

### Road Casualties Great Britain: 2011

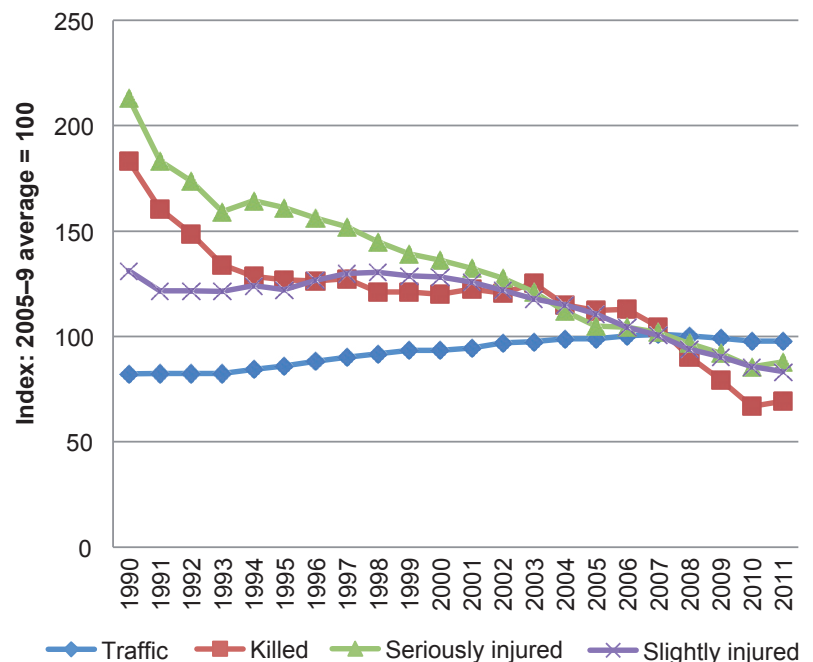
In September 2012, the Department for Transport (DfT) published *Road Casualties Great Britain: 2011*. The key findings were:

- **203,950 casualties** of all severities in road accidents were reported to the police in 2011, **2% lower than in 2010**.<sup>1</sup>
- **1,901 people were killed in road accidents in 2011**, an average of over five road deaths per day. This is a **3% increase from 2010** and is the first increase since 2003. This increase follows a 17% fall between 2009 and 2010, which was the largest percentage fall in a single year in the post-war period. The 2011 figure is, however, still 32% lower than the 2005–9 average.
- **23,122 people were seriously injured in 2011, up 2% from 2010**. This figure is 15% lower than the 2005–9 average.
- There was a **2% rise in the number of people killed or seriously injured (KSI)** that were reported to the police **between 2010 and 2011**. This is the first annual increase since 1994, but the figure is still 17% lower than the 2005–9 average. This has occurred alongside a fall in overall traffic by 2% between 2005–9 and 2011.
- **Motor vehicle traffic increased slightly** (0.2%) between 2010 and 2011.

**Figure 1: Traffic and reported casualties by severity: GB 1990–2011**

Figure 1 shows the trends in reported fatal, serious and slight casualties. Trends in fatalities and serious injuries were generally similar between 1990 and 1998. Between 1998 and 2005, a divergence started to appear: deaths fell by 6% and serious injuries by 29%.

Between 2005 and 2010, the number of deaths fell by 42%, compared with a 22% fall in serious injuries. This data mainly relates to car occupants. Other road users, particularly pedestrians, have seen more consistent trends in fatalities and serious injuries. In 2011, both fatalities and serious injuries rose 3% and 2% respectively in comparison to 2010 figures.



Source: DfT (2012), *Reported Road Casualties in Great Britain: 2011 Annual Report*, RAS10013; and DfT (2012), *Transport Statistics Great Britain: Annual Report*, TRA0201

<sup>1</sup> The real figure is expected to be between 600,000–800,000 – three to four times more than the reported levels.



Fatalities have generally been on a downward trend since 1973, with some intermittent periods showing small increases. Some reasons suggested for the general downward trend in fatalities (DfT, 2012) include:<sup>2</sup>

- improved vehicle safety;
- road safety engineering;
- road safety education;
- economic downturn and falling traffic levels; and
- reduction in free-flow traffic speeds.

It is difficult to determine which of these factors has had the greatest impact on road safety. Today, a higher proportion of road transport

takes place on the motorway network (an increase from 9% in 1973 to 20% in 2011), which has a better safety record than any other class of road. It might therefore be that the changing mix of traffic by road type has contributed to this ongoing downward trend.

The significant reduction in deaths between 2009 and 2010 can be partly attributed to the sustained periods of snow and ice in the first and fourth quarters of 2010. Extreme winter weather tends to reduce the number of serious road casualties as there is less traffic on the roads, and the motorists that do venture out tend to drive more slowly and carefully as a result.

The DfT's *Overview and trends in reported road casualties 2011* suggests that the lack of extreme weather in 2011, in comparison with 2010, can explain much of the 2011 increase in fatal and serious injuries. During the winter months of 2011 (January, February, November and December), there were 81 more fatalities than in the same months of 2010.

Traffic levels also stabilised in 2011 after falling for three years. Despite an increase in deaths and serious injuries between 2010 and 2011, the 2011 figures (apart from seriously injured pedal cyclists) remain below 2009 levels, which were the second lowest on record (see Table 1).

**Table 1: Reported road accident casualties by severity: GB 2011**

	Number				2011 percentage change over:	
	2005–9 average	2009	2010	2011	2010	2005-09 average
Killed	2,816	2,222	1,850	<b>1,901</b>	3	<b>-32</b>
Of which children	127	81	55	<b>60</b>	9	<b>-53</b>
Seriously injured	27,225	24,690	22,660	<b>23,122</b>	2	<b>-15</b>
Killed or seriously injured	30,041	26,912	24,510	<b>25,023</b>	2	<b>-17</b>
Of which children	3,067	2,671	2,502	<b>2,412</b>	-4	<b>-21</b>
Slightly injured	216,010	195,234	184,138	<b>178,927</b>	-3	<b>-17</b>
All severities	246,050	222,146	208,648	<b>203,950</b>	-2	<b>-17</b>
Traffic <sup>1</sup>	313	311	306	<b>307</b>	0	<b>-2</b>
KSI rate <sup>1</sup>	96	87	80	<b>82</b>	2	<b>-15</b>
Slight casualty rate <sup>1</sup>	690	628	601	<b>583</b>	-3	<b>-15</b>

<sup>1</sup> Traffic in billion vehicles miles; rates per billion vehicle miles, rounded to the nearest whole number

Source: DfT (2012), *Reported Road Casualties in 2011: Annual Report*, RAS30059: 2

<sup>2</sup> DfT (2012), *Reported Road Casualties in Great Britain: 2011 Annual Report*

In terms of where collisions occurred on the road network in 2011:

- most fatalities occurred on rural roads (61%);
- 33% of fatalities occurred on urban roads, compared with 61% of all casualties; and
- 6% of fatalities occurred on motorways, which carry 20% of all traffic.

Key contributory factors in road accidents were drink-driving and the lack of attention of the driver. In 2011:

- 5% of all road casualties (9,990) occurred when someone was driving over the legal alcohol limit;
- 15% of all road fatalities (280) are estimated to have been caused by drink-drive accidents; and
- failing to look properly was the most frequently reported contributory factor in 42% of all accidents.

Young drivers remain over-represented in road collisions with road accidents causing over a fifth of all deaths in 15–19 year olds (DfT, 2012: Table RAS30035).

The rise in road deaths in 2011 can be accounted for by a rise in pedestrian (12%) and car occupant (6%) fatalities. Fatalities fell for bus and coach occupants (22%), motorcyclists (10%) and pedal cyclists (4%). In 2011 there were 3.7 car occupants killed per billion vehicle miles (pbvm) travelled.

Despite an increase from 3.5 car occupants killed pbvm in 2010, this is 47% below the figure for 2005 and 36% below the 2005–9 average. Motorcyclists have the highest fatality rate of any road user group (125 killed pbvm). This is, however, 11% lower than 2010 levels and 25% below the 2005–9 average. The 2011 KSIs by road user type are provided in Table 2 below.



**Table 2: Reported killed and seriously injured casualties by road user type: GB 2011**

	Number				2011 percentage change over:	
	2005–9 average	2009	2010	2011	2010	2005–9 average
Pedestrian	6,758	6,045	5,605	5,907	5	-13
Pedal Cyclist	2,528	2,710	2,771	3,192	15	26
Motorcycle Rider/Passenger	6,320	5,822	5,183	5,609	8	-11
Car Occupant	12,984	11,112	9,749	9,225	-5	-29
Bus or Coach Occupant	409	370	401	332	-17	-19
Van/Light Goods Vehicle Occupant	501	417	359	340	-5	-32
HGV Occupant	314	189	212	195	-8	-38
Other Vehicle Occupant	226	247	230	223	-3	-1
All Road Users	30,041	26,912	24,510	25,023	2	-17
Of which children	431	350	293	272	-7	-37

Source: DfT (2012), *Reported Road Casualties in 2011: Annual report*, RAS30061: 9

## Great Britain Provisional Figures 2012

Provisional estimates have been published for the first and second quarters of 2012 by the DfT.<sup>3</sup> These show the following changes in comparison with the first and second quarters of 2011.

- First quarter comparison between 2011 and 2012:
- 1,870 people were killed, a 1% drop from the year ending March 2011 (1,881).
- The number of people killed or seriously injured in the year ending March 2012 rose to 25,210, a 1% increase compared with the year ending March 2011 (24,849).
- Second quarter comparison between 2011 and 2012:
- 1,790 people were killed in reported road accidents, a 6% drop from the year ending June 2011 (1,901).
- The number of people killed or seriously injured in the year ending June 2012 rose to 24,870, a 1% increase compared with the year ending June 2011 (24,610).

These initial figures indicate that final 2012 figures might report a fall in the number of people killed, but an increase in the number of people seriously injured in comparison with 2011.

Research from Australia<sup>4</sup> has found that in fatal crashes, 43.4% of drivers are involved in extreme behaviour (i.e. high levels of alcohol consumption and speeding), whereas in non-fatal metropolitan injury crashes, 86.8% of drivers are involved in an incident attributed to system failure. A similar analysis completed for Great Britain would be of use as it might help determine whether policy needs to focus more on combating extreme behaviour or system failures.

## European Road Safety Performance

It is interesting to compare Britain's (defined as UK in European comparisons) slowdown in road safety casualties with the rest of Europe. The most recent comparative data on this subject finds that:<sup>5</sup>

- The average EU reduction in road deaths in 2011 was 3%. This compares with the average annual reduction of 5.7% for the 2001–10 decade.
- Latvia, Spain, Bulgaria and Romania are the four EU countries with the biggest reductions in road deaths. They are joined by Norway, where road deaths were reduced by 20% in 2011 compared with 2010.
- In 13 EU countries, the number of road deaths recorded in 2011 was above that of 2010. Estonia, Sweden and Cyprus registered the biggest increases; countries with good road safety records, such as the Netherlands, Germany and the UK, also saw an increase in road deaths after several years of sustained progress. Germany, like the UK, have used extreme winter weather in 2010 to explain this discrepancy.
- There have been 940 fewer road deaths in 2011 than in 2010 in the EU as a whole. A further reduction of 1,140 road deaths would have been needed to put the EU on track to meet its 2020 road safety target of reducing road deaths by 50% in comparison with 2010 levels.

Organisations such as the World Bank, the International Transport Forum (ITF) and the Organisation for Economic Co-operation and Development (OECD) have made numerous calls for road safety policy to be supported by effective institutional management in order to achieve higher road safety levels in the long term. A large number of organisations have urged national governments to organise clear institutional roles and responsibilities and to adopt national road safety plans and targets, against which performance can be measured and delivery made accountable to guide their road safety actions.

<sup>3</sup> DfT (2012), *Reported road casualties Great Britain: provisional estimates Q1 2012* and DfT (2012) *Reported road casualties Great Britain: provisional estimates Q2 2012*

<sup>4</sup> Wundersitz, L. N. & Baldock, M. R. J. (2011), *The relative contribution of system failures and extreme behaviour in South Australian crashes based on data from 1998–2008*

<sup>5</sup> European Transport Safety Council (ETSC) (2012), *A Challenging Start towards the EU 2020 Road Safety Target 6th Road Safety PIN Report*

It is clear that the UK has underperformed on road death improvement in comparison with much of the rest of Europe. However, in absolute terms, the UK, along with Sweden, the Netherlands and Denmark, remained the four safest EU countries for road use (see Table 3). They are joined by Norway in having a level of road mortality lower than 40 deaths per million inhabitants. The UK, as well as Latvia, Spain, Portugal, Lithuania, Ireland, Slovenia, France, the Czech Republic, Slovakia, Hungary and Germany, have also achieved better-than-average yearly reductions in both road deaths and serious injuries.

**Table 3: Road fatalities – country rankings**

Fatalities 2010					
Per million inhabitants		Per 10 billion pkm		Per million passenger cars	
SE	28	SE	27	SE	62
UK	31	UK	29	MT	63
NL	32	NL	37	UK	65
MT	36	DE	40	NL	71
DE	45	FI	41	DE	87
DK	46	IE	46	LU	96
IE	47	LU	48	FI	96
FI	51	DK	49	IE	111
ES	54	SI	53	IT	112
EE	58	FR	54	ES	112
EU27	62	IT	55	DK	119
LU	63	EU27	64	AT	125
FR	63	MT	66	FR	127
AT	66	ES	70	CY	130
SI	67	BE	74	SI	130
IT	68	AT	74	EU27	131
SK	68	EE	76	EE	142
HU	74	LT	98	BE	155
BE	75	CY	100	LT	177
CY	75	PT	110	CZ	180
CZ	76	EL	119	PT	210
PT	88	CZ	120	SK	228
LT	91	LV	129	PL	232
LV	97	PL	129	EL	243
PL	102	SK	135	HU	247
BG	103	HU	137	LV	283
RO	111	BG	162	BG	304
EL	111	RO	303	RO	555

Source: EU (2012), *Transport in Figures Statistical Pocketbook 2012*, Tables 1.5, 2.3.4, 2.6.2, 2.7.1, and estimates as well as national statistics for powered two-wheelers pkm

**Notes:**

Fatalities – all fatalities on the road: car drivers and passengers, bus and coach occupants, powered two-wheelers' riders and passengers, cyclists, pedestrians, commercial vehicle drivers, etc indicated in Table 2.7.1 for 2010.

Pkm – indicator of traffic volume (in the absence of consistent vehicle-kilometre data); passenger-kilometres of cars indicated in Table 2.3.4 for 2010 plus (mostly estimated) passenger-kilometres of motorised two-wheelers.

Inhabitants – the sum of the population indicated in Table 1.5 at 1 January 2010 and 1 January 2011 divided by two.

Passenger cars – the sum of the stock of vehicles indicated in Table 2.6.2 for 2009 and 2010 divided by two.



The 2012 PIN (Road Safety Performance Index) report from the European Transport Safety Council (ETSC) shows how the UK rates on its road safety management in comparison with other EU countries. The report rates each country's approach to road safety, based on the following criteria.

**Phase 1:** The basics of road safety management:

- Vision for road safety
- Road safety action plan
- Targets for casualty reduction
- Political leadership.

**Phase 2:** From strategy to action, creating the means for effective policy:

- Institutional roles and responsibilities
- Accident and casualty data
- Best practice exchange
- Scientific choice of measures
- Funding for road safety
- Research
- Training
- Public and private sector awareness and involvement.

**Phase 3:** Implementation and updating of the plan or programme:

- Road safety legislation
- Infrastructure safety
- Performance targets
- Exposure data and safety performance indicators.
- Enforcement of road safety laws
- Emergency response
- Monitoring and evaluation



The overall country scores are provided in Figure 2 below.

**Figure 2: Overall score for EU countries and their road safety management**

	Scores in		
	Phase 1	Phase 2	Phase 3
AT			
BE			
CY			
CZ			
DK			
EE			
FI			
FR			
DE			
EL			
HU			
IE			
IL			
IT			
LV			
LT			
LU			
MT			
NL			
NO			
PL			
PT			
RO			
SK			
SI			
ES			
SE			
CH			
UK			

Phase 1		>75%
		75% to 50%
		<50%

Phase 2		>75%
		75% to 55%
		<55%

Phase 3		>70%
		70% to 40%
		<40%

Source: ETSC (2012) *Challenging Start towards the EU 2020 Road Safety Target: Sixth Road Safety PIN Report*, June 2012

These rankings place the UK's road safety management system in the bottom 25% of all European countries, which may be a contributory factor to the UK's recent increase in road deaths.

## Summary and Conclusions

Between 2010 and 2011 there was a **3% increase** in the **number of people killed** and a **2% increase** in the **number of people seriously injured** on Britain's roads. This is the first increase since 2003.

This 3% increase in the number of people killed on Britain's roads follows a 17% fall between 2009 and 2010, which was the largest percentage fall in a single year in the post-war period. The extreme winter of 2010 is thought to have contributed to this large fall and has been used as a way of explaining 2011 increases on the previous year. The 2011 figures, when compared with the 2005–9 baseline, still represent a 32% reduction on the number of people killed and a 15% reduction on the number of people seriously injured.

This is against a background of reduced traffic levels, which are slowly starting to grow. Provisional figures for 2012 indicate that we can expect a year-on-year fall in the number of people killed (6%), but an increase in the number of people killed or seriously injured (1%) between 2011 and 2012. Based on the experience of Australia, this might indicate that extreme driver behaviours and system failures should be addressed to help reduce the casualty rate further.

On average, road deaths across Europe fell by 3% between 2010 and 2011. However, the UK, as well as 12 other EU countries, reported road deaths above 2010 levels, including both Germany and the Netherlands – who, like the UK, have a history of good road safety performance. As with the UK, this diversion from past performance may be partly explained by the 2010 extreme winter weather in a number of countries.



In absolute terms, the UK, along with Sweden, the Netherlands and Denmark, remain the four safest EU countries for road use. However, an analysis of the road safety management and plans of European countries ranks the UK within the bottom 25%, which suggests that the slowdown in road safety performance might also be related to systemic planning failures, rather than external factors alone such as the weather.

It therefore remains important for the RAC Foundation and other similar organisations to monitor government performance on road safety, and to continue work to encourage the government to adopt proven road safety planning and performance measures.

This factsheet was last updated January 2013.

The Royal Automobile Club Foundation for Motoring is a transport policy and research organisation which explores the economic, mobility, safety and environmental issues relating to roads and their users. The Foundation publishes independent and authoritative research with which it promotes informed debate and advocates policy in the interest of the responsible motorist.

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