

SDR 78/2016

Police recorded road casualties in Wales, 2015

28 June 2016

This is an annual release about road accidents in Wales and provides the latest figures for 2015. The data comes from Welsh Police forces and includes details of all vehicles and casualties involved in personal injury accidents on Welsh roads. All casualty injuries are classed as fatal, serious, or slight.

Key Results for 2015


- ↓ There were 5,543 **road accidents** involving personal injury recorded by the police, 333(r) fewer than in 2014 (6 per cent reduction) and continuing a long-term trend of fewer road accidents.
- ↑ **105 people were killed**, which was 2 more than in 2014
- ↓ **1,081 people were seriously injured**, which was 79 fewer than in 2014 but higher than in 2012 when the series was at an all-time low (numbers had subsequently increased in 2013 and 2014).

(r) Revised on 29 June 2016, due to a typographical error.

Welsh Government Targets

In 2013 new targets for 2020 were introduced. They are based on the average for 2004-08

KSI Target 1 - A **40% reduction** in the total number of people killed and seriously injured (KSI) on Welsh roads. The number of KSIs in 2015 was 1,186; **16 per cent lower** than the 2004-08 average.

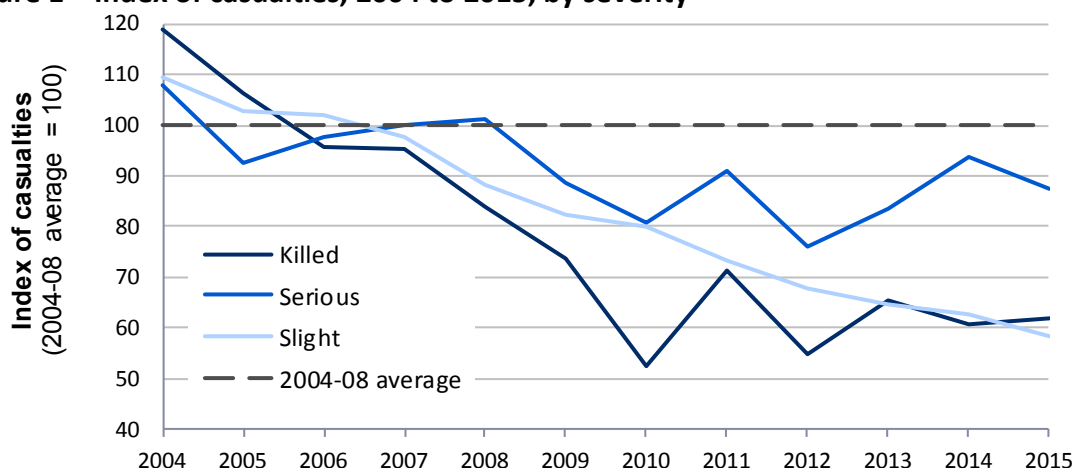
 Target 2 - A **25% reduction** in the number of motorcyclists KSI on Welsh roads. In 2015 there were 273 Motorcyclist KSI; **6 per cent higher** than the 2004-08 average.

Target 3 - A **40% reduction** in the number of young people (aged 16-24) KSI on Welsh roads. In 2015 there were 284 young people KSI; **28 per cent lower** than the 2004-08 average.



Figure 1 shows that overall casualties of all severities have dropped compared with the 2004-08 average. However, as the targets show, there has been an increase in motorcycle KSIs combined with large decreases in other types of casualties.

Figure 1 – Index of casualties, 2004 to 2015, by severity



Source: Welsh Government

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Llywodraeth Cymru
Welsh Government

Contents

All Road Accidents	3
KSI Accidents	4
Casualties	5
KSI Casualties.....	5
Accident Location Maps.....	7
Casualties by Road User type	9
Casualties by Road Speed limit	11
Causes of accidents	13
Key quality information:	15

List of Figures

Figure 1	Index of casualties, 2004 to 2015, by severity
Figure 2	Number of accidents and volume of traffic on Welsh roads
Figure 3(a)	Number of fatal road accidents on Welsh Roads 1993 to 2015
Figure 3(b)	Number of serious road accidents on Welsh Roads 1993 to 2015
Figure 4	Number of deaths by selected cause of death
Figure 5	KSI casualties and volume of traffic on Welsh roads
Figure 6	KSI casualties by age group 1993 - 2015
Figure 7(a)	All Casualties by Road User type
Figure 7(b)	KSI Casualties by Road User type
Figure 8	Number of Casualties by Road User type and severity
Figure 9	Proportions of casualties and traffic volume by road user type
Figure 10a	Casualties, by speed limit of road
Figure 10b	KSI casualties, by speed limit of road
Figure 11	Number of Casualties and Percentage KSI by road speed limit
Figure 12	The 10 most common causes of KSI accidents, by reporting officers' confidence
Figure 13	Number of Contributory Factor (CF) categories listed as cause, split by likelihood

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You can also use the above email address to request to be added to the mailing list for our Welsh transport statistical publications.

All Road Accidents

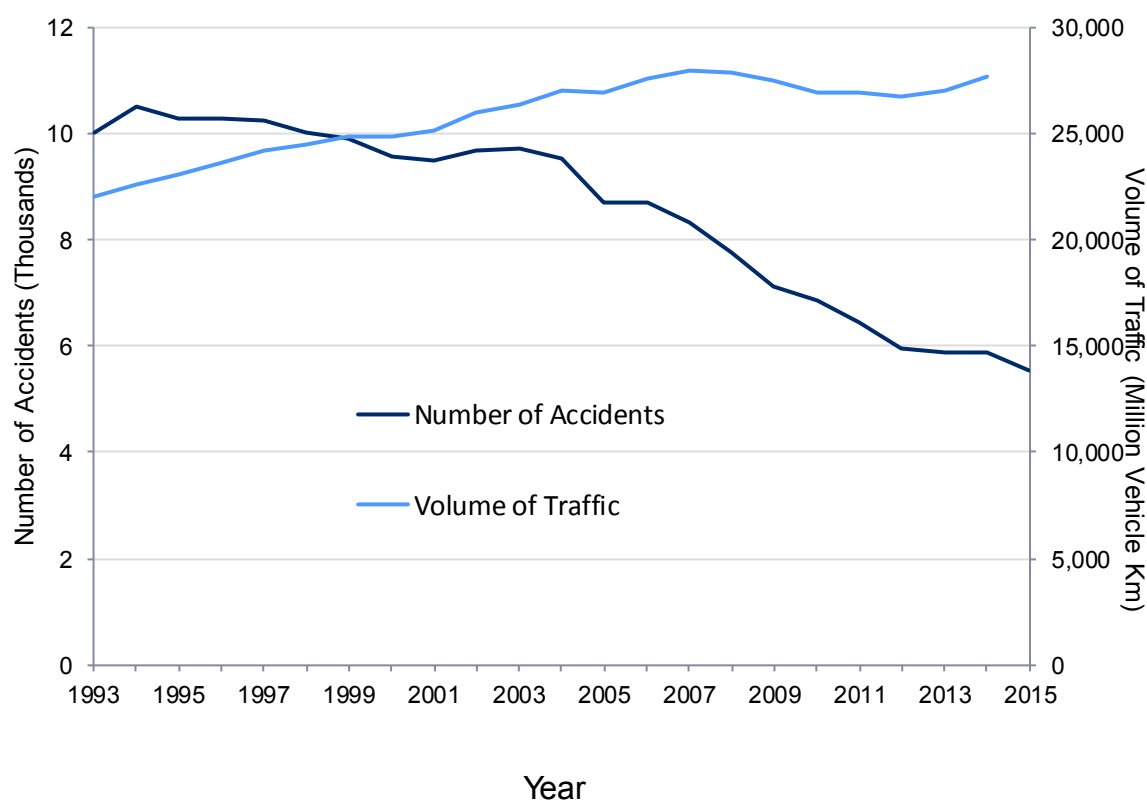
During 2015 there were 5,543 road accidents involving personal injury, which was 6 per cent lower than in 2014. Of these 91 were classed as fatal, 940 were classed as serious and the remaining 4,512 were classed as slight. Accident severity is classed according to the most seriously injured casualty in that accident. For example if there are 5 casualties and 1 fatality, the accident is classed as fatal.

Comparing rolling 3-year averages, the average number of accidents was **6 per cent lower** for 2013-2015 than the previous average (2012-2014), a fall of 371 accidents.



Figure 2 illustrates the long run downward trend in number of accidents on Welsh roads since 1993¹ and it contrasts with the gradual increase in the volume of road traffic over the same period. The introduction of compulsory wearing of seat belts in the 1980s and improvements to vehicle technology have contributed to the reduction.

Figure 2 – Number of accidents and volume of traffic on Welsh roads



Source: Welsh Government

¹ Electronic records for traffic volume only go as far back as 1993

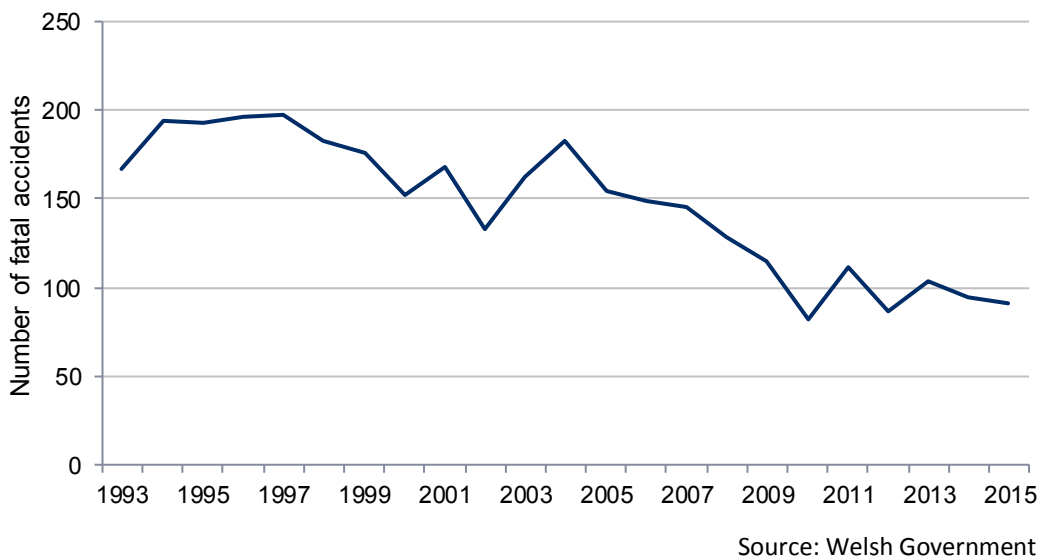
KSI Accidents

The long term trend for KSI accidents (involving Death or Serious Injury) is downwards as illustrated in Figures 3(a) and 3(b).

There have been less than 200 fatal accidents each year since 1993. Care must be taken when interpreting changes in small numbers, such as fatal accidents per year, and so we recommend using KSI accidents when looking at more detailed breakdowns or when calculating percentage changes.

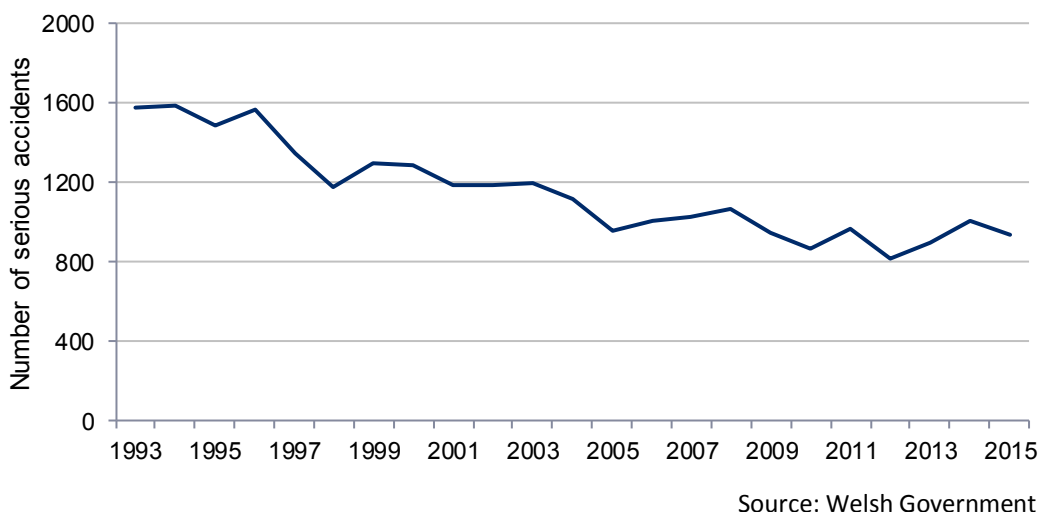
From 1993 to 2009 there were at least 115 fatal accidents recorded per year; there was an average of 164 fatal accidents per year ranging from a peak of 197 in 1997 to a low of 115 in 2009. Since then the average number of fatal accidents per year has been lower at 95, ranging from 112 in 2011 to a historical low of 82 in 2010.

Figure 3(a) – Number of fatal road accidents on Welsh Roads 1993 to 2015



The number of serious accidents has followed the same trend. Between 1993 and 2009 there were an average of 1,234 severe accidents recorded ranging from a peak of 1,582 in 1994 to a low of 946 in 2009. From 2010 onwards the average number of accidents per year has been 917 (around a quarter fewer accidents on average than in the 93-09 period), ranging from 1,007 in 2014 to a low of 820 in 2012.

Figure 3(b) – Number of serious road accidents on Welsh Roads 1993 to 2015



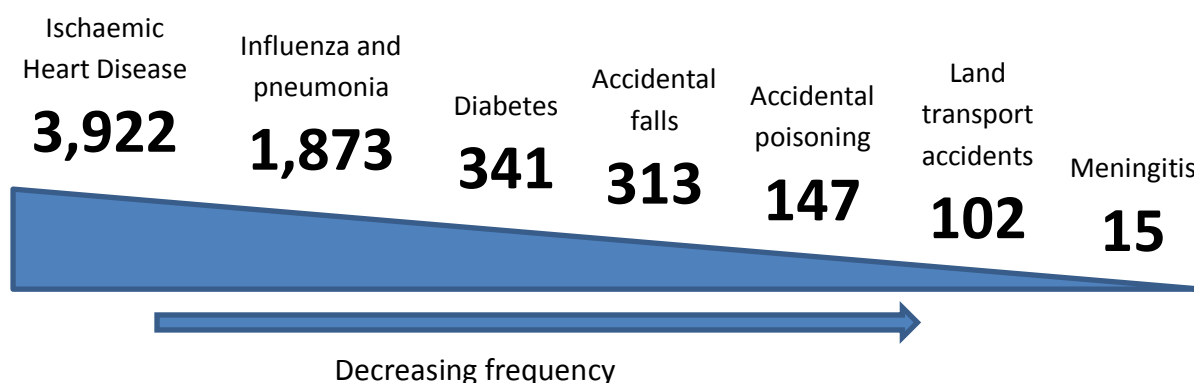
Casualties

During 2015, Police recorded accidents resulted in 7,682 casualties. Of these 105 were fatal, 1,081 people were seriously injured and 6,496 casualties were slightly injured.

There were two more fatalities in 2015 than in 2014 and there were 79 fewer seriously injured casualties (7 per cent fewer), whilst the number of slightly injured casualties was 449 fewer (6 per cent fewer).

As a comparison with a selection of other causes of death, figure 4 shows that for 2015 road accidents accounted for fewer deaths than accidental poisoning² and that for each fatality in a road accident there were approximately 18 deaths due to flu and pneumonia.

Figure 4 – Number of deaths by selected cause of death



Source: Office for National Statistics

The Office for National Statistics (ONS) figures for deaths in land transport accidents may differ slightly from the police recorded number of fatal road accidents due to differences in definitions, however these data are broadly similar.

KSI Casualties



The number of KSI casualties was **3 per cent higher** in 2015 than the average for the previous 3 years (2012-2014), an increase of 39 casualties.



The number of KSI children (aged under 16) was **21 per cent lower** in 2015 than the average for the previous 3 years (2012-2014), a fall of 22 casualties.



The number of KSI young people (age 16-24) was **10 per cent higher** in 2015 than the average for previous 3 years (2012-2014), an increase of 27 casualties.

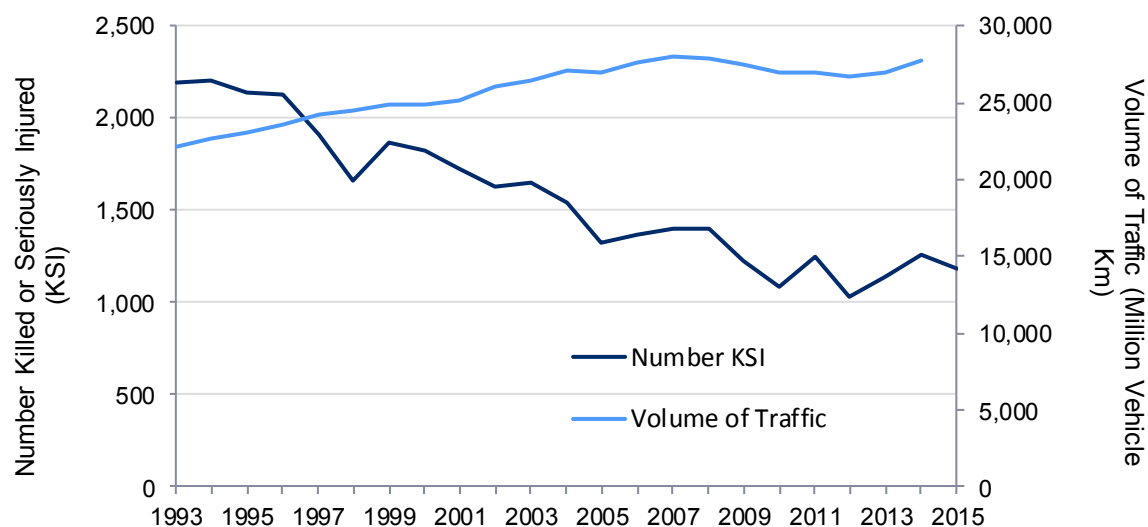


The number of KSI older people (age 65+) in 2015 was 178, which was **1 casualty less** than the average for the previous 3 years (2012-2014).

65+

² The figures for other causes of death are for year ending 2014. This was additional Welsh Government Analysis of Death Register data published by the Office for National Statistics.

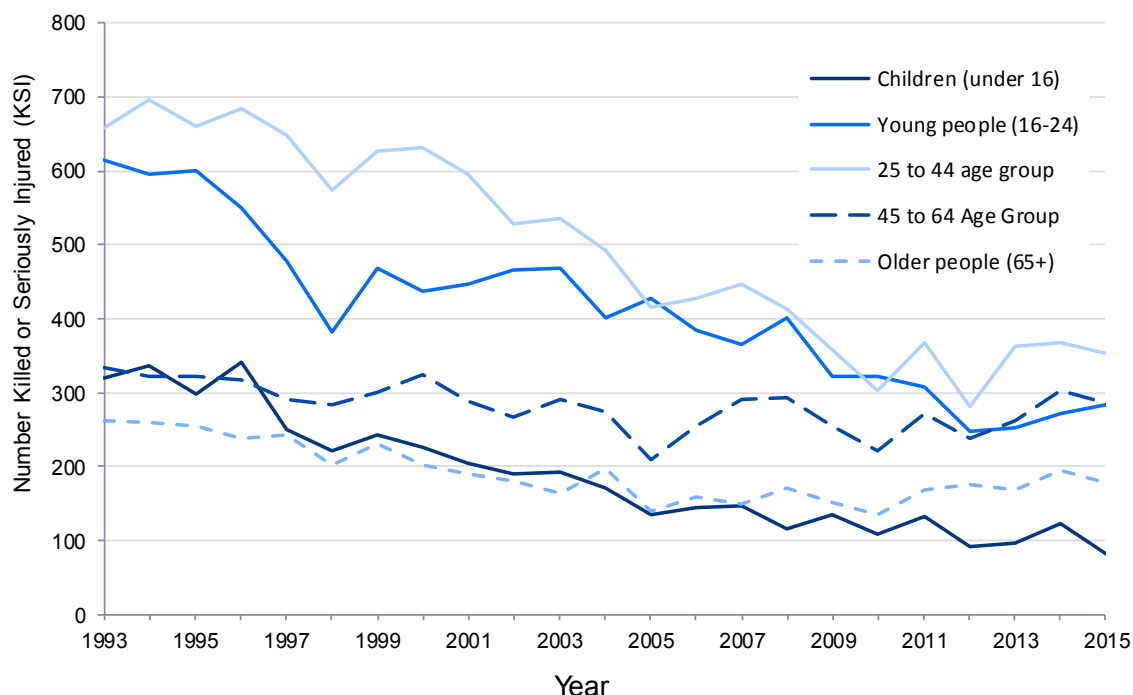
Figure 5 – KSI casualties and volume of traffic on Welsh roads



Source: Welsh Government

Figure 5 illustrates the downward trend in the number of casualties who were either Killed or Seriously Injured (KSI) since the early 1990s. Figure 5 illustrates that the number of KSI casualties peaked at 2,208 in 1994 before starting its downward trend with the lowest number occurring in 2012 at 1,034. This is in spite of the gradual increase in the volume of road traffic during that period.

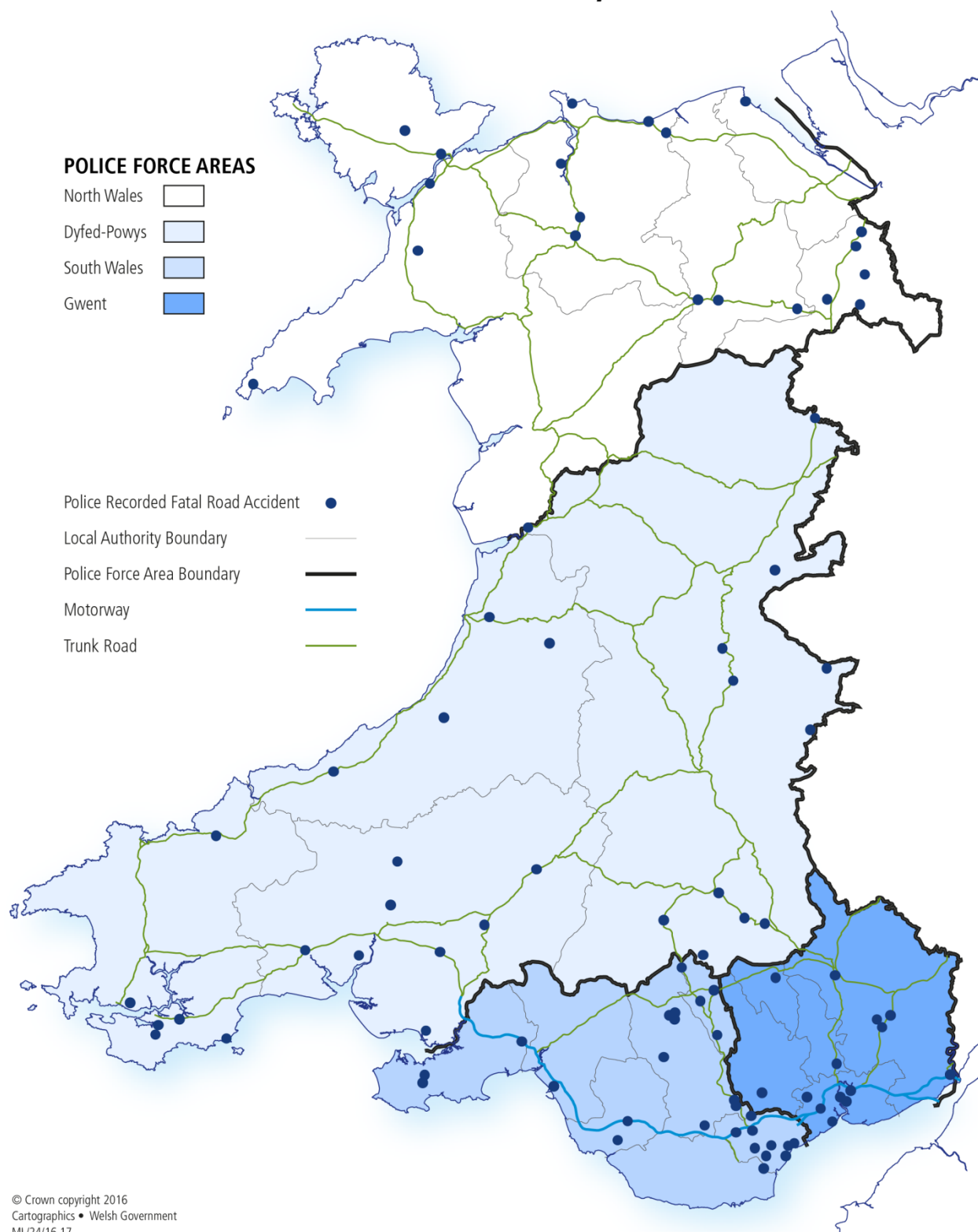
Figure 6 – KSI casualties by age group 1993 - 2015



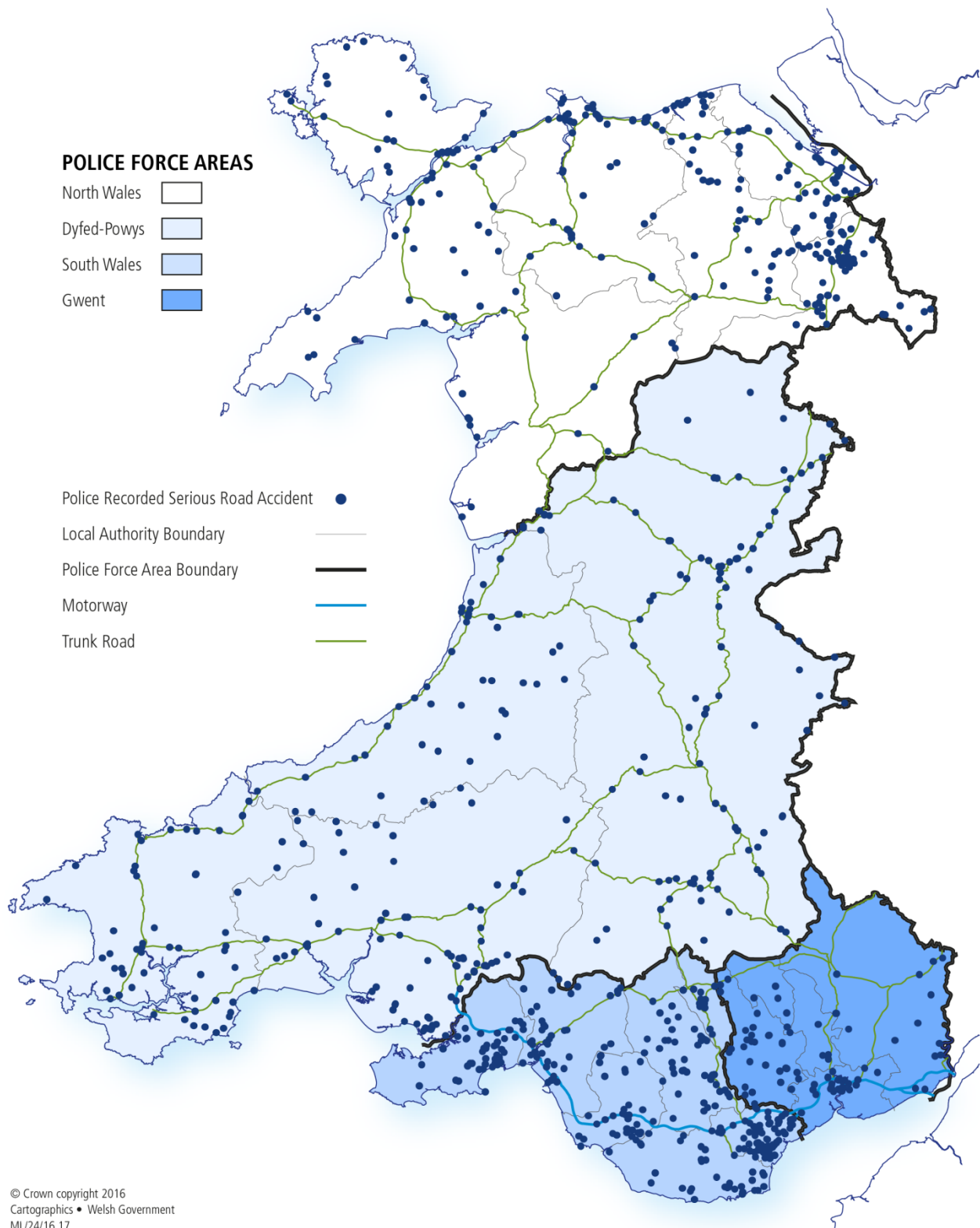
Source: Welsh Government

Figure 6 shows the downward long term trend in the number of killed or seriously injured (KSI) casualties by age group. The chart highlights the disproportionate number of KSI casualties among young people (16-24) compared to other age groups. Since 1993 the numbers have fallen across all age groups with Children (under 16) having the largest relative decrease (74 per cent), followed by the 16 to 24 age group (54 per cent).

Police Recorded Fatal Road Accidents in Wales, 2015



Police Recorded Serious Road Accidents in Wales, 2015



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Casualties by Road User type

This section deals with casualties by the type of road user. Each category of road user has a different chance of having a serious injury. Pedestrians, motorcyclists and pedal cyclists are considered to be vulnerable road users as they are at a higher risk of involvement in an accident (relative to distance travelled) or are more vulnerable in terms of becoming a casualty, or killed or seriously injured, if involved in an accident.

Figure 7(a) – All Casualties by Road User type

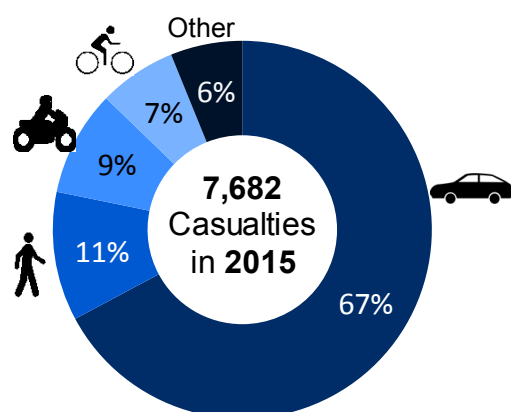


Figure 7(b) – KSI Casualties by Road User type

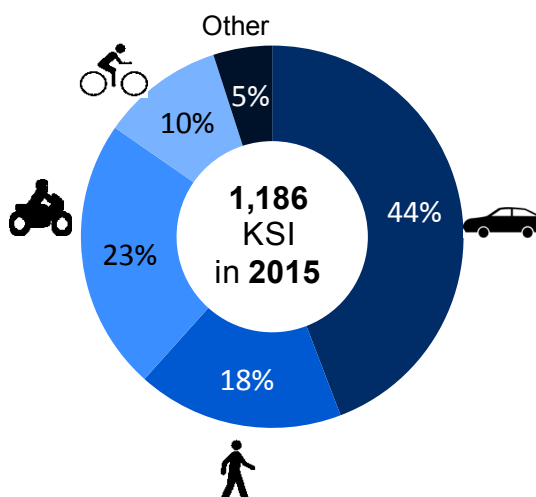


Figure 7(a) illustrates that the group of car, taxi and minibus users were the largest category of overall casualties (67 per cent). Pedestrians (11 per cent), motorcycle (9 per cent) and pedal cycle users (7 per cent) account for 27 per cent of total casualties. The remaining 6 per cent covers other road users such as goods vehicles, mobility scooter, horse rider and bus/coach users.

Figure 7(b) illustrates that car, taxi and minibus users are the largest category of KSI casualties (44 per cent). However this is a lower proportion in comparison to the overall casualty numbers accounted for by this group. Pedestrians (18 per cent), motorcyclists (23 per cent) and pedal cyclists (10 per cent) account for 51 per cent of all KSIs in 2015. These groups of road users are either at higher risk of involvement in an accident or are more vulnerable in terms of becoming a casualty, or being killed or seriously injured, if involved in an accident.

Figure 8 presents the underlying data for figures 7(a) and 7(b)

Figure 8 – Number of Casualties by Road User type and severity

	2011		2012		2013		2014		2015	
	All	KSI	All	KSI	All	KSI	All	KSI	All	KSI
Car, Taxi and Minibus users	6,553	573	5,986	494	5,633	494	5,511	542	5,161	524
Pedestrian	1,154	261	1,007	203	1,052	260	922	249	848	207
Motorcyclists	612	242	627	213	685	246	749	282	693	273
Pedal Cyclists	521	118	474	84	496	100	567	138	509	123
Other road users	566	53	471	40	469	44	459	52	471	59
Total	9,406	1,247	8,565	1,034	8,335	1,144	8,208	1,263	7,682	1,186

Source: Welsh Government

Road traffic is estimated from counts of traffic at points on the road network and multiplied up by the length of road each counted vehicle is travelling on to give a figure measured in vehicle-kilometres.

The latest Road Traffic figures for Wales showed that traffic volume on Welsh Roads was nearly 28 billion vehicle-kilometres in 2014³, which means traffic travelled 28 billion kilometres over the Welsh road network in 2014.

Cars, taxis and buses represented 80 per cent of this traffic volume and as charts 7(a) and 7(b) illustrate car, taxi and minibus users are the largest category of casualties. Pedal cyclists and motorcycle users are therefore significantly more likely to suffer serious injury as a result of an accident relative to road use. Figure 9 shows that these two categories account for only 1 per cent of traffic volume but a much larger proportion of casualties and KSI casualties.

Figure 9 – Proportions of casualties and traffic volume by road user type

Proportions of:	Traffic volume (a)	All Casualties	KSI Casualties
Motorcyclist & pedal cyclist	1%	16%	33%
Car, taxi & minibus/bus (a)	80%	67%	44%

(a) For traffic volume, DfT include minibuses under bus/coach so 80% is for car, taxi & bus.

For road accident data the category is just car, taxi and minibus.

Source: Welsh Government

³ See Road Traffic in Wales 2014, www.gov.wales/statistics-and-research/road-traffic

Casualties by Road Speed limit

This section deals with the number of casualties by Road Speed Limit. During 2015, Figure 10(a) illustrates that the highest proportion (51 per cent) of all casualties occurred on 30mph roads with the next highest being on 60mph roads (27 per cent). The proportion of casualties in each of the other speed limit zones was below 10 per cent.

Figure 10(b) shows that for casualties killed or seriously injured (KSI), the largest proportion of these occurred in the 30 mph zone (43 per cent) followed by the 60 mph zone (38 per cent). Therefore if people are involved in an accident in a 60 mph zone this is more likely to result in killed or seriously injured casualties than those in a slower zone. The momentum of vehicles travelling at higher speeds is more likely to result in serious or fatal injury following an impact. The proportion of KSI casualties that were injured in each of the other speed limit zones was below 10 per cent.

Figure 10a – Casualties, by speed limit of road

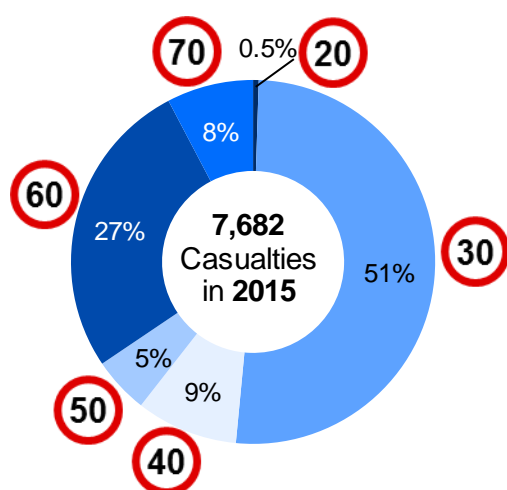
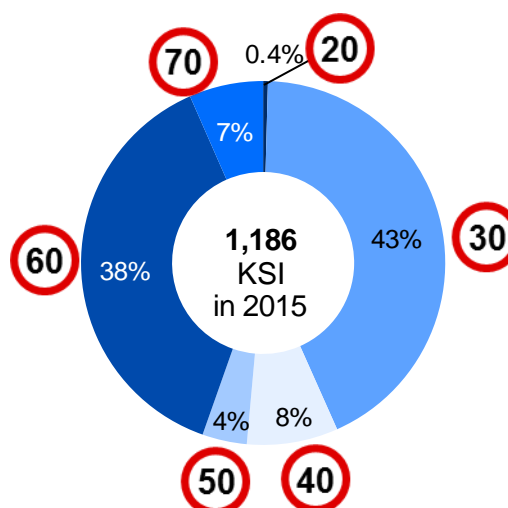


Figure 10b – KSI casualties, by speed limit of road



Source: Welsh Government

Figure 10a and 10b show total casualties split by road speed limit and KSI casualties split by road speed limit. Figure 11 gives the percentages that are KSI within each speed limit group. So figure 10a and 10b show which speed category of roads casualties are being injured on, whereas Figure 11 shows how likely it is for a casualty to be killed or seriously injured depending on the speed limit of the road they are injured on.

Figure 11 – Number of Casualties and Percentage KSI by road speed limit

	2011 All	2011 KSI Percentage	2012 All	2012 KSI Percentage	2013 All	2013 KSI Percentage	2014 All	2014 KSI Percentage	2015 All	2015 KSI Percentage
20	23	13%	39	8%	36	14%	49	35%	38	13%
30	5,395	10%	4,625	9%	4,625	12%	4,284	13%	3,919	13%
40	559	13%	592	11%	620	14%	653	11%	695	14%
50	327	14%	353	12%	339	12%	395	15%	384	12%
60	2,468	21%	2,391	18%	2,062	20%	2,199	22%	2,055	22%
70	634	12%	564	12%	653	11%	628	13%	591	13%
Total Casualties	9,406	1,247	8,564	1,034	8,335	1,144	8,208	1,263	7,682	1,186

Source: Welsh Government

Figure 11 shows casualties split by the speed limit of the road the accident happened on and the percentage of those which are KSI casualties. Therefore in 2015 of the 3,919 casualties injured on 30mph roads, 13 per cent of them were killed or seriously injured (KSI), whereas for the 2,055 casualties injured on 60mph roads 22 per cent of them were KSIs.

Whilst the majority of casualties were injured on 30mph roads, the higher chance of serious or fatal injuries was on 60mph roads which had the highest proportion (22 per cent) of casualties being KSI.

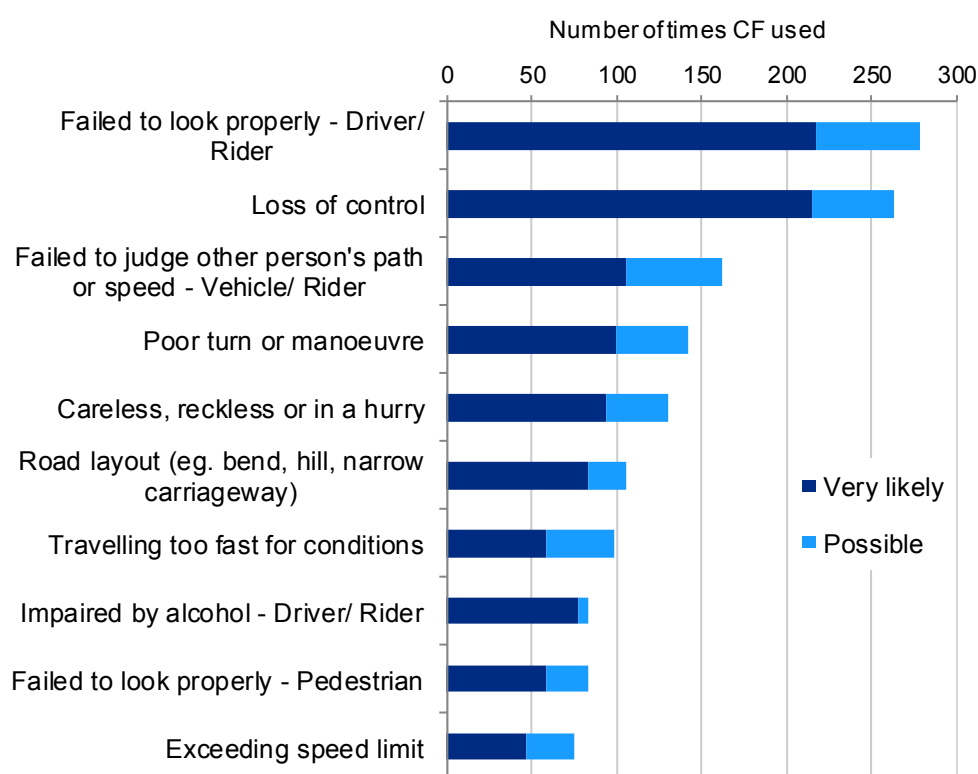
In contrast, whilst the proportion of casualties that were KSIs is much higher on 60mph roads the corresponding figure on 70mph roads is only 13 per cent. This suggests factors such as whether the roads are single or dual carriageway is an important factor in the severity of injuries.

Causes of accidents

The Contributory Factors (CF) in a road accident are the key actions and failures that led directly to the accident. They show why the accident occurred and give clues about how it may have been prevented. There are 78 Contributory Factors listed and a maximum of 6 may be recorded for each accident. These are only completed for accidents where a police officer attended the scene. This analysis therefore focuses on accidents which involve casualties who were either killed or seriously injured, as police officer attendance is much more frequent at these accidents.

Factors are identified on the basis of evidence and this may come from various sources such as witness statements, vehicle and site inspections. Contributory Factors are largely subjective and depend on the skill and experience of the investigating officer to reconstruct the events which led directly to the accident. They reflect the reporting officer's opinion at the time of reporting and are not necessarily the result of extensive investigation. They are classed as either very likely or possible based on the reporting officer's confidence that they caused or contributed to causing the accident.

Figure 12 – The 10 most common causes of KSI accidents, by reporting officers' confidence



Source: Welsh Government

Figure 12 shows the ten most common contributory factors for KSI accidents. The two largest contributory factors highlighted by the Police during 2015 were failing to look properly (279 cases) and loss of vehicle control (264 cases). In the Police Officers' opinion it is very likely that in those accidents they attended, these two factors played a major role in those accidents. The other 8 contributory factors were altogether identified as a cause a total of 879 times.

There were only 7 instances where the Police identified the driver/rider using a mobile phone may have caused an accident.

Figure 13 – Number of Contributory Factor (CF) categories listed as cause, split by likelihood

CF category	Very likely	Possible	Total
Driver/ Rider error or reaction	729	247	976
Behaviour or inexperience	187	76	263
Pedestrian	171	81	252
Injudicious action - Driver/ Rider	151	84	235
Road Environment	152	63	215
Impairment or distraction	135	77	212
Driver/ Rider's vision affected	44	54	98
Special factors	42	6	48
Vehicle Defects	8	17	25
All CFs	1,619	705	2,324

Source: Welsh Government

The 78 contributory factors fall under 9 categories which the attending police officer considers when investigating an accident. Figure 13 shows that during 2015 the most common contributory factor category identified by the Police was Driver/Rider error or reaction, used 976 times. This covers a number of factors such as junction overshoot, poor turn or manoeuvre, failing to signal or look properly and loss of control.

Behaviour or inexperience covers a number of factors including aggressive driving, careless, reckless or in a hurry to being unfamiliar with model of vehicle.

Factors in the Pedestrian contributory factor category include failing to look properly, failing to judging the path of a vehicle, being impaired by alcohol/drugs, in a hurry and wearing dark clothes at night.

Injudicious action by driver/ rider includes exceeding the speed limit, travelling too fast for the conditions, illegal turn or direction of travel and disobeying traffic signs and signals.

The road environment is used where in the Police Officers' opinion the road itself contributed to the accident for example defective surface, traffic signals, road layout and slippery road due to the weather.

Impairment or distraction covers drivers affected by drink, drugs, fatigue, eyesight issues, use of mobile phone and distraction.

The factors that affect the driver or riders vision include stationary vehicles, dazzling sun or headlights, adverse weather, spray and blind spot. The final two categories were only identified by the police in a small number of cases overall. Special factors include stolen vehicles and vehicles used in the course of a crime while vehicle defects cover illegals tyres, defective lights, brakes, steering and mirrors.

Key quality information:

Source: Police reported road casualties in Wales

Status: National Statistics

Description: The statistics refer to casualties resulting from personal injury accidents on public roads reported to the police and forwarded to the Welsh Government. The police compile statistical data about road traffic accidents and casualties (called Stats19 data) for the Welsh Government and the Department for Transport (DfT). This follows police attendance at accidents that involve any personal injury, together with members of the public reporting personal injury accidents directly to the police. The figures are based on information available to the Government 14 weeks after the end of the latest quarter.

A casualty is defined as, a person killed or injured in an accident. One accident may give rise to several casualties. Casualties are subdivided into killed, seriously injured and slightly injured categories. Casualties reported as killed include only those cases where death occurs in less than 30 days as a result of the accident. They do not include those who died as a result of natural causes (e.g. heart attack) rather than as a result of the accident, nor do they include confirmed suicides.

Uses of data There are a variety of organisations that use the Welsh road traffic accident and casualty data. The Welsh Government uses road traffic accident and casualty data to help set road safety policy. It is also used for performance indicators, both for the Welsh Government's Transport Strategy and for some Health Performance indicators. They are also component indicators in the Welsh Government's Child Poverty and Sustainable Development indicators.

Other users include Highway Authorities (on behalf of the Welsh Government, which is responsible for the motorway and trunk road network) and Local Authorities (which are responsible for other roads in Wales). Other bodies involved in road safety include the Safety Camera Partnership, Trunk Road Agents, and Police & Community Safety Partnerships.

Quality: The figures shown may change in future if there are late amendments. Similarly, the figures for earlier years may differ from those previously published. The figures cover only road accidents reported to the police involving personal injury. There is some possibility of under-reporting and under-recording as well as for the misclassification of accidents though these are minimised by local authorities and the Welsh Government conducting a number of data validations. For example, Welsh Government data analysts may query the location of an accident with a police force when the grid reference of an accident is in a different local authority to the one specified in the data return. These issues are discussed in more detail in a Statistical Article 'Quality Report for Welsh Road Casualties'.

This data is obtained from administrative sources and thus may be affected by changes in procedures within those systems.

This article also summarises the sources and methods used to compile the road accident and casualty figures for Wales. It also reviews the quality of the resulting figures in terms of the six dimensions of statistical quality of the European Statistical System. The aim is to provide background information about road casualty statistics for Wales in a single document for all users of the published

statistics. It is available from the following link:

<http://gov.wales/statistics-and-research/police-recorded-road-casualties/quality-report>

We are currently working with the Welsh police authorities to quality assure the data systems that are used to form these statistics. A report on the quality of these statistics, in line with the National Statisticians guidance on quality assurance of administrative data sources, will be published in early 2017.

Comparability and links to further information: This First Release will be followed by further publications that are intended to provide users with more information about road accident and casualties in Wales during 2015.
All of our publications will be available from the following link:

<http://gov.wales/statistics-and-research/?topic=Transport&lang=en>

Road accident statistics are fully comparable across Great Britain. Results for Great Britain will be published by the Department for Transport on 30 June 2016 in 'Reported road casualties in Great Britain main results: 2015'; available from the link:

<https://www.gov.uk/government/organisations/department-for-transport/about/statistics>

Data covering both 2015 and previous years' accident data are now published on StatsWales. Accompanying the data is a data dictionary outlining the variables that are included in the collection of Road Accident data. StatsWales is accessible at the link below:

www.statswales.gov.wales

Data quality issue for the 2012 data Between April 2012 and the beginning of 2013, South Wales Police made changes to their procedures for recording this data which led to a lower number of slight and serious casualties being recorded than would have been the case in previous and subsequent years. This means that the comparison of 2013 with 2012 overstates the change in slight and serious casualties. This issue does not affect the measure of road traffic fatalities.

Data quality /under reporting issue for 2015 South Wales Police are experiencing difficulties with their Road Accident software and are unable to provide their full set of casualty data. The extent of this under-reporting is thought to be roughly 10 accidents missing from the data presented in this release and includes at least one fatal road accident. South Wales Police are working on addressing the issue and we hope to be able to revise our figures later this year once they provide the missing data.

The number of accidents for Gwent Police for 2015 is much lower than for 2014. We are conducting further analysis into the decrease to determine if this is a genuine reduction and if necessary will revise our figures later in the year.



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National Statistics status

The United Kingdom Statistics Authority has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics.

National Statistics status means that official statistics meet the highest standards of trustworthiness, quality and public value.

All official statistics should comply with all aspects of the Code of Practice for Official Statistics. They are awarded National Statistics status following an assessment by the UK Statistics Authority's regulatory arm. The Authority considers whether the statistics meet the highest standards of Code compliance, including the value they add to public decisions and debate.

It is Welsh Government's responsibility to maintain compliance with the standards expected of National Statistics. If we become concerned about whether these statistics are still meeting the appropriate standards, we will discuss any concerns with the Authority promptly. National Statistics status can be removed at any point when the highest standards are not maintained, and reinstated when standards are restored.