



Road Safety Since 2010

Update with 2017 data

December 2018

Jack Arnholz
Anderson Etika
Rafael Showman
Evan Webster

PACTS Research Officers 2017-2018

ACKNOWLEDGMENTS

PACTS wishes to acknowledge the RAC Foundation, with which PACTS produced the original report in 2015. PACTS would also like to thank Dr Kit Mitchell and Professor Richard Allsop who contributed to this update.

ABOUT PACTS

The Parliamentary Advisory Council for Transport Safety – better known as PACTS – promotes evidence-based solutions to achieve safe transport for all. Established in 1981, its founder members were responsible for the legislation which made front seat-belt wearing in cars compulsory in Britain.

The unique features of PACTS are that it is a multi-modal transport safety body and focuses on working with UK parliamentarians, government, professionals and other key stakeholders. It is independent and has no financial or sectoral interests. PACTS provides the secretariat to the All-Party Parliamentary Group for Transport Safety and to the Transport Safety Commission.

PACTS is a charity with over 100 member organisations which provide PACTS with a vital source of income, advice and technical collaboration. We see membership as a partnership arrangement in the furtherance of transport safety. If you would like information about the benefits of PACTS membership for your organisation, please visit <http://www.pacts.org.uk/about/> (Join us) or contact David Davies, Executive Director, david.davies@pacts.org.uk

Road Safety Since 2010: Update with 2017 data

EXECUTIVE SUMMARY

2010 heralded substantial economic, political and administrative change in the UK. It also marked the end of four years of unusual reductions in road deaths in the UK and in most other European countries – an outcome of the economic recession. In 2015, PACTS and the RAC Foundation published a detailed analysis *Road Safety Since 2010*. This reviewed casualty trends for UK and, uniquely, compared progress across the major jurisdictions of London, England, Wales, Scotland and Northern Ireland.

In light of the increased devolution of road safety powers and responsibilities from Westminster to the other governments and administrations, variations in casualty trends might have been expected. The report showed that, on the basis of the number of people killed or seriously injured (KSI), London, Scotland and Northern Ireland performed much better than England or Wales.

This short update includes casualty analysis to 2017 and adds some further dimensions, including casualty rates based on population and a separate analysis of casualties on the Strategic Road Network in England. Partly because of changes to the systems used by police to record road casualties in London and much of England, this update focuses on road deaths – not KSI. This is unavoidable and, in some respects, a better measure but one consequence is that some of our conclusions are now different to those in our previous report.

This update shows:

- UK road deaths in 2017 were substantially (37%) lower than in the period 2005-09. This ranges from 33% lower in Wales to 47% lower in Scotland. This is almost entirely due to the unusual reductions during the economic recession of 2007-2010, particularly in 2010.
- There has been virtually no progress since 2010. Compared with 2010, UK road deaths in 2017 were only 3% lower. Only Scotland has achieved a significant reduction since 2010, and this is heavily dependent on the figure for 2017. Because the annual number of deaths in each jurisdiction except England is relatively small – around 100 – the percentage change can fluctuate considerably from year to year.
- Taking population growth into account, the number of road deaths per head of population declined by 8% for the UK between 2010 and 2017. This means that, from an individual's perspective, the risk of a fatal road injury has reduced.
- The UK has managed to maintain its position as one of the best performing European countries, measured by road deaths per million population, despite having one of the lowest percentage rates of reduction in deaths since 2010. It remains close to Sweden, although Norway and Switzerland now consistently perform better.
- All major road user groups have seen substantial reductions in deaths when compared to 2005-09. Apart from pedestrians, all groups also saw modest reductions between 2010 and 2017.

Although the UK Government has refused to adopt national road safety targets, many parts of the UK have done so. Scotland, Wales and Northern Ireland adopted targets earlier and used a 2004-08 baseline. These countries are making good progress and some targets have been achieved

already. London and Highways England have targets based on 2005-09. Although only one year later, inclusion of the year 2009 in this baseline and removal of 2004 make the targets much more challenging. It is widely accepted that targets have helped to drive road safety effort in these jurisdictions and that progress would have been less without the targets. However, the casualty figures do not demonstrate differential progress as a result of having targets.

Based on this analysis, PACTS makes the following recommendations:

- The Government needs to take bold measures, at national level, to end the “plateau” in the number of deaths and seriously injured casualties since 2010 across most of the UK;
- The Government should not refer to substantial reductions in road casualties “over the past 10 years” without also stating that there has been almost no reduction in deaths or serious injuries since 2010;
- Those jurisdictions that have already achieved, or almost achieved, their 2020 road safety targets should renew them as soon as possible. New targets should have baseline and deadline periods that each cover at least three years. For example, achieving a 50% reduction in fatalities by 2028-30 (average) compared to the 2018-2020 (average);
- Separate targets should be adopted for deaths and for seriously injured casualties;
- Those police forces which have not yet adopted the new casualty reporting system (CRASH) are urged to do so.

David G Davies
Executive Director
PACTS

December 2018

CONTENTS

Acknowledgments	1
About PACTS.....	1
Executive summary	2
1. Introduction	5
Original report.....	5
Targets and baselines.....	5
Recent changes in casualty reporting systems.....	6
2. Road safety since 2010: update with 2017 data	7
In this report.....	7
Casualty trends revisited	7
People killed on the roads	7
Seriously injured casualties	10
3. Deaths by road user group.....	14
4. Casualties on the Strategic Road Network in England.....	17
5. Conclusions	19
6. Recommendations	20
Appendix A – Road safety targets set by UK jurisdictions and progress.....	21
Appendix B – Killed and seriously injured casualties combined	23
Appendix C – Road casualty tables and population data used in this report.....	24

1. INTRODUCTION

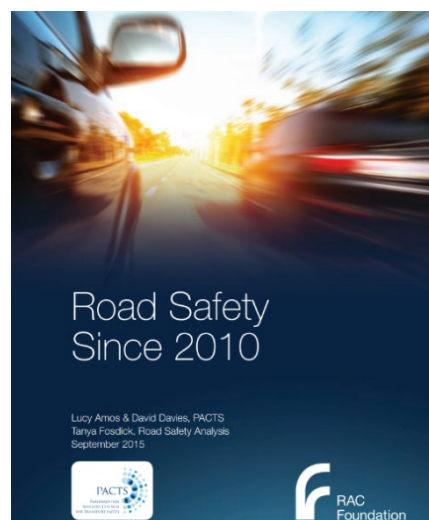
In September 2015, in collaboration with the RAC Foundation, PACTS published *Road Safety Since 2010*.¹ This update incorporates the latest casualty figures (to 2017) and introduces some additional analysis, including casualty rates in relation to population and an analysis of casualty trends on the Strategic Road Network in England. It provides a brief commentary on the trends for the UK and the differences between parts of the UK; but it does not seek to explain the reasons for them. Given the increasing devolution of powers and spending, and divergence of policy, we believe this is useful exercise. As far as we know, this information is not readily available elsewhere.

ORIGINAL REPORT

The original report, *Road Safety Since 2010*, focused on major changes in road safety strategy, actions, resources, road casualty figures and research for the years 2010 to 2015. It addressed issues relating to the impact on road safety of the 2010-2015 UK Coalition Government's policy changes and local authority spending cuts. It included results of a survey of local authority views.

The report also showed the different trends in casualty numbers across the jurisdictions of the UK. By 2014 (the latest year for which data were available) there had been a 19% reduction in killed or seriously injured casualties (KSIs) in the UK relative to the 2005-09 average.

The report noted that most of this decrease took place between 2007 and 2010, while 2011 and 2014 saw increases on the respective previous year. Since 2010, road deaths and serious injuries have decreased across the UK, but at a much slower rate than previous recent years.



TARGETS AND BASELINES

The changes in casualty figures shown in the original report were calculated against the average number of casualties from 2005 to 2009 – the baseline period set by the Government in its 2011 *Strategic Framework for Road Safety*.²

In 2015 the Government published the *British Road Safety Statement*³ which replaced the 2011 *Framework*. The *Statement* made no reference to the 2005-09 baseline or any other.

In July 2010 the European Union set out its *Road Safety Programme 2011-2020*⁴ which included a target to cut road deaths by half by 2020 relative to 2010. This EU-wide target (and baseline) were endorsed by European governments, including the UK government.

The governments of Scotland, Wales and Northern Ireland set casualty reduction targets against slightly earlier baselines (2004-08) and have reported annual progress against them. (See Appendix A). To avoid duplication and complexity, we have not repeated them here. Because total casualties were higher in 2004 than in 2009 and the fall recorded in 2009 was unusually large, the 2004-08 baseline tends to

¹ Amos, L., Davies, D., & Fosdick, T. (2015). *Road Safety Since 2010*, PACTS with RAC Foundation, London.

² Department for Transport (2011). *Strategic Framework for Road Safety*, London.

³ Department for Transport (2015). *Working Together to Build a Safer Road System: British Road Safety Statement*, London.

⁴ European Commission (2010). *Road Safety Programme 2011-2020: Detailed Measures*, Brussels.

show more favourable casualty trends than when compared against 2005-09 or 2010. One aim of this report is to provide a common UK baseline for comparisons.

RECENT CHANGES IN CASUALTY REPORTING SYSTEMS

Since 2015 there have been changes to the police reporting systems for road casualty figures in England. Almost half of the police forces in England have adopted a computer-based road collision and injury reporting system. The Collision Reporting and Sharing System, known as CRASH, has inbuilt validations and other features designed to make reports more accurate, reliable and accessible than the previous STATS19 system.

One feature is that CRASH provides a more accurate method of assessing injury severity. This has impacted on levels of serious injuries recorded. A consequence is that a higher proportion of casualties are now being classified as “serious” rather than “slight”.

The Department for Transport issued a warning in 2017 that the data should be ‘interpreted with caution due to changes in severity reporting by several police forces’.⁵ Initial estimates by the ONS suggest that the ‘CRASH effect’ had resulted in an additional 5 to 15% of serious casualties nationally in 2016. Using ONS information, DfT estimated that the number of reported serious casualties in 2017 would have been 10% higher if all forces used CRASH.⁶ However, in a more recent study, the ONS concluded that, since only about 50% of casualties are recorded by the new systems, it is not yet possible to have a firm estimate of the effects and further work will be required.⁷

The situation is further complicated for London where the Metropolitan Police have introduced their own system, COPA (Case Overview Preparation Application). This has resulted in a substantial increase in the levels of serious injuries now recorded. It has also led to major delays in providing the data to DfT.⁸

Police forces in Scotland, Wales and Northern Ireland have not (yet) adopted CRASH. This means that it should be more straight-forward to monitor recent trends in these jurisdictions but comparisons with England must be treated with caution.

⁵ Department for Transport (2017). *Reported Road Casualties Great Britain: 2016 Annual Report Moving Britain Ahead*, London.

⁶ Department for Transport (2018). *Reported Road Casualties in Great Britain: 2017 Annual Report*, London.

⁷ Office for National Statistics (2018). *Estimating and adjusting for changes in the method of severity reporting for road accidents and casualty data. Interim report*.

⁸ Department for Transport (2018). *Reported Road casualties in Great Britain: 2017 Annual Report*, London.

2. ROAD SAFETY SINCE 2010: UPDATE WITH 2017 DATA

IN THIS REPORT

This update report takes account of the above factors by showing:

- changes in deaths and serious injuries to 2014 (pre-CRASH) compared to the 2010 baseline;
- changes in deaths and serious injuries to 2017 (latest available data and post-CRASH) compared to the 2010 baseline.

The 2010 baseline, albeit a single year, has been added because it reflects the significant drop in casualty figures by 2010, compared with the 2005-09 average. (This occurred mainly during the 2008-10 recession). In addition, 2010 is the baseline used in the European Union target, endorsed by the UK.

This report looks at changes in deaths and serious injuries to 2014 and 2017, for the UK and for its jurisdictions. Both dates are used so that the impacts of CRASH and COPA can be isolated.

A new section has been added to show casualty data to 2017 for Highways England's Strategic Road Network (SRN), which represent approximately 33% of motor traffic in England.

The analysis now includes casualty rates per million population for the UK and its constituent parts. This was not in the 2015 report.

Also included in this report is an updated analysis of deaths by road user group for Great Britain for the various baselines and reporting dates.

For a number of reasons, we analyse the data for killed casualties separately from seriously injured casualties. For completeness, the combined KSI data are provided in Appendix B. The casualty data for individual years and population data used in this report are provided in Appendix C.

The data are accompanied by a brief commentary on the headline trends. It does not seek to analyse the reasons for the trends or the reasons for the differences in trends across the UK.

CASUALTY TRENDS REVISITED

People killed on the roads

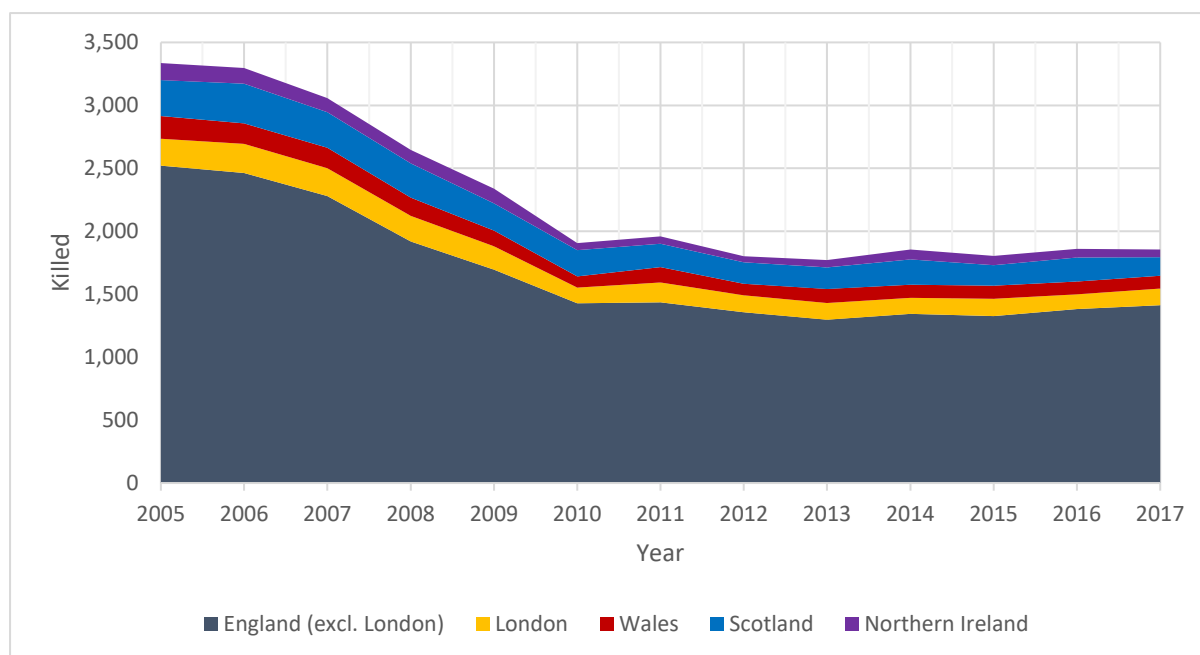
The number of people reported killed on the roads is considered the most reliable measure of casualties as all, or virtually all, deaths are reported to the police and recorded in the National Statistics for road casualties. In addition, these numbers are not affected by the adoption of the CRASH or COPA reporting systems.

Table 1 shows that for the UK overall, the long-term trend in the reduction of people killed largely ground to a halt after 2010. Whereas between 2005-09 and 2017, UK deaths declined by 37%, between 2010 and 2017 deaths declined by only 3% (from 1,905 to 1856). The DfT has described the figures for the period 2010-2017 as a "plateau", concluding that Britain is in a period when the fatality numbers are stable and most of the changes relate to random variation.⁹

Figure 1 shows how the overall plateau since 2010 prevails across the UK. Table 1 shows how percentage changes in numbers differ among jurisdictions and according to baseline, and Figure 2 shows how percentage differences from the 2010 baseline differ among jurisdictions and vary from year to year.

⁹ Department for Transport (2018). *Reported Road Casualties in Great Britain: 2017 Annual Report*, London.

Figure 1: People killed according to jurisdiction (United Kingdom, 2005-17)



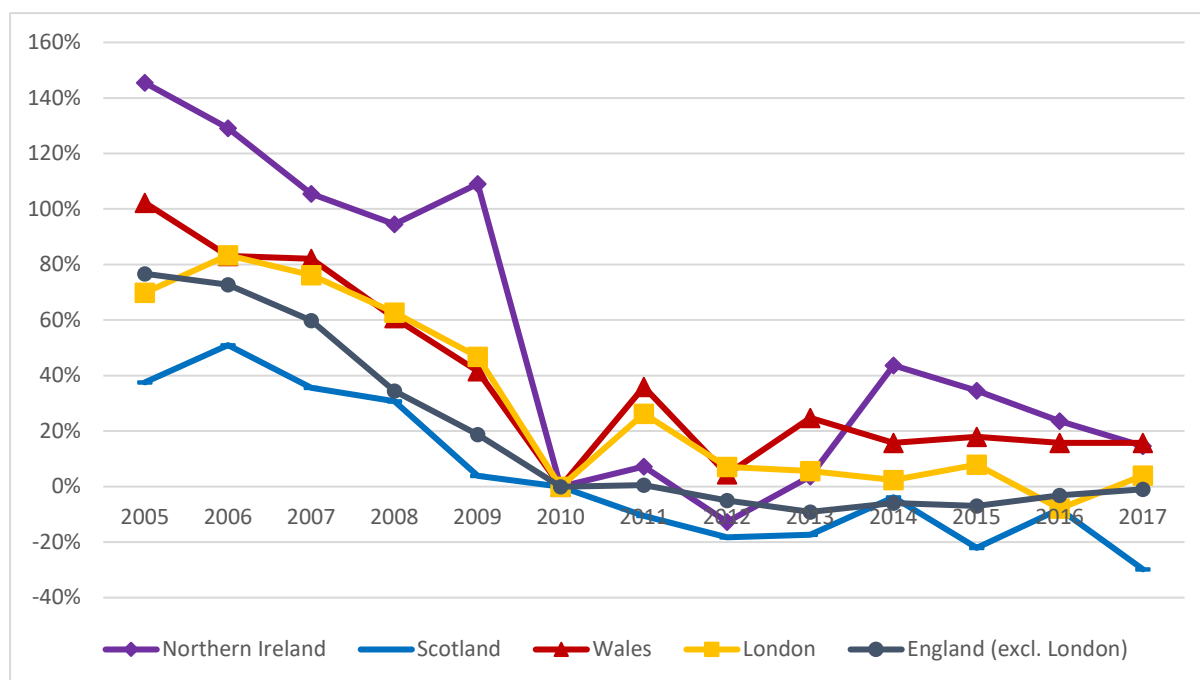
Source: DfT, [Reported Road Casualties Great Britain 2005-2017](#) (For convenience, the annual casualty data are provided in Appendix B in this update.)

Table 1: People killed according to jurisdiction (UK 2005-09 average, 2010, 2014 and 2017)

Jurisdiction	People killed and % change							
	2005-09 average	2010	2014	% change 2005-09 to 2014	% change 2010 to 2014	2017	% change 2005-9 to 2017	% change 2010 to 2017
England excl. London	2,176	1,427	1,343	-38%	-6%	1,413	-35%	-1%
London	211	126	129	-39%	2%	131	-38%	4%
England	2,387	1,553	1,472	-38%	-5%	1,544	-35%	-1%
Wales	155	89	103	-33%	16%	103	-33%	16%
Scotland	274	208	200	-27%	-4%	146	-47%	-30%
Great Britain	2,816	1,850	1,775	-37%	-4%	1,793	-36%	-3%
Northern Ireland	119	55	79	-34%	44%	63	-47%	15%
UK	2,935	1,905	1,854	-37%	-3%	1,856	-37%	-3%

Source: DfT, [Reported Road Casualties Great Britain: Annual Reports 2010-2017](#)

Figure 2: Annual numbers killed as percentages of numbers in 2010 according to jurisdiction



Source: DfT, [Reported Road Casualties Great Britain 2005-2017](#)

England, excluding London, saw a 35% decline in the number of deaths by 2017 relative to 2005-09. However, relative to 2010, the decline was only 1%.

London saw a 38% decline in deaths by 2017 relative to 2005-09; this was slightly above the average for England. However, relative to 2010, London in 2017 showed an increase of 4%.

Scotland shows the largest decline in the UK (47%) in deaths between 2005-09 and 2017 and the largest decline (30%) between 2010 and 2017. However, this was not apparent in 2014 and reflects a large fall in deaths in the final year (2017).

Wales and Northern Ireland both showed large reductions in deaths in 2017 relative to 2005-09 (33% and 47% respectively). However, relative to 2010, both Wales and Northern Ireland saw substantial increases, of 16% and 15% respectively in 2017.

The striking differences in the measures of progress given by the two baselines reflect the substantial decline in road deaths during the period 2007-2010. They also show how, in a period of rapid change, use of a single year (2010) as a baseline can result in somewhat arbitrary measures of progress. This is particularly problematic for smaller jurisdictions (London, Wales, Northern Ireland and, to some extent, Scotland) where the absolute numbers of people killed in a single year are relatively small and there are inevitable annual statistical fluctuations. In addition, 2010 saw particularly large reductions in the number of deaths in London, Wales and Northern Ireland.

Table 2 shows the rate of people killed per million population, according to the population of that jurisdiction. Overall the UK saw a 5% fall in 2014, which fell further to 8% in 2017 relative to the 2010 baseline. This is the basis on which international road safety comparisons are usually made.

Table 2: People killed per million population according to jurisdiction (2005-09 average, 2010, 2014 and 2017)

Jurisdiction	People killed per million population and % change							
	2005-9 average	2010	2014	% change 2005-09 to 2014	% change 2010 to 2014	2017	% change 2005-09 to 2017	% change 2010 to 2017
England excl. London	49.8	32.0	29.5	-41%	-8%	30.2	-39%	-6%
London	27.4	15.6	14.6	-45%	-3%	14.9	-46%	-5%
England	46.4	29.5	27.1	-42%	-8%	27.8	-40%	-6%
Wales	51.5	29.2	33.3	-35%	14%	33.0	-36%	13%
Scotland	53.0	39.5	37.4	-29%	-5%	26.9	-49%	-31%
Great Britain	47.3	30.4	28.3	-40%	-7%	27.9	-41%	-8%
Northern Ireland	67.7	30.5	42.9	-37%	41%	33.7	-50%	10%
UK	47.9	30.4	28.7	-40%	-5%	28.1	-41%	-8%

Source: DfT, [Reported Road Casualties Great Britain 2010-2017](#); Office of National Statistics [Population Estimates 2005-2017](#) (The population data are provided in Appendix 3 in this update.)

Seriously injured casualties

The number of reported seriously injured casualties is not as reliable as that of the number of people killed as there is known to be a degree of under-reporting each year. The DfT estimates 57,000 seriously injured casualties were underreported on average each year between 2012 and 2016.¹⁰ However, the DfT is confident that the degree of underreporting is reasonably stable, so comparisons over time can be made.

The adoption of the CRASH and COPA reporting systems by police forces in England and London respectively in 2015 and 2016 has had a substantial impact on the number of casualties reported as serious. Initial analysis of high level data by DfT suggest that switching to CRASH and COPA added between 5% and 15% to the Great Britain total for 'serious' casualties in 2016.¹¹ The DfT, using the Office for National Statistics (ONS) report templates,¹² estimates that the total number of serious casualties in 2017 would have been 10% higher if all police forces used the new reporting systems of CRASH. Due to the adoption of CRASH and COPA, the 2017 serious casualty numbers for England are not comparable to years before 2015 without adjustment. We have presented the unadjusted data here, with these caveats.

Figures for serious casualties for other parts of the UK are unaffected by CRASH, but comparisons between these parts and England may no longer be valid.

In 2017, there were 24,831 reported seriously injured casualties in the UK. When allowing for changes in the reporting systems, the total number of seriously injured casualties in 2017 is similar to other

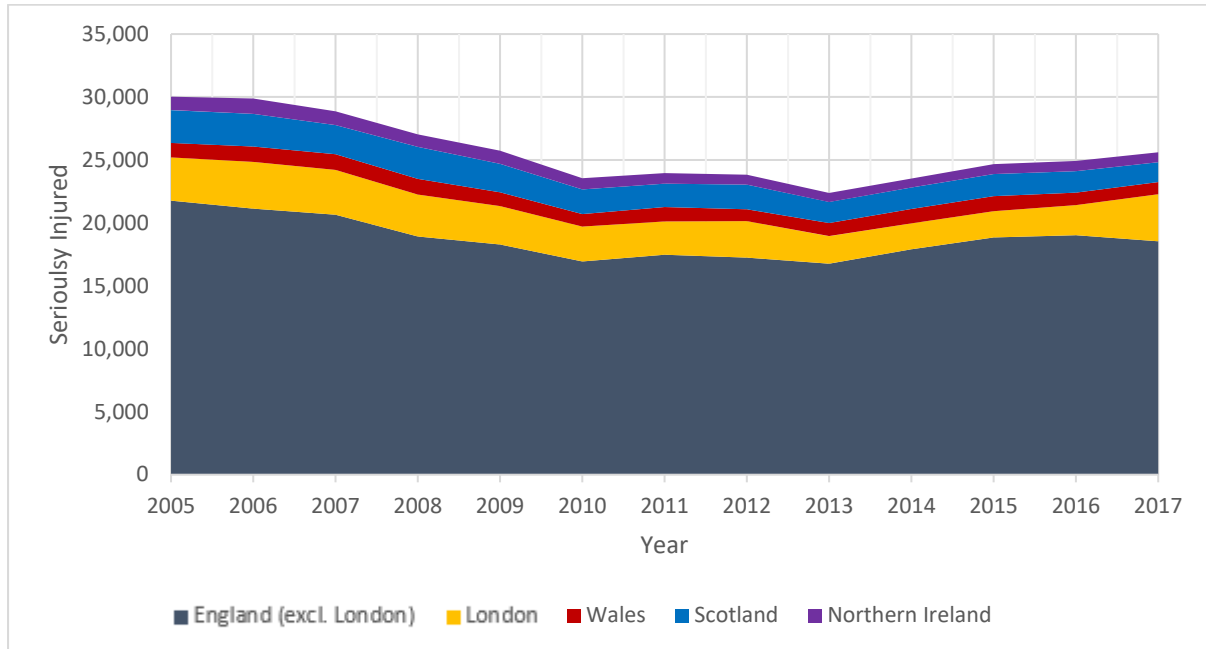
¹⁰ Department for Transport (2016). *Reported Road Casualties Great Britain: 2016 Annual Report*, London.

¹¹ Department for Transport (2016). *Reported Road Casualties Great Britain: 2016 Annual Report*, London.

¹² Office of National Statistics (2018). *Estimating and adjusting for changes in the method of severity reporting for road accidents and casualty data: Interim Report*.

years since 2010, allowing for natural variations.¹³ According to the DfT, CRASH should be more accurate in reporting of injury severity.¹⁴

Figure 3: Numbers seriously injured according to jurisdiction (United Kingdom, 2005-17)



Source: DfT, [Reported Road Casualties Great Britain 2005-2017](#)

¹³ Department for Transport (2018). *Reported Road Casualties Great Britain: 2017 Annual Report*, London

¹⁴ The development of CRASH has been funded by DfT and DfT is making it available to police services at no cost. COPA was developed by the Metropolitan Police Service.

Table 3: Seriously injured casualties according to jurisdiction (UK 2005-09 average, 2010, 2014 and 2017)

Jurisdiction	Seriously injured casualties and % change							
	2005-9 average	2010	2014 (pre-CRASH)	% change 2005-09 to 2014	% change 2010 to 2014	2017 (post-CRASH)	% change 2005-09 to 2017	% change 2010 to 2017
England excl. London	20,153	16,939	17,912	-11%	6%	18,530	-8%	9%
London	3,418	2,763	2,041	-40%	-26%	3,751	10%	36%
England	23,571	19,702	19,953	-15%	1%	22,281	-5%	13%
Wales	1,189	998	1,160	-2%	16%	961	-19%	-4%
Scotland	2,465	1,960	1,694	-31%	-14%	1,589	-35%	-19%
Great Britain	27,225	22,660	22,807	-16%	1%	24,831	-9%	10%
Northern Ireland	1,081	892	710	-34%	-20%	778	-28%	-13%
UK	28,306	23,552	23,517	-17%	0%	25,609	-10%	9%

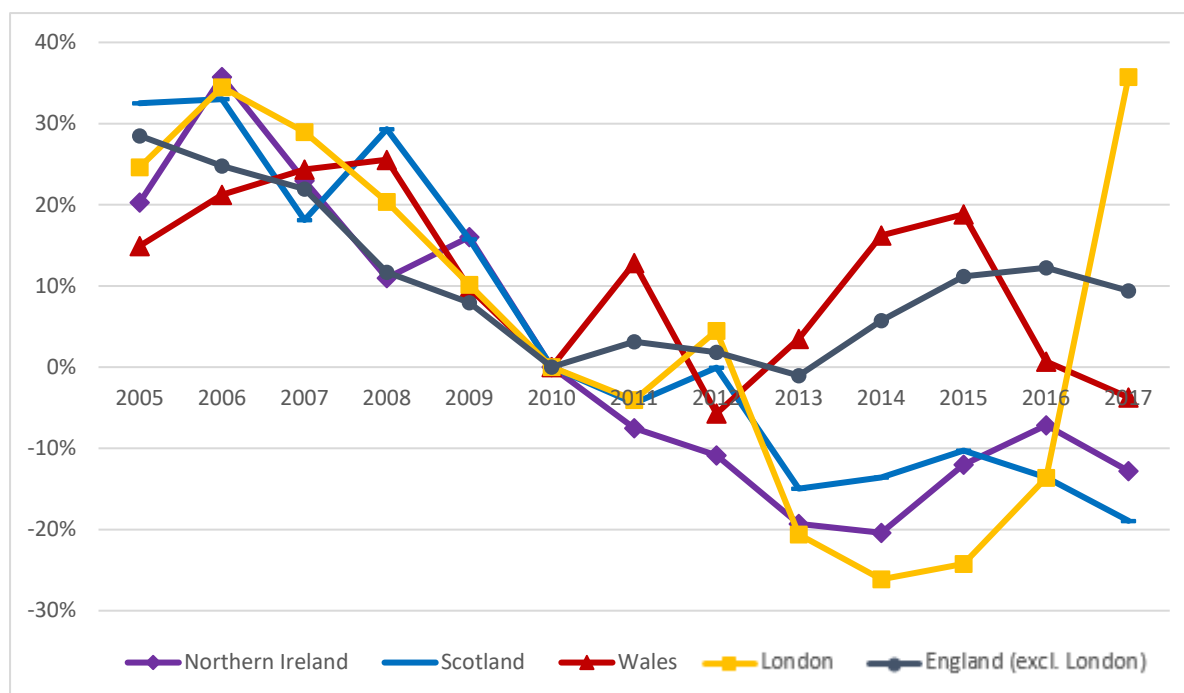
Source: DfT, [Reported Road Casualties Great Britain 2010-2017](#)

Table 3 shows that overall for the UK in 2014 (pre-CRASH) there was no change in the number of seriously injured casualties compared to 2010, but by 2017 (post-CRASH) there were 9% more than in 2010. There appeared to be substantial variations across the UK.

By 2014, London showed the largest decrease and Wales showed the largest increase in the number of reported seriously injured casualties. However, by 2017, London showed the biggest increase. This is likely to be at least partly due to the introduction of COPA. In 2016 the Metropolitan Police introduced online self-reporting of casualties by the public. This is believed to have increased the total number of casualties reported in London, including seriously injured and slightly injured casualties.

By 2017, Wales, Scotland and Northern Ireland (all non-CRASH/COPA jurisdictions) showed decreases in seriously injured casualties, relative to 2010.

Figure 4: Annual numbers seriously injured as percentages of numbers in 2010 according to jurisdiction



Source: DfT, [Reported Road Casualties Great Britain 2005-2017](#)

Table 4: Seriously injured casualties per million population according to jurisdiction (2005-09 average, 2010, 2014 and 2017)

Jurisdiction	Seriously Injured casualties per million population and % change							
	Seriously Injured 2005-9 average	2010	2014 (pre-CRASH)	% change 2005-09 to 2014	% change 2010 to 2014	2017 (post-CRASH)	% change 2005-09 to 2017	% change 2010 to 2017
England excl. London	461	380	391	-15%	3%	396	-14%	4%
London	443	343	239	-46%	-30%	428	-3%	24%
England	459	374	367	-20%	-2%	401	-12%	7%
Wales	396	327	375	-5%	15%	308	-22%	-6%
Scotland	477	372	317	-34%	-15%	293	-39%	-21%
Great Britain	457	372	363	-20%	-2%	387	-15%	4%
Northern Ireland	614	494	386	-37%	-22%	416	-32%	-16%
UK	462	375	364	-21%	-3%	388	-16%	3%

Source: DfT, [Reported Road Casualties Great Britain 2010-2017](#); Office of National Statistics Population Estimates 2005-2017

Table 4 shows that for the UK as a whole, relative to 2010, the number of seriously injured casualties per million population had decreased 3% by 2014. The 3% increase by 2017 probably reflects the effects of CRASH and COPA. Once again, there appear to be substantial variations across the jurisdictions of the UK.

3. DEATHS BY ROAD USER GROUP

The distribution of risk between road users is of interest to policy makers and the public. We present the changes over time for the main road user groups in Great Britain in 2005-09, 2010, 2014 and 2017. Northern Ireland road casualty statistics are reported differently from those for Great Britain so we have presented only the Great Britain statistics in this section.

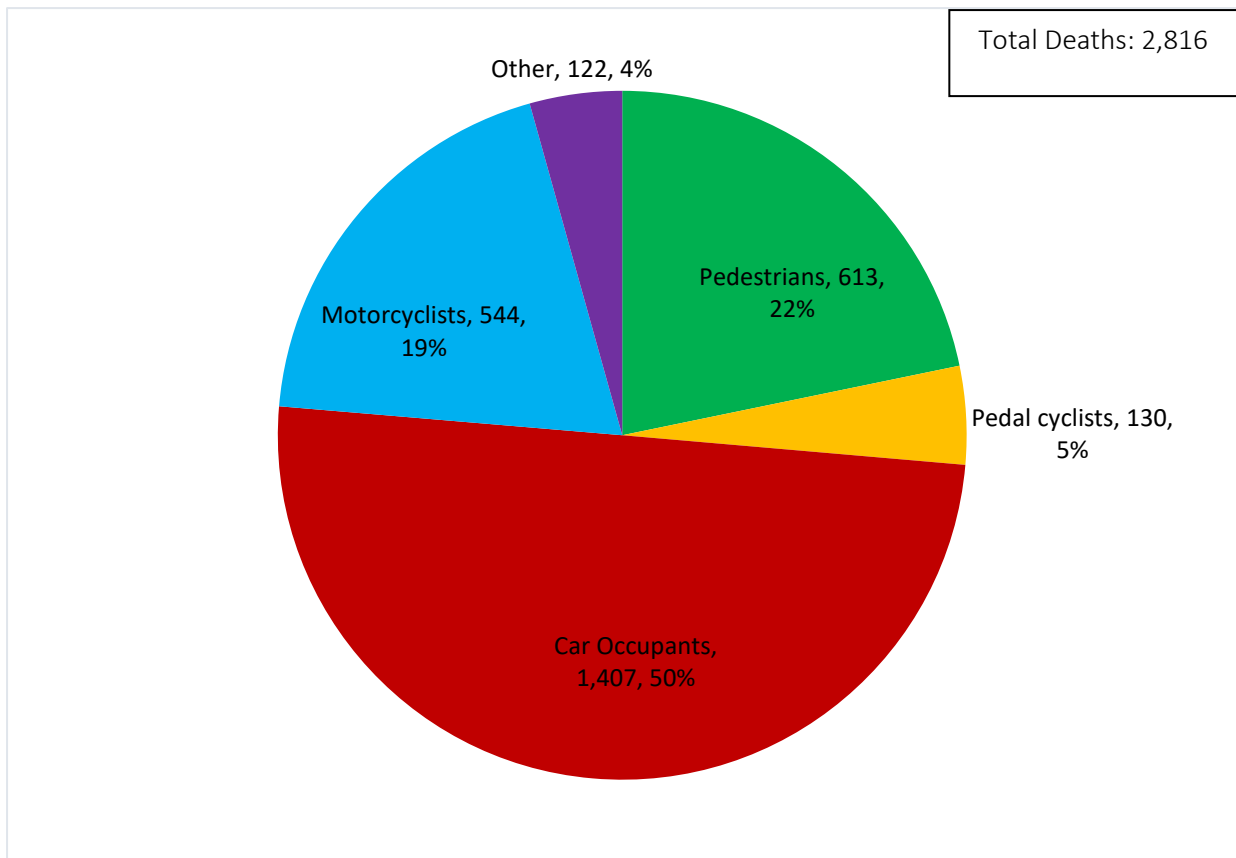
Between 2005-09 and 2017, the number of deaths for all user groups declined substantially, but at differing rates.

- Car occupant deaths declined faster than the overall average rate and consequently their share of total deaths reduced from 50% to 44%.
- Pedestrian deaths declined substantially by 2010, but increased again in 2014 and 2017 to the extent that pedestrians represented 26% of total deaths by 2017 (up from 22% in 2005-09).
- Motorcyclist deaths declined at the average rate, remaining at 19% of deaths.
- Pedal cyclist deaths, while also declining, have increased from 5% to 6% of the total.

Apart from pedestrians, all groups saw deaths decline between 2010 and 2017.

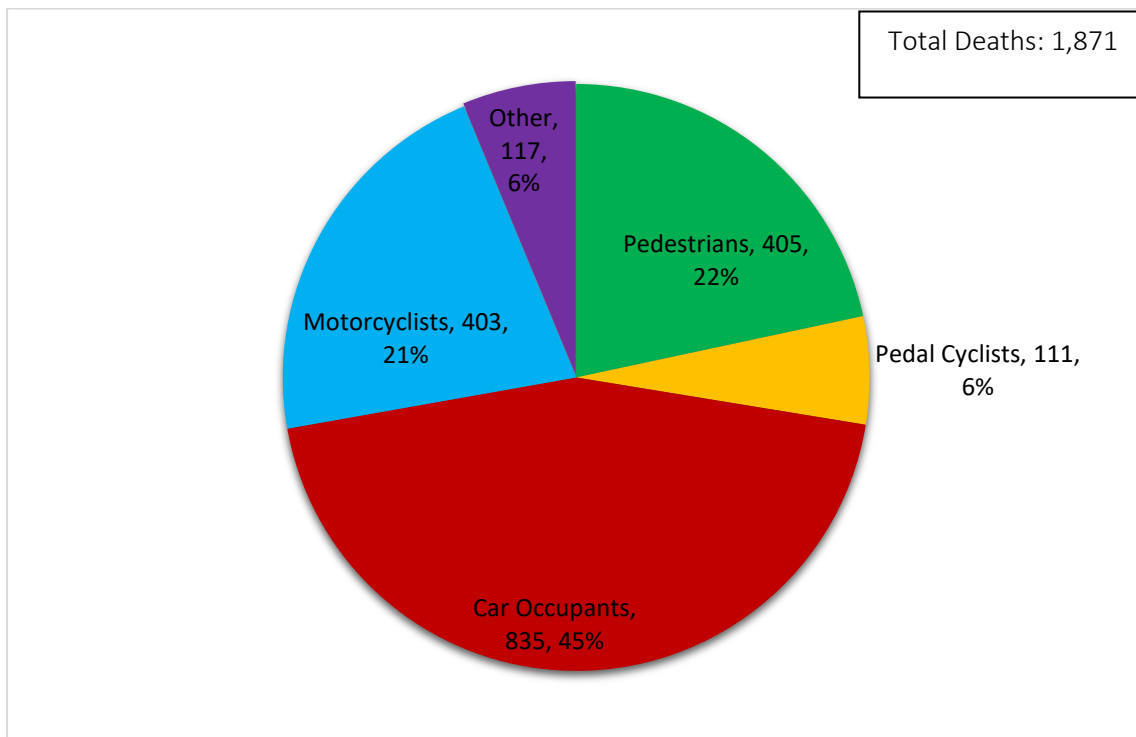
The different rates of death reduction may be due to differences in the extent to which safety improvements have been made for each road user group, or to changes in their relative traffic volumes, or to a combination of factors.

Figure 5.1: Deaths by road user group (Great Britain, 2005-09 Average)



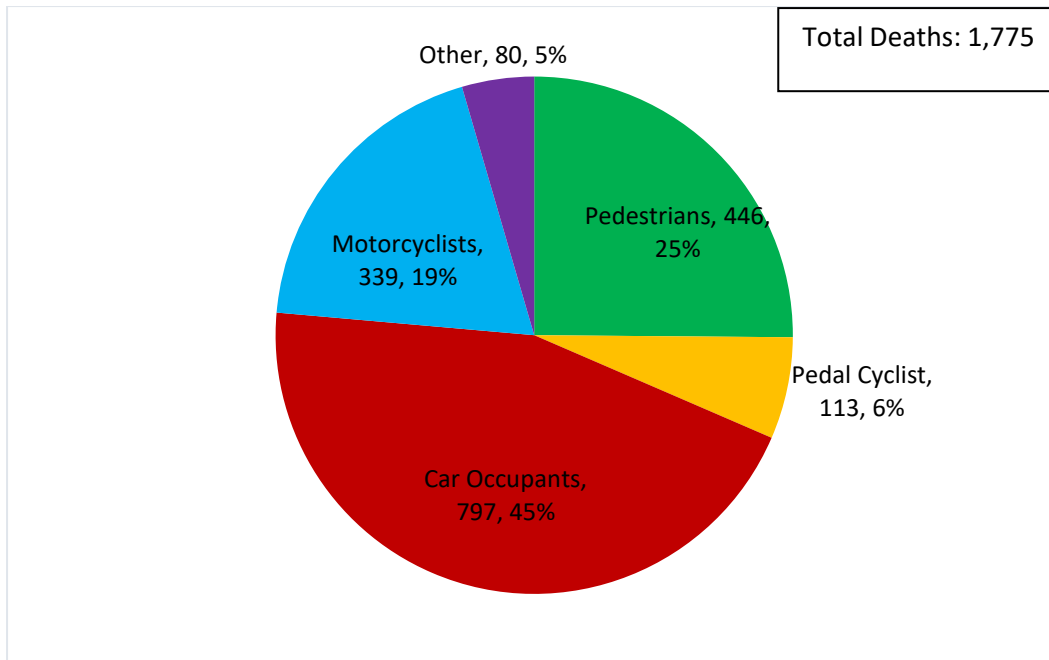
Source: DfT, Reported Road Casualties Great Britain 2005-2009

Figure 5.2: Deaths by road user group (Great Britain, 2010)



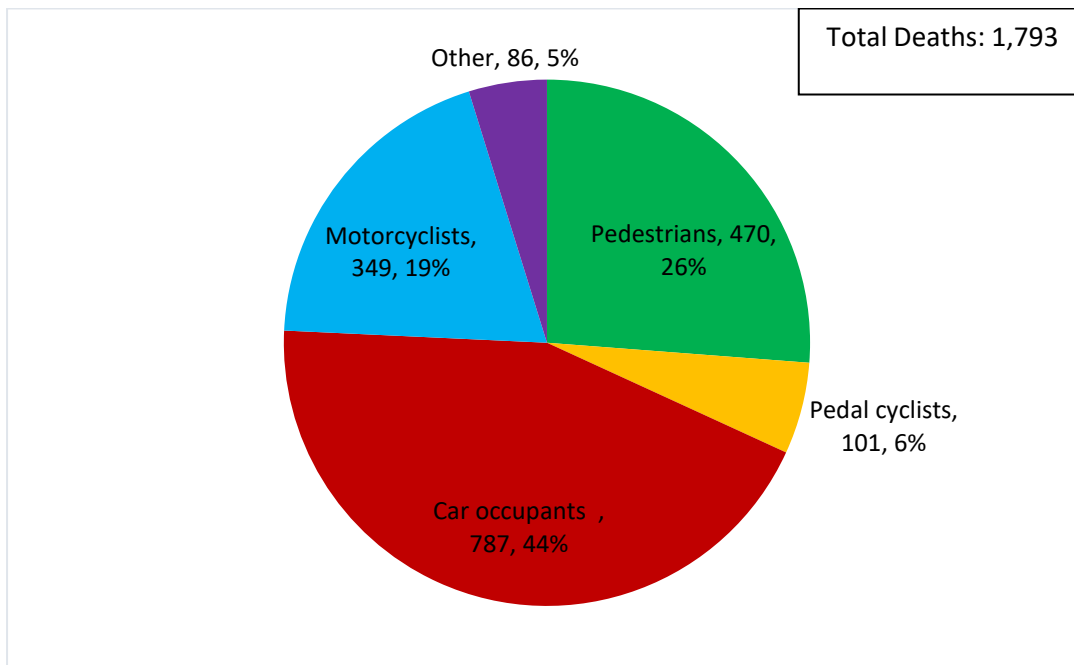
Source: DfT, Reported Road Casualties Great Britain 2010

Figure 5.3: Deaths by road user group (Great Britain, 2014)



Source: DfT, Reported Road Casualties Great Britain 2014

Figure 5.4: Deaths by road user group (Great Britain, 2017)



Source: DfT, Reported Road Casualties Great Britain 2017

4. CASUALTIES ON THE STRATEGIC ROAD NETWORK IN ENGLAND

This analysis looks at number of people killed or seriously injured on the Strategic Road Network (SRN) in England. These figures are a subset of (not additional to) those for England presented above.

The SRN is made up of around 4,400 miles of motorways and major trunk roads, approximately as follows:

- Motorways - 1,877 miles
- dual carriageway - 1,712 miles
- single carriageway - 858 miles.

The SRN represent two percent of all roads in the UK by length but carries approximately one third of all motor traffic by mileage. Some 4 million vehicles use the SRN every day.¹⁵

Highways England manages the SRN. The DfT has set Highways England a target to reduce the number of people killed or seriously injured on the SRN by 40% between 2005-09 and 2020.

Table 5: Killed and seriously injured casualties (Strategic Road Network in England, 2005-09 average, 2010, 2014 and 2017)

	Killed and seriously injured casualties							
	2005-09 average	2010	2014 (pre-CRASH)	% change 2005-09 to 2014	% change 2010 to 2014	2017 (post-CRASH)	% change 2005-09 to 2017	% change 2010 to 2017
People Killed	357	249	211	-41%	-15%	236	-34%	-5%
Seriously Injured Casualties	1,964	1,637	1,642	-16%	0%	1,617	-18%	-1%
Killed & Seriously Injured Casualties (KSI)	2,321	1,886	1,853	-20%	-2%	1,853	-20%	-2%

Source: Highways England (2018). Validated Collision and Casualty Data – 2017

Table 5 shows that, by 2010, there was a substantial reduction in the number of people killed on the SRN compared with the 2005-09 baseline set by the DfT. There were further reductions by 2014 but these were partially reversed by 2017.

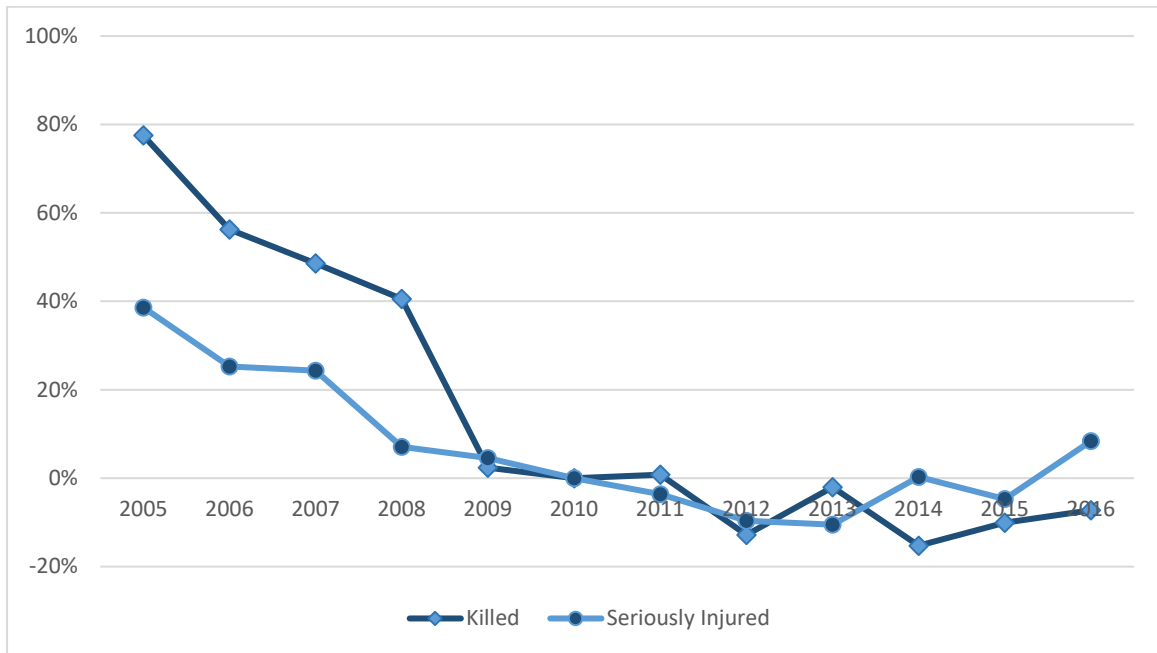
The situation was similar for serious injuries: by 2010 there was a substantial reduction in the number of people seriously injured, compared with the 2005-09 baseline. However, between 2010 and 2014 (pre-CRASH) there was no change and only a 1% reduction by 2017 (post-CRASH).

These figures are not adjusted for any CRASH effect.

Progress against the target is shown in Appendix A. Based on trends since 2010, achieving the 2020 target looks very challenging.

¹⁵ Highways England (2017). *Highways England Strategic Road Network Initial Report Overview*.

Figure 6: Annual numbers killed and numbers seriously injured on the Strategic Road Network as percentages of numbers in 2010



Source: Highways England (2018). Validated Collision and Casualty Data – 2017

Highways England has provided the following comment:

'The number of fatalities on the Strategic Road Network in 2017 at 236 were one third lower than the 2005-09 baseline. However, since 2012 the overall trend has been flat, ranging between 211 and 244 per year. In terms of KSIs, single carriageway A Roads on the SRN have more than 6 times the KSI rate (76.7 casualties per billion vehicle miles) of motorways (12.4). Single carriageway A Roads account for just 6% of traffic on the SRN but 25% of fatalities.'

5. CONCLUSIONS

There has been little reduction in road deaths in the UK since 2010 – some seven years. Numbers of seriously injured casualties have increased, although the impact of CRASH on recent numbers of recorded seriously injured casualties in England needs to be considered.

When casualties are measured against the 2005-09 baseline there has been a significant reduction. However, this is due almost entirely to the substantial falls in the period 2007-2010. When measured against the 2010 baseline, a levelling out and, in some cases, a rise is evident.

The DfT and Government ministers still have a tendency to refer to substantial reductions in road casualties “over the past 10 years” without also stating that there has been almost no reduction in deaths or serious injuries since 2010. For example, in March 2018, “*Britain has some of the safest roads in the world. Casualties have fallen substantially over the last 10 years, with a 44% reduction in fatalities on Britain's roads since 2006.*”¹⁶ This is unhelpful.

The previous PACTS report of 2015, based on KSIs, showed that some parts of the UK were performing substantially better than others. However, this update, based on deaths only and more recent data, shows a somewhat different picture.

The effects of CRASH/COPA make analysis of serious injury trends difficult. Those jurisdictions which have not introduced CRASH have seen reductions whereas those jurisdictions (England and London) which have introduced CRASH/COPA have seen increases since 2015.

The increase in the UK population during this period should be taken into account when considering progress. The rate of people killed per million population for the UK showed a reduction of 8% between 2010 and 2017. This means that, from an individual’s perspective, the risk of a fatal road injury has reduced.

The UK has managed to maintain its position as one of the best performing European countries, measured by road deaths per million population, despite having one of the lowest percentage rates of reduction in deaths since 2010. It remains close to Sweden, although Norway and Switzerland now consistently perform better.

Although the UK Government has refused to adopt national road safety targets, many parts of the UK have done so. Scotland, Wales and Northern Ireland adopted targets earlier and used a 2004-08 baseline. These countries are making good progress against their target and some have been achieved already. London and Highways England have targets based on 2005-09. Although only one year later, this baseline makes the targets much more challenging.

It is widely accepted that targets have helped to drive road safety effort in these jurisdictions and that progress would have been less without the targets. However, the casualty figures do not demonstrate differential progress associated with having targets.

¹⁶ DfT, *Call for Evidence - CWIS Safety Review, March 2018, p5*

6. RECOMMENDATIONS

Based on this analysis, PACTS makes the following recommendations:

- The Government needs to take bold measures, at national level, to end the “plateau” in the numbers of road deaths and seriously injured casualties since 2010 across most of the UK.
- The Government should not refer to substantial reductions in road casualties “over the past 10 years” without also stating that there has been almost no reduction in deaths or serious injuries since 2010.
- Those jurisdictions that have already achieved, or almost achieved, their 2020 road safety targets, should renew them as soon as possible. New targets should have baseline and deadline periods that each cover at least three years. For example, achieving a 50% reduction in fatalities by 2028-30 (average) compared to the 2018-2020 (average).
- Separate targets should be adopted for deaths and seriously injured casualties.
- Those police forces which have not yet adopted the new casualty reporting system (CRASH) are urged to do so.

APPENDIX A – ROAD SAFETY TARGETS SET BY UK JURISDICTIONS AND PROGRESS

The devolved administrations of Scotland, Wales, Northern Ireland and London have set their own casualty reduction targets. The UK Government set a target for Highways England.¹⁷ These are shown below, with reported progress.

The targets and baselines vary. Those targets measured against earlier baselines (2004-08) have proved easier to achieve because of the substantial reductions in casualties in all parts of the UK and elsewhere during 2007-2010, accelerated by the recession.

Table A1: Scotland: road safety targets and progress

	Baseline 2004-8 average	2017 actual	2020 targets
People killed	292	146 (-50%)	175 (-40%)
People seriously injured	2,605	1,589 (-39%)	1,172 (-55%)
Children killed (5 year average)	15	7 (-61%)	8 (-50%)
Children seriously injured	325	152 (-53%)	114 (-65%)

Source: [Transport Scotland \(2018\) Reported Road Casualties Scotland 2017: Transport Scotland \(10/18\)](#)

We have summarised the headline targets above as these are similar to the targets adopted in other parts of the UK.

Transport Scotland reports the following for the Scotland's full set of road safety targets:¹⁸

Compared to the 2004-2008 baseline, in 2017 there was:

- A 50% reduction in fatalities (the 2020 target is a 40% reduction)
- A 39% reduction in serious injuries (the 2020 target is a 55% reduction)
- A reduction of 61% in the number of children killed over a three-year period (the 2020 target is a 50% reduction)
- A reduction of 53% in the number of children seriously injured (the 2020 target is a 65% reduction)
- A 51% reduction in the slight casualty rate (the 2020 target is a 10% reduction).

¹⁷ Highways England (2015). Strategic Business Plan 2015-2020.

¹⁸ Transport Scotland (2018). Key Reported Road Casualties Scotland 2017. Statistical Bulletin

Table A2: Wales: road safety targets and progress

	Baseline 2004-8 average	2017 actual	2020 targets
Killed or seriously injured	1,406	1,064 (-24%)	844 (-40%)
Motorcyclists killed or seriously injured	257	252 (-2%)	193 (-25%)
Young people (16-24) killed or seriously injured	396	235 (-41%)	237 (-40%)

Source: [Police recorded road accidents, 2017. Welsh Government \(Aug 2018\)](#)

Table A3: Northern Ireland: road safety targets and progress

	Baseline 2004-8 average	2017 actual	2020 targets
People killed	126	63 (-50%)	50 (-60%)
People seriously injured	1,111	778 (-30%)	611 (-45%)
Children (aged 0-15 years) killed or seriously injured	128	68 (-47%)	58 (-55%)
Young people (aged 16-24) killed or seriously injured	366	177 (-52%)	165 (-55%)

Source: [Department of Infrastructure Northern Ireland \(2018\)](#)

Table A4: London: road safety targets and progress

	Baseline 2005-9 average	2017 actual	2022 targets (longer period)
Killed or seriously injured	3,627	3,882 (+7%)	1,269 (-65%)

* In 2018 the London Mayor replaced the 2020 target with a more challenging target of 65% KSI reduction by 2022.
Source: [TfL, Vision Zero Action Plan, July 2018](#).

Table A5: Highways England/Strategic Road Network: road safety targets and progress

	Baseline 2005-9 average	2017 actual	2020 targets
Killed or seriously injured	2,321	1,853 (-20%)	1,393(-40%)

Source: [Highways England \(2015\)](#) and [Highways England \(2018\)](#)

APPENDIX B – KILLED AND SERIOUSLY INJURED CASUALTIES COMBINED

Killed casualties and seriously injured casualties are frequently reported as a combined figure (KSI). Our 2015 report used numbers of KSI to assess and compare progress. In this update report, as explained earlier, we have separated killed casualties from seriously injured casualties. Whilst the number of KSI may be an adequate measure for some purposes, it largely reflects serious injury (not death) and, since 2015, numbers and trends have been influenced by the CRASH effect. We present the KSI numbers here for completeness. The DfT's warnings regarding comparisons of pre-CRASH and post-CRASH serious injury data in England should be noted.

The table below shows that reductions in KSI casualties, both in terms of total numbers and relative to population, have been levelling out since 2010.

The changes are most dramatic for London which has gone from being the best performing jurisdiction in 2014 to the worst in 2017. COPA has the capacity to provide more accurate classification of injury severity than the previous system but it is unclear if this has yet been established in practice.

Scotland, Wales and Northern Ireland all show a fall in KSI in 2017 relative to 2010. The adoption of CRASH might reduce or even reverse this.

Table B1: KSI casualties by jurisdiction (UK, 2005-09 average, 2010, 2014 and 2017)

Jurisdiction	Numbers KSI and % change							
	2005-09 average	2010	2014 (pre-CRASH)	% change 2005-09 to 2014	% change 2010 to 2014	2017 (post-CRASH)	% change 2005-09 to 2017	% change 2010 to 2017
England excl. London	22,330	18,366	19,255	-14%	5%	19,943	-11%	9%
London	3,628	2,889	2,170	-40%	-25%	3,882	+7%	34%
England	25,958	21,255	21,425	-17%	1%	23,825	-8%	12%
Wales	1,344	1,087	1,263	-6%	16%	1,064	-21%	-2%
Scotland	2,739	2,168	1,894	-31%	-13%	1,735	-37%	-20%
Great Britain	30,041	24,510	24,582	-18%	0%	26,624	-11%	9%
Northern Ireland	1,200	947	789	-34%	-17%	841	-30%	-11%
UK	31,241	25,457	25,371	-19%	0%	27,465	-12%	8%

Source: DfT, Reported Road Casualties Great Britain 2010-2017; Office of National Statistics Population Estimates 2005-2017

APPENDIX C – ROAD CASUALTY TABLES AND POPULATION DATA USED IN THIS REPORT

The tables below are provided for completeness and to assist readers.

Table C1: Killed casualties by jurisdiction, 2005-2017

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
London	214	231	222	205	185	126	159	135	133	129	136	116	131
England	2,521	2,464	2,280	1,918	1,695	1,427	1,435	1,356	1,297	1,343	1,327	1,382	1,413
Wales	180	163	162	143	126	89	121	93	111	103	105	103	103
Scotland	286	314	282	272	216	208	186	170	172	200	162	191	146
Northern Ireland	135	126	113	107	115	55	59	48	57	79	74	68	63
UK	3,336	3,298	3,059	2,645	2,337	1,905	1,960	1,802	1,770	1,854	1,804	1,860	1,856

Table C2: Seriously injured casualties by jurisdiction, 2005-2017

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
London	3443	3716	3563	3326	3044	2,763	2651	2887	2,194	2,041	2,094	2,387	3,751
England	21,767	21,140	20,655	18,920	18,282	16,939	17,472	17,252	16,763	17,912	18,835	19,015	18,530
Wales	1147	1210	1241	1253	1095	998	1126	941	1,033	1,160	1,186	1,005	961
Scotland	2,597	2,607	2,315	2,535	2,269	1,960	1,873	1,959	1,667	1,694	1,759	1,694	1,589
Northern Ireland	1,073	1,211	1,097	990	1,035	892	825	795	720	710	785	828	778
UK	30,027	29,884	28,871	27,024	25,725	23,552	23,947	23,834	22,377	23,517	24,659	24,929	25,609

Table C3: Killed and seriously injured casualties on the Strategic Road Network in England, 2005-2017

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Killed	442	389	370	350	255	249	251	217	244	211	224	231	231
Seriously Injured	2,269	2,051	2,035	1,753	1,712	1637	1578	1479	1465	1642	1,560	1,774	1,617

The population data below were obtained from the Office of National Statistics and were used to calculate the casualty rates per million population in this update.

Table C4: Population by jurisdiction, 2005-09 average, 2010, 2014 and 2017

Jurisdiction	Average Population 2005-2009	Population 2010	Population 2014	Population Mid 2017
England excl. London	43,679,897	44,580,957	45,777,220	46,849,771
London	7,713,012	8,061,495	8,539,398	8,769,659
England	51,392,909	52,642,452	54,316,618	55,619,430
Wales	3,005,203	3,049,971	3,092,036	3,125,165
Scotland	5,169,620	5,262,200	5,347,600	5,424,800
Great Britain	59,567,732	60,954,623	62,756,254	64,169,395
Northern Ireland	1,761,003	1,804,833	1,840,498	1,870,834
UK	61,326,735	62,759,456	64,596,752	66,040,229

Source: [Office of National Statistics Population Estimates 2005-2017](#)

- Etika, A. (2018). *Developing safe system road safety indicators for the UK*. PACTS with Ageas.
- PACTS and RoadSafe (2017). *2017 Speed Summit: A Report on Effective Schemes*. PACTS and RoadSafe.
- Harrison, K. (2017). *Suicides on UK Roads*. PACTS and Samaritans.
- Tunbridge, R., and Harrison, K. (2017). *Fifty Years of the Breathalyser – Where Now for Drink Driving?* PACTS.
- Davies, D., Fosdick, T., Campsall, D., Owen, R., Ciaburro, T., Spencer, J., and Fay, P. (2017). *UK Road Safety: Seizing the Opportunities*. PACTS.
- Christie, N., Ward, H., and Helman, S. (2017). *The Changing Nature of Driving for Work and Questions for Safety Policy and Practice*. PACTS and the Transport Safety Commission.
- Atchison, L. (2017). *Drug Driving in Europe*. PACTS and ETSC.
- Atchison, L. (2016). *Reducing Casualties Involving Young Drivers and Riders in Europe*. YEARS project, PACTS and ETSC.
- Lawton, B., and Fordham, C. (2016). *Understanding the Strengths and Weaknesses of Britain's Road Safety Performance*. TRL and PACTS.
- Carsten, O., Campsall, D., Christie, N., and Tunbridge, R. (2016). *Fit to Drive?* PACTS.
- Allsop, R. (2015). *Saving Lives by Lowering the Legal Drink-Drive Limit*. PACTS and RAC Foundation.
- Amos, L., Davies, D., and Fosdick, T. (2015). *Road Safety Since 2010*. PACTS and RAC Foundation.
- UK Transport Safety Commission, UK Transport Safety: Who is responsible?, PACTS.
- PACTS and Direct Line (2015 & 2016). *Constituency Road Safety Dashboard*. PACTS and Direct Line.
- Baster, N., Amos, L., and Davies, D. (2014). *Achieving Safety, Sustainability and Health Goals in Transport*. PACTS.
- Mitchell, C. G. B., and Allsop, R. (2014). *Projections of Road Casualties in Great Britain to 2030*. PACTS.
- PACTS and RSA Ltd. (2013). *Stepping Out. Pedestrian Casualties: an analysis of the people and circumstances*. PACTS.
- Baster, N. (2012). *Tackling the Deficit: Checking the Health of Road Safety*. PACTS.
- Baster, N. (2012). *It's My Choice. Safer mobility for an ageing population*. PACTS.
- Baster, N. (2011). *Tackling the Deficit: Where Next for Road Safety*. PACTS and RAC Foundation.
- Besley, E., (2010). *Tackling the Deficit: At What Cost to Road Safety?* PACTS and RAC Foundation.
- Besley, E., (2010). *Kerb Your Enthusiasm. Why shared space doesn't always mean shared surface, and other stories*. PACTS.



Parliamentary Advisory Council for Transport Safety (PACTS)
Buckingham Court
78 Buckingham Gate
Westminster
London
SW1E 6PE

admin@pacts.org.uk
0207 222 7732
www.pacts.org.uk
@PACTS