national highways

2023 Road safety performance overview

2005-2023 results

Foreword

Road safety is, and will always be, our number one priority. England's motorways and major A-roads are some of the safest in the world, but our ambition remains that no-one should be harmed while travelling or working on our roads.

Every road death or serious injury is a tragedy. Improving safety on our roads benefits not just drivers, but also the wider community of family, friends and colleagues affected when deaths or injuries occur.

Road safety is a shared responsibility – it is important we all recognise the part we can play. For road users safety comes from a combination of safe roads, drivers, vehicles and the response when collisions happen. We're working to improve each of these aspects and we will continue to implement the road safety interventions that we can and continue to work with partners, organisations and road users to help us collectively achieve our zero harm ambition.

Nick Harris
National Highways Chief Executive

Executive Summary

Great Britain's road network is amongst the best performing road networks internationally for countries where this data is available. In 2023, the fatality rate by population on Great Britain's road network was 25 deaths per one million people. Only Norway (20) and Sweden (22) recorded lower fatality rates. Whilst we have one of the best performing road networks in Europe, we strive to continue to improve the safety of our roads. This report looks at road safety statistics for the strategic road network (SRN) up to and inclusive of 2023.

This report includes the latest safety data analysed by National Highways, using the Department for Transport's validated STATS19 dataset, and sets out the key safety headlines across the network[1]. This annual road safety performance overview report now includes detailed safety performance analysis for all our roads, including smart motorways. This follows the publication in March 2025 of the final smart motorways stocktake progress report. The analysis of our smart motorway network over the past five years has helped us develop a detailed understanding of road safety across the whole strategic road network. This knowledge is helping us to improve safety for drivers up and down the country, supporting our ambition that no one should be harmed while travelling on the strategic road network.

Footnote 1 This report does not cover evaluation activities for specific schemes or investments such as before versus after comparisons, or customer insight. We continue to undertake this analysis separately on an ongoing basis and outputs are intended for future publication.

Safety Headlines

- In 2023, there were 1,913 deaths and serious injuries on the SRN. This is a reduction of 39% against the 2005-09 baseline and means that 1,201 fewer people were killed or seriously injured (KSI). We need to reduce the number of killed and seriously injured people on our roads by a further 356, from 1,913 in 2023 to 1,557 in 2025, to meet our second roads period target by the end of December 2025.
- KSI rates on both types of A-roads and most types of motorway are decreasing over time. Motorways are our safest roads, the 2023 KSI rate for motorways was 1.29 compared to 3.26 for A-roads. Overall, no one type of motorway performs best for both KSI and personal injury collision (PIC) rates.
- Single carriageway A-roads are less safe than dual carriageway A-roads. In 2023 a person travelling on a single carriageway A-road was three times more likely to be killed or seriously injured when compared to an equivalent journey on a dual carriageway A-road.
- While the overall number of vulnerable road user casualties decreased in 2023 by more than other casualty types, age is a noticeable factor in collision casualty outcomes. There has been an increase of 17% in KSI casualties aged 66 to 75 and an increase of 25% in casualties aged 75 or over compared to the 2005-2009 baseline period. By comparison there was a 48% reduction in the number of KSI casualties aged 55 or under and a reduction of 6% of casualties aged 56 to 65.

While we have made significant progress in reducing the number of people killed or seriously injured over recent years, we recognise that we are off course to achieve our safety target. We cannot afford to be complacent. We will continue to take action to reduce the number of people killed or seriously injured as we strive to further improve the safety of our roads.

We remain committed to working closely with drivers and our partners, including the Department for Transport (DfT) and the Office for Rail and Road (ORR) as we continue to deliver roads for the future.

Contents

In this report

Foreword 2
Executive Summary 2
Contents 3

Introduction 4

National Highways Strategic Road Network (SRN) 4
National Highways Regions 5

Key Performance Indicator (KPI) Trends 6

Trends in deaths and serious injuries 6
Trends in deaths and serious injuries by road class 8
Trends in deaths and serious injuries by A-road type 9
Trends in deaths and serious injuries by road type 10
Trends in deaths and serious injuries by road type (continued) 11
Safety in the North West Region 12
Safety in the Yorkshire and North East Region 13
Safety in the Midlands Region 14
Safety in the East Region 15
Safety in the South West Region 16
Safety in the South East Region 17
Total number of people killed and seriously injured (KSIs) on the SRN compared to the rest of England and Great Britain 18

Performance Indicator (PI) trends 20

Deaths and injuries (all casualty severities) on the Strategic Road Network (SRN) 20
Pedestrians, cyclists and motorcyclist users killed or injured on the Strategic Road Network (SRN) 22
Injury collisions on the Strategic Road Network 23
Trends in personal injury collisions (PIC) on the SRN by road type 24
Injury Collisions on the Strategic Road Network (SRN) by region 26

Other trends 27

Deaths and serious injuries on the Strategic Road Network (SRN) by vehicle and non-motorised user type 27
Deaths and serious injuries on the Strategic Road Network (SRN) by age groups 29

Collision analysis 30

Road Safety Factors in collisions on the Strategic Road Network by road class and type 30
Behaviour Road Safety Factors in collisions on the Strategic Road Network 31
Distraction and impairment Road Safety Factors in collisions on the Strategic Road Network 32
Road and Vehicle Road Safety Factors in collisions on the Strategic Road Network 33
Speed Road Safety Factors in collisions on the Strategic Road Network 34
Fatal Five Road Safety Factors in fatal collisions on the Strategic Road Network 35
Collision Type Analysis — comparing percentage collisions with percentage KSI in 2023 36
Moving and Stopped Vehicle Collisions 38
Strategic Road Network PIC 5-year Moving—Stopped (continued) 39
KSIs Resulting from Stopped and Moving Vehicle Collisions 40
Strategic Road Network KSI 5-year Moving—Stopped (continued) 41

Global perspective 42

Motorway deaths by country compared to motorway traffic 42
Rate of road deaths by country per million of population in 2023 43

Key definitions 44

Navigating this interactive document

This contents page is interactive so simply click on the section you would like to go to. You can use the tools shown below to move interactively through our report and return to this page.

Return to contents

Return to previously viewed page

Page back

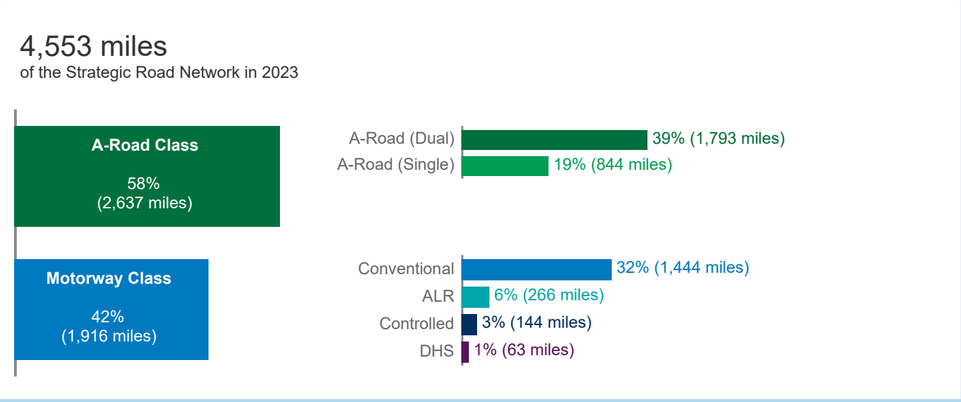
Page forward

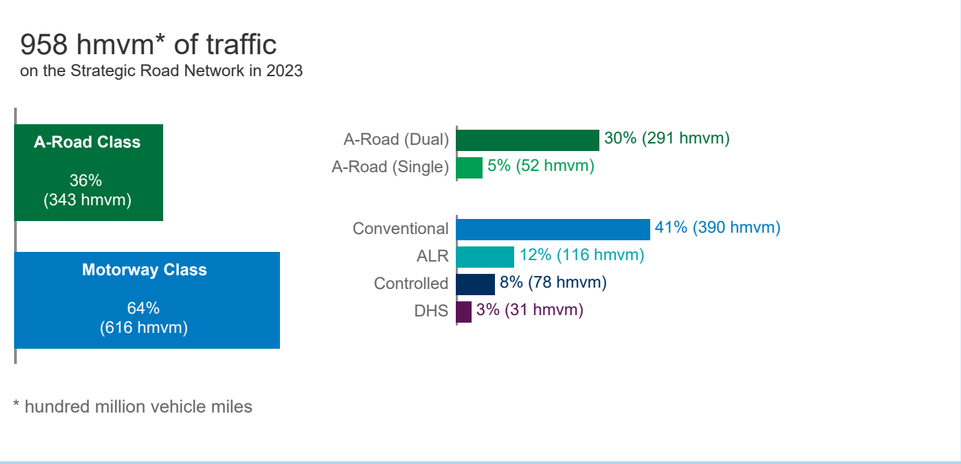
Introduction

National Highways Strategic Road Network (SRN)

The Strategic Road Network (SRN) is 4,553 miles in total and comprises 1,916 miles of motorways, 1,793 miles of dual-carriageway A-Roads and 844 miles of single-carriageway A-Roads.

The SRN is the most heavily used part of the national road network with millions of people using it every day. It carries a third of all traffic and two-thirds of all freight. It provides businesses with the means to get products and services to their customers, gives access to labour markets and suppliers and encourages trade and new investment.



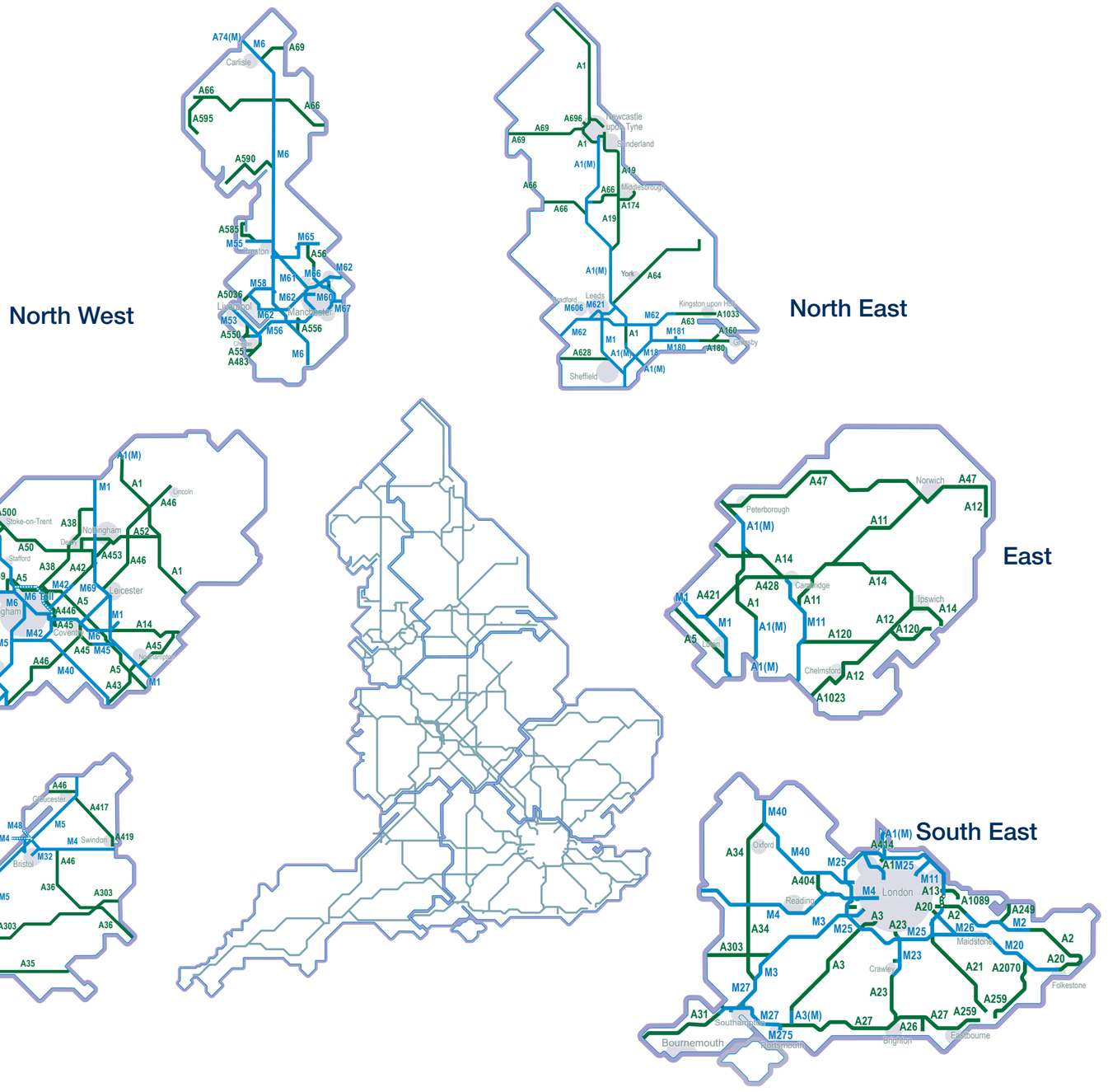


National Highways Regions

The National Highways SRN is subdivided into 6 regions:

- North West,
- North East,
- Midlands,
- East,
- South West and
- South East.

Safety performance is reported both nationally and regionally in this report.



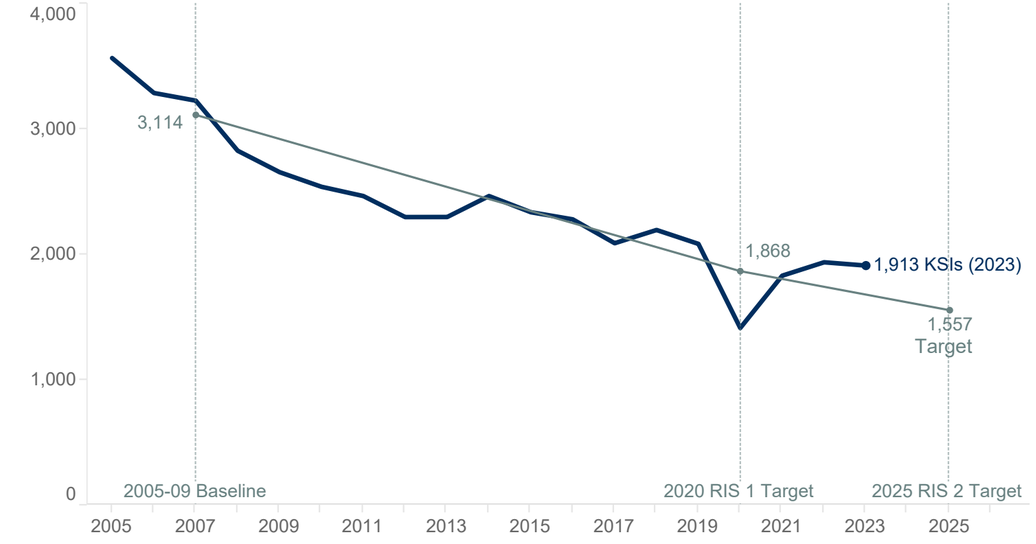
Key Performance Indicator (KPI) Trends

1

Overview
Introduction
KPI trends
PI trends
Other trends
Collision analysis
Global perspective
Key definitions

Trends in deaths and serious injuries

KPI 1.1: Killed and Serious Injury (KSI) performance from 2005 to 2023, compared to the 2023 adjusted target / monitoring points



KPI1 performance over Roads Period 2 (RIS2): 2021-2025

	2021	2022	2023	2024	2025
RIS2 KSI target / monitoring points (2023 adjusted)	1,806	1,744	1,681	1,619	1,557
Number of KSI (adjusted)	1,832	1,939	1,913	∅	∅
KSI monitoring point achieved (-) or missed (+) by	26	195	231	∅	∅

Our first Key Performance Indicator (KPI1.1) is the number of people killed or seriously injured (KSI) on the SRN. Our target is a 50% reduction by end of 2025 (against the 2005-2009 annual average baseline).

At the start of 2020 we adopted an aspirational safety target to halve the number of deaths and serious injuries on the SRN by the end of 2025, against a 2005-2009 baseline of 3,114. In 2023 there were 1,913 deaths and serious injuries on the SRN. This is a reduction of 39% against the baseline and means that 1,201 fewer people were killed or seriously injured.

In order to meet our target for this key performance indicator (KPI) we need to reduce the number of people killed and seriously injured on our roads by 356 from 1,913 in 2023 to 1,557 in 2025.

The coronavirus pandemic (Covid-19) and associated travel restrictions affected road safety data in 2020 and January to March 2021. We know that the number of collisions and casualties were influenced by there being fewer vehicles on our network. When we measure the number of people killed and seriously injured relative to the volume of traffic from 2018 to 2023, the KSI rate remained relatively stable between 2019 and 2023. This suggests that the increase in KSIs on the SRN between 2021 and 2022 is more likely a result of an increase in traffic following the lifting of coronavirus travel restrictions. This is illustrated in the graph titled 'Traffic in hmvm on the SRN: 2018-2023'.

We recognise that for 2023 we are above the KPI monitoring point and that the Office of Rail and Road (ORR) have assessed that it is improbable that we will achieve our target by the end of 2025. Due to the time lag in STATS19 data, it will be autumn 2026 when verified STATS19 data for 2025 will be available. Our second roads period safety programme anticipated that there would be improvements in external factors outside of National Highways control, such as advancements in vehicle technologies and improvements in driver training, which have not progressed as quickly as anticipated. There is also a suggestion that due to cost of living pressures, essential vehicle maintenance is not being prioritised by some drivers. A recent TyreSafe report[2] found that nearly one-in-four vehicles on Britain's roads have illegal tyres – just over 6.1 million per year.

We are striving to do all that we can to hit the target and welcome ORR's findings that we are doing everything we reasonably can to reduce the number of casualties on the SRN.

Our work includes:

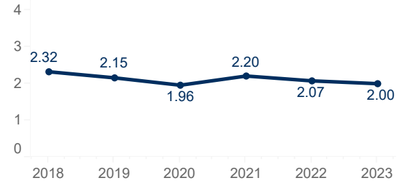
- Our Road to Zero Harm project
- Delivering road safety enhancements on the roads that need it most, such as A-roads, at locations where intelligence indicates they will have the greatest possible impact on reducing the number, and severity, of collisions.
- Working collaboratively with our Road Safety Panel partners to deliver a joined-up approach to road safety initiatives and communications.

Why KSI rates are useful

Killed and Serious Injury (KSI) rates measure the number of deaths and serious injuries in relation to the total miles travelled on a type, or section, of road. This enables us to compare roads with a high volume of traffic, or that span a long distance, with roads which have a lower volume of traffic or span a shorter distance. The rate is presented as a severity-adjusted number of KSIs per hundred million vehicle miles (hmvm). This is an established way of assessing rates across the road sector.

Whilst our casualty reduction KPI is not split by road type or region, it is important to understand the safety performance of different types of roads, and regions, and how this contributes to the overall KSI reduction. For this reason, we have presented the KSI reduction in this report by road type and by region.

KSIs per hundred million vehicle miles (hmvm) on the SRN: 2018-2023



Traffic in hmvm on the SRN: 2018-2023

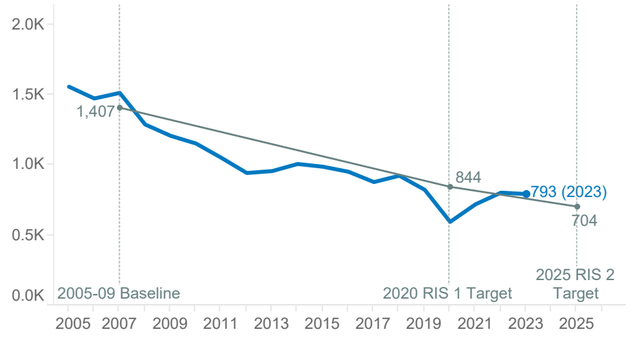
Note: our 2025 target is based on road traffic collision deaths and serious injuries which occurred between 2005 and 2009. This historic data and the 2025 target is subject to an annual revision by the Office for National Statistics and Department for Transport due to changes in how police forces captured injury severity data in recent years. For more information, please see page 19.

Footnote 2 https://www.tyresafe.org/tyre_research/tread-depth-survey-at-the-point-of-replacement-survey-2016-vs-2023/

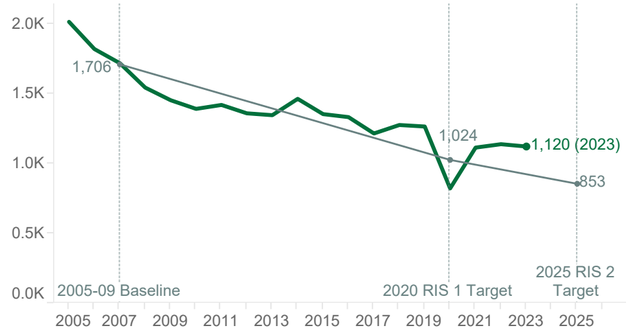
Trends in deaths and serious injuries by road class

KPI 1.1: KSI performance over time (2005 to 2023) compared to 2023 adjusted target / monitoring points by road class

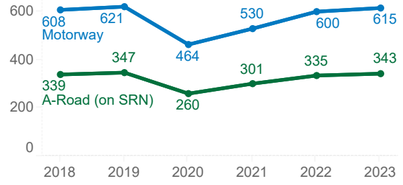
Motorway



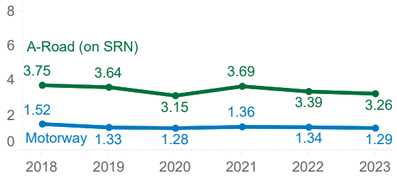
A-Roads on SRN



Traffic in hmvm on Motorways and A-Roads: 2018-2023



KSIs per hundred million vehicle miles (hmvm) on Motorways and A-Roads: 2018-2023



KSI performance in RIS2: 2021-2025

Road Class		2021	2022	2023	2024	2025
Motorway	RIS2 KSI target / monitoring points (2023 adjusted)	816	788	760	732	704
	Number of KSI (adjusted)	720	803	793	∅	∅
	KSI monitoring point achieved (-) or missed (+) by	-96	15	33	∅	∅
A-Road (on SRN)	RIS2 KSI target / monitoring points (2023 adjusted)	990	956	921	887	853
	Number of KSI (adjusted)	1,112	1,136	1,120	∅	∅
	KSI monitoring point achieved (-) or missed (+) by	122	181	198	∅	∅

Motorways are our safest roads

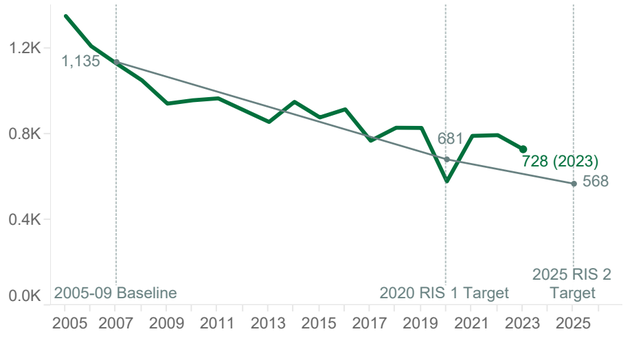
In 2023 there were 793 people killed or seriously injured on motorways against the monitoring point of 760. This means we need to achieve a further reduction of 89 KSIs to achieve the 2025 target for motorways. Since 2019 rates have been stable, suggesting that the number of people killed and seriously injured compared to the volume of traffic the network carries has stagnated.

There were 1,120 people killed or seriously injured on A-roads, against the monitoring point of 921. This means we need to achieve a further reduction of at least 267 KSIs to achieve the 2025 target for A-roads. Despite A-roads carrying almost half the traffic of motorways there were 327 more KSIs on A-roads than on motorways. This is reflected in the 2023 KSI rate being 3.26 for A-roads and 1.29 for motorways.

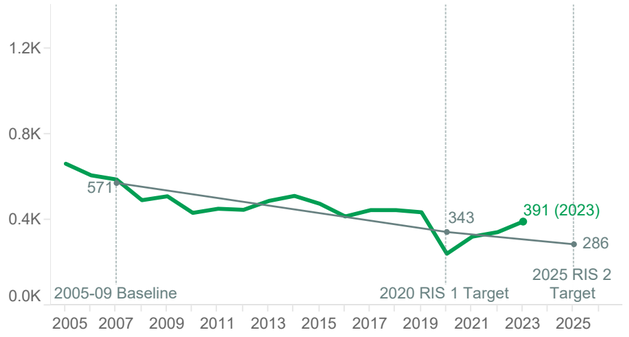
Trends in deaths and serious injuries by A-road type

KPI 1.1: KSI performance over time (2005 to 2023) compared to 2023 adjusted target / monitoring points by A-road type

A-road dual carriageway on SRN



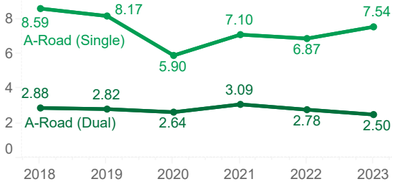
A-road single carriageway on SRN



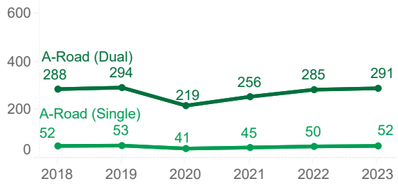
KSI performance in RIS2: 2021-2025

Road Type		2021	2022	2023	2024	2025
A-Road (Dual)	RIS2 KSI target / monitoring points (2023 adjusted)	658	636	613	590	568
	Number of KSI (adjusted)	791	794	728	∅	∅
	KSI monitoring point achieved (-) or missed (+) by	132	158	115	∅	∅
A-Road (Single)	RIS2 KSI target / monitoring points (2023 adjusted)	331	320	308	297	286
	Number of KSI (adjusted)	321	342	391	∅	∅
	KSI monitoring point achieved (-) or missed (+) by	(10)	22	83	∅	∅

KSIs per hundred million vehicle miles (hmvm) on A-roads dual and single: 2018-2023



Traffic in hmvm on A-roads dual and single: 2018-2023



Dual carriageway A-roads remain safer than single carriageway A-roads

Dual carriageway A-roads on the SRN carry over five times more traffic than single carriageway A-roads, however the number of people killed and seriously injured on dual carriageway A-roads is less than double of those on single carriageway A-roads. This is reflected in the 2023 KSI rate being 2.50 for dual carriageway A-roads and 7.54 for single carriageway A-roads, which means that in 2023 a person travelling on a single carriageway road was three times more likely to be killed or seriously injured when compared to an equivalent journey on a dual carriageway A-road.

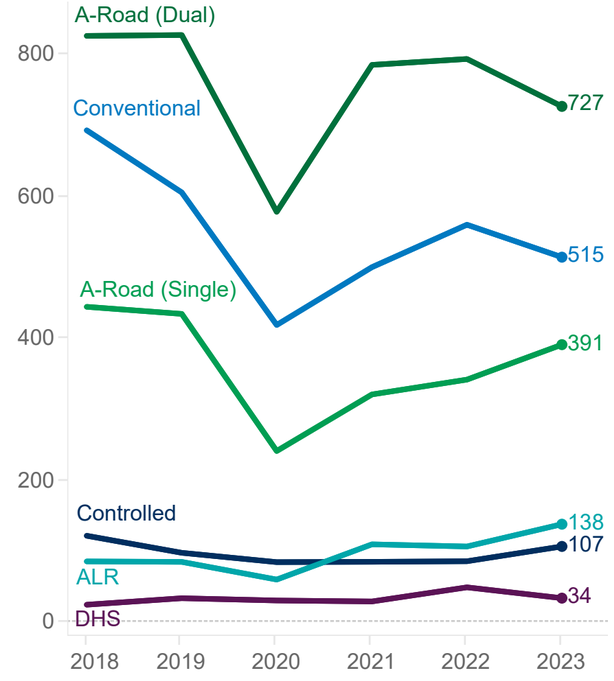
Despite being safer than single carriageway A-roads, there is more to do to reduce the number of people killed and seriously injured on dual carriageway A-roads. We are 115 KSIs above the 2023 monitoring point and require a reduction of 160 KSI casualties to achieve our 2025 target.

Single carriageways A-roads have an increased risk for head on collisions and collisions resulting from right turn manoeuvres across live traffic. This risk is partially mitigated through single carriageway roads having a lower national speed limit than dual carriageway A-roads. In 2023 we were 83 KSIs above our monitoring point for single carriageway A-roads and require a reduction of 105 KSI casualties to achieve our 2025 target.

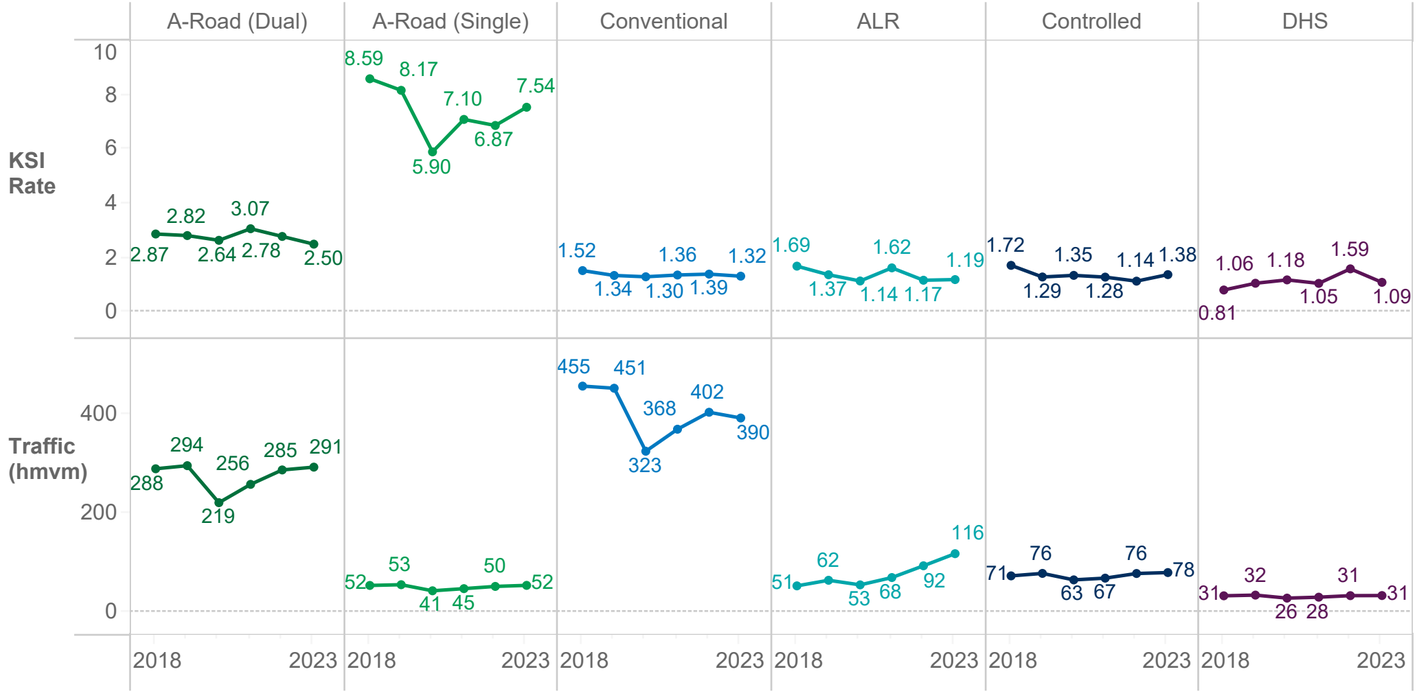
Overview
Introduction
KPI trends
PI trends
Other trends
Collision analysis
Global perspective
Key definitions

Trends in deaths and serious injuries by road type

KPI 1.1: KSI performance over time (2018 to 2023)



KSI rate and traffic per hundred million vehicle miles



KSI rates on both types of A-roads and most types of motorway are decreasing over time

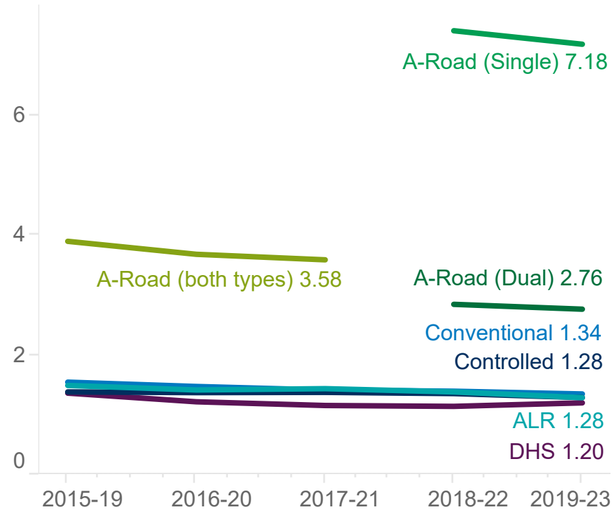
There are four different types of motorway and two different types of A-road on the SRN. Page four shows the difference in the number of miles of each road type on the SRN. Dual carriageway A-roads make up the largest share at 1,793 miles and dynamic hard shoulder motorways make up the smallest share at 63 miles. The volume of traffic that each of the road types carry differs, with motorways typically carrying more traffic than A-roads. This is illustrated in the traffic hundred million vehicle miles (hmvm) data visualisation above, with conventional motorways accounting for the largest share of traffic on the SRN and DHS motorways the lowest share of traffic on the SRN. KSI rates allow us to make effective comparisons between different roads or road types. The rate is presented as the number of killed and seriously injured casualties per hundred million vehicle miles (hmvm), which is an established way of assessing rates across the road sector.

More people are killed or seriously injured on dual carriageway A-Roads and conventional motorways. However, when the amount of traffic carried on each type of road is considered, the highest rate, by some margin, is on single carriageway A-roads. In 2023, the KSI rate on single carriageway A-roads was 7.54, up from 6.87 in 2022. The next highest KSI rate was on dual carriageway A-roads (2.50) followed by controlled motorways (1.38) and conventional motorways (1.32).

The number of miles of ALR motorway has increased from 118 miles in 2018 to 266 miles in 2023 and is therefore able to carry

Trends in deaths and serious injuries by road type (continued)

All vehicle five-year average KSI rates by road class and type 2015-2023



An improvement in the methodology for calculating traffic by single and dual carriageway A-Road applies to traffic from 2018 onwards. Therefore, five-year periods containing years before 2018 have not had rates calculated for dual and single carriageway A-Roads because we do not have the full five-years of data. Prior to this, rates for all A-Roads on the SRN are shown

more traffic. The amount of traffic carried by ALR motorways in 2023 (116 HMVMs) was more than double the traffic carried in 2018 (51 HMVMs). Although the number of KSI casualties on ALR motorways have increased over time from 86 in 2018 to 138 in 2023, the risk of an individual road user becoming a KSI casualty on an ALR motorway has decreased. This is evidenced by the decrease in the KSI rate on ALR motorways

from 1.49 between 2015 and 2019 to 1.28 between 2019 and 2023. KSI casualties on conventional motorways have reduced over time partially due to the upgrading of some conventional motorways to ALR motorways and controlled motorways. In 2018, conventional motorways carried 455 HMVM of traffic and in 2023 carried 390 HMVM of traffic, which is a 14% decrease in traffic using conventional motorways.

It is helpful to consider KSI rates over five years when comparing different types of roads given the variation in length of the road types and vehicle miles travelled on the roads. Using five-year rates increases the certainty in conclusions and to some extent this reduces the impact from external events, such as Covid-19. KSI rates are higher on A-roads than motorways, with single carriageway A-roads having the highest five year KSI rate in the period between 2019 and 2023 at 7.18 KSI casualties per hundred million vehicle miles. DHS motorways have the lowest five year KSI rate in the period between 2019 and 2023 at 1.20 KSI casualties per hundred million vehicle miles. Conventional motorways have the highest KSI rate of the four motorway types at 1.34 collisions per hundred million vehicle miles.

The controlled motorway KSI rate increased to 1.38 in 2023, from 1.14 in 2022. This is the highest rate on controlled motorways since 2018, and it is slightly higher than the 2020 rate. However, as with DHS motorways, where there was an increase in 2022 before a reduction in line with the longer-term trend in 2023, KSI rates can vary year on year, which is why we look at rates over a five-year period. In the most recent five-year period (2019-2023), the KSI rate on controlled motorways is the same as ALR (1.28) and is lower than the KSI rate on conventional motorways (1.34).

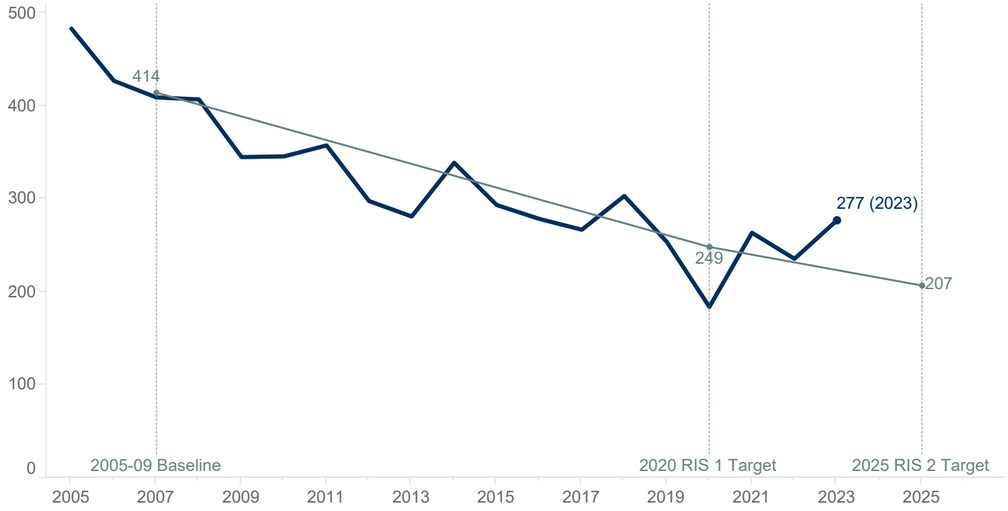
The overall trend of the five year period 2019-2023 shows a decrease of KSI rates on the SRN, compared to 2015-2019, with reductions across all road types. As mentioned previously, the highest KSI rate is on single carriageway A-roads. Both single carriageway and dual carriageway A-road KSI rates have decreased from the 2018-2022 period, and the KSI rate for A-roads combined decreased between the 2015-2019 and 2017-2021 periods, prior to separate rates being calculated for single and dual carriageway A-roads.

The findings regarding the performance of DHS motorways should be treated with a degree of caution as DHS is the least common motorway type in both length and vehicle miles travelled. The smaller sample size makes the calculation of rates, more sensitive to individual collisions occurring on those roads. On DHS motorways, it is also important to note that when the hard shoulder is operating as a live lane, the speed is set at a maximum of 60mph. Relative to the volume of traffic on roads across the SRN, the risk of death or serious injury from a road traffic collision has reduced over time.

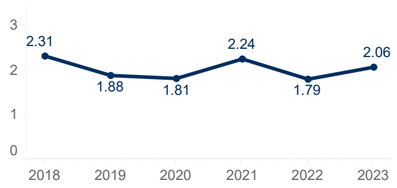
Overview
Introduction
KPI trends
PI trends
Other trends
Collision analysis
Global perspective
Key definitions

Safety in the North West Region

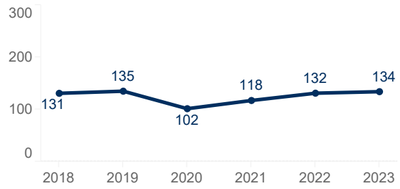
KPI 1.1 KSI performance over time (2005 to 2023) compared to 2023 adjusted target / monitoring points in the North West region

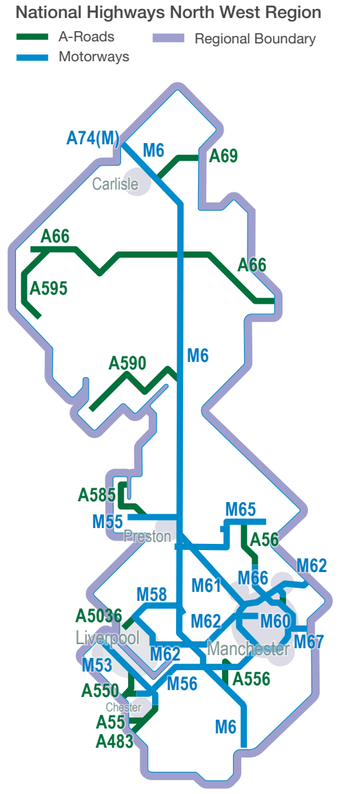


KSIs per hundred million vehicle miles (hmvm): 2018-2023



Traffic in hmvm: 2018-2023





KSI performance in RIS2: 2021-2025

	2021	2022	2023	2024	2025
RIS2 KSI target / monitoring points (2023 adjusted)	240	232	224	215	207
Number of KSI (adjusted)	264	236	277	Ø	Ø
KSI monitoring point achieved (-) or missed (+) by	24	4	54	Ø	Ø

Substantial challenge ahead

The number of people killed or seriously injured in the North West region increased from 236 in 2022 to 277 in 2023. This is 41 more casualties than the previous year. The North West was the region with the highest increase in KSIs.

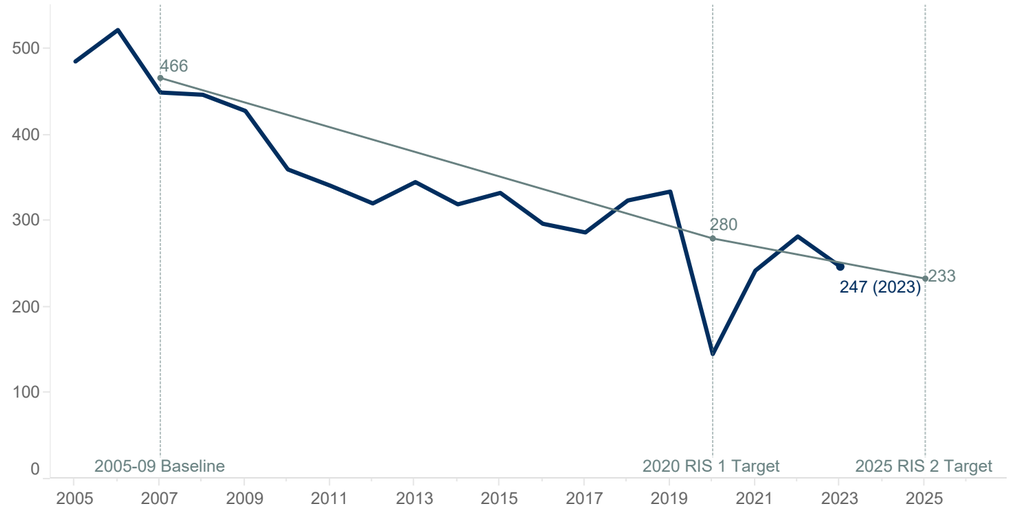
The volume of traffic in 2023 was similar to levels of recent years, apart from 2020 and 2021. However, fluctuations in annual KSIs has resulted in a variation in KSI rates. The 2023 rate of 2.06 KSIs per hmvm is an increase from 2022 but is lower than it was in 2021. In the North West, there were 54 more KSIs than the 2023 monitoring point. A further reduction of 70 KSIs is required to meet the 2025 target.

We have delivered road safety enhancement schemes in the North West region to improve safety for all road users and reduce the number of people harmed on the region's roads. We have upgraded road markings and signage at M6 junction 37 and installed safety cameras on the A585-M55 junction 3 and A66. In addition to these measures aimed at reducing KSIs, efforts to prevent suicides on the network are also being prioritised. This includes the upgrade of bridge parapets, such as the M602 junction 2-3 project.

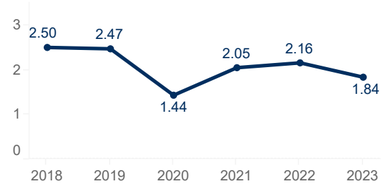
Overview
Introduction
KPI trends
PI trends
Other trends
Collision analysis
Global perspective
Key definitions

Safety in the Yorkshire and North East Region

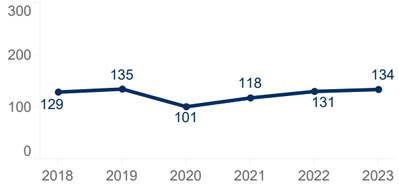
KPI 1.1 KSI performance over time (2005 to 2023) compared to 2023 adjusted target / monitoring points in the Yorkshire and North East region

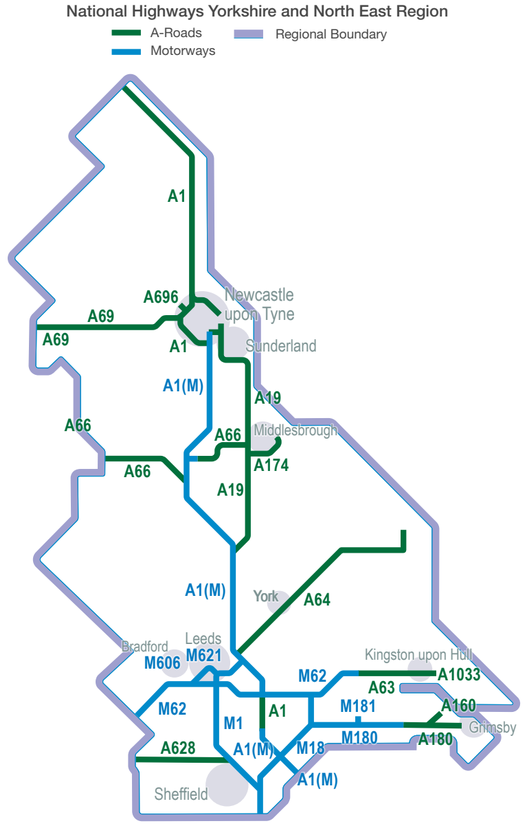


KSIs per hundred million vehicle miles (hmvm): 2018-2023



Traffic in hmvm: 2018-2023





KSI performance in RIS2: 2021-2025

	2021	2022	2023	2024	2025
RIS2 KSI target / monitoring points (2023 adjusted)	270	261	252	242	233
Number of KSI (adjusted)	242	282	247	Ø	Ø
KSI monitoring point achieved (-) or missed (+) by	(28)	21	(5)	Ø	Ø

A reduced killed and seriously injured casualty rate

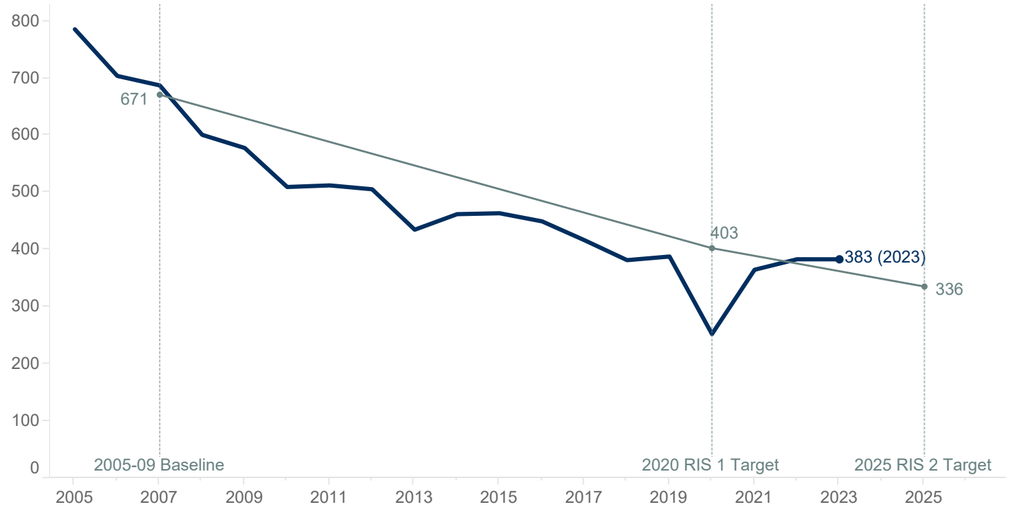
The number of people killed or seriously injured in the Yorkshire and North East region decreased from 282 in 2022 to 247 in 2023. This is a reduction of 35 KSI's. The volume of traffic in 2023 was similar to 2018, 2019 and 2022, however the number of people killed and seriously injured in 2023 was lower. This is reflected in an improvement in the KSI rate of 1.84 in 2023 compared to 2.50 in 2018. The number of killed and seriously injured people in 2023 was five below the 2023 monitoring point for the region. A further reduction of 13 KSIs is required to meet the 2025 target.

We are committed to improving road safety in the North East region and have delivered improved road markings and signage on the A66 Boldron Bypass Gaps and A1/A1068. We also aim to reduce the risk of wrong-way driving in areas like the A161 Wortley and M62 Hartshead by enhancing traffic signals and road markings.

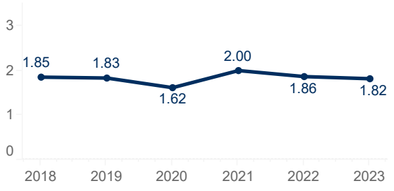
Overview
Introduction
KPI trends
PI trends
Other trends
Collision analysis
Global perspective
Key definitions

Safety in the Midlands Region

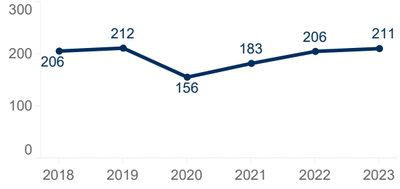
KPI 1.1 KSI performance over time (2005 to 2023) compared to 2023 adjusted target / monitoring points in the Midlands region

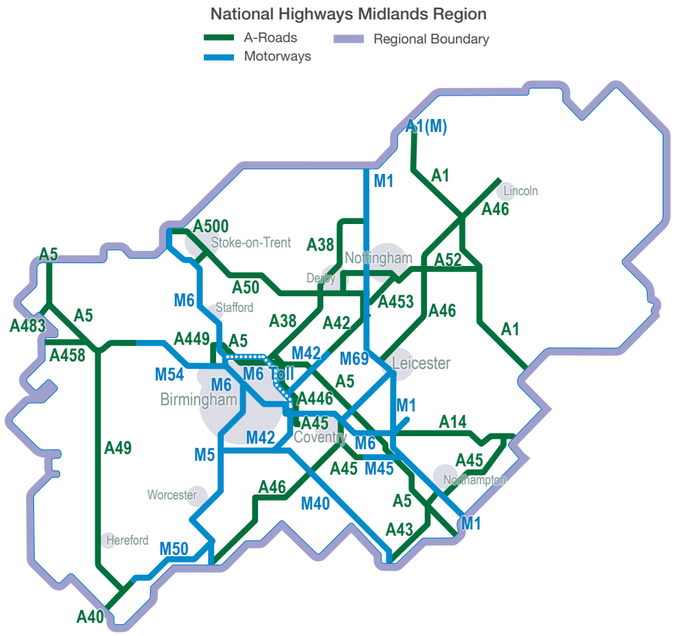


KSIs per hundred million vehicle miles (hmvm): 2018-2023



Traffic in hmvm: 2018-2023





KSI Midlands region performance in RIS2: 2021-2025

	2021	2022	2023	2024	2025
RIS2 KSI target / monitoring points (2023 adjusted)	389	376	362	349	336
Number of KSI (adjusted)	365	383	383	Ø	Ø
KSI monitoring point achieved (-) or missed (+) by	(24)	7	21	Ø	Ø

Little change from 2022

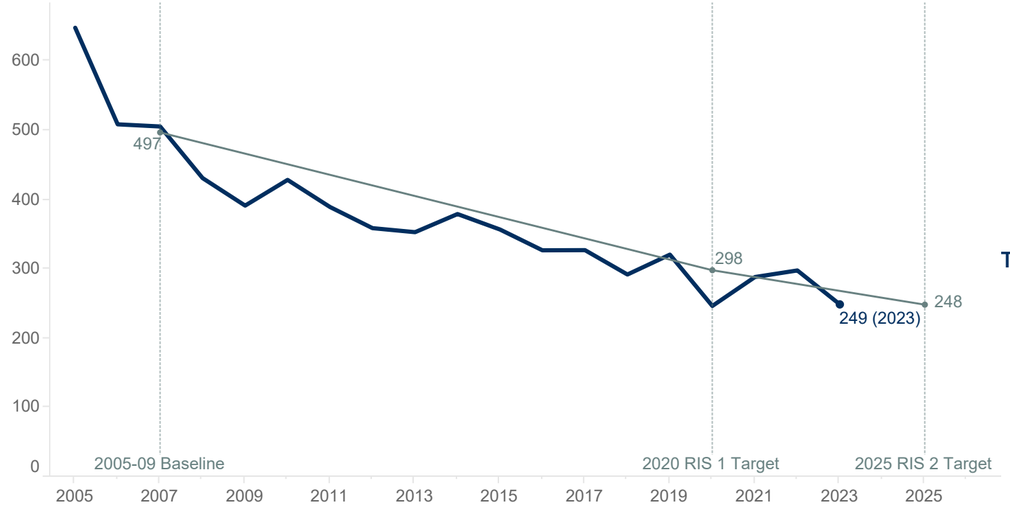
The number of people killed or seriously injured in the Midlands region stayed the same in 2023, when compared to 2022 (383 KSIs). This is similar to the number of deaths and serious injuries in 2018 and 2019. The volume of traffic in 2023 was similar to 2018, 2019 and 2022 and this is reflected in a similar KSI rate of 1.82 in 2023 compared to those years. The number of killed and seriously injured people in 2023 was 21 above the 2023 monitoring point for the region. A further reduction of 48 KSI casualties is required to meet the 2025 target.

In 2024 we completed work to upgrade the barriers on the M42 junction 4-7. We replaced the existing steel central reservation barrier with a safer and more durable concrete one between junctions 4 and 5. We also installed additional CCTV cameras and signage between junctions 4 and 6. We are making improvements to three roundabouts on the A38 near Derby, which will reduce congestion and improve safety for all road users by separating local traffic from through traffic.

Overview
Introduction
KPI trends
PI trends
Other trends
Collision analysis
Global perspective
Key definitions

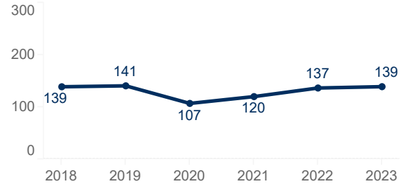
Safety in the East Region

KPI 1.1 KSI performance over time (2005 to 2023) compared to 2023 adjusted target / monitoring points in the East region

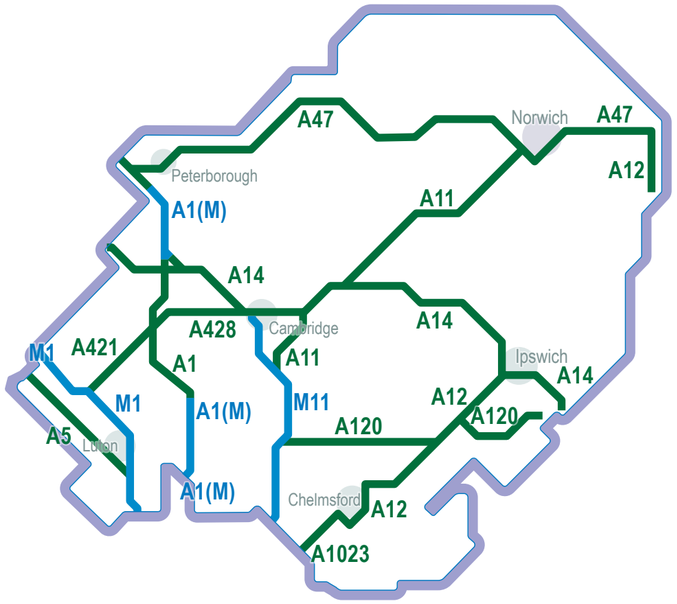


KSIs per hundred million vehicle miles (hmvm): 2018-2023

Traffic in hmvm: 2018-2023



National Highways East Region



KSI East region performance in RIS2: 2021-2025

	2021	2022	2023	2024	2025
RIS2 KSI target / monitoring points (2023 adjusted)	288	278	268	258	248
Number of KSI (adjusted)	288	298	249	Ø	Ø
KSI monitoring point achieved (-) or missed (+) by	0	20	(19)	Ø	Ø

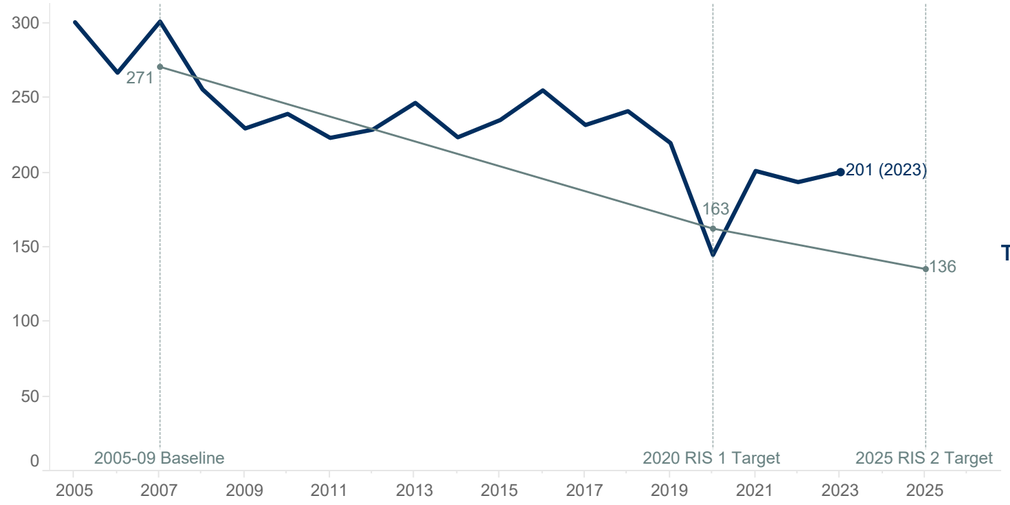
2023 monitoring point met

The number of people killed or seriously injured in the East region decreased from 298 in 2022 to 249 in 2023 following an increase in 2022. The volume of traffic in 2023 was similar to 2018, 2019 and 2022 levels, however, the number of people killed and seriously injured was lower in 2023. This is reflected in a reduction in KSI rate from 2.17 in 2022 to 1.78 in 2023. The number of killed and seriously injured people in 2023 was 19 below the 2023 monitoring point for the region. A reduction of one more KSI is required to meet the 2025 target.

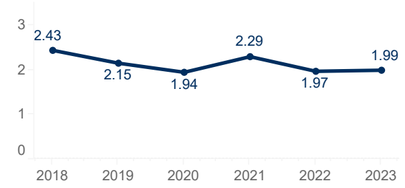
Using collision data, research and risk assessments, we have selected locations on the SRN where safety enhancement projects are likely to reduce the total number of collisions and people killed or seriously injured. We have implemented targeted speed limit reductions and introduced speed camera enforcement equipment within the East region. For example, on the A47 between Acle and Great Yarmouth and the A5 Little Brickhill to Thorn roundabout.

Safety in the South West Region

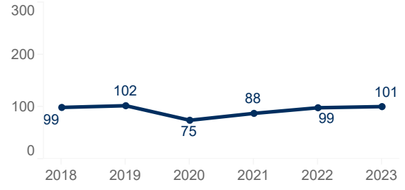
KPI 1.1 KSI performance over time (2005 to 2023) compared to 2023 adjusted target / monitoring points in the South West region

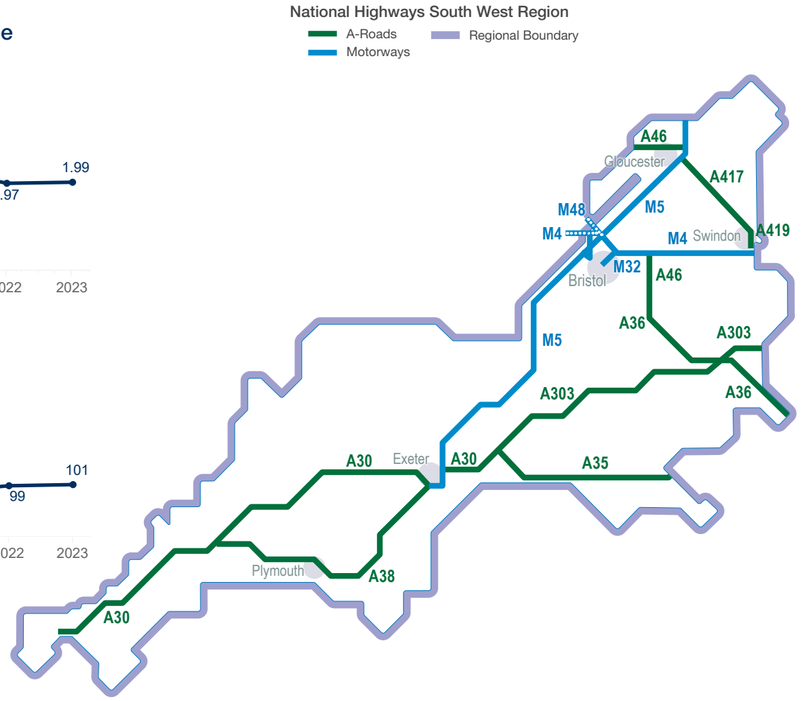


KSIs per hundred million vehicle miles (hmvm): 2018-2023



Traffic in hmvm: 2018-2023





KSI South West region performance in RIS2: 2021-2025

	2021	2022	2023	2024	2025
RIS2 KSI target / monitoring points (2023 adjusted)	157	152	146	141	136
Number of KSI (adjusted)	201	194	201	Ø	Ø
KSI monitoring point achieved (-) or missed (+) by	44	42	54	Ø	Ø

Little overall change in the past three years

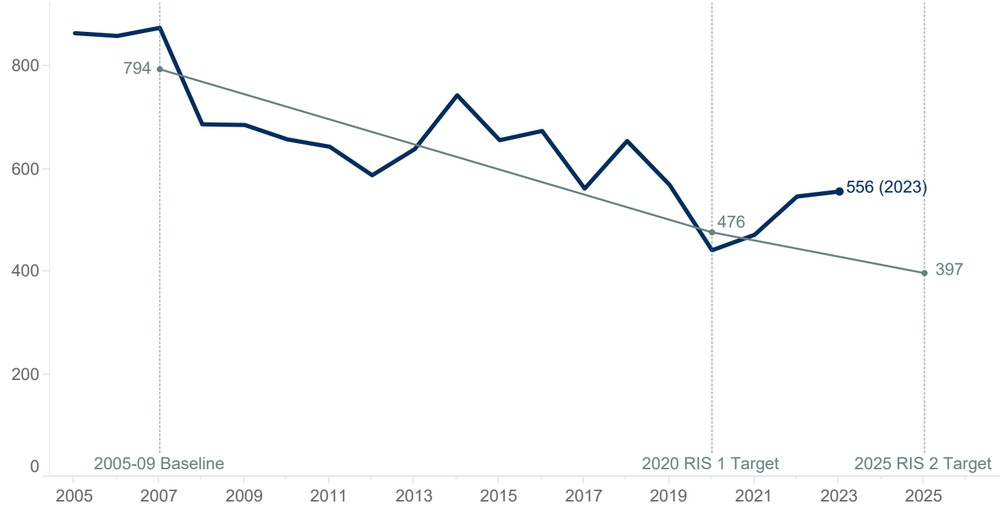
The number of people killed or seriously injured in the South West region increased from 194 in 2022 to 201 in 2023. This is similar to the number killed or seriously injured in 2021. The volume of traffic in 2023 was similar to 2018, 2019 and 2022 levels. The 2023 KSI rate is similar to the 2022 rate – whilst there was an increase in KSIs there was also a slight increase in traffic, meaning there was only a small increase in the rate. The number of killed and seriously injured people in 2023 was 54 above the 2023 monitoring point for the region. A further reduction of 65 KSI casualties is required to meet the 2025 target.

Ensuring the speed limit is suitable for the characteristics and usage of the road is a key factor in reducing road user harm on the strategic road network. In the South West, on the A38 in Cornwall, we have introduced 30mph speed limits in Tideford and Landrake and work is underway to install average speed cameras enforcing a 50mph speed limit between Carkeel roundabout and Trerulefoot. We also plan on reducing the speed limit on the A38 in Devon near Plymouth Parkway.

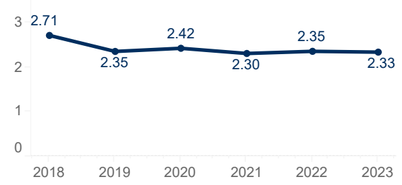
Overview
Introduction
KPI trends
PI trends
Other trends
Collision analysis
Global perspective
Key definitions

Safety in the South East Region

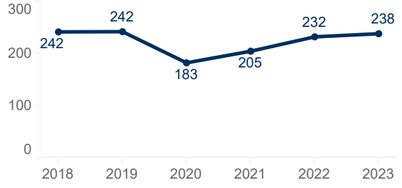
KPI 1.1 KSI performance over time (2005 to 2023) compared to 2023 adjusted target / monitoring points in the South East region

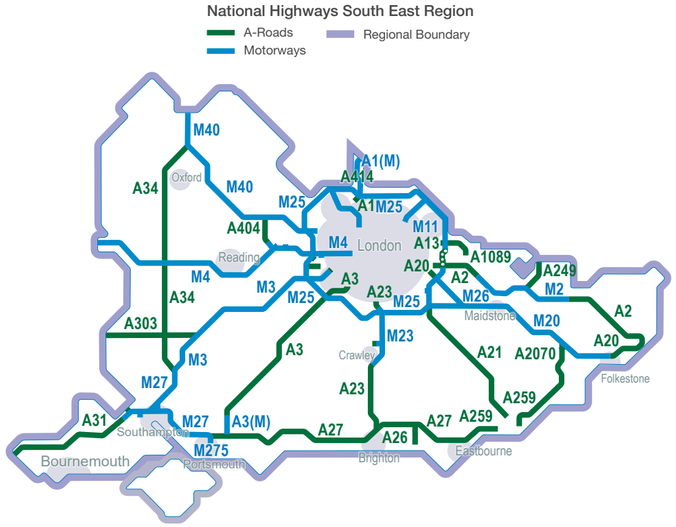


KSIs per hundred million vehicle miles (hmvm): 2018-2023



Traffic in hmvm: 2018-2023





KSI South East region performance in RIS2: 2021-2025

	2021	2022	2023	2024	2025
RIS2 KSI target / monitoring points (2023 adjusted)	461	445	429	413	397
Number of KSI (adjusted)	472	546	556	Ø	Ø
KSI monitoring point achieved (-) or missed (+) by	11	102	127	Ø	Ø

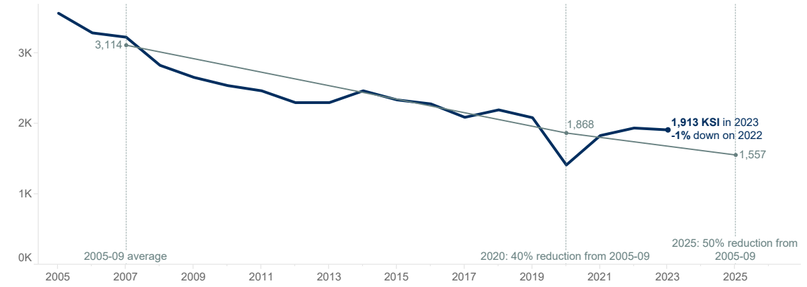
KSI rates are stable but there is a substantial challenge ahead

The number of people killed or seriously injured in the South East region increased from 546 in 2022 to 556 in 2023. This is the third consecutive annual increase but is still lower than in 2019. The volume of traffic has also been gradually increasing over the past few years, which is reflected in the KSI rate staying at a similar level over the same period. The number of killed and seriously injured people in 2023 was 127 above the 2023 monitoring point for the region. A further reduction of 159 KSI casualties is required to meet the 2025 target.

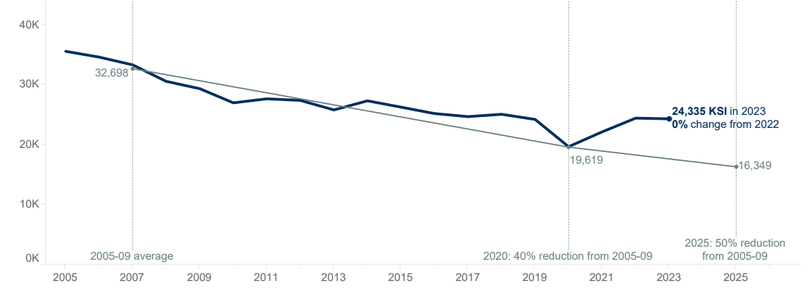
Ensuring the speed limit is suitable for the characteristics and usage of the road is a key factor in reducing road user harm on the strategic road network. Data from the past five years shows the number of collisions in Hooley is higher than the national average for this type of road and that vehicle speed is a safety factor. We have reduced the speed limit on the A23 through Hooley village and from the M23 junction 7. Additionally, we have implemented other measures to further improve road safety in Hooley. This includes new traffic signals at the Star Lane and Netherne Drive junctions and a new red-light camera, which were installed last year. We are also due to apply a special high-friction road surface treatment on the A23 Brighton Road at the Dean Lane and Netherne Drive junctions to help improve vehicle grip.

Total number of people killed and seriously injured (KSIs) on the SRN compared to the rest of England and Great Britain

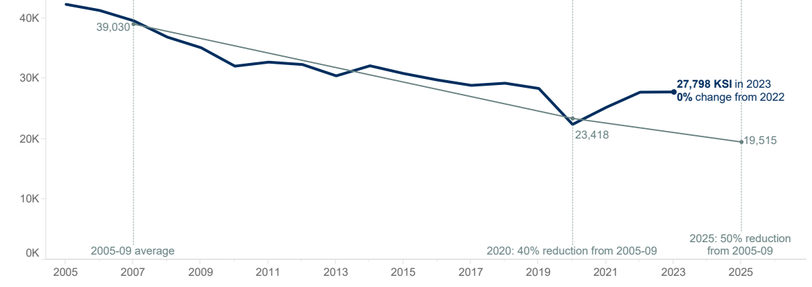
KSIs on England's Strategic Road Network (SRN)



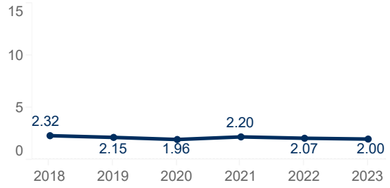
KSIs on the rest of England's roads



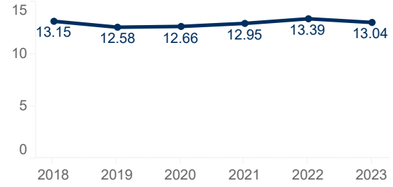
KSIs on the rest of English, Scottish and Welsh roads (GB)



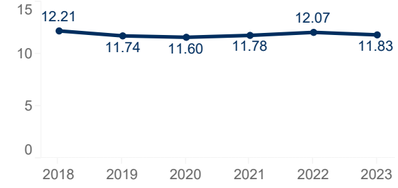
KSIs per hundred million vehicle miles (hmvm) on the SRN: 2018-2023



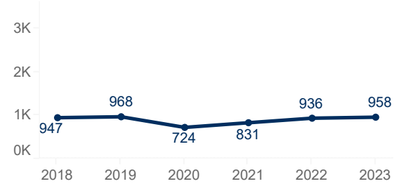
KSIs per hundred million vehicle miles (hmvm) on the rest of England's roads: 2018-2023



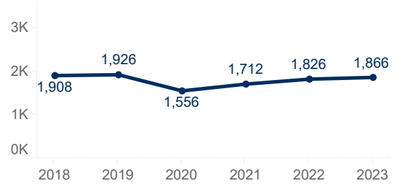
KSIs per hundred million vehicle miles (hmvm) on the rest of English, Scottish and Welsh roads (GB): 2018-2023



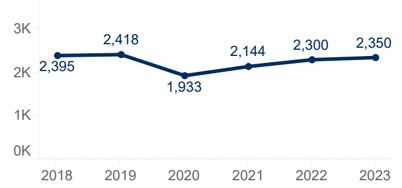
Traffic on the SRN in hmvm: 2018-2023



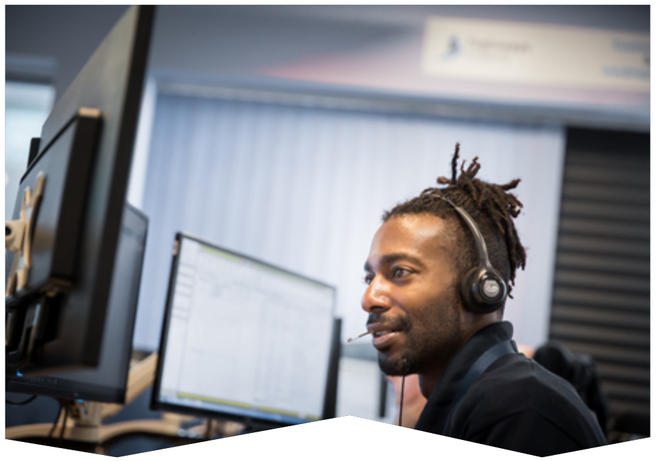
Traffic on the rest of England's roads in hmvm: 2018-2023



Traffic on the rest of English, Scottish and Welsh roads GB) in hmvm: 2018-2023



Reporting of road casualty data



Since 2012, many police forces have changed the way they collect safety data. Using the new method an incident is categorised automatically based on the worst injury, rather than (using the previous method) the judgement of a police officer.

Police forces using the new method report more serious injuries than those which don't.

The Department for Transport (DfT) and the Office for National Statistics (ONS) have developed an approach to adjust the data collected from those police forces not currently using the automated system. This adjusted data is published annually by DfT and is the basis for the safety analysis in this report. By 2023, the automated systems were being used by 25 of the 38 (65.8%) police forces which cover the SRN.

DfT commissioned the ONS to estimate adjustment factors for historical KSI data. This enables the production of consistent numbers over time which are independent of the reporting method being used.

The methodology paper *Estimating and adjusting for changes in the method of severity reporting for road collisions and casualty data*: final report was published in July 2019. It is complemented by the Annex: Update to severity adjustment methodology which was published in September 2019.

The STATS19 values in this report are based on the adjusted figures.

Due to varying Covid-19 restrictions across different regions and therefore varying traffic levels across roads, comparisons of absolute numbers should be made with caution. Using KSI rates, which takes traffic volume into account, makes comparisons between different road types more representative.

Annual updates to casualty severity adjustments are likely to be needed until all police forces have adopted injury-based reporting systems. Historic serious injury data from the 2005-2009 baseline period, on which our KPI target is based, will be subject to a small degree of change each year as the latest ONS adjustment factor analysis becomes available. This therefore means that our target to reduce KSIs by 50% by the end of 2025, which is based on the 2005-2009 period, will also be subject to small annual changes so that it is based on the best information available at the time

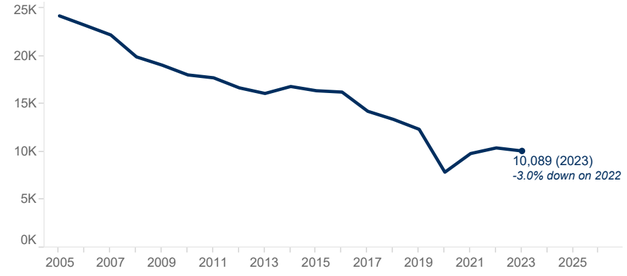
Performance Indicator (PI) trends

2

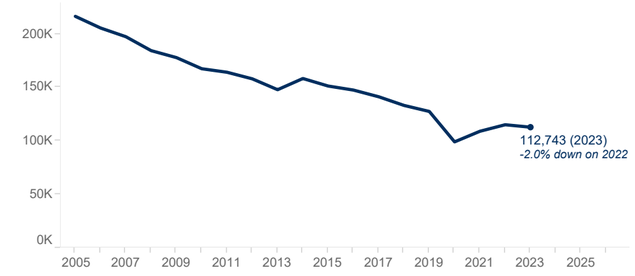
Deaths and injuries (all casualty severities) on the Strategic Road Network (SRN)

PI 1.2: Total number of people killed or injured (all casualties)

All casualties on the SRN



All casualties on rest of England's roads

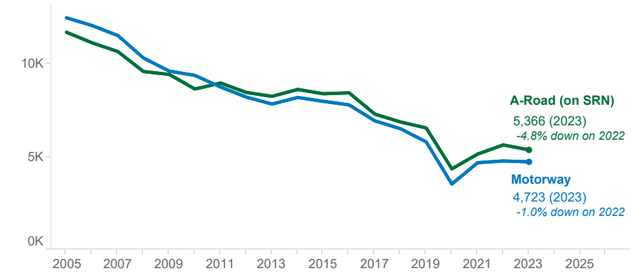


The number of people injured in collisions on the SRN has more than halved since the 2005-2009 baseline period.

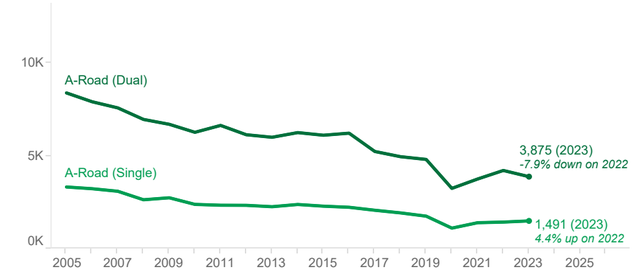
In 2023 there were 10,089 casualties, of all severities, on the SRN which is a decrease of 317 (3.0%) from 2022. For the rest of England, the total number of casualties decreased by 2.0% meaning the decrease in the number of casualties on the SRN was slightly higher than the rest of England.

KSIs on the SRN decreased by 1.4% compared with an increase of 0.5% for the rest of England. Casualties with a slight injury decreased by 3.4% on the SRN compared with a decrease of 2.4% for the rest of England.

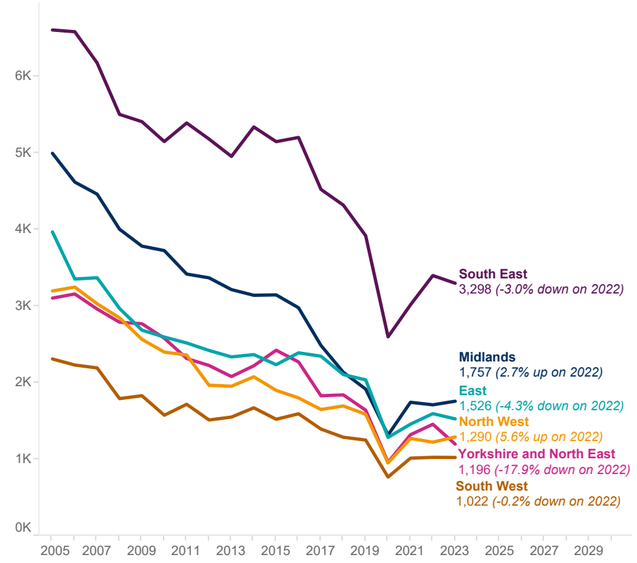
All casualties on the SRN by road class



All casualties on the SRN A-Roads by type



All casualties on the SRN by region



The number of people killed or injured in road traffic collisions on the SRN has more than halved since the baseline period.

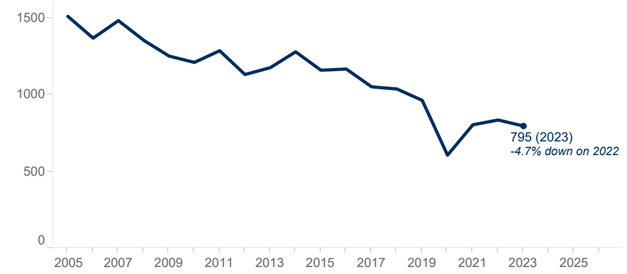
The most notable change on the SRN occurred on single carriageway A-roads where the total number of casualties increased by 4.4% compared with 2022. Casualties decreased by 7.9% on dual carriageway A-roads and by 1% on motorways. Improving safety on single carriageway A-roads is a point of focus for National Highways and much of our safety investment for the 2025/26 financial year is targeted at these roads.

The North West region had the highest increase in the number of casualties (5.6%) followed by the Midlands region (2.7%). The Yorkshire and North East region (17.9%) and the East region (4.3%) were the only regions to have a larger reduction than the 3% across the whole SRN.

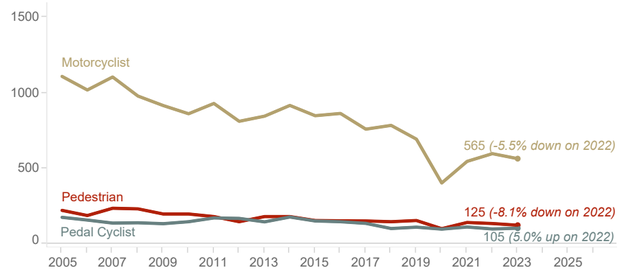
Pedestrians, cyclists and motorcyclist users killed or injured on the Strategic Road Network (SRN)

PI 1.3: Total number of non-motorised and motorcyclist users killed or injured on the Strategic Road Network (SRN)

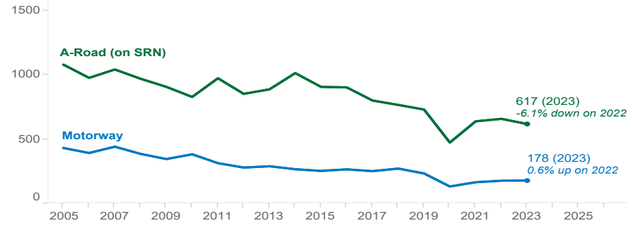
All vulnerable road user casualties on the SRN



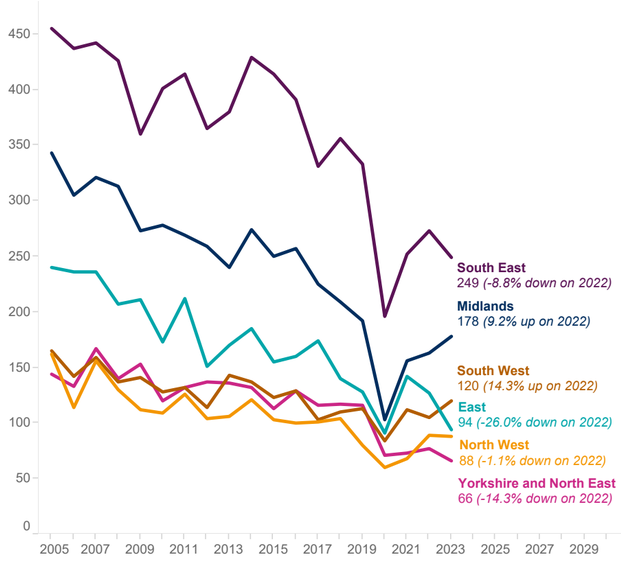
All vulnerable road user casualties on the SRN by user group



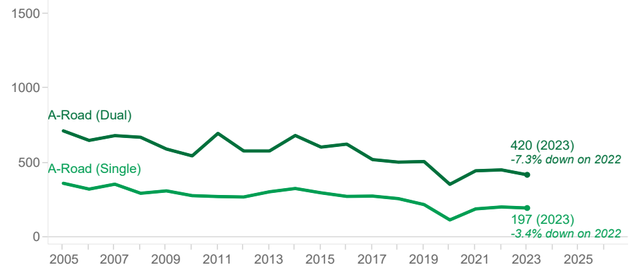
All vulnerable road user casualties on the SRN by road class



All vulnerable road user casualties on the SRN by region



All vulnerable road user casualties on the SRN A-Roads by type



Overall vulnerable road user casualties decreased in 2023 by more than other casualty types

Our second Performance Indicator (PI1.3) is the number of pedestrian, pedal cyclist, motorcyclist and equestrian users killed or injured on the SRN

Vulnerable road users is a collective term used to describe pedestrians, cyclists, motorcyclists and horse riders. The number of vulnerable road user casualties on the SRN decreased by 4.7% from 2022 to 2023. This is more than the 3.0% decrease for total SRN casualties.

The number of pedestrian and motorcyclist casualties both decreased when compared with 2022, with pedestrian casualties decreasing by 8.1% and motorcyclist casualties decreasing by 5.5%. Pedal cyclist casualties increased by 5.0% when compared to 2022.

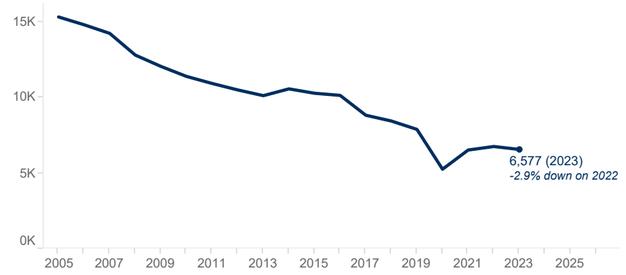
In 2023 the number of vulnerable road user casualties decreased on both dual carriageway A-roads (7.3%) and single carriageway A-roads (3.4%), when compared to 2022. On motorways vulnerable road user casualties increased slightly (0.6%). The South West region had the highest increase in vulnerable road user casualties (14.3%) followed by the Midlands (9.2%). All other regions had a reduction in the number of vulnerable road user casualties with the largest decrease being the East region (26.0%).

Overview
Introduction
KPI trends
PI trends
Other trends
Collision analysis
Global perspective
Key definitions

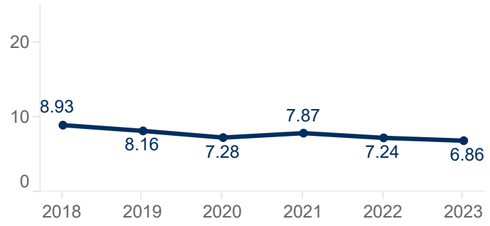
Injury collisions on the Strategic Road Network

PI 1.4: Total number of injury collisions on the Strategic Road Network (SRN)

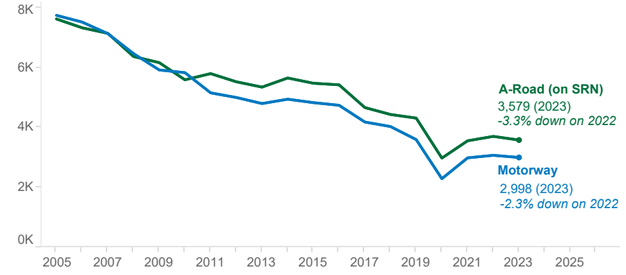
All personal injury collisions on the SRN



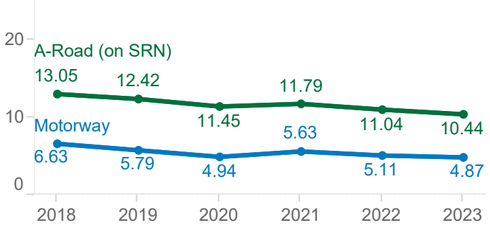
PIC rate on the SRN: 2018-2023



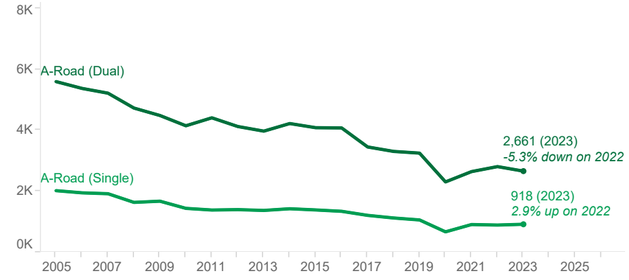
All personal injury collisions on the SRN by road class



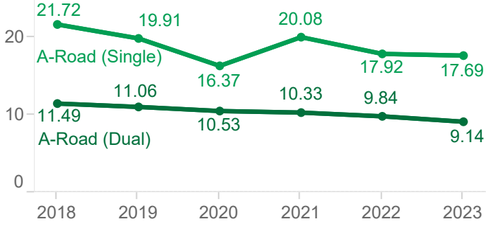
PIC rate on the SRN by road class: 2018-2023



All personal injury collisions on SRN A-Roads by type



PIC rate on the SRN by A-Road type: 2018-2023



Fewer injury collisions are occurring on the Strategic Road Network.

Our third Performance Indicator (PI1.4) is the number of collisions recorded that resulted in at least one injury (of any severity) on the SRN.

Reducing the number of injury collisions on the strategic road network is part of our Road to Zero Harm initiative. Over time, National Highways and our partners have made significant progress in this area. As the number of collisions decrease, the remaining collisions that do occur become increasingly challenging to prevent. Our focus is not only on preventing collisions but also on improving outcomes where collisions do occur by minimising fatalities and serious injuries.

Personal injury collision (PIC) rates measure the number of injury collisions which occur on the SRN relative to the amount of traffic the network is carrying. The trend of PIC rates on the SRN reducing over time has continued in 2023 on both motorways and A-roads. In 2023 SRN PIC rates were highest on single carriageway A-roads at 17.69 per 100 million vehicle miles (HMVM), this is a reduction from the 2018 PIC rate of 21.72.

The iRAP (International Roads Assessment Program) star rating of our network assesses the quality of infrastructure, presence of road features and operational characteristics (such as traffic volumes and speeds). In terms of safety, the highest risk roads are rated as 1-star and the lowest risk roads are rated as 5-star. Single carriageway A-roads have the lowest star rating when compared to dual carriageway A-roads and motorways. In our second roads period, we have been combining star ratings with historical collision data as part of the prioritisation process for investment in road safety improvements. Several road safety improvements, to be delivered in 2025/26, are focused on single carriageway A-roads. In our third roads period, our aspiration is to focus even more on delivering safety improvements on our 1 and 2-star iRAP rated roads.

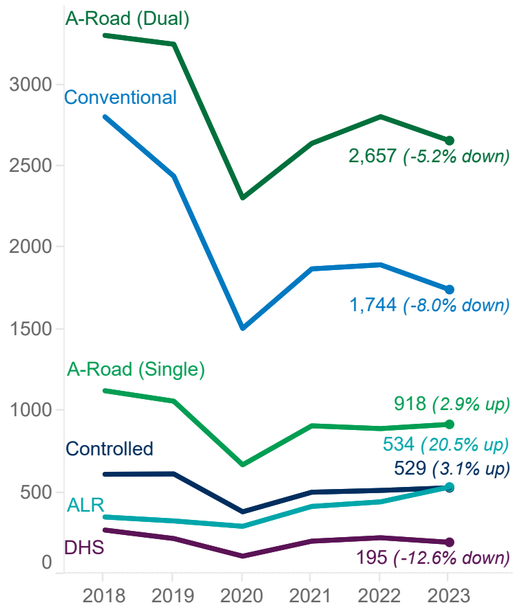
https://nationalhighways.co.uk/media/3mya00pi/the-strategic-road-network-star-rating-report.pdf

Overview
Introduction
KPI trends
PI trends
Other trends
Collision analysis
Global perspective
Key definitions

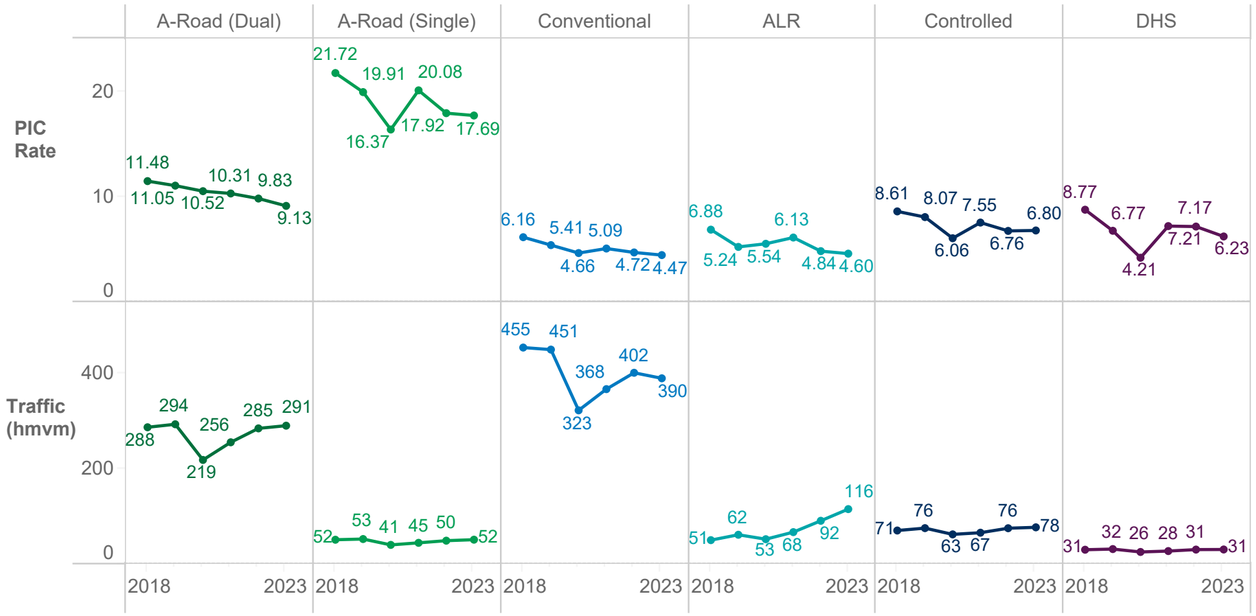
Trends in personal injury collisions (PIC) on the SRN by road type

PI 1.4: Total number of injury collisions on the Strategic Road Network (SRN) by road type

PICs



PIC rate and traffic per hundred million vehicle miles



Personal Injury Collision rates are trending downwards on all types of motorways and A-roads

Personal injury collision (PIC) rates measure the number of injury collisions which occur on the SRN relative to the amount of traffic the network is carrying and allow us to make effective comparisons between different roads or road types. The rate is presented as the number of collisions per hundred million vehicle miles (hmvm), which is an established way of assessing rates across the road sector.

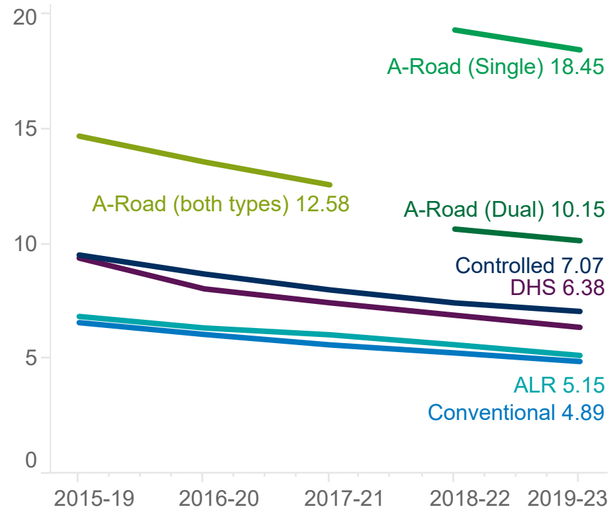
Across the SRN there are four different types of motorway and two types of A-roads. The trend of PIC rates on the SRN reducing over time has continued in 2023 on both motorways and A-roads, although there was a slight increase on controlled motorways, from 6.76 to 6.80. In 2023 SRN PIC rates were highest on single carriageway A-roads at 17.69 per 100 million vehicle miles (hmvm), this is a reduction from the 2018 PIC rate of 21.72. The next highest PIC rate in 2023 was on dual carriageway A-roads where the rate was 9.13 in 2023, down from 11.48 in 2018.

The number of miles of ALR motorway has increased from 118 miles in 2018 to 266 miles in 2023 and is therefore able to carry more traffic. The amount of traffic carried by ALR motorways in 2023 (116 hmvm) was more than double the traffic carried in 2018 (51 hmvm). Although the number of collisions has increased from 350 in 2018 to 534 in 2023, the risk of an individual road user being involved in an injury collision on an ALR motorway decreased, as evidenced by the reduction in the PIC rate from 6.88 in 2018 to 4.60 in 2023.

It is helpful to consider PIC rates over five years when comparing different types of roads given the variation in length of the road types and vehicle miles travelled on the roads. Using five year rates increases the certainty in conclusions and to some extent this reduces the impact from external events, such as Covid-19. PIC rates are higher on A-roads than motorways, with single carriageway A-roads having the highest five year KSI rate in the period between 2019 and 2023 at 18.45 PIC per hundred million vehicle miles. Conventional motorways have the lowest five year PIC rate in the period between 2019 and 2023 at 4.89 PIC per hundred

Overview
Introduction
KPI trends
PI trends
Other trends
Collision analysis
Global perspective
Key definitions

All vehicle five-year average PIC rates by road class and type 2015-2023



An improvement in the methodology for calculating traffic by single and dual carriageway A-Road applies to traffic from 2018 onwards. Therefore, five-year periods containing years before 2018 have not had rates calculated for dual and single carriageway A-Roads because we do not have the full five-years of data. Prior to this, rates for all A-Roads on the SRN are shown.

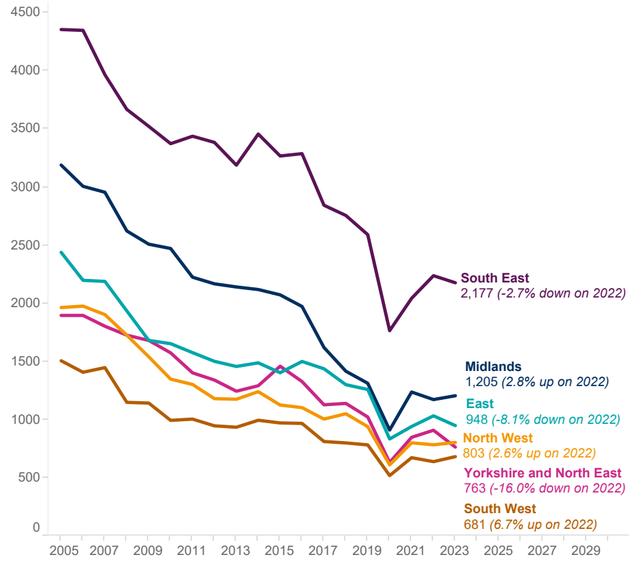
million vehicle miles. Controlled motorways have the highest PIC rate of the four motorway types at 7.07 collisions per hundred million vehicle miles.

The PIC rate for conventional motorways is 4.89 and for ALR motorways is 5.15. Based on the statistical significance testing, there is strong evidence that these two figures are statistically different to each other, and that the conventional motorway PIC rate is statistically lower than the ALR PIC rate. The PIC rates for both conventional and ALR motorways are statistically lower than the PIC rates for DHS motorways (6.38) and controlled motorways (7.07).

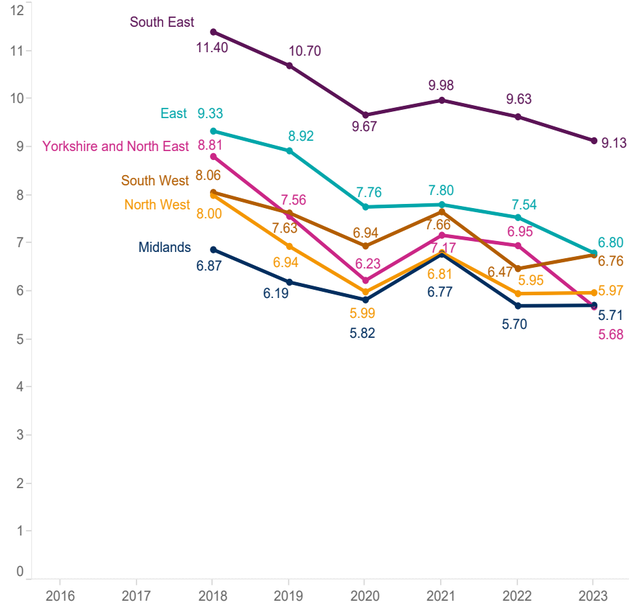
The overall trend is of PIC rates on the SRN decreasing from the 2015-2019 five year period, with five year PIC rates decreasing across all road types. Since the 2015-2019 period the largest decrease in PIC rates occurred on DHS motorways. Findings regarding the performance of DHS motorways should be treated with a degree of caution as DHS is the least common motorway type in both length and vehicle miles travelled. The smaller sample size makes the calculation of rates, more sensitive to individual collisions occurring on those roads. On DHS motorways, it is also important to note that when the hard shoulder is operating as a live lane, the speed is set at a maximum of 60mph.

Injury Collisions on the Strategic Road Network (SRN) by region

PI 1.4: Total number of collisions on the Strategic Road Network (SRN) by region



PIC Rate on the SRN by Region: 2018-2023



PIC rates across all regions decreasing over time

The number of personal injury collisions decreased in 2023 compared to 2022 in three regions. Personal injury collisions decreased the most in the Yorkshire and North East region (16.0%) followed by decreases in the East (8.1%) and South East (2.7%) regions. Personal injury collisions increased the most in the South West region (6.7%), followed by the Midlands (2.8%) and North West region (2.6%).

Personal injury collision rates were lower across all regions in 2023 than in 2018 and are showing a general trend of decreasing over time, with occasional short-term increases (such as 2020 when traffic was affected by the Covid-19 pandemic). The personal injury collision rates were lower in 2023 than 2022 for three of the six regions (South East, East and Yorkshire and North East) and higher in three regions (North West, Midlands and South West). We can see from the period covering 2018 to 2023 that each region has shown a reduction in the number of injury collisions occurring and the personal injury collision rates, which take the number of miles travelled on those roads into account.

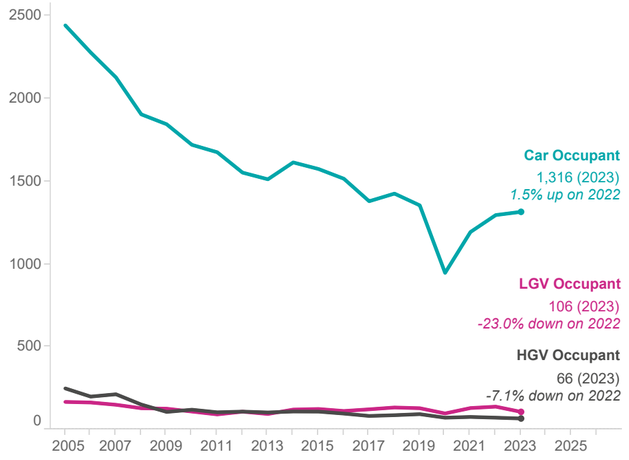
Other **trends**

3

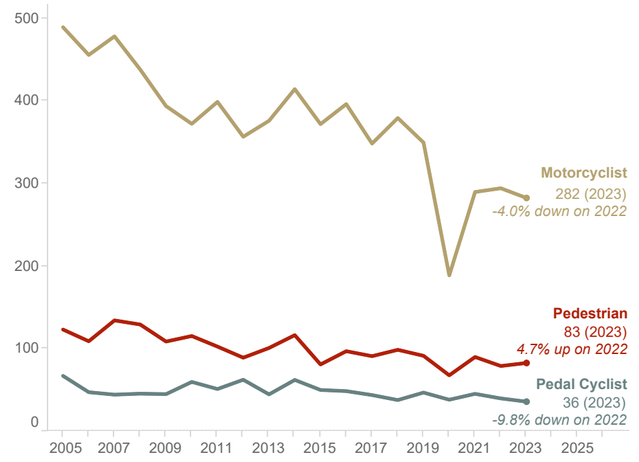
Overview
Introduction
KPI trends
PI trends
Other trends
Collision analysis
Global perspective
Key definitions

Deaths and serious injuries on the Strategic Road Network (SRN) by vehicle and non-motorised user type

Car, LGV and HGV KSIs on the SRN



Vulnerable user KSIs on the SRN

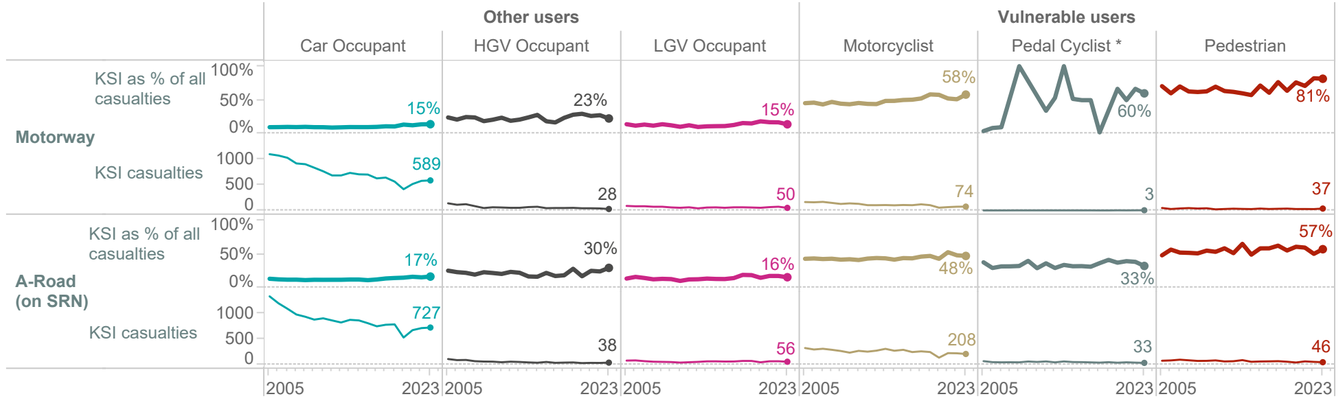


Motorcycle casualties and ridership lower than pre-pandemic levels

Motorcycle riders and their passengers are the non-pedestrian casualty type most likely to be killed or seriously injured in a collision on the SRN. Half (50%) of the motorcycle riders or passengers injured in a road traffic collision in 2023 were either killed or seriously injured. The more exposed position of riders, and their passengers, compared to other motorised vehicles is a factor. The number of

Overview
Introduction
KPI trends
PI trends
Other trends
Collision analysis
Global perspective
Key definitions

KSI and KSI as % of all casualties by road Class and User Group



motorcycle rider and passenger KSIs have been lower in the post pandemic period compared to the pre-pandemic period. The annual average KSIs per year in the period between 2015 and 2019 was 369 per year compared to 294 (a 20% decrease) in 2022 and 282 (a 23% decrease) in 2023. Motorcycle traffic on the SRN is known to have decreased by 20% in 2022 and 19% in 2023 compared to the 2015-2019 period. It is highly likely that the decrease in motorcycle traffic on the SRN in the post pandemic period is a key contributor to the decrease in the number of motorcycle rider and passenger KSIs on the network3.

There were 106 LGV occupant KSIs in 2023 which is a 23% reduction compared to 2022. Excluding 2020 there has been the fewest number of LGV occupant KSIs on the SRN since 2013 and this has occurred in a year when the SRN carried the highest ever volume of LGV traffic on record. This suggests that the number of LGV occupant KSIs in 2023 appears to be surprisingly low. As such, if LGV traffic levels do not change substantially we would expect LGV occupant KSIs will increase in 2024 back in line with the recent longer term trends.

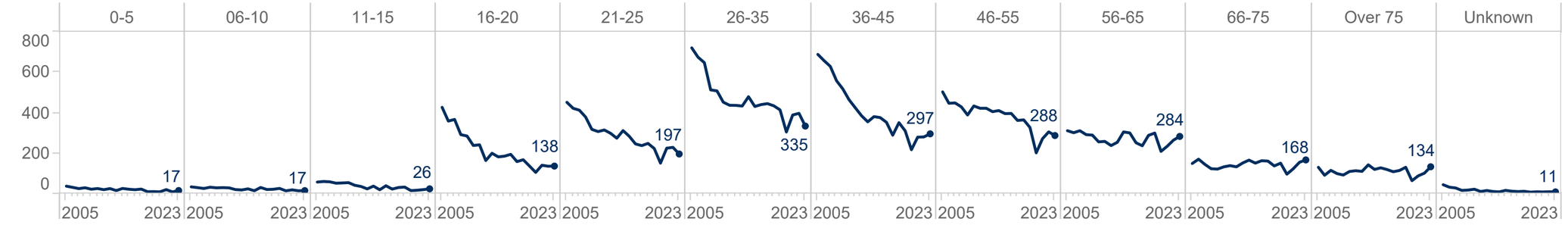
Heavy goods vehicle (HGV) occupant casualties have reduced substantially since the 2005-2009 baseline period. In 2023 there were 66 HGV occupant KSIs, which is the fewest number there have been on the SRN in any calendar year in the period analysed from 2005 to 2023. This is a decrease of 7% on 2022. As part of Euro NCAP's work to help many countries across Europe achieve their 'Vision Zero' target, in an industry first, trucks are now be rated as part of their vehicle safety programme. Euro NCAP created the five-star safety rating system to help consumers, compare the safety performance of cars. Euro NCAP publish safety reports on new cars, and awards 'star ratings' based on the performance of the vehicles in a variety of crash tests, including front, side and pole impacts, and impacts with pedestrians. National Highways is an affiliate member of the Euro NCAP's HGV safety rating programme. This means we can support Euro NCAP's work by helping to provide direction. We're supporting Euro NCAP's approach to HGV testing, to ensure they reflect the types of collisions seen on our roads. Working with Euro NCAP also helps our work in bringing together the safe vehicles elements of the Safe System approach.

Footnote 3 The number of killed and seriously injured motorcycle riders and passengers is reducing over time, however, this is broadly in line with a reduction in motorcycle traffic on the SRN.

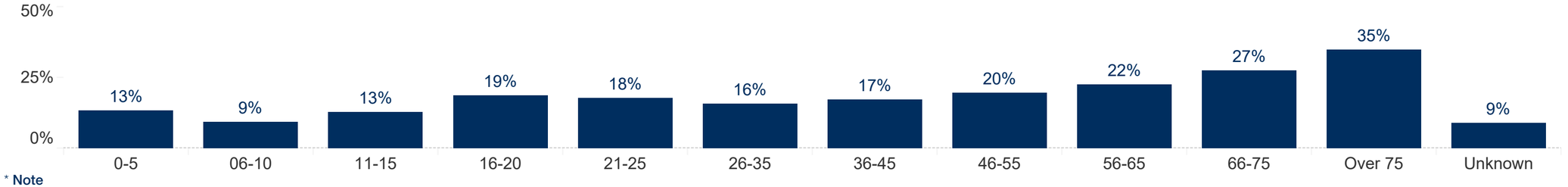
Overview
Introduction
KPI trends
PI trends
Other trends
Collision analysis
Global perspective
Key definitions

Deaths and serious injuries on the Strategic Road Network (SRN) by age groups

KSIs by age group 2005-2023



2023 Deaths and serious injuries as a percentage of age group casualties



* **Note**
Pedal cyclists are prohibited from using Motorways which we emphasise with signage.

Age is a factor in collision casualty outcomes

Road traffic collisions can impart a great deal of force on the human body. As we age the human body is more at risk from the impact of sudden force[4] and this is reflected in the casualty severity data. From the age of 45 the likelihood of a collision resulting in a casualty being killed or seriously injured increases, with those over the age of 75 most likely to die or be seriously injured if they are involved in a road traffic collision.

The Office for National Statistics forecasts that the number of people in the UK is expected to increase from 67.6 million in 2022 to 69.5 million in 2032 with a 2.5 million increase in those aged 66 or older[5]. As of 2023, the National Travel Survey estimates that 83% of adults aged 60 to 69, and 73% of adults aged 70 and over hold a driving licence[6]. Both these figures have increased since 2012, from 80% and 59% respectively. This combination of factors poses a challenge as it means we are likely to see more people using the SRN from the age groups with a higher severe injury risk from a collision impact than we have seen in the past. The effects of this appear to be reflected in the 2023 age group data analysis, with an increase of 17% in KSI casualties aged 66 to 75 and increase of 25% in casualties aged 75 or over compared to the 2005-2009 baseline period. By comparison there was a 48% reduction in the number of KSI casualties aged 55 or under and a reduction of 6% of casualties aged 56 to 65.

Footnote 4 https://road-safety.transport.ec.europa.eu/eu-road-safety-policy/priorities/safe-road-use/elderly-drivers/older-drivers_en

Footnote 5 https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/bulletins/nationalpopulationprojections/2022based

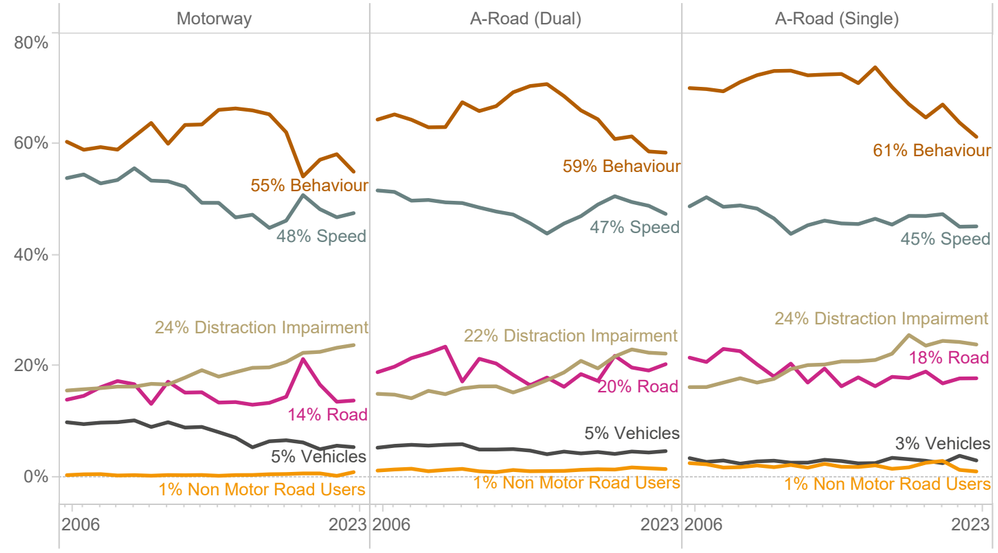
Footnote 6 https://www.gov.uk/government/statistics/national-travel-survey-2023

Collision analysis

4

Road Safety Factors in collisions on the Strategic Road Network by road class and type

Percentage of collisions where a Road Safety Factor has been identified: by road class and Road Safety Factor type



Distraction and/or impairment factors have increased over time.

As part of the most recent STATS19 review by DfT[7] , a decision was made that contributory factors would be replaced by a new set of road safety factors. The planned road safety factors are categorised into six groups: Behaviour or inexperience, Distraction or impairment, Non-motorised road users, Road, Speed and Vehicles.

Understanding the most common road safety factors identified in collisions on the SRN helps us understand the mitigations required to reduce the number of collisions and casualties on the SRN.

Road safety factors related to road user behaviour are the most common identified in collisions and are associated with around six out of ten collisions on the SRN. In recent years the proportion of collisions where road user behaviour has been identified as a factor has decreased.

Speed related factors are present in close to half of collisions on the SRN but only a small percentage of these relate to drivers exceeding the legal speed limit. Most speed road safety factors relate to drivers and riders travelling within the legal speed limit but at an inappropriate speed for the circumstances, such as driving too fast for the conditions at the time. The proportion of collisions featuring a speed related factor temporarily increased in 2020 but has subsequently returned to around pre-pandemic levels. It is likely that the lower traffic volumes, which resulted in higher average speeds on the SRN were a key influence in this temporary increase. Speed plays an important role in determining the impact forces when a collision occurs and the outcome of collisions. We must do what we can to ensure that the road conditions and the environment around it are appropriate for the intended purpose and speed limit for that road.

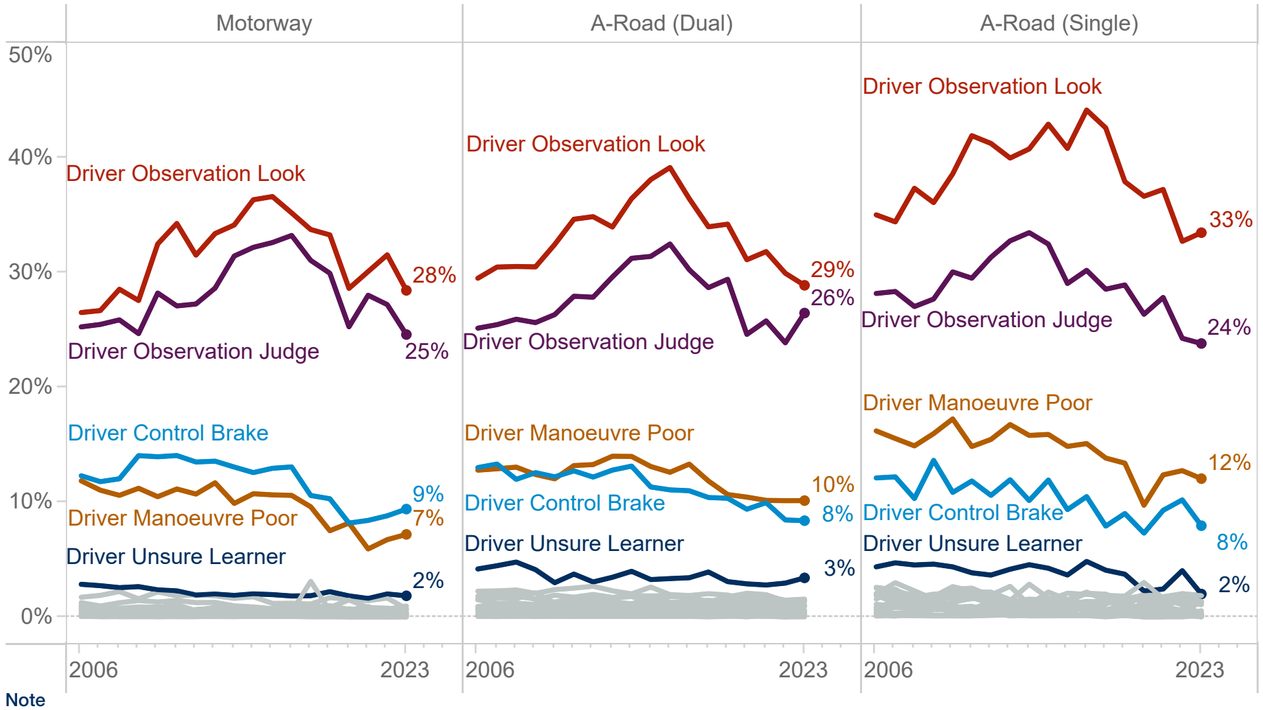
Distraction and impairment factors[8] have increased over time and as of 2023 were present in more than one in five collisions. The frequency at which distractions and impairments have been identified as factors in collisions occurring on motorways and A-roads has increased since 2006.

Footnote 7 https://assets.publishing.service.gov.uk/media/60ec379ae90e0764c59382bc/stats-19-review-final-report.pdf

Footnote 8 Impairment and distraction consists of 10 subcategories, inclusive of impaired by alcohol and drug, distraction in and outside of vehicle, using a mobile phone and fatigue.

Behaviour Road Safety Factors in collisions on the Strategic Road Network

Behaviour Road Safety Factors by road class and type



Note

All factors shown but only selected ones highlighted in colour. Other less prominent factors not labelled are shown in grey.

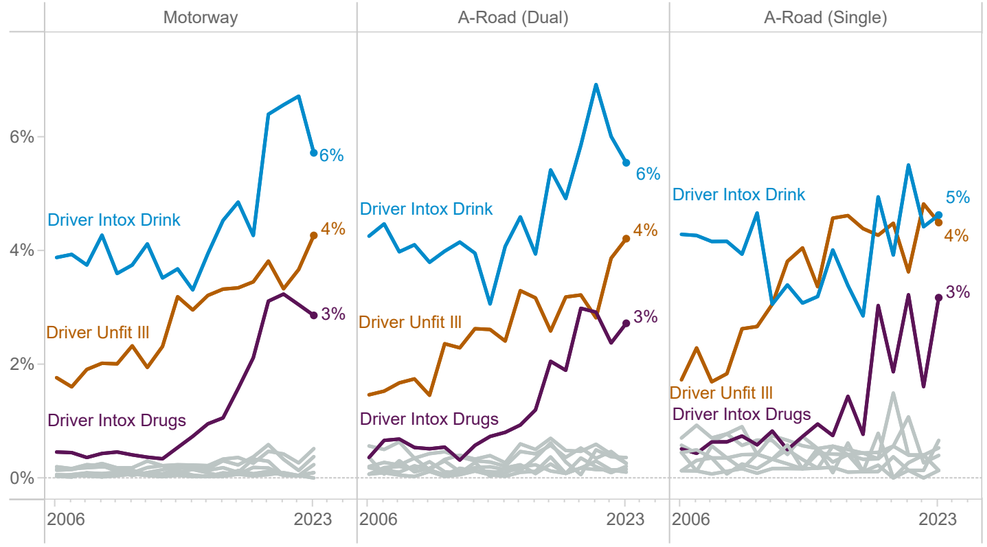
Mistakes by drivers and other road users are inevitable regardless of the amount of skill or experience they have. We strive to take this into account when we design our roads to minimise the consequences of those mistakes.

Behaviour factors are slightly more common on single carriageway roads than dual carriageway A-roads and motorways. Single carriageway A-roads are a less controlled environment, with more junctions and opportunities for interactions between vehicles than on a dual carriageway. This means there are potentially more opportunities for road users to make mistakes on single carriageway roads, and this likely contributes to driver behaviour factors being identified more frequently.

The most common behaviour factors are observation errors relating to drivers failing to look properly when making a manoeuvre or failing to judge another vehicle's path or speed. It is not uncommon for both factors to be present in the same collision and in future reporting these will be grouped together as ineffective observations. The frequency of these factors being recorded has decreased in recent years from their peak in the mid 2010s. Roads should be designed to reduce the risk of collisions and, should an injury occur, to reduce the severity of injuries. Designing our roads so that they are even more intuitive for road users will allow them to understand what is expected of them and encourage them to make good decisions when using the road. Consistency in design features across a route or network is key to developing that intuitive understanding and minimising the number of errors road users make.

Distraction and impairment Road Safety Factors in collisions on the Strategic Road Network

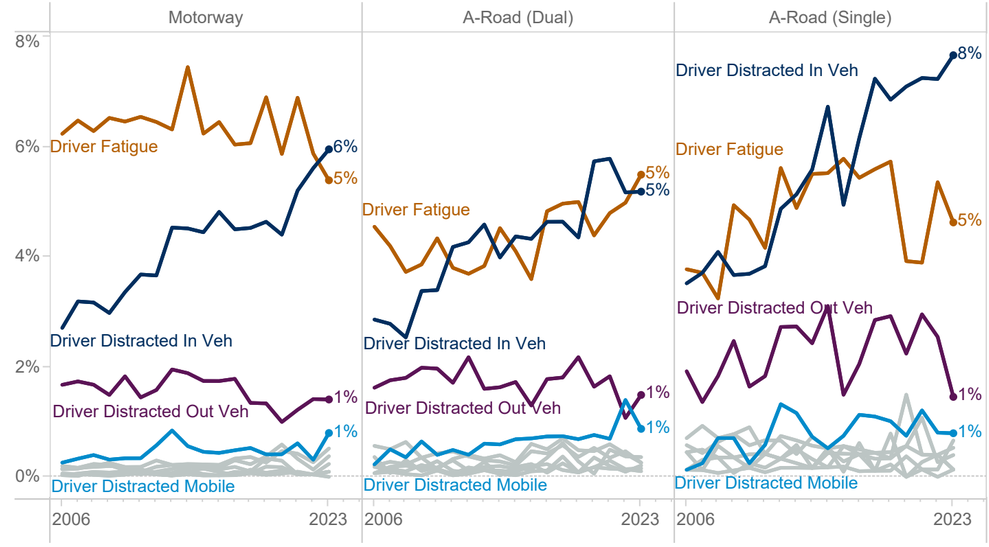
Driver impaired by drink, drugs, illness and other factors



Note

All factors shown but only selected ones highlighted in colour. Other less prominent factors not labelled are shown in grey.

Driver impaired by fatigue, distraction in the vehicle, outside the vehicle or other factors



Note

All factors shown but only selected ones highlighted in colour. Other less prominent factors not labelled are shown in grey.

Using the SRN whilst impaired through alcohol or drug use is illegal and unacceptable. Collisions where impairment from alcohol and drugs is a factor are on the increase. We will continue to promote safety messaging and work with partners in law enforcement and other agencies to dissuade people from using the SRN whilst impaired by both legal and illegal substances.

Collisions where a driver is impaired by illness or disability are increasing. We will work with our partners and organisations to better understand the reasons for the increasing numbers of collisions where disability or illness has been identified as a factor.

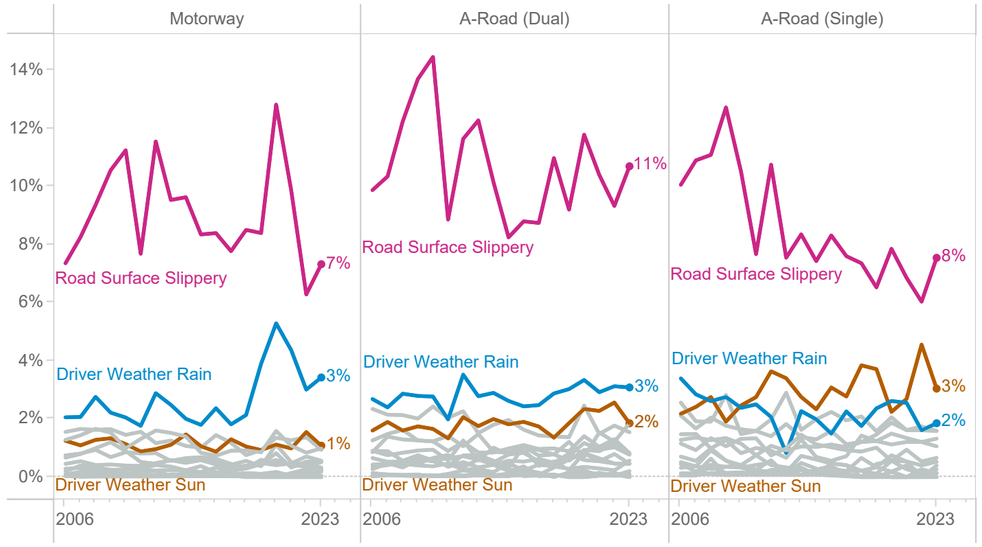
Fatigue is one of the most common forms of impairment identified in road traffic collisions, especially on motorways. Collisions involving fatigue are most common over the months of July and August with approximately 1 in 15 collisions involving fatigue. Advice that motorists should factor in regular rest stops on their journeys is a key part of our T.R.I.P. campaign. It is recommended to take a minimum break of at least 15 minutes for every two hours of driving.

Distraction by something within the vehicle is the most common form of distraction contributing to collisions on the SRN. Since 2015, National Highways has been collaborating with the police to target dangerous driving behaviour. One way we do this is by supplying HGV camera cabs to police forces. From the HGV cab's elevated position, officers can spot and record evidence of risky driving behaviour – whatever vehicle the motorist is driving. Consequences for drivers range from warnings to fixed penalty notices, court summons or arrest. Police also use the initiative as way to engage with people, and it gives them an opportunity to offer advice to drivers.

Overview
Introduction
KPI trends
PI trends
Other trends
Collision analysis
Global perspective
Key definitions

Road and Vehicle Road Safety Factors in collisions on the Strategic Road Network

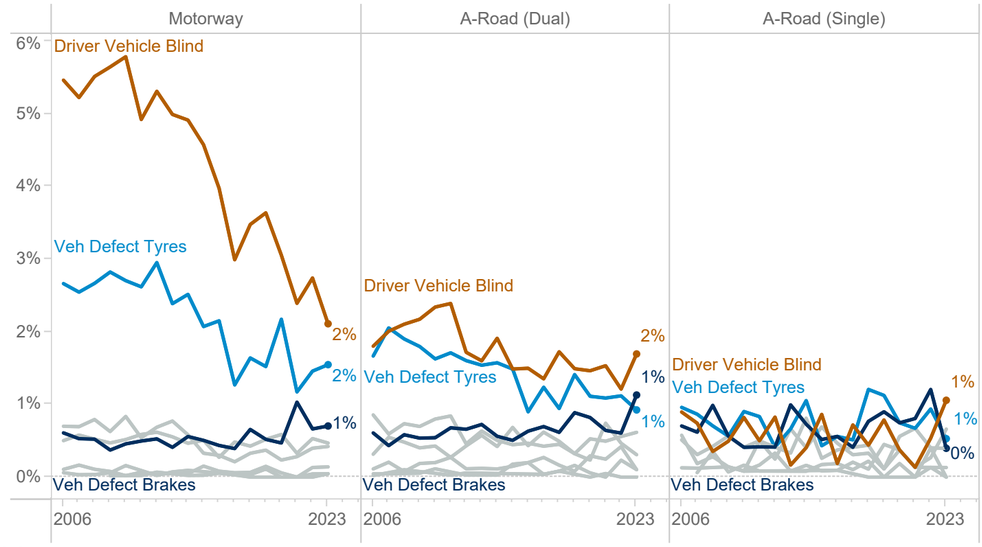
Road Road Safety Factors by road class and type



Note

All factors shown but only selected ones highlighted in colour. Other less prominent factors not labelled are shown in grey.

Vehicle Road Safety Factors by road class and type



Note

All factors shown but only selected ones highlighted in colour. Other less prominent factors not labelled are shown in grey.

The main road environment factors relate to weather conditions.

The main road environment factors relate to weather conditions, with slippery road surfaces caused by rain, and driver vision being affected by precipitation and fog. Data from the Met Office shows that over the last two decades there has been a trend of increasing rainfall in the UK[9], however the percentage of collisions on the SRN where precipitation or a slippery road surface is a factor has shown limited change over the long term. Electronic stability control and traction control were made mandatory in new UK vehicles in 2014, and were present in some cars prior to this, help to prevent skidding related collisions. Wet and extreme wet weather conditions on the SRN are likely to become more of an issue in the future, with modelling by the Met Office[10] suggesting that by 2070 extreme weather events, including extreme rainfall, will become more frequent. Road factor data analysis suggests that the condition of vehicles is not frequently a factor in a collision, with the most common vehicle factor being a driver affected by a vehicle blind spot. Blind spots are most identified as a factor on motorways where drivers are most likely to make lane changing manoeuvres. Large vehicles, such as heavy goods vehicles (HGVs) have zones of limited visibility and are considerably longer, heavier, and more powerful than standard vehicles. They also require longer stopping distances. Other drivers often underestimate the zones of limited visibility when manoeuvring around HGVs. Our recent 'Know The Zones' campaign aimed to educate on blind spots on HGVs and encourages drivers to stay visible, overtake with care and not to tailgate.

Tyre and brake defects were identified as factors in around 1% of collisions and whilst that is a small number, they are potentially avoidable through pre-journey vehicle checks and regular maintenance. Our T.R.I.P. campaign encourages drivers to inspect their vehicle before long journeys to help prevent vehicle breakdowns and reduce the number of collisions caused by fatigue. The T.R.I.P. checklist is based on four key principles which are:

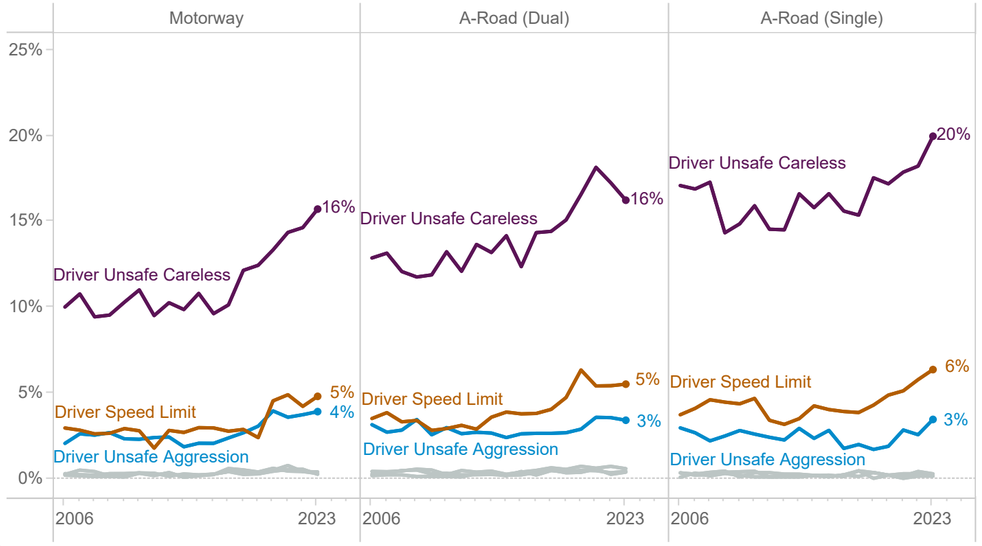
- Top–up. Fuel, oil and screen wash.
- Rest. Take a rest break every two hours.
- Inspect. Check tyre pressure and tread.
- Prepare. Have a plan for all weather conditions.

Footnote 9 https://www.metoffice.gov.uk/research/climate/maps-and-data/uk-temperature-rainfall-and-sunshine-time-series

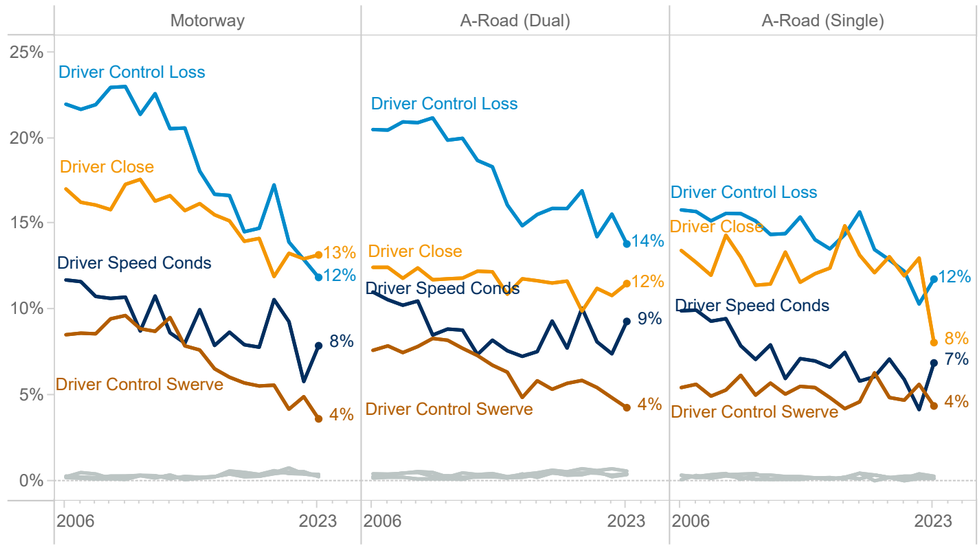
Footnote 10 https://www.metoffice.gov.uk/weather/climate-change/climate-change-in-the-uk#effects-of-climate-change-in-the-uk

Speed Road Safety Factors in collisions on the Strategic Road Network

Speed Road Safety Factors trending upwards by road class and type



Speed Road Safety Factors trending downwards by road class and type



Note

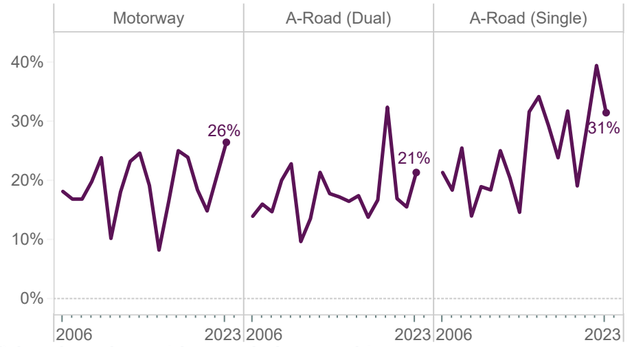
All factors shown but only selected ones highlighted in colour. Other less prominent factors not labelled are shown in grey.

There is a direct link between speed and collisions. The risk of serious injury or death increases with a minor increase in speed[11]. We know the number, and severity, of collisions reduce if motorists drive at speeds that reflect the road environment. Overall, between 2006 and 2023 the percentage of collisions where speed related factors have been identified has remained relatively constant however the nature of individual factor profiles has changed with careless and aggressive driving factors and vehicles travelling above the legal speed limit increasing in frequency. The increase in these factors has been offset by the decrease in loss of control, close following and travelling too fast for conditions factors. It is not known if this is due to recording practice changes within police forces or if there has been a genuine change in factors related to speed.

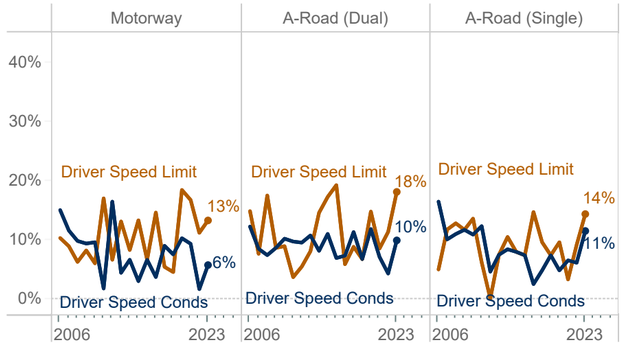
Footnote 11 Based on a study by Elvik et al https://www.trg.dk/elvik/740-2004.pdf

Fatal Five Road Safety Factors in fatal collisions on the Strategic Road Network

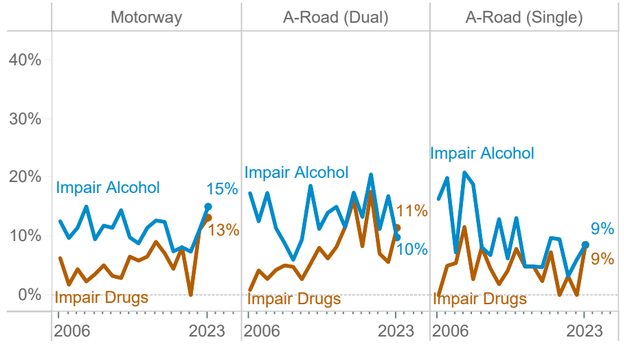
Dangerous and reckless driving by road class and type



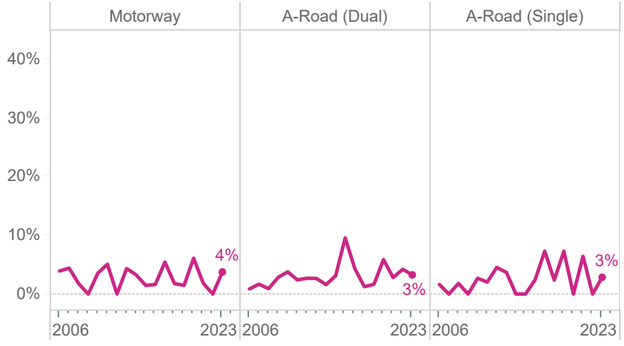
Driver excess speed by road class and type



Driver impairment by road class and type



Driver mobile device distraction by road class and type



The most common fatal five factor is dangerous or reckless driving / riding. This was a factor in nearly one in three fatal collisions on single carriageway A-roads.

Use of a mobile device is not commonly identified as a factor in fatal collisions. However, there is a likelihood that mobile device usage may be under reported in STATS19 because the STATS19 factors are identified at the scene of a collision rather than later following a detailed investigation by police.

Collisions on hard shoulders, in lay-bys and emergency areas on the SRN

We recognise the importance of being able to stop in a place of relative safety in an emergency. The hard shoulder is perceived to be a place of safety but in reality it does not provide a completely safe place to stop. In 2023 there were eight deaths resulting from seven collisions, where a vehicle is recorded as entering, leaving or being on a hard shoulder on a motorway. This is the same number as occurred in 2022 and the joint highest number (2016 and 2022) since 2015 when there were nine deaths involving a motorway hard shoulder. Between 2019 and 2023 there were 26 deaths (out of a total of 393 deaths on motorways) resulting from a vehicle entering, leaving or being on a hard shoulder, which is one out of every 15. Of these, 24 deaths occurred on conventional motorways and two on controlled motorways. For more information, please see Annex A – Detailed tables. Between 2019 and 2023 there continued to be no deaths in emergency areas on ALR and DHS motorways.

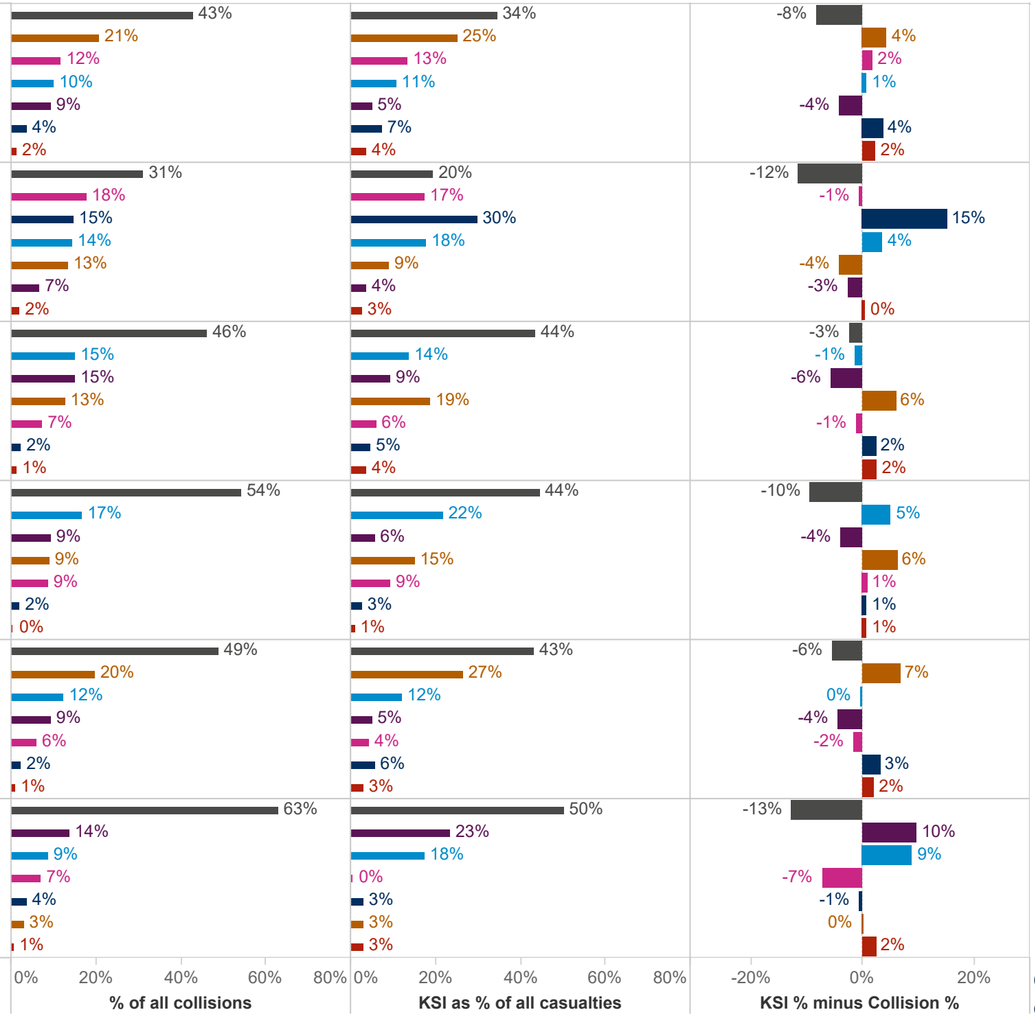
Mapping roads policing offences to Road Safety Factors

The ‘fatal five’ are offences identified by the police that increase the likelihood of someone being involved in a fatal collision. The fatal five offences are: careless driving, speeding, drink & drug driving, driving whilst distracted and non-wearing of seatbelts.

National Highways does not hold data for the fatal five offences however we have mapped road safety factors as best as possible to four of the fatal five offences. Non-wearing of seatbelts is not a STATS19 road safety factor and is excluded from this analysis.

Collision Type Analysis — comparing percentage collisions with percentage KSI in 2023

Road Type	Rank	Collision Injury Type	% of all collisions	KSI as % of all casualties	KSI % minus Collision %
A-Road (Dual)	1	Rear end shunt	43%	34%	-8%
	2	Single Moving Vehicle (without pedestrian)	21%	25%	4%
	3	T-bone	12%	13%	2%
	4	Other	10%	11%	1%
	5	Side swipe	9%	5%	-4%
	6	Head on	4%	7%	4%
	7	Single Moving Vehicle (with pedestrian)	2%	4%	2%
A-Road (Single)	1	Rear end shunt	31%	20%	-12%
	2	T-bone	18%	17%	-1%
	3	Head on	15%	30%	15%
	4	Other	14%	18%	4%
	5	Single Moving Vehicle (without pedestrian)	13%	9%	-4%
	6	Side swipe	7%	4%	-3%
	7	Single Moving Vehicle (with pedestrian)	2%	3%	0%
ALR	1	Rear end shunt	46%	44%	-3%
	2	Other	15%	14%	-1%
	3	Side swipe	15%	9%	-6%
	4	Single Moving Vehicle (without pedestrian)	13%	19%	6%
	5	T-bone	7%	6%	-1%
	6	Head on	2%	5%	2%
	7	Single Moving Vehicle (with pedestrian)	1%	4%	2%
Controlled	1	Rear end shunt	54%	44%	-10%
	2	Other	17%	22%	5%
	3	Side swipe	9%	6%	-4%
	4	Single Moving Vehicle (without pedestrian)	9%	15%	6%
	5	T-bone	9%	9%	1%
	6	Head on	2%	3%	1%
	7	Single Moving Vehicle (with pedestrian)	0%	1%	1%
Conventional	1	Rear end shunt	49%	43%	-6%
	2	Single Moving Vehicle (without pedestrian)	20%	27%	7%
	3	Other	12%	12%	0%
	4	Side swipe	9%	5%	-4%
	5	T-bone	6%	4%	-2%
	6	Head on	2%	6%	3%
	7	Single Moving Vehicle (with pedestrian)	1%	3%	2%
DHS	1	Rear end shunt	63%	50%	-13%
	2	Side swipe	14%	23%	10%
	3	Other	9%	18%	9%
	4	T-bone	7%	0%	-7%
	5	Head on	4%	3%	-1%
	6	Single Moving Vehicle (without pedestrian)	3%	3%	0%
	7	Single Moving Vehicle (with pedestrian)	1%	3%	2%



Collision type analysis has been carried out by considering the first point of impact recorded for vehicles involved in these collisions.

Shunt collisions, where the front of a vehicle strikes the rear of a vehicle, are the most common type of collision on the SRN. Single vehicle collisions (not involving a pedestrian), whilst less common than shunt collisions, have worse outcomes on motorways and dual carriageway A-roads.

Shunt collisions often involve traffic which is temporarily halted, either at a junction or on the main carriageway, in congested conditions. This means these types of collisions typically happen at lower speeds than other types of collision and are more likely to result in minor injuries. Fourteen percent of casualties in shunt collisions sustain fatal or serious injuries, which is the lowest of any of the collision types. Overall, shunt collisions make up 45% of collisions and 35% of KSIs on the SRN. The controlled environment of motorways, with limited entry and exit points, makes this type of collision more prevalent on motorways than on A-roads where there is more opportunity for different types of vehicle manoeuvres, and more interaction between vehicles and therefore more potential for other collision types. The same is true when comparing dual carriageway A-roads to single carriageway A-roads, which is why the percentages for shunt collisions and KSI casualties are lower for these road types than motorways.

The M25 junction 10 improvement project, which is currently being delivered and scheduled to complete in 2025/26, is an example of where National Highways are investing to improve the flow of traffic and improve safety by reducing the likelihood of shunt collisions occurring. The project includes installing a larger roundabout with extra lanes to increase capacity and an additional lane on the A3 on both directions from Ockham and Painshill towards the M25.

Single vehicle collisions are the second most common type of collision on the SRN (17%) and typically involve the vehicle striking a barrier, a hazard in the carriageway or leaving the carriageway and colliding with a roadside hazard.

Single vehicle collisions are by their nature high impact collisions as they often result from a loss of control of a vehicle at higher speeds. These kinds of collisions can happen for a variety of reasons including excessive speed for the conditions, driver fatigue or medical factors. The increased impact, as a result of these collisions, tends to lead to worse outcomes for the occupants of the vehicle than other collision types, with single vehicle collisions resulting in fatal or serious injuries for 28% of casualties. Single vehicle collisions make up 17% of all collisions and 21% of deaths and serious injuries on the SRN.

On single carriageway A-roads front of vehicle to front of vehicle collisions, also known as head on collisions, result in a disproportionate number of deaths and serious injuries.

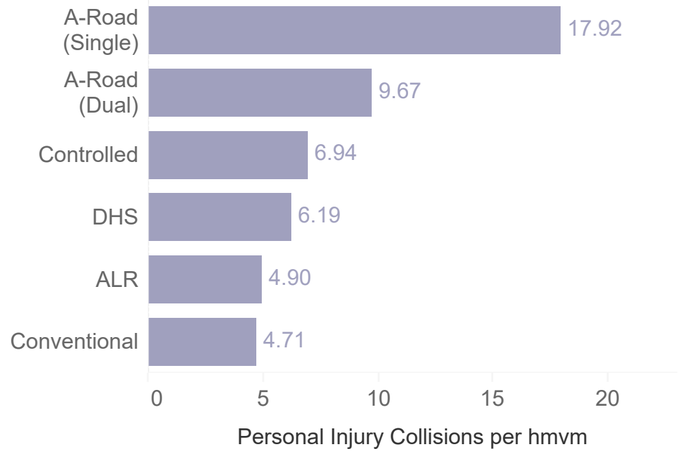
Head on collisions are relatively rare on motorways and dual carriageway A-roads due to the presence of a central reservation barrier segregating traffic heading in opposite directions; This type of collision is more common on single carriageway A-roads where traffic travels in opposite directions without physical separation.

Head on collisions are the third most common type of collision on single carriageway A-roads (15% of collisions) resulting in the highest number of deaths and serious injuries (30%).

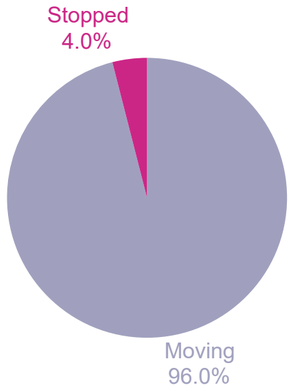
When two vehicles travelling on the SRN in opposite directions collide head on, the forces involved are so impactful that, collisions result in 37% of casualties sustaining fatal or serious injuries. This is the highest of any collision type involving vehicle to vehicle conflict.

Moving and Stopped Vehicle Collisions

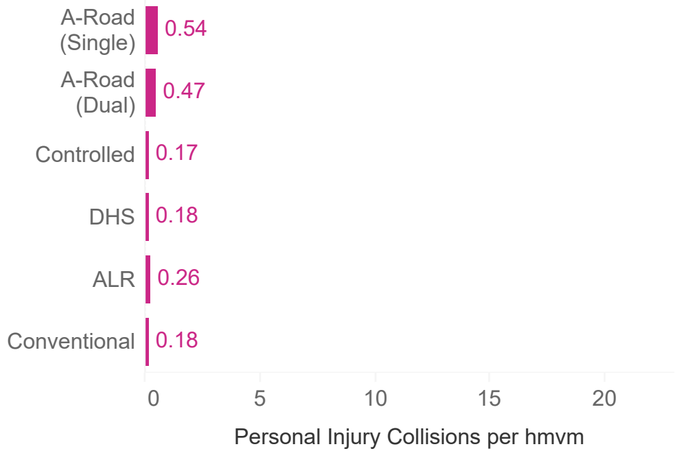
Moving Vehicle personal injury collision rates per hmvm by road type (2019-2023)



96.0% of Personal Injury Collisions in 2019-2023 occured in Moving Vehicle collisions on the SRN



Stopped Vehicle personal injury collision rates per hmvm by road type (2019-2023)



The vast majority (96.0%) of collisions across the SRN are single vehicle collisions or collisions involving two or more moving vehicles. The rest of the collisions, which form a small proportion of the total number of SRN collisions (4.0%), involve moving vehicles colliding with stopped vehicles. Both types of collisions occur on all types of roads.

With stopped vehicle collisions making up such a small proportion of all collisions, it is helpful to consider PIC rates over 5 years when comparing different types of roads or making comparisons between stopped and moving vehicle rates. This increases the certainty in conclusions and to some extent reduces the impact of external events, such as Covid-19. The findings regarding the performance of DHS motorways should be treated with a degree of caution as DHS is the least common motorway type in both length and vehicle miles travelled. The smaller sample size makes the calculation of rates, more sensitive to individual collisions occurring on those roads. On DHS motorways, it is also important to note that when the hard shoulder is operating as a live lane, the speed is set at a maximum of 60mph.

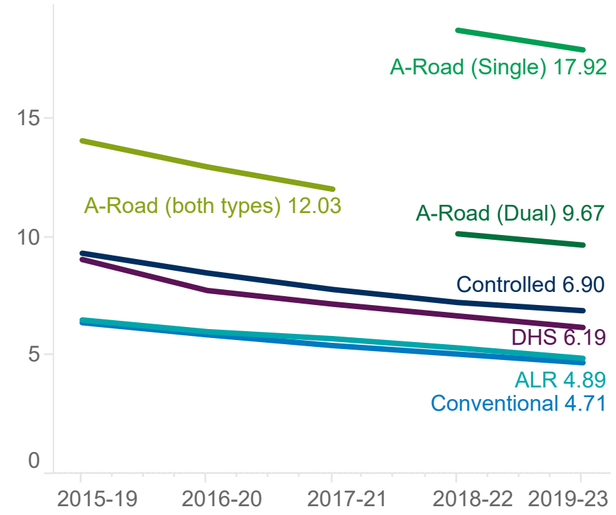
Moving vehicle collision PIC rates are higher on A-roads than motorways, with single carriageway A-roads having the highest five year PIC rate in the period between 2019 and 2023 at 17.92 collisions per hundred million vehicle miles. Conventional motorways have the lowest five year PIC rate in the period between 2019 and 2023 at 4.71 collisions per hundred million vehicle miles. Controlled motorways have the highest moving vehicle PIC rate of the four motorway types at 6.90 collisions per hundred million vehicle miles.

Over time we can see that moving vehicle PIC rates have decreased on all six road types on the SRN, and that the findings are consistent in that conventional motorway and ALR PIC rates are lower than the other types of motorway and A-roads. We have also undertaken statistical significance testing, which helps us understand whether a difference in numbers is likely to be due to random variation. Simply put, as the numbers are low and similar to each other, statistical significance testing helps explain whether the numbers are statistically different to each other. This helps make some of the comparisons between different road types more meaningful. The moving vehicle collision PIC rate for conventional motorways is 4.71 and for ALR motorways is 4.89. Based on the statistical significance testing, there is strong evidence that these two figures are statistically different to each other, and that the conventional motorway moving vehicle collision PIC rate is statistically lower than the ALR moving vehicle collision PIC rate. The moving vehicle collision PIC rates for both conventional and ALR motorways are statistically lower than the moving vehicle collision PIC rates for DHS motorways (6.19) and controlled motorways (6.90).Stopped vehicle collision PIC rates are higher on A-roads than motorways, with single carriageway A-roads having the highest five year stopped vehicle PIC rate in the period between 2019 and 2023 at 0.54 collisions per hundred million vehicle miles. Controlled motorways have the lowest five year stopped vehicle PIC rate in the period between 2019 and 2023 at 0.17 collisions per hundred million vehicle miles. ALR motorways have the highest stopped vehicle PIC rate of the four motorway types at 0.26 collisions per hundred million vehicle miles.

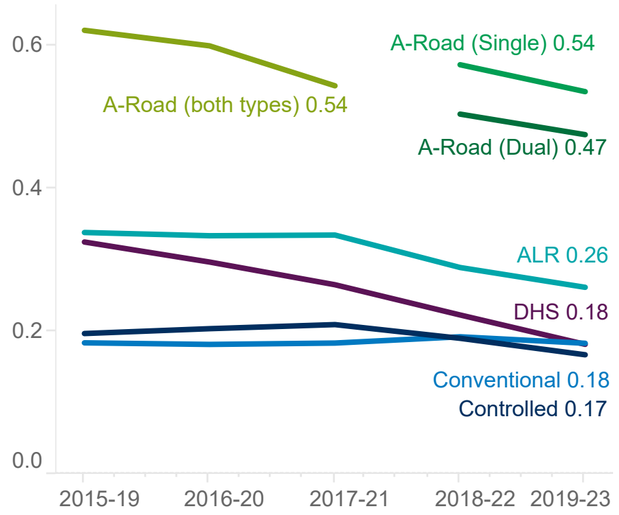
Overview
Introduction
KPI trends
PI trends
Other trends
Collision analysis
Global perspective
Key definitions

Strategic Road Network PIC 5-year Moving—Stopped (continued)

Moving vehicle five-year average PIC rates by road class and type 2015-2023



Stopped vehicle five-year average PIC rates by road class and type 2015-2023



An improvement in the methodology for calculating traffic by single and dual carriageway A-Road applies to traffic from 2018 onwards. Therefore, five-year periods containing years before 2018 have not had rates calculated for dual and single carriageway A-roads because we do not have the full five-years of data. Prior to this, rates for all A-roads on the SRN are shown.

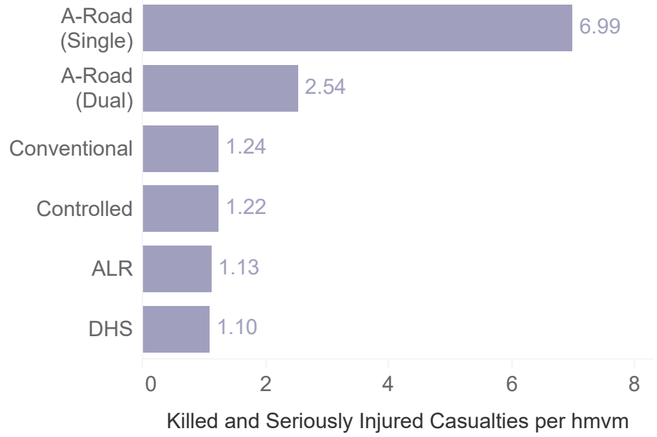
Over time we can see that stopped vehicle PIC rates have decreased on five of the six types of road on the SRN, the exception being conventional motorways which has remained relatively static. The most notable change which has occurred over time is the reduction of the rate for DHS motorways which has decreased from 0.32 in the 2015-2019 period to 0.18 in the 2019 to 2023 period. As noted above, findings regarding the performance of DHS motorways should be treated with a degree of caution.

We have also undertaken statistical significance testing for stopped vehicle PIC rates. The stopped vehicle collision PIC rate is 0.17 for controlled motorways, 0.18 for conventional motorways and 0.18 for DHS motorways. Based on the statistical significance testing, there is little evidence that these three figures are statistically different to each other. The stopped vehicle collision PIC rate for ALR is 0.26. There is strong evidence that this is statistically higher than the stopped vehicle collision PIC rate for controlled motorways. However, there is insufficient evidence that the ALR rate is statistically different to the DHS stopped vehicle collision PIC rate. All motorway types have stopped vehicle collision PIC rates that are statistically lower than the rates for dual carriageway (0.47) and single carriageway A-roads (0.54).

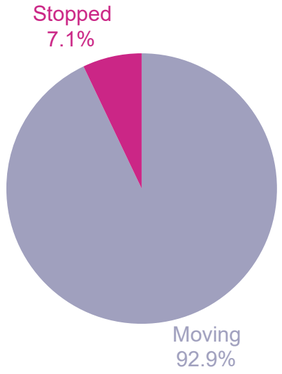
Stopped vehicle detection (SVD) is a radar-based system, on all lane running (ALR) sections of smart motorway that enables the detection of vehicles which have stopped on the carriageway or in an emergency area. The installation of SVD on all sections of ALR was one of the actions delivered by National Highways in response to the March 2020 Smart Motorways Evidence Stocktake and Action Plan. National Highways is currently evaluating the impact of these actions. The 2023 STATS19 data provides the first opportunity to gain indicative insight into the impact of SVD (alongside other stocktake plan actions) on the number of stopped vehicle collisions on ALR motorways, however no conclusions should be drawn at this time. Over the five year period from 2018 to 2022 the stopped vehicle collision PIC rate on ALR motorways was 0.29 stopped vehicle collisions per hundred million vehicle miles. In 2023 the stopped vehicle collision PIC rate on ALR motorways was 0.22 collisions per hundred million vehicle miles. The 2023 rate was the lowest stopped vehicle collision PIC rate on ALR motorways since 2015 when the rate was 0.14 (when there were fewer ALR sections in operation). Whilst the stopped vehicle collision PIC rate in 2023 shows a decrease, the rate is calculated on a relatively small number of stopped vehicle road traffic collisions. This means that even a small change in the number of collisions can have a noticeable effect on the result of the PIC rate calculation. Future evaluation of the actions from the Smart Motorway Evidence Stocktake and Action Plan will enable us to fully evaluate the impact that SVD has had together with the other actions in the plan. The evaluation will include demonstrating cause and effect on the number of stopped vehicle collisions on ALR sections of smart motorways. It will also include a 'before and after construction' analysis of safety alongside customer experience insight.

KSIs Resulting from Stopped and Moving Vehicle Collisions

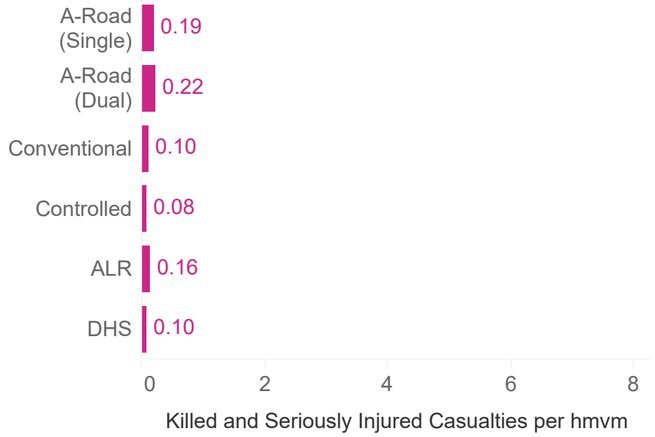
Moving Vehicle killed and seriously injured casualty rates per hmvm by road type (2019-2023)



92.9% of Killed and Seriously Injured Casualties in 2019-2023 occured in Moving Vehicle collisions on the SRN



Stopped Vehicle killed and seriously injured casualty rates per hmvm by road type (2019-2023)



The vast majority (92.9%) of KSI casualties across the SRN result from single vehicle collisions or collisions involving two or more moving vehicles. The rest of the KSI casualties, which form a smaller proportion of all SRN KSI casualties (7.1%), result from collisions involving moving vehicles colliding with stopped vehicles. Both types of collisions occur on all types of roads. KSI casualties resulting from stopped vehicle collisions make up a larger share of all KSI casualties than stopped vehicle collisions make up of all collisions (4.0%), which indicates that a stopped vehicle collision is more likely to result in a KSI casualty than a moving vehicle collision.

With stopped vehicle collision KSI casualties making up such a small proportion of all KSI casualties, it is helpful to consider KSI rates over 5 years when comparing different types of roads or making comparisons between stopped and moving vehicle rates. This increases the certainty in conclusions and to some extent this reduces the impact from external events, such as Covid-19. The findings regarding the performance of DHS motorways should be treated with a degree of caution as DHS is the least common motorway type in both length and vehicle miles travelled. The smaller sample size makes the calculation of rates, more sensitive to individual collisions occurring on those roads. On DHS motorways, it is also important to note that when the hard shoulder is operating as a live lane, the speed is set at a maximum of 60mph.

Moving vehicle collision KSI rates are higher on A-roads than motorways, with single carriageway A-roads having the highest five year KSI rate in the period between 2019 and 2023 at 6.99 KSI casualties per hundred million vehicle miles. DHS motorways have the lowest five year KSI rate in the period between 2019 and 2023 at 1.10 KSI casualties per hundred million vehicle miles. Conventional motorways have the highest moving vehicle KSI rate of the four motorway types at 1.24 KSI casualties per hundred million vehicle miles. Whilst statistical significance testing has been undertaken for PIC rates it is not currently possible to undertake such analysis for KSI rates. This is due to the historic under reporting of serious injuries in road safety data. Changes to STATS19 recording practices mean this will be possible in future years when all police forces have adopted injury-based collision reporting. As per DfT[12] "It is currently hoped that the remaining 8 forces will adopt the new specification as soon as possible in 2025, though this could be impacted by IT deployments in some cases."Over time we can see that moving vehicle KSI rates have remained relatively static on five of the six road types, with the exception being single carriageway A-roads which have decreased over time but remain notably higher than the rates for dual carriageway A-roads and all motorway types.

Stopped vehicle collision KSI rates are higher on A-roads than motorways, with dual carriageway A-roads having the highest five year KSI rate in the period between 2019 and 2023 at 0.22 KSI casualties per hundred million vehicle miles. Controlled motorways have the lowest five year KSI rate in the period between 2019 and 2023 at 0.08 KSI casualties per hundred million vehicle miles. ALR motorways have the highest stopped vehicle KSI rate of the four motorway types at 0.16 KSI casualties per hundred million vehicle miles.

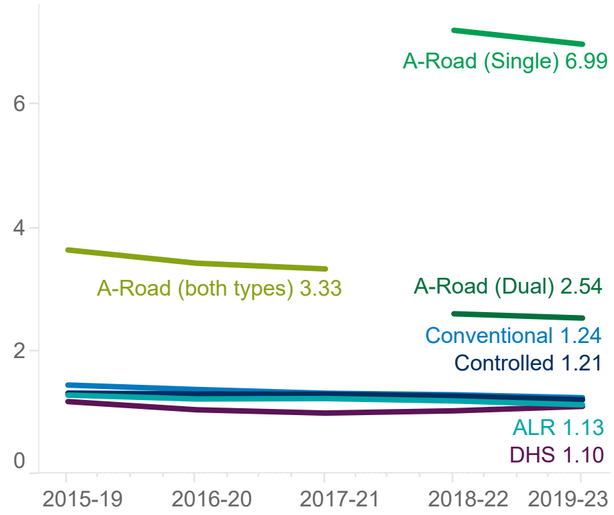
Over time we can see that stopped vehicle KSI rates have decreased on ALR and DHS motorways, whilst remaining relatively static for conventional motorways and increasing slightly on controlled motorways from a comparatively low initial rate, compared to other motorway types, and continue to have the

Footnote 12 https://www.gov.uk/government/publications/road-safety-statistics-stats19-review-update-and-future-development-roadmap/road-safety-data-and-statistics-stats19-review-update-and-future-plans

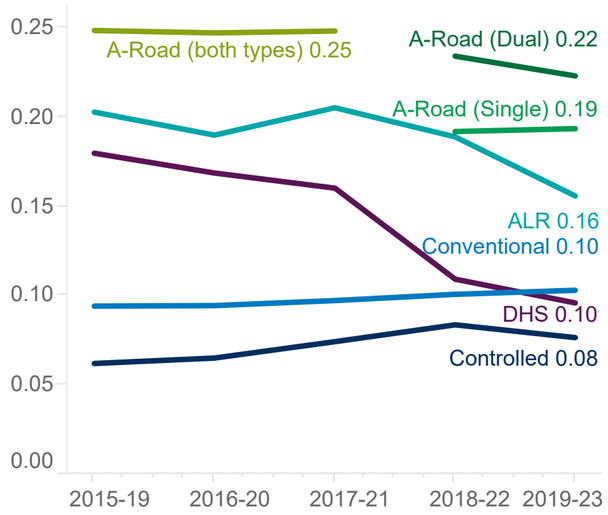
Overview
Introduction
KPI trends
PI trends
Other trends
Collision analysis
Global perspective
Key definitions

Strategic Road Network KSI 5-year Moving—Stopped (continued)

Moving vehicle five-year average KSI rates by road class and type 2015-2023



Stopped vehicle five-year average KSI rates by road class and type 2015-2023



An improvement in the methodology for calculating traffic by single and dual carriageway A-road applies to traffic from 2018 onwards. Therefore, five-year periods containing years before 2018 have not had rates calculated for dual and single carriageway A-roads because we do not have the full five-years of data. Prior to this, rates for all A-roads on the SRN are shown.

lowest stopped vehicle rate despite that slight increase over time. The most notable change which has occurred over time is a reduction in the rate for DHS motorways from 0.17 in the 2015- 2019 period, to 0.10 in the 2019 to 2023 period. As noted above findings regarding the performance of DHS motorways should be treated with a degree of caution.

The 2023 STATS19 data is the first opportunity to gain indicative insight into the impact of SVD (alongside other stocktake plan actions) on the number of stopped vehicle collisions on ALR motorways, however no conclusions should be drawn at this time. Over the five year period from 2018 to 2022 the stopped vehicle collision KSI rate on ALR motorways was 0.19 KSI casualties per hundred million vehicle miles. In 2023 the stopped vehicle collision KSI rate on ALR motorways was 0.10 KSI casualties per hundred million vehicle miles. The 2023 rate is the third lowest ALR stopped vehicle collision KSI rate since 2015, with 2015 (0.01) and 2020 (0.09) having lower rates. We have shown moving and stopped vehicle five-year average rates in the charts. For more information on the annual rates referenced here, please see Annex A - detailed tables. Whilst the stopped vehicle collision KSI rate in 2023 shows a decrease, the rate is calculated on a relatively small number of stopped vehicle road traffic collisions. This means that even a small change in the number of collisions, vehicle occupants or injury severities can have a noticeable effect on the result of the KSI rate calculation. Future evaluation of the actions from the Smart Motorway Evidence Stocktake and Action Plan will enable us to fully evaluate the impact that SVD has had together with the other actions in the plan.

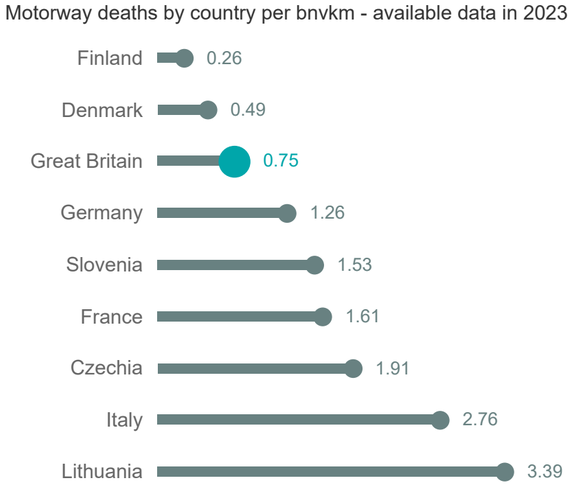
The evaluation will include demonstrating cause and effect on the number of stopped vehicle collisions on ALR sections of smart motorways. It will also include a ‘before and after construction’ analysis of safety alongside customer experience insight.

Overview
Introduction
KPI trends
PI trends
Other trends
Collision analysis
Global perspective
Key definitions

Global perspective

5

Motorway deaths by country compared to motorway traffic

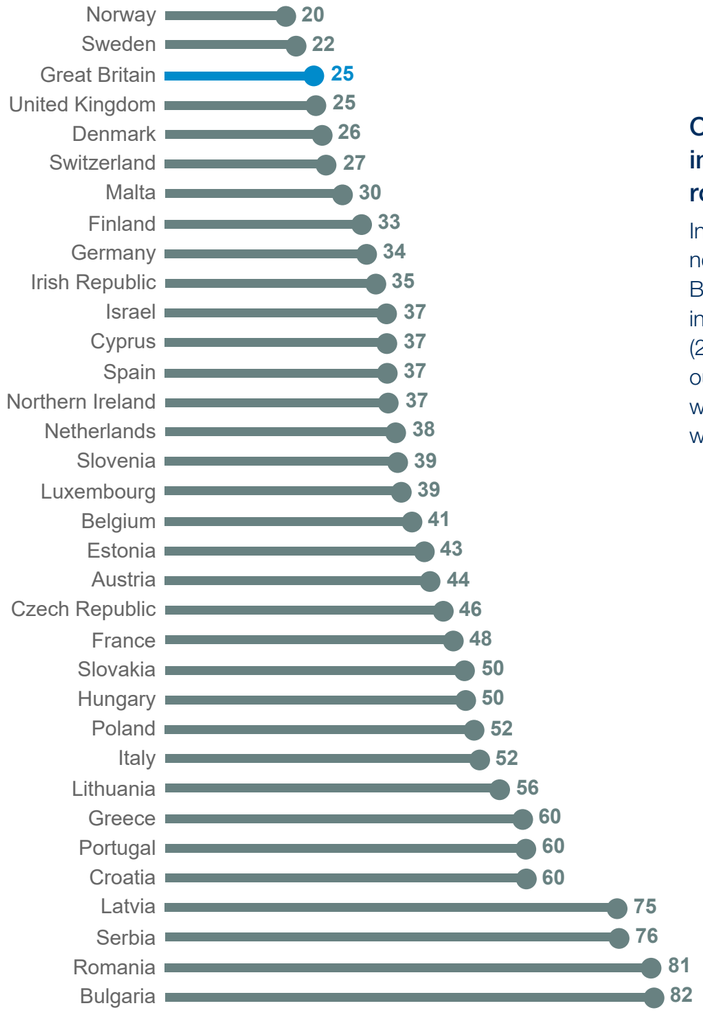


Great Britain has some of the safest motorways in Europe. For countries where 2023 data is available, deaths on British motorways are ranked third out of nine nations.

In 2023, the fatality rate on Britain's motorways was 0.75 per billion vehicle kilometres travelled. This is amongst the best performing motorway networks in Europe for which data is available. Only Finland (0.26) and Denmark (0.49) recorded lower fatality rates.

Source: International Traffic Safety Data and Analysis Group (IRTAD)

Rate of road deaths by country per million of population in 2023



Our national road safety record stands the test of international comparison, having some of the safest roads in Europe

In 2023, the fatality rate by population on the Great Britain's road network was 25 deaths per one million people. This means the British road network is amongst the best performing road networks internationally for countries where this data is available. Only Norway (20) and Sweden (22) and recorded lower fatality rates. We know our roads are some of the safest in Europe but there's always more we can do. Our long-term ambition is that no one should be harmed while travelling or working on our road network.

Source: International Traffic Safety Data and Analysis Group (IRTAD)

Key **definitions**

6

Car – includes taxi/private hire car and minibus.

Casualty – A person killed or injured in a reported collision on a public road. Casualties are sub-divided into fatal, seriously injured and slightly injured.

Collision/accident/incident – The terminology used to describe collisions is important. The Department for Transport updated the terminology used in 2022 to refer to collisions in place of accidents. However this report relates also to historical data and therefore there may be some instances where the terms collision, accident and incident are used interchangeably.

Fatality – A person who has died from their injuries up to 30 days after the incident.

HGV – Heavy Goods Vehicle. Goods Vehicles with maximum gross weight over 3.5tonnes.

hmvm – Hundred million vehicle miles.

KSI – Killed or seriously injured. The number of people killed or seriously injured in a road traffic collision.

LGV – Light Goods Vehicle. Goods Vehicles with maximum gross weight equal to or under 3.5tonnes or unknown weight.

MGW – Maximum gross weight.

PIC – Personal injury collision. A collision which resulted in at least one death or injury of any severity.

Serious injury/serious casualties – People sustaining injuries requiring hospitalisation, or any of the following injuries whether or not the individual went to hospital: fractures, concussion, internal injuries, crushing injuries, burns (excluding friction burns), severe cuts, severe general shock requiring medical treatment and injuries causing death 30 or more days after the incident.

Slight injury/slight casualty – People sustaining a minor injury such as a sprain (including neck whiplash), bruise or cut which is not judged to be severe, or slight shock requiring roadside attention. This definition includes injuries not requiring medical treatment.

SRN – Strategic road network. In England, the SRN is consists of around 4,500 miles of motorways and major A-roads **managed** by National Highways, a government-owned company

This document is also available on our website at nationalhighways.co.uk
For an accessible version of this publication please call 0300 123 5000 and we will help you.

If you have any enquiries about this publication email info@highwaysengland.co.uk
or call 0300 123 5000*. Please quote the National Highways publications code PR52/24.

*Calls to 03 numbers cost no more than a national rate call to an 01 or 02 number and must count towards any inclusive minutes in the same way as 01 and 02 calls.

These rules apply to calls from any type of line including mobile, BT, other fixed line or payphone.

Calls may be recorded or monitored.

Registered office Bridge House, 1 Walnut Tree Close, Guildford GU1 4LZ
National Highways Limited registered in England and Wales number 0934636