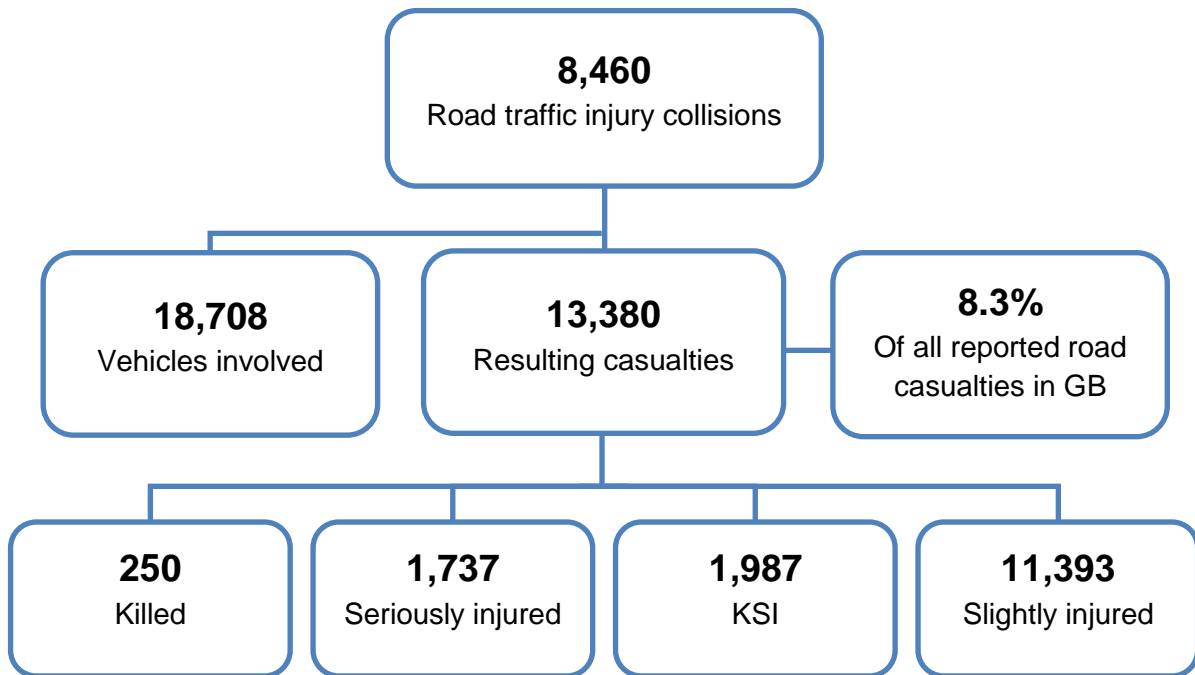


# Reported Road Casualties on the Strategic Network 2018



# High Level Summary

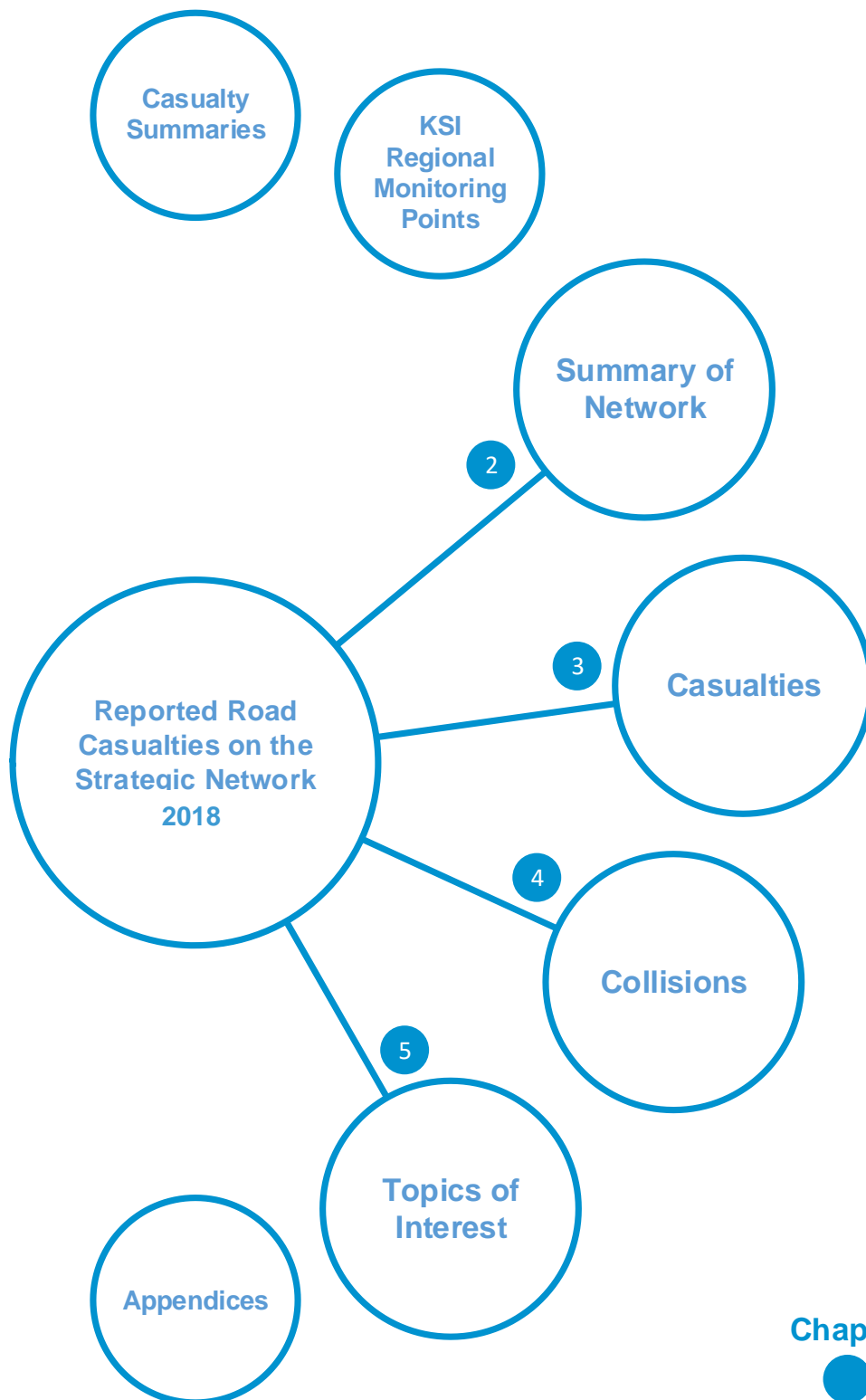
High level summary of the validated 2018 personal injury collision and casualty data is provided below.



		Motorway	A-road	A-road dual	A-road single
Collisions	KSI	691	983	657	326
	Total	4,029	4,431	3,307	1,124
Casualties	KSI	807	1,180	754	426
	Total	6,507	6,873	4,950	1,923
Traffic (provisional)	HMVM	607.2	339.8	285.0	54.8

The original format of this document is copyright to Highways England

# Document Map



Chapter



# Table of Contents

High Level Summary.....	I
Document Map.....	II
1. Introduction.....	1
1.1. Background.....	1
1.2. Purpose of Document.....	2
1.3. Understanding changes in reporting systems.....	3
1.4. Structure of Document.....	5
1.5. Summary Sheet of Fatal.....	7
1.6. Summary Sheet of Serious.....	8
1.7. Summary Sheet of KSI.....	9
1.8. Summary Sheet of Slight.....	10
1.9. Summary sheet of collision and casualty cost.....	11
1.10. Regional KSI Values.....	12
2. Network Summary.....	15
2.1. The SRN.....	15
2.2. Traffic Estimates and Economic Factors.....	16
2.3. Traffic Estimates by Road Classification.....	18
2.4. Traffic Estimates by Vehicle Type.....	20
3. Casualties.....	22
3.1. Roads.....	22
3.1.1. Casualties and likelihood of injury by road classification and severity.....	23
3.1.2. Motorway casualties and rates by severity.....	24
3.1.3. A-road casualties and rates by severity.....	25
3.1.4. A-road dual carriageway casualties and rates by severity.....	26
3.1.5. A-road single carriageway casualties and rates by severity.....	27
3.1.6. Casualties involving road environment.....	28
3.2. Vehicles.....	30
3.2.1. First point of impact.....	30
3.2.2. Casualties from vehicle interactions.....	32
3.2.3. Casualties involving vehicle defects.....	36
3.3. People.....	38
3.3.1. Casualty severity trends.....	39

3.3.2.	Casualty by type and age .....	41
3.3.3.	Casualties where human factors contributed .....	47
3.4.	Contributory Factors.....	52
3.4.1.	Top 10 contributory factors by road classification .....	53
4.	Collisions .....	55
4.1.	Roads .....	55
4.1.1.	Collisions and likelihood of injury by road classification and severity .....	56
4.1.2.	Motorway collisions and rates by severity .....	57
4.1.3.	A-road collisions and rates by severity.....	58
4.1.4.	A-road dual carriageway collisions and rates by severity .....	59
4.1.5.	A-road single carriageway collisions and rates by severity .....	60
4.1.6.	Collisions involving road environment.....	61
4.2.	Vehicles .....	63
4.2.1.	Collisions by gender of driver .....	63
4.2.2.	First point of impact .....	64
4.2.3.	Collisions involving vehicle defects.....	66
4.3.	People.....	68
4.3.1.	Collision severity trends.....	68
4.3.2.	Collision by age of casualties involved.....	70
4.3.3.	Collisions where human factors contributed .....	71
4.4.	Contributory Factors.....	76
4.4.1.	Overview .....	76
4.4.2.	Contributory factors attributed to collisions .....	77
4.4.3.	Top 10 contributory factors by road classification .....	78
5.	Topics of Interest.....	80
5.1.	Fatally Injured Casualties .....	81
5.1.1.	Fatal casualty infographics .....	82
5.2.	Seriously Injured Casualties.....	85
5.2.1.	Seriously injured casualty infographics.....	86
5.3.	Killed or Seriously Injured Casualties .....	88
5.3.1.	KSI casualty infographics .....	89
5.4.	Slightly Injured Casualties .....	91
5.4.1.	Slightly injured casualty infographics .....	92
5.5.	Child Casualties .....	94
5.5.1.	Child casualty summary .....	94

5.6.	Young Motorist.....	96
5.6.1.	Casualties involving young motorists by severity .....	96
5.6.2.	Cost of motoring effect on casualties involving young motorists .....	97
5.6.3.	Casualties involving young motorists by road classification .....	98
5.6.4.	Contributory factors associated with young motorists .....	99
5.7.	Older and Elderly Casualties.....	100
5.7.1.	Summary of older and elderly casualties .....	100
5.8.	Weather .....	102
5.8.1.	Casualties by weather type.....	102
5.8.2.	Casualties by harsh weather type.....	104
5.8.3.	Casualties against measured temperature and rainfall .....	105
5.8.4.	Collisions by weather related contributory factors .....	107
5.9.	Junctions.....	108
5.9.1.	Junction summary .....	108
5.10.	Vehicle Defects .....	111
5.10.1.	Casualties resulting from illegal, defective or under-inflated tyres.....	111
5.10.2.	Casualties resulting from defective lights or indicators.....	112
5.10.3.	Casualties resulting from defective brakes .....	113
5.10.4.	Casualties resulting from defective steering or suspension.....	113
5.10.5.	Casualties resulting from overloaded or poorly loaded vehicle or trailer.....	114
5.11.	Goods Vehicles .....	116
5.11.1.	Changes in HGV and LGV traffic levels .....	116
5.11.2.	Comparison of casualties and casualty rates involving goods vehicles.....	116
5.11.3.	HGV and LGV casualties by road classification and name .....	118
5.11.4.	Contributory factors .....	120
5.12.	Motorcycle Users.....	121
5.12.1.	Motorcycle user casualties by severity.....	121
5.12.2.	Casualties involving motorcycles by road classification and name.....	122
5.13.	Hardshoulders .....	124
5.13.1.	Comparison between hardshoulders and lay-bys .....	124
5.13.2.	Hardshoulder and lay-by casualties resulting from fatigue or distraction.....	125
5.14.	Collisions Type .....	126
5.14.1.	Casualties by collision type and severity.....	127
5.14.2.	KSI casualties by collision type and road classification .....	128
5.15.	Vulnerable and Non-motorised Users.....	129

5.15.1.	Vulnerable and non-motorised KSI casualties by year .....	129
5.15.2.	Vulnerable and non-motorised KSI casualties by road type .....	130
5.15.3.	Contributory factors .....	132
5.16.	Journey Purpose .....	135
5.16.1.	Journey purpose summary .....	135
5.16.2.	Journey as part of work .....	137
5.16.3.	Commuting to/from work.....	138
5.17.	Towing.....	139
5.17.1.	Towing summary .....	139
	Contributory Factor Classification and Codes .....	142

# 1. Introduction

## 1.1. Background

Highways England launched the 'Home Safe and Well' approach in 2019<sup>1</sup>, which details the approach to health, safety and wellbeing for staff, suppliers and road users. This is supported by other plans including the National Incident and Casualty Reduction Plan: Our approach to road safety (NICRP), which sets out the long term vision that no one should be harmed whilst travelling or working on the strategic road network (SRN). Meeting the objectives set out in these documents will improve safety and help to achieve our overarching aim of 'everyone home safe and well every day'.

Following the principle of the Safe Systems Approach, the NICRP outlines how we are going to achieve the strategic outcomes as an organisation and what we need to do to deliver successful interventions on the ground. This includes the key performance indicator of reducing killed or seriously injured (KSI) casualties on the SRN by 40 per cent by 2020 from the 2005-2009 baseline as originally outlined in our Strategic Business Plan and as specified in the Operational Metrics Manual (OMM).

Annual analysis of personal injury collisions on the SRN is a key component of monitoring and evaluating progress toward the 40 per cent target. In addition to monitoring trends, Highways England can use the data to identify road safety interventions, which are provided for in the Road Investment Strategy<sup>2</sup> and our Delivery Plan<sup>3</sup>.

This document forms part of the annual series Reported Road Casualties on the Strategic Network. It provides a high level overview of personal injury collisions on the SRN, primarily based on STATS19 data, reported to or by the police, and supplemented by other sources to provide a more comprehensive picture.

Further information regarding the personal injury collision and casualty data on the SRN can be obtained from **Highways England's Strategic Safety Team**<sup>4</sup>.

The overarching Great Britain (GB) STATS19 information can be found in the Department for Transport (DfT) publication *Reported road casualties in Great Britain: 2018 annual report*<sup>5</sup> and accompanying data tables. The high level unadjusted GB values can be summarised as follows:

There were 122,635 collisions involving 226,409 vehicles resulting in 160,597 casualties of all severities as reported to or by the police. The casualties comprised 1,784 deaths, 25,511 serious injuries (i.e. 27,295 KSI) and 133,302 slight injuries.

<sup>1</sup> <http://assets.highwaysengland.co.uk/about-us/Home+Safe+and+Well+Strategy+2019.pdf>

<sup>2</sup> <https://www.gov.uk/government/collections/road-investment-strategy>

<sup>3</sup> <https://www.gov.uk/government/publications/highways-england-delivery-plan-2015-2020>

<sup>4</sup> For enquiries to the Strategic Safety Team, email [StrategicSafetyTeam@highwaysengland.co.uk](mailto:StrategicSafetyTeam@highwaysengland.co.uk)

<sup>5</sup> [DfT Reported road casualties in Great Britain: 2018 annual report](https://www.gov.uk/government/publications/dft-reported-road-casualties-in-great-britain-2018-annual-report)



## 1.2. Purpose of Document

This document is intended for use by Highways England staff, service providers, supply chain and those in the public arena with an interest. It provides quantified road safety information and guidance that describes the current state of Highways England's reportable network in terms of collisions and casualties.

This information is designed to enable Highways England to:

- Assess the performance of the network in achieving the key performance indicator (KPI) of a 40 per cent reduction in KSI casualties by 2020 from the baseline (2005-2009)
- Identify opportunities to reduce the number of KSI casualties to contribute to the KPI
- Monitor and evaluate effectiveness of road safety actions
- Monitor changes in safety on the network year on year and against the baseline
- Provide a national safety perspective for balancing needs across the SRN
- Answer safety queries from the Government, stakeholders and other external partners

The collision and casualty information in this document and the accompanying appendices are based only on STATS19 data, unless otherwise specified. STATS19 is the national database of personal injury road collisions reported by, or to, the police. In this report percentage change values will not be given where the base value is lower than 15 to prevent misrepresentation caused by random fluctuations in values. Furthermore, a zero percentage is indicated where the base value is equal to or greater than 15 but has the same value of the year being compared.

The information used to create these statistics are collected by police forces, either through officers attending the scene of accidents or from members of the public reporting the accident in police stations after the incident, or more recently online.

There is no obligation for people to report all personal injury collisions to the police (although there is an obligation under certain conditions, as outlined in the Road Traffic Act). These figures, therefore, do not represent the full range of all accidents or casualties in Great Britain.

All collisions that were reported by the police and that occurred on the strategic road network involving at least one motor vehicle, horse rider or pedal cyclist, and where at least one person was injured are included. Damage only accidents that do not result in personal injury are also excluded from these statistics.

### 1.3. Understanding changes in reporting systems

A key factor affecting road safety performance in recent years has been the change in recording practice by some police forces. The DfT reported that<sup>5</sup>:

“Approximately half of English police forces adopted the CRASH (Collision Recording and Sharing) system for recording reported road traffic collisions [STATS19] at the end of 2015 or the first part of 2016, although Surrey has been using the system since November 2012. In addition, the Metropolitan Police Service (MPS) switched to a new reporting system called COPA (Case Overview Preparation Application), which went live to police officers from November 2016 [see Figure 1-1].

The remaining forces use a wide variety of systems to report accidents, in which police officers use their own judgement and guidance to determine directly the severity of a casualty (‘slight’ or ‘serious’).

In contrast CRASH and COPA are injury-based severity reporting systems where the officer records the most severe injury for the casualty. The injuries are then automatically converted to a severity level from ‘slight’ to ‘serious’.

Eliminating the uncertainty in determining severity that arises from the officer having to make their own judgement means that the new severity level data observed from these systems using injury based methods are expected to be more accurate than the data from other systems.”

DfT commissioned the Office for National Statistics (ONS), “to quantify the effect of the introduction of injury reporting systems (CRASH and COPA) on the number of slight and serious injuries reported to the police”<sup>5</sup>. This work is complete and the methodology paper *Estimating and adjusting for changes in the method of severity reporting for road accidents and casualty data: final report*<sup>6</sup> was published in July 2019. It is complemented by the *Annex: Update to severity adjustment methodology*<sup>7</sup> which was published in September 2019.

The adjustment factors “estimate the level of slight and serious injuries as if all police forces were using injury-based reporting systems”<sup>5</sup>. As such if further police forces adopt the new injury reporting methodology further adjustments is likely to be necessary.

The SRN has a higher proportion of its casualties reported by police forces using injury-based reporting systems, hence the impact for the SRN is likely to be slightly higher.

This document shows the data as reported to or by the police and does not make any adjustments.

<sup>5</sup> <https://www.gov.uk/government/statistics/reported-road-casualties-great-britain-main-results-2018>

<sup>7</sup> [Annex: Update to severity adjustment methodology](#)



Figure 1-1 Police forces by reporting system in 2018

## 1.4. Structure of Document

The structure of the rest of the document is as follows:

Chapter	Description
<b>2</b> Network	<ul style="list-style-type: none"> <li>• Overview of the SRN and its unique properties</li> <li>• Traffic estimates and economic factors</li> <li>• Estimation of usage by road classification and vehicle type</li> </ul>
<b>3</b> Casualties	<ul style="list-style-type: none"> <li>• Analysis of casualty and rate trends including by severity</li> <li>• Analysis by road classification including by severity</li> <li>• Snapshot of vehicle interactions, impact and defects</li> <li>• Understanding of casualty trends by type and age</li> <li>• Understanding the contributory factor influences on casualty numbers</li> </ul>
<b>4</b> Collisions	<ul style="list-style-type: none"> <li>• Analysis of collision and rate trends including by severity</li> <li>• Analysis by road classification including by severity</li> <li>• Snapshot of vehicle impact and defects</li> <li>• Snapshot of the types of drivers and riders involved in collisions</li> <li>• Understanding the contributory factor influences on collision numbers</li> </ul>
<b>5</b> Topics of Interest	<p>Evaluation of topics of interest, including:</p> <ul style="list-style-type: none"> <li>• Fatally injured casualties</li> <li>• Seriously injured casualties</li> <li>• Killed or seriously injured (KSI) casualties</li> <li>• Slightly injured casualties</li> <li>• Child casualties</li> <li>• Young motorists</li> <li>• Older and Elderly casualties</li> <li>• Weather effects on the SRN</li> <li>• Junctions</li> <li>• Vehicle Defects</li> <li>• Goods vehicles (HGVs and LGVs)</li> <li>• Motorcycle users</li> <li>• Hardshoulders and lay-bys</li> <li>• Collision type</li> <li>• Vulnerable and non-motorised users</li> <li>• Journey purpose</li> <li>• Towing</li> </ul>

## A to X

Appendices  
(provided as  
a separate  
document)

- Appendix A – Glossary of terms
- Appendix B – Collisions
- Appendix C – Casualties
- Appendix D – Traffic and collision/casualty rates
- Appendix E – Vehicles
- Appendix F – Contributory factors
- Appendix G to X – Additional topics of interest statistics

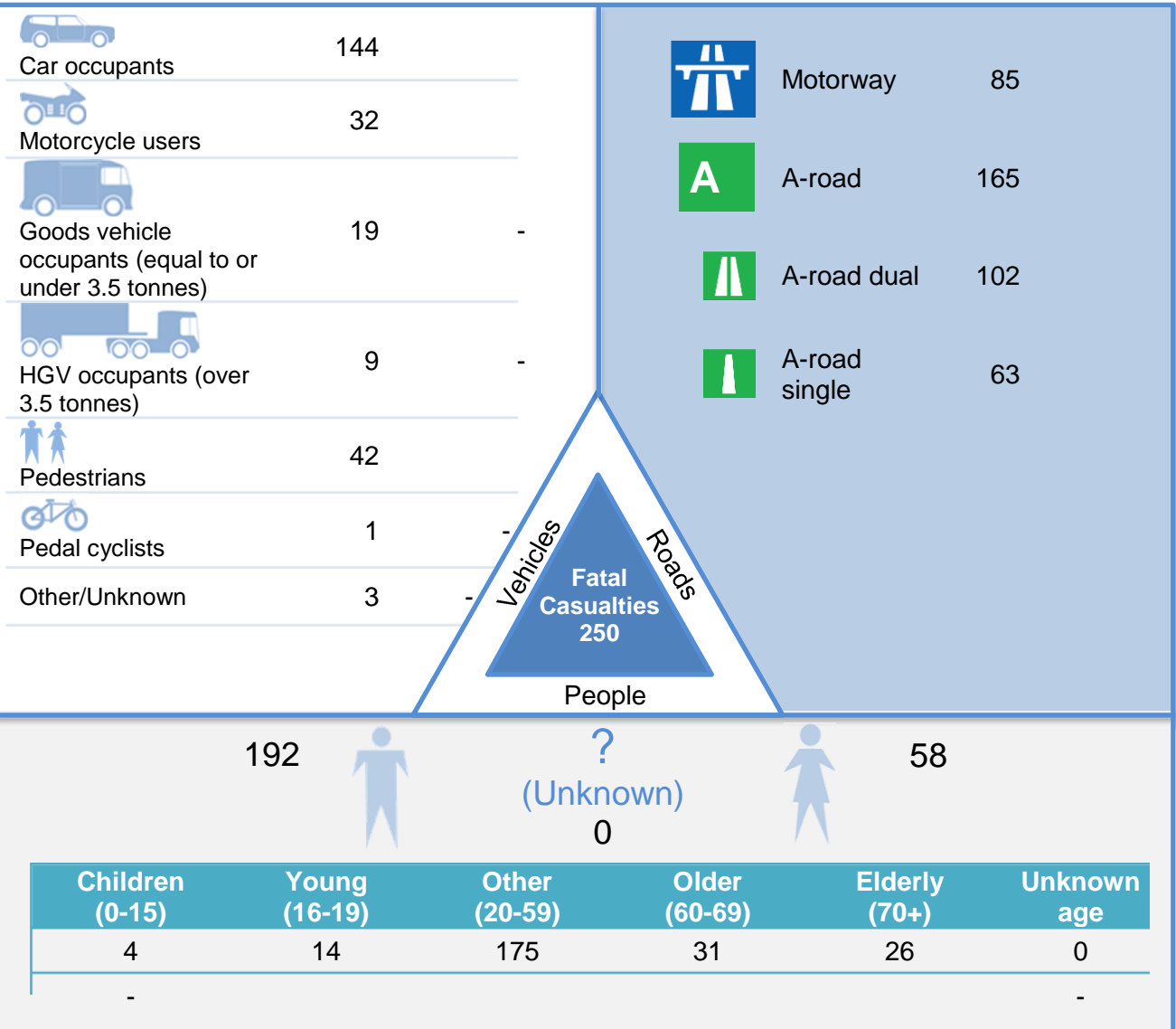
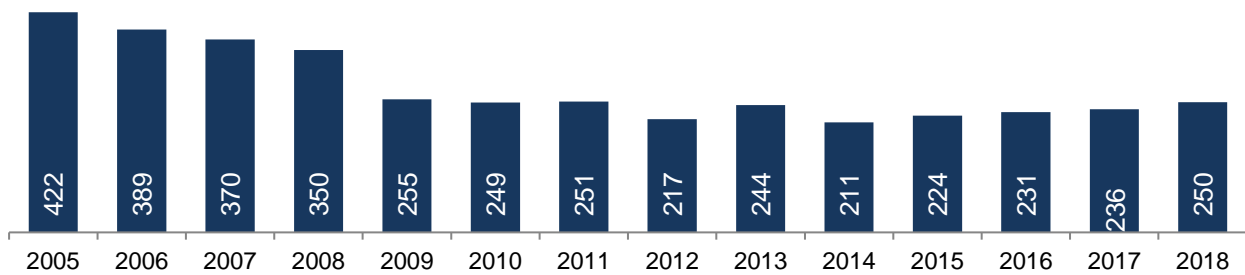
## 1.5. Summary Sheet of Fatal

A summary of the 2018 fatally injured casualty data can be seen below.

**Estimated Cost: £427,617,393**

**Average Cost: £1,710,470**

**Fatalities**



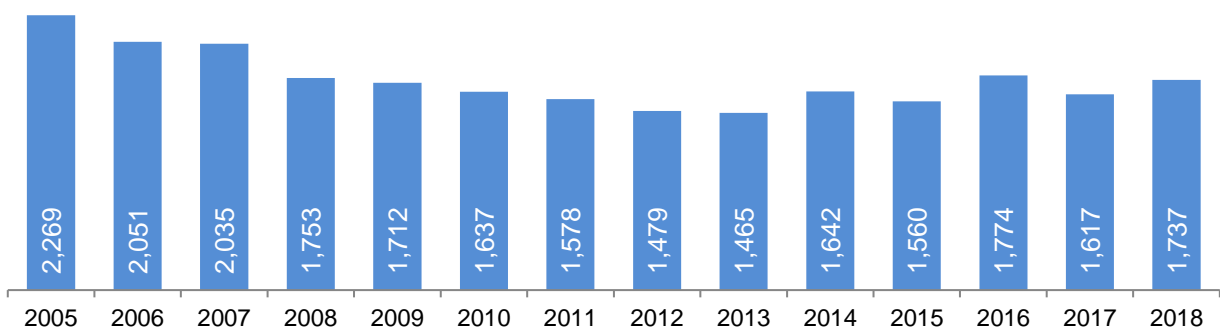
## 1.6. Summary Sheet of Serious

A summary of the 2018 seriously injured casualty data can be seen below.

**Estimated Cost: £333,866,826**

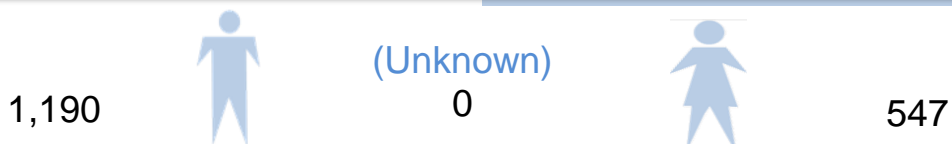
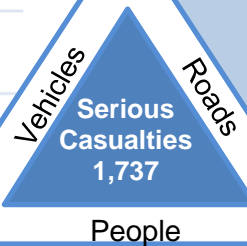
**Average Cost: £192,209**

### Seriously injured casualties



Car occupants	1,126
Motorcycle users	321
Goods vehicle occupants (equal to or under 3.5 tonnes)	111
HGV occupants (over 3.5 tonnes)	63
Pedestrians	54
Pedal cyclists	34
Other/Unknown	28

Motorway	722
A-road	1,015
A-road dual	652
A-road single	363



Children (0-15)	Young (16-19)	Other (20-59)	Older (60-69)	Elderly (70+)	Unknown age
53	95	1,269	160	146	14



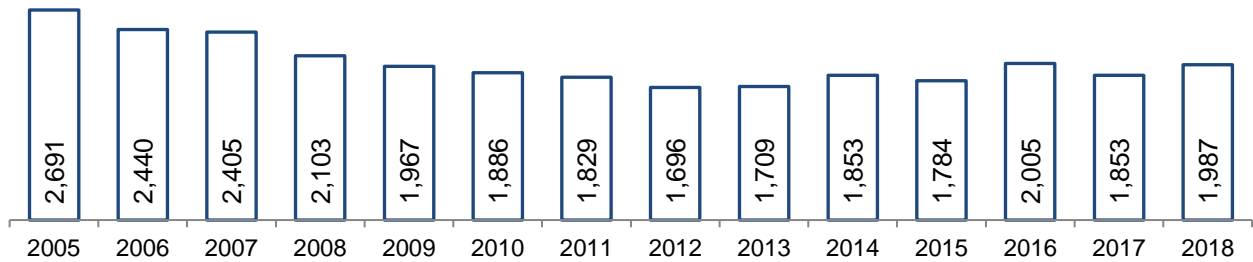
## 1.7. Summary Sheet of KSI

A summary of the 2018 killed or seriously injured (KSI) casualty data can be seen below.

**Estimated Cost: £761,484,219**

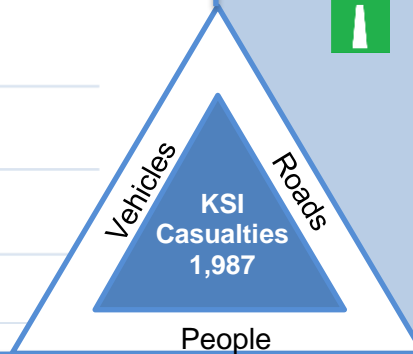
**Average Cost: £383,233**

**KSI casualties**



Car occupants	1,270
Motorcycle users	353
Goods vehicle occupants (equal to or under 3.5 tonnes)	130
HGV occupants (over 3.5 tonnes)	72
Pedestrians	96
Pedal cyclists	35
Other/Unknown	31

Motorway	807
A-road	1,180
A-road dual	754
A-road single	426



1,382



?  
(Unknown)  
0



605

Children (0-15)	Young (16-19)	Other (20-59)	Older (60-69)	Elderly (70+)	Unknown age
57	109	1,444	191	172	14



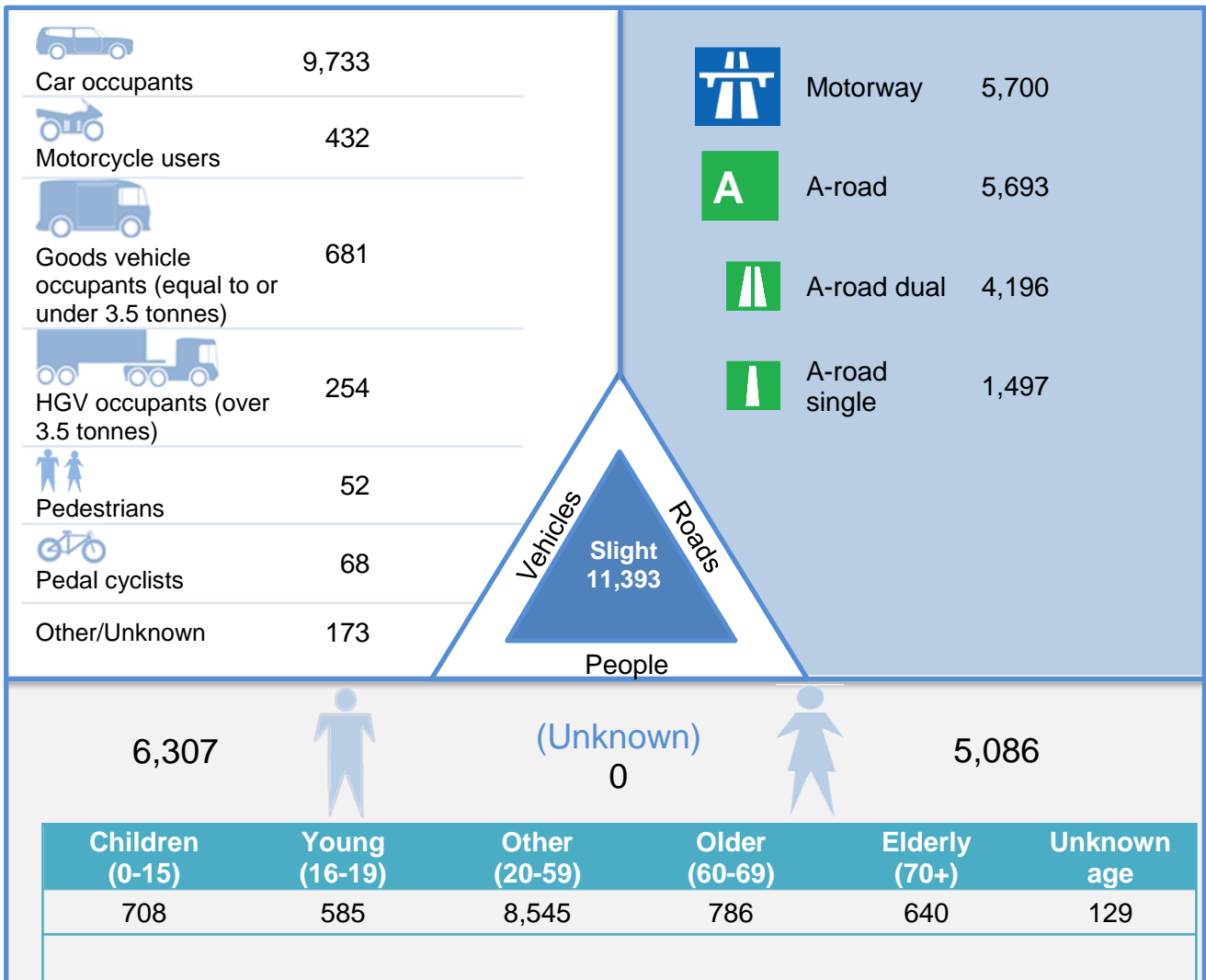
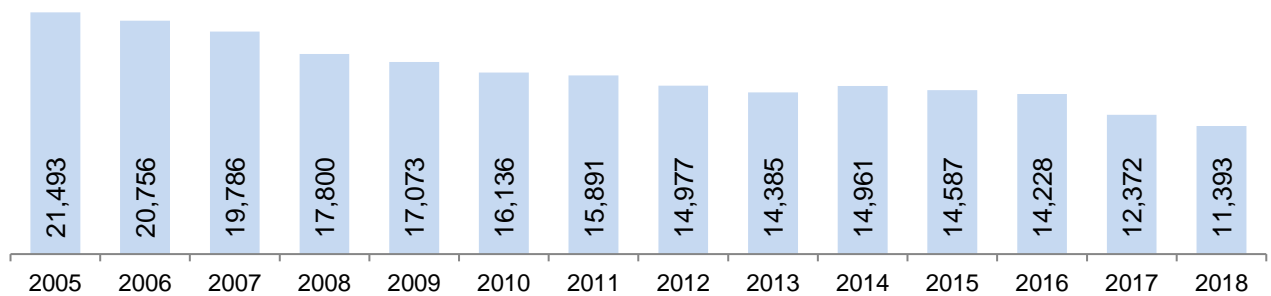
## 1.8. Summary Sheet of Slight

A summary of the 2018 slightly injured casualty data can be seen below.

**Estimated Cost: £168,814,169**

**Average Cost: £14,817**

**Slightly injured casualties**



## 1.9. Summary sheet of collision and casualty cost

### Estimated cost of casualties (£Millions)

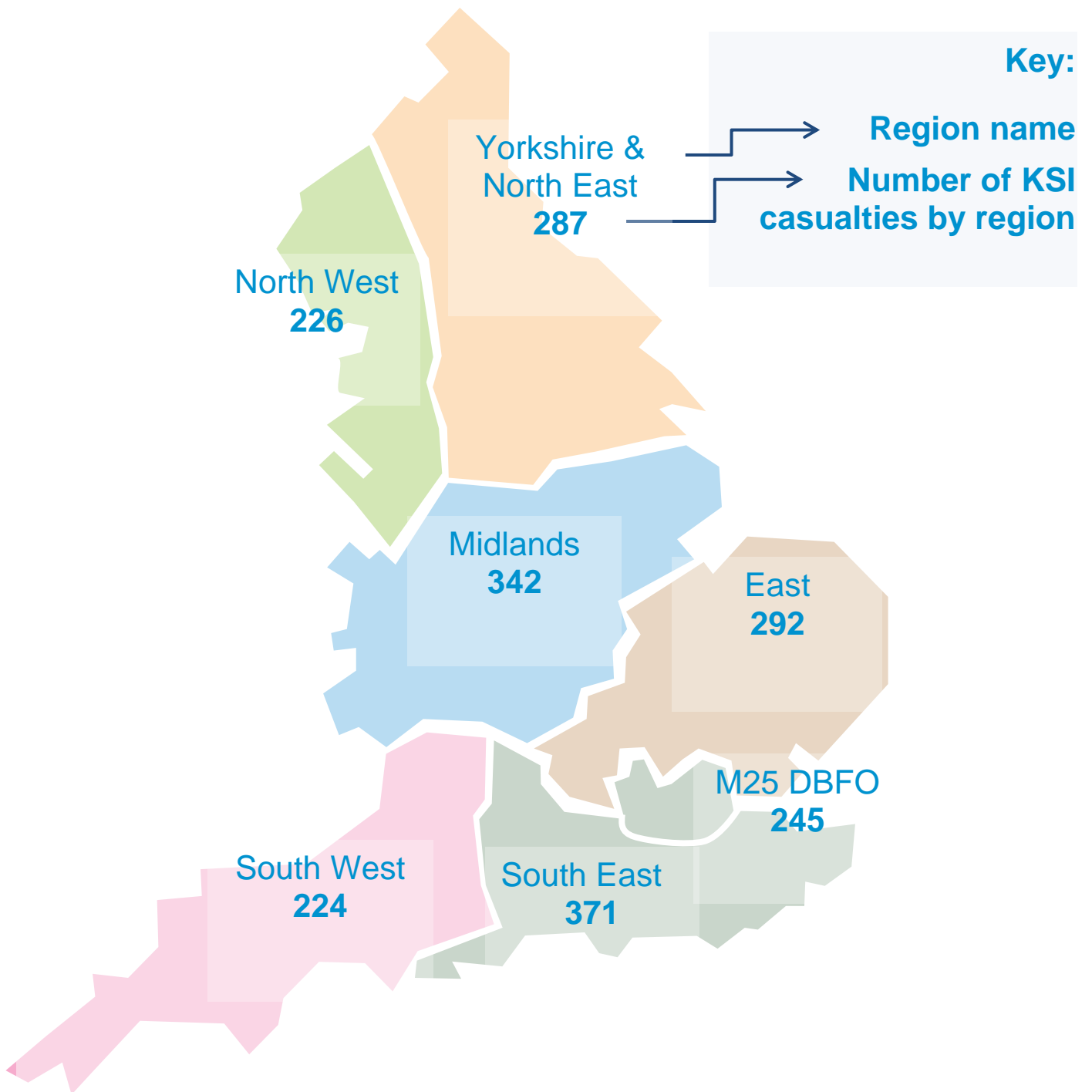
Killed	Seriously injured	Slightly injured	Total
£427.6	£333.9	£168.8	£930.3

### Estimated cost of collisions (£Millions)

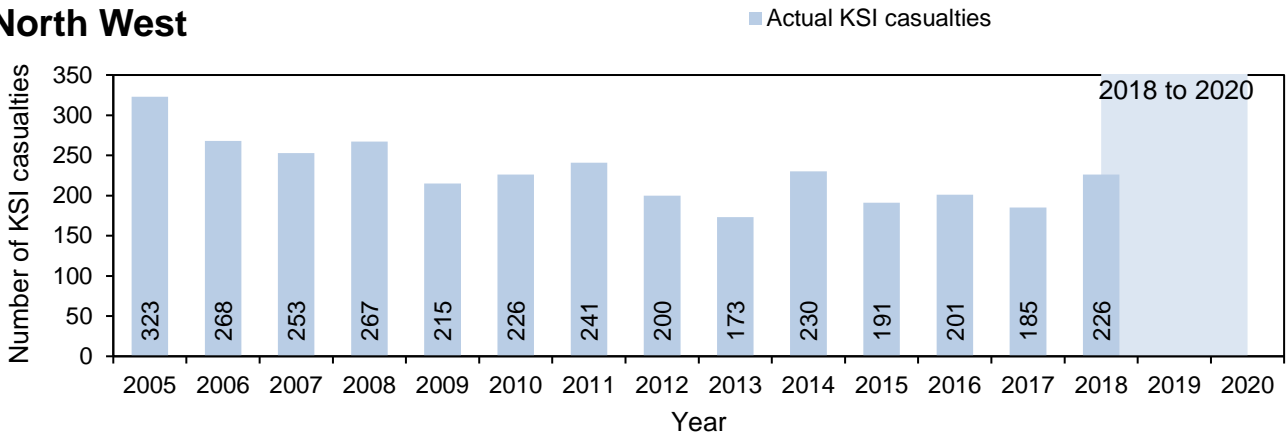
Collision Severity	Road Class	A-road		Total
	Motorway	Non-built-up	Built-up	
<b>Fatal</b>	£172.2	£274.7	£12.9	£459.8
<b>Serious</b>	£153.1	£170.9	£26.4	£350.4
<b>Fatal + Serious</b>	£325.3	£445.6	£39.3	£810.2
<b>Slight</b>	£105.4	£75.6	£13.1	£194.1
<b>Total</b>	£430.8	£521.2	£52.3	£1,004.3
<b>Damage only</b>	£83.6	£81.9	£25.3	£190.8
<b>Total inc. Damage only</b>	£514.4	£603.1	£77.6	£1,195.1

Note: Estimated costs outlined in Sections 1.5 to 1.9 are calculated using DfT WebTAG May 2019 release v1.12. and are based on the average value of prevention at 2010 prices and 2018 values. WebTAG guidance for damage only collisions is based on the work of Simpson and O'Reilly (1994) [Damage only collisions per PIC, Motorways = 7.6, Non-built-up= 7.8, Built-up 17.7]. The estimation of these values may differ from that generated if using the DfT RAS table due to several reasons including the differing nature of the networks (SRN vs. GB).

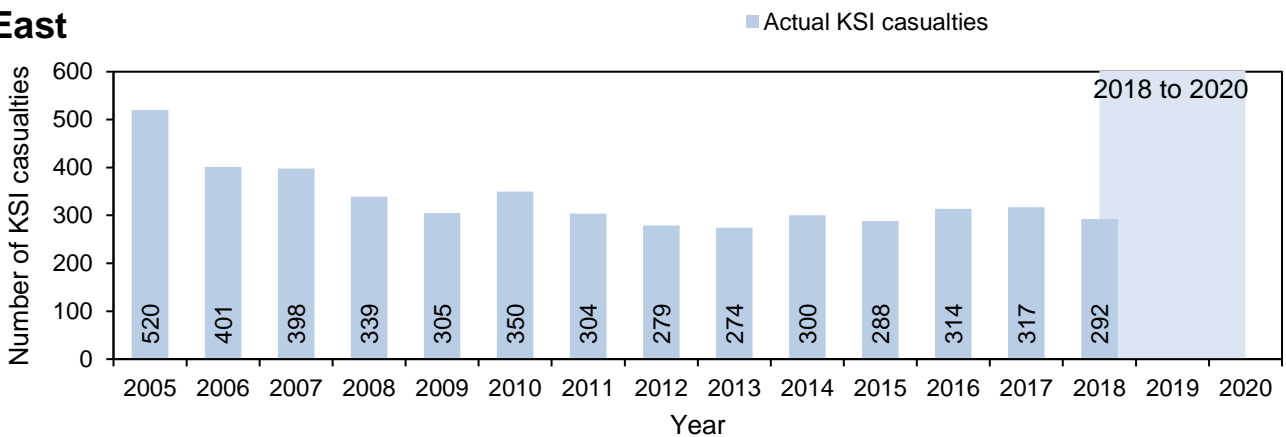
## 1.10. Regional KSI Values



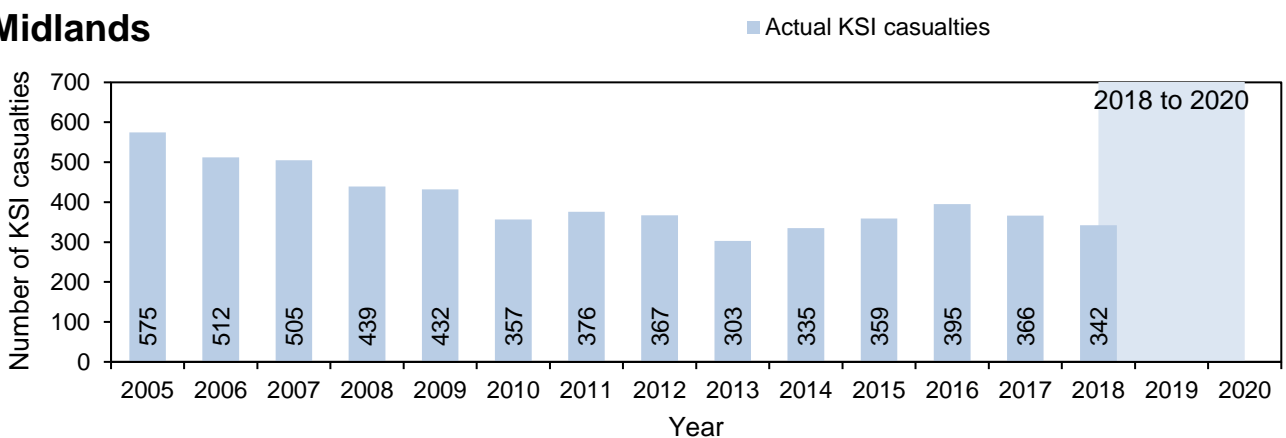
### North West



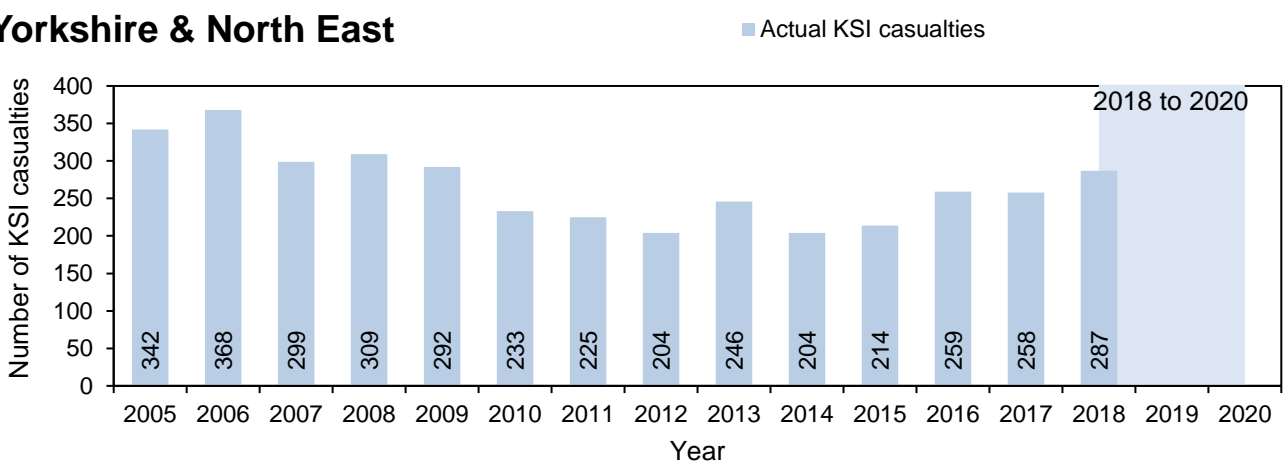
### East



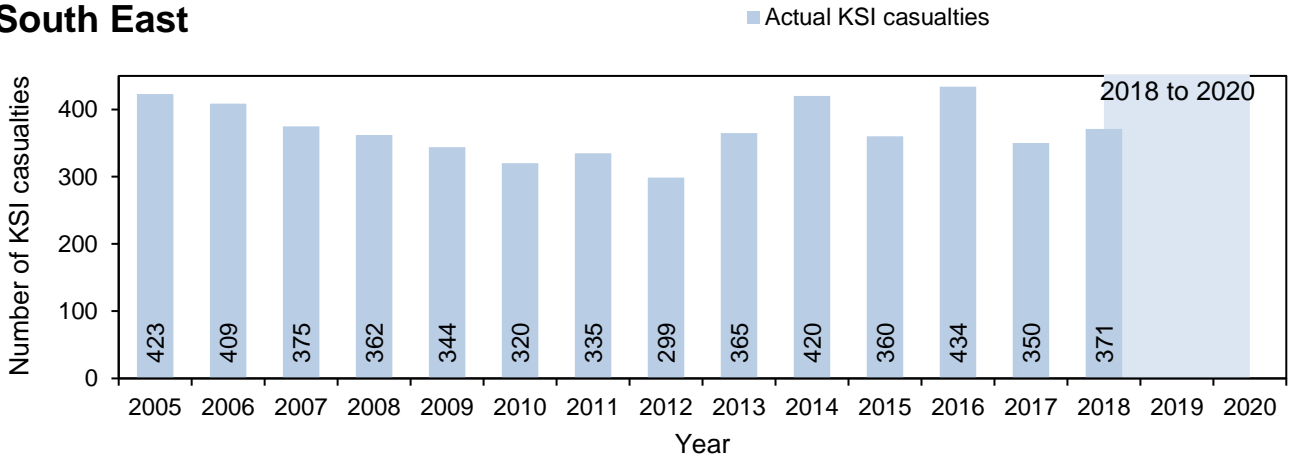
### Midlands



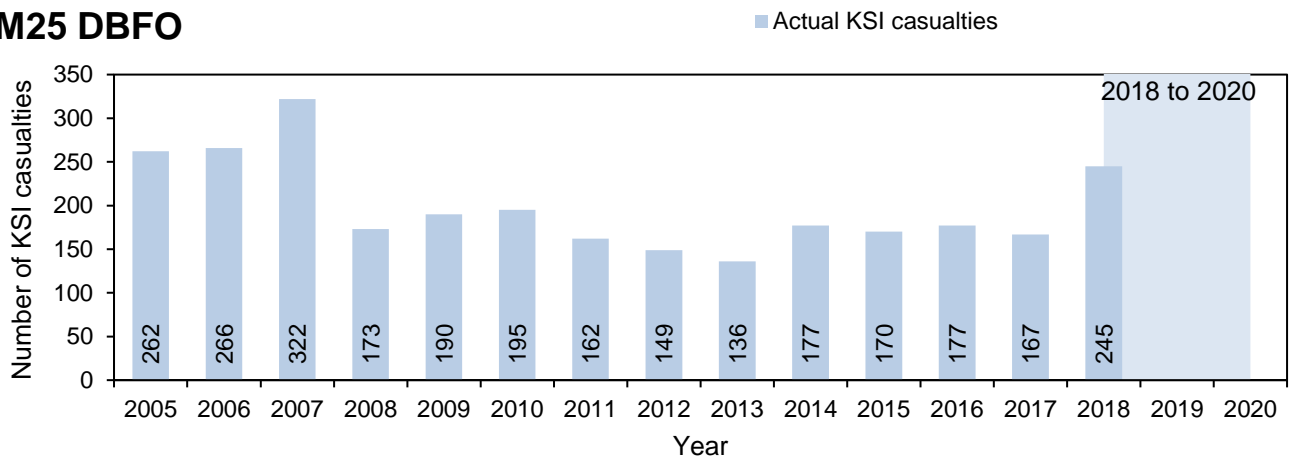
### Yorkshire & North East



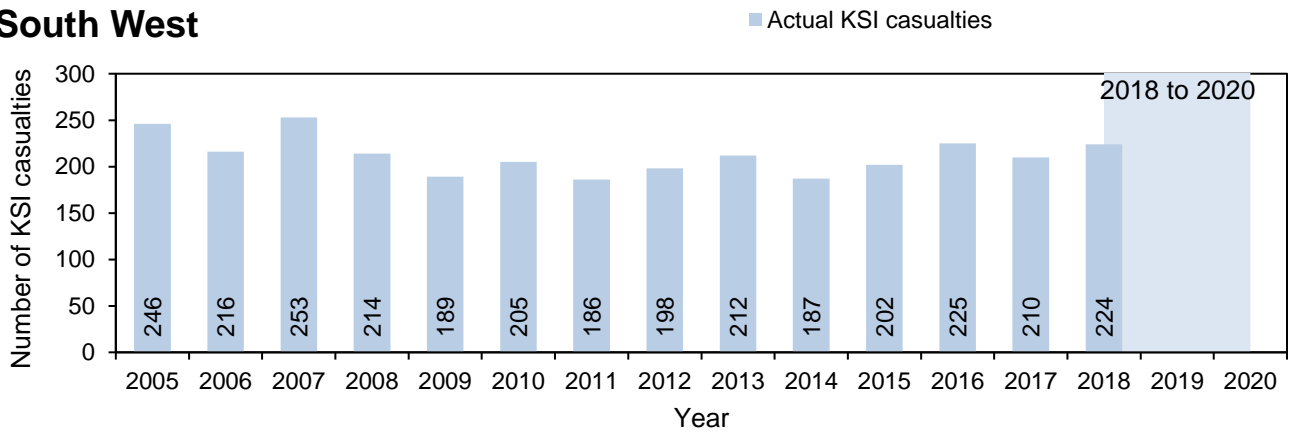
### South East



### M25 DBFO

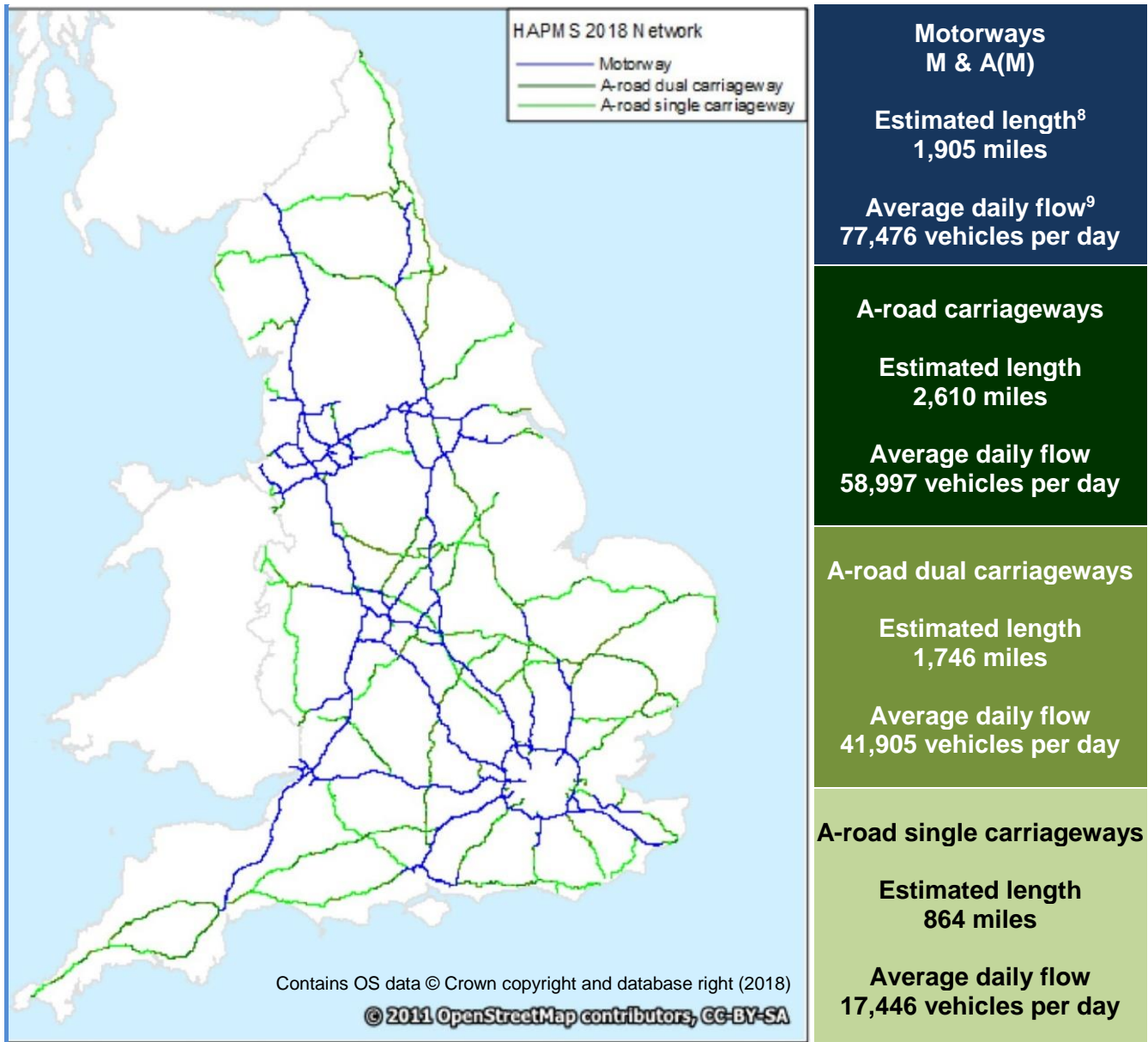


### South West



# 2. Network Summary

## 2.1. The SRN



**Figure 2-1 Highways England’s 2018 Strategic Road Network**  
Based on the ‘2018 HAPMS’ network

From 2016, the referenced network will be that at 1st January and will be updated annually to capture changes on the SRN in a timely manner. Pre-2016 was a fixed reference network taken in December 2010 (“2010 network”).

<sup>8</sup> Based on summation of length from DfT count points identified as part of the 2018 SRN.

<sup>9</sup> Based on 2018 Annual Average Daily Flow (AADF) values obtained from DfT count points identified as part of the 2018 SRN.

## 2.2. Traffic Estimates and Economic Factors

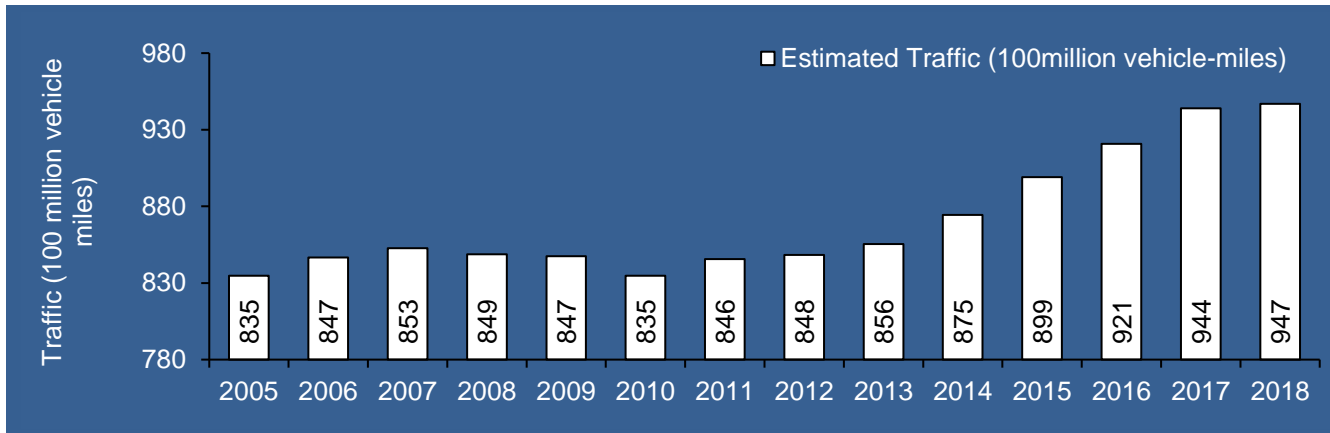


Figure 2-2 Historic traffic levels on the SRN

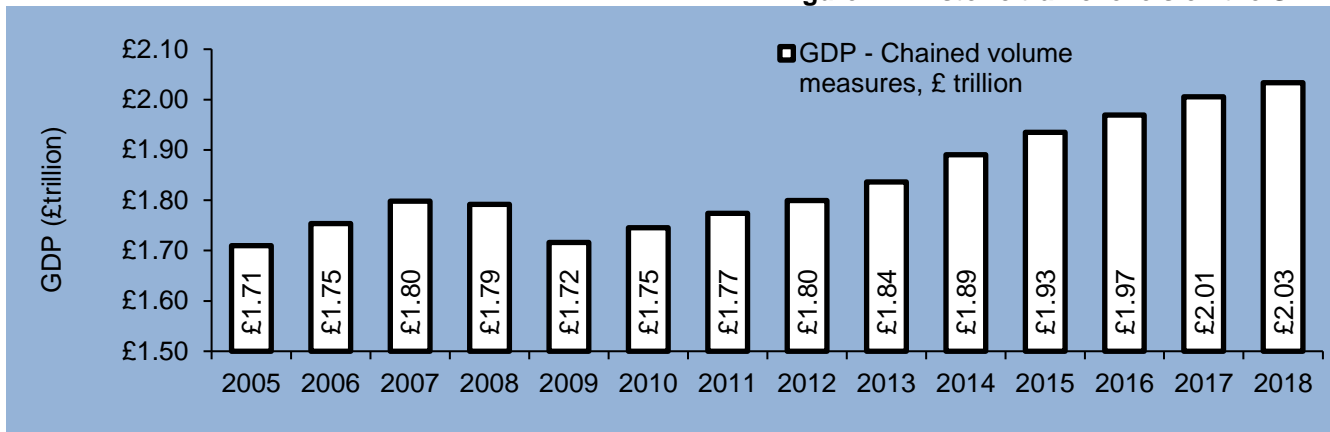


Figure 2-3 UK Gross Domestic Product between 2005 and 2018

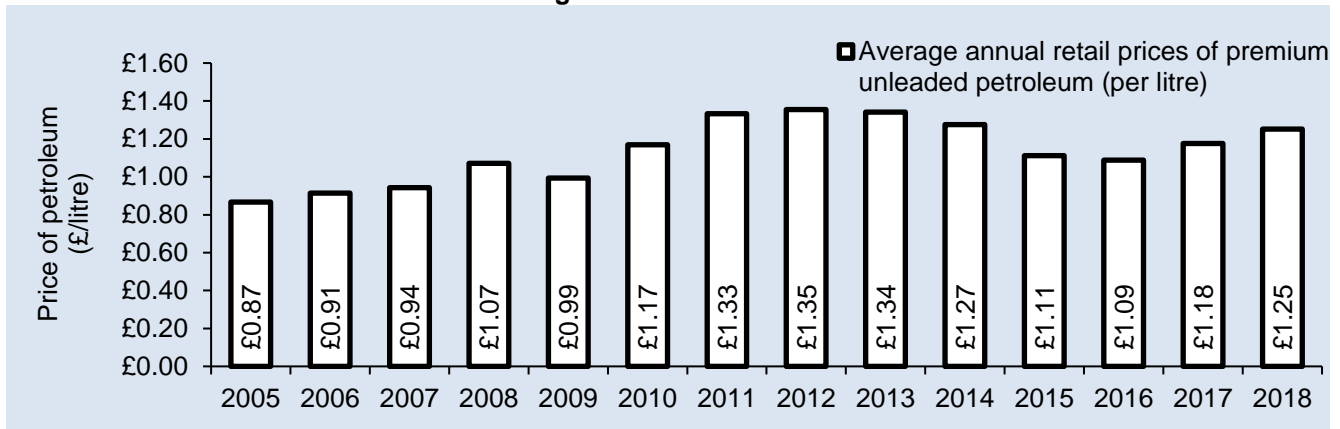


Figure 2-4 Average annual UK fuel prices between 2005 and 2018

Notes:

- (a) Traffic estimates based on 2018 AADF values obtained from DfT count points identified as part of the 2018 SRN.
- (b) UK GDP sourced from <https://www.ons.gov.uk/economy/grossdomesticproductgdp/timeseries/abmi/pn2>
- (c) UK fuel prices sourced from DfT Table 4.1.2 Average annual retail prices of petroleum products and a crude oil price index UK.

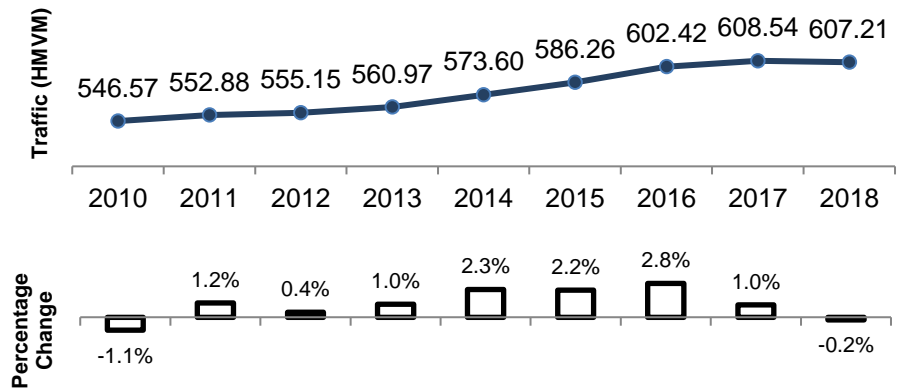
Figure 2-2 to Figure 2-4 show estimated traffic along with economic factors. Figure 2-2 shows that between 2007 and 2010, the SRN witnessed a decline in overall usage with headline traffic levels decreasing by 2.1 per cent from 853 hundred million vehicle miles (HMVM) to 835 HMVM.

Between 2010 and 2018, traffic levels increased 13.5 per cent from 835 HMVM to 947 HMVM, with the largest percentage traffic growth within this period (3.3 per cent) occurring between 2014 and 2015. In the same period (2010 to 2018), traffic on the Great Britain network (excluding estimates for the SRN) increased 5.8 per cent from 2,197 HMVM to 2,325 HMVM.

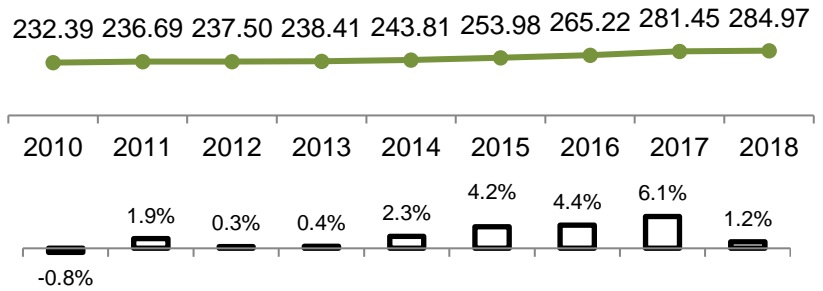
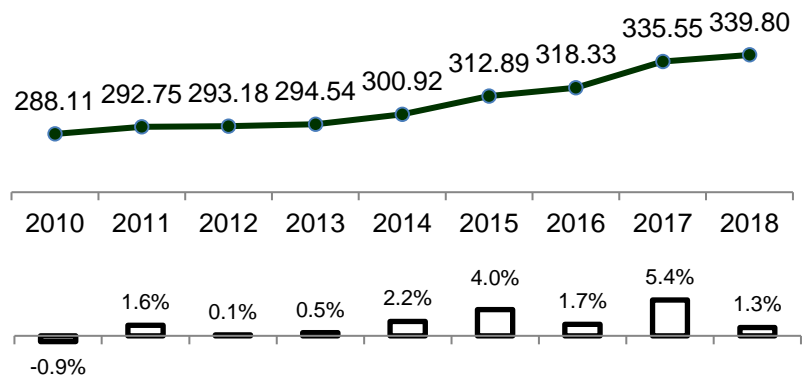
The increase in traffic on the SRN, since 2010, (Figure 2-2) correlates with the economic recovery from 2009 (Figure 2-3). The increase in traffic is also generally augmented by decreasing retail prices of premium unleaded petroleum, after 2012, as shown in Figure 2-4.



## 2.3. Traffic Estimates by Road Classification



### A-road



### A-road single carriageway

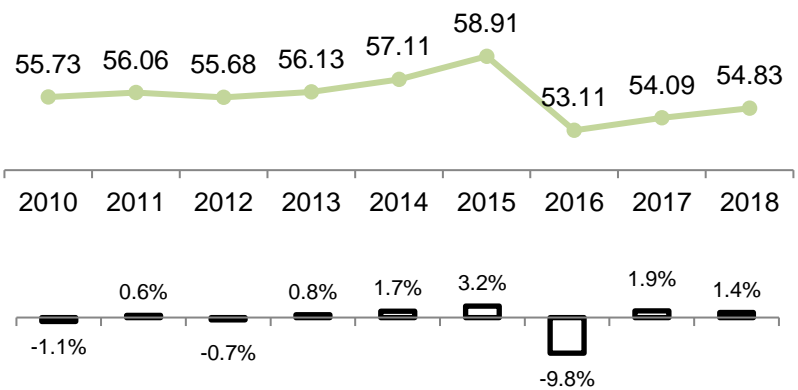


Figure 2-5 Traffic estimates by road classification

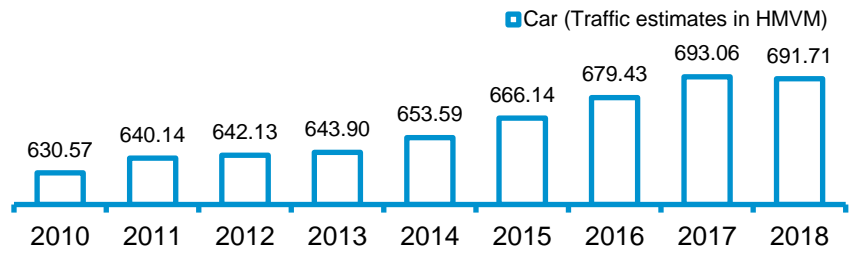
Estimates of traffic (measured in hundred million vehicle miles, HMVM) by road classification are provided in Figure 2-5. Between 2010 and 2018, there has been an 11.1 per cent increase in motorway traffic and a 22.6 per cent increase in A-road dual carriageway traffic on the SRN (based on the 2018 reference network). In contrast the traffic on A-road single carriageways decreased by 1.6 per cent over the same period (2010 to 2018).

## 2.4. Traffic Estimates by Vehicle Type



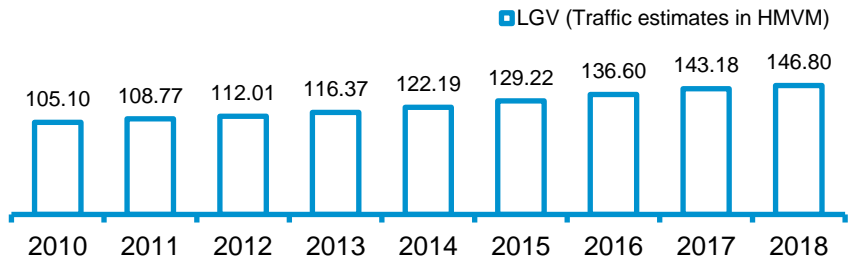
### Car

↑ 9.7% from 2010



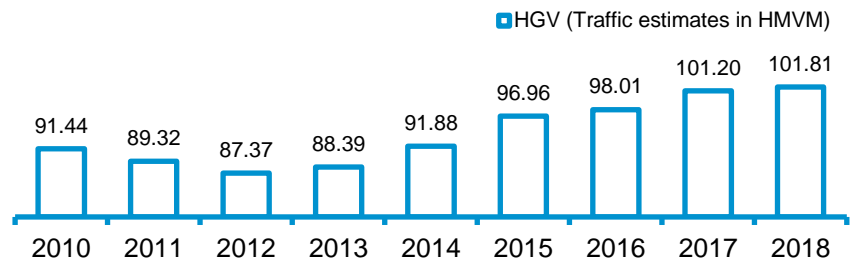
### LGV (other GV)

↑ 39.7% from 2010



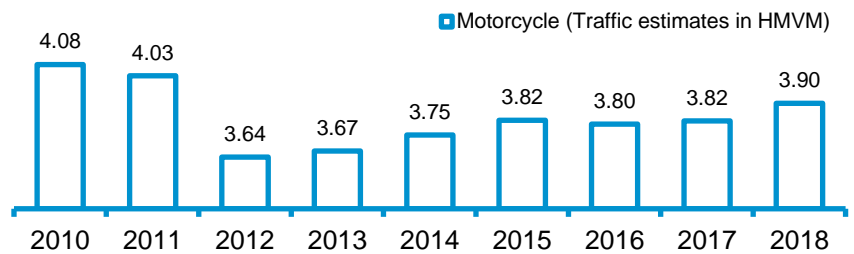
### HGV (over 3.5t)

↑ 11.3% from 2010



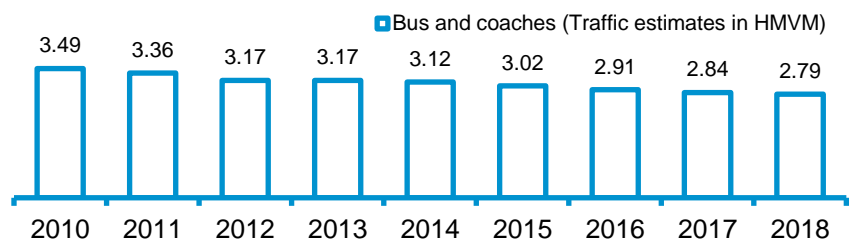
### Motorcycle

↓ 4.5% from 2010



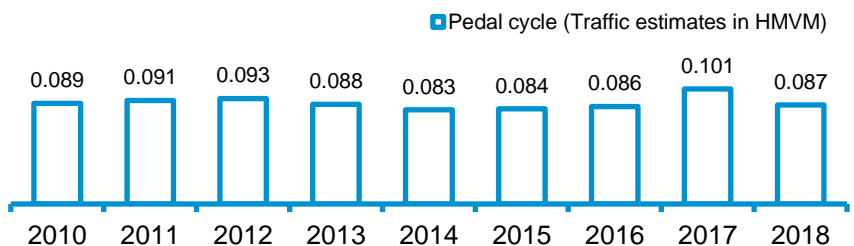
### Bus / coach

↓ 19.9% from 2010



### Pedal cycle

↓ 1.6% from 2010



Note: Measurement of the distance travelled by cyclists on the SRN is subject to considerable uncertainty

Figure 2-6 Traffic estimates by vehicle type

An estimate of vehicle traffic levels<sup>10</sup> on the SRN in 2018 is shown in Figure 2-6. As shown in the figure, the largest percentage of vehicle traffic on the SRN are cars (73.0 per cent) followed by LGVs (other goods vehicles<sup>11</sup>) with 15.5 per cent.

Between 2010 and 2018, out of the three major vehicle types (car, heavy goods vehicle (HGV) and light goods vehicle (LGV)), the largest increase was LGVs equivalent to 39.7 per cent; with a 2.5 per cent increase occurring between 2017 and 2018. As shown in Figure 2-6, LGV traffic increased steadily from 105.10 HMVM in 2010 to 146.80 HMVM in 2018. LGVs are further investigated in the goods vehicle topic of interest (Section 0).

In the same period, HGV traffic decreased till 2012 and subsequently increased to yield a net increase of 11.3 per cent over the period. Buses and coaches is the only vehicle type to show a continuous decrease (19.9 per cent) between 2010 and 2018.

<sup>10</sup>Vehicle traffic estimates were determined using count point vehicular data accessed from the DfT Traffic Counts website found at <http://www.dft.gov.uk/traffic-counts/> along with the underlying assumptions and collection methods. Only count points aligned with the corresponding reference network year were used in the calculation.

<sup>11</sup>For the purpose of reporting traffic estimates, where the vehicle type "other goods vehicle" has been recorded these are represented by light goods vehicles (LGV) as termed by the DfT.

# 3. Casualties

## 3.1. Roads

This section provides an overview of casualties linked to road classification by severity, year (including baseline (BSL)) and rates (i.e. number of casualties per HMVM). The rates provide an indication of the likelihood of being injured. The section also considers the influence of road environment.

Figure 3-1 to Figure 3-5 illustrate the casualty distribution on motorway, A-road dual carriageway and A-road single carriageway in terms of the number and rate. Comparison of data for the road classifications shows that for 2018:

- The most fatalities (102 out of 250) occurred on the A-road dual carriageways.
- The largest proportion of KSI (40.6 per cent) occurred on the motorways compared to A-road dual and A-road single carriageways. Motorways also showed the largest proportion of total casualties (48.6 per cent).
- The likelihood of being injured on motorways was the lowest of all three road classifications across all severities. Therefore, the data in Figure 3-1 is normalised to illustrate the ratio (based on casualty rate) between the likelihood of an injury occurring on a motorway, dual carriageway or single carriageway relative to the motorway.
- The likelihood of being injured on A-road single carriageways was the highest of all three road classifications across all severities, followed by A-road dual carriageways.

### 3.1.1. Casualties and likelihood of injury by road classification and severity

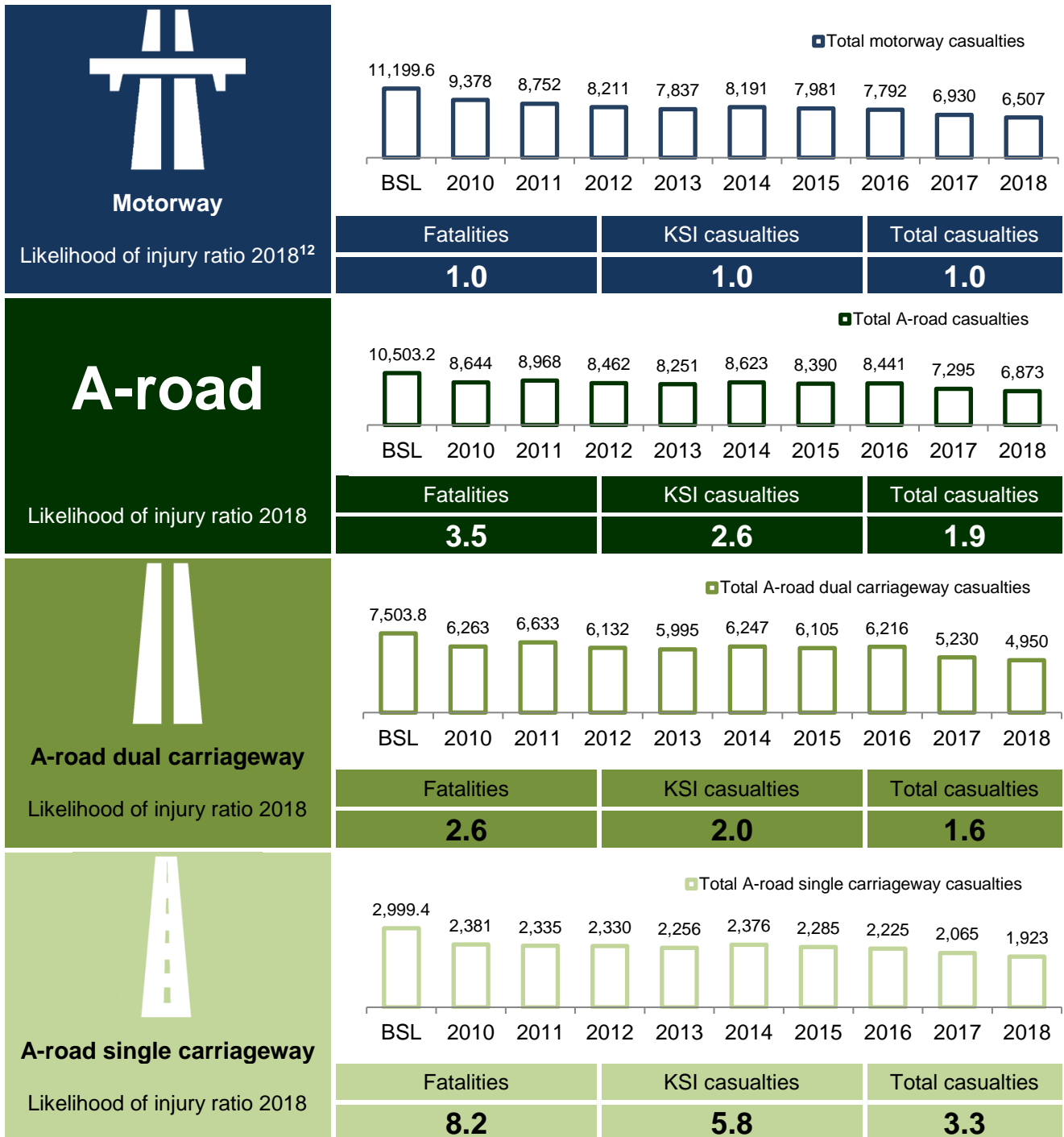


Figure 3-1 Casualties by road classification and likelihood of injury by road classification and severity

<sup>12</sup> 'Likelihood of injury ratio' is the ratio between casualty rates; normalised to motorway data.

### 3.1.2. Motorway casualties and rates by severity



Figure 3-2 Motorway casualties and rates by severity

### 3.1.3. A-road casualties and rates by severity

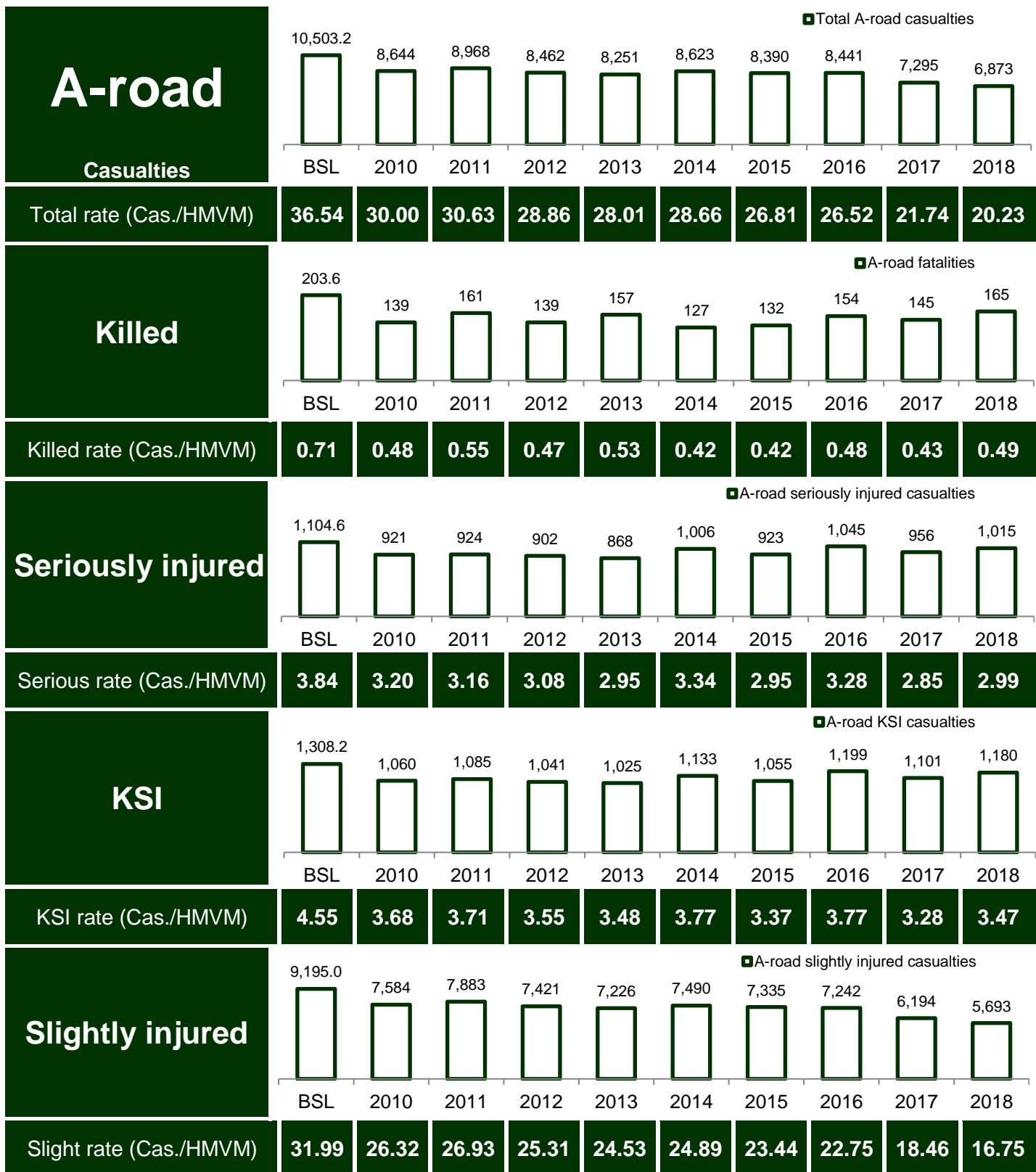


Figure 3-3 A-road casualties and rates by severity



### 3.1.4. A-road dual carriageway casualties and rates by severity

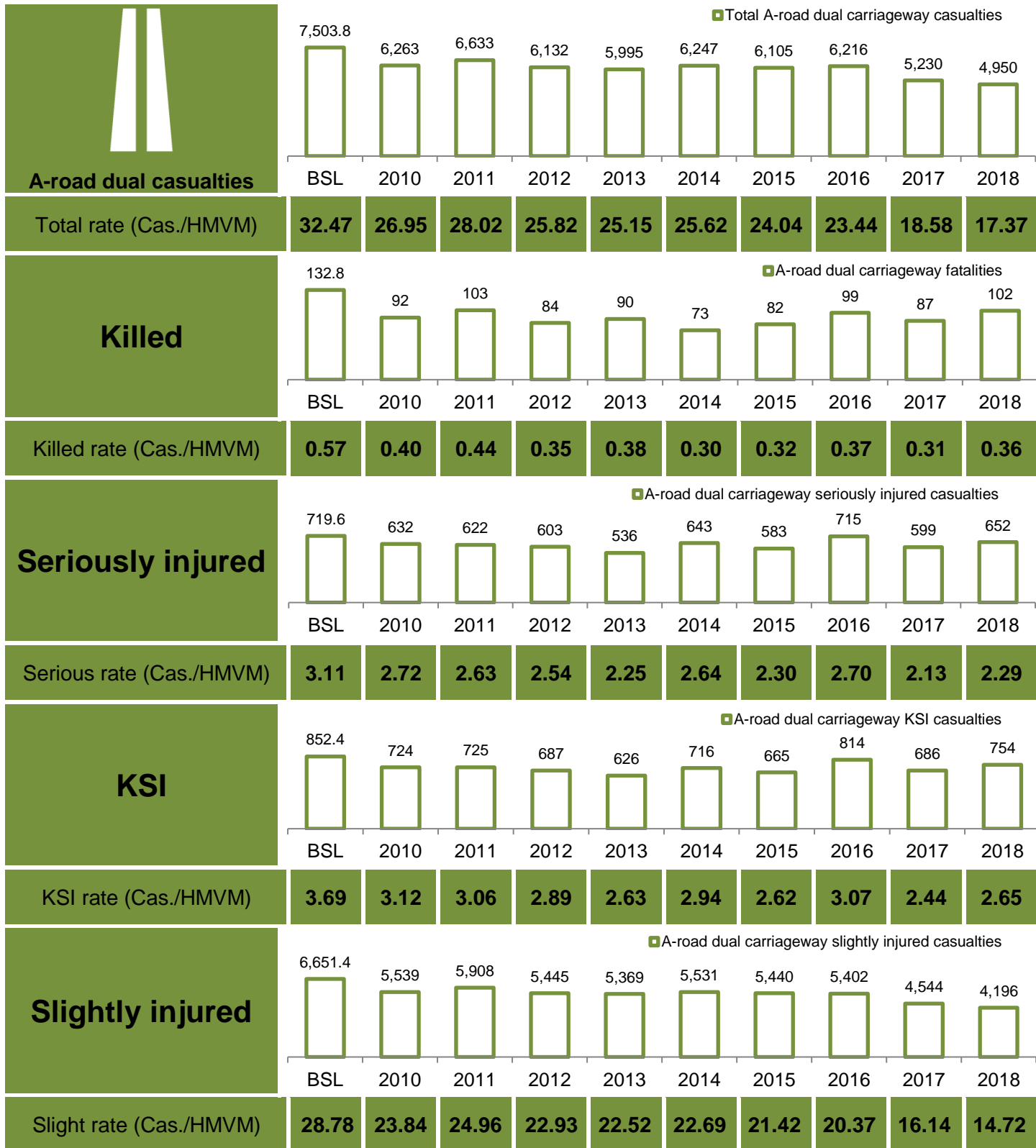


Figure 3-4 A-road dual carriageway casualties and rates by severity

### 3.1.5.A-road single carriageway casualties and rates by severity



Figure 3-5 A-road single carriageway casualties and rates by severity

### 3.1.6. Casualties involving road environment

This section evaluates the number of casualties where the road environment is categorised as a contributory factor.

In 2018, the number of KSI casualties involving road environment factors was 214 and was equivalent to 10.8 per cent of the respective total KSI casualties (1,987).

Figure 3-6 summarises the number of KSI casualties involving at least one factor associated with the road environment from 2005 and 2018. The diagram depicting the split by road classification shows the trend in KSI casualties from 2005 to 2018, involving road environment factors, which indicates an overall a continual fluctuation across all road classifications; particularly the motorways.

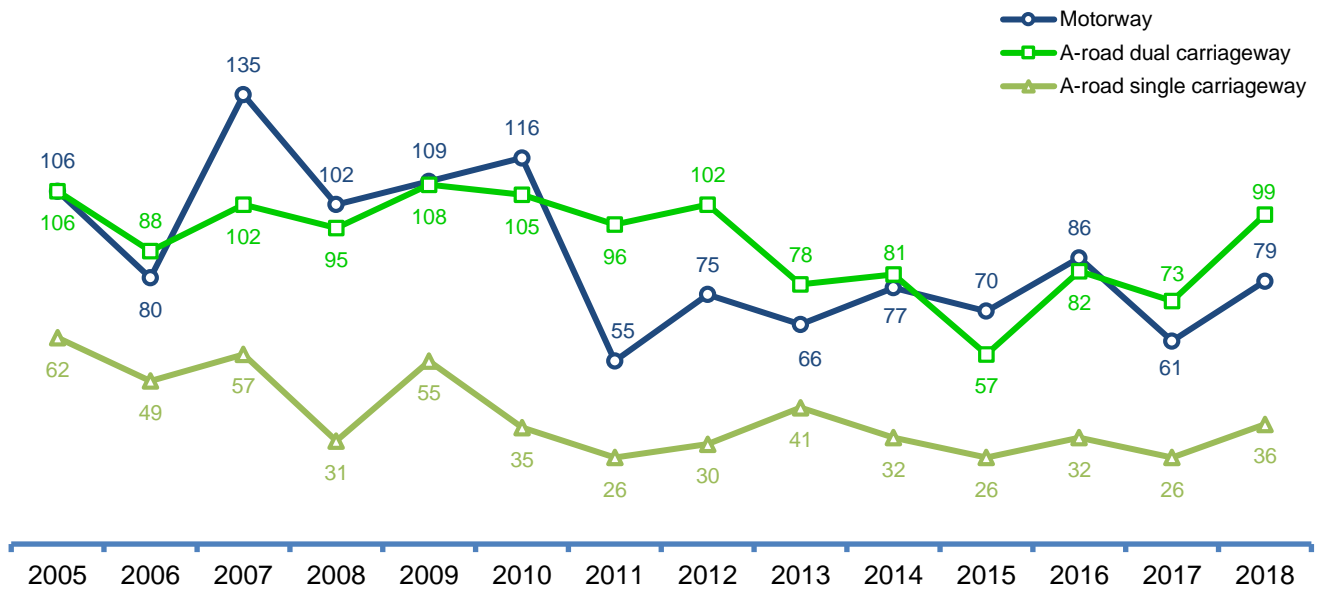
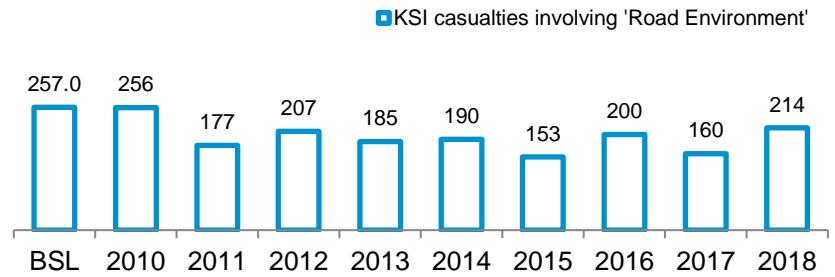
The primary contributory factor for road environment continues to be "Slippery road (due to weather)" which contributed to 156 of the KSI casualties in 2018. Weather is a topic of interest in section 5.8

The number of casualties involving a poor or defective road surfacing on the SRN is also shown in Figure 3-6. This provides context on the potential human cost from defects in surfacing. From 2008 to 2011, England experienced harsh winters, with December 2010 being one of the coldest on record<sup>13</sup>. As a result, the occurrence of surface defects during and after this period became a significant concern for all stakeholders.

The graph depicting the trend of casualties involving poor or defective road surfacing (in Figure 3-6) shows that the number spiked in 2012; a 47.7 per cent increase from 44 in 2011 to 65 in 2012, followed by a 40.0 per cent decrease in 2013 to 39. When assessing the overall impact of this contributory factor against total casualties for all years, the typical contribution is less than one per cent per annum.

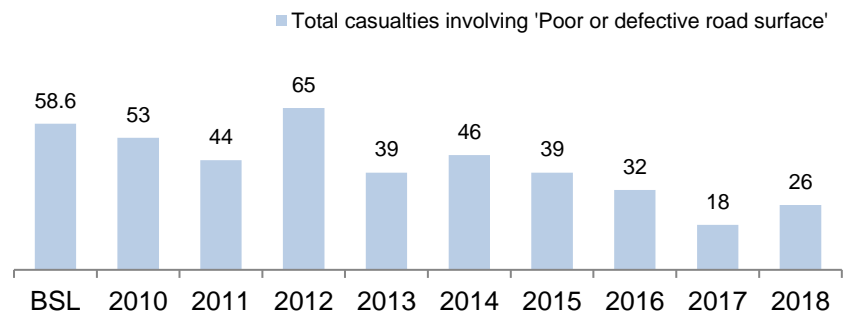
<sup>13</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/4002/potholes-review-progress-report.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/4002/potholes-review-progress-report.pdf)

## Road environment contributed to 214 KSI casualties in 2018



In 2018, 46.3% of KSI casualties where the road environment contributed were on A-road dual carriageways

'Poor or defective road surface' contributed to 26 casualties in 2018



Slippery road contributed to 156 KSI casualties in 2018

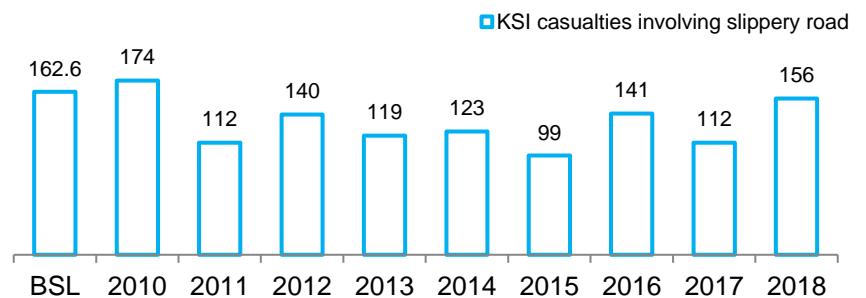


Figure 3-6 Summary of casualties where road environment contributed

## 3.2. Vehicles

This section briefly assesses the impact of vehicles on casualties occurring on the SRN.

The section primarily focuses on providing an overview of casualties based on first point of vehicle impact, different vehicle interactions and where vehicle defects contributed.

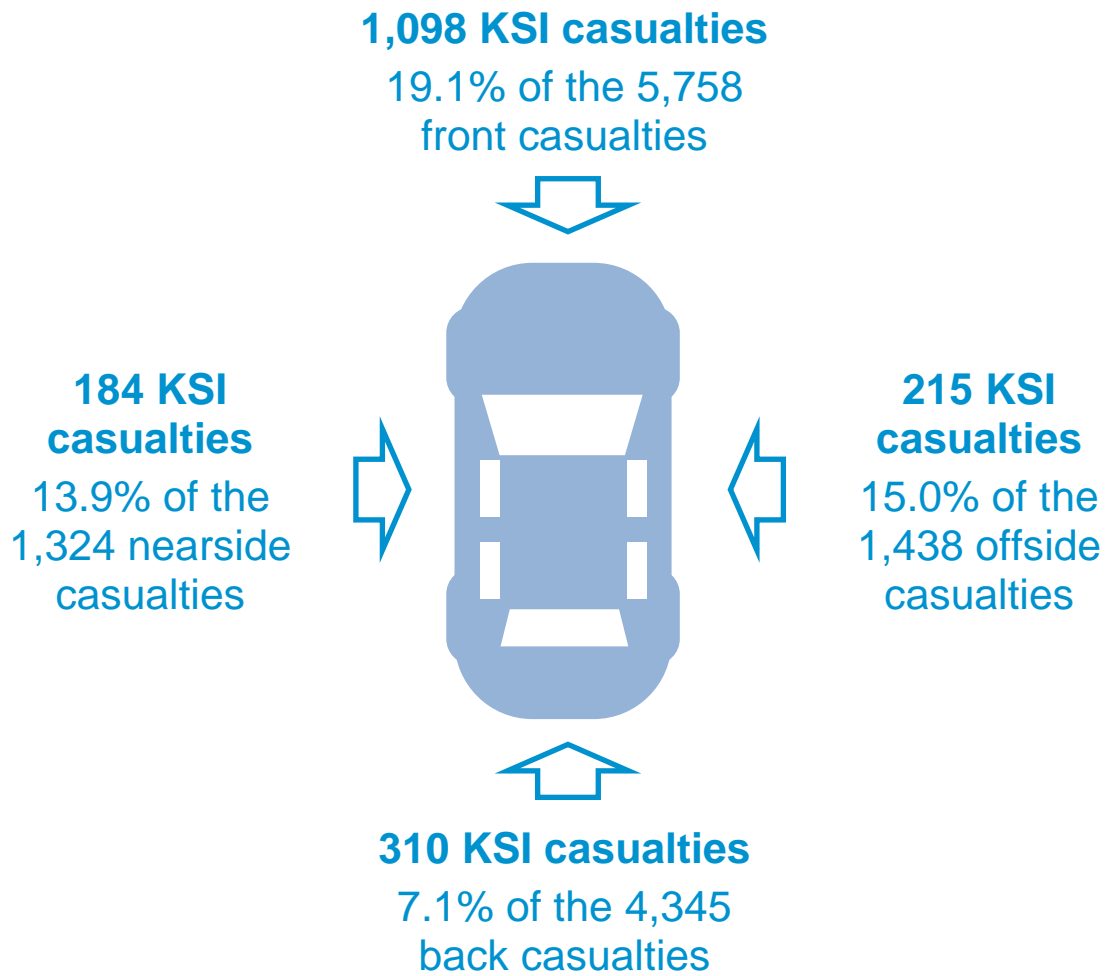
### 3.2.1. First point of impact

Figure 3-7 provides a breakdown of the number of KSI casualties by first point of vehicle impact. This represents the first point of impact recorded on the vehicle that the casualty is associated with.

Note: As part of STATS19, casualties are assigned to vehicles that they were occupying or riding at the time of the collision. Furthermore, pedestrians are assigned to the specific vehicle they collided with. This analysis, however, excludes pedestrian casualties as it is focussed only on vehicle occupants.

KSI casualties where the first point of vehicle impact was front (1,098) made up 55.3 per cent of KSI casualties in 2018 and the corresponding KSI severity ratio (KSI severity ratios are the percentage of KSI casualties to total casualties for each individual category) was 19.1 per cent. It can also be seen that both offside and nearside impacts resulted in similar number of casualties and KSI severity ratios, whilst the back impacts resulted in the lowest KSI severity ratio of 7.1 per cent.

**First point of impact:**



84 KSI casualties had no recorded first point of impact (60 in 2017)

*Note: Pedestrians excluded from analysis*

**Figure 3-7 Casualties by first point of impact**

### 3.2.2. Casualties from vehicle interactions

All collisions in 2018 are grouped by the various combinations of vehicle types that were involved in the collision, for instance, a car colliding with a pedal cyclist. A breakdown by number of casualties and vehicles of all collision combination types where data were available are reported in Appendix Table E-9.

There can be 45 different combinations of vehicle type interactions involved in collisions. In the Appendix table(s) each collision interaction has been labelled with a reference letter (A to AT).

An evaluation of how specific vehicle interactions influence the numbers of casualties in 2018 by severity and type is provided in Figure 3-8 and Figure 3-9.

Figure 3-8 reports the resulting casualties (including pedestrians) where only one vehicle type was involved; Figure 3-9 reports where two vehicle types were involved.

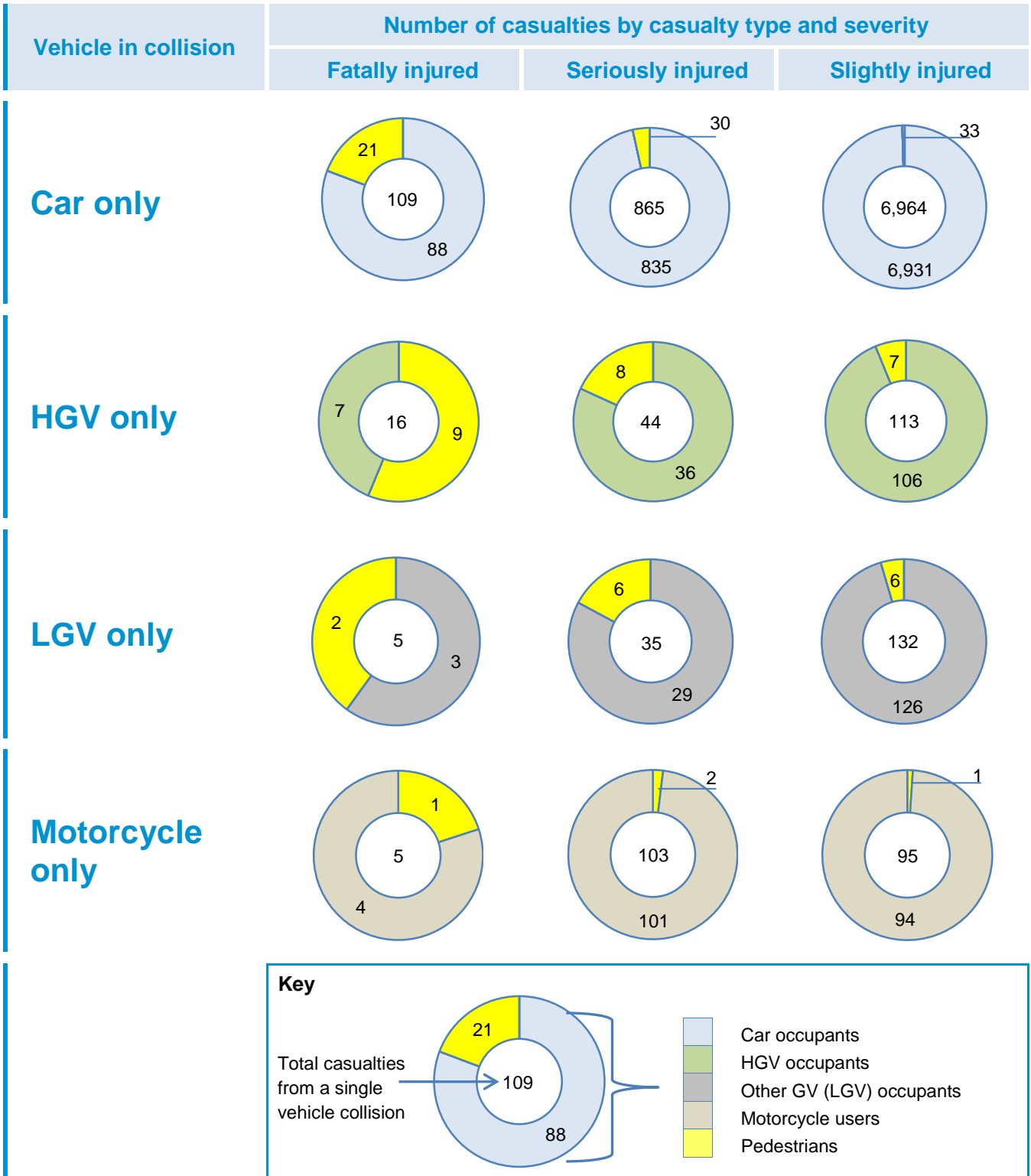


Figure 3-8 Casualty data for single vehicle



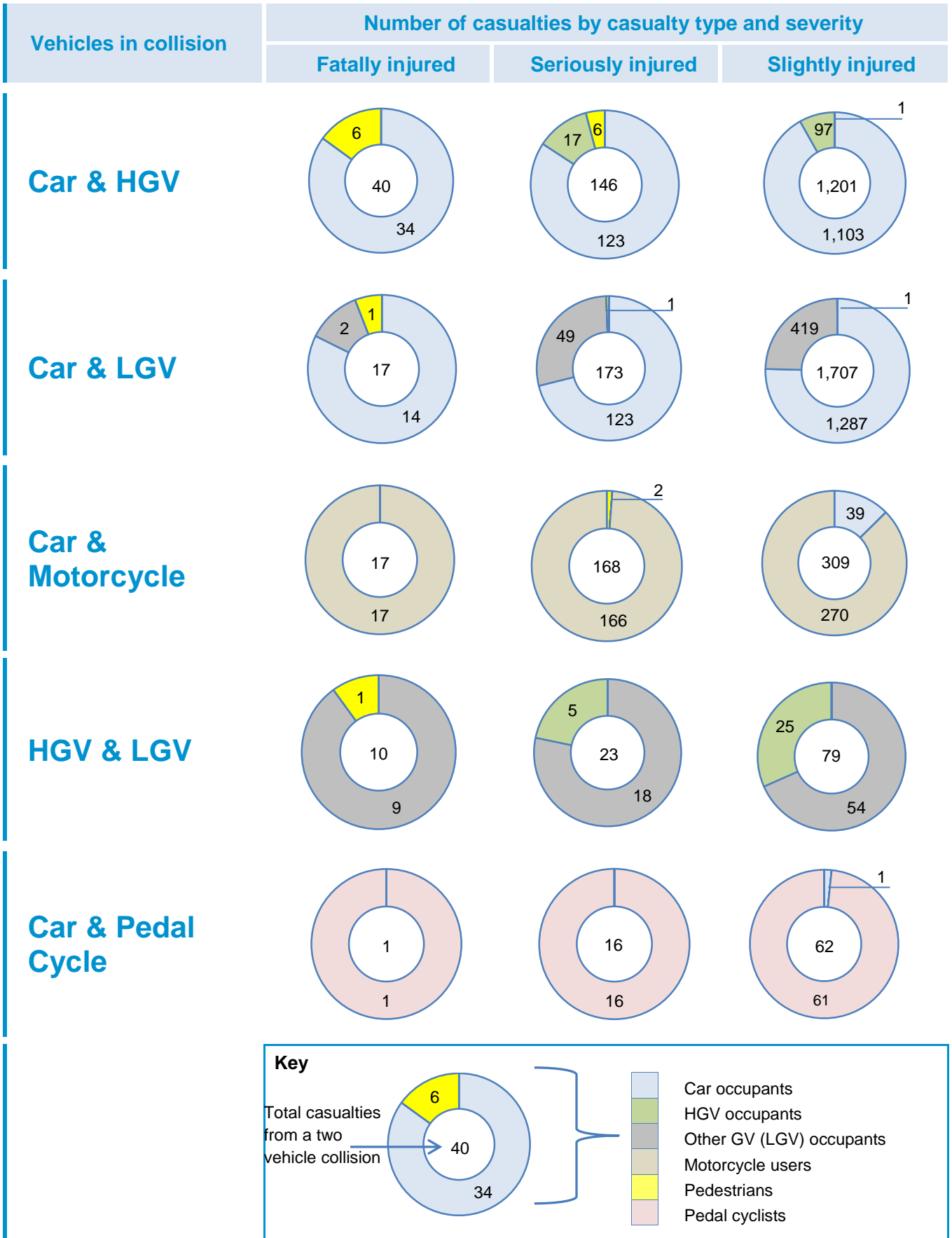


Figure 3-9 Casualty data by vehicle interaction

The most frequent interaction as shown in Figure 3-8 was car only collisions. Car only collisions resulted in 109 fatalities, equivalent to 43.6 per cent of the 250 total fatalities in 2018. In 2018, 21 pedestrian fatalities involved car only and 9 involved HGV only.

Where cars collide with vulnerable road users<sup>14</sup> such as motorcycle users and pedal cyclists, as shown in Figure 3-9, the vulnerable road users are at high risk of being fatally or seriously injured. In these two collision types, all 202 KSI casualties were vulnerable road users.

In collisions involving cars and HGVs, car occupants are disproportionately killed with 85.0 per cent of fatalities being car occupants. The corresponding KSI casualty value is 84.4 per cent. These values are below the corresponding 2017 values of 94.0 and 91.0 per cent respectively.

---

<sup>14</sup> Vulnerable road users include motorcycle users, pedal cyclists and pedestrians.

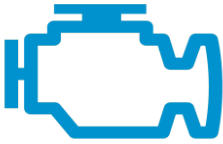
### 3.2.3. Casualties involving vehicle defects

This section evaluates the number of casualties where at least one vehicle within a collision had a defect which was a contributory factor. As shown previously in Figure 2-3, it is apparent that the economic situation for the period covered in this analysis, was recovering, and hence this section also assesses the corresponding historic trends in vehicle defects.

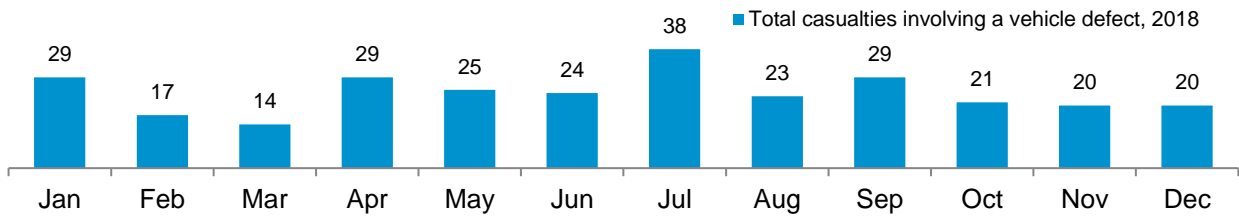
Figure 3-10 provides a summary of casualties involving vehicle defects, including specific factors and their overall impact on KSI casualties for 2018. The latter indicates that the most common vehicle defect which contributed to 32 (52.5 per cent of) KSI casualties was tyres that were illegal, defective or under inflated. For further detailed analysis of the tyres contributory factor refer to the Topic of Interest in Section 5.10.1.

KSI casualties resulting from incidents involving vehicle defects decreased by 42.2 per cent from the baseline value of 105.8 to 61 in 2018. In comparison, overall KSI casualties decreased by 14.4 per cent from the baseline value of 2,321.2 to 1,987 in 2018. The most significant change over the period was between 2013 and 2014, which resulted in an increase in KSI casualties associated with vehicle defects by 78.7 per cent from 47 in 2013 to 84 in 2014. Since then the values have remained below 65.

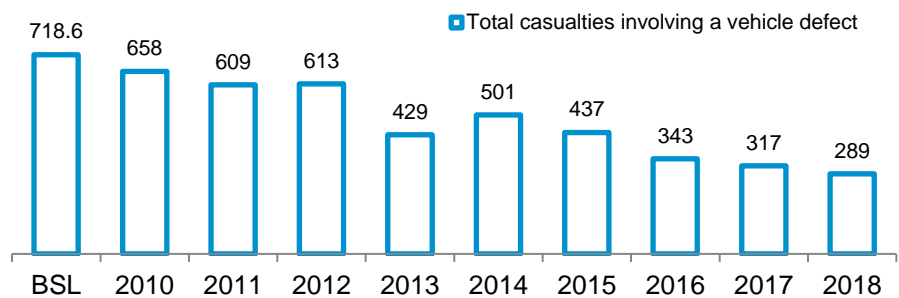
For more details refer the Topic of Interest Section 5.10.



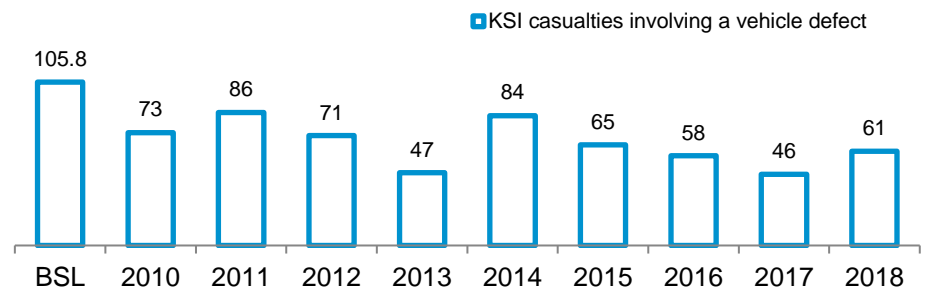
## Vehicle defect attributed to 289 casualties in 2018



## Vehicle defect attributed to 38 casualties in July 2018

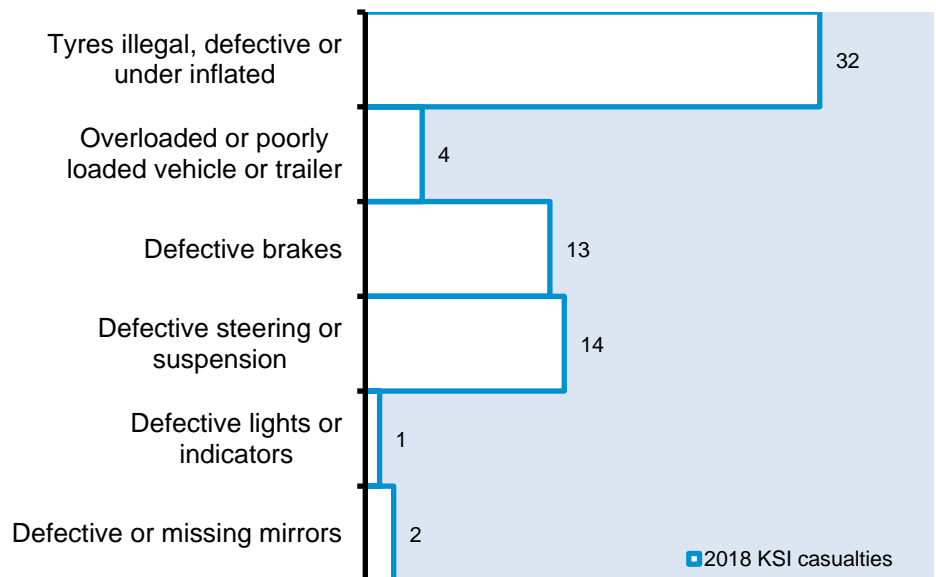


### Total casualties



### KSI casualties

52.5% of KSI casualties associated with vehicle defects were attributed to 'Tyres illegal, defective or under inflated'



As more than one contributory factor can be recorded per collision; defects will not sum to 61 KSI casualties

Figure 3-10 Summary of casualty data involving a vehicle defect

### 3.3. People

This section provides an assessment of the casualties on the SRN including an analysis of historic and future trends, casualty types and assessment of the drivers and riders including the human factors involved in collisions.

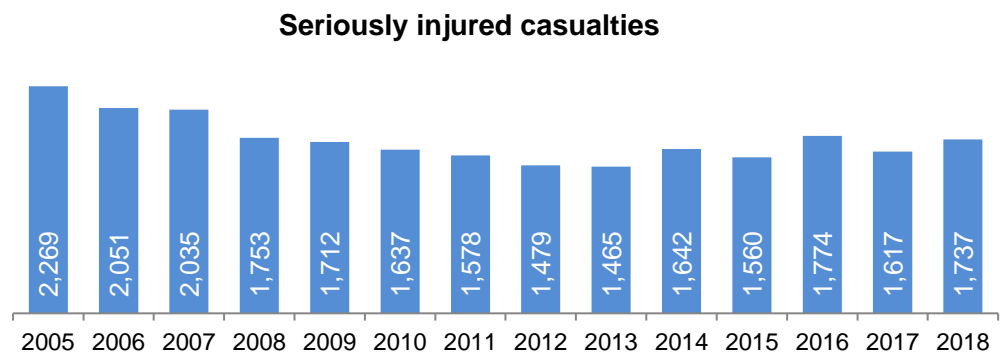
### 3.3.1. Casualty severity trends

This section identifies underlying trends in casualty data for each year, by severity, between 2005 and 2018. As explained in Section 1.3 the reporting of STATS19 via CRASH/COPA has had an impact on both seriously injured and slightly injured casualty data.

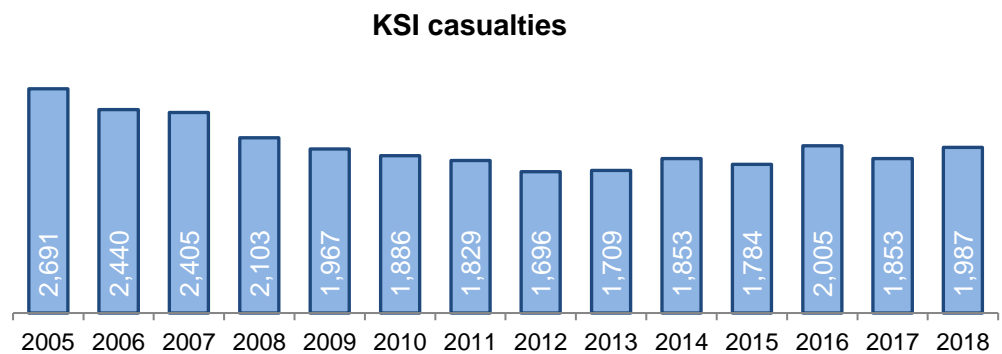
#### Fatalities



#### Seriously injured



#### KSI



#### Slightly injured



## Total casualties

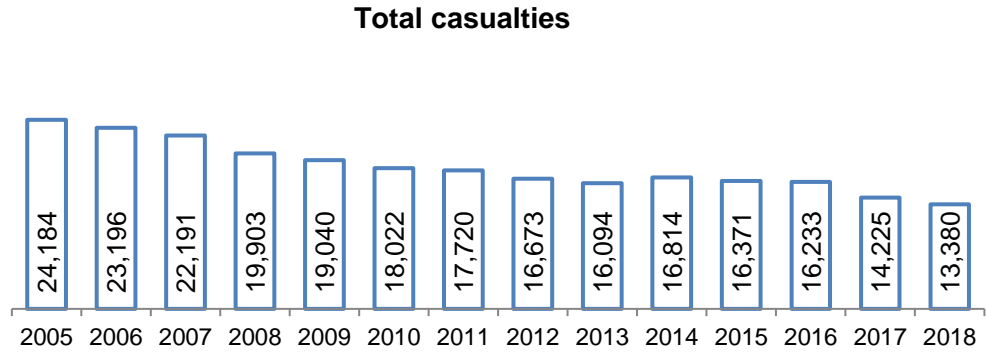


Figure 3-11 Casualty data trends by severity

Figure 3-11 provides an outline of historic casualty trends for fatally injured, seriously injured, KSI, slightly injured and total casualties between 2005 and 2018.

Figure 3-12 indexes all severities against a base value of 100 in order to directly compare changes in casualty numbers across severities by year. The base value is equivalent to the baseline average (2005-2009).

As shown by Figure 3-12, the change in total casualties over time has been relatively steady (apart from 2008 and 2017) and the decrease on average was 3.8 index points per annum. The increase in the total number of casualties between 2013 and 2014 is the only increase since at least 2005. The fatalities profile plateaued at approximately 70 index points between 2009 and 2011 after which it fluctuated between approximately 60 and 70 index points.

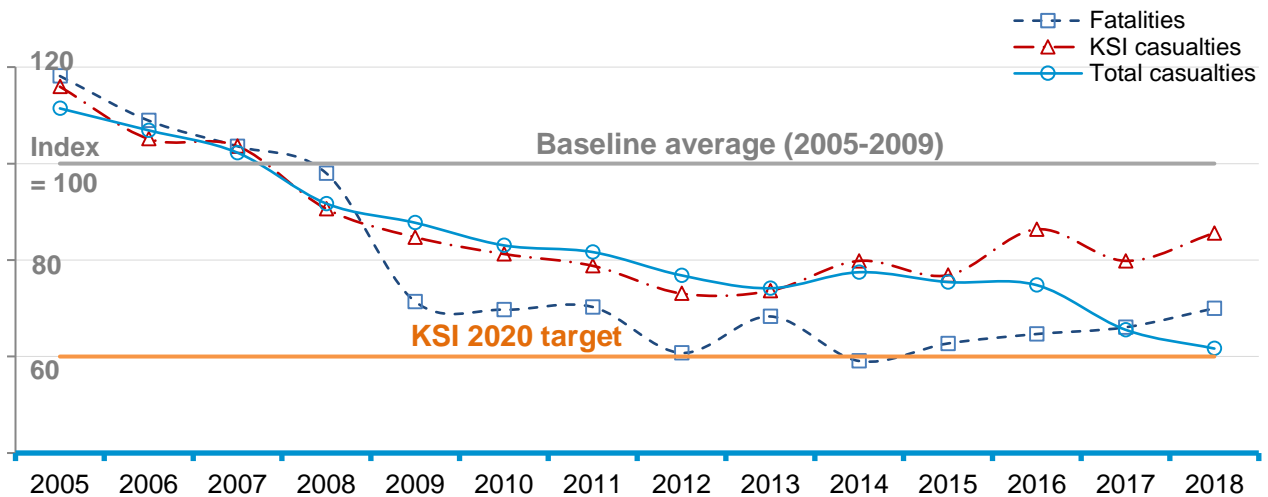
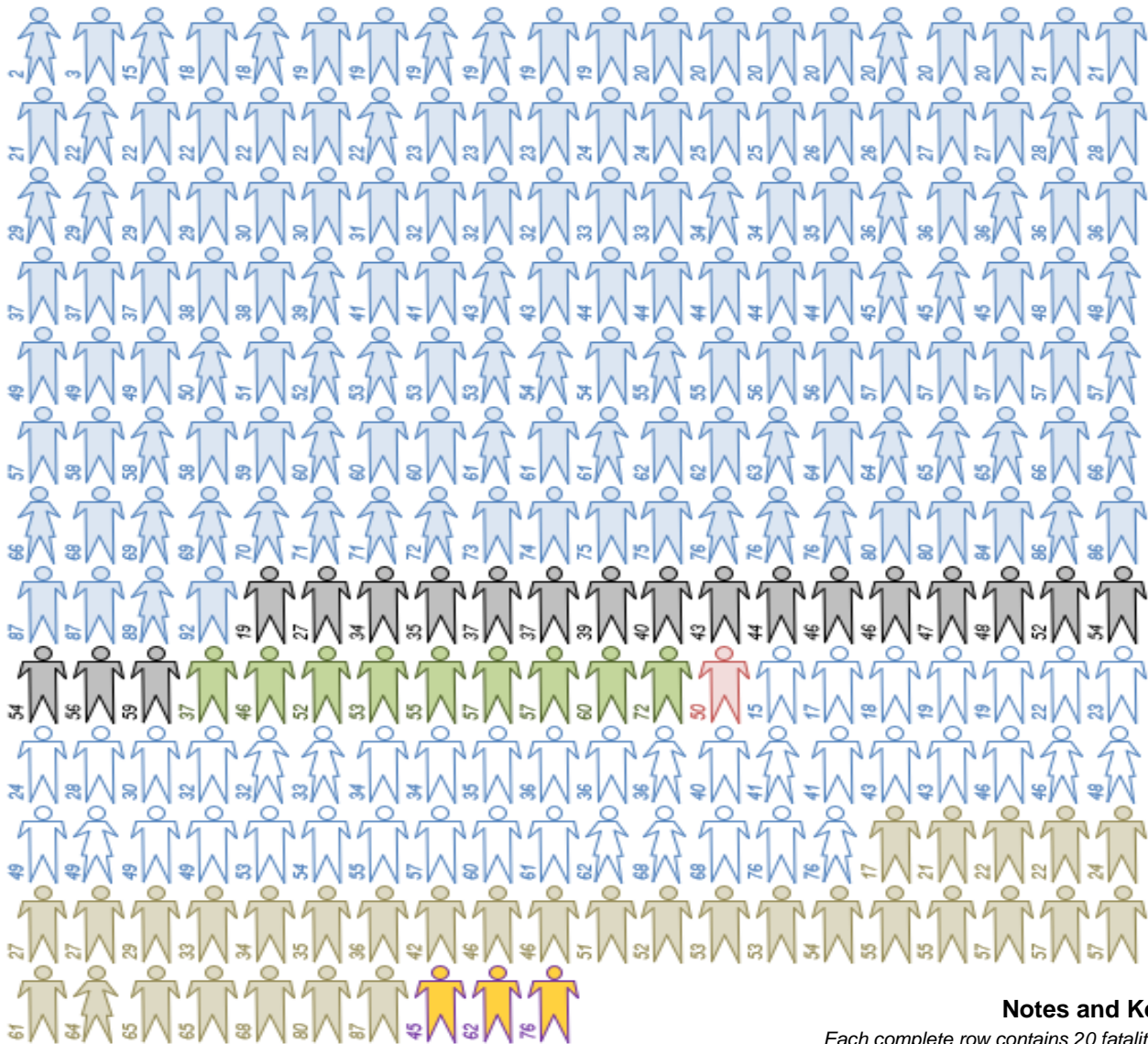


Figure 3-12 Index of changes in casualties by severity

### 3.3.2. Casualty by type and age

This section provides an overview of fatalities and KSIs, by casualty type, gender and age, resulting from collisions on the SRN.

There were 250 fatalities in 2018 and these are illustrated in Figure 3-13 by casualty type, gender and age.



**Notes and Key**

Each complete row contains 20 fatalities  
 Gender indicated by shape; either male or female. Age indicated on left-leg.

		Pedestrian			Pedal cyclist			Car occupant			Motorcycle user
		HGV occupant			Other goods vehicle occupant			Other / unknown			

**Figure 3-13 Pictogram of all SRN fatalities by casualty type, gender and age, 2018**





Figure 3-13 shows that road users of multiple types, ages and gender were killed on the SRN in 2018; including one 2-year old and one 3-year old who were car occupants. ‘Other’ occupants killed on the SRN in 2018 include two bus / coach occupants.

Further data on casualty type, including trends, are provided in Appendix Table C-13. The casualty age groups are provided in Appendix Table C-16.

Table 3-1 illustrates the number of KSI casualties by gender and age for 2018. For further details regarding casualty breakdown by gender and age see Appendix Table C-10.

**Table 3-1 Summary of KSI casualties by gender and age, 2018**

Gender	Children (0-15)	Young (16-19)	Other (20-59)	Older (60-69)	Elderly (70+)	Unknown age
 <b>Male</b>	<b>32</b>	<b>67</b>	<b>1,062</b>	<b>121</b>	<b>90</b>	<b>10</b>
 <b>Female</b>	<b>25</b>	<b>42</b>	<b>382</b>	<b>70</b>	<b>82</b>	<b>4</b>

Changes in casualty types and ages between 2010 and 2018 for KSI casualties are shown below in Figure 3-14 and Figure 3-15, and Figure 3-16.

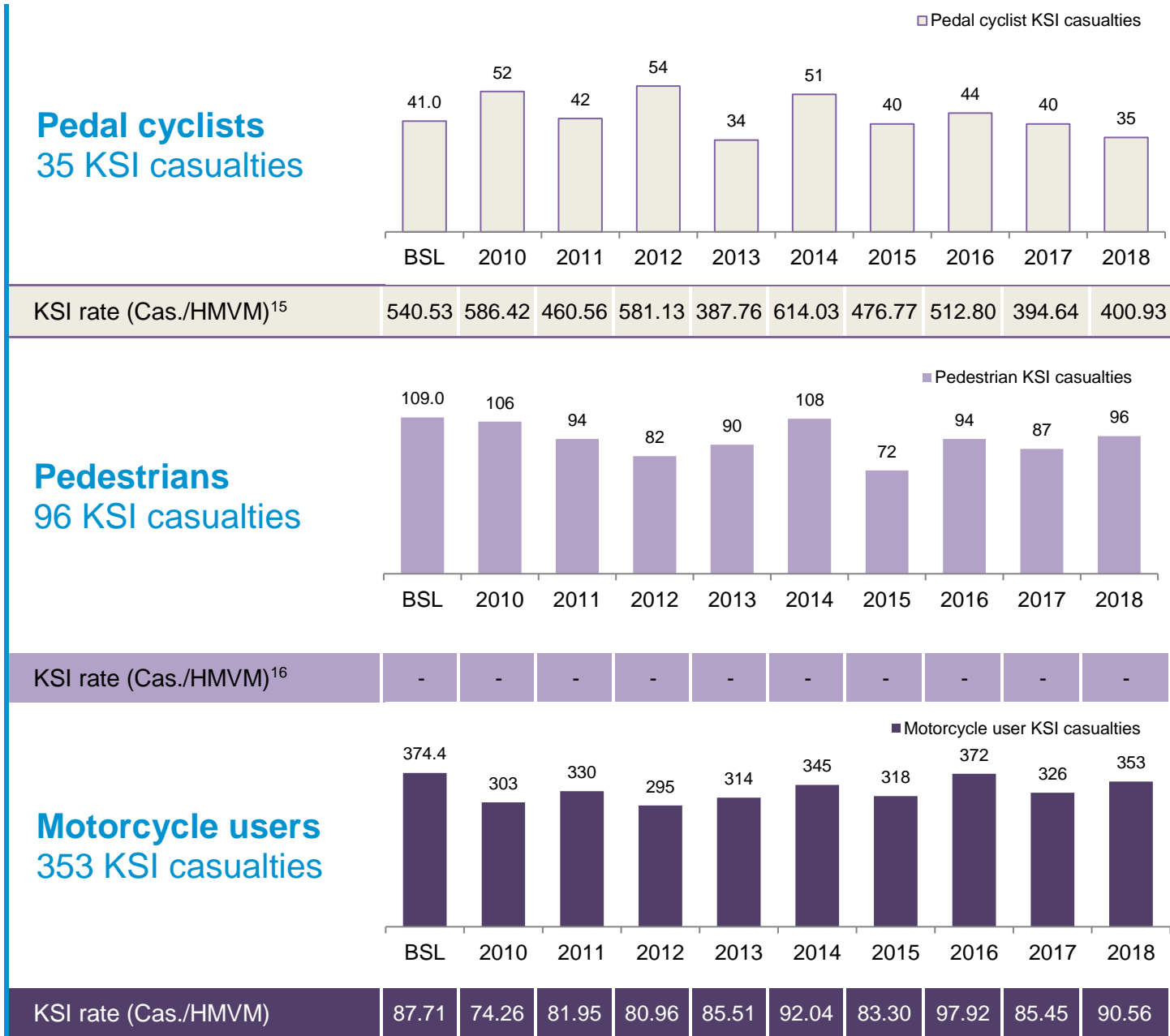
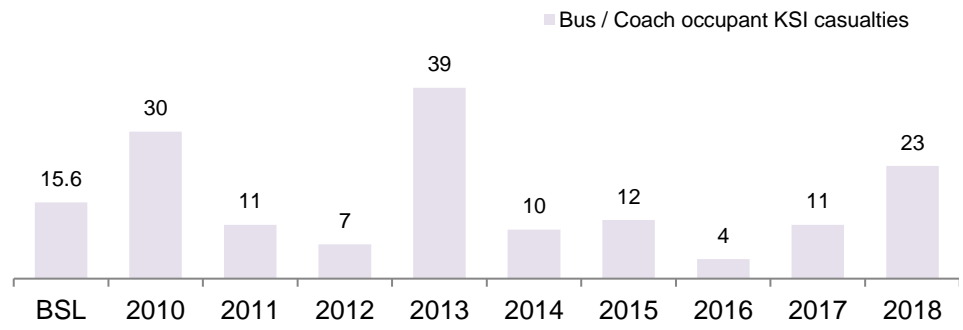


Figure 3-14 Vulnerable user KSI casualties and rates

<sup>15</sup>It is known that pedal cyclist traffic data is difficult to estimate on the SRN and therefore it is unlikely that the rates shown are those actually experienced.

<sup>16</sup>Currently no traffic statistics for pedestrians on the SRN.

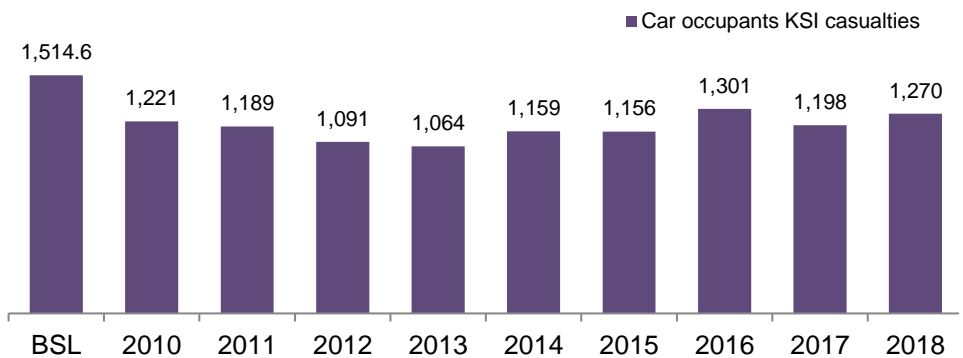
### Bus/ Coach occupants 23 KSI casualties



KSI rate (Cas./HMVM)

4.22	8.60	3.27	2.21	12.31	3.20	3.98	1.37	3.87	8.23
------	------	------	------	-------	------	------	------	------	------

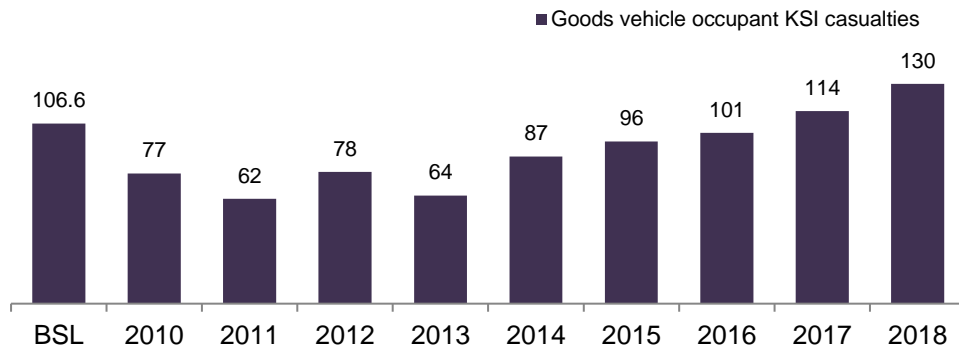
### Car occupants 1,270 KSI casualties



KSI rate (Cas./HMVM)

2.41	1.94	1.86	1.70	1.65	1.77	1.74	1.91	1.73	1.84
------	------	------	------	------	------	------	------	------	------

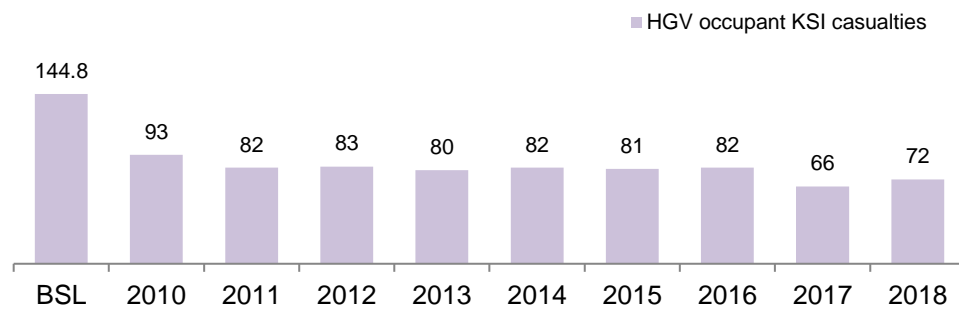
### Light Goods vehicle occupants 130 KSI casualties



KSI rate (Cas./HMVM)

1.03	0.73	0.57	0.70	0.55	0.71	0.74	0.74	0.80	0.89
------	------	------	------	------	------	------	------	------	------

### HGV occupants 72 KSI casualties

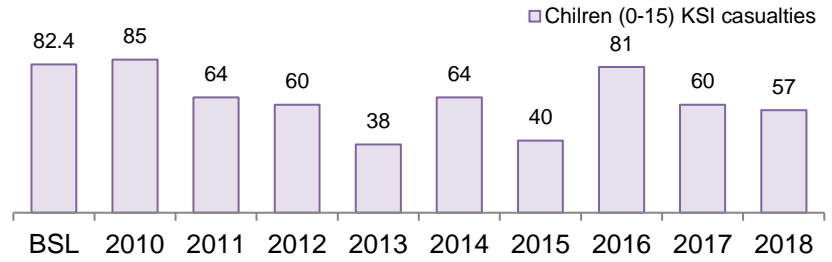


KSI rate (Cas./HMVM)

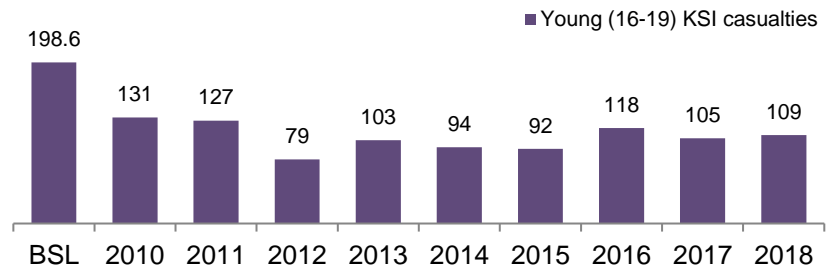
1.53	1.02	0.92	0.95	0.91	0.89	0.84	0.84	0.65	0.71
------	------	------	------	------	------	------	------	------	------

Figure 3-15 Non-vulnerable user KSI casualties and rates

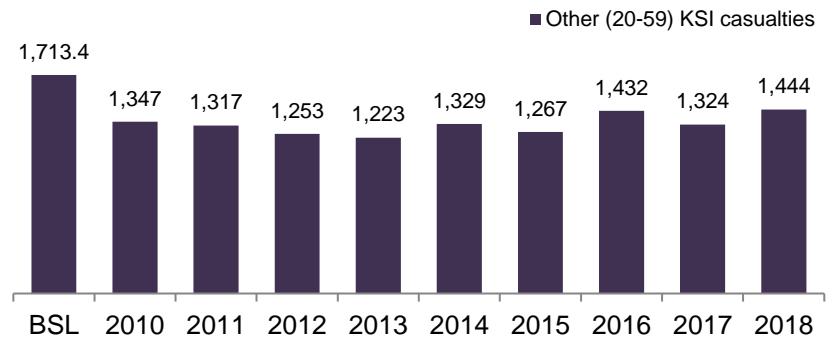
### Children (0-15) 57 KSI casualties



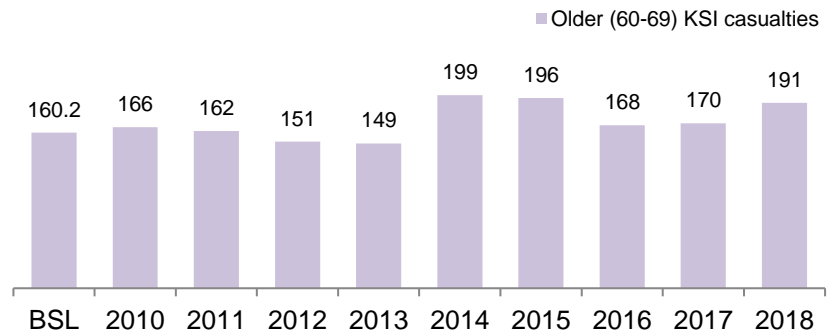
### Young (16-19) 109 KSI casualties



### Other (20-59) 1,444 KSI casualties



### Older (60-69) 191 KSI casualties



### Elderly (70+) 172 KSI casualties

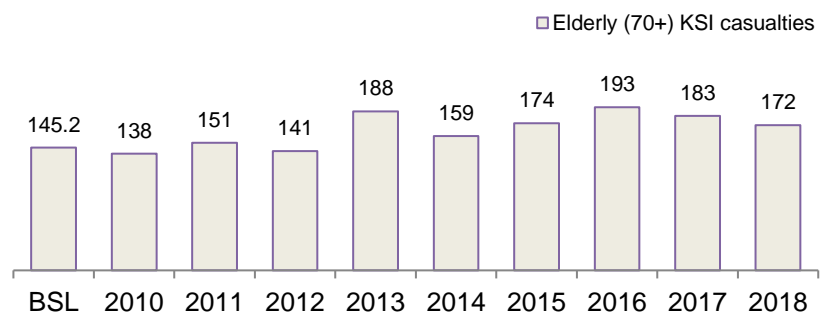


Figure 3-16 KSI casualties by age group

Figure 3-16 shows that Young (16-19) KSI casualties have decreased significantly compared to the 2005-09 baseline average, with a 45.1 per cent decrease. In contrast, the Older (60-69) and Elderly (70+) groups showed an increase in KSI casualties compared to the baseline, with the larger increase observed in Older (60-69); a 19.2 per cent increase. Also, in 2018, Older (60-69) KSI casualties increased; whilst Elderly (70+) for the second consecutive year showed a decrease after the increase reported in 2016.

Analysing changes in casualty type (linked to age), as provided in Appendix Table I-24, shows that in 2018 the major categories, other than Older Motorist (60-69), Elderly Motorist (70+) and Older Rider (60-69) showed a decrease in KSI casualties compared to the 2005-09 baseline average. Older Motorist (60-69), Elderly Motorist (70+) and Older Rider (60-69) KSI casualties have increased by 21.4, 36.1 and 64.9 per cent, respectively, against the baseline.

Further analysis of casualty age groups can be found in Sections 5.5 to 5.7.

### 3.3.3. Casualties where human factors contributed

Human factors remain the largest single cause of killed or seriously injured casualties on the SRN. In 2018, there were 1,487 KSI casualties resulting from at least one human factor representing 74.8 per cent of total KSI casualties.

Figure 3-17 is an assessment of the contributing human factors which result in KSI casualties on the SRN. These human factors broadly fall into four categories of contributory factors:

- Driver/rider error or reaction
- Impairment or distraction
- Injudicious action
- Behaviour or inexperience

The contributory factors within these groupings are provided in the table below<sup>17</sup>

**Table 3-2 Human factor contributory factors**

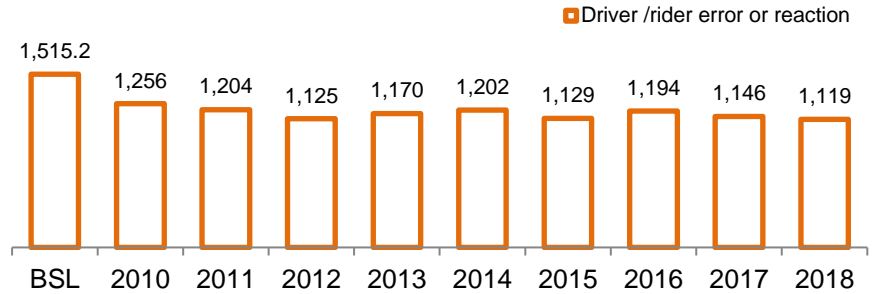
Injudicious action			
301	Disobeyed automatic traffic signal	306	Exceeding speed limit
302	Disobeyed 'Give Way' or 'Stop' sign or markings	307	Travelling too fast for conditions
303	Disobeyed double white lines	308	Following too close
304	Disobeyed pedestrian crossing facility	309	Vehicle travelling along pavement
305	Illegal turn or direction of travel	310	Cyclist entering road from pavement
Driver/Rider error or reaction			
401	Junction overshoot	406	Failed to judge other person's path or speed
402	Junction restart (moving off at junction)	407	Too close to cyclist, horse rider or pedestrian
403	Poor turn or manoeuvre	408	Sudden braking
404	Failed to signal or misleading signal	409	Swerved
405	Failed to look properly	410	Loss of control
Impairment or distraction			
501	Impaired by alcohol	506	Not displaying lights at night or in poor visibility
502	Impaired by drugs (illicit or medicinal)	507	Rider wearing dark clothing
503	Fatigue	508	Driver using mobile phone
504	Uncorrected, defective eyesight	509	Distraction in vehicle
505	Illness or disability, mental or physical	510	Distraction outside vehicle
Behaviour or inexperience			
601	Aggressive driving	605	Learner or inexperienced driver/rider
602	Careless, reckless or in a hurry	606	Inexperience of driving on the left
603	Nervous, uncertain or panic	607	Unfamiliar with model of vehicle
604	Driving too slow for conditions or slow veh (e.g. tractor)		

<sup>17</sup> Full listing of contributory factors of all groupings is provided at the end of this report.

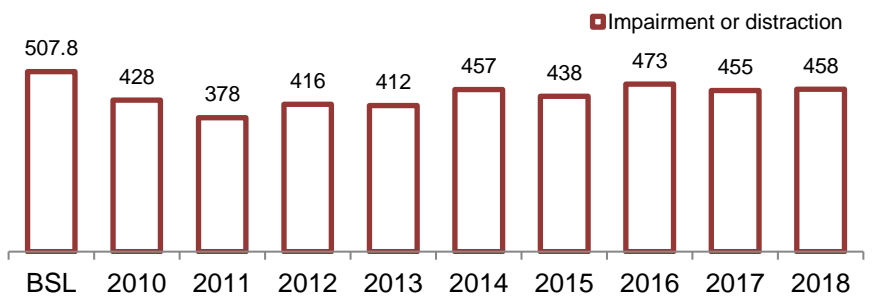
## 1,487 KSI casualties where human factors were attributed

74.8 per cent of the 1,987 KSI casualties in 2018

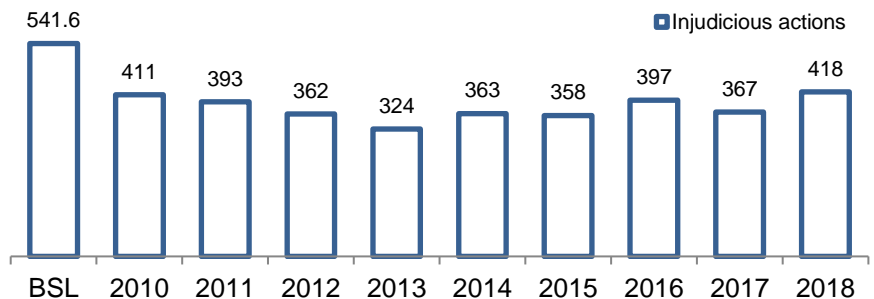
**Driver/Rider error or reaction**  
1,119 KSI casualties



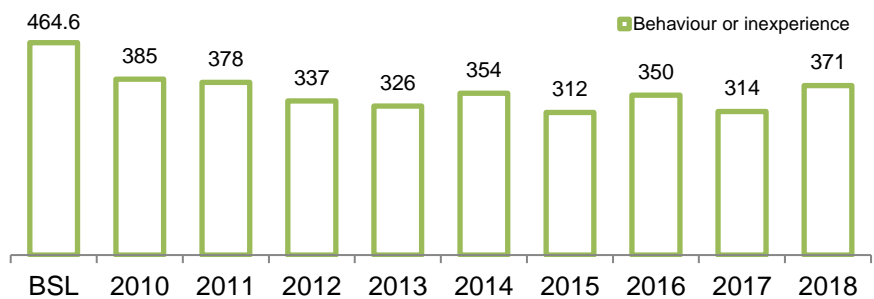
**Impairment or distraction**  
458 KSI casualties



**Injudicious actions**  
418 KSI casualties



**Behaviour or inexperience**  
371 KSI casualties



Note:

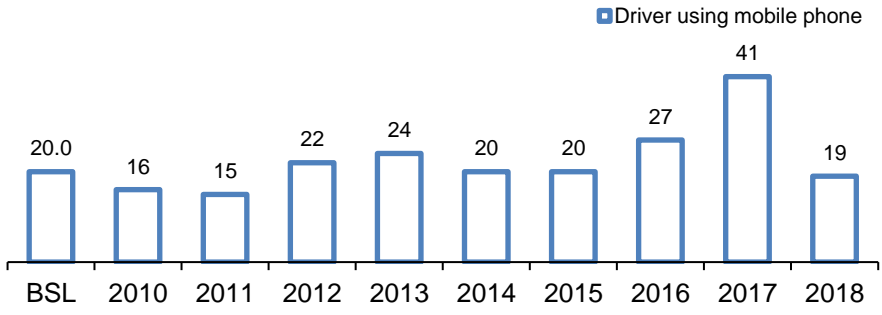
(a) Figures show the number of KSI casualties with at least one contributory factor from the relevant group. The listing of each group is provided in previous page.

**Figure 3-17 KSI casualties involving human contributory factors by group and year**

In 2018, Figure 3-17 shows that KSI casualties where at least one of the aforementioned human factors were attributed have shown an increase in three of the factors.

Investigating the impairment or distraction human factor category further, Figure 3-18 shows the number of KSI casualties involving at least one driver using a mobile phone.

**Driver using mobile phone**  
19 KSI casualties



**Figure 3-18 KSI casualties associated with mobile phones by year**

Table 3-3 highlights the top 20 human contributory factors by severity for 2018 (ranked by KSI casualties). The top three contributory factors attributed to KSI casualties were all driver/rider error or reaction. This category features heavily in all collisions as stated previously.

From the table, it is evident that the injudicious action and impairment or distraction human factor categories also feature in the top 10. Individual factors pertaining to injudicious action of travelling too fast for conditions and following too close contributed to 160 and 134 KSI casualties respectively, in 2018.



**Table 3-3 Top 20 human contributory factors attributed to casualties by severity, 2018**

Rank	Contributory Factor	KSI	Killed	Seriously Injured	Slightly Injured	Total
1	405 Failed to look properly	498	50	448	3,268	3,766
2	406 Failed to judge other person's path or speed	391	31	360	2,885	3,276
3	410 Loss of control	358	49	309	1,119	1,477
4	602 Careless, reckless or in a hurry	251	27	224	1,228	1,479
5	403 Poor turn or manoeuvre	185	16	169	880	1,065
6	307 Travelling too fast for conditions	160	17	143	720	880
7	308 Following too close	134	8	126	1,336	1,470
8	503 Fatigue	130	20	110	466	596
9	509 Distraction in vehicle	117	12	105	528	645
10	501 Impaired by alcohol	116	17	99	371	487
11	409 Swerved	102	9	93	495	597
12	306 Exceeding speed limit	96	15	81	298	394
13	408 Sudden braking	90	7	83	1,049	1,139
14	505 Illness or disability, mental or physical	79	18	61	225	304
15	601 Aggressive driving	66	12	54	232	298
16	502 Impaired by drugs (illicit or medicinal)	54	15	39	122	176
17	605 Learner or inexperienced driver/rider	51	4	47	244	295
18	303 Disobeyed double white lines	40	4	36	211	251
19	510 Distraction outside vehicle	33	2	31	148	181
20	401 Junction overshoot	23	4	19	87	110

Key (CF groups):

Driver/Rider error or reaction	Impairment or distraction	Injudicious action
Behaviour or inexperience		

Notes:

- (a) Table reports number of casualties.
- (b) Table ranked by KSI casualties.
- (c) As more than one contributory factor can be recorded per collision; columns will not sum to their respective totals.

Table 3-4 is an adaptation of the 'Fatal Four' driving offences:

- Speeding (CFs 306 and 307)
- Improper use of restraints (Casualty code "Seat belt in use – not used")
- Distraction (including use of mobile phone) (CFs 508, 509 and 510)
- Impaired by drink and drugs (CFs 501 and 502)

Note: For CF code definitions refer to Table 3-2

It can be seen from Table 3-4 that the majority of the number of fatalities and seriously injured casualties associated with speeding, restraints and distraction and drink/drugs increased in 2018. The table shows that the number of slightly injured casualties for restraints and drink/drugs (and hence the total casualties) also increased from that in 2017.

Due to the recording of the use of seatbelts not being mandatory this category potentially shows the minimum number of casualties by severity. In terms of casualties, this means that in 2018 a minimum of 183 casualties were linked to improper use of or no restraints.

**Table 3-4 Casualties involving speeding, restraints, distractions and drink/drugs, 2018**

Category/ Severity	Speeding	Restraints <sup>(a)</sup>	Distractions	Drink/Drugs
Fatalities	<b>30</b>	<b>25</b>	<b>19</b>	<b>26</b>
Seriously injured	<b>202</b>	<b>50</b>	<b>140</b>	<b>123</b>
KSI	<b>232</b>	<b>75</b>	<b>159</b>	<b>149</b>
Slightly injured	<b>964</b>	<b>108</b>	<b>684</b>	<b>455</b>
<b>Total</b>	<b>1,196</b>	<b>183</b>	<b>843</b>	<b>604</b>

Notes:

- (a) The recording of seatbelts is only required in STATS19 for fatalities who are occupants of vehicles in which the wearing of a seatbelt is mandatory. However, police forces can choose to collect this data for all casualty severities and hence any large variation in 'Restraints' is likely to come, at least in part, from the increase or decrease of the recording by police forces..

### 3.4. Contributory Factors

Table 3-5 illustrates the top 10 contributory factors related to people, vehicles<sup>18</sup> and roads. It is clear that contributory factors relating to people were attributed to the most casualties in 2018, compared to vehicles and roads. Vehicle related contributory factors were attributed to the fewest casualties. Failed to look properly was attributed to the majority of casualties (3,766); 28.1 per cent of all casualties in 2018. Slippery road (due to weather) was the most common road contributory factor, being attributed to 7.1 per cent (945) of casualties in 2018. The most common vehicle contributory factor was vehicle blind spot, which was attributed to 1.5 per cent (200) of casualties in 2018.

**Table 3-5 Top 10 contributory factors attributed to casualties, 2018**

	Rank	Contributory Factor	2018	Percentage of casualties, 2018
People	1	405 Failed to look properly	3,766	28.1%
	2	406 Failed to judge other person's path or speed	3,276	24.5%
	3	602 Careless, reckless or in a hurry	1,479	11.1%
	4	410 Loss of control	1,477	11.0%
	5	308 Following too close	1,470	11.0%
	6	408 Sudden braking	1,139	8.5%
	7	403 Poor turn or manoeuvre	1,065	8.0%
	8	307 Travelling too fast for conditions	880	6.6%
	9	509 Distraction in vehicle	645	4.8%
	10	409 Swerved	597	4.5%
Vehicles	1	710 Vehicle blind spot	200	1.5%
	2	201 Tyres illegal, defective or under inflated	132	1.0%
	3	203 Defective brakes	77	0.6%
	4	204 Defective steering or suspension	50	0.4%
	5	206 Overloaded or poorly loaded vehicle or trailer	31	0.2%
	6	705 Dazzling headlights	11	0.1%
	7	202 Defective lights or indicators	9	0.1%
	8	709 Visor or windscreen dirty, scratched or frosted etc.	7	0.1%
	9	205 Defective or missing mirrors	3	0.0%
Roads	1	103 Slippery road (due to weather)	945	7.1%
	2	707 Rain, sleet, snow, or fog	251	1.9%
	3	706 Dazzling sun	195	1.5%
	4	109 Animal or object in carriageway	111	0.8%
	5	108 Road layout (eg. bend, hill, narrow carriageway)	72	0.5%
	6	708 Spray from other vehicles	69	0.5%
	7	102 Deposit on road (eg. oil, mud, chippings)	63	0.5%
	8	701 Stationary or parked vehicle(s)	50	0.4%
	9	107 Temporary road layout (eg. contraflow)	48	0.4%
	10	703 Road layout (eg. bend, winding road, hill crest)	46	0.3%

Key (CF groups):

	Driver/Rider error or reaction		Impairment or distraction		Injudicious action
	Vision affected by		Road environment		Vehicle defect
	Behaviour or inexperience				

Notes:

(a) In 2018, there were a total of 13,380 casualties.




(b) There are only nine contributory factors associated with vehicles whereas only the top 10 contributory factors associated with people and roads are shown.

<sup>18</sup> Only nine contributory factors have been associated with vehicles.

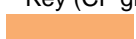


### 3.4.1. Top 10 contributory factors by road classification

Table 3-6 illustrates top 10 contributory factors attributed to casualties by road classification. Note that further analysis and discussion regarding the per cent of collisions attended by police is illustrated in Section 4.4.1. As per past years “Failed to look properly” is shown as the highest factor attributed to casualties across all road classes in 2018. Three out of the top five contributory factors for the motorways and all A-road classes are related to “Driver/Rider error or reaction”. Following on from this, there are multiple strands of research aimed at reducing the occurrence and severity of such incidents across the strategic road network.

**Table 3-6 Top 10 contributory factors attributed to casualties by road classification, 2018**

	Rank	Contributory Factor	2018
 <p><b>Motorway</b> (79.9% of collisions attended by police)</p>	1	405 Failed to look properly	1,734
	2	406 Failed to judge other person's path or speed	1,696
	3	308 Following too close	769
	4	410 Loss of control	677
	5	602 Careless, reckless or in a hurry	665
	6	408 Sudden braking	585
	7	403 Poor turn or manoeuvre	453
	8	307 Travelling too fast for conditions	430
	9	103 Slippery road (due to weather)	424
	10	503 Fatigue	311
<p><b>A-road</b> (78.4% of collisions attended by police)</p>	1	405 Failed to look properly	2,032
	2	406 Failed to judge other person's path or speed	1,580
	3	602 Careless, reckless or in a hurry	814
	4	410 Loss of control	800
	5	308 Following too close	701
	6	403 Poor turn or manoeuvre	612
	7	408 Sudden braking	554
	8	103 Slippery road (due to weather)	521
	9	307 Travelling too fast for conditions	450
	10	509 Distraction in vehicle	345
 <p><b>A-road dual carriageway</b> (76.6% of collisions attended by police)</p>	1	405 Failed to look properly	1,314
	2	406 Failed to judge other person's path or speed	1,127
	3	602 Careless, reckless or in a hurry	559
	4	410 Loss of control	554
	5	308 Following too close	481
	6	408 Sudden braking	429
	7	403 Poor turn or manoeuvre	409
	8	103 Slippery road (due to weather)	400
	9	307 Travelling too fast for conditions	356
	10	409 Swerved	216
 <p><b>A-road single carriageway</b> (83.5% of collisions attended by police)</p>	1	405 Failed to look properly	718
	2	406 Failed to judge other person's path or speed	453
	3	602 Careless, reckless or in a hurry	255
	4	410 Loss of control	246
	5	308 Following too close	220
	6	403 Poor turn or manoeuvre	203
	7	509 Distraction in vehicle	164
	8	408 Sudden braking	125
	9	103 Slippery road (due to weather)	121
	10	503 Fatigue	103

Key (CF groups):

	Driver/Rider error or reaction		Impairment or distraction		Injudicious action
	Road environment		Behaviour or inexperience		

Note:

(a) Further analysis and discussion regarding the per cent of collisions attended by police is illustrated in Section 4.4.1.

# 4. Collisions

## 4.1. Roads

This section provides an overview of personal injury collisions (PICs - but for the purpose of this document generally termed as 'collision' linked to road classification by severity, year (including BSL) and rates (i.e. number of collisions per HMVM). The rates discussed in this section provide an indication of the likelihood of getting involved in a collision.

Figure 4-1 to Figure 4-5 illustrate the collision distribution on motorway, A-road dual carriageway and A-road single carriageway in terms of the number and rate. Comparison of data for the road classifications shows that for 2018:

- The most fatal collisions (91 out of 221) occurred on A-road dual carriageways.
- The largest proportion of fatal and serious collisions (41.3 per cent) occurred on motorways but with A-road dual carriageways only slightly behind on 39.2 per cent.
- The largest proportion of total collisions (47.6 per cent) occurred on motorways.
- The likelihood of being involved in a collision on motorways was the lowest of all three road classifications across all severities of collision. Therefore, the data in Figure 4-1 is normalised to illustrate the ratio (based on collision rate) between the likelihood of a collision occurring on a motorway, dual carriageway or single carriageway relative to the motorway.
- The likelihood of being involved in a collision on A-road single carriageways was the highest of all three road classifications across all severities of collision, followed by A-road dual carriageways.

### 4.1.1. Collisions and likelihood of injury by road classification and severity

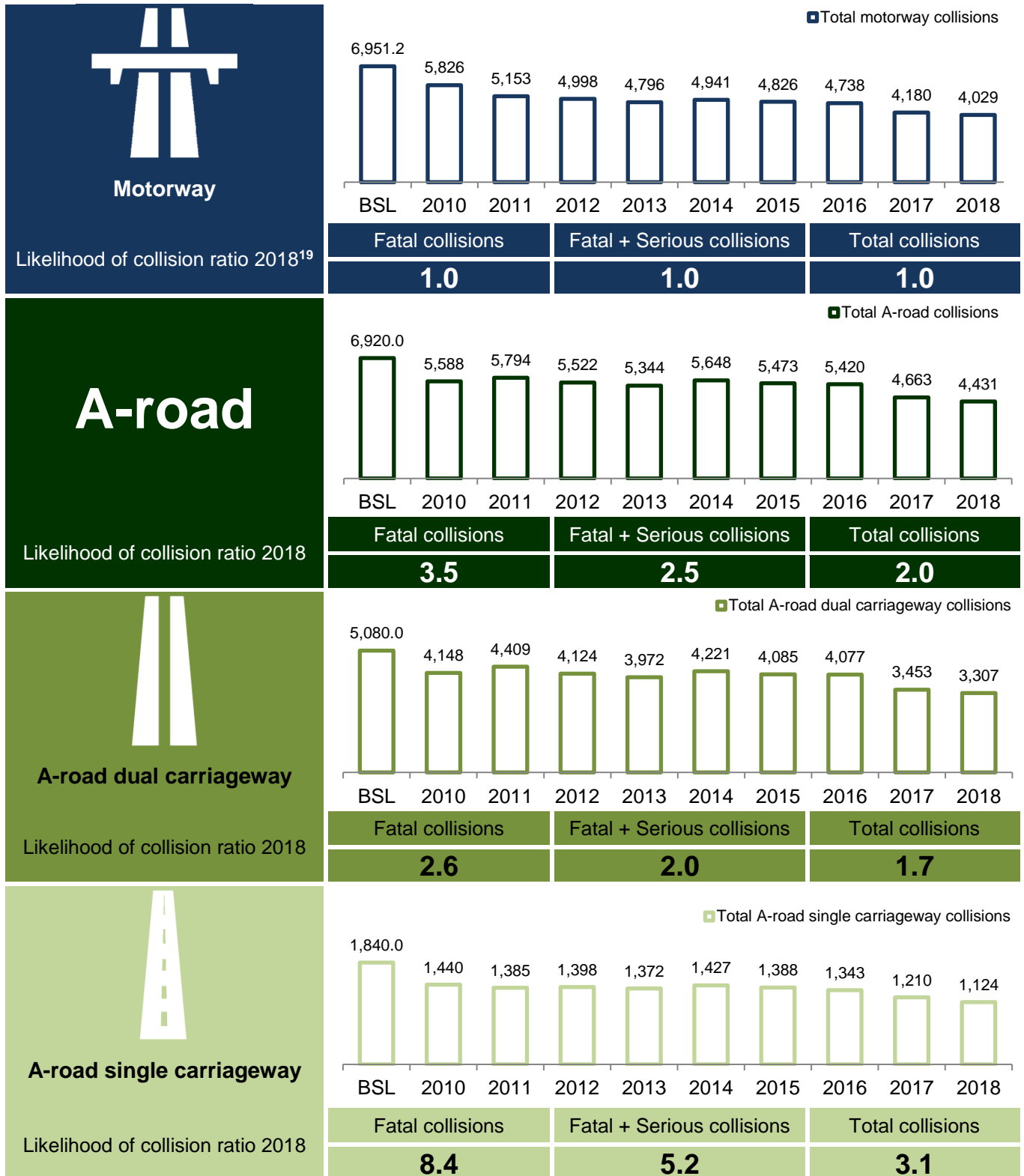


Figure 4-1 Collisions by road classification and likelihood of collision by road classification and severity

<sup>19</sup> 'Likelihood of collision ratio' is the ratio between collision rates; normalised to motorway data.

### 4.1.2. Motorway collisions and rates by severity

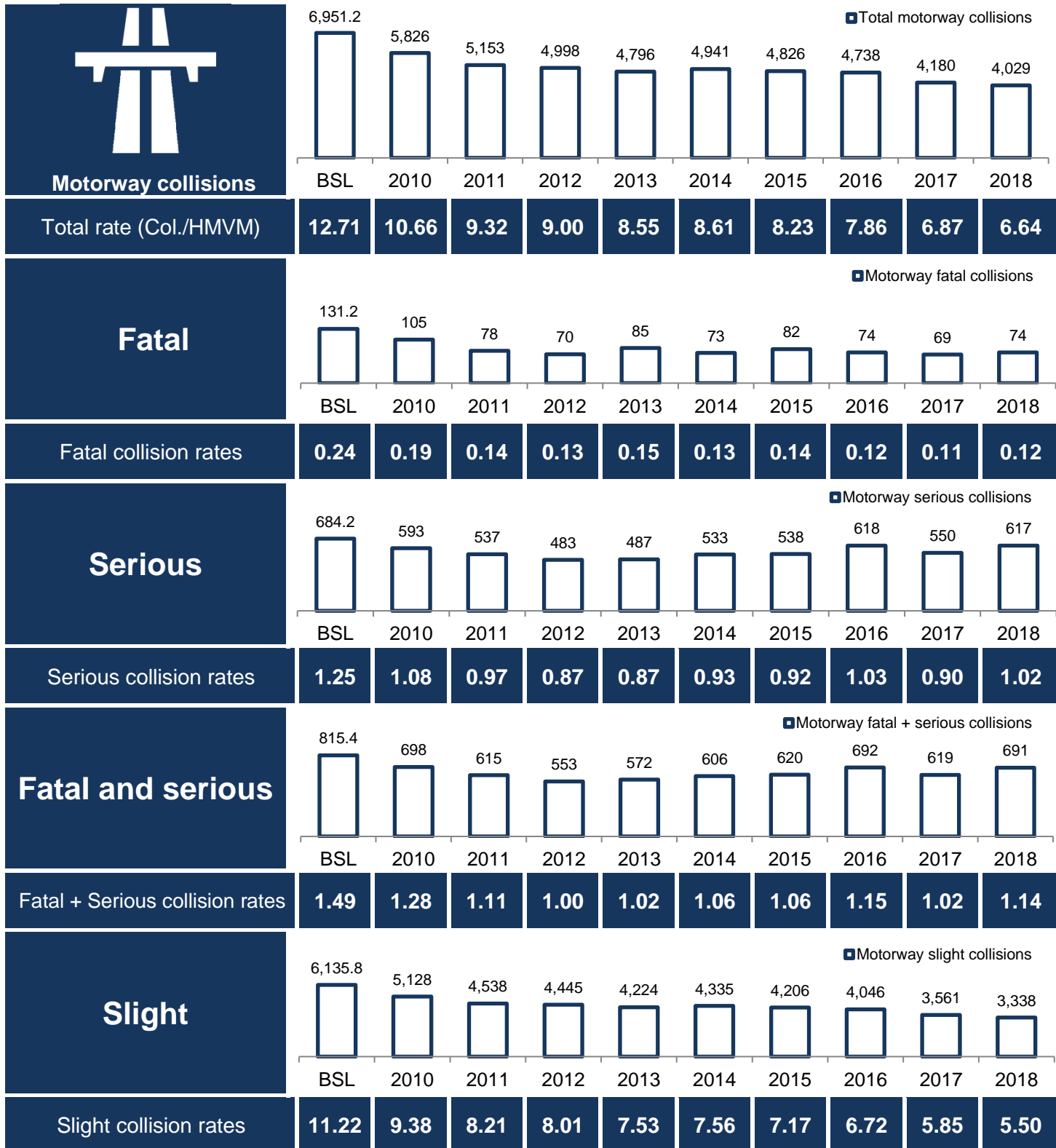


Figure 4-2 Motorway collisions and rates by severity



### 4.1.3. A-road collisions and rates by severity



Figure 4-3 A-road collisions and rates by severity

#### 4.1.4. A-road dual carriageway collisions and rates by severity

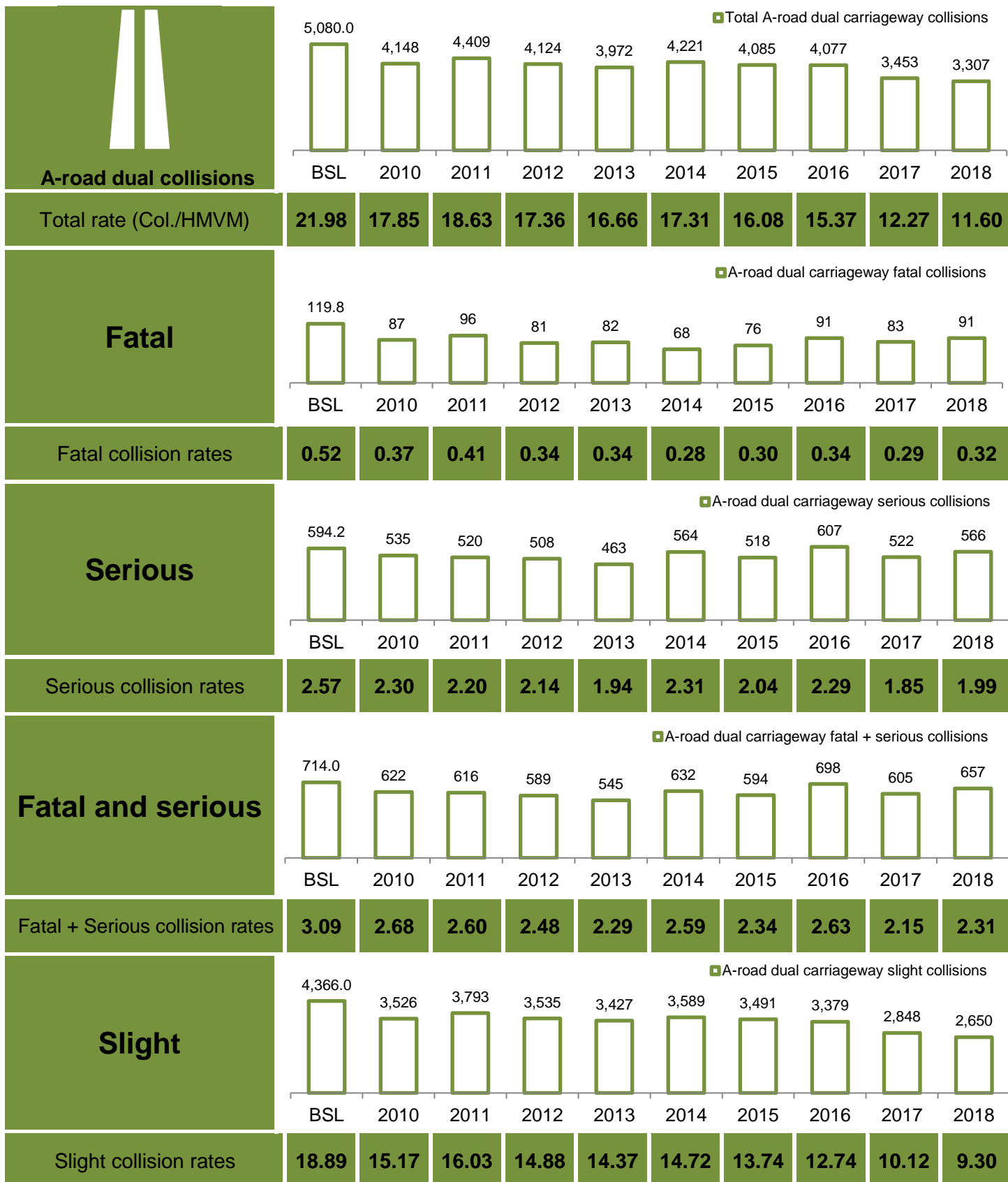


Figure 4-4 A-road dual carriageway collisions and rates by severity

### 4.1.5.A-road single carriageway collisions and rates by severity

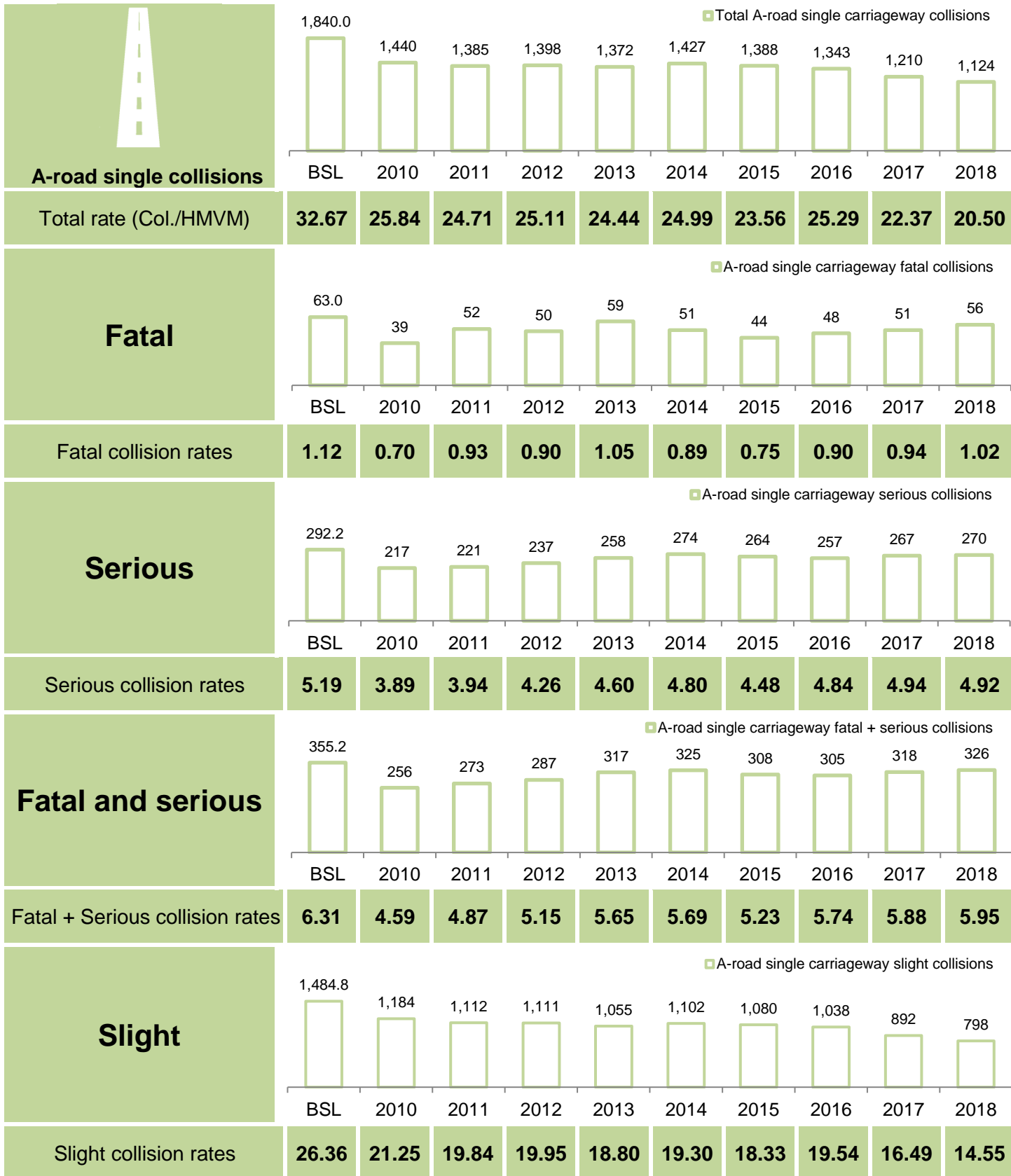


Figure 4-5 A-road single carriageway collisions and rates by severity

#### 4.1.6. Collisions involving road environment

This section evaluates the number of collisions where the road environment is categorised as a contributory factor.

In 2018, the number of fatal and serious collisions involving road environment factors was 179 and was equivalent to 10.7 per cent of the respective total fatal and serious collisions of 1,674.

Figure 4-6 outlines the number of fatal and serious collisions associated with at least one road environment factor between 2010 and 2018. The diagram depicting the split by road classification shows the trend in fatal and serious collisions from 2005 to 2018, linked to road environment factors, fluctuates somewhat across all road classifications especially the motorways. The fluctuation is lower than observed for casualties.

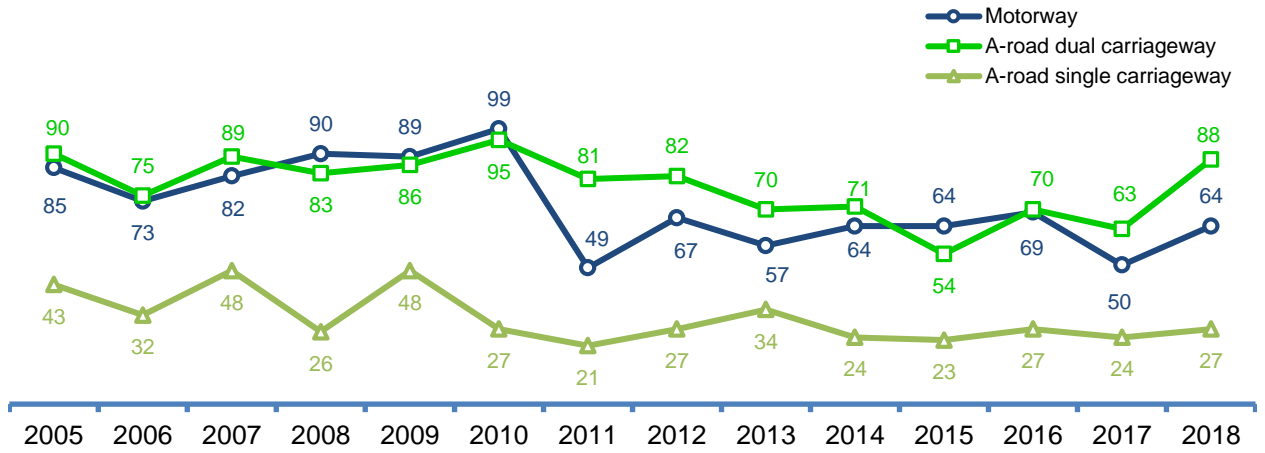
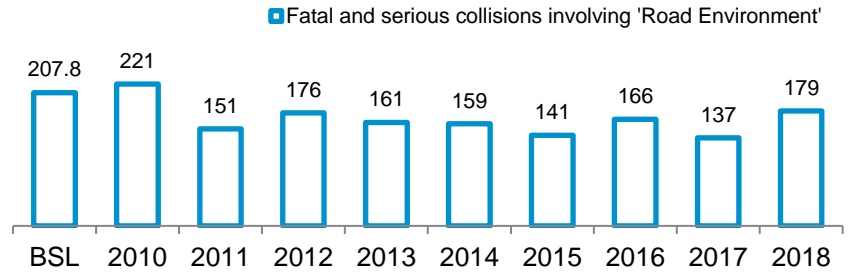
The primary contributory factor for road environment was “Slippery road (due to weather)” which contributed to 132 fatal and serious collisions in 2018.

An analysis of the number of collisions involving a poor or defective road surface on the SRN is also provided in Figure 4-6. This provides context on the potential collisions from defects in surfacing. From 2008 to 2011, England experienced harsh winters, with December 2010 being one of the coldest on record<sup>20</sup>. As a result, the occurrence of surface defects during and after this period became a significant concern for all stakeholders.

The graph in Figure 4-6 depicting the trend of collisions involving poor or defective road surfacing shows that the number of collisions peaked in 2012; a 20.0 per cent increase from 35 in 2011 to 42 in 2012, followed by a 28.6 per cent decrease in 2013. This decrease in related collisions continued through to 2017 to yield the lowest number (11) since 2010. However, this number increased again in 2018 to 23 (but still 40.7 per cent lower from the baseline).

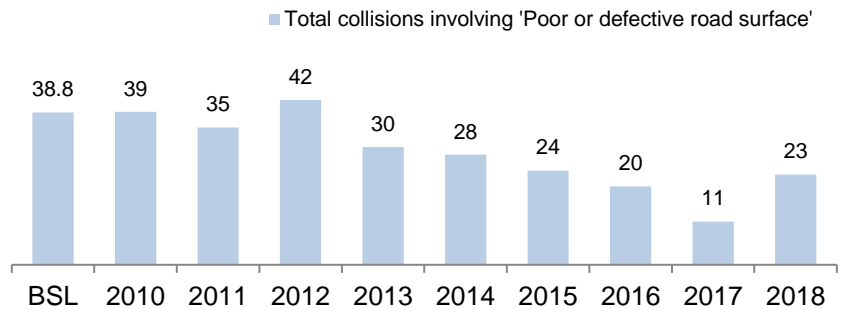
<sup>20</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/4002/potholes-review-progress-report.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/4002/potholes-review-progress-report.pdf)

## Road environment contributed to 179 fatal and serious collisions in 2018



49.2% of fatal and serious collisions where the road environment contributed occurred on A-road dual carriageways

## 'Poor or defective road surface' contributed to 23 collisions in 2018



## Slippery road contributed to 132 fatal and serious collisions in 2018

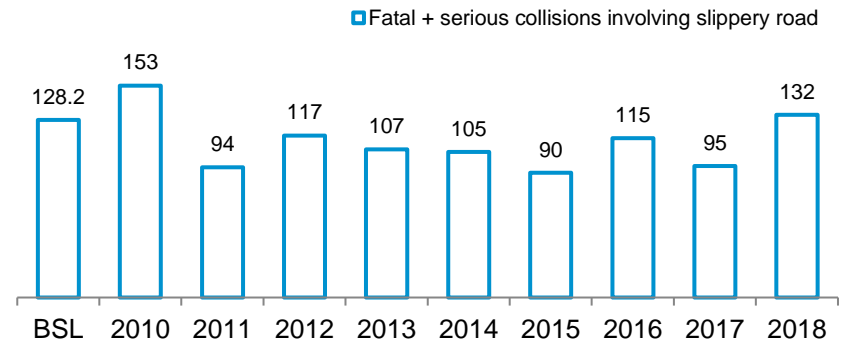


Figure 4-6 Summary of collisions where road environment contributed










## 4.2. Vehicles

This section briefly assesses the potential impact vehicles had towards collisions that occurred on the SRN. It focuses on providing an overview of collisions based on gender and vehicle type, first point of vehicle impact and where vehicle defects contributed to the collision.

### 4.2.1. Collisions by gender of driver

Table 4-1 illustrates male and female drivers involved in collisions by vehicle type. Female and male drivers involved in collisions in majority of vehicle types decreased compared to 2017. The exceptions for female were mainly motorcycles and goods vehicles, and for male was buses/coaches. The number of male car drivers involved in collisions account for 65.4 per cent of all car drivers and male cyclists 89.4 per cent (an increase from last year's 81.3 per cent). The male drivers for other types of vehicles range from 92.1 to 98.9 per cent.

**Table 4-1 Drivers involved in collisions by gender and vehicle type, 2018**

							
Gender	Car	Motorcycle	Goods vehicle	HGV (over 3.5 tonnes)	Pedal cycle	Bus / coach	Other <sup>21</sup>
 Female	4,725	50	64	17	11	3	14
 Male	8,937	712	1,549	1,494	93	72	164

Notes:

- (a) Goods vehicles equal to or under 3.5 tonnes.
- (b) There were 803 vehicle records with unknown driver gender.

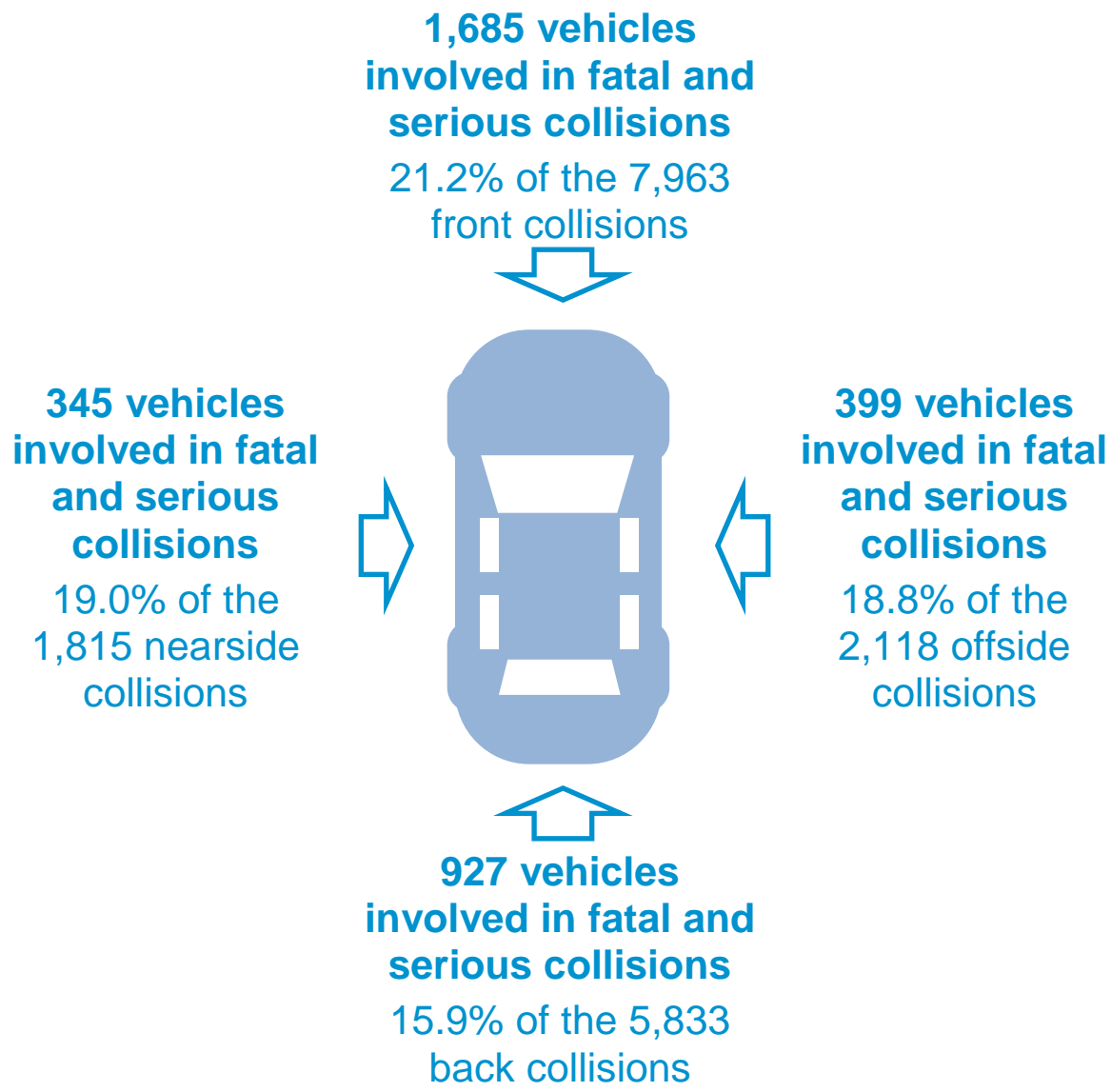
<sup>21</sup> Other includes where the vehicle has been recorded as others/unknown, ridden horse, or agricultural vehicle.

### 4.2.2. First point of impact

Figure 4-7 provides a breakdown of the number of vehicles involved in fatal and serious collisions by first point of vehicle impact.

Vehicles with a first point of impact as front, involved in fatal or serious collisions, made up 46.9 per cent of all vehicles involved in such collisions in 2018. The corresponding fatal and serious collision severity ratio (this is the percentage of vehicles involved in fatal and serious collisions to those in total collisions for each individual category) was 21.2 per cent. It can also be seen that, although in the similar ball-park and with similar severity ratios, the offside impacts were slightly higher than the nearside impacts in terms of the vehicles involved in fatal and serious collisions.

**First point of impact:**



238 vehicles involved in fatal or serious collisions had no recorded first point of impact

**Figure 4-7 Vehicles by first point of impact**

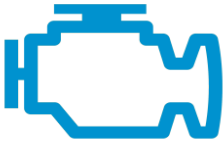


### 4.2.3. Collisions involving vehicle defects

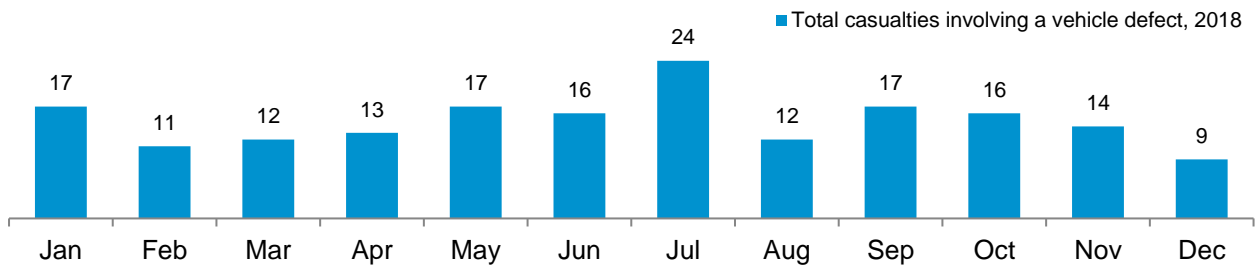
This section evaluates the number of collisions where at least one vehicle within a collision had a defect which was a contributory factor. As shown previously in Figure 2-3, it is apparent that the economic situation is recovering and hence this section also assesses the corresponding historic trends in vehicle defects.

Figure 4-8 provides a summary of collisions involving vehicle defects, including specific factors and their overall impact on fatal and serious collisions 2018. The trend over time of total collisions and to some extent the fatal and serious collisions indicate that collisions involving defective vehicles are on the decline. Total collisions have decreased by 60.0 per cent to 178 in 2018 compared to the baseline of 444.8. In comparison, overall collisions on the SRN decreased by 39.0 per cent from the baseline value of 13,871.2 to 8,460 in 2018.

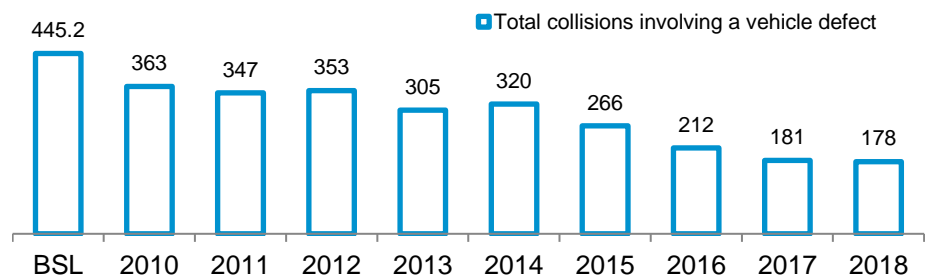
When considering the specific factors classed as vehicle defects, the most common continued to be tyres illegal, defective or under inflated and it contributed to 25 (52.1 per cent) of fatal and serious collisions involving a vehicle defect. It is a worsening on 2017 where the corresponding values were 14 and 35.9 per cent, but on par with those of 2016 (27 and 54.0 per cent).



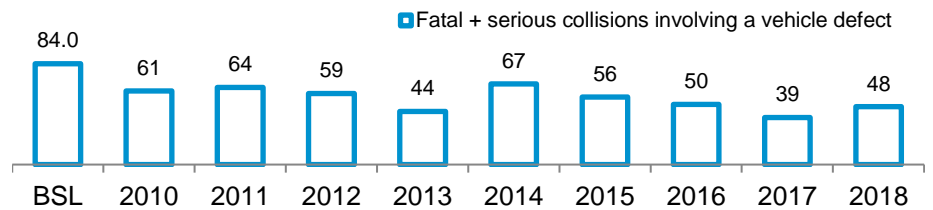
## Vehicle defect attributed to 178 collisions in 2018



## Vehicle defect attributed to 24 collisions in July 2018

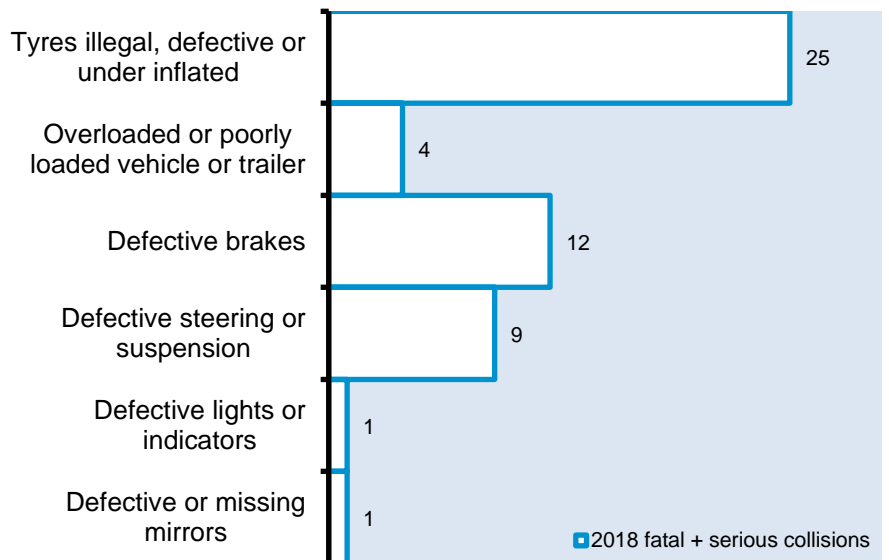


### Total collisions



### Fatal and serious collisions

52.1% of fatal and serious collisions associated with vehicle defects involved 'Tyres illegal, defective or under inflated'



As more than one contributory factor can be recorded per collision; defects will not sum to 48 fatal and serious collisions

Figure 4-8 Summary of collisions linked to a vehicle defect

## 4.3. People

An assessment of the collisions on the SRN has been undertaken in this section. This includes analysis of trends, collisions by casualty age groups involved and an assessment of the human factors linked to collisions.

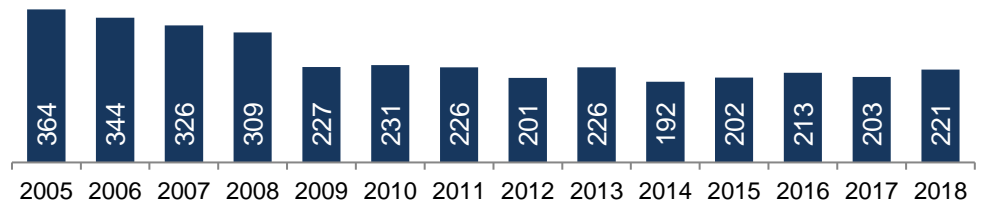
### 4.3.1. Collision severity trends

This section identifies underlying trends in the number of collisions occurring each year by severity between 2005 and 2018. As explained in Section 1.3 the reporting of STATS19 via CRASH/COPA has had an impact on both seriously injured and slightly injured collision data.

Figure 4-9 provides an outline of collision trends for fatal, serious, fatal and serious, slight and total collisions between 2005 and 2018.

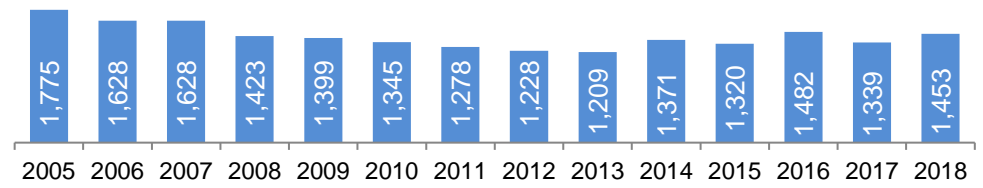
Fatal

Fatal collisions



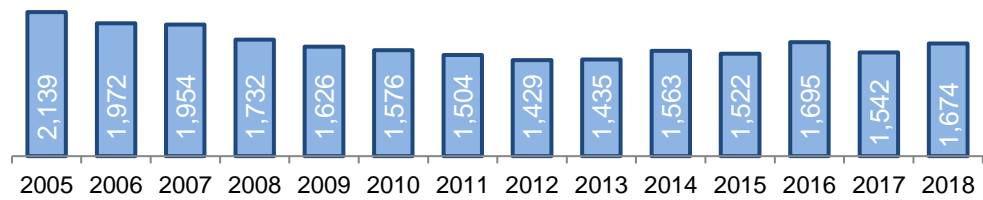
Serious

Serious collisions



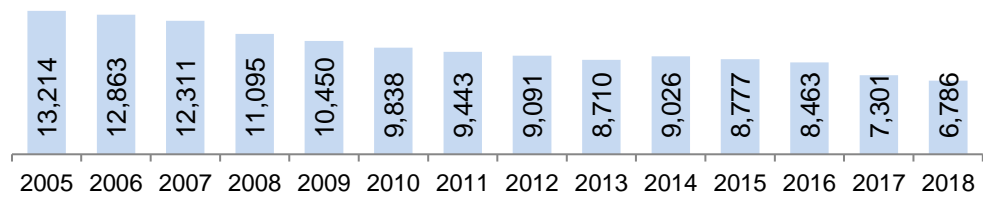
Fatal and serious

Fatal + serious collisions



Slight

Slight collisions



Total collisions

Total collisions

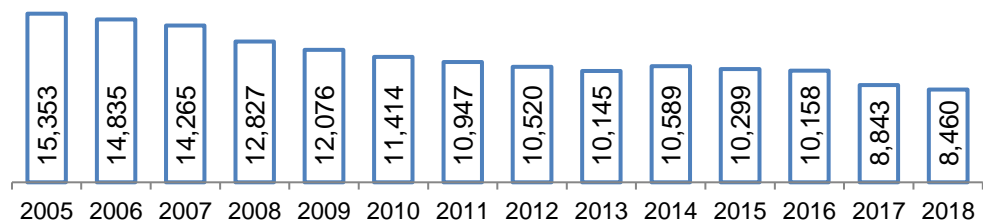
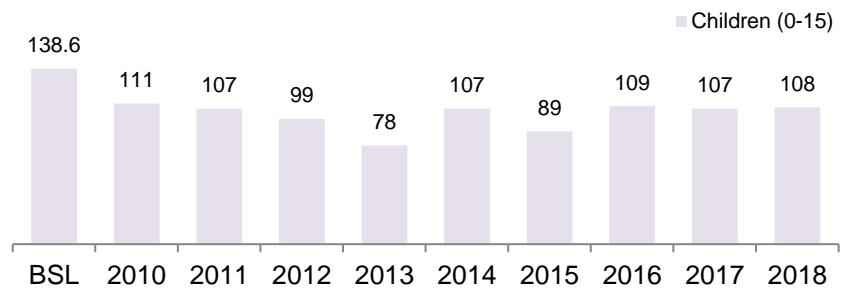


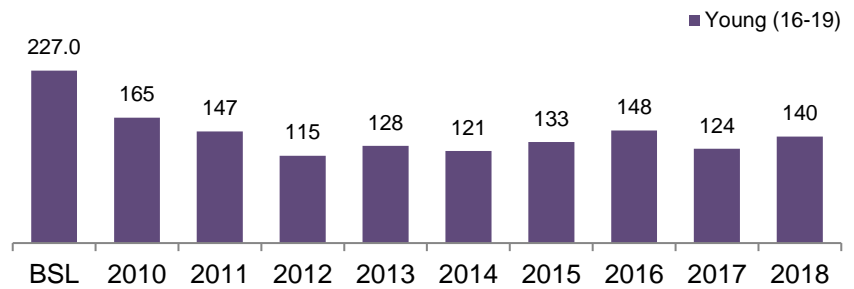
Figure 4-9 Collision trends by severity

### 4.3.2. Collision by age of casualties involved

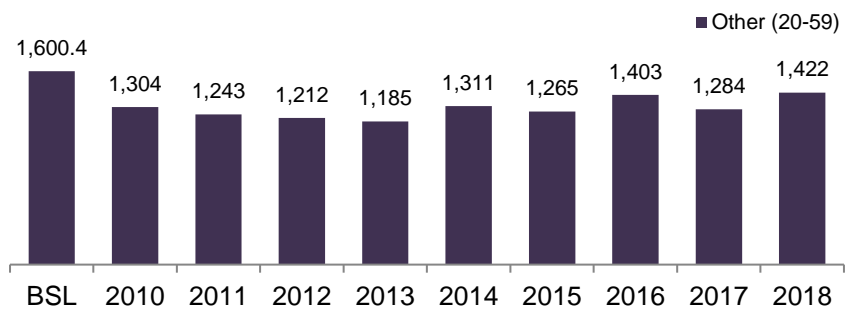
**Children (0-15)**  
108 fatal and serious collisions



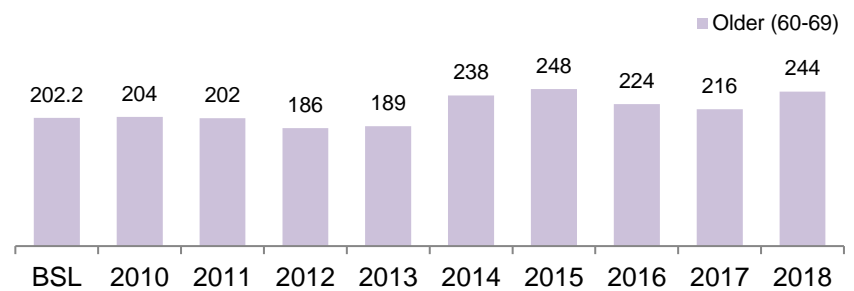
**Young (16-19)**  
140 fatal and serious collisions



**Other (20-59)**  
1,422 fatal and serious collisions



**Older (60-69)**  
244 fatal and serious collisions



**Elderly (70+)**  
181 fatal and serious collisions

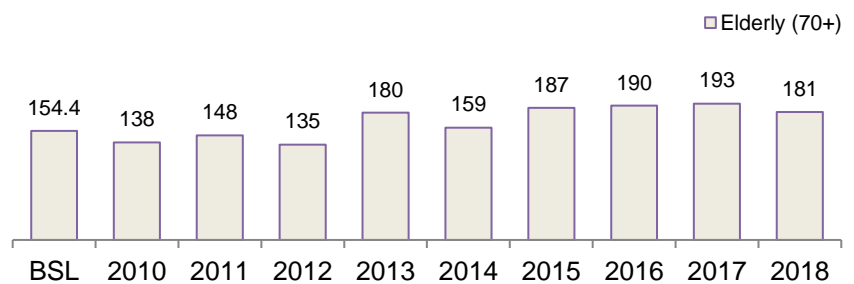


Figure 4-10 Fatal and serious collisions by age group and year

### 4.3.3. Collisions where human factors contributed

Human factors remain the largest single cause of fatal and serious collisions on the SRN. In 2018, there were 1,254 fatal and serious collisions involving at least one human factor representing 74.9 per cent of total fatal and serious collisions.

Figure 4-11 is an assessment of the contributing human factors which result in fatal and serious collisions on the SRN. These human factors broadly fall into four categories of contributory factors:

- Driver/rider error or reaction
- Impairment or distraction
- Injudicious action
- Behaviour or inexperience

The contributory factors within these groupings are provided in the table below<sup>22</sup>

**Table 4-2 Human factor contributory factors**

Injudicious action			
301	Disobeyed automatic traffic signal	306	Exceeding speed limit
302	Disobeyed 'Give Way' or 'Stop' sign or markings	307	Travelling too fast for conditions
303	Disobeyed double white lines	308	Following too close
304	Disobeyed pedestrian crossing facility	309	Vehicle travelling along pavement
305	Illegal turn or direction of travel	310	Cyclist entering road from pavement
Driver/Rider error or reaction			
401	Junction overshoot	406	Failed to judge other person's path or speed
402	Junction restart (moving off at junction)	407	Too close to cyclist, horse rider or pedestrian
403	Poor turn or manoeuvre	408	Sudden braking
404	Failed to signal or misleading signal	409	Swerved
405	Failed to look properly	410	Loss of control
Impairment or distraction			
501	Impaired by alcohol	506	Not displaying lights at night or in poor visibility
502	Impaired by drugs (illicit or medicinal)	507	Rider wearing dark clothing
503	Fatigue	508	Driver using mobile phone
504	Uncorrected, defective eyesight	509	Distraction in vehicle
505	Illness or disability, mental or physical	510	Distraction outside vehicle
Behaviour or inexperience			
601	Aggressive driving	605	Learner or inexperienced driver/rider
602	Careless, reckless or in a hurry	606	Inexperience of driving on the left
603	Nervous, uncertain or panic	607	Unfamiliar with model of vehicle
604	Driving too slow for conditions or slow veh (e.g. tractor)		

<sup>22</sup> Full listing of contributory factors of all groupings is provided at the end of this report.

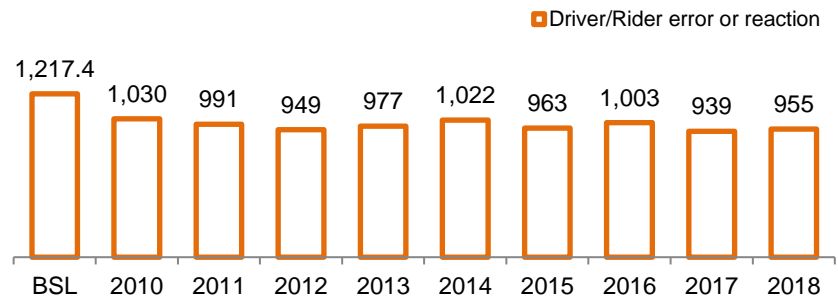
## 1,254 fatal and serious collisions where human factors were attributed

74.9 per cent of the 1,674 fatal and serious collisions in 2018

### Driver/Rider error or reaction

955 fatal and serious collisions

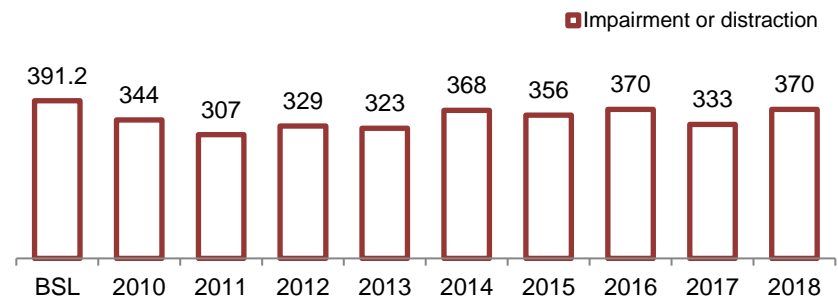
↑ 1.7 per cent from 939 in 2017



### Impairment or distraction

370 fatal and serious collisions

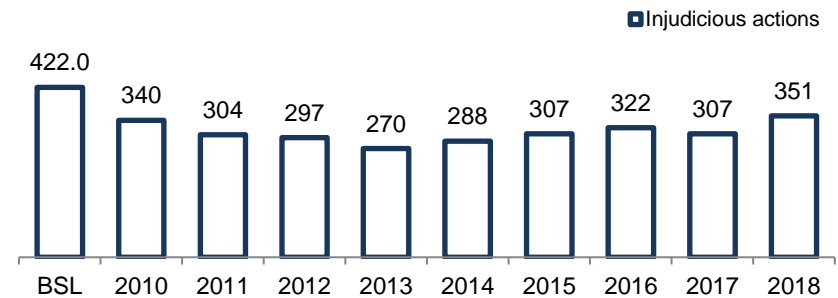
↑ 11.1 per cent from 333 in 2017



### Injudicious actions

351 fatal and serious collisions

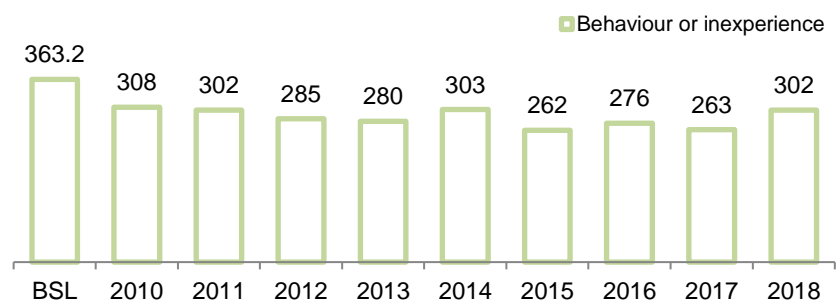
↑ 14.3 per cent from 307 in 2017



### Behaviour or inexperience

302 fatal and serious collisions

↑ 14.8 per cent from 263 in 2017



Note:

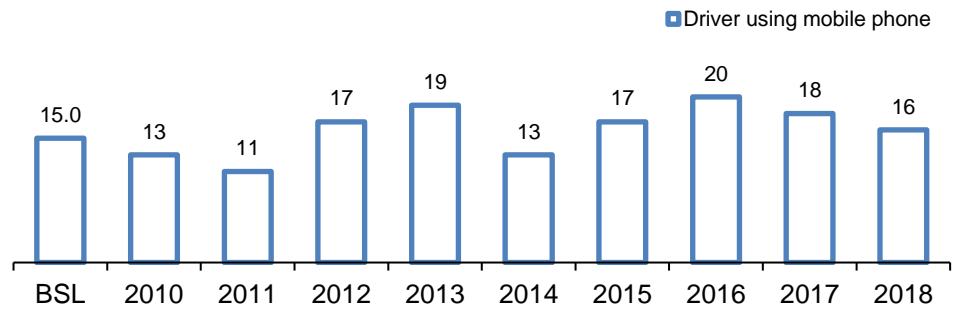
(a) Figures show the number of fatal and serious collisions involving at least one contributory factor from the relevant group. The listing of each group is provided in previous page.

Figure 4-11 Fatal and serious collisions associated with human contributory factors by group and year

Figure 4-11 shows that fatal and serious collisions where at least one of the aforementioned human factors was attributed have increased, with impairment or distraction increasing by 11.1 per cent from 333 in 2017 to 370 in 2018.

Investigating the impairment or distraction human factor category further, Figure 4-12 details the number of fatal and serious collisions involving at least one driver using a mobile phone. The number of fatal and serious collisions has decreased gradually from 2016 to be 16 in 2018 and is one above from the baseline (of 15.0).

**Driver using mobile phone**  
**16 fatal and serious collisions**  
**↓ 11.1 per cent from 2017**



**Figure 4-12 Fatal and serious collisions where mobile phone use attributed by year**

Table 4-3 highlights the top 20 human contributory factors by severity linked to collisions for 2018 (ranked by fatal and serious collisions). The top three contributory factors involved in fatal and serious collisions were all from the driver/rider error or reaction group. This group features heavily in all collisions.

From the table, it is evident that the impairment or distraction human factor category also remains a major issue. Individual factors such as fatigue; impaired by alcohol; distraction in vehicle; and illness or disability, mental or physical contributed to 109, 97, 83, and 68 fatal and serious collisions respectively in 2018. This has followed a similar profile as that for the corresponding casualties apart from few subtle variations in the ranking.



**Table 4-3 Top 20 human contributory factors attributed to collisions by severity, 2018**

Rank	Contributory Factor	Fatal + serious	Fatal	Serious	Slight	Total
1	405 Failed to look properly	436	47	389	1,807	2,243
2	406 Failed to judge other person's path or speed	338	29	309	1,566	1,904
3	410 Loss of control	295	42	253	678	973
4	602 Careless, reckless or in a hurry	201	22	179	660	861
5	403 Poor turn or manoeuvre	160	15	145	546	706
6	307 Travelling too fast for conditions	132	16	116	390	522
7	308 Following too close	117	7	110	710	827
8	503 Fatigue	109	19	90	248	357
9	501 Impaired by alcohol	97	15	82	209	306
10	409 Swerved	84	8	76	262	346
11	509 Distraction in vehicle	83	10	73	234	317
12	408 Sudden braking	81	6	75	566	647
13	306 Exceeding speed limit	76	14	62	144	220
14	505 Illness or disability, mental or physical	68	16	52	137	205
15	601 Aggressive driving	49	10	39	114	163
16	605 Learner or inexperienced driver/rider	47	3	44	141	188
17	502 Impaired by drugs (illicit or medicinal)	42	13	29	63	105
18	303 Disobeyed double white lines	30	3	27	104	134
19	510 Distraction outside vehicle	29	2	27	82	111
20	302 Disobeyed 'Give Way' or 'Stop' sign or markings	16	3	13	34	50

Key (CF groups):

	Driver/Rider error or reaction		Impairment or distraction		Injudicious action
	Behaviour or inexperience				

Notes:

- (a) Table reports number of collisions.
- (b) Table ranked by fatal and serious collisions.
- (c) As more than one contributory factor can be recorded per collision; columns will not sum to their respective totals.

Table 4-4 is an adaptation of the 'Fatal Four' driving offences:

- Speeding (CFs 306 and 307)
- Improper use of restraints (Casualty code "Seat belt in use – not used")
- Distraction (including use of mobile phone) (CFs 508, 509 and 510)
- Impaired by drink and drugs (CFs 501 and 502)

Note: For CF code definitions refer to Table 4-2

It can be seen from Table 4-4 that collisions involving 'improper use of or no restraints' increased in fatal and slight severities in 2018. Fatal collisions linked to restraints have increased by 44.4 per cent.

Due to the recording of the use of seatbelts not being mandatory this category potentially shows the minimum number of collisions by severity of the collision. In terms of collisions, the table does show that in 2018 a minimum of 147 total collisions had recorded 'improper use of or no restraints' this is a 12.2 per cent increase from the value recorded in 2017. The number of fatal and serious collisions showed a decrease of 2.8 per cent and slight collisions showed an increase of 30.0 per cent compared to values in 2017.

Impaired by drink and drugs showed an increase across all severities compared to 2017.

**Table 4-4 Collisions involving speeding, restraints, distractions and drink/drugs, 2018**

Category/ Severity	Speeding	Restraints <sup>(a)</sup>	Distractions	Drink/Drugs
Fatal	<b>28</b> ↑ 12.0%	<b>26</b> ↑ 44.4%	<b>15</b> ↓ 6.3%	<b>22</b> ↑ 29.4%
Serious	<b>162</b> ↑ 5.9%	<b>43</b> ↓ 18.9%	<b>104</b> ↑ 33.3%	<b>100</b> ↑ 29.9%
Fatal + Serious	<b>190</b> ↑ 6.7%	<b>69</b> ↓ 2.8%	<b>119</b> ↑ 26.6%	<b>122</b> ↑ 29.8%
Slight	<b>507</b> ↓ 7.1%	<b>78</b> ↑ 30.0%	<b>319</b> ↓ 13.3%	<b>250</b> ↑ 3.7%
Total	<b>697</b> ↓ 3.7%	<b>147</b> ↑ 12.2%	<b>438</b> ↓ 5.2%	<b>372</b> ↑ 11.0%

Notes:

(a) The recording of seatbelts is only required in STATS19 for fatalities who are occupants of vehicles in which the wearing of a seatbelt is mandatory. However, police forces can choose to collect this data for all collision severities and hence any large variation in 'Restraints' is likely come, at least in part, from the increase or decrease of the recording by police forces.

(b) Percentages represent the per cent change of 2018 values from 2017 values; percentages are only shown where the base is 15 or more including if unchanged.

## 4.4. Contributory Factors

### 4.4.1. Overview

Based on STATS20<sup>23</sup> contributory factors should only be recorded in STATS19 data for collisions attended by a police officer. This is due in part because contributory factors are subjective and depend on the police officer's experience and their skill of investigating. For any collision attended by a police officer up to six contributory factors can be recorded, these give an indication as to what may have occurred.

Figure 4-13 shows the number and percentage of collisions on the SRN which were attended by a police officer between 2005 and 2018.

It can be seen that from 2005 to 2014 the percentage of collisions attended by police officers varied between the lowest value of 88.5 per cent and the highest value of 91.1 per cent. However, the figure shows a significant decrease in the number and percentage of collisions attended by a police officer through 2016 to 2018. This reduction should be taken into consideration by the reader when analysing contributory factor tables.

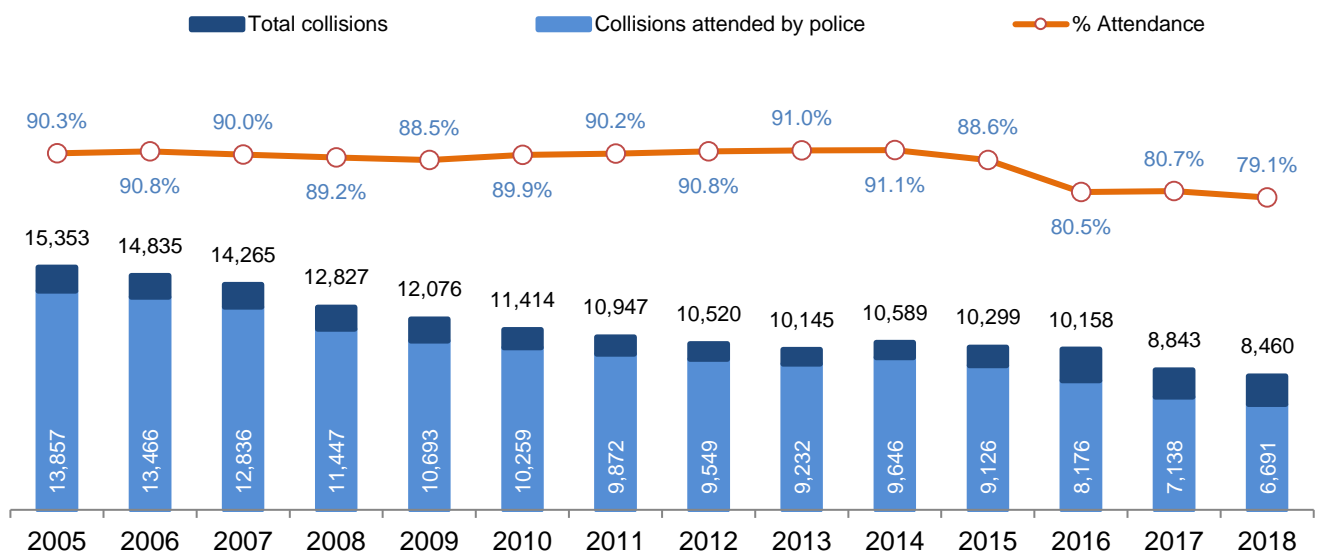


Figure 4-13 Number and percentage of collisions where police attended (2005-2018)

<sup>23</sup>STATS20 "Instructions for the Completion of Road Accident Reports from non-CRASH Sources" Department for Transport, September 2011.








## 4.4.2. Contributory factors attributed to collisions

Table 4-5 illustrates the top 10 contributory factors related to people, vehicles and roads. It is clear that contributory factors relating to people were attributed to the most collisions compared to vehicle and road related contributory factors. Failed to look properly was attributed to the majority of collisions 26.5 per cent (2,243) in 2018. Slippery road (due to weather) was the most common road contributory factor, being attributed to 7.0 per cent (593) of collisions in 2018. The most common vehicle contributory factor was vehicle blind spot which was attributed to 1.8 per cent (152) of collisions in 2018.

**Table 4-5 Top 10 contributory factors attributed to collisions, 2018**

	Rank	Contributory Factor	2018	Percentage of collisions, 2018
People	1	405 Failed to look properly	2,243	26.5%
	2	406 Failed to judge other person's path or speed	1,904	22.5%
	3	410 Loss of control	973	11.5%
	4	602 Careless, reckless or in a hurry	861	10.2%
	5	308 Following too close	827	9.8%
	6	403 Poor turn or manoeuvre	706	8.3%
	7	408 Sudden braking	647	7.6%
	8	307 Travelling too fast for conditions	522	6.2%
	9	503 Fatigue	357	4.2%
	10	409 Swerved	346	4.1%
Vehicles	1	710 Vehicle blind spot	152	1.8%
	2	201 Tyres illegal, defective or under inflated	84	1.0%
	3	203 Defective brakes	42	0.5%
	4	204 Defective steering or suspension	29	0.3%
	5	206 Overloaded or poorly loaded vehicle or trailer	24	0.3%
	6	202 Defective lights or indicators	7	0.1%
	7	705 Dazzling headlights	6	0.1%
	8	709 Visor or windscreen dirty, scratched or frosted etc.	5	0.1%
	9	205 Defective or missing mirrors	2	0.0%
Roads	1	103 Slippery road (due to weather)	593	7.0%
	2	707 Rain, sleet, snow, or fog	151	1.8%
	3	706 Dazzling sun	100	1.2%
	4	109 Animal or object in carriageway	68	0.8%
	5	108 Road layout (eg. bend, hill, narrow carriageway)	50	0.6%
	6	102 Deposit on road (eg. oil, mud, chippings)	47	0.6%
	7	708 Spray from other vehicles	41	0.5%
	8	701 Stationary or parked vehicle(s)	36	0.4%
	9	107 Temporary road layout (eg. contraflow)	30	0.4%
	10	703 Road layout (eg. bend, winding road, hill crest)	27	0.3%

Key (CF groups):

	Driver/Rider error or reaction		Impairment or distraction		Injudicious action
	Vision affected by		Road environment		Vehicle defect
	Behaviour or inexperience				

Note:




- (a) In 2018, there were a total of 8,460 collisions.
- (b) There are only nine contributory factors associated with vehicles whereas only the top 10 contributory factors associated with people and roads are shown.

### 4.4.3. Top 10 contributory factors by road classification






Table 4-6 illustrates top 10 contributory factors attributed to collisions by road classification.

Based on the results shown in Table 4-6, “Failed to look properly” was the top contributory factor attributed to collisions across all road classes in 2018. Four out of the top five contributory factors across most road classes are in relation to “Driver/Rider error or reaction”; the exception being Motorway where it was three of the top five.

**Table 4-6 Top 10 contributory factors attributed to collisions by road classification, 2018**

	Rank	Contributory Factor	2018
 <p><b>Motorway</b> (79.9% of collisions attended by police)</p>	1	405 Failed to look properly	1,028
	2	406 Failed to judge other person's path or speed	946
	3	410 Loss of control	443
	4	308 Following too close	426
	5	602 Careless, reckless or in a hurry	370
	6	408 Sudden braking	322
	7	403 Poor turn or manoeuvre	292
	8	103 Slippery road (due to weather)	259
	9	307 Travelling too fast for conditions	242
	10	503 Fatigue	185
<p><b>A-road</b> (78.4% of collisions attended by police)</p>	1	405 Failed to look properly	1,215
	2	406 Failed to judge other person's path or speed	958
	3	410 Loss of control	530
	4	602 Careless, reckless or in a hurry	491
	5	403 Poor turn or manoeuvre	414
	6	308 Following too close	401
	7	103 Slippery road (due to weather)	334
	8	408 Sudden braking	325
	9	307 Travelling too fast for conditions	280
	10	509 Distraction in vehicle	179
 <p><b>A-road dual carriageway</b> (76.6% of collisions attended by police)</p>	1	405 Failed to look properly	827
	2	406 Failed to judge other person's path or speed	698
	3	410 Loss of control	387
	4	602 Careless, reckless or in a hurry	351
	5	403 Poor turn or manoeuvre	288
	6	308 Following too close	281
	7	103 Slippery road (due to weather)	267
	8	408 Sudden braking	253
	9	307 Travelling too fast for conditions	227
	10	501 Impaired by alcohol	132
 <p><b>A-road single carriageway</b> (83.5% of collisions attended by police)</p>	1	405 Failed to look properly	388
	2	406 Failed to judge other person's path or speed	260
	3	410 Loss of control	143
	4	602 Careless, reckless or in a hurry	140
	5	403 Poor turn or manoeuvre	126
	6	308 Following too close	120
	7	408 Sudden braking	72
	8	103 Slippery road (due to weather)	67
	9	509 Distraction in vehicle	66
	10	307 Travelling too fast for conditions	53

Key (CF groups):

 Driver/Rider error or reaction	 Impairment or distraction	 Injudicious action
 Road environment	 Behaviour or inexperience	

# 5. Topics of Interest

The purpose of this section is to provide analysis for a range of topics of interest. The topics are themes that affect the SRN and hence include more detailed analysis than the overall assessment of casualty (and collision) trends in the previous sections.

This section includes the following topics of interest:

- Fatally injured casualties
- Seriously injured casualties
- Killed or seriously injured (KSI) casualties
- Slightly injured casualties
- Child casualties
- Young motorists
- Older and Elderly casualties
- Weather effects on the SRN
- Junctions
- Vehicle Defects
- Goods vehicles (HGVs and LGVs)
- Motorcycle users
- Hardshoulders and lay-bys
- Collision type
- Vulnerable and non-motorised users
- Journey purpose
- Towing

## 5.1. Fatally Injured Casualties

This section provides an overview of fatalities on the SRN for 2018 along with comparisons to previous years as required.

In 2018, there were 250 fatalities on the SRN; (Figure 5-1). The estimated cost of fatalities on the SRN in 2018 was £427.6<sup>24</sup>.

Figure 5-2 shows that in 2018, October had the most fatalities with 30 in the month. This was closely followed by May which had 26 fatalities and then by December which had 24 fatalities.

Table 5-1 shows fatalities by casualty type, it can be seen that in 2018:

- 57.6 per cent of fatalities were car occupants (144 of 250)
- 16.8 per cent of fatalities were pedestrians (42 of 250)
- 12.8 per cent of fatalities were motorcycle users (32 of 250)

Table 5-1 also shows the number of pedestrian fatalities decreased to 42 in 2018 from 44 in 2017 and motorcycle user fatalities increased to 32 in 2018 from 25 in 2017.

Table 5-2 provides a breakdown of fatalities by casualty age. There was a reduction in the number of fatalities for the age group (16-19) years from 2017, while fatalities for the age groups 60-69 and 70+ years have increased.

Figure 5-3 shows fatalities by road classification in 2018 and it can be seen that:

- A-road single carriageway fatalities increased to 63, from 58 in 2017
- A-road dual carriageway fatalities increased to 102, from 87 in 2017
- A-road fatalities, as a whole, increased to 165, from 145 in 2017
- Motorway fatalities decreased to 85, from 91 in 2017

Figure 5-4 illustrates that hitting an object off the carriageway was attributed to 63 fatalities and is 25.2 per cent of all fatalities in 2018. This is a decrease on the 2017 value of 69. Of those fatalities that involved hitting an object off the carriageway in 2018, 33.3 per cent were attributed to hitting a tree and 46.0 per cent were attributed to hitting a barrier of some kind. This is equivalent to 8.4 per cent and 11.6 per cent of all fatalities (250) respectively.

Table 5-3 shows fatalities by junction detail, overall 16.8 per cent of fatalities occurred at junctions in 2018. The total number of fatalities occurring at junctions decreased to 42 in 2018 from 50 in 2017.

<sup>24</sup>Based on the average value of prevention per casualty at 2010 prices and 2018 values, DfT WebTAG: Unit A 4.1.1, May 2019.



### 5.1.1. Fatal casualty infographics

**250 fatally injured casualties**

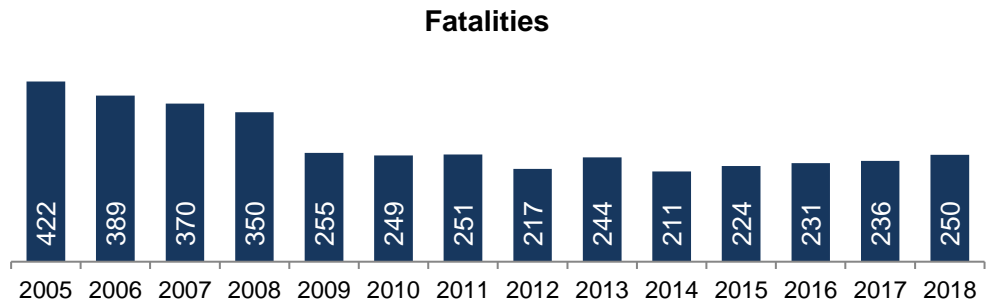


Figure 5-1 Fatally injured casualties by year, SRN

**30 fatally injured casualties occurred in October**

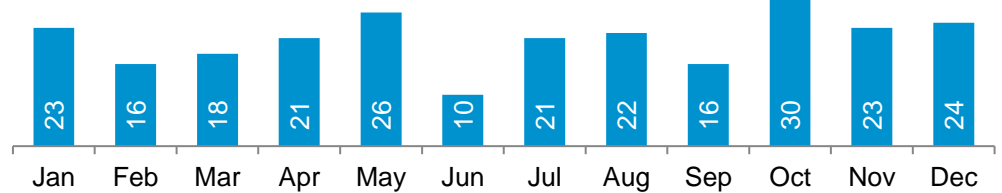


Figure 5-2 Fatally injured casualties by month, 2018

Table 5-1 Fatally injured casualties by type, 2018

Casualty type	2018
Car occupants	144
Motorcycle users	32
Goods vehicle occupants (equal to or under 3.5 tonnes)	19
HGV occupants (over 3.5 tonnes)	9
Pedestrians	42
Pedal cyclists	1

**57.6 per cent of total fatally injured casualties involved car occupants**

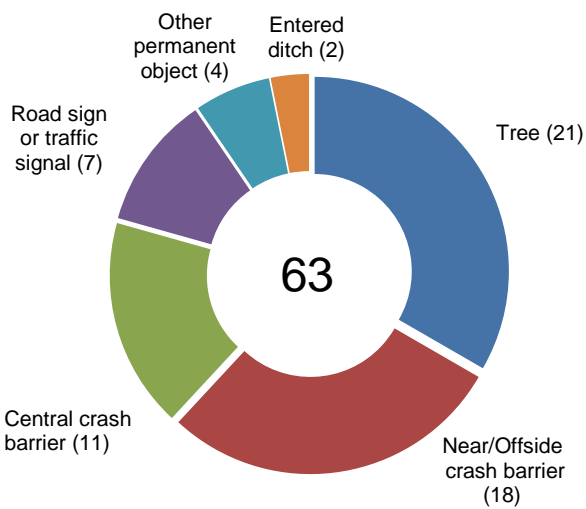
Table 5-2 Fatally injured casualties by age group, 2018

Children (0-15)	Young (16-19)	Other (20-59)	Older (60-69)	Elderly (70+)
4	14	175	31	26

**66.0 per cent of all fatally injured casualties occurred on A-roads**

<b>165</b>	<b>102</b> ↑17.2%
<b>A-road</b>	 A-road dual carriageway
<b>85</b>	<b>63</b> ↑8.6%
 <b>Motorway</b>	 A-road single carriageway

**Figure 5-3 Fatally injured casualties by road classification, 2018**



**63 fatally injured casualties involved hitting an object off the carriageway in 2018**

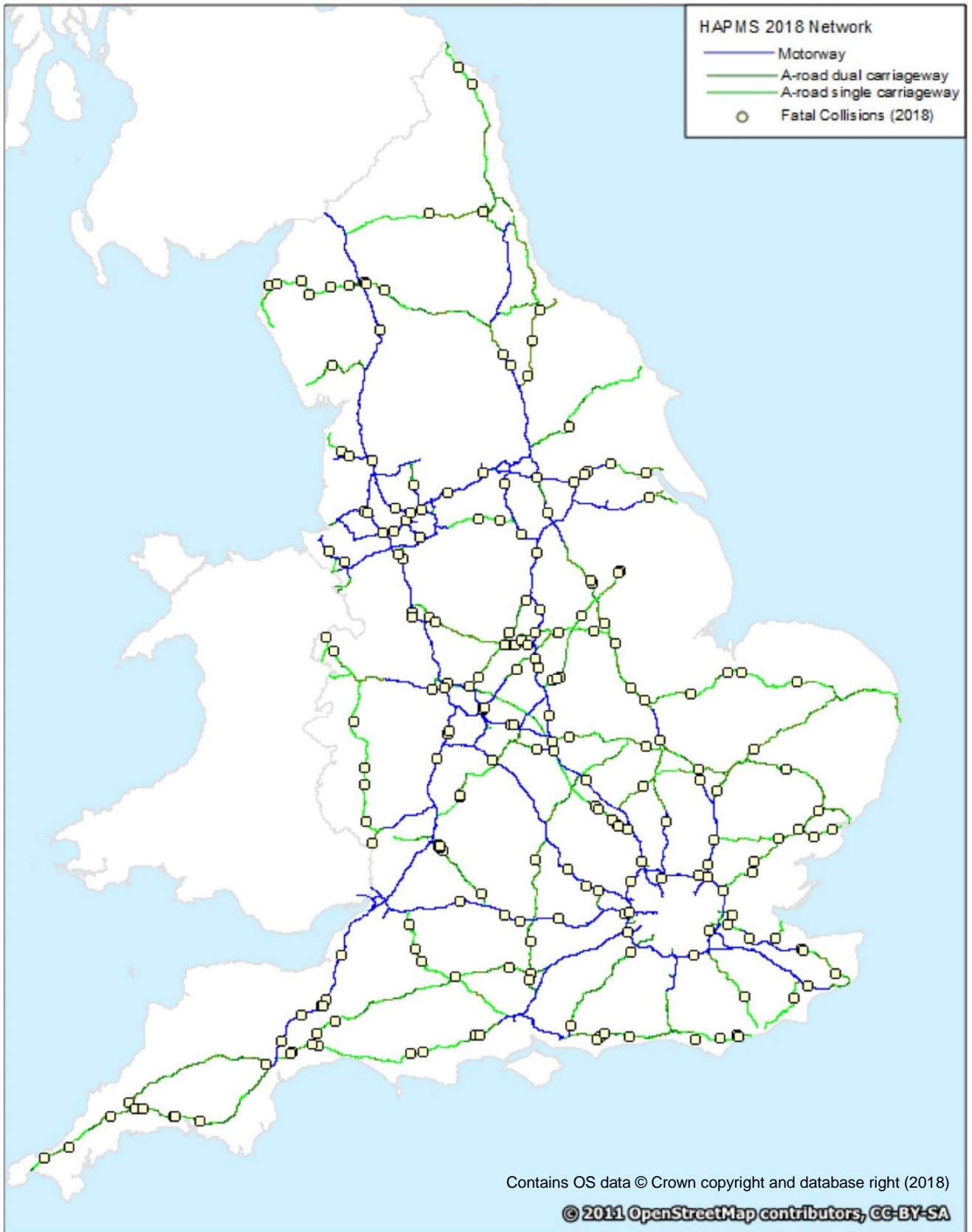
**11.6 per cent of all fatally injured casualties (250) involved hitting a crash barrier of some kind (29)**

**Figure 5-4 Fatally injured casualties by objects hit off carriageway, 2018**

**Table 5-3 Fatally injured casualties by junction detail, 2018**

Junction detail	2018
Slip road	18
T or staggered	10
Crossroad	5
Roundabout	6
Private drive or entrance	0
More than 4 arms (not roundabout)	0
Mini-roundabout	0
Other	3
Not at junction	208

**16.8 per cent of fatally injured casualties were at a junction**



**Figure 5-5 Fatal collision locations across the SRN**

*Due to the number of serious and slight being higher it is not practical to represent them on a map. Therefore there is no HAPMS 2018 Network figure in the corresponding sections for these severities.*

## 5.2. Seriously Injured Casualties

This section provides an overview of seriously injured casualties on the SRN for 2018 along with comparisons to previous years as required. As explained in Section 1.3 the reporting of STATS19 via CRASH/COPA has had an impact on both seriously injured and slightly injured collision and casualty data.

In 2018, there were 1,737 seriously injured casualties on the SRN; this is an increase of 120 seriously injured casualties from the 2017 value of 1,617 (Figure 5-6). The introduction of CRASH and COPA has led to a change in recording methodology leading to a requirement to produce “adjusted” and “unadjusted” figures to explain the apparent difference (see section 1-3). The estimated cost of seriously injured casualties on the SRN in 2018 was £333.9m<sup>24</sup>.

Figure 5-7 shows that in 2018 August had the most seriously injured casualties with 175 in the month. This was followed by July and May with 175 and 166 seriously injured casualties respectively.

Table 5-4 shows seriously injured casualties by type, it can be seen that in 2018:

- 64.8 per cent of seriously injured were car occupants (1,126 of 1,737)
- 18.5 per cent of seriously injured were motorcycle users (321 of 1,737)
- 3.1 per cent of seriously injured were pedestrians (54 of 1,737)

Table 5-4 also shows the number of seriously injured pedestrians increased by 25.6 to 54 in 2018 from 43 in 2017 (however, it was also 54 in 2016), and number of seriously injured motorcycle users increased over this period. The number of pedal cyclists decreased.

Table 5-5 shows a breakdown of seriously injured by casualty age. It can be seen that the number of serious injuries decreased across Children (0-15) and Elderly (70+) age groups, with Elderly (70+) having the greatest decrease from 2017.

In 2018, all road classes showed an increase in seriously injured casualties (Figure 5-8). The changes to seriously injured casualties by road classification are:

- A-road single carriageway serious injuries increased to 363, from 357 in 2017
- A-road dual carriageway serious injuries increased to 652, from 599 in 2017
- A-road serious injuries, as a whole, increased to 1,015, from 956 in 2017
- Motorway serious injuries increased to 722, from 661 in 2017

In 2018, hitting an object off the carriageway was associated with 403 seriously injured casualties (Figure 5-9), and is 23.2 per cent of all seriously injured casualties in 2018. This is a slight increase on the 2017 value of 399. Of those seriously injured casualties that involved hitting an object off the carriageway 45.2 per cent were attributed to hitting a barrier of some kind and 20.8 per cent were attributed to hitting a tree; this is 10.5 per cent and 4.8 per cent of all seriously injured casualties. Table 5-6 shows seriously injured casualties by junction detail, overall 22.3 per cent of serious injuries occurred at junctions in 2018. The total number of seriously injured casualties at junctions decreased to 387 in 2018 from 397 in 2017. The majority of seriously injured casualties at junctions were attributed to slip roads, roundabouts, and T or staggered junctions. However, the three junctions have seen a decrease from the corresponding 2017 value. In contrast, cross roads showed an increase from 11 in 2017 to 23 in 2018.

## 5.2.1. Seriously injured casualty infographics

**1,737**  
seriously  
injured  
casualties

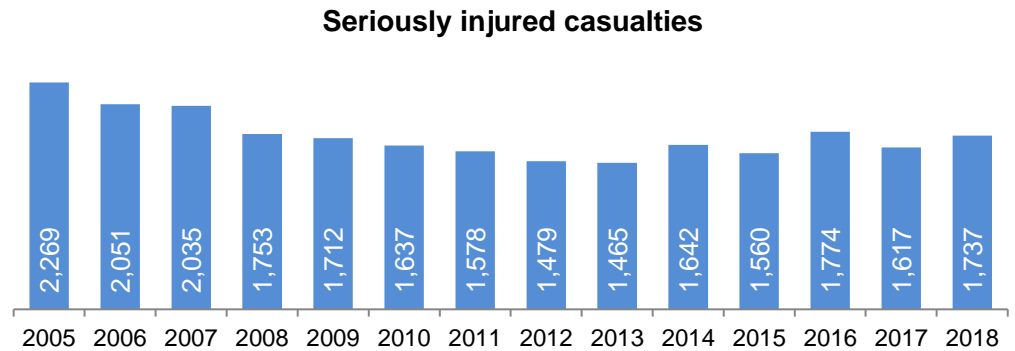


Figure 5-6 Seriously injured casualties by year, SRN

**175**  
seriously  
injured  
casualties  
occurred in  
August

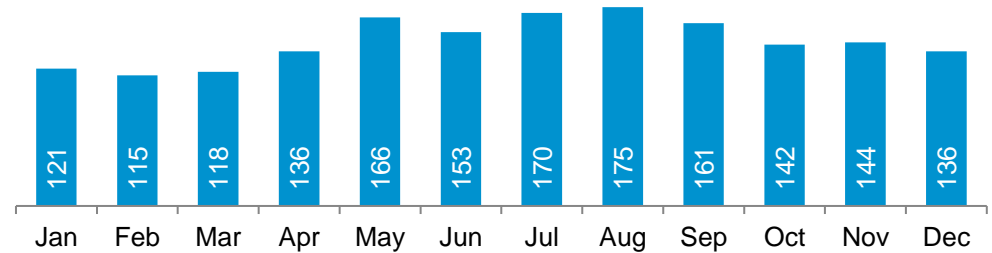


Figure 5-7 Seriously injured casualties by month, 2018

Table 5-4 Seriously injured casualties by type, 2018

Casualty type	2018
Car occupants	1,126
Motorcycle users	321
Goods vehicle occupants (equal to or under 3.5 tonnes)	111
HGV occupants (over 3.5 tonnes)	63
Pedestrians	54
Pedal cyclists	34

Table 5-5 Seriously injured casualties by age group, 2018

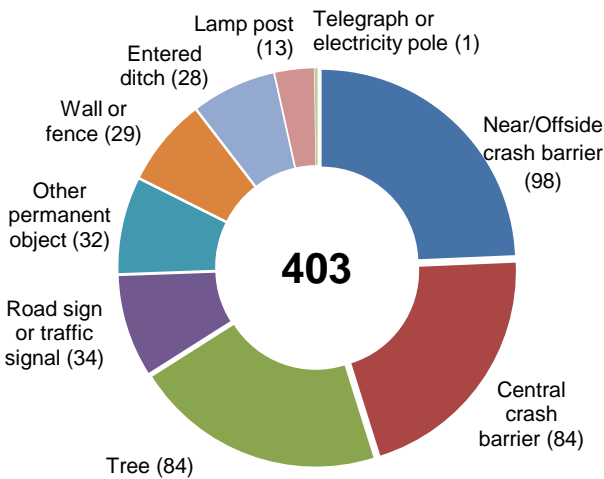
Children (0-15)	Young (16-19)	Other (20-59)	Older (60-69)	Elderly (70+)	Unknown age
53	95	1,269	160	146	14

**58.4 per cent of all seriously injured casualties occurred on A-roads**

**All road classes had an increase in seriously injured casualties**

<b>1,015</b>	<b>652</b>
<b>A-road</b>	A-road dual carriageway
<b>722</b>	<b>363</b>
<b>Motorway</b>	A-road single carriageway

**Figure 5-8 Seriously injured casualties by road classification, 2018**



**403 seriously injured casualties involved hitting an object off the carriageway in 2018**

**10.5 per cent of all seriously injured casualties involved in hitting a crash barrier of some kind**

**Figure 5-9 Seriously injured casualties by objects hit off carriageway, 2018**

**Table 5-6 Seriously injured casualties by junction detail, 2018**

Junction detail	2018
Slip road	119
Roundabout	116
T or staggered	99
Private drive or entrance	9
Crossroad	23
More than 4 arms (not roundabout)	2
Mini-roundabout	0
Other	19
Not at junction	1,350

**22.3 per cent of seriously injured casualties were at junctions**



### 5.3. Killed or Seriously Injured Casualties

This section provides an overview of killed or seriously injured (KSI) casualties on the SRN for 2018 along with comparisons to previous years as required. As explained in Section 1.3 the reporting of STATS19 via CRASH/COPA has had an impact on seriously injured and slightly injured collision and casualty data.

In 2018, there were 1,987 KSI casualties on the SRN; an increase of 134 KSI casualties from the 2017 value of 1,853. The estimated cost of KSI casualties on the SRN in 2018 was £761.5m<sup>24</sup>.

Figure 5-11 shows that August, with 197, had the most number of KSI casualties followed by May with 192 and then July with 191.

Table 5-7 shows KSI casualties by type, it can be seen that in 2018:

- 63.9 per cent of KSI casualties were car occupants (1,270 of 1,987)
- 17.8 per cent of KSI casualties were motorcycle users (353 of 1,987)
- 4.8 per cent of KSI casualties were pedestrians (96 of 1,987)

Table 5-7 also shows the number of pedestrian KSI casualties increased to 96 in 2018, from 87 in 2017 and that motorcycle user KSI casualties increased to 353 in 2018, from 326 in 2017.

Table 5-8 shows a breakdown of KSI casualties by age. The number of KSI casualties for most of the age groups increased, with Older (60-69) having the greatest increase from 2017. The exception are Children (0-15) and Elderly (70+) age group where the KSI casualties decreased from 2017.

In 2018, all road classes showed an increase in KSI casualties (Figure 5-12). The changes to KSI casualties by road classification are:

- A-road single carriageway KSI casualties increased to 426, from 415 in 2017
- A-road dual carriageway KSI casualties increased to 754, from 686 in 2017
- A-road KSI casualties, as a whole, increased to 1,180, from 1,101 in 2017
- Motorway KSI casualties increased to 807, from 752 in 2017

In 2018, hitting an object off the carriageway was associated with 466 KSI casualties (Figure 5-13), and is 23.5 per cent of all KSI casualties. This is a slight decrease on the 2017 value of 468. Of those KSI casualties that involved hitting an object off the carriageway 45.3 per cent were attributed to hitting a barrier of some kind and 22.5 per cent attributed to hitting a tree. This is equivalent to 10.6 per cent and 5.3 per cent of all KSI casualties (1,987) respectively.

In 2018, 21.6 per cent of KSI casualties were at junctions, with the total number decreasing to 429 from 447 in 2017. Table 5-9 shows KSI casualties by junction detail. Similar to trends evident in seriously injured casualties, the table shows that cross roads had a notable increase in KSI casualties from 2017.

### 5.3.1.KSI casualty infographics

**1,987 KSI casualties**

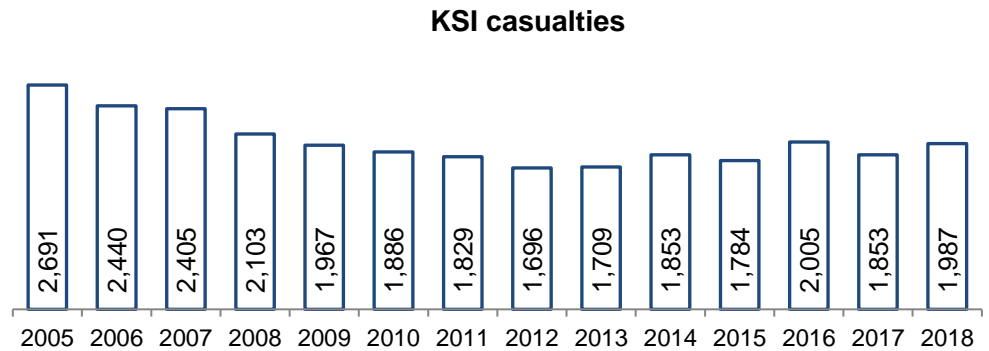


Figure 5-10 KSI casualties by year, SRN

**197 KSI casualties in August**

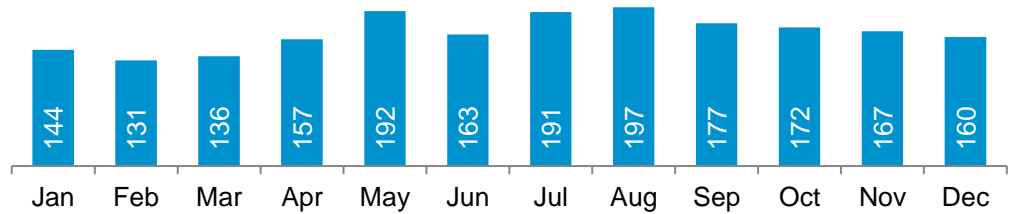


Figure 5-11 KSI casualties by month, 2018

Table 5-7 KSI casualties by type, 2018

Casualty type	2018
Car occupants	1,270
Motorcycle users	353
Goods vehicle occupants (equal to or under 3.5 tonnes)	130
HGV occupants (over 3.5 tonnes)	72
Pedestrians	96
Pedal cyclists	35

Table 5-8 KSI casualties by age group, 2018

Children (0-15)	Young (16-19)	Other (20-59)	Older (60-69)	Elderly (70+)	Unknown age
57	109	1,444	191	172	14



**59.4 per cent of all KSI casualties were on A-roads**

**A-road dual carriageway - the road class with the highest increase in KSI casualties**




<b>1,180</b>	<b>754</b>
<b>A-road</b>	 A-road dual carriageway
<b>807</b>	<b>426</b>
 Motorway	 A-road single carriageway

Figure 5-12 KSI casualties by road classification, 2018

**466 KSI casualties involved hitting an object off the carriageway in 2018**

**10.6 per cent of all KSI casualties involved hitting a barrier of some kind**

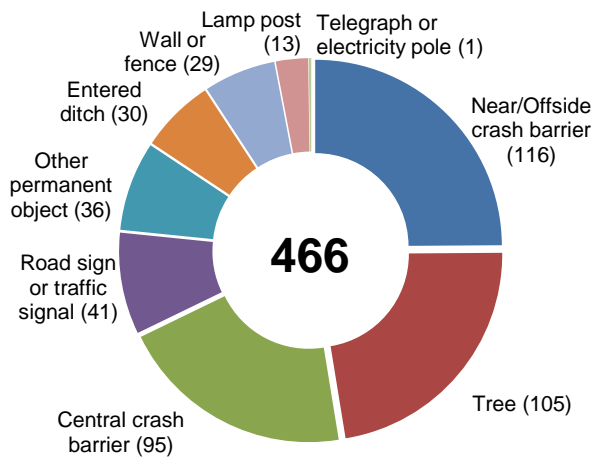


Figure 5-13 KSI casualties by objects hit off carriageway, 2018

Table 5-9 KSI casualties by junction detail, 2018

Junction detail	2018
Slip road	137
T or staggered	109
Roundabout	122
Crossroad	28
Private drive or entrance	9
More than 4 arms (not roundabout)	2
Mini-roundabout	0
Other	22
Not at junction	1,558

**21.6 per cent of KSI casualties were at a junction**

## 5.4. Slightly Injured Casualties

This section provides an overview of slightly injured casualties on the SRN for 2018 along with comparisons to previous years as required. As explained in Section 1.3 the reporting of STATS19 via CRASH/COPA has had an impact on both seriously injured and slightly injured collision and casualty data.

In 2018, there were 11,393 slightly injured casualties on the SRN; a decrease of 979 slightly injured casualties from the 2017 value of 12,372. The total cost of slightly injured casualties on the SRN in 2018 was £168.8m<sup>24</sup>.

Figure 5-15 shows that in 2018 May had the most slightly injured casualties with 1,075 whilst February had the fewest with 815.

Table 5-10 shows slightly injured casualties by type, it can be calculated that in 2018:

- 85.4 per cent of slightly injured were car occupants (9,733 of 11,393)
- 6.0 per cent of slightly injured were goods vehicle occupants (under 3.5 tonnes or unknown weight) (681 of 11,393)
- 3.8 per cent of slightly injured were motorcycle users (432 of 11,393)

Table 5-11 shows the number of slightly injured casualties by age group in 2018. All the age groups except Elderly (70+) show a decrease in the number of slightly injured casualties from that in 2017, with Young (16-19) having the greatest reduction. Elderly (70+) age group showed an increase from 2017.

In 2018, the number of slightly injured casualties decreased across all road classes (Figure 5-16). The changes to slightly injured casualties by road classification are:

- A-road single carriageway slightly injured casualties decreased to 1,497, from 1,650 in 2017
- A-road dual carriageway slightly injured casualties decreased to 4,196, from 4,544 in 2017
- A-road slightly injured casualties, as a whole, decreased to 5,693, from 6,194 in 2017
- Motorway slightly injured casualties decreased to 5,700, from 6,178 in 2017

In 2018, hitting an object off the carriageway was associated with 1,627 slightly injured casualties (Figure 5-17), and is 14.3 per cent of all slightly injured casualties. This is a decrease on the 2017 value of 1,931. Of those slightly injured casualties that involved hitting an object off the carriageway 61.1 per cent were attributed to hitting a barrier of some kind and 12.1 per cent attributed to hitting a tree. This is equivalent to 8.7 per cent and 1.7 per cent of all slightly injured casualties (11,393) respectively.

Table 5-12 shows slightly injured casualties by junction detail, overall 24.7 per cent of slightly injured casualties were at junctions in 2018. The total number of slightly injured casualties at junctions decreased to 2,811 in 2018 from 3,130 in 2017; a decrease of 10.2 per cent. Roundabouts and slip roads both had significantly more slightly injured casualties compared to other junction types in 2018 with 1,126 and 849 respectively. However, slightly injured casualties on slip roads decreased from 2017. Roundabouts show an increase from 2017.

### 5.4.1. Slightly injured casualty infographics

**11,393**  
slightly  
injured  
casualties

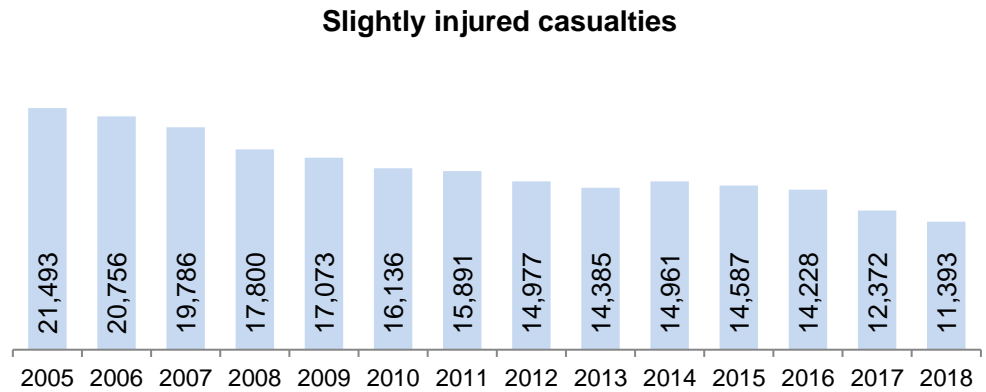


Figure 5-14 Slightly injured casualties by year, SRN

**1,075** slightly  
injured  
casualties in  
May

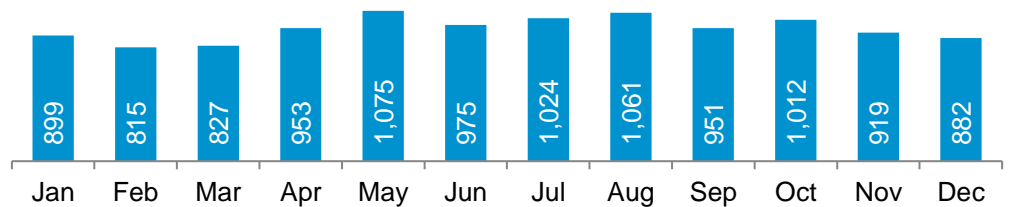


Figure 5-15 Slightly injured casualties by month, 2018

Table 5-10 Slightly injured casualties by type, 2018

Casualty type	2018
Car occupants	9,733
Motorcycle users	432
Goods vehicle occupants (equal to or under 3.5 tonnes)	681
HGV occupants (over 3.5 tonnes)	254
Pedestrians	52
Pedal cyclists	68

**85.4 per cent** of the slightly injured casualties involved car occupants

Table 5-11 Slightly injured casualties by age group, 2018

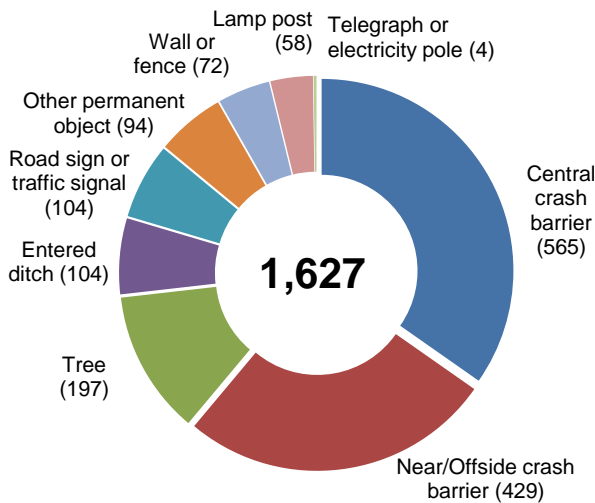
Children (0-15)	Young (16-19)	Other (20-59)	Older (60-69)	Elderly (70+)	Unknown age
708	585	8,545	786	640	129

**36.8 per cent of all slightly injured casualties were on A-road dual carriageways**

**All the road classes had a reduction in slightly injured casualties**

<b>5,693</b>	<b>4,196</b>
<b>A-road</b>	A-road dual carriageway
<b>5,700</b>	<b>1,497</b>
<b>Motorway</b>	A-road single carriageway

**Figure 5-16 Slightly injured casualties by road classification, 2018**



**1,627 slightly injured casualties involved hitting an object off the carriageway in 2018**

**8.7 per cent of all slightly injured casualties involved hitting a barrier of some kind**

**Figure 5-17 Slightly injured casualties by objects hit off carriageway, 2018**

**Table 5-12 Slightly injured casualties by junction detail, 2018**

Junction detail	2018
Roundabout	1,126
Slip road	849
T or staggered	507
Crossroad	143
Private drive or entrance	51
More than 4 arms (not roundabout)	16
Mini-roundabout	2
Other	117
Not at junction	8,582

**24.7 per cent of slightly injured casualties were at a junction**

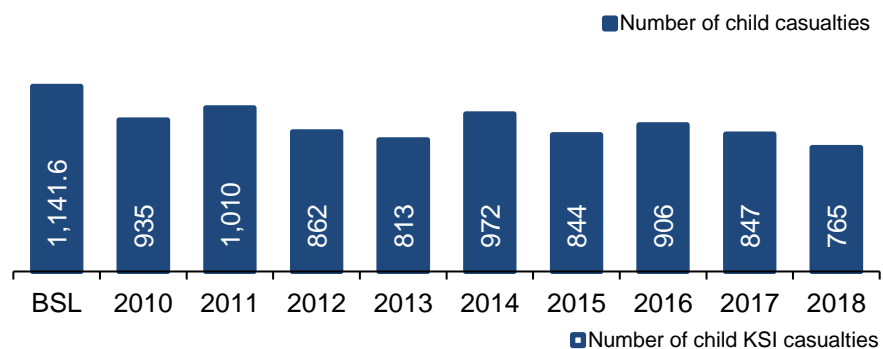
## 5.5. Child Casualties

This section investigates child (ages 0-15) casualties and KSI casualties by year, road class and gives a breakdown of KSI casualties by type.

### 5.5.1. Child casualty summary

Figure 5-18 shows child casualties and KSI casualties by year. There is an emerging three-year trend in significantly reducing child casualties, and child KSI casualties. In the latest reporting year there were 765 child casualties in 2018, a decrease on the 2017 value of 847. Child KSI casualties also decreased from 2017 to 2018, from 60 to 57.

**765 child casualties in 2018**



**57 child KSI casualties in 2018**

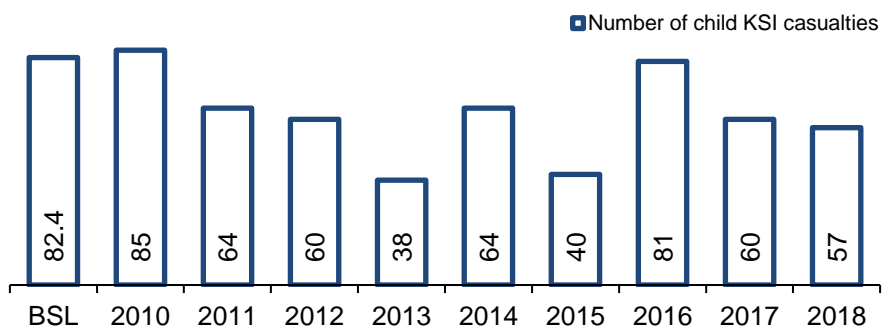


Figure 5-18 Total and KSI child casualties by year

Figure 5-19 shows a breakdown of 2018 child KSI casualties by casualty type. It can be seen that 47 of the 57 (82.5 per cent) child KSI casualties were car occupants. The next highest type were pedestrians and goods vehicle occupants which accounted for 3 child KSI casualties each.

**82.5% of child casualties were car occupants in 2018**

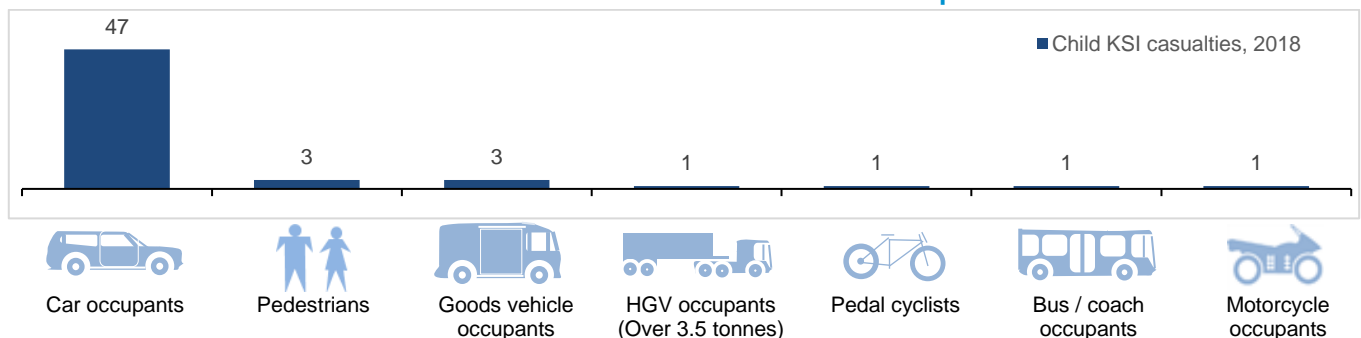
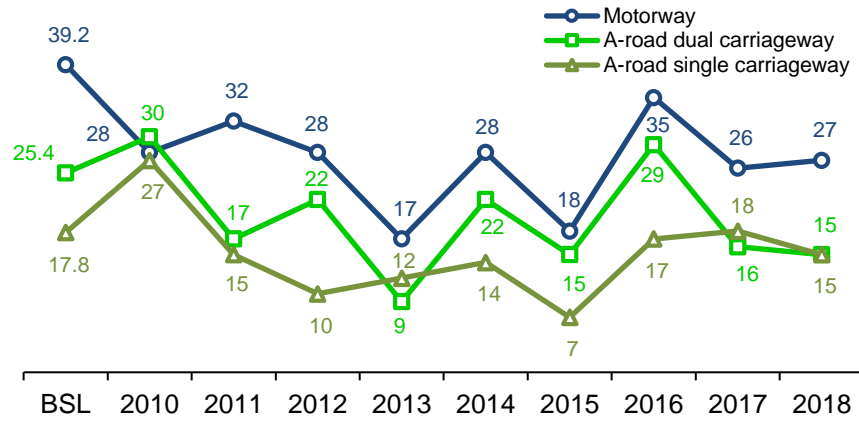


Figure 5-19 Child KSI casualties by type, 2018

Figure 5-20 gives a breakdown of child casualties and KSI casualties by road class. It can be seen that child KSI casualties on both A-road dual and single carriageways decreased from 2017 to 2018. However, child KSI casualties on motorways increased by 1, from 26 in 2017 to 27 in 2018. Nonetheless, it can also be seen that for the fourth consecutive year child casualties have decreased on motorways with 354 in 2018. In contrast, in 2018, child casualties on A-road single carriageways increased for the fourth consecutive year to 156 from 145 in 2017.

### Child KSI casualties



### Child casualties

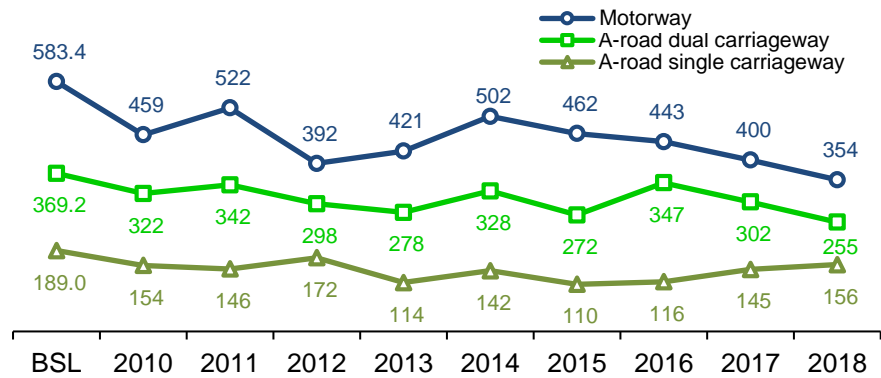


Figure 5-20 Child casualties by severity and road class

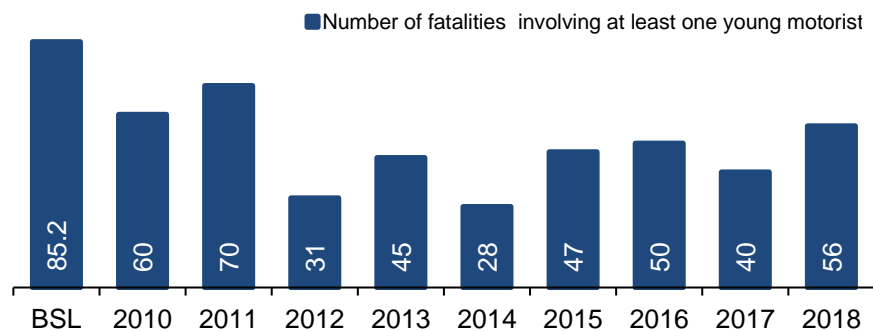
## 5.6. Young Motorist

This section investigates casualty trends where a collision involved at least one young motorist aged between 17 and 24 years. The number of casualties involving a young motorist still remains at approximately one quarter of total casualties (3,271 out of 13,380).

### 5.6.1. Casualties involving young motorists by severity

The historic number of casualties by severity between 2010 and 2018 together with the baseline average are shown in Figure 5-21 and Figure 5-22. As shown in Figure 5-21 the number of young motorists involved in fatalities increased in 2018 (56) from 2017 (40). Also, the number of KSI casualties (Figure 5-21) increased. However, the number of total casualties (Figure 5-22) decreased in 2018.

**56 fatalities involving young motorists**



**442 KSI casualties involving young motorists**

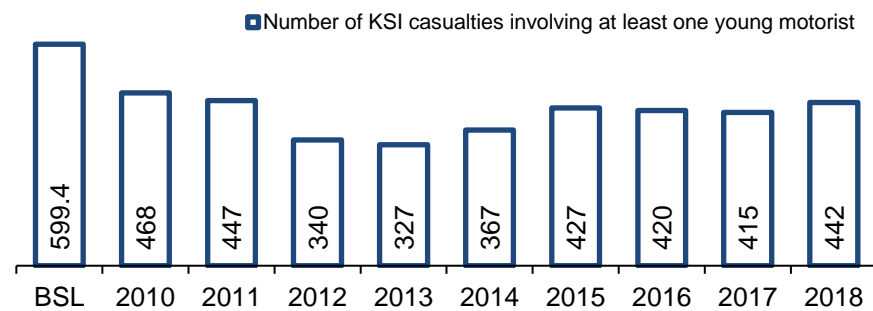


Figure 5-21 Fatalities and KSI casualties involving young motorists

**3,271 casualties involving young motorists**

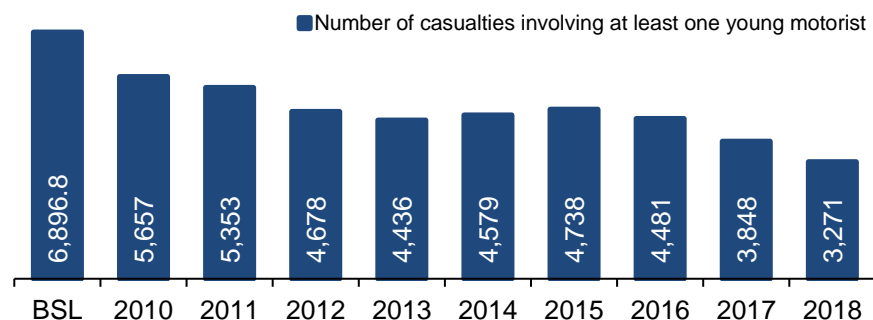


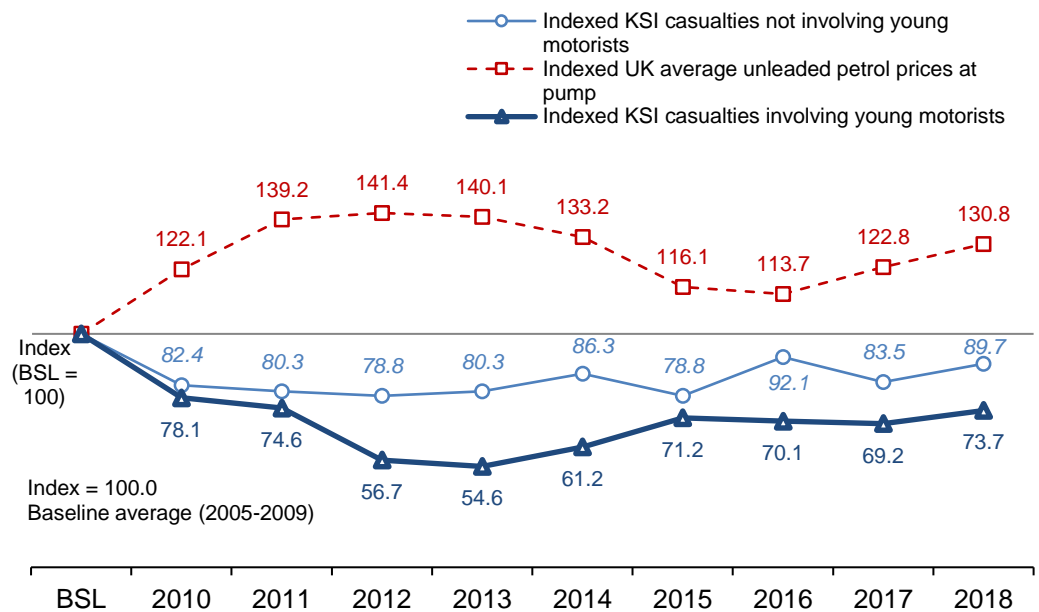
Figure 5-22 Casualties involving young motorists

## 5.6.2. Cost of motoring effect on casualties involving young motorists

Figure 5-23 compares the change of UK average petrol prices and KSI casualties involving young motorists, indexed to their respective baseline averages (2005-2009). It can be observed that the two parameters potentially correlate, with an increase in petrol prices typically corresponding with a decrease in KSI casualties involving young motorists. However, 2018 is an exception to this correlation.

Figure 5-23 also shows that KSI casualties involving young motorists have increased by 4.5 index points from 2017. The KSI casualties not involving young motorists also increased by 6.2 index points between the years (2017 to 2018) but its trajectory is not as closely correlated to fuel prices.

**Average UK cost of petrol at pump**  
 125.2 pence  
 ↑ 30.8 per cent since the BSL



**Notes:**

- (a) KSI casualties not involving young motorists represent the number of KSI casualties where no young motorists were involved.
- (b) Data sourced from gov.uk, Department of Energy & Climate Change<sup>25</sup>.

**Figure 5-23 Index of changes in UK average petrol price and KSI casualties involving/not involving young motorists**

<sup>25</sup> UK fuel prices sourced from Table 4.1.2 average annual retail prices of petroleum products and a crude oil price index UK

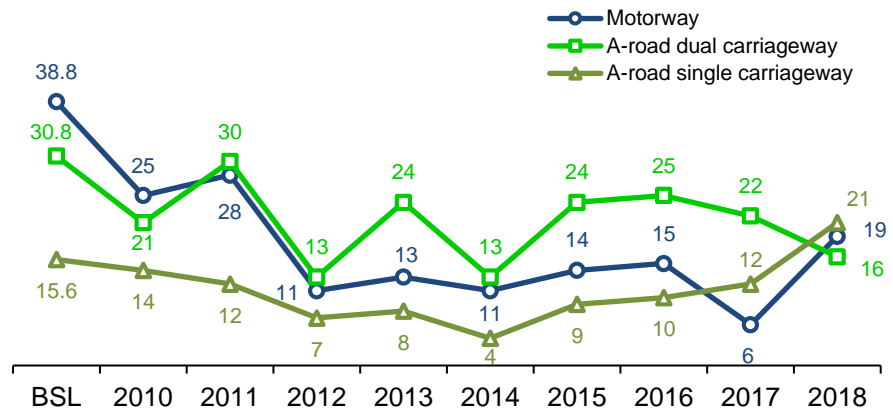


### 5.6.3. Casualties involving young motorists by road classification

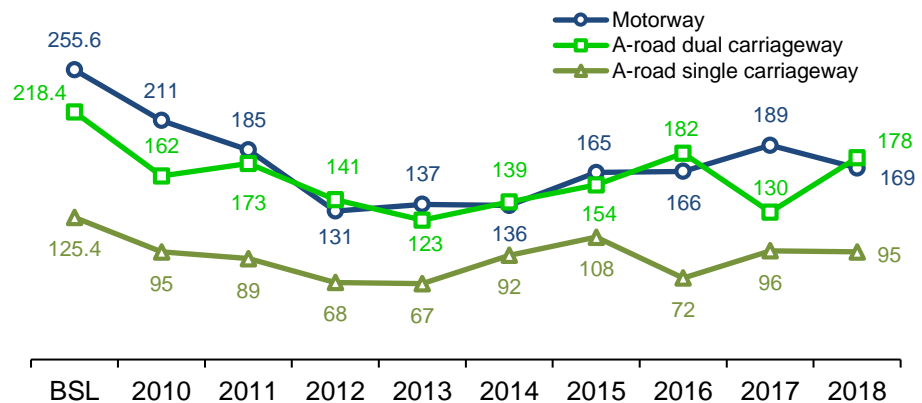
Appendix Table K-3 provides the number of casualties involving young motorists by road classification and severity. The trend over time of the number of casualties, tabulated in Appendix Table K-3, is presented in Figure 5-24 by road classification and severity.

Figure 5-24 shows that there were increases in fatalities across motorways and A-road single carriageways in 2018, compared to 2017. The opposite trend is shown for the number of KSI casualties across all classifications between 2017 and 2018, including a significant increase in A-road dual carriageways from 130 in 2017 to 178 in 2018.

#### Fatalities involving young motorists



#### KSI casualties involving young motorists



#### Casualties involving young motorists

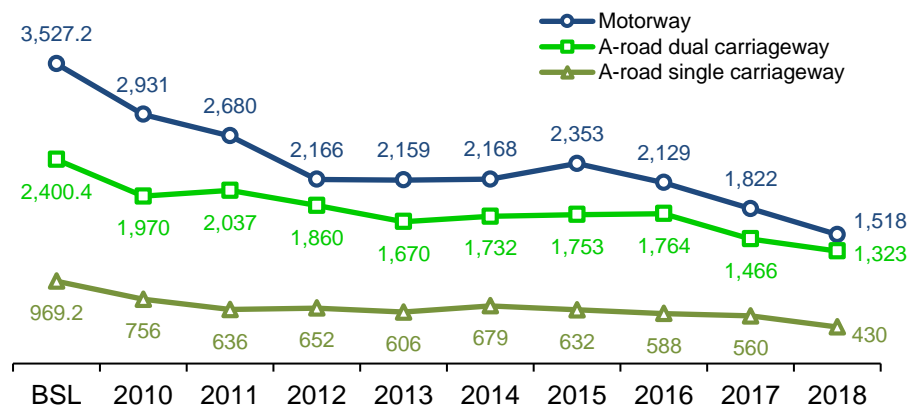


Figure 5-24 Casualties involving young motorists by severity and road class

## 5.6.4. Contributory factors associated with young motorists

The number of KSI casualties involving young motorists for the top 10 contributory factors are highlighted in Table 5-13. The top 10 contributory factors are grouped under “driver/rider error or reaction”, “injudicious action”, “behaviour or inexperience”, “impairment or distraction” and “road environment” groupings.

The contributory factor related to the highest number of KSI casualties involving young motorists was “loss of control” which contributed to 62 KSI casualties.

Of note, eight of the top 10 contributory factors listed in Table 5-13 also appear in the top 10 contributory factors attributed to all KSI casualties in 2018 (Appendix Table I-5); the exceptions were “exceeding speed limit”, and “learner or inexperienced driver/rider”.

**Table 5-13 Top 10 contributory factors for KSI casualties involving young motorists, 2018**

Rank	Contributory Factor	2018	Percentage of KSI casualties
1	410 Loss of control	62	14.0%
2	405 Failed to look properly	57	12.9%
3	406 Failed to judge other person’s path or speed	44	10.0%
4	602 Careless, reckless or in a hurry	41	9.3%
5	306 Exceeding speed limit	28	6.3%
6	509 Distraction in vehicle	26	5.9%
7	103 Slippery road (due to weather)	24	5.4%
8	307 Travelling too fast for conditions	22	5.0%
9	605 Learner or inexperienced driver/rider	22	5.0%
10	403 Poor turn or manoeuvre	20	4.5%

Key (CF groups):

	Driver/Rider error or reaction		Injudicious action		Behaviour or inexperience
	Impairment or distraction		Road environment		

Notes:

(a) Table reports the number of KSI casualties involving at least one young motorist where the specified contributory factor was recorded at least once.

(b) In 2018, there was a total of 442 KSI casualties involving young motorists.

The top 5 contributory factors attributed to collisions with young motorists are listed below and relate to the total number of collisions where at least one of the factors was present in the collision and are not necessarily attributed directly to the young motorist. The top 5 factors recorded at least once in a collision involving a young motorist are:

- Failed to look properly
- Failed to judge other person’s path or speed
- Careless, reckless or in a hurry
- Loss of control
- Following too close

## 5.7. Older and Elderly Casualties

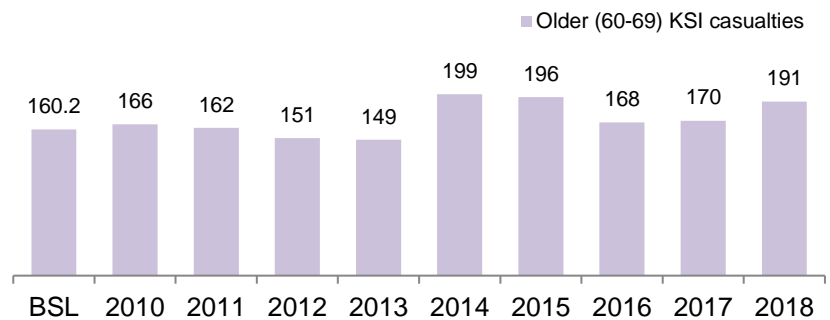
This section gives an overview of Older (60-69) and Elderly (70+) KSI casualties.

### 5.7.1. Summary of older and elderly casualties

From Section 3.3.2 it can be seen that of the casualty age groups only Older (60-69) and Elderly (70+) had more KSI casualties in 2018 than the baseline average, this is reiterated in Figure 5-25.

Figure 5-26 shows the percentage change in population from the baseline period (2005 to 2009) to 2018 by age groups. It can be seen that the Older and Elderly are the only groups above the average increase for England. This growth in population for these age groups may, in part, be a contributor for increased number of KSI casualties.

**Older (60-69)**  
191 KSI casualties



**Elderly (70+)**  
172 KSI casualties

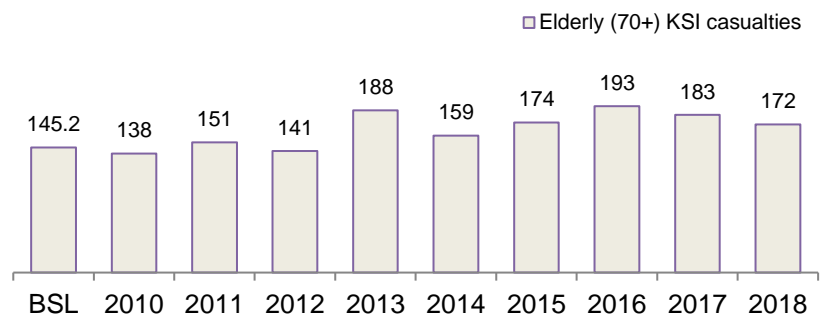


Figure 5-25 Older and Elderly KSI casualties by year

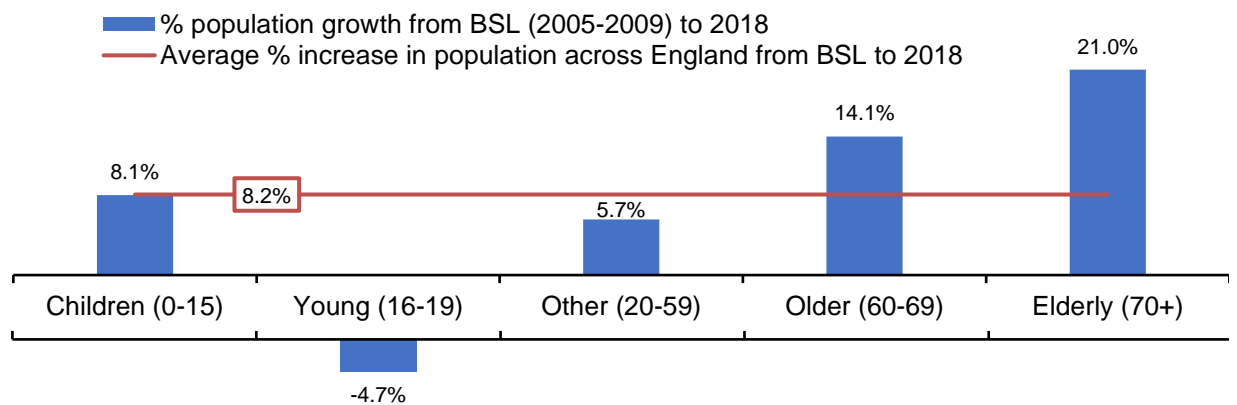
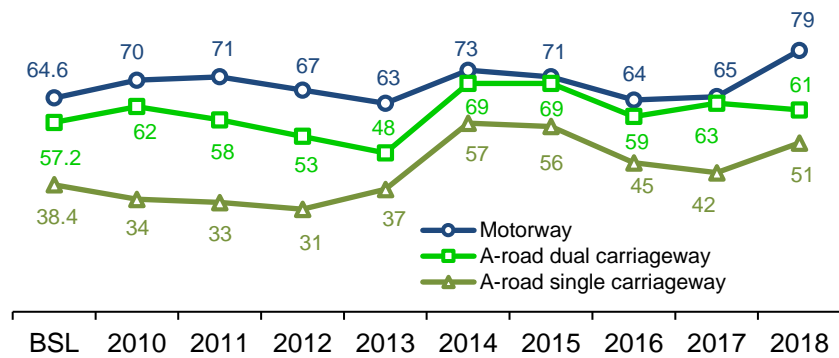


Figure 5-26 Percentage change in population from BSL to 2018 by age groups

Figure 5-27 shows the Older and Elderly KSI casualties by road class. It can be seen that motorway had the most (79) Older KSI casualties but the fewest (55) Elderly in 2018. It can also be seen that the number of Older KSI casualties increased on A-road single carriageway, from 42 in 2017 to 51 in 2018. The opposite can be said for Elderly KSI casualties on A-road single carriageway which decreased, from 71 in 2017 to 60 in 2018. Both the Older and Elderly KSI casualties on A-road dual carriageway decreased, with Elderly decreasing from 64 in 2017 to 57 in 2018.

Figure 5-28 shows Older and Elderly KSI casualties in 2018 by casualty type. It can be seen that for both Older and Elderly the majority of KSI casualties were car occupants in 2018, 131 and 144 respectively.

### 79 Older (60-69) KSI casualties on Motorways



### 60 Elderly (70+) KSI casualties on A-road single carriageways

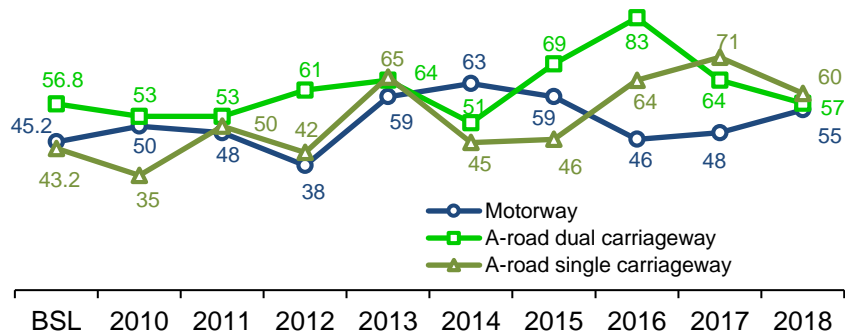


Figure 5-27 Older and Elderly KSI casualties by road class

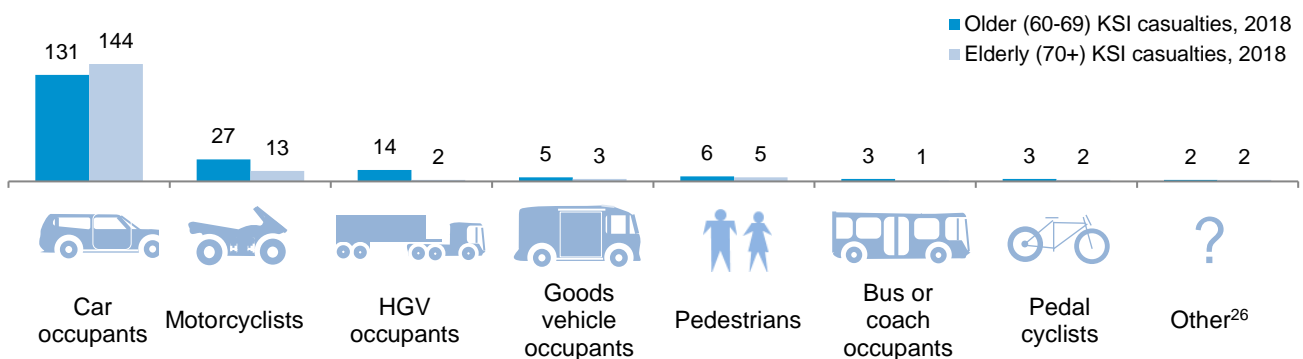


Figure 5-28 Older and Elderly KSI casualties by type, 2018

<sup>26</sup> Other includes any ridden horse, occupants of other vehicles, and unknowns

## 5.8. Weather

This topic of interest analyses the effects of weather on the SRN. Weather events (rain, snow and fog or mist) recorded along with the casualties, in 2018, equalled 2,092 and was equivalent to 15.6 per cent of the total 13,380 casualties on the SRN; fine weather conditions were recorded in 81.1 per cent of casualties.

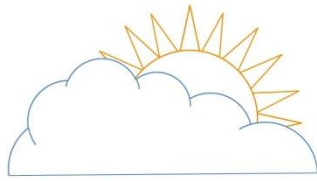
Appendix Table M-1 to Table M-16 provide additional breakdowns of collisions and casualties by weather group, road classification, contributory factors, severity, vehicle type and skidding.

### 5.8.1. Casualties by weather type

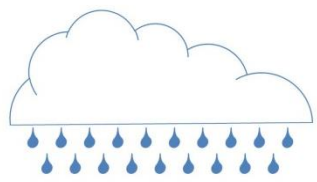
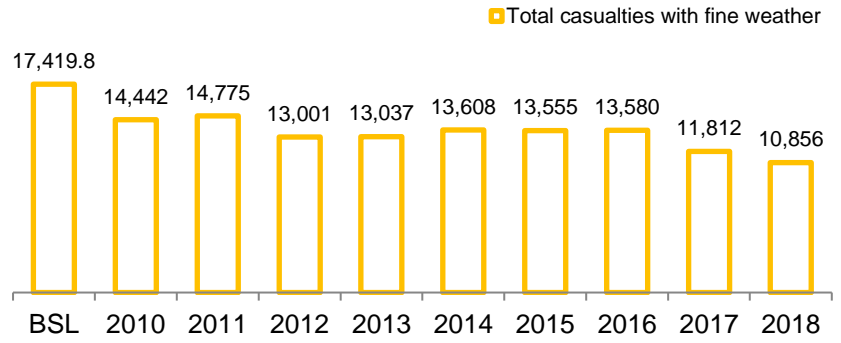
Figure 5-29 shows the number of total casualties by weather group for the years 2010 to 2018. Between 2017 and 2018, the following changes occurred in total casualty numbers during weather events:

- The number of casualties during snow increased to 276 from 120
- The number of casualties during rain decreased to 1,750 from 1,823
- The number of casualties during fog or mist decreased to 66 from 107

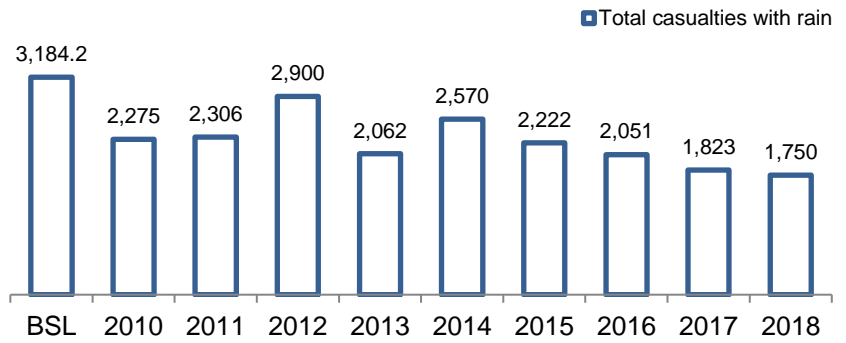
Appendix Table M-1 shows a further breakdown by severity.



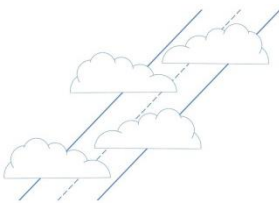
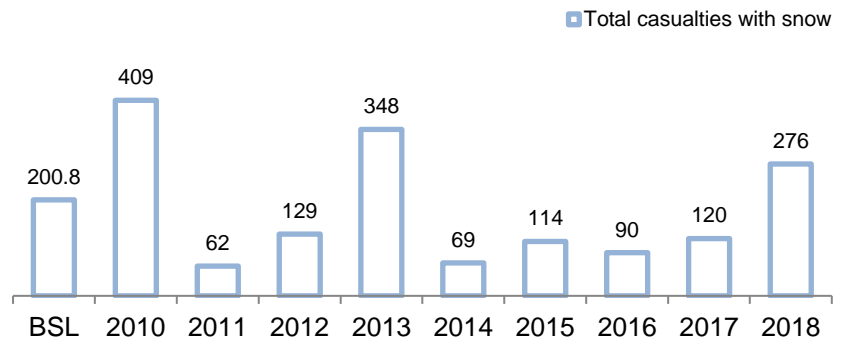
Fine



Rain



Snow



Fog or mist

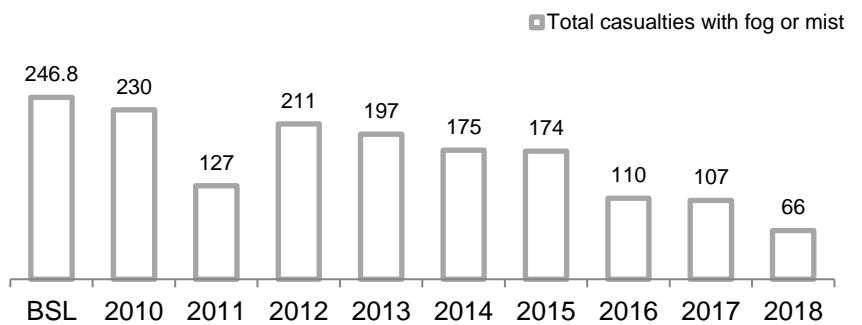


Figure 5-29 Casualties by weather group and year

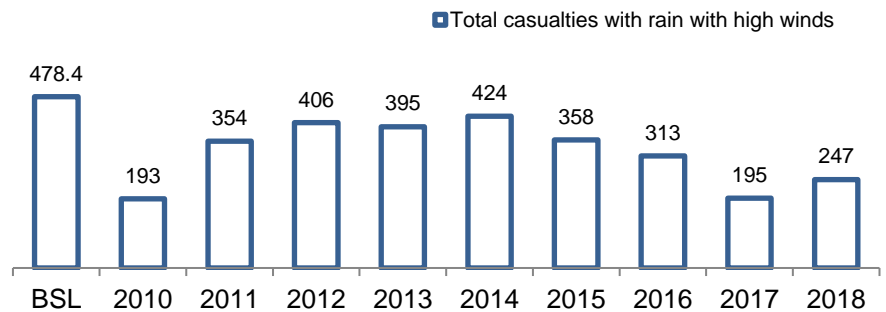
## 5.8.2. Casualties by harsh weather type

This section provides total casualties arising in harsh weather conditions (rain with high winds, and snow with and without high winds) based on the weather categories in STATS19.

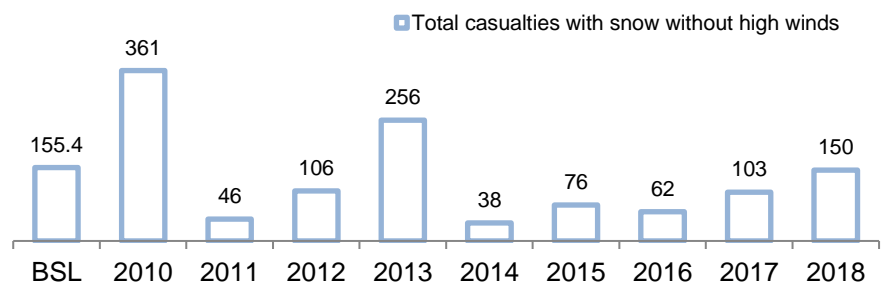
Figure 5-30 shows the number of total casualties by weather severity for the years 2010 to 2018. In 2018, the following occurred in total casualty numbers during harsh weather events:

- The number of casualties during rain with high winds is equivalent to 14.1 per cent of total casualties during rainy weather condition (247 of 1,750).
- The number of casualties during snow without high winds is equivalent to 54.3 per cent of total casualties during snowy weather condition (150 of 276).
- The number of casualties during snow with high winds is equivalent to 45.7 per cent of total casualties during snowy weather condition (126 of 276).

### Rain with high winds



### Snow without high winds



### Snow with high winds

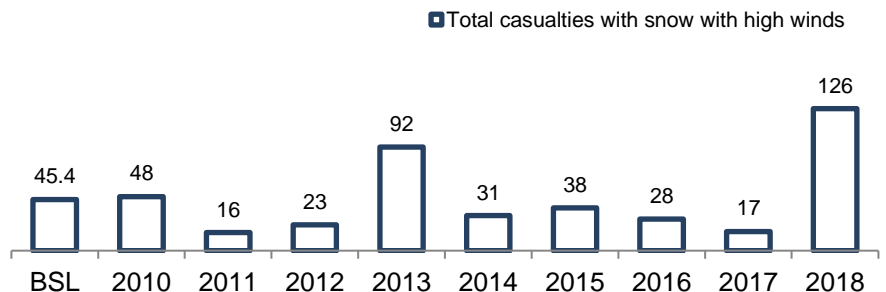


Figure 5-30 Casualties by weather group and year

### 5.8.3. Casualties against measured temperature and rainfall

The distribution of casualties during rainfall by month in 2018 is shown in Figure 5-32. It can be seen that December has the highest number of casualties with 285.

Figure 5-32 and Figure 5-34 show that there is not a strong correlation between the two values, except perhaps between May to August which had the lowest number of casualties during rainfall and the lowest average UK monthly rainfall.

The casualty data along with measured air temperature and rainfall for 2018 are provided in Figure 5-31, Figure 5-33 and Figure 5-34. From the figures it can be observed that in 2018:

- **Quarter 1 (Jan to Mar)** – casualty values were at their lowest annually (*average of 984 per month*) corresponding with low temperatures (4.5°C to 6.5°C) and high/moderate rainfall
- **Quarter 2 (Apr to Jun)** – casualty values were high (*average of 1,172 per month*) through increasing air temperature but lowest rainfall
- **Quarter 3 (Jul to Sep)** – casualty values were at their highest (*average of 1,200 per month*) corresponding with the highest temperatures (14.0°C to 16.5°C) and moderate/high rainfall; this period corresponds with the school summer holiday
- **Quarter 4 (Oct to Dec)** – casualty values were high (*average of 1,104 per month*) with declining temperatures and highest average rainfall.



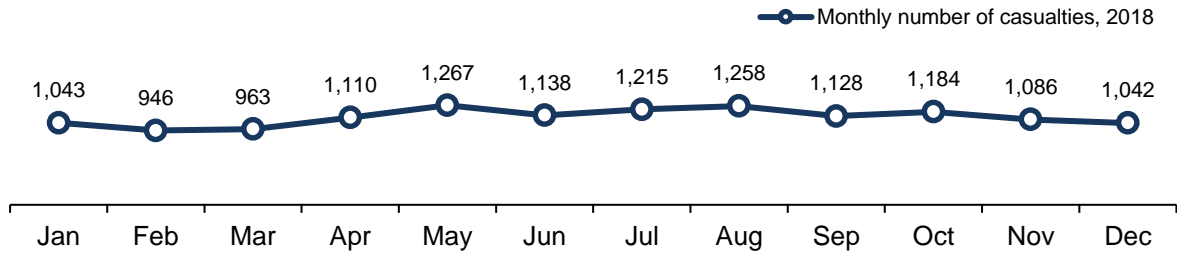


Figure 5-31 Number of total casualties by month, 2018

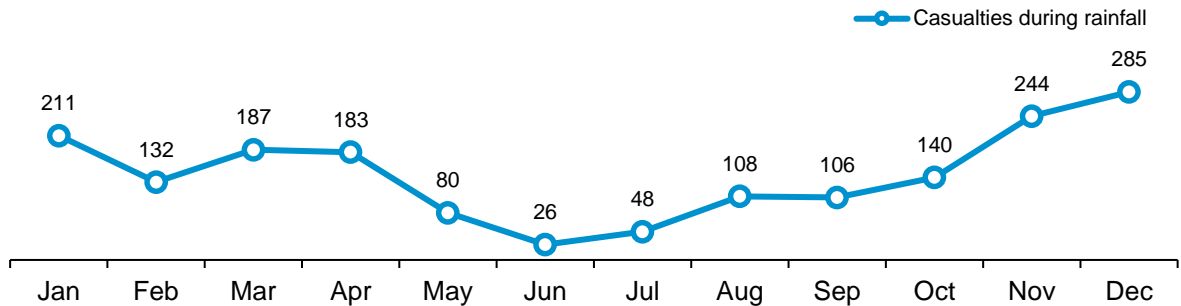


Figure 5-32 Total number of casualties during rainfall by month, 2018

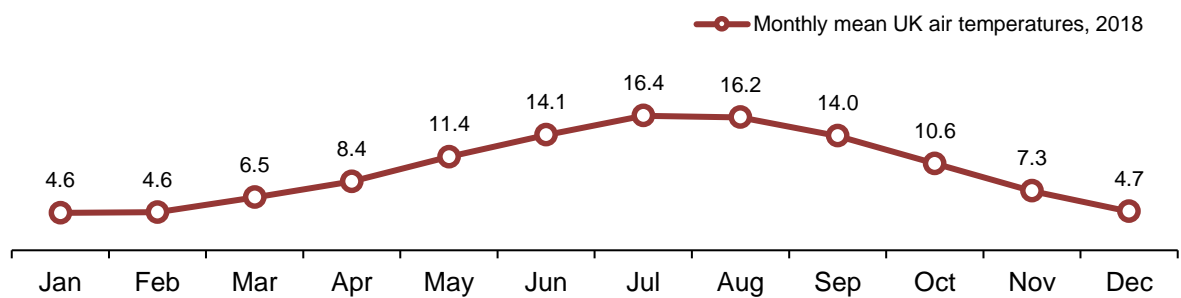


Figure 5-33 Mean UK air temperatures (degrees Celsius) by month, 2018

Notes:

(a) Temperature data sourced from DECC Energy Weather: Digest of United Kingdom energy statistics (DUKES).

(b) Accessed from <https://www.gov.uk/government/statistics/weather-digest-of-united-kingdom-energy-statistics-dukes>

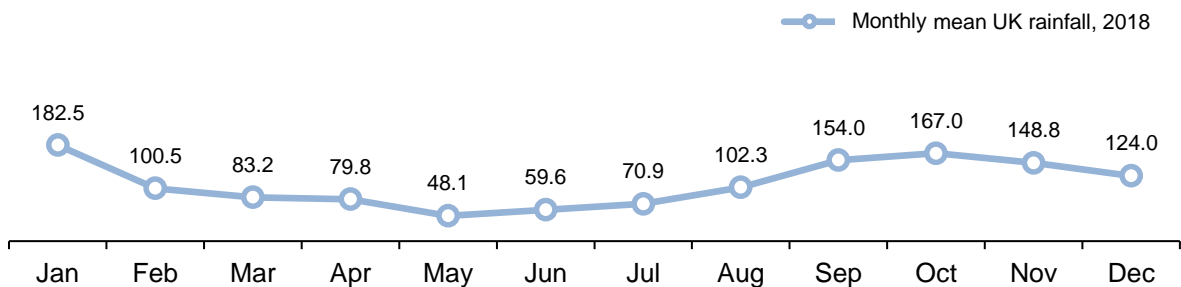


Figure 5-34 Mean UK rainfall (millimetres) by month, 2018

Notes:

(a) Rainfall data sourced from DECC Energy Trends Statistics.

(b) Accessed from <https://www.gov.uk/government/statistics/energy-trends-section-7-weather>

### 5.8.4. Collisions by weather related contributory factors

Table 5-14 shows the number of collisions during specific weather related contributory factors. It shows that the number of collisions during specific weather related contributory factors have increased for slippery road (due to weather) and for rain, sleet, snow, or fog from 2017 to 2018. ‘Slippery road (due to weather)’ showed the largest increase compared to 2017.

**Table 5-14 Number of collisions involving specific weather related contributory factors, 2017 and 2018**

Contributory Factor	2017	2018
103 Slippery road (due to weather)	557	593
307 Travelling too fast for conditions	555	522
706 Dazzling sun	115	100
707 Rain, sleet, snow, or fog	146	151
708 Spray from other vehicles	46	41

Appendix Table M-13 to Table M-16 provide further breakdown of the number of casualties and collisions attributed to the weather related contributory factors.

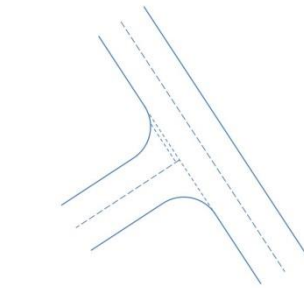
## 5.9. Junctions

This topic of interest focuses on collisions and casualties occurring at junctions. For additional statistics on junctions refer to Appendix Table P-1 to Table P-14 which provide breakdowns of collisions and casualties by junction detail, junction control, road name, vehicle type, driver age, contributory factors and severity.

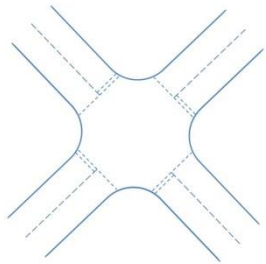
### 5.9.1. Junction summary

Figure 5-35 shows a breakdown of KSI casualties by junction type and year. It can be seen that crossroads and roundabouts increased in 2018 compared to 2017, with cross roads increasing to 28 from 15 in 2017. Slip road related KSI casualties decreased to 137 in 2018 from 155 in 2017. T or staggered junctions decreased to 109 in 2018 from 123 in 2017. These values, however, remain significantly higher to those of the crossroads.

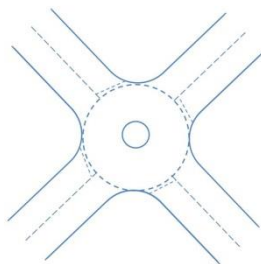
Figure 5-36 gives a summary of casualties reported at junctions. It can be seen that 3,240 casualties were recorded at junctions in 2018. Of the 429 KSI casualties at junctions, 137 were recorded at slip roads, 122 at roundabouts and 109 at T or staggered junctions; which equates to 85.8 per cent.



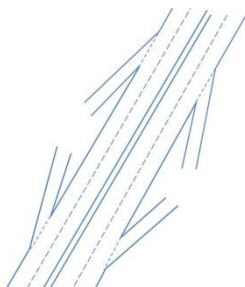
T or staggered



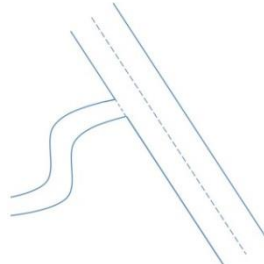
Crossroad



Roundabout



Slip road



Private drive

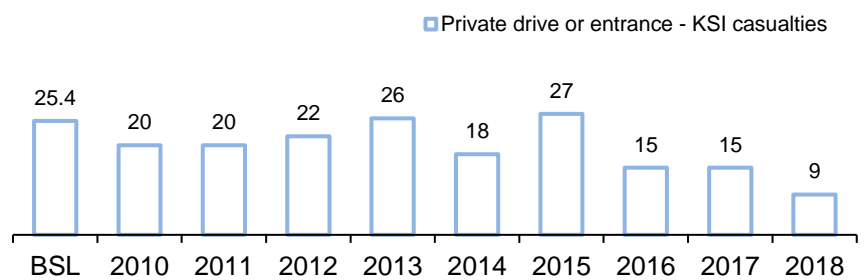
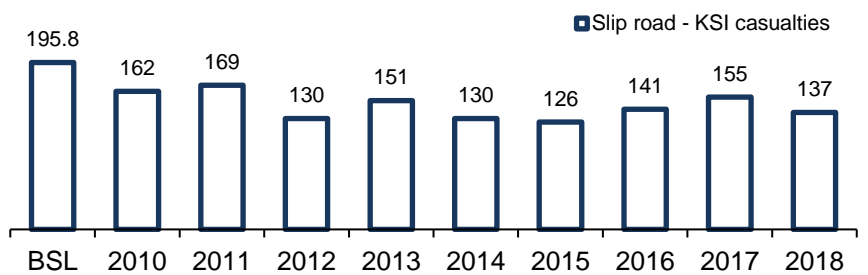
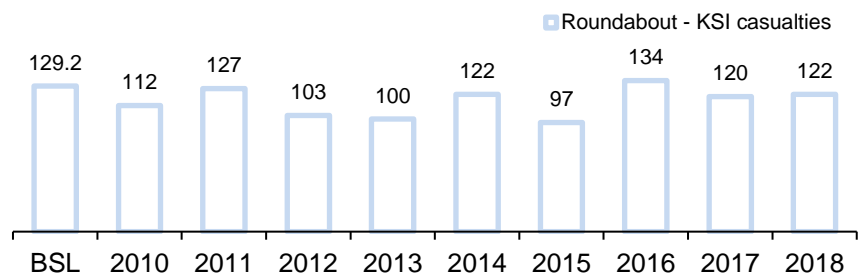
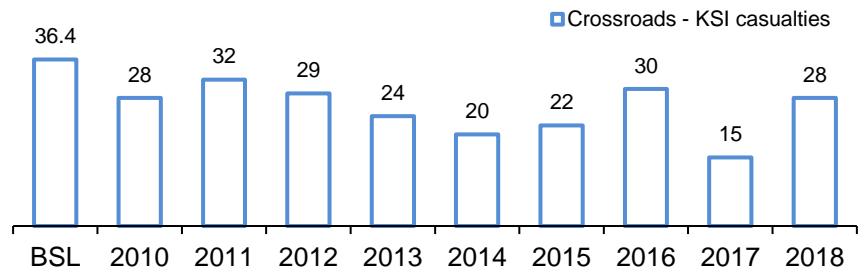
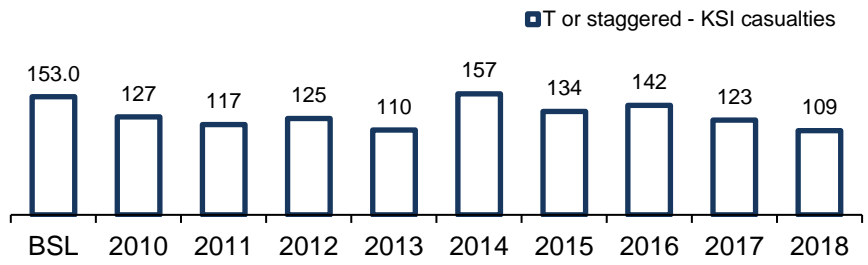
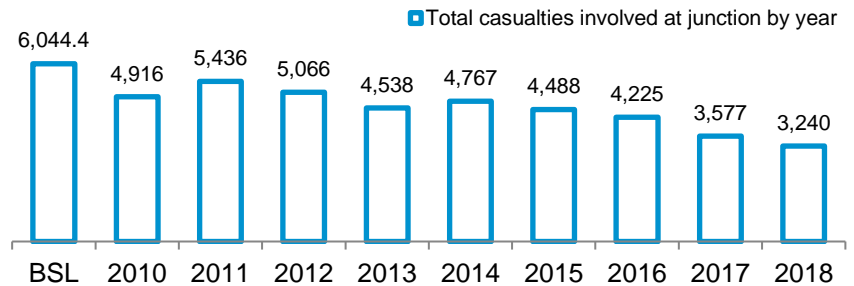


Figure 5-35 KSI casualties by junction detail and year

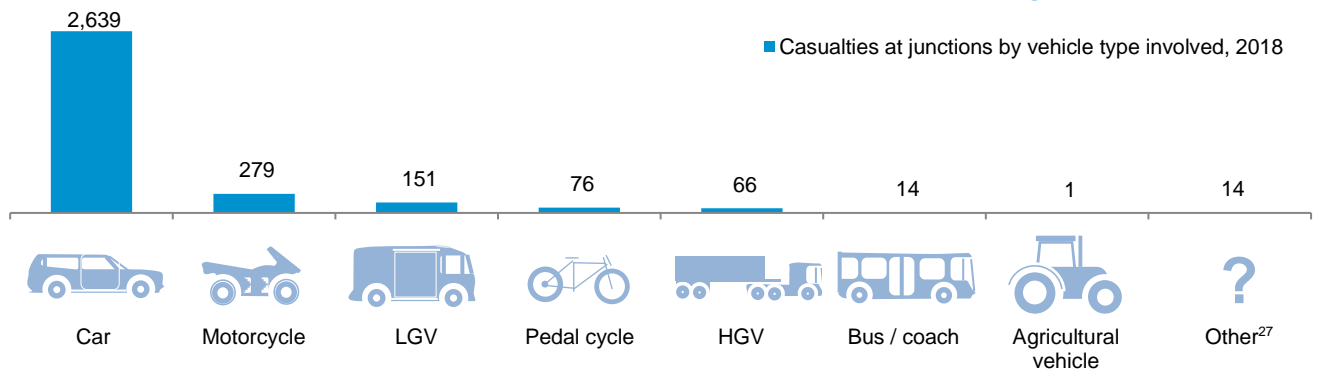


## 3,240 casualties recorded at junctions in 2018

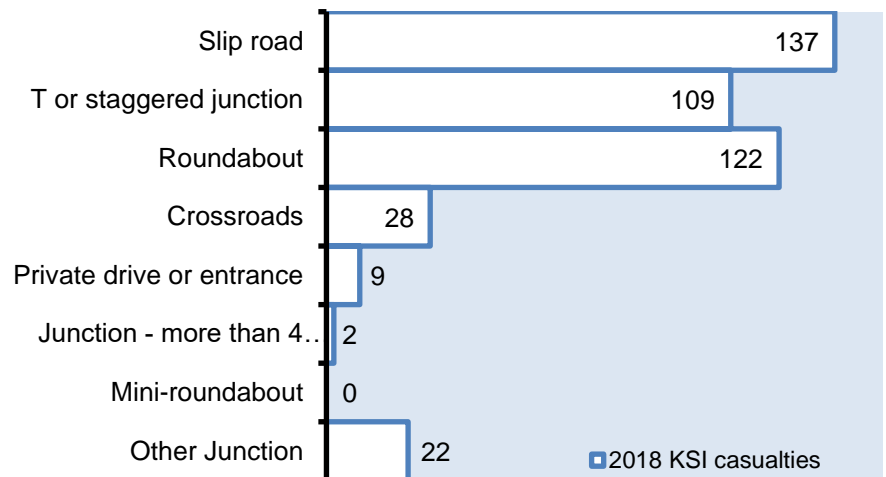
### Total casualties



### 2,639 of the 3,240 casualties at junctions in 2018 assigned to cars



### 429 KSI casualties recorded at junctions in 2018



KSI casualties	Young motorist (17-24)	Other motorist (25-59)	Older motorist (60-69)	Elderly motorist (70+)	Young rider (16-19)	Other rider (20-59)	Older rider (60-69)	Elderly rider (70+)
		53	180	23	45	6	90	7

Figure 5-36 Summary of casualties reported at junctions

<sup>27</sup> Other includes any ridden horse, tram, mobility scooter and other vehicles plus unknowns

## 5.10. Vehicle Defects

This topic of interest examines collisions and casualties where vehicle defects (“Tyres illegal, defective or under inflated”, “Defective lights or indicators”, “Defective brakes”, “Defective steering or suspension”, “Defective or missing mirrors<sup>28</sup>”, “Overloaded or poorly loaded vehicle or trailer”) are listed as at least one of the contributory factors. This indicates a lack of preparation or carelessness on the part of the driver or rider to ensure the roadworthiness of their vehicle, and therefore casualties associated with it as the main factor can be considered as preventable.

Appendix Table Q-1 to Table Q-20 provide additional breakdowns of collisions and casualties involving vehicle defects by road name, road/weather condition, casualty type, contributory factors and severity.

### 5.10.1. Casualties resulting from illegal, defective or under-inflated tyres

The number of total casualties resulting from illegal, defective or under inflated tyres by year is reported in Figure 5-37. The number of reported casualties related to illegal, defective or under inflated tyres has significantly reduced since the baseline period; with a reduction in 2018 to 132. This is a reduction of over 68% since the baseline period.

Figure 5-38 shows the number of KSI casualties related to illegal, defective or under inflated tyres has fluctuated since the baseline period; the 2018 value of 32 is 47.0 per cent below the baseline average of 60.4.

**132 casualties involving illegal, defective or under inflated tyres**

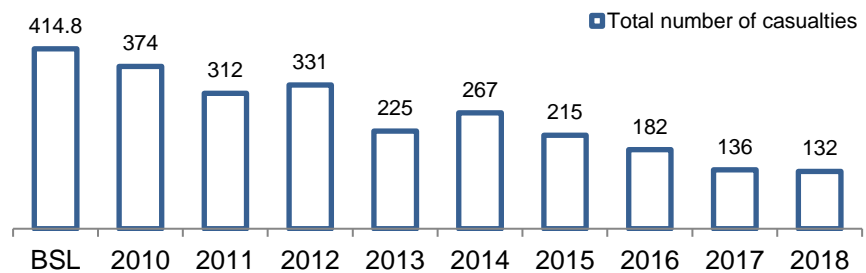


Figure 5-37 Casualties involving illegal, defective or under-inflated tyres by year

<sup>28</sup>Casualties with regard to “defective or missing mirror” is not significant in terms of values and therefore a sub-section with regard to this vehicle defect is not included in this report.

## 32 KSI casualties involving illegal, defective or under inflated tyres

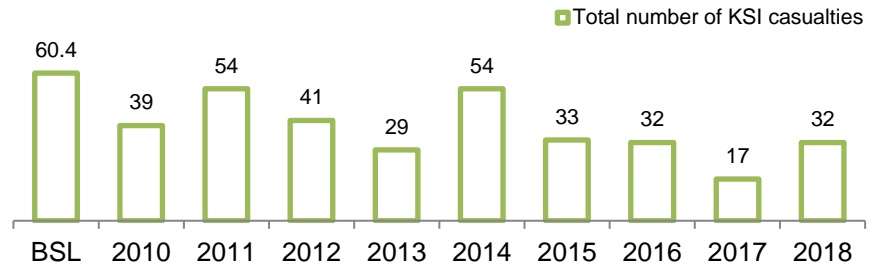


Figure 5-38 KSI casualties involving illegal, defective or under-inflated tyres by year

### 5.10.2. Casualties resulting from defective lights or indicators

The number of total casualties resulting from defective lights or indicators by year is reported in Figure 5-39. The number of reported casualties related to defective lights or indicators has fluctuated since the baseline period; with a reduction in 2018 to 9.

Figure 5-40 shows the number of KSI casualties related defective lights or indicators which has again fluctuated since the baseline period; the 2018 value of one is 4.4 below the baseline average of 5.4.

## 9 casualties involving defective lights or indicators

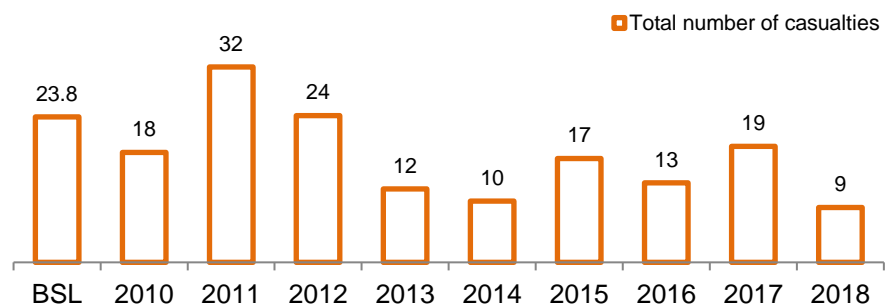


Figure 5-39 Casualties involving defective lights or indicators by year

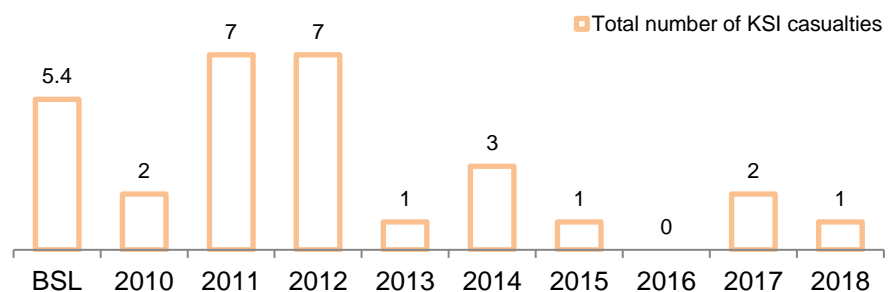


Figure 5-40 KSI casualties involving defective lights or indicators by year

### 5.10.3. Casualties resulting from defective brakes

The number of total casualties resulting from defective brakes by year is reported in Figure 5-41. The number of reported casualties related to defective brakes has generally decreased between 2014 and 2017 prior to the increase in 2018. The 2018 value is still 25.8 per cent below the baseline average of 103.8.

Figure 5-42 shows the number of KSI casualties related to defective brakes has increased from six in 2013 to 13 in 2018, which is only 1.2 below the baseline average of 14.2.

**77 casualties involving defective brakes**

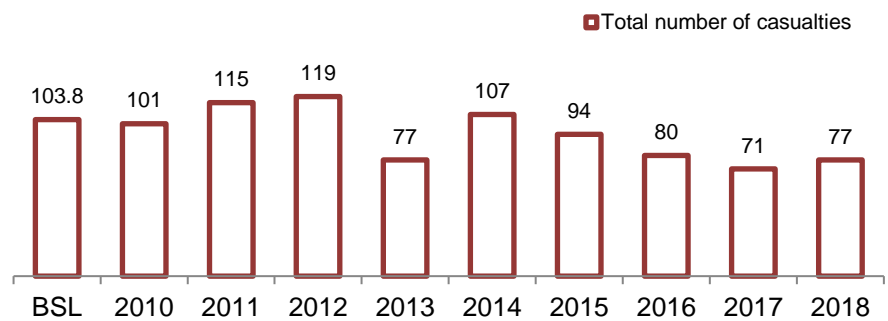


Figure 5-41 Casualties involving defective brakes by year

**13 KSI casualties involving defective brakes**

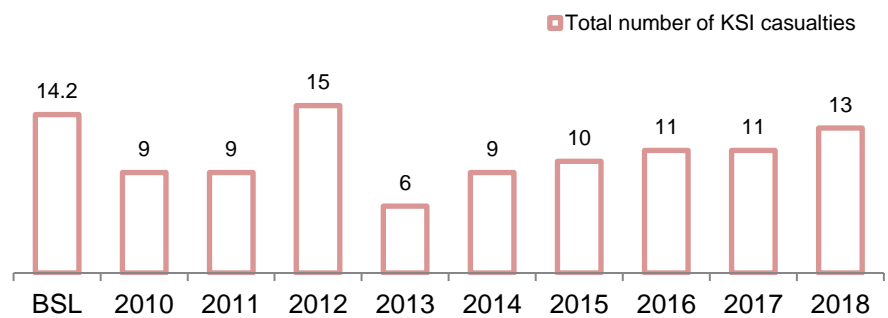


Figure 5-42 KSI casualties involving defective brakes by year

### 5.10.4. Casualties resulting from defective steering or suspension

The number of total casualties resulting from defective steering or suspension by year is reported in Figure 5-43. The number of reported casualties related to defective steering or suspension has generally decreased since the baseline period; with a reduction of 40.2 per cent in 2018 to 50.

Figure 5-44 shows the number of KSI casualties related to defective steering or suspension has fluctuated since the baseline period but with an increasing trend since 2016. The 2018 value of 14 is therefore above the baseline average of 11.6.



## 50 casualties involving defective steering or suspension

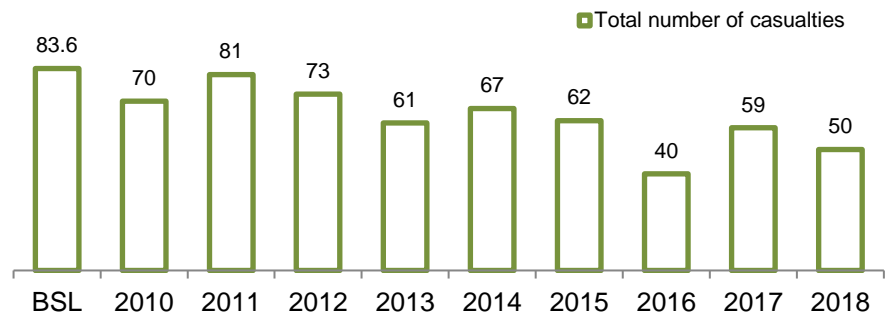


Figure 5-43 Casualties involving defective steering or suspension by year

## 14 KSI casualties involving defective steering or suspension

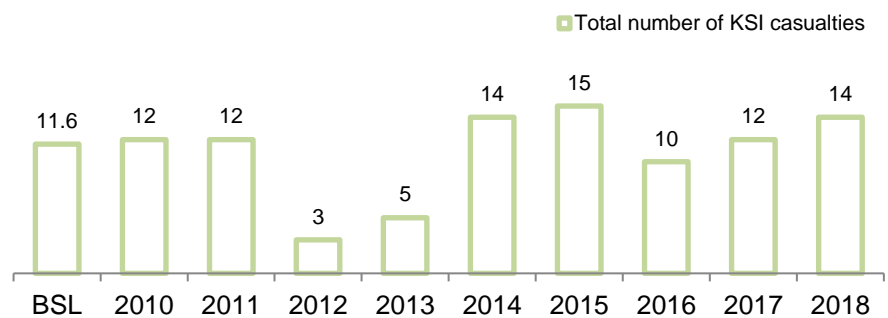


Figure 5-44 KSI casualties involving defective steering or suspension by year

### 5.10.5. Casualties resulting from overloaded or poorly loaded vehicle or trailer

The number of total casualties resulting from overloaded or poorly loaded vehicle or trailer by year is reported in Figure 5-45. The number of reported casualties related to overloaded or poorly loaded vehicle or trailer has reduced since the baseline period except for 2010; with a reduction in 2018 to 31.

Figure 5-46 shows the number of KSI casualties related to overloaded or poorly loaded vehicle or trailer has fluctuated but with a downward trend since the baseline period; the 2018 value of 4 is 80.4 per cent below the baseline of 20.4.

### 31 casualties involving overloaded or poorly loaded vehicle or trailer

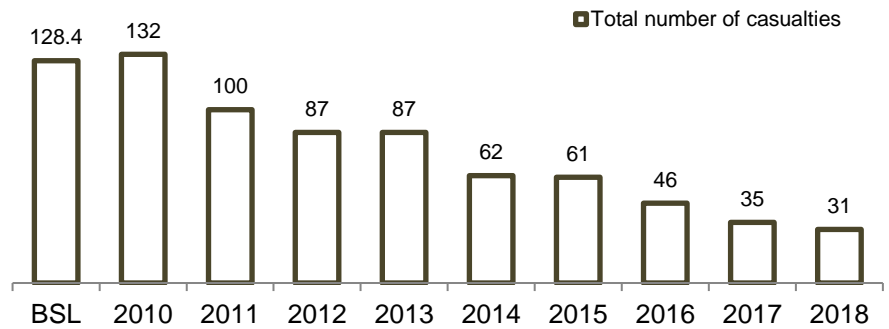


Figure 5-45 Casualties involving overloaded or poorly loaded vehicle or trailer by year

### 4 KSI casualties involving overloaded or poorly loaded vehicle or trailer

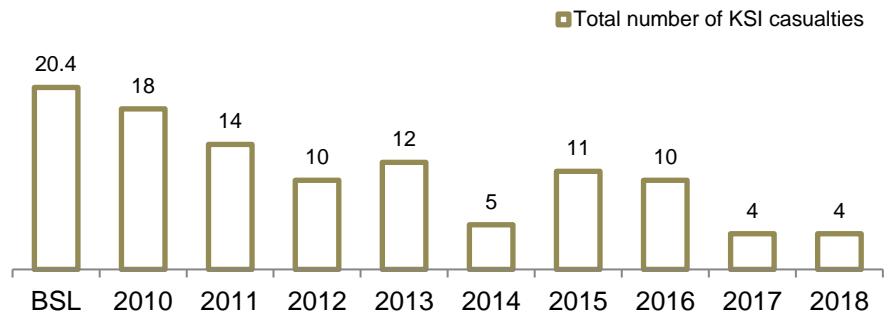


Figure 5-46 KSI casualties involving overloaded or poorly loaded vehicle or trailer by year

## 5.11. Goods Vehicles

This section considers the traffic and casualty statistics associated with goods vehicles. Heavy Goods Vehicles (HGVs) and Other Goods Vehicles (Other GVs or LGVs) rely heavily on the SRN to deliver goods to businesses in the UK and for export and import goods to and from foreign markets.

HGVs are classified and generally reported as goods vehicles where the vehicle gross weight is greater than 3.5 tonnes, whereas LGVs are those with the gross weight equal to or less than 3.5 tonnes. For the purpose of this report, goods vehicles with unclassified gross weight are also classed under LGVs (or Other GVs).

Appendix Table R-1 to Table R-18 provide additional breakdowns of collisions and casualties involving HGVs and LGVs by road name, casualty age, contributory factors and severity.

### 5.11.1. Changes in HGV and LGV traffic levels

Figure 5-47 outlines the change in traffic levels of HGVs and LGVs by year. The table shows that in 2018, the amount of HGV traffic (101.81 HMVM) was significantly less than that of LGV traffic (146.80 HMVM). The difference between HGV and LGV traffic levels has more than tripled from 13.66 HMVM in 2010 to 44.99 HMVM in 2018.

#### LGV

#### Estimated traffic (HMVM)

↑ 2.5 per cent from 2017 (143.18 to 146.80)

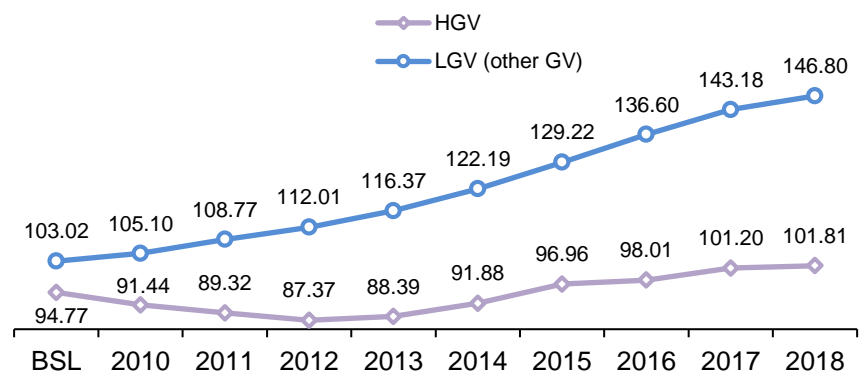
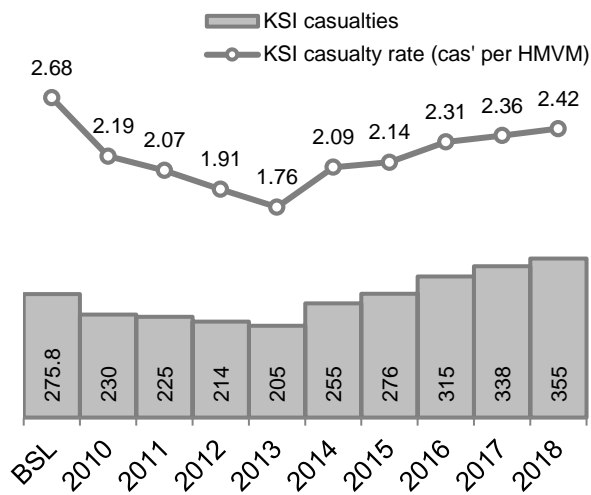


Figure 5-47 Estimated traffic levels for HGV and LGV (Other GV) on the SRN

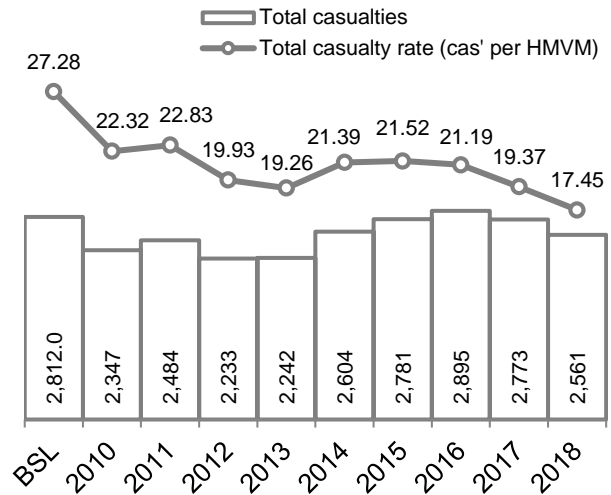
### 5.11.2. Comparison of casualties and casualty rates involving goods vehicles

Comparison of casualties and casualty rates involving either LGVs or HGVs is provided in Figure 5-48 and Figure 5-49 respectively. As shown by the figures, the likelihood of KSI or total casualties involving a HGV is greater than that for LGV. Comparing KSI casualty rates for 2018 shows that the KSI casualty rate for HGVs (3.50 KSI casualties per HMVM) is approximately one and a half times that of the value for LGVs (2.42 KSI casualties per HMVM).

It can be seen from Figure 5-48 that KSI casualty rates involving LGVs increased for the fifth time (2014 – 2018), whereas the total casualty rate generally decreased over the same period. The corresponding KSI casualties and total casualties (to a lesser extent) also followed a similar trend.



(a) KSI casualties and KSI rate involving LGVs

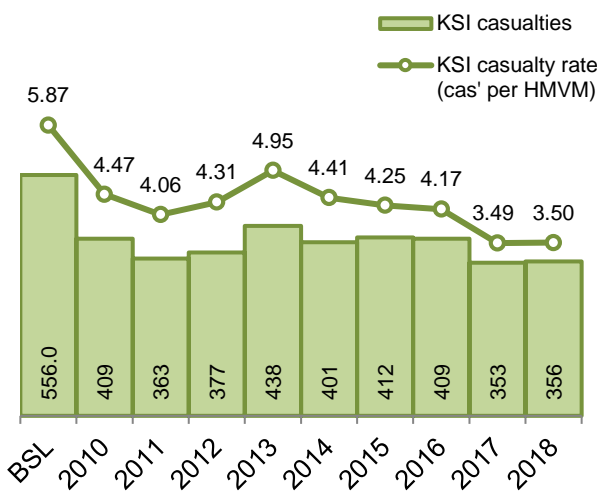


(b) Total casualties and total rate involving LGVs

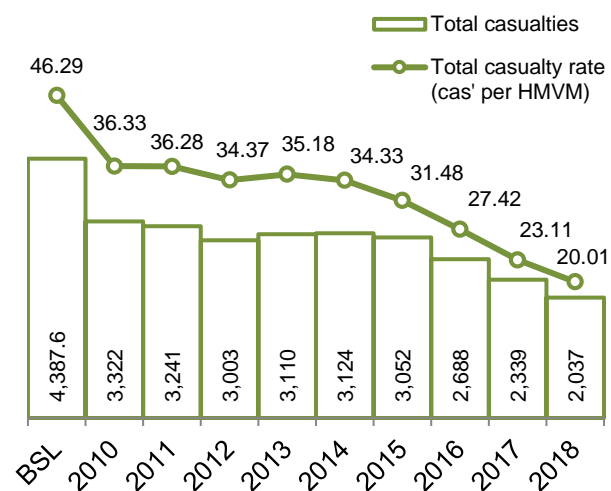
Notes:

- (a) Figure reports number of KSI and total casualties involving at least one LGV in a collision.
- (b) Casualty rates based on traffic values provided in Figure 5-47.

**Figure 5-48 Number of KSI and total casualties involving at least one LGV**



(a) KSI casualties and KSI rate involving HGVs



(b) Total casualties and total rate involving HGVs

Notes:

- (a) Figure reports number of KSI and total casualties involving at least one HGV in a collision.
- (b) Casualty rates based on traffic values provided in Figure 5-47.

**Figure 5-49 Number of KSI and total casualties involving at least one HGV**

### 5.11.3. HGV and LGV casualties by road classification and name

As seen in Figure 5-50 the number of KSI casualties involving at least one LGV increased on motorways and A-road dual carriageways in 2018 from 2017. The number of KSI casualties on both these roads have been increasing since 2013 (with exception in 2016 for A-road dual carriageways). The number of KSI casualties involving at least one LGV on A-road single carriageways decreased to 58 in 2018 from 64 in 2017 but remains above the baseline average of 50.0.

As seen in Figure 5-51, the number of KSI casualties involving at least one HGV on motorways and A- road dual carriageways decreased from 187 in 2017 to 176 in 2018 and 120 to 118. However, the number of KSI casualties on A-road single carriageways increased from 46 in 2017 to 62 in 2018.

**134 KSI casualties involving LGVs on A-road dual carriageway**

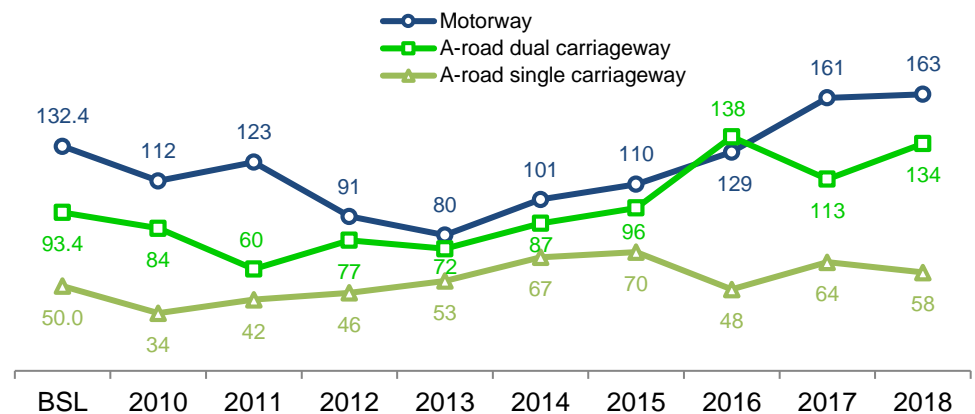


Figure 5-50 Number of KSI casualties involving at least one LGV

**62 KSI casualties involving HGVs on A-road single carriageways**

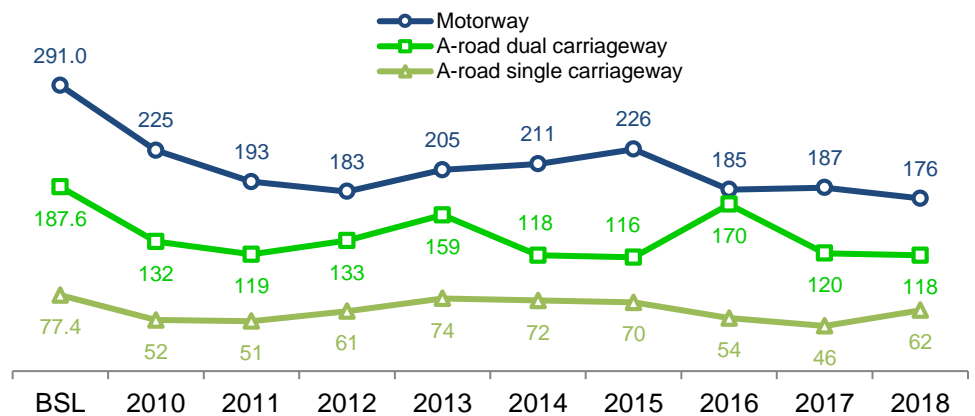


Figure 5-51 Number of KSI casualties involving at least one HGV

Table 5-15 shows the number of casualties involving LGVs by top 10 roads; the M25 had the most casualties involving LGVs in 2018 (246), and is an increase from 231 in 2017. In addition, there were notable rises in casualties involving LGVs between 2017 and 2018 on the A30 and M5 followed by the M20 and the A1(M).

Casualties involving LGVs by top 20 road names are provided in Appendix Table R-3.

Similarly, Table 5-16 shows the number of casualties involving HGVs by top 10 roads. It can be seen that considerably more casualties involving HGVs occurred on the M6, M25 and M1 than any other road on the SRN. This is despite the decrease in the number of casualties across all three roads in 2018. There was a notable increase in casualties on the A47; an increase from 37 in 2017 to 70 in 2018.

Casualties involving HGVs by top 20 road names are provided in Appendix Table R-5.

**Table 5-15 Casualties involving LGVs by top 10 roads**

Rank	Road Name	BSL (2005-2009)										2018 change from		
		2010	2011	2012	2013	2014	2015	2016	2017	2018	BSL (2005-2009)	2016	2017	
1	M25	192.2	155	202	185	143	180	219	294	231	246	28.0%	16.3%	6.5%
2	M6	244.4	190	216	162	157	232	237	200	225	211	-13.7%	5.5%	-6.2%
3	M1	275.4	183	192	216	169	171	163	210	216	184	-33.2%	-12.4%	-14.8%
4	A1	149.8	101	107	79	90	106	118	117	120	95	-36.6%	-18.8%	-20.8%
5	M20	28.2	22	12	31	23	30	27	30	69	82	190.8%	173.3%	18.8%
6	A30	24.8	23	12	30	32	60	52	51	49	78	214.5%	52.9%	59.2%
7	A27	66.6	64	64	51	85	60	69	67	69	73	9.6%	9.0%	5.8%
8	A1(M)	66.4	76	57	62	71	57	59	101	60	71	6.9%	-29.7%	18.3%
9	M5	81.4	62	128	49	40	57	43	51	51	62	-23.8%	21.6%	21.6%
10	A5	49.6	53	71	52	63	64	80	75	56	56	12.9%	-25.3%	0.0%

Notes:

- (a) Table reports the number of casualties involving at least one LGV.
- (b) Ranked by 2018.
- (c) Values may be skewed by amount of LGV traffic on a road.

**Table 5-16 Casualties involving HGVs by top 10 roads**

Rank	Road Name	BSL (2005-2009)										2018 change from		
		2010	2011	2012	2013	2014	2015	2016	2017	2018	BSL (2005-2009)	2016	2017	
1	M6	468.6	382	323	321	334	337	314	233	267	238	-49.2%	2.1%	-10.9%
2	M25	522.4	351	377	331	376	322	315	259	286	209	-60.0%	-19.3%	-26.9%
3	M1	494.8	358	292	315	292	333	336	254	215	155	-68.7%	-39.0%	-27.9%
4	M62	151.2	170	110	117	103	112	128	103	87	88	-41.8%	-14.6%	1.1%
5	A14	174.6	144	118	98	86	98	104	103	78	86	-50.7%	-16.5%	10.3%
6	A1	205.0	146	151	118	152	112	130	107	84	83	-59.5%	-22.4%	-1.2%
7	A47	40.4	49	36	27	32	33	34	38	37	70	73.3%	84.2%	89.2%
8	M4	119.4	112	94	100	85	101	73	79	51	62	-48.1%	-21.5%	21.6%
9	M5	136.8	89	151	124	57	62	69	88	91	58	-57.6%	-34.1%	-36.3%
10	A5	70.2	61	56	64	56	76	52	73	54	57	-18.8%	-21.9%	5.6%

Notes:

- (a) Table reports the number of casualties involving at least one HGV.
- (b) Ranked by 2018.
- (c) Values may be skewed by amount of HGV traffic on a road.

### 5.11.4. Contributory factors

Table 5-17 shows that the most common contributory factor assigned to LGV drivers (in terms of the resulting casualties) was “Failed to look properly”. Of note, for the 2,561 casualties involving a LGV driver, 9.7 per cent of the LGV drivers were recorded as “Following too close”.

As shown in Table 5-18, the contributory factor “Vehicle blind spot” which is in the “Vision affected by” group was in the top five contributory factors assigned to HGV drivers (in terms of the resulting casualties) in 2018. “Failed to look properly” was assigned to 23.5 per cent of HGV drivers in 2018.

**Table 5-17 Top 10 contributory factors assigned to LGV drivers by casualty, 2018**

Rank	Contributory Factor	2018	Percentage of casualties involving LGVs, 2018
1	405 Failed to look properly	496	19.4%
2	406 Failed to judge other person's path or speed	394	15.4%
3	308 Following too close	249	9.7%
4	602 Careless, reckless or in a hurry	184	7.2%
5	408 Sudden braking	106	4.1%
6	403 Poor turn or manoeuvre	104	4.1%
7	509 Distraction in vehicle	82	3.2%
8	307 Travelling too fast for conditions	81	3.2%
9	410 Loss of control	76	3.0%
10	503 Fatigue	67	2.6%

Key (CF groups):

	Driver/Rider error or reaction		Impairment or distraction		Injudicious action
	Behaviour or inexperience		Road environment		

Notes:

- (a) Table reports the number of casualties where the specified contributory factor was recorded against at least one LGV driver.
- (b) In 2018, there was a total of 2,561 casualties involving at least one LGV.

**Table 5-18 Top 10 contributory factors assigned to HGV drivers by casualty, 2018**

Rank	Contributory Factor	2018	Percentage of casualties involving HGVs, 2018
1	405 Failed to look properly	479	23.5%
2	406 Failed to judge other person's path or speed	331	16.2%
3	308 Following too close	125	6.1%
4	710 Vehicle blind spot	116	5.7%
5	602 Careless, reckless or in a hurry	110	5.4%
6	403 Poor turn or manoeuvre	100	4.9%
7	509 Distraction in vehicle	89	4.4%
8	408 Sudden braking	56	2.7%
9	303 Disobeyed double white lines	48	2.4%
10	706 Dazzling sun	45	2.2%

Key (CF groups):

	Driver/Rider error or reaction		Vision effected by		Injudicious action
	Behaviour or inexperience		Impairment or distraction		

Notes:

- (a) Table reports the number of casualties where the specified contributory factor was recorded against at least one HGV driver.
- (b) In 2018, there was a total of 2,037 casualties involving at least one HGV.

## 5.12. Motorcycle Users

This topic of interest analyses the number of motorcycle rider and/or passenger (motorcycle user) casualties occurring on the SRN. Additional data on this topic is provided in Appendix Table S-1 to Table S-10.

In 2018, motorcycle users accounted for 12.8% of fatalities (32 of 250) and 17.8 per cent of KSI casualties (353 of 1,987) on the SRN.

### 5.12.1. Motorcycle user casualties by severity

Figure 5-52 highlights the changes in motorcycle user fatalities and KSI casualties since 2010. From the figure it can be seen that the number of fatalities and KSI casualties in 2018 remained below the corresponding baseline average.

Assessing the trends in the figure below indicates that the number of motorcycle user KSI casualties has been fluctuating since the baseline.

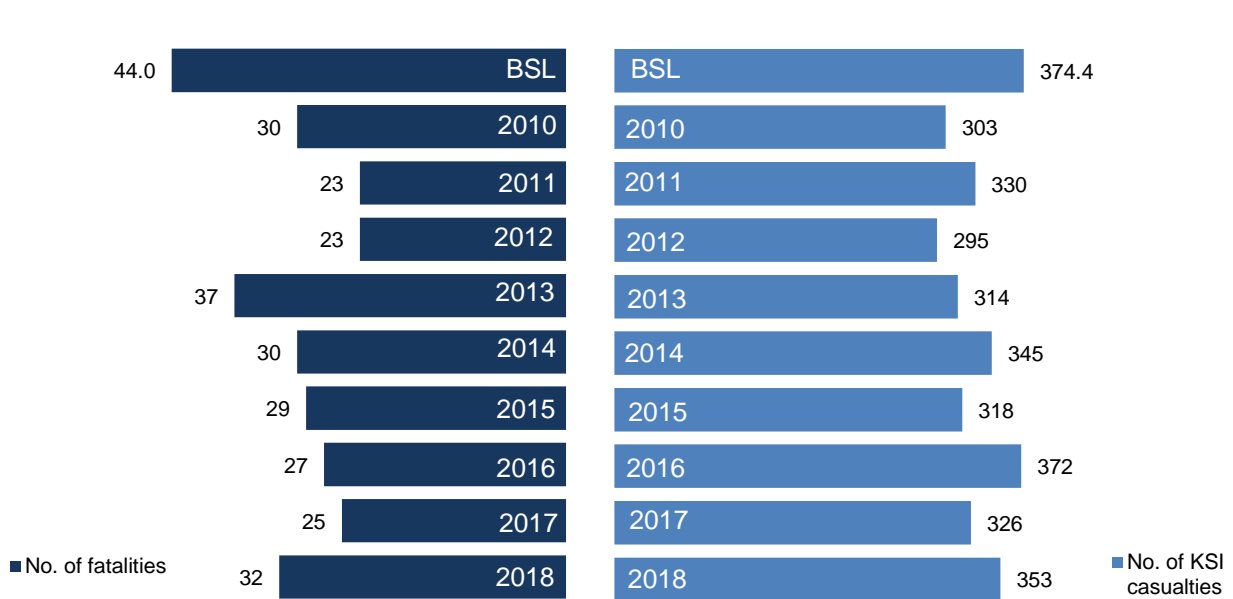


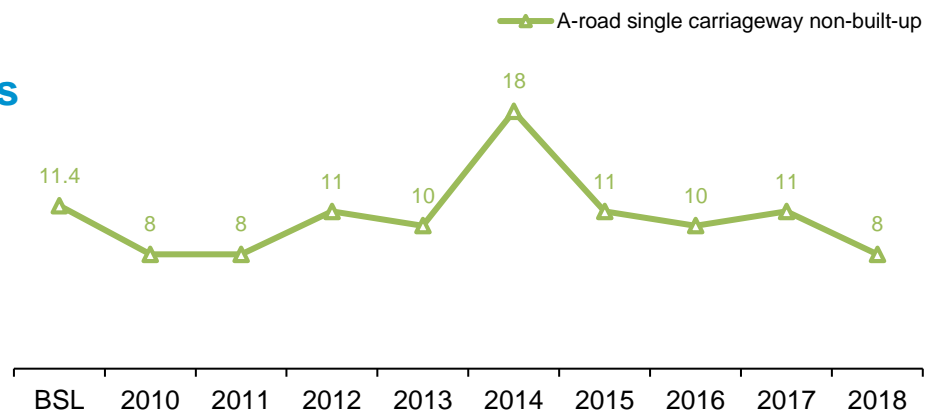
Figure 5-52 Number of motorcycle user fatalities and KSI casualties by year



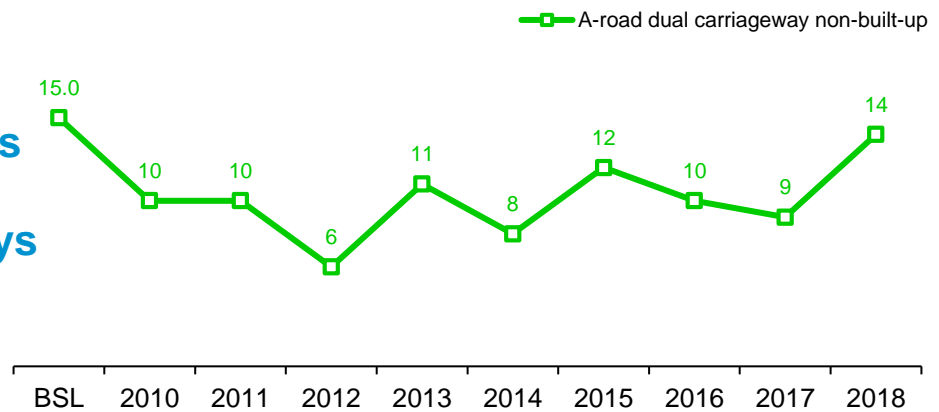
### 5.12.2. Casualties involving motorcycles by road classification and name

The trends for the number of fatalities involving motorcycle users on non-built-up (NBU) A-road single carriageways and non-built-up A-road dual carriageways are shown in Figure 5-53. The figure shows that the number of fatalities involving motorcycle users on NBU A-road single carriageways decreased to 8 in 2018 from 11 in 2017. The number of fatalities involving motorcycle users on NBU A-road dual carriageways increased to 14 in 2018 from 9 in 2017. The trend indicates that the number of fatalities for this road type is fluctuating around an average of 10 since 2010.

**Fatalities involving motorcycle users on NBU A-road single carriageways**  
8 fatalities



**Fatalities involving motorcycle users on NBU A-road dual carriageways**  
14 fatalities



*Note: There were nine fatalities involving motorcycle users on motorways and two on built-up A-roads (dual carriageway).*

**Figure 5-53 Fatalities involving motorcycle users on non-built-up A-road single and dual carriageways by year**

Figure 5-54 shows the number of KSI casualties involving motorcycle users by road classification. Each road type had a decrease in the number of KSI casualties from 2014 to 2015 followed by an increase in 2016, a decrease in 2017 and again an increase in 2018. It is apparent that motorcycle KSI casualties, on the motorway network, shows an increasing trend. From the figure it can be calculated that 360 KSI casualties involved a motorcycle. When this value is compared to that in Figure 5-52 (353) The majority of KSI casualties involving a motorcycle are actually motorcycle users.

## 112 KSI casualties involving motorcycle users on motorways

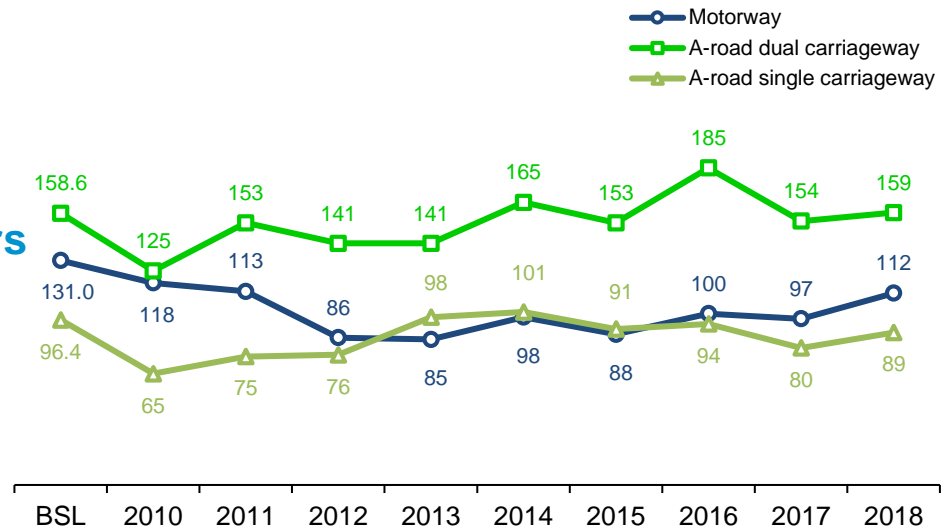


Figure 5-54 KSI casualties involving motorcycle users by road class and year

Table 5-19 lists casualties involving motorcycle users by top 10 roads. It can be seen that although the A5, which has less than half the motorcycle traffic of the M25, has 12 more casualties than M25.

Table 5-19 Casualties involving motorcycle users by top 10 roads

Rank	Road Name	BSL (2005-2009)											2018 change from		
			2010	2011	2012	2013	2014	2015	2016	2017	2018	BSL (2005-2009)	2016	2017	
1	A27	44.0	38	46	28	51	54	62	51	42	61	38.6%	19.6%	45.2%	
2	M1	54.2	49	21	24	23	38	15	15	11	43	-20.7%	186.7%	-	
3	A5	57.2	53	63	44	54	60	67	47	46	40	-30.1%	-14.9%	-13.0%	
4	A47	30.2	25	28	28	33	25	15	21	24	29	-4.0%	38.1%	20.8%	
5	M25	68.6	62	73	45	35	52	44	37	41	28	-59.2%	-24.3%	-31.7%	
6	A2	21.8	18	21	23	24	34	29	23	20	27	23.9%	17.4%	35.0%	
7	A46	31.4	22	21	24	18	24	37	34	32	26	-17.2%	-23.5%	-18.8%	
8	A38	33.6	27	35	45	30	38	33	44	25	22	-34.5%	-50.0%	-12.0%	
9	A1	42.2	29	29	27	28	30	16	24	22	21	-50.2%	-12.5%	-4.5%	
10	M4	36.8	27	36	27	27	23	21	30	20	21	-42.9%	-30.0%	5.0%	

Note:

- (a) Values in the table report the number of casualties where at least one motorcycle user was recorded as being involved.
- (b) Ranked by 2018.

## 5.13. Hard shoulders

This section provides collision and resulting casualty information involving motorway hardshoulders and A-road lay-bys.

### 5.13.1. Comparison between hardshoulders and lay-bys

Figure 5-55 shows the total number of casualties involving either motorway hardshoulders or lay-bys or A-road lay-bys at point of impact by road classification and year.

In 2018, 104 casualties occurred on motorways and 131 casualties occurred on A-roads, of which 103 were on A-road dual carriageways.

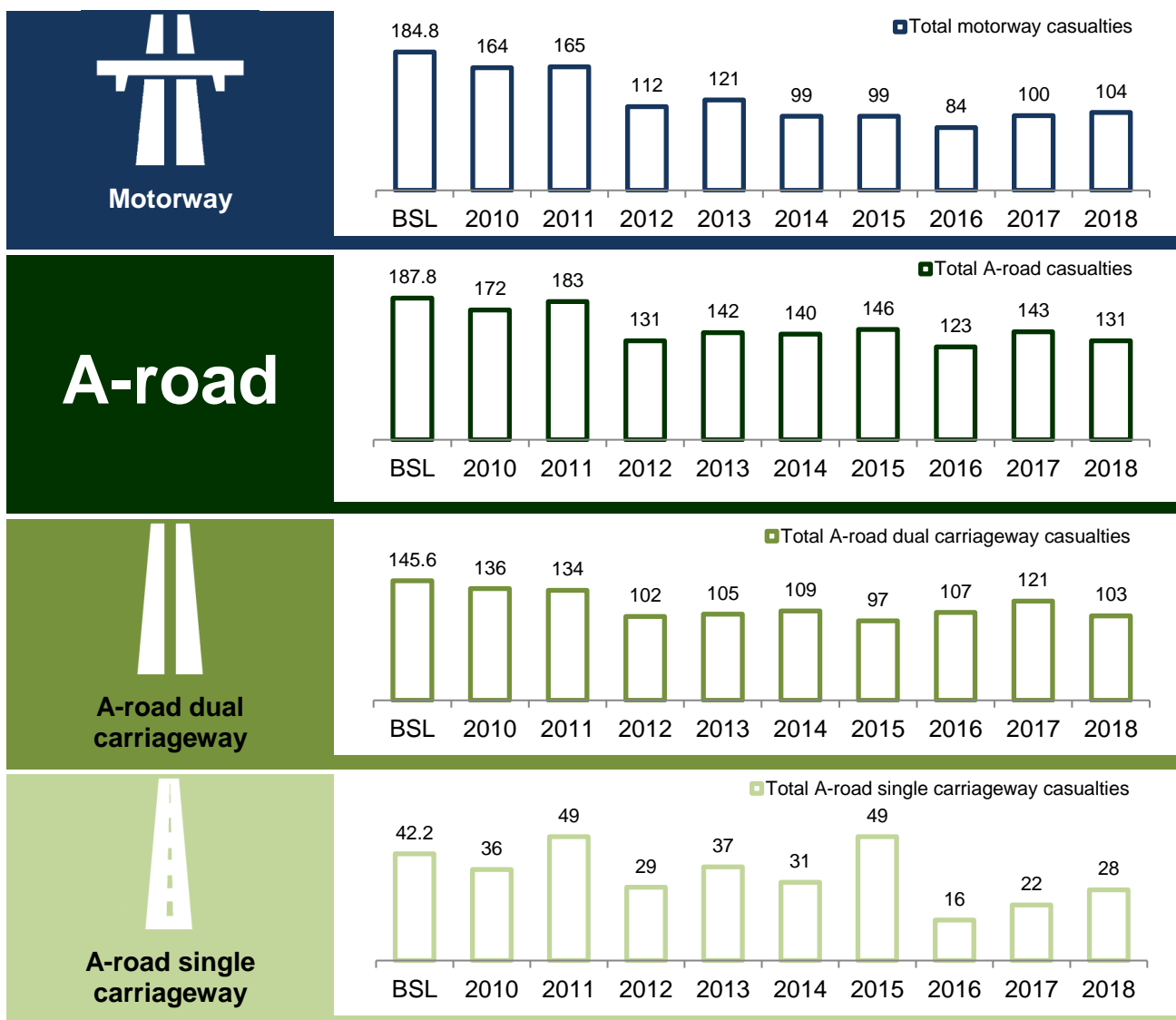


Figure 5-55 Casualties involving either a hardshoulder or lay-by by road classification and year

### 5.13.2. Hardshoulder and lay-by casualties resulting from fatigue or distraction

Figure 5-56 focuses specifically on the number of casualties involving hardshoulders and lay-bys linked to fatigue and distraction inside the vehicle. These factors are potentially attributed to the driver of the vehicle inadvertently drifting into the hardshoulder or lay-by and colliding with a stationary vehicle.

Figure 5-56 shows that the number of casualties involving hardshoulders or lay-bys resulting from fatigue has decreased to 21 in 2018 from 25 in 2017.

The number of casualties where distraction was involved has increased, by two, to 10 in 2018 from 8 in 2017.

**Fatigue**  
 ↑ 58.0 per cent from BSL (50.0)

**Distraction in vehicle**  
 ↓ 36.7 per cent from BSL (15.8)

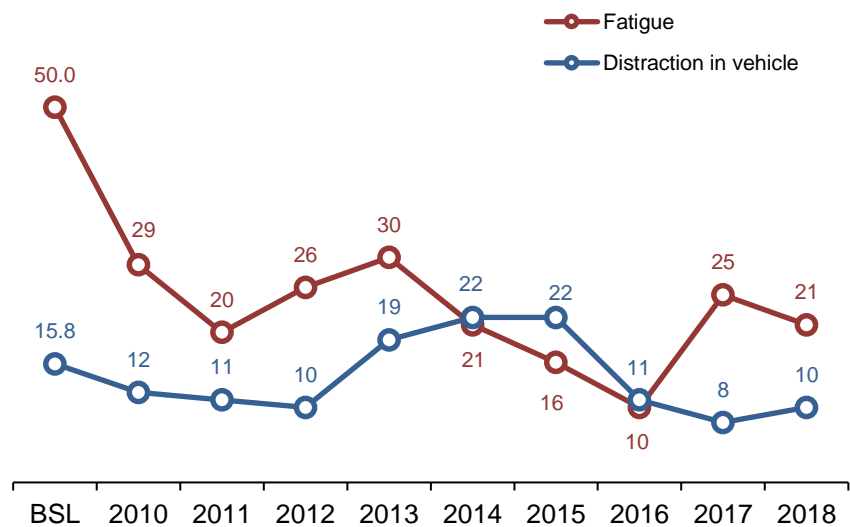


Figure 5-56 Casualties involving either a hardshoulder or lay-by resulting from fatigue or distraction inside the vehicle by year

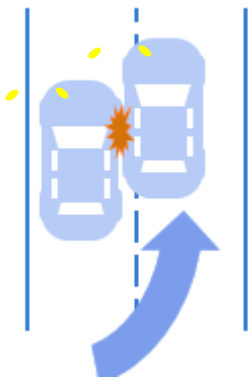
## 5.14. Collisions Type

This topic of interest analyses the number of collisions occurring on the SRN by collision type. Additional statistics on this are provided in Appendix Table U-1 to Table U-26.

The four most common types of collision are:

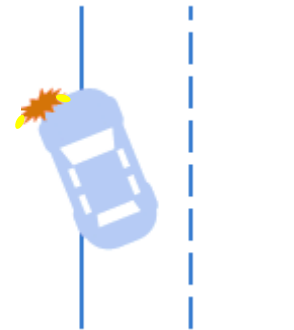
- Shunt
- Single vehicle run off
- Overtake
- Head on

A brief description of each of the four most common types of collision can be found in Figure 5-57.



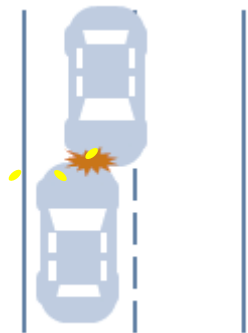
### Overtake:

A collision involving at least one vehicle recorded as overtaking another vehicle.



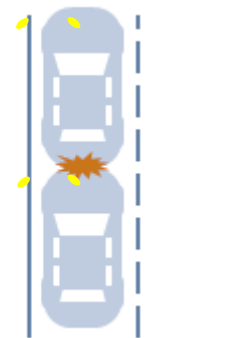
### Single vehicle run off:

A collision involving a single vehicle (excludes collisions involving pedestrians).



### Head on:

A collision involving at least two vehicles moving in opposite directions at point of impact, where both vehicles first point of impact was recorded as "Front". Vehicles that were parked, or where the vehicle movement was unknown are not included.



### Shunt:

A collision involving at least two vehicles moving in the same direction at point of impact, where one vehicle's first point of impact was recorded as "Front" and the other vehicle's as "Back". Vehicles that were parked, or where the vehicle movement was unknown are not included.

Figure 5-57 Diagrams of collision types

### 5.14.1. Casualties by collision type and severity

Table 5-20 provides a breakdown of the number of casualties by severity and collision type. When considering fatalities, associated with the four collision types, only shunt showed an increase from 2017 to 2018. The number of seriously injured casualties (and hence KSIs) of this collision type also increased over this period, but slightly injured casualties and consequently the total casualties decreased.

The figure shows that the majority of casualties are involved in shunt collisions. However, when considering the severity ratio (i.e. percentage of casualty severity to total casualty ratio) shunt collisions have the least KSI severity ratio (9.2 per cent), whilst head on collisions have the highest (32.6 per cent), which could indicate this is the more severe collision type when they occur.

**Table 5-20 Casualties by collision type, 2018**

Severity/ Collision type	Killed	Seriously injured	KSI	Slightly injured	Total
Head on	25	111	136	281	417
Shunt	57	492	549	5,430	5,979
Overtake	10	106	116	427	543
Single vehicle run off	27	308	335	1,160	1,495

Notes:

(a) Casualties may fall within more than one collision type and hence may be counted more than once.

(b) See Figure 5-57 for definitions of collisions types.

### 5.14.2. KSI casualties by collision type and road classification

A breakdown of KSI casualties by collision type and road classification can be found in Table 5-21. It can be seen that motorway and A-road dual carriageway have greater numbers of KSI casualties involved in shunt collisions, 293 and 199 respectively, with A-road single carriageway having 57 KSI casualties in 2018.

**Table 5-21 KSI casualties by road class and collision type, 2018**

Road classification/ Collision type	Motorway	A-road	A-road dual carriageway	A-road single carriageway
Head on	<b>7</b>	<b>129</b>	<b>15</b>	<b>114</b>
Shunt	<b>293</b>	<b>256</b>	<b>199</b>	<b>57</b>
Overtake	<b>31</b>	<b>85</b>	<b>39</b>	<b>46</b>
Single vehicle run off	<b>143</b>	<b>192</b>	<b>156</b>	<b>36</b>

Notes:

- (a) Casualties may fall within more than one collision type and hence may be counted more than once.
- (b) See Figure 5-57 for definitions of collisions types.

## 5.15. Vulnerable and Non-motorised Users

This section provides KSI casualty information involving vulnerable<sup>29</sup> and non-motorised<sup>30</sup> users including contributory factors associated with the individual user groups.

### 5.15.1. Vulnerable and non-motorised KSI casualties by year

Figure 5-58 shows the distribution of vulnerable and non-motorised user KSI casualties by year including the baseline. It can be seen that vulnerable user KSI casualties increased to 484 in 2018, from 453 in 2017; but is 7.7 per cent below the baseline. It can also be seen that non-motorised user KSI casualties increased to 131 in 2018, from 127 in 2017; but is 12.7 per cent below the baseline.

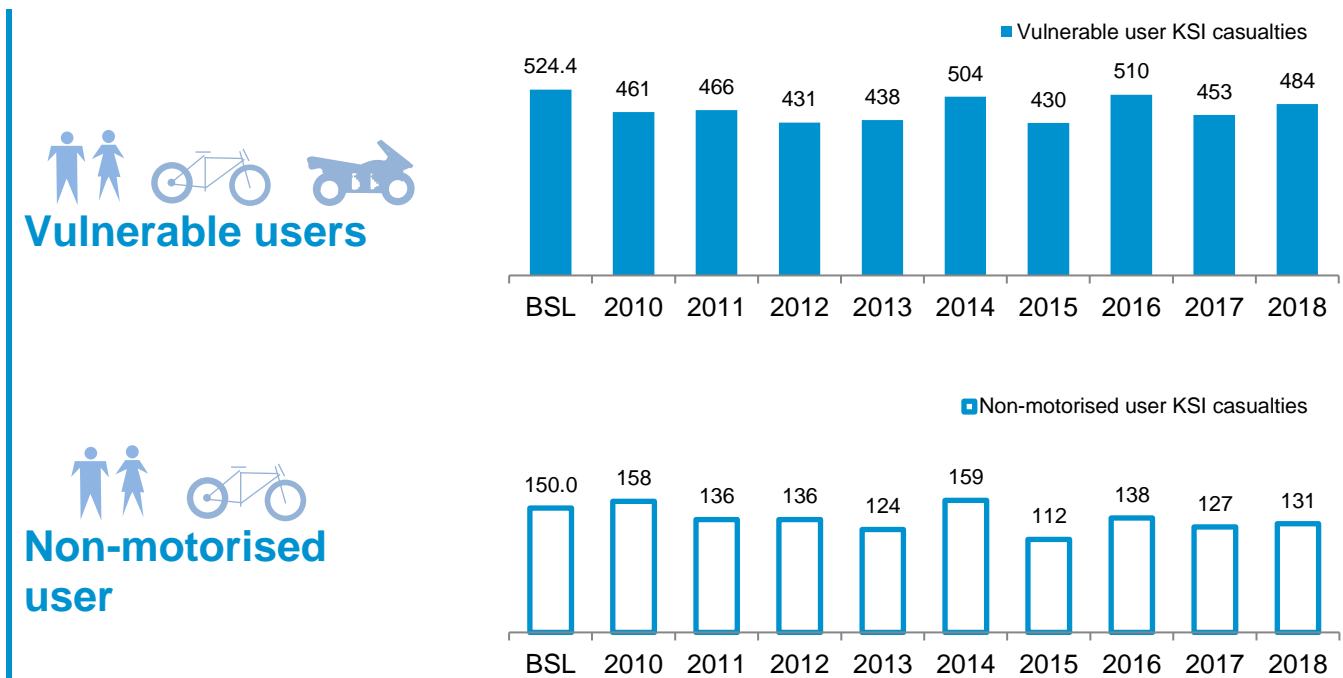


Figure 5-58 Vulnerable and non-motorised user KSI casualties by year

<sup>29</sup>Vulnerable users include pedestrians, pedal cyclists and motorcycle users (and also equestrians, which however had no recorded KSI casualties).

<sup>30</sup>Non-motorised users include pedestrians, pedal cyclists and equestrians (no recorded KSI casualties).



Figure 5-59 shows the distribution of KSI casualties across the vulnerable and non-motorised user categories. It can be seen that out of the vulnerable user categories motorcycle users make up the largest proportion with 353 KSI casualties in 2018; this is 72.9 per cent of all vulnerable user KSI casualties in 2018. From Figure 5-59 it can also be seen that the number of pedal cyclist KSI casualties has fallen for 2 successive years and is significantly below baseline and at 66% of levels seen in 2010.

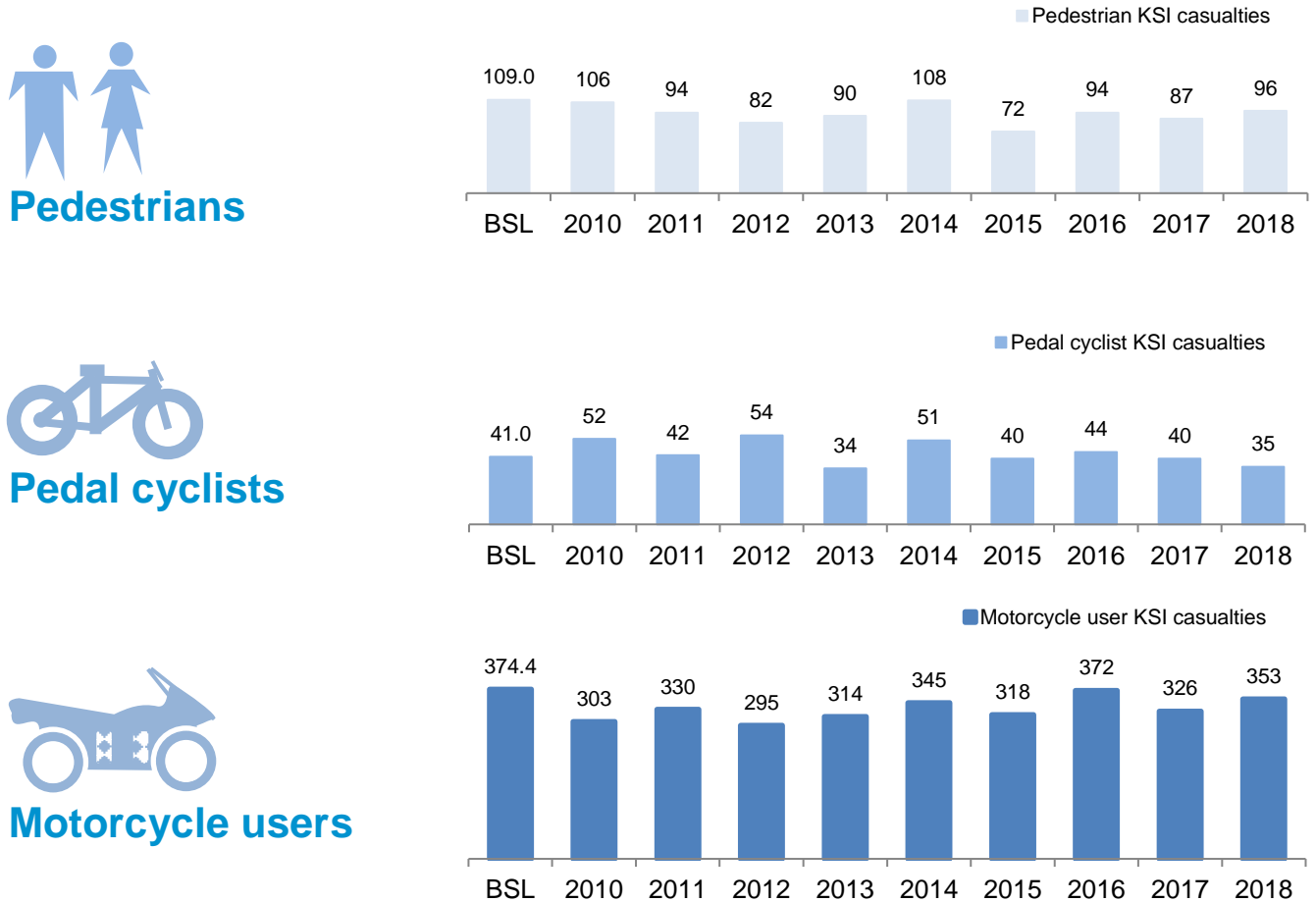





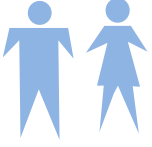

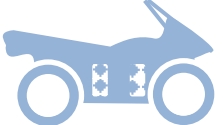


Figure 5-59 Vulnerable and non-motorised user KSI casualties by subordinate categories by year

### 5.15.2. Vulnerable and non-motorised KSI casualties by road type

Figure 5-60 shows the distribution of the 2018 vulnerable and non-motorised user KSI casualties along with their subordinate categories by road classification. It can be seen that the majority of both vulnerable and non-motorised user KSI casualties occurred on A-roads in 2018; with 70.9 per cent of vulnerable and 76.3 per cent of non-motorised user KSI casualties occurring on A-roads in 2018. It can also be seen from Figure 5-60 that there was an increase in motorcycle and pedestrian KSI casualties across motorways and A-road dual carriageways in 2018.

2018 KSI casualties (% change from 2017)	 Motorway	A-road	 A-road dual carriageway	 A-road single carriageway
 Vulnerable users	141	343	219	124
 Non-motorised users	31	100	63	37
 Pedestrians	31	65	43	22
 Pedal cyclists	0	35	20	15
 Motorcycle users	110	243	156	87

Note: Pedestrian casualties include people who have alighted from vehicles and road workers.

Figure 5-60 Vulnerable and non-motorised user KSI casualties by road classification

### 5.15.3. Contributory factors

Table 5-22 provides the top 10 contributory factors assigned to pedestrian casualties. The values represent the number of KSI casualties where the specified contributory factor was recorded against at least one pedestrian casualty. Table 5-23 and Table 5-24 provide the same information but for where the record is against at least one pedal cyclist and motorcycle user respectively.

**Table 5-22 Top 10 contributory factors assigned to pedestrian casualties by KSI casualties involved**

Rank	Contributory Factor	2016	2017	2018
1	805 Dangerous action in carriageway (eg. playing)	19	15	26
2	809 Pedestrian wearing dark clothing at night	17	12	21
3	802 Failed to look properly	21	26	20
4	810 Disability or illness, mental or physical	13	12	19
5	806 Impaired by alcohol	15	16	15
6	803 Failed to judge vehicle's path or speed	13	9	15
7	808 Careless, reckless or in a hurry	9	13	12
8	807 Impaired by drugs (illicit or medicinal)	6	6	11
9	804 Wrong use of pedestrian crossing facility	3	5	2
10	801 Crossing road masked by stationary or parked vehicle	1	2	1

Key (CF groups):

  Pedestrian

Notes:

- (a) Table reports the number of KSI casualties where the specified contributory factor was recorded against at least one pedestrian casualty.
- (b) Table sorted by 2018 values.

**Table 5-23 Top 10 contributory factors assigned to pedal cyclists by KSI casualties involved**

Rank	Contributory Factor	2016	2017	2018
1	405 Failed to look properly	3	6	8
2	310 Cyclist entering road from pavement	6	2	3
3	403 Poor turn or manoeuvre	2	0	3
-	501 Impaired by alcohol	2	0	3
5	406 Failed to judge other person's path or speed	8	5	2
6	506 Not displaying lights at night or in poor visibility	2	0	2
7	305 Illegal turn or direction of travel	0	0	2
-	407 Too close to cyclist, horse rider or pedestrian	0	0	2
9	507 Rider wearing dark clothing	2	3	1
10	410 Loss of control	2	2	1

Key (CF groups):

  Driver/Rider error or reaction

  Impairment or distraction

  Injudicious action





Notes:

- (a) Table reports the number of KSI casualties where the specified contributory factor was recorded against at least one pedal cyclist.
- (b) Table sorted by 2018 values.

**Table 5-24 Top 10 contributory factors assigned to motorcycle users by KSI casualties involved**

Rank	Contributory Factor	2016	2017	2018
1	406 Failed to judge other person's path or speed	61	57	70
2	405 Failed to look properly	62	54	65
3	410 Loss of control	61	56	62
4	403 Poor turn or manoeuvre	29	29	36
5	307 Travelling too fast for conditions	20	23	33
6	308 Following too close	20	20	27
7	602 Careless, reckless or in a hurry	26	38	26
8	605 Learner or inexperienced driver/rider	19	13	23
9	103 Slippery road (due to weather)	14	15	16
10	306 Exceeding speed limit	23	18	12

Key (CF groups):

	Driver/Rider error or reaction		Behaviour or inexperience		Injudicious action
	Road environment				

Notes:

- (a) Table reports the number of KSI casualties where the specified contributory factor was recorded against at least one motorcycle user.  
 (b) Table sorted by 2018 values.

Table 5-25 provides the top 10 contributory factors for KSI casualties where the collision involved at least one pedestrian casualty. Table 5-26 and Table 5-27 provide the same information but for where the collision involved at least one pedal cyclist and motorcycle user respectively.

“Failed to look properly” was in the top 2 contributory factors for KSI casualties across all three vulnerable user categories. The majority (8 of 10) of the top 10 contributory factors involving pedestrian casualties were in the pedestrian contributory factor group. Driver/Rider error or reaction is the common grouping across all three user categories and make up half the top 10 contributory factors involving pedal cyclists and motorcycle users.

**Table 5-25 Top 10 contributory factors for KSI casualties involving pedestrian casualties**

Rank	Contributory Factor	2016	2017	2018
1	805 Dangerous action in carriageway (eg. playing)	19	15	26
2	802 Failed to look properly	21	26	22
3	809 Pedestrian wearing dark clothing at night	17	12	21
4	810 Disability or illness, mental or physical	13	12	19
5	806 Impaired by alcohol	15	16	15
6	803 Failed to judge vehicle's path or speed	13	9	15
7	808 Careless, reckless or in a hurry	9	13	12
8	807 Impaired by drugs (illicit or medicinal)	6	6	11
9	405 Failed to look properly	11	5	10
10	509 Distraction in vehicle	4	6	5

Key (CF groups):

	Driver/Rider error or reaction		Impairment or distraction		Pedestrian
---	--------------------------------	---	---------------------------	---	------------

Notes:

- (a) Table reports the number of KSI casualties involving at least one pedestrian casualty where at least one of the specified contributory factors was recorded.  
 (b) Table sorted by 2018 values.

**Table 5-26 Top 10 contributory factors for KSI casualties involving pedal cyclists**

Rank	Contributory Factor	2016	2017	2018
1	405 Failed to look properly	12	17	19
2	406 Failed to judge other person's path or speed	12	7	9
3	407 Too close to cyclist, horse rider or pedestrian	4	9	7
4	403 Poor turn or manoeuvre	2	1	5
5	602 Careless, reckless or in a hurry	3	6	3
6	501 Impaired by alcohol	2	3	3
7	310 Cyclist entering road from pavement	7	2	3
8	410 Loss of control	2	3	2
9	506 Not displaying lights at night or in poor visibility	2	0	2
10	305 Illegal turn or direction of travel	1	0	2

Key (CF groups):

Driver/Rider error or reaction	Impairment or distraction	Injudicious action
Behaviour or inexperience		

Notes:

- (a) Table reports the number of KSI casualties involving at least one pedal cyclist where at least one of the specified contributory factors was recorded.  
 (b) Table sorted by 2018 values.

**Table 5-27 Top 10 contributory factors for KSI casualties involving motorcycle users**

Rank	Contributory Factor	2016	2017	2018
1	405 Failed to look properly	149	122	119
2	406 Failed to judge other person's path or speed	100	82	96
3	410 Loss of control	61	56	64
4	403 Poor turn or manoeuvre	49	58	62
5	602 Careless, reckless or in a hurry	44	56	37
6	307 Travelling too fast for conditions	20	23	33
7	308 Following too close	23	21	29
8	605 Learner or inexperienced driver/rider	24	13	25
9	408 Sudden braking	20	34	23
10	103 Slippery road (due to weather)	16	15	18

Key (CF groups)

Driver/Rider error or reaction	Behaviour or inexperience	Injudicious action
Road environment		

Notes:

- (a) Table reports the number of KSI casualties involving at least one motorcycle user where at least one of the specified contributory factors was recorded.  
 (b) Table sorted by 2018 values.

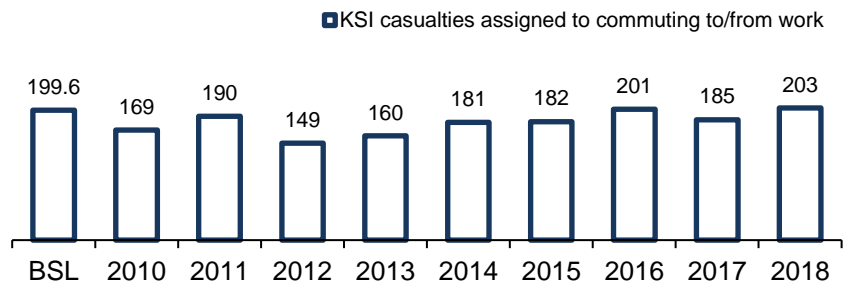
## 5.16. Journey Purpose

This topic of interest provides a summary of journey purpose. For this section casualties are assigned their journey purpose based upon the vehicle they are associated with. This section excludes pedestrians from the analysis as the journey purpose for these casualties is unclear.

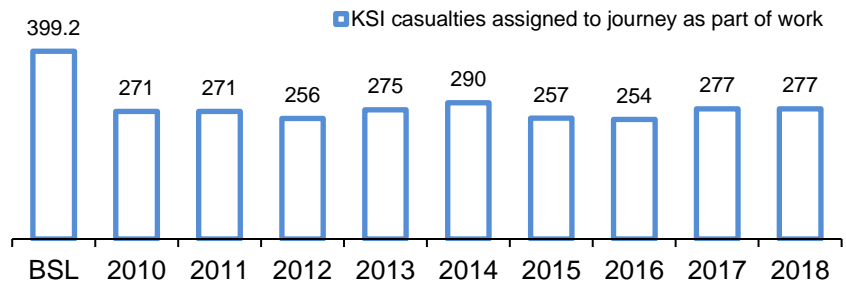
### 5.16.1. Journey purpose summary

The trends from Figure 5-61 show that the majority of KSI casualties are recorded with either the journey purpose missing or with a journey purpose other than those listed within STATS19. Of the categories within STATS19, journey as part of work accounted for 277 KSI casualties in 2018; commuting to/from work had a lower value of 203 KSI casualties. These two categories combined (480 KSI casualties) account for 24.2 per cent of all KSI casualties (1,987) in 2018.

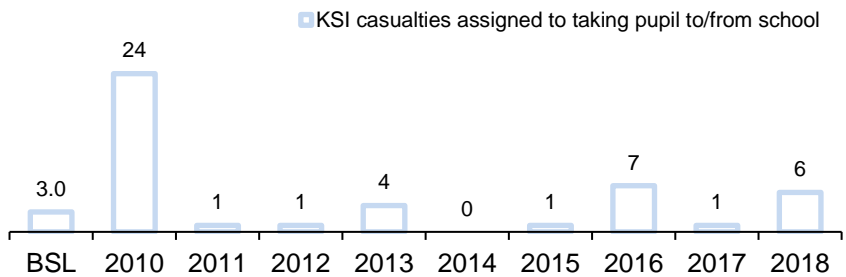
### Commuting to/from work 203 KSI casualties



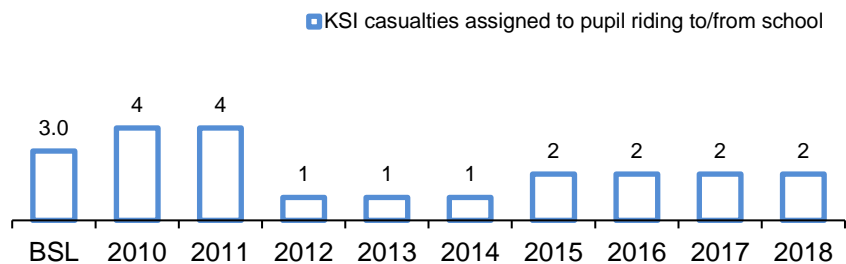
### Journey as part of work 277 KSI casualties



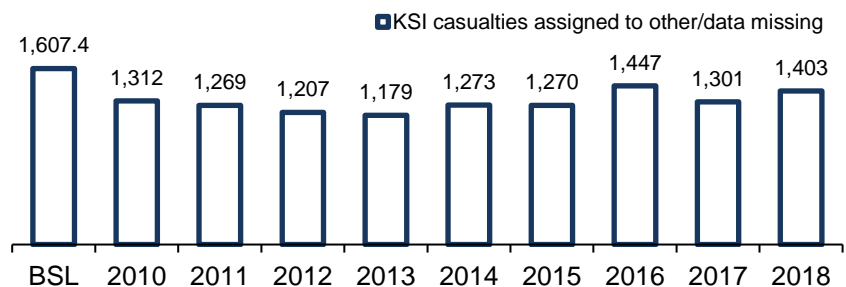
### Taking pupil to/from school 6 KSI casualties



### Pupil riding to/from school 2 KSI casualties



### Other or data missing 1,403 KSI casualties

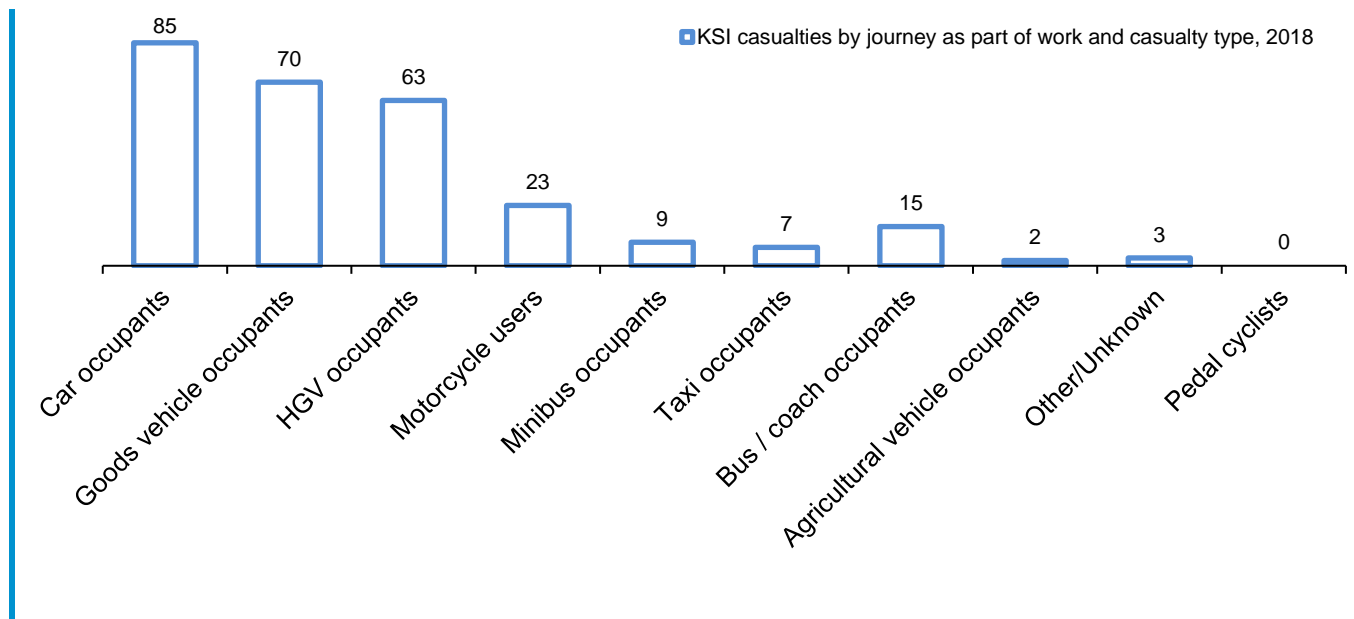


Note: Analysis excludes pedestrians due to journey purpose of pedestrians being unclear. However, there were 96 pedestrian KSI casualties in 2018

Figure 5-61 KSI casualties by journey purpose and year

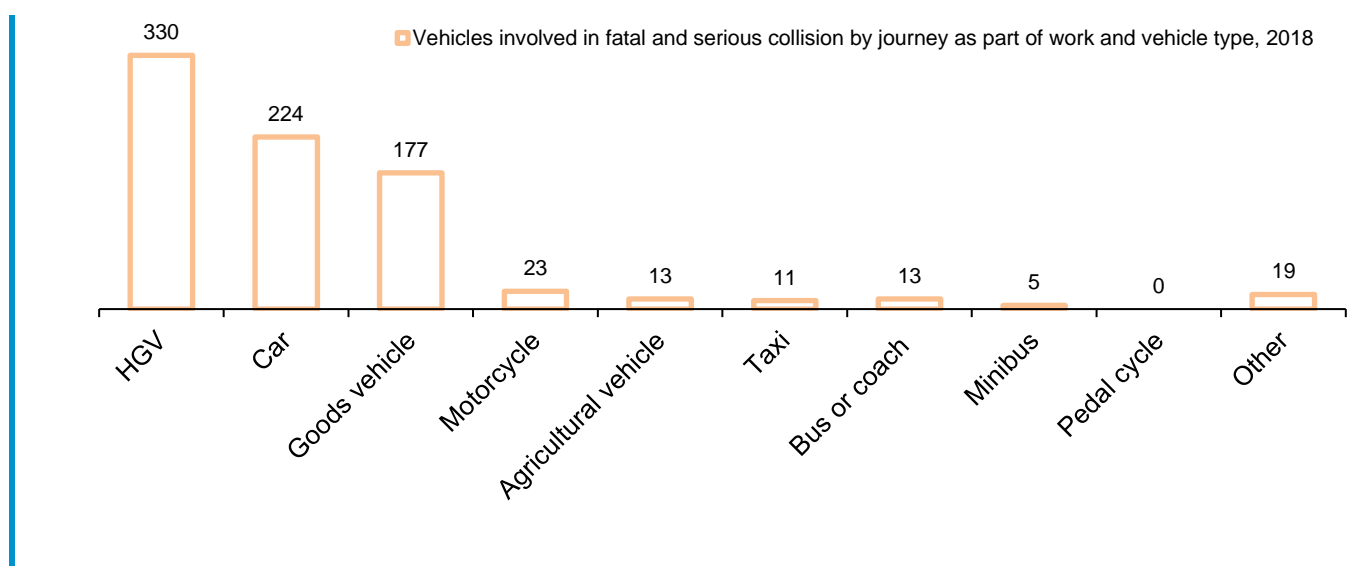
### 5.16.2. Journey as part of work

Where the journey purpose was specified in STATS19, the highest number of KSI casualties in 2018 (277) are against the 'Journey as part of work' category. Figure 5-62 shows these KSI casualties broken down by casualty type. As seen by the figure, 85 of the KSI casualties were car occupants (30.7 per cent), 70 were goods vehicle occupants (25.3 per cent) and 63 were HGV occupants (22.7 per cent).



**Figure 5-62 KSI casualties by journey as part of work and casualty type, 2018**

Figure 5-63 shows the vehicles involved in fatal and serious collisions associated with Journey as part of work. Of the 815 vehicles involved 330 were HGVs (40.5 per cent), 224 were cars (27.5 per cent) and 177 were goods vehicles (21.7 per cent).



**Figure 5-63 Vehicles involved in fatal and serious collisions associated with journey as part of work, 2018**



### 5.16.3. Commuting to/from work

Where the journey purpose was specified in STATS19, the second highest number of KSI casualties in 2018 (203) are against the 'Commuting to/from work' category. Figure 5-64 shows these broken down by casualty type and as seen 122 KSI casualties were car occupants (60.1 per cent), 60 were motorcycle users (29.6 per cent) and 13 were goods vehicle occupants (6.4 per cent).

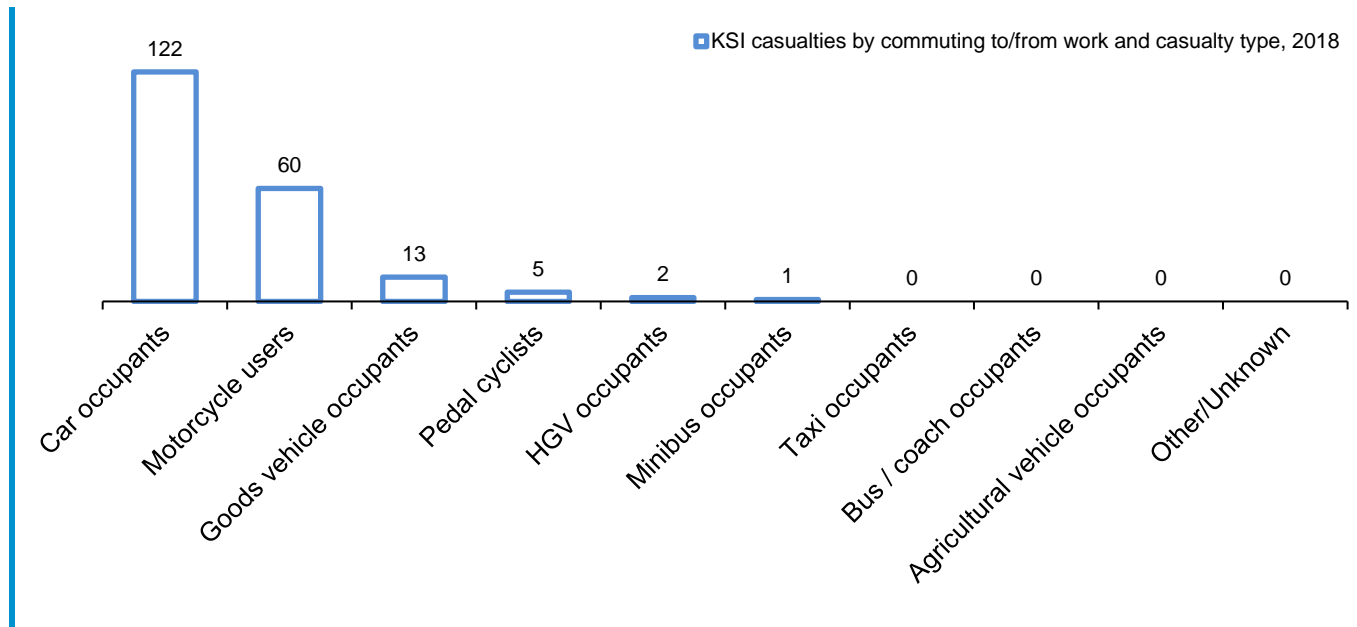


Figure 5-64 KSI casualties by commuting to/from work and casualty type, 2018

Figure 5-65 shows the vehicles involved in fatal and serious collisions associated with Commuting to/from work. Of the 415 vehicles involved 297 were cars (71.6 per cent).

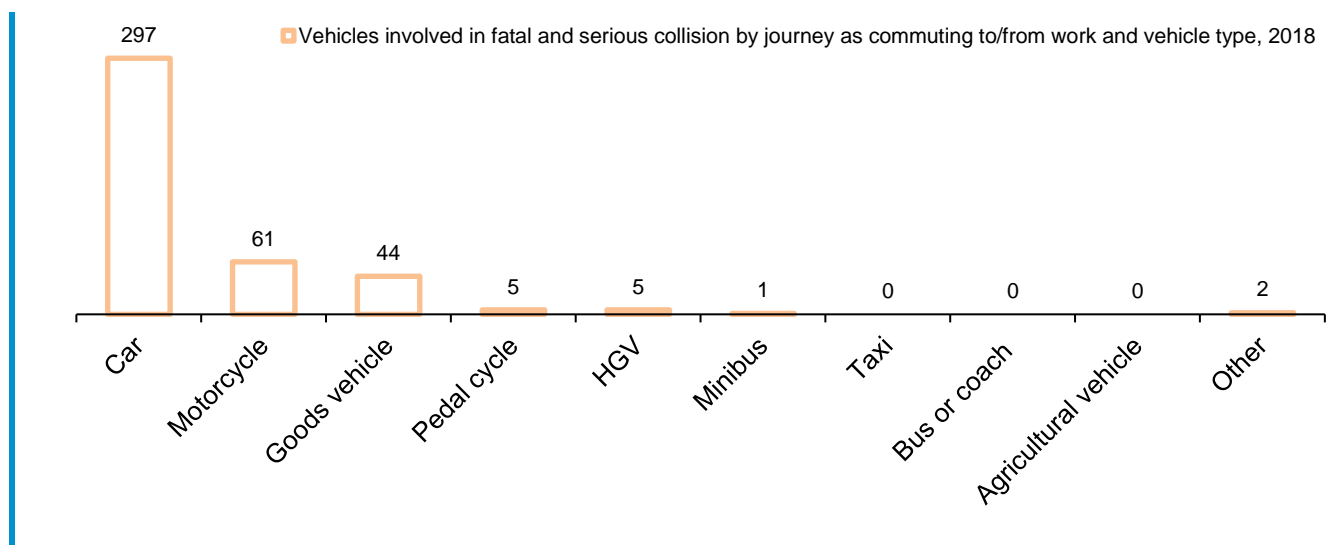


Figure 5-65 Vehicles involved in fatal and serious collisions associated with commuting to/from work, 2018

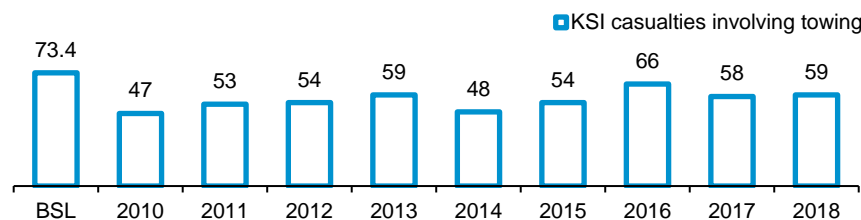
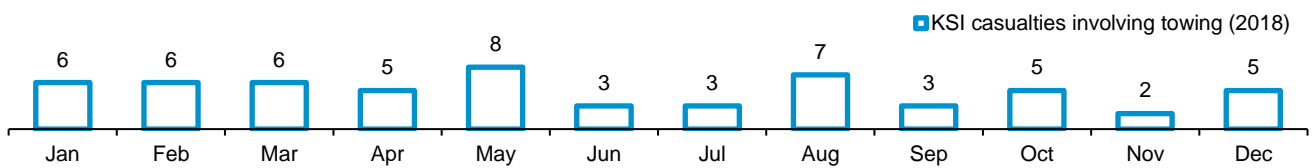
## 5.17. Towing

This topic of interest focuses on casualties involving at least one vehicle towing. This section excludes articulated vehicles from the towing category.

### 5.17.1. Towing summary

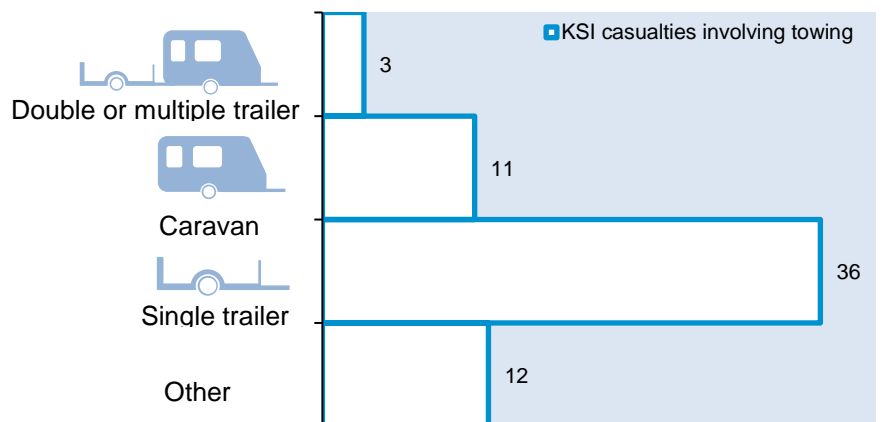
Figure 5-66 and Figure 5-67 give a summary of KSI and total casualties respectively involving at least one vehicle towing. In 2018, it can be seen that 59 casualties involved at least one vehicle towing, which is a decrease on the 2017 value (66). Of these casualties, 34 occurred in May and August. May and August also had the most KSI casualties in 2018, with 8 and 7, respectively, of the 59 that occurred. It can also be seen that the East region had the highest number of casualties involving towing with 74 towing casualties in 2018. Both the South West and East regions had 3.5 per cent of casualties involving towing. Figure 5-68 gives a summary of towed vehicles involved in collisions in 2018 along with tow type. It can be seen that 211 vehicles were recorded as towing in 2018. Of the vehicles recorded as towing 112 (53.1 per cent of vehicles recorded as towing) were recorded with a journey purpose of 'Journey as part of work', with 95 of these recorded with a tow type of 'Single trailer'.

#### 59 KSI casualties involved a vehicle towing in 2018



#### KSI casualties

**61.0% of KSI towing casualties involved at least one single trailer in 2018**

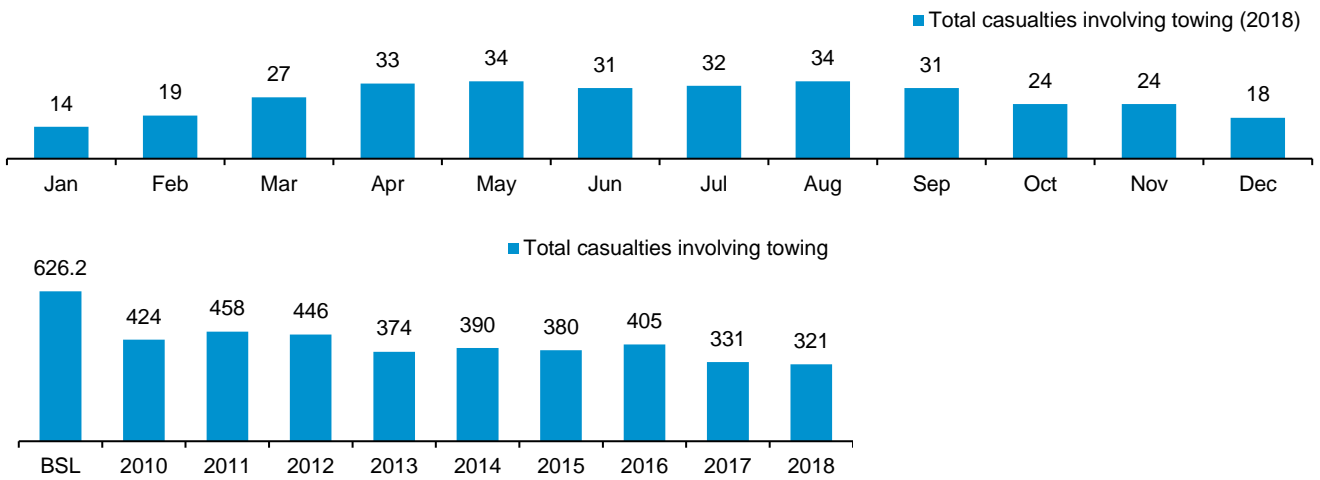


Note: Excludes articulated and data missing

Figure 5-66 Summary of KSI casualties involving towing

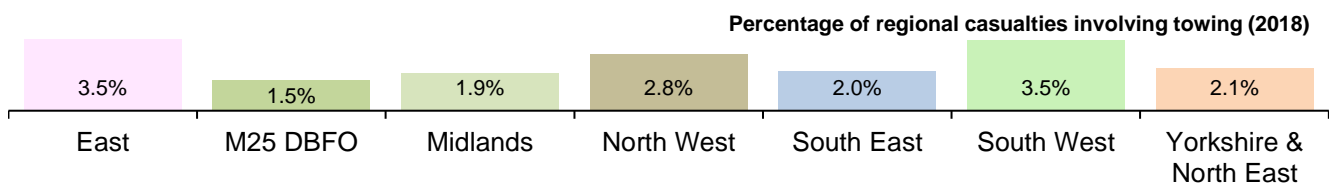
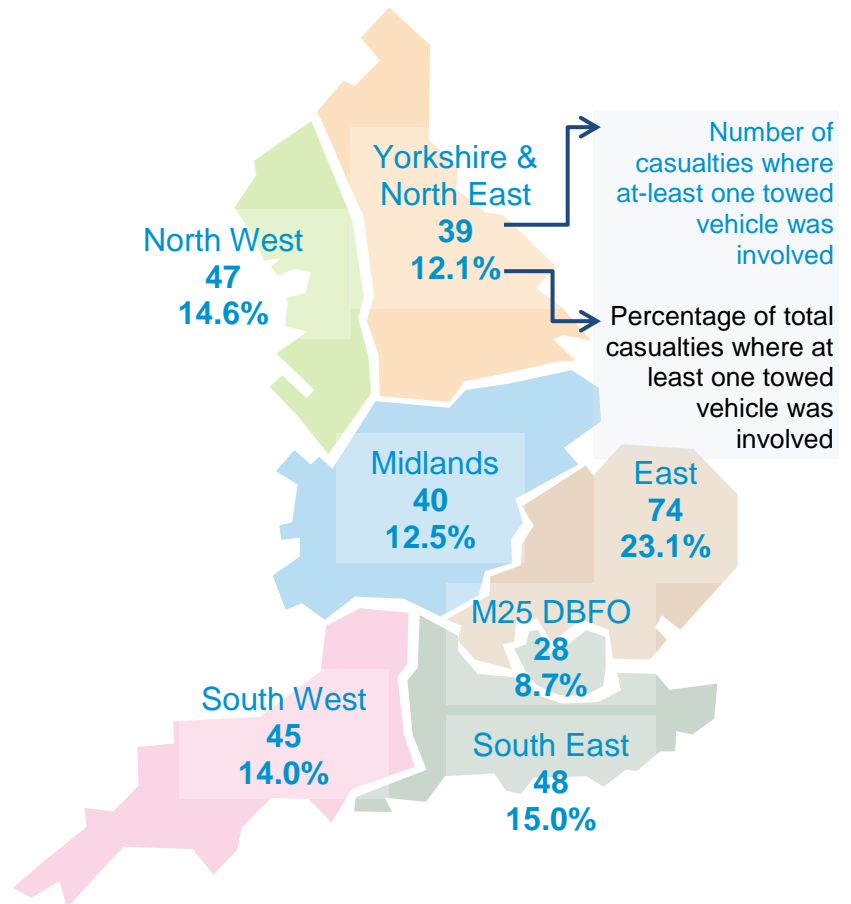


## 321 casualties involved a vehicle towing in 2018



**23.1% of casualties involving towing in 2018 occurred in the East region.**

**3.5% of East and South West casualties involved towing in 2018**

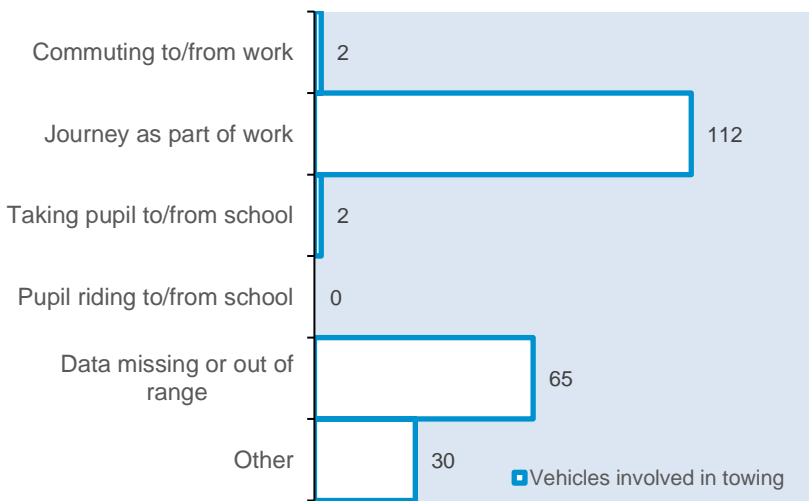
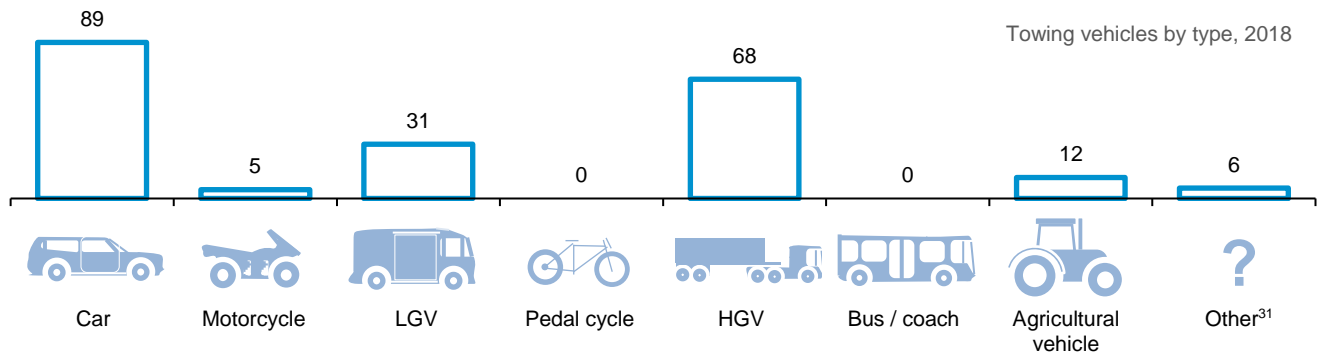


Note: Excludes articulated and data missing

**Figure 5-67 Summary of casualties involving towing**

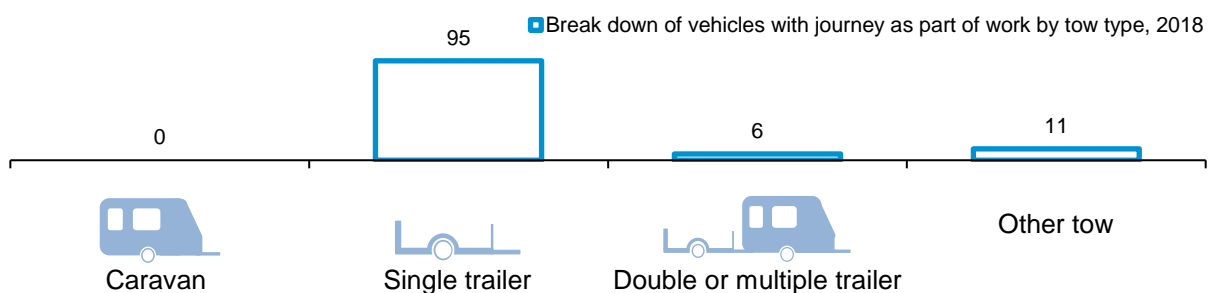


## 211 vehicles recorded as towing in 2018



**Journey as part of work accounted for 53.1% of vehicles involved in towing in 2018**

**95 of the 112 towed vehicles recorded as journey as part of work were single trailers**



Note: Excludes articulated and data missing

**Figure 5-68 Summary of towing vehicles by type**

<sup>31</sup> Other includes any ridden horse, tram, mobility scooter and other vehicles

## Contributory Factor Classification and Codes

The full listing of contributory factor groupings together with the individual contributory factors are provided in the table below.

CF Group I: Road environment contributed			
101	Poor or defective road surface	106	Traffic calming (e.g. speed cushions, road humps, chicanes)
102	Deposit on road (e.g. oil, mud, chippings)	107	Temporary road layout (e.g. contraflow)
103	Slippery road (due to weather)	108	Road layout (e.g. bend, hill, narrow carriageway)
104	Inadequate or masked signs or road markings	109	Animal or object in carriageway
105	Defective traffic signals	110	Slippery inspection cover or road marking
CF Group II: Vehicle defect			
201	Tyres illegal, defective or under inflated	204	Defective steering or suspension
202	Defective lights or indicators	205	Defective or missing mirrors
203	Defective brakes	206	Overloaded or poorly loaded vehicle or trailer
CF Group III: Injudicious action			
301	Disobeyed automatic traffic signal	306	Exceeding speed limit
302	Disobeyed 'Give Way' or 'Stop' sign or markings	307	Travelling too fast for conditions
303	Disobeyed double white lines	308	Following too close
304	Disobeyed pedestrian crossing facility	309	Vehicle travelling along pavement
305	Illegal turn or direction of travel	310	Cyclist entering road from pavement
CF Group IV: Driver/Rider error or reaction			
401	Junction overshoot	406	Failed to judge other person's path or speed
402	Junction restart (moving off at junction)	407	Too close to cyclist, horse rider or pedestrian
403	Poor turn or manoeuvre	408	Sudden braking
404	Failed to signal or misleading signal	409	Swerved
405	Failed to look properly	410	Loss of control
CF Group V: Impairment or distraction			
501	Impaired by alcohol	506	Not displaying lights at night or in poor visibility
502	Impaired by drugs (illicit or medicinal)	507	Rider wearing dark clothing
503	Fatigue	508	Driver using mobile phone
504	Uncorrected, defective eyesight	509	Distraction in vehicle
505	Illness or disability, mental or physical	510	Distraction outside vehicle
CF Group VI: Behaviour or inexperience			
601	Aggressive driving	605	Learner or inexperienced driver/rider
602	Careless, reckless or in a hurry	606	Inexperience of driving on the left
603	Nervous, uncertain or panic	607	Unfamiliar with model of vehicle
604	Driving too slow for conditions or slow vehicle (e.g. tractor)		

**CF Group VII: Vision affected by**

701	Stationary or parked vehicle(s)	706	Dazzling sun
702	Vegetation	707	Rain, sleet, snow, or fog
703	Road layout (e.g. bend, winding road, hill crest)	708	Spray from other vehicles
704	Buildings, road signs, street furniture	709	Visor or windscreen dirty, scratched or frosted etc.
705	Dazzling headlights	710	Vehicle blind spot

**CF Group VIII: Pedestrian only (casualty or uninjured)**

801	Crossing road masked by stationary or parked vehicle	806	Impaired by alcohol
802	Failed to look properly	807	Impaired by drugs (illicit or medicinal)
803	Failed to judge vehicle's path or speed	808	Careless, reckless or in a hurry
804	Wrong use of pedestrian crossing facility	809	Pedestrian wearing dark clothing at night
805	Dangerous action in carriageway (e.g. playing)	810	Disability or illness, mental or physical

**CF Group IX: Special codes**

901	Stolen vehicle	904	Vehicle door opened or closed negligently
902	Vehicle in course of crime		
903	Emergency vehicle on a call	999	Other – Please specify *

\* To be used only when no contributory factor is available to describe a particular circumstance which contributed to the accident (Source: STATS20 "Instructions for the Completion of Road Accident Reports from non-CRASH Sources" Department for Transport, September 2011).