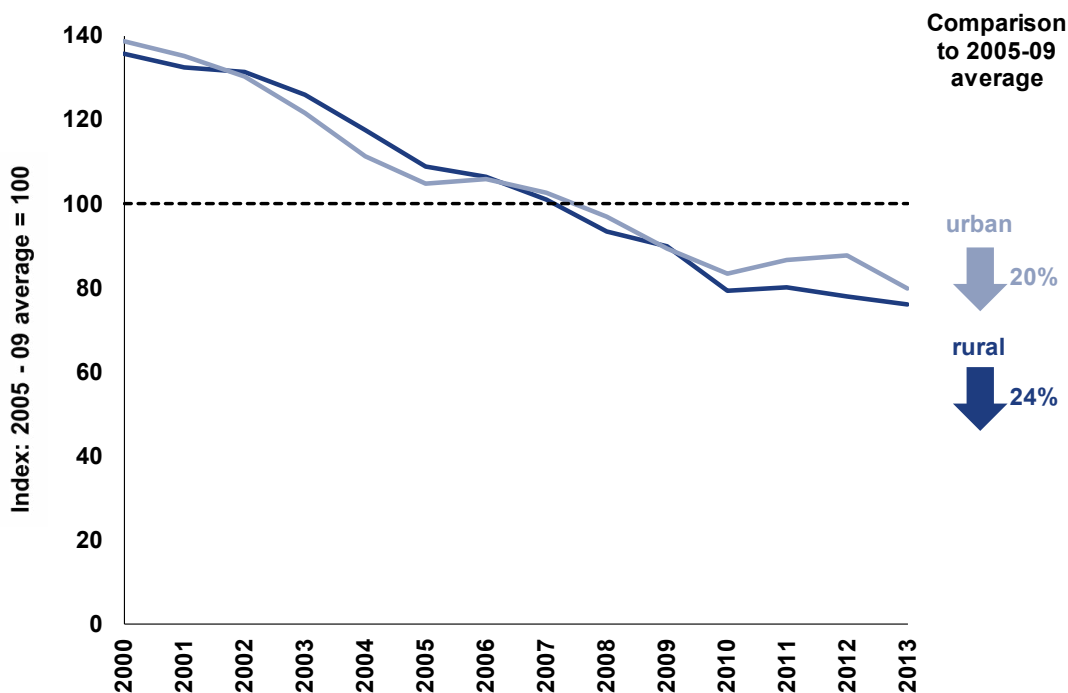
Motorways are excluded from the rural and urban road definitions and are discussed in the next section.

Chart 3: Killed or seriously injured casualties on urban and rural roads by road user type, GB: 2013



- **Fatalities** on rural roads increased by 3 per cent to 1,070 in 2013, although this figure is still around 8 per cent lower than 2011. With the exception of fatalities on rural roads, casualties of all road user types on both rural and urban roads decreased in 2013.
- Both **rural and urban roads** have seen casualty decreases over the past decade, with broadly similar trends on the two road types, as shown in chart 4. In 2013, KSI casualties on rural roads were nearly a quarter lower than the 2005-09 average and a fifth lower on urban roads. Over the same period, rural traffic has decreased by 2 per cent and urban by around 5 per cent.

Chart 4: KSI casualties on rural and urban roads, GB: 2000 to 2013



Motorways

- In 2013, **motorways** carried around 20 per cent of GB **motor traffic**, but accounted for just 6 per cent of **road deaths** (100 deaths) and 3 per cent of serious injuries (660 serious casualties) which means they are the safest road type. Mile-per-mile, the risk of death on motorways was around 5 times lower than the equivalent figure for rural roads and 3 times lower than for urban roads.
- **Car occupants** comprise by far the biggest casualty group on motorways: in 2013 they accounted for almost 70 per cent of motorway KSIs, with motorcyclists the next largest group (12 per cent) and goods vehicle occupants (vans and HGVs) comprising a further 10 per cent.
- In 2013, **deaths on motorways** increased for the first time since 2005, from 88 in 2012 to

100 in 2013, a 14 per cent increase. For context, motorway traffic levels rose by 1.5 per cent. Seriously injured casualties also increased very slightly, from 654 to 660.

- **The reasons for the increase are not clear.** Table 1 shows the breakdown of motorway fatalities over time. The numbers are relatively small so the year-on-year changes do need to be interpreted with some caution, but they can still provide some limited insight into the 2013 increase.

Table 1: Fatalities on motorways, GB: 2005 to 2013

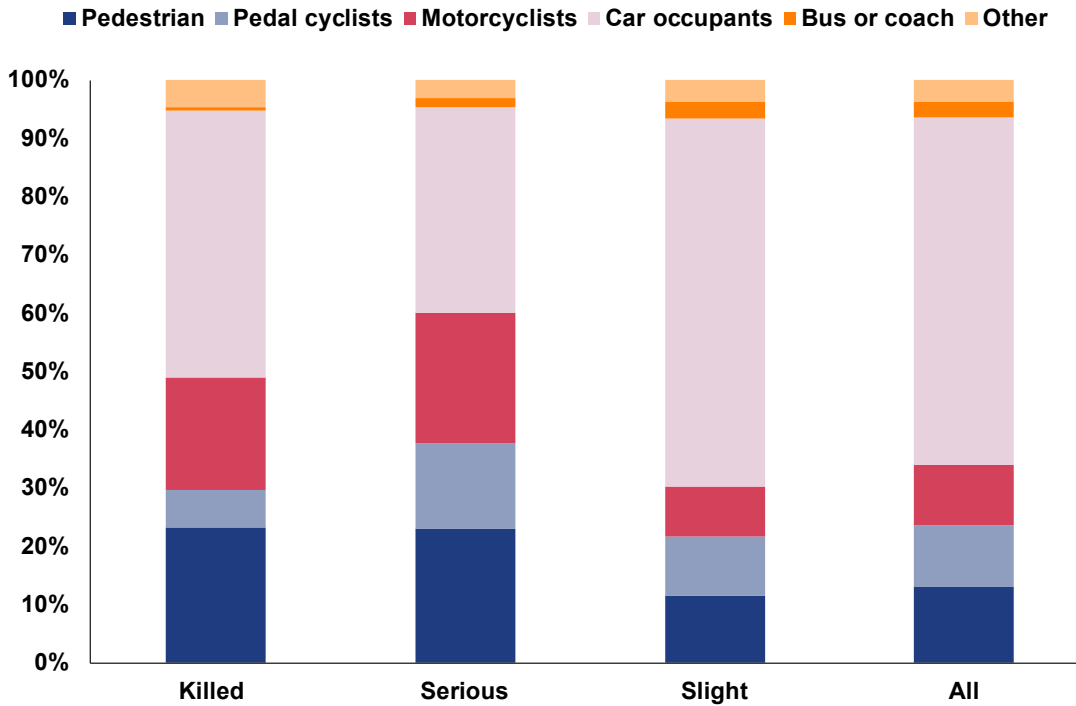
ROAD USER TYPE	2005	2006	2007	2008	2009	2010	2011	2012	2013	change from 2012
Pedestrian / pedal cyclist	31	14	30	21	18	24	16	17	17	-
Motorcyclist	18	22	16	15	12	13	8	4	14	↑ 10
Car occupant	123	130	99	104	84	60	64	46	53	↑ 7
LGV / HGV	31	21	35	18	16	20	17	20	14	↓ 6
Other	1	0	3	0	2	1	1	1	2	↑ 1
Total	204	187	183	158	132	118	106	88	100	↑ 12

- **Car occupants and motorcyclists** make up the largest motorway fatality groups and both of them saw an increase in 2013. However, in both cases this followed sharp drops in the preceding years and so they don't necessarily represent a diversion from a longer-term downward trend.
- As more data become available in future years, we will be able to assess whether last year's increase in motorway fatalities is a one-off fluctuation or the start of an ongoing trend. However, it is worth noting that even with the increase, both deaths and KSIs were more than a third down on the 2005-09 average.

Trends and the relative risk for different road types

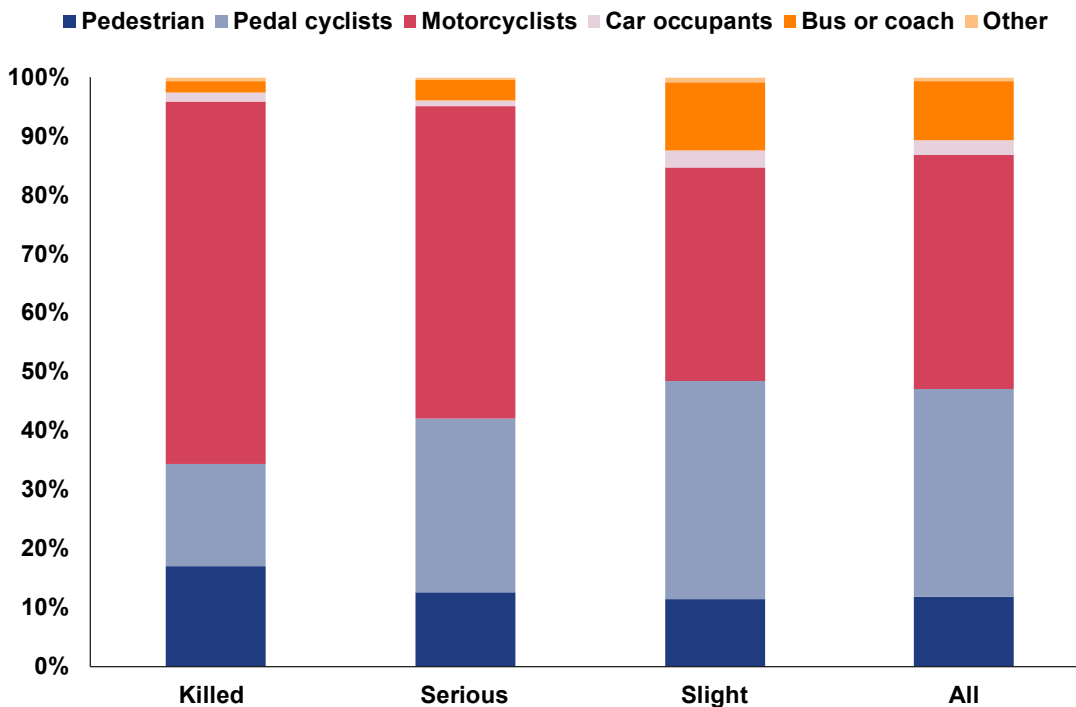
- As in previous years, **car users made up the biggest share of road deaths in 2013** (46 per cent), with vulnerable road users (pedestrians, pedal cyclists, motorcyclists) collectively making up a further 49 per cent.
- Amongst non-fatal casualties, **car users** are also the largest road user group, accounting for 35 per cent of serious and 63 per cent of slight casualties in 2013, with **vulnerable road users** collectively accounting for 60 per cent of serious and 30 per cent of slight casualties.

Chart 5: Proportion of reported casualties by road user type and severity: GB 2013



- However, despite comprising the largest casualty group, when **adjusted for the relative distance travelled**, the casualty rate for car occupants is amongst the safest of the casualty groups.

Chart 6: Proportion of reported casualties by road user type and severity, adjusted for distance travelled per year: GB 2013



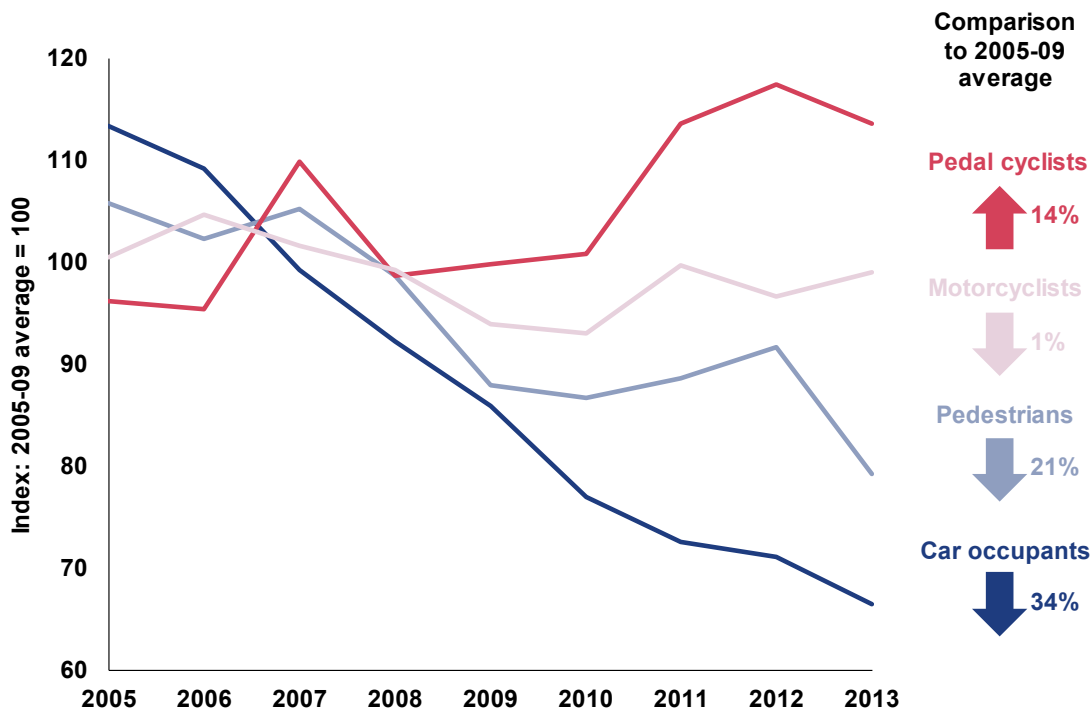
- Chart 6 shows the distribution of casualty types adjusted for the distance driven, cycled or walked for each mode, with the effect that the groups at higher risk comprise a larger share. When adjusted in this way, **motorcyclists** are at by far the biggest risk of death (for context, they accounted for less than 1 per cent of traffic but 19 per cent of fatalities in 2013), with pedal cyclists and pedestrians the next largest groups.
- Charts 7 and 8 show how the casualty rates have changed over time for the **four largest casualty groups** for killed and KSI casualties.

Chart 7: Reported killed casualties for the four largest casualty groups, per billion miles travelled: GB, 2013



- **All four main casualty groups have seen a reduction in the fatality rate over the past decade**, with a broadly continuous drop between 2005 and 2010 and subsequent slowing down or flattening of the rate. Car occupants have seen the biggest overall improvement in fatality rate: their fatality rate in 2013 was over 40 per cent lower than the 2005-09 average. Pedal cyclists and motorcyclists saw slower decreases and were around a quarter lower than the 2005-09 average in 2013.

Chart 8: Reported killed or seriously injured casualties for the four largest casualty groups, per billion miles travelled: GB, 2013



- The **trend for KSI casualties shows a different picture**. Only car occupants have seen a continuous year-on-year fall since 2005, with the rate in 2013 around a third lower than the 2005-09 average. Pedestrians rates fell by around a fifth over the same period. In contrast, the pedal cyclist KSI rate has increased by 14 per cent compared to the 2005-09 average and the rate for motorcyclists is only slightly lower (1 per cent) than the 2005-09 average.