national highways

2022 Road safety performance overview

2005-2022 results

Contents

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

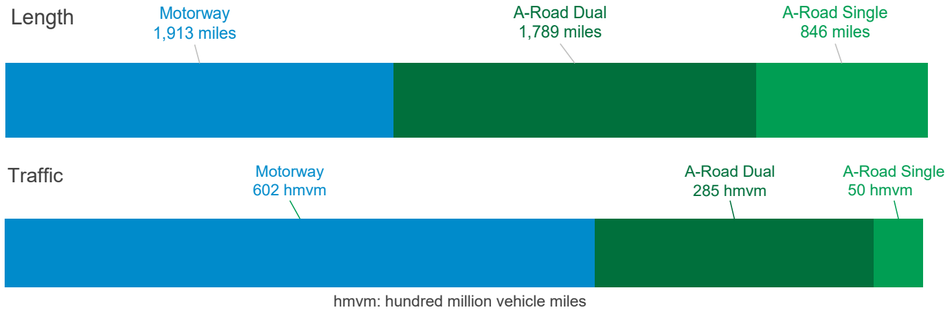
Page forward

National Highways Network and Regions

Introduction

This report looks at road safety statistics for the Strategic Road Network up to and including 2022. This is the latest safety data analysed by National Highways using the Department for Transport's STATS19 validated dataset. England has some of the safest roads in the world. According to the 2022 international safety data consolidated by DfT, only Norway, Sweden and Iceland perform better than England by population. While England's road network continues to be among the best performing road networks internationally, we strive to continue to improve the safety of our roads. Safety continues to be our number one priority and our ambition is that no-one should be harmed while travelling or working on our roads.

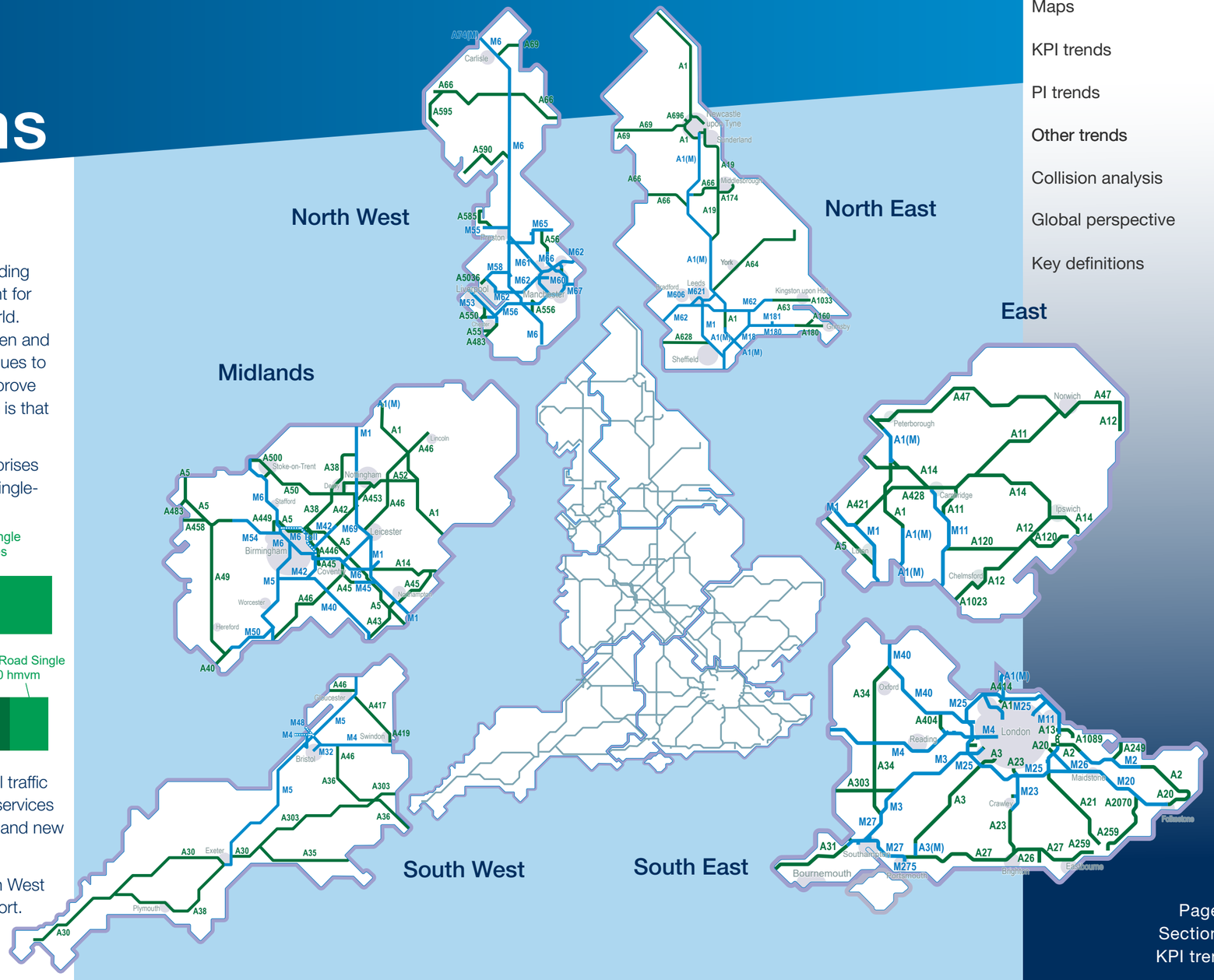
The National Highways Strategic Road Network (SRN) is 4,548 miles in length and comprises 1,913 miles of motorways, 1,789 miles of dual-carriageway A-Roads and 846 miles of single-carriageway A-Roads.



The SRN is the most heavily used part of the national road network, carrying 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.

The network 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.

ROAD SAFETY PERFORMANCE OVERVIEW

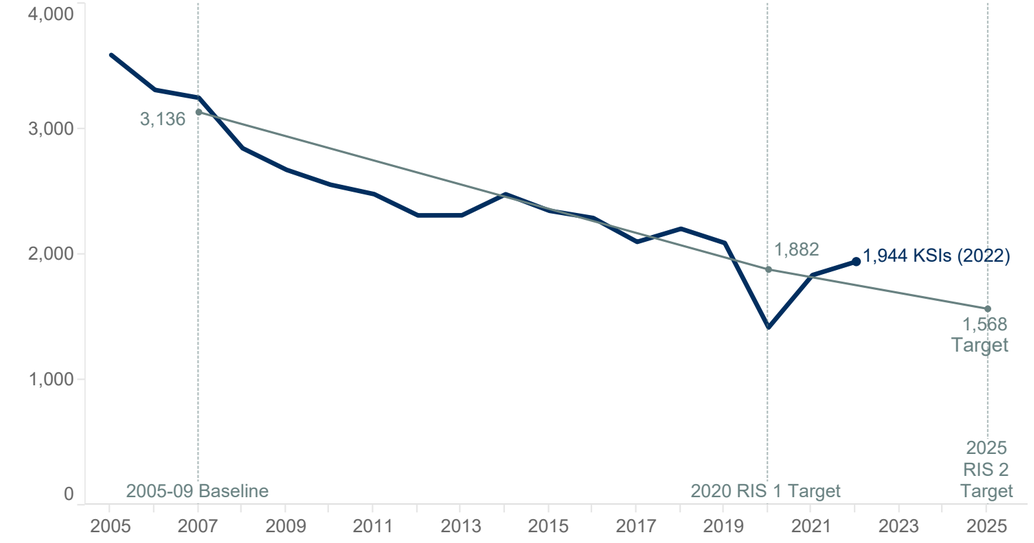


Key Performance Indicator (KPI) Trends

1

Trends in deaths and serious injuries

KPI 1.1: Killed and Serious Injury (KSI) performance from 2005 to 2022, compared to the 2022 adjusted target / monitoring points



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

	2021	2022	2023	2024	2025
RIS2 KSI target / monitoring points (2022 adjusted)	1,819	1,756	1,693	1,631	1,568
Number of KSI (adjusted)	1,837	1,944	Ø	Ø	Ø
KSI monitoring point (achieved) or missed by	18	188	Ø	Ø	Ø

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).

Road safety is, and will always be, our number one priority. Every death or serious injury on our roads 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. 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.

Road safety is a shared responsibility – it is important we all recognise the part we can play. We are working with partners, organisations and road users to help us collectively achieve this ambition.

To help with this ambition, we have a key performance indicator for casualty reduction targets on our network for each roads period. For Roads Period 2 our target has been to reduce the number of people killed and seriously injured on our network by 50% by the end of 2025 compared to the 2005-2009 baseline period. In order to meet our target for this key performance indicator we need to reduce the number of killed and seriously injured people on our roads from 1,944 in 2022 to 1,568 in 2025.

The strategic road network (SRN) is the backbone of our country. Consisting of around 4,500 miles of motorways and major A-roads, it connects people, builds communities, creates opportunities, and helps the UK to thrive. The SRN is the most heavily used part of the national road network and carries a third of all traffic. We have a key performance indicator (KPI) for casualty reduction on the SRN. For the second Roads Period our target is to reduce the number of people killed and seriously injured (KSI) on the SRN by 50% by the end of 2025 compared to the 2005-2009 baseline period (see note). To meet this target we need to reduce the number of KSIs on our roads from 1,944 in 2022 to 1,568 by the end of 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 2022, the KSI rate remained relatively stable between 2019 and 2022. 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: 2018-2022'.

We recognise that for 2022 we are above the KPI monitoring point and we are working to further reduce the number of people killed or seriously injured. Our work includes:

- Continuing with the delivery of our second road investment strategy (RIS2) safety programme.
- Delivering additional activities beyond our RIS2 safety programme to help drivers be safer and feel safe on our roads. This includes working with police forces on enforcement activities, driver education campaigns and targeted safety interventions across our network.
- Facilitating additional activities beyond our RIS2 safety programme, which are beyond National Highways control. This includes setting our Road to Zero Harm project which is an exciting and ambitious road safety initiative that we're championing.

A critical component of achieving our long-term safety ambition is stakeholder support. In 2023, as part of the Road to Zero Harm project, we spoke with more than 50 stakeholders, including emergency services, local authorities and road safety and recovery organisations, to identify, prioritise and deliver agreed measures.

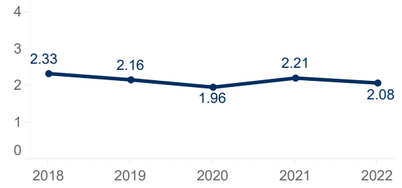
We have also taken the lead in setting up a multi organisation Road Safety Panel to deliver a joined-up approach to road safety initiatives and communications. Such collaboration will be vital to helping us reduce the number of people killed or seriously injured on our roads.

Why KSI rates are useful

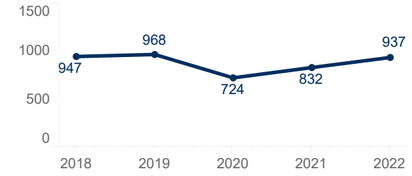
Killed and Serious Injury (KSI) rates measure the number of deaths and serious injuries in relation to the total miles travelled on a type, or section, of road. This enables us to compare roads with a high volume of traffic, or that span a long distance, with roads which have a lower volume of traffic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

Whilst the 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: 2018-2022



Traffic in hmvm on the SRN: 2018-2022

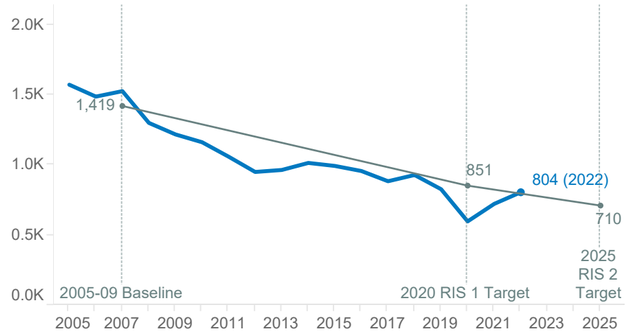


Note: our 2025 target is based on road traffic collision deaths and serious injuries which occurred between 2005 and 2009. This historic data and the 2025 target is subject to an annual revision by the Office for National Statistics and Department for Transport due to changes in how police forces captured injury severity data in recent years. For more information, please see page 15.

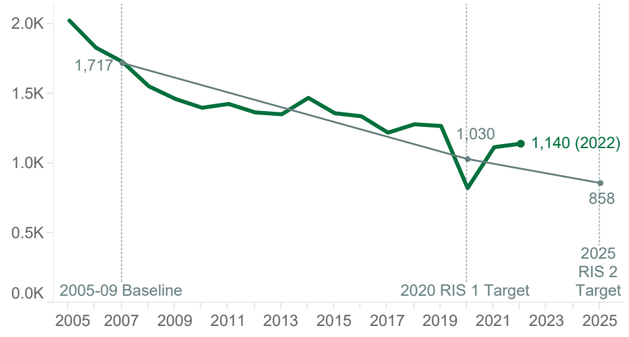
Trends in deaths and serious injuries by road class

KPI 1.1: KSI performance over time (2005 to 2022) compared to 2022 adjusted target / monitoring points by road class

Motorway



A-Roads on SRN



KSI performance in RIS2: 2021-2025

Road Class		2021	2022	2023	2024	2025
Motorway	RIS2 KSI target / monitoring points (2022 adjusted)	823	795	766	738	710
	Number of KSI (adjusted)	722	804	Ø	Ø	Ø
	KSI monitoring point (achieved) or missed by	-101	10	Ø	Ø	Ø
A-Road (on SRN)	RIS2 KSI target / monitoring points (2022 adjusted)	996	961	927	893	858
	Number of KSI (adjusted)	1,115	1,140	Ø	Ø	Ø
	KSI monitoring point (achieved) or missed by	119	179	Ø	Ø	Ø

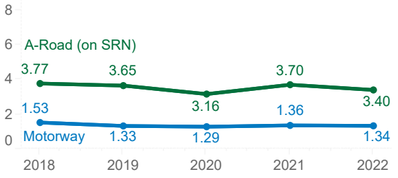
Note: Numbers may vary slightly due to rounding

Motorways are our safest roads

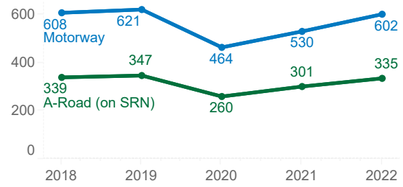
There were 804 people killed or seriously injured on motorways against the monitoring point of 795. This means we need to achieve a further reduction of 94 KSIs to achieve the 2025 target for motorways. Since 2019 rates have been stable, suggesting that the number of people killed and seriously injured to the volume of traffic the network carries has stagnated.

There were 1,140 people killed or seriously injured on A-roads, against the monitoring point of 961. This means we need to achieve a further reduction of at least 282 KSIs to achieve the 2025 target for A-roads.

KSIs per hundred million vehicle miles (hmvm) on Motorways and A-Roads: 2018-2022



Traffic in hmvm on Motorways and A-Roads: 2018-2022



Despite A-roads carrying around half the traffic of motorways there were 336 more KSIs on A-roads than on motorways. This is reflected in the 2022 KSI rate being 3.40 for A-roads and 1.34 for motorways.

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[1] found that nearly one-in-four vehicles on Britain's roads have illegal tyres – just over 6.1 million per year.

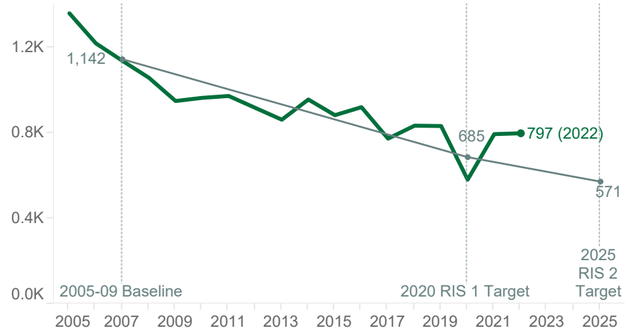
The publication of our Delivery plan 2024-25 will outline how we will continue to deliver our Roads Period commitments along with how we work with our road safety partners and stakeholders to deliver additional activities.

1 https://www.tyresafe.org/wp-content/uploads/2023/10/NH-TyreSafe-Tread-Depth-Survey-Report-2016-vs-2023-DESIGN.pdf

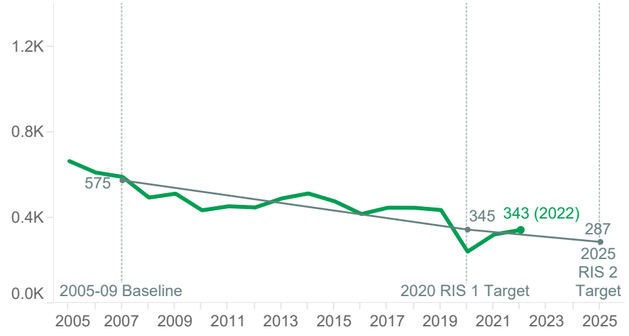
Trends in deaths and serious injuries by A-road type

KPI 1.1: KSI performance over time (2005 to 2022) compared to 2022 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

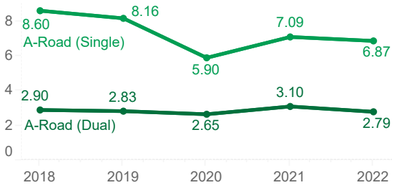
Road Type		2021	2022	2023	2024	2025
A-Road (Dual)	RIS2 KSI target / monitoring points (2022 adjusted)	663	640	617	594	571
	Number of KSI (adjusted)	793	797	Ø	Ø	Ø
	KSI monitoring point (achieved) or missed by	130	157	Ø	Ø	Ø
A-Road (Single)	RIS2 KSI target / monitoring points (2022 adjusted)	333	322	310	299	287
	Number of KSI (adjusted)	322	343	Ø	Ø	Ø
	KSI monitoring point (achieved) or missed by	(11)	21	Ø	Ø	Ø

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

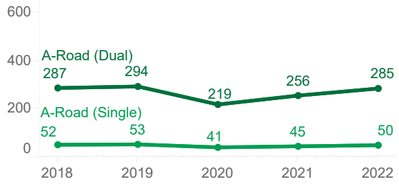
Dual carriageway A-roads on the SRN carry five times more traffic than single carriageway A-roads, however the number of people killed and seriously injured on dual carriageway A-roads is two and a half times more than single carriageway A-roads. This is reflected in the 2022 KSI rate being 2.79 for dual carriageway A-roads and 6.87 for single carriageway A-roads.

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 157 KSIs above the 2022 monitoring point and require a reduction of 226 KSI casualties to reach the 2025 target. This is a significant challenge and one that we will need to work with other stakeholders to tackle.

KSIs per hundred million vehicle miles (hmvm) on A-roads dual and single: 2018-2022



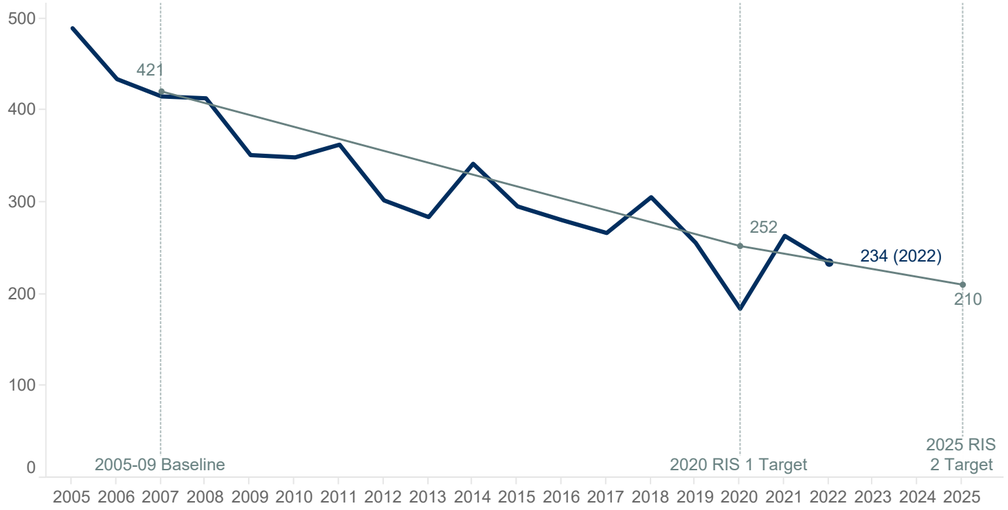
Traffic in hmvm on A-roads dual and single: 2018-2022



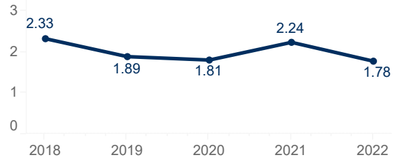
Single carriageways A-roads present additional challenges on the strategic road network with the increased potential for head on collisions and collisions resulting from right turn manoeuvres across live traffic. This risk is partially mitigated through single carriageway having a lower national speed limit than dual carriageway A-roads. In 2022 we were 21 KSIs above our monitoring point for single carriageway A-roads and require a reduction of 56 casualties to reach the 2025 target.

Safety in the North West Region

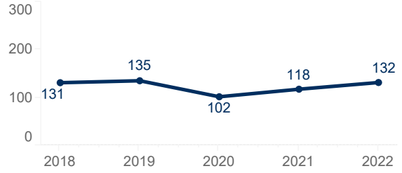
KPI 1.1 KSI performance over time (2005 to 2022) compared to 2022 adjusted target / monitoring points in the North West region

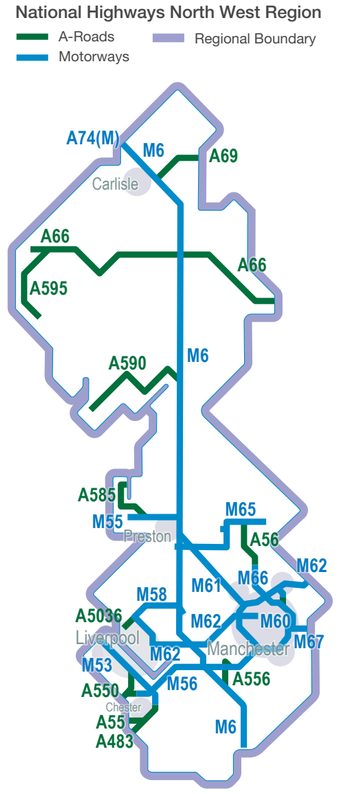


KSIs per hundred million vehicle miles (hmvm): 2018-2022



Traffic in hmvm: 2018-2022





KSI performance in RIS2: 2021-2025

	2021	2022	2023	2024	2025
RIS2 KSI target / monitoring points (2022 adjusted)	244	235	227	219	210
Number of KSI (adjusted)	263	234	Ø	Ø	Ø
KSI monitoring point (achieved) or missed by	19	(1)	Ø	Ø	Ø

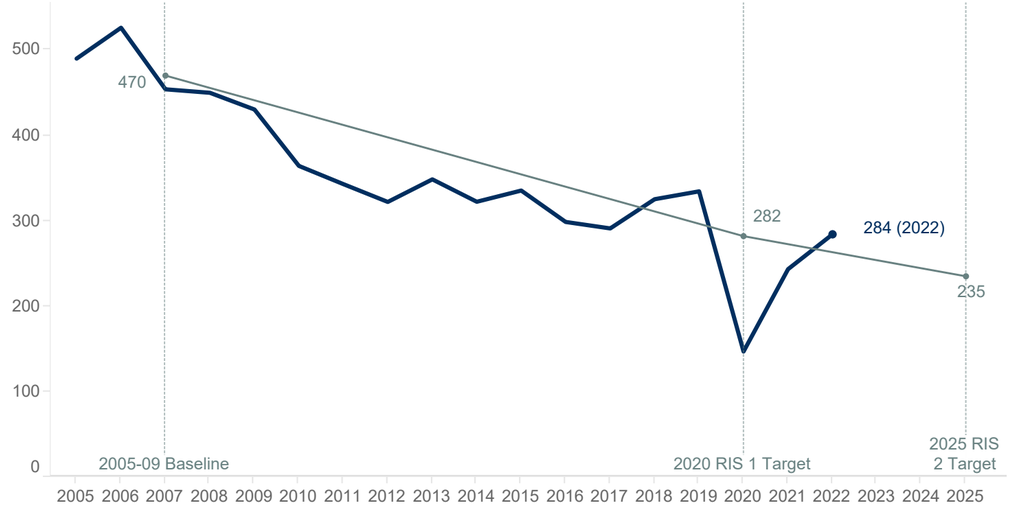
2022 monitoring point met

The number of people killed or seriously injured in the North West region decreased from 263 in 2021 to 234 in 2022 and was only one of two regions where KSI casualties have decreased year on year. The volume of traffic in 2022 was similar to 2018 and 2019 levels, however the number of people killed and seriously injured was lower. This is reflected in an improvement in the KSI rate being 1.78 in 2022 compared to 2018 and 2019. The North West was the only region to achieve the 2022 monitoring point. A further reduction of 24 KSIs is required to meet the 2025 target.

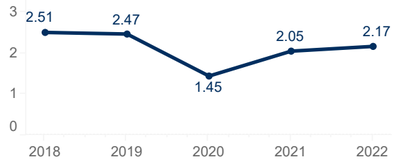
Our safety data shows that dual carriageway roads are safer for road users to travel on than single carriageway roads. Upgrading single carriageway roads to dual carriageway roads increases capacity and creates a more controlled road environment, where vehicles travelling in opposite directions are separated, helping to reduce the likelihood of head on collisions between vehicles. Increasing capacity on the SRN can also help to encourage drivers to move away from less safe roads.

Safety in the Yorkshire and North East Region

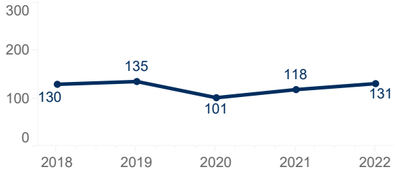
KPI 1.1 KSI performance over time (2005 to 2022) compared to 2022 adjusted target / monitoring points in the Yorkshire and North East region

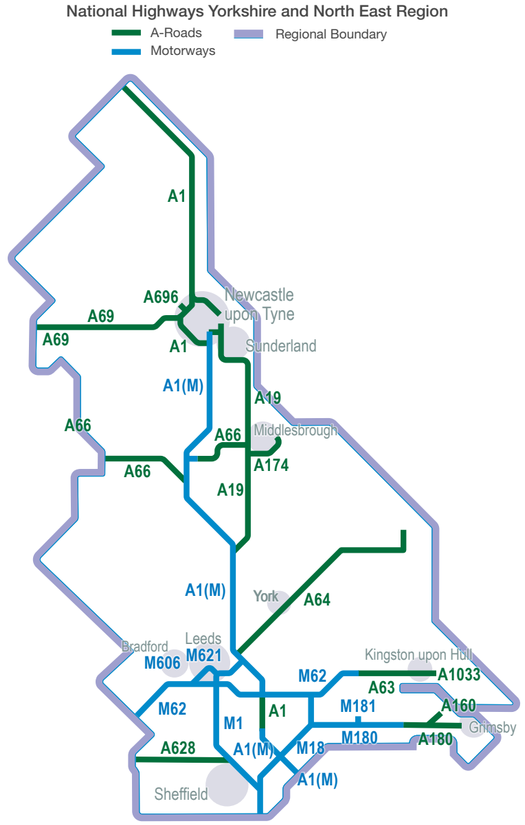


KSIs per hundred million vehicle miles (hmvm): 2018-2022



Traffic in hmvm: 2018-2022





KSI performance in RIS2: 2021-2025

	2021	2022	2023	2024	2025
RIS2 KSI target / monitoring points (2022 adjusted)	273	263	254	244	235
Number of KSI (adjusted)	243	284	Ø	Ø	Ø
KSI monitoring point (achieved) or missed by	(29)	21	Ø	Ø	Ø

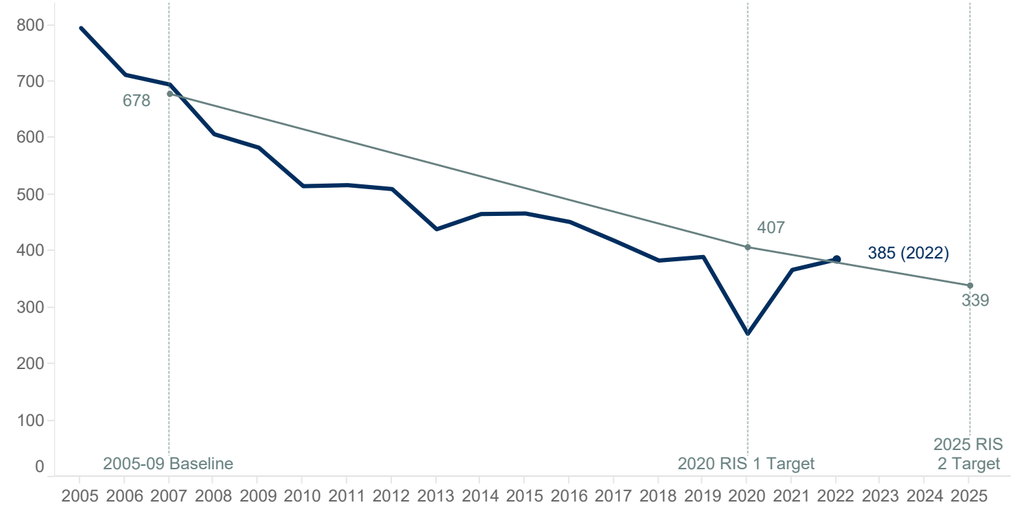
A return to 2016 and 2017 levels

The number of people killed or seriously injured in the Yorkshire and North East region increased from 243 in 2021 to 284 in 2022, this is similar to the number of deaths and serious injuries in 2016 and 2017. The volume of traffic in 2022 was similar to 2018 and 2019 levels, however the number of people killed and seriously injured was lower. This is reflected in an improvement in the KSI rate being 2.17 in 2022 compared with 2018 and 2019. The number of killed and seriously injured people in 2022 was 21 above the 2022 monitoring point for the region. A further reduction of 49 KSIs is required to meet the 2025 target.

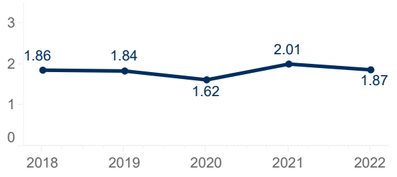
In 2023 we realigned two exit slip roads on the A63 near Brighton Street roundabout to improve safety at the junction. The enhancements delivered on this project included resurfacing the eastbound and westbound exit slip road entries to the roundabout, realigning the kerbs on the existing slip roads, installing new lighting columns adjacent to the bridge, renewing road markings on the roundabout and roundabout approaches, and clearing vegetation on the exit slip roads. Some of the intended benefits of these enhancements are an reduction in shunt and side swipe collisions and improved visibility.

Safety in the Midlands Region

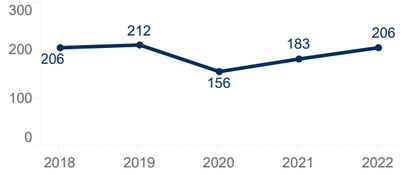
KPI 1.1 KSI performance over time (2005 to 2022) compared to 2022 adjusted target / monitoring points in the Midlands region

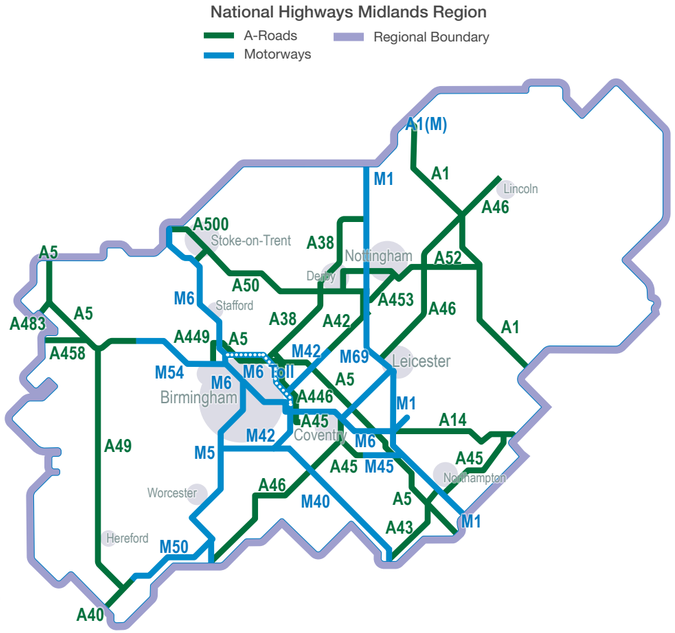


KSIs per hundred million vehicle miles (hmvm): 2018-2022



Traffic in hmvm: 2018-2022





KSI Midlands region performance in RIS2: 2021-2025

	2021	2022	2023	2024	2025
RIS2 KSI target / monitoring points (2022 adjusted)	393	380	366	353	339
Number of KSI (adjusted)	367	385	Ø	Ø	Ø
KSI monitoring point (achieved) or missed by	(27)	6	Ø	Ø	Ø

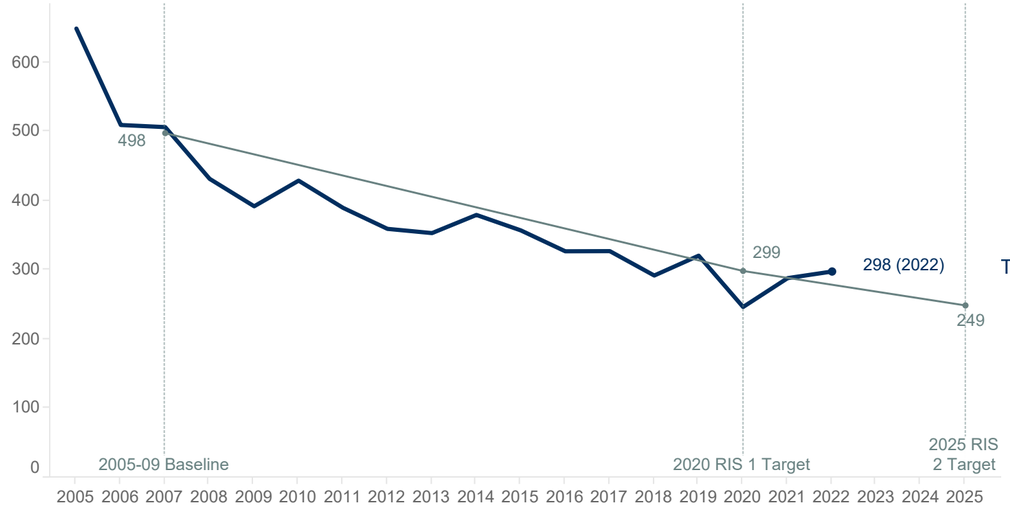
A return to 2018 and 2019 levels

The number of people killed or seriously injured in the Midlands region increased from 367 in 2021 to 385 in 2022. This is similar to the number of deaths and serious injuries in 2018 and 2019.

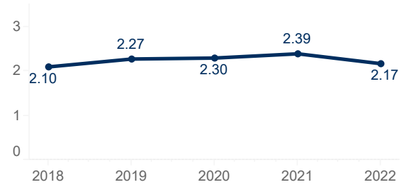
The volume of traffic in 2022 was similar to 2018 and 2019 levels and this is reflected in a similar KSI rate of 1.87 in 2022 compared with 2018 and 2019. The number of killed and seriously injured people in 2022 was five above the 2022 monitoring point for the region. A further reduction of 46 KSI casualties is required to meet the 2025 target. Upgrading single carriageway roads to dual carriageway roads improves capacity on the SRN and provides for a more controlled environment which separates vehicles travelling in opposite directions, reducing the likelihood of head on collisions between vehicles. Increasing capacity on the SRN's safer roads can also provide safer overall capacity for drivers on the non-strategic road network. That is because drivers can move away from less safe roads where there tend to be more deaths and injuries. Our safety data shows that dual carriageway roads are safer for road users to travel on than single carriageway roads.

Safety in the East Region

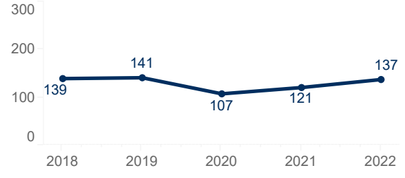
KPI 1.1 KSI performance over time (2005 to 2022) compared to 2022 adjusted target / monitoring points in the East region

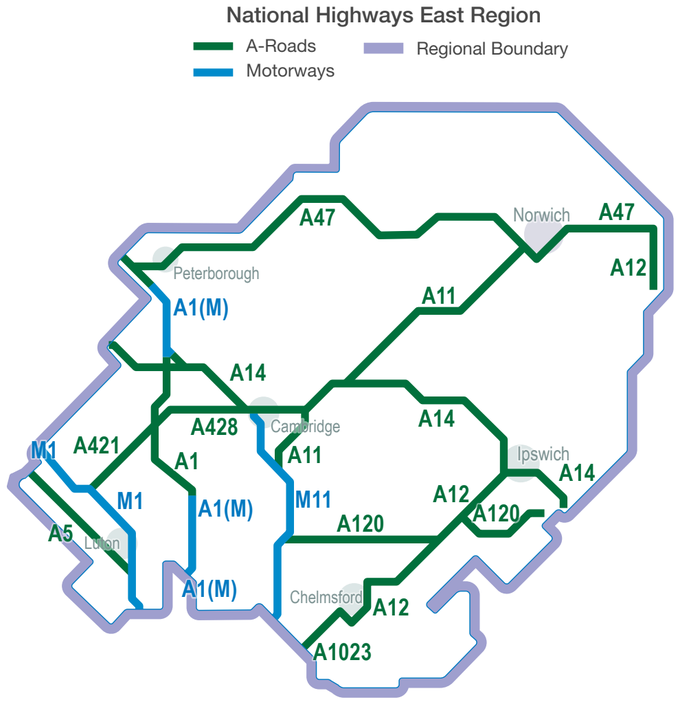


KSIs per hundred million vehicle miles (hmvm): 2018-2022



Traffic in hmvm: 2018-2022





KSI East region performance in RIS2: 2021-2025

	2021	2022	2023	2024	2025
RIS2 KSI target / monitoring points (2022 adjusted)	289	279	269	259	249
Number of KSI (adjusted)	288	298	Ø	Ø	Ø
KSI monitoring point (achieved) or missed by	(0)	19	Ø	Ø	Ø

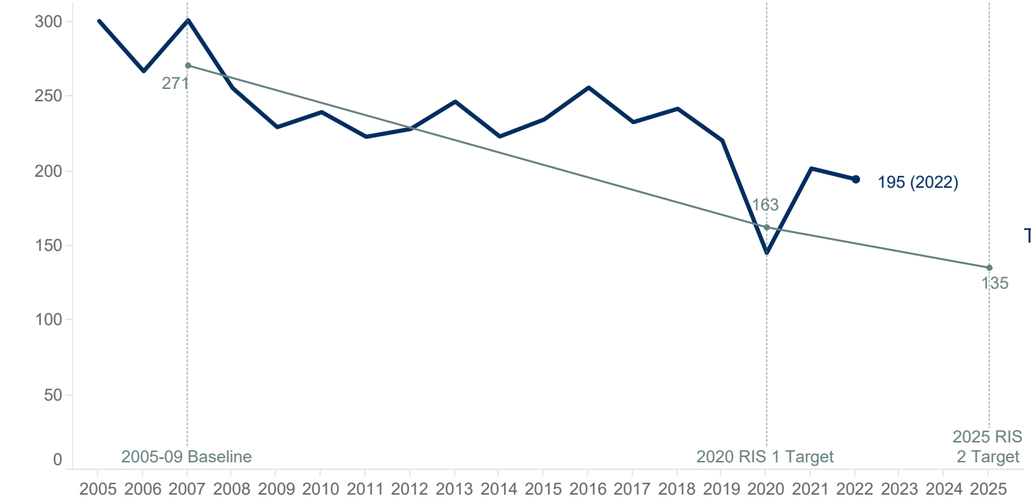
A reduced killed and seriously injured casualty rate

The number of people killed or seriously injured in the East region increased from 288 in 2021 to 298 in 2022, this is similar to the number of deaths and serious injuries in 2018 and less than in 2019. The volume of traffic in 2022 was similar to 2018 and 2019 levels, this is reflected in the KSI rate being 2.17 which is the lowest since 2018. The number of killed and seriously injured people in 2022 was 19 above the 2022 monitoring point for the region. A further reduction of 49 KSI casualties is required to meet the 2025 target.

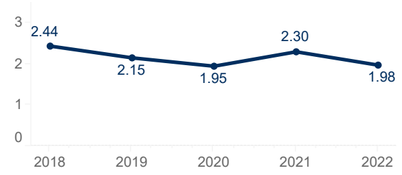
Our statistics show that the A11 in Suffolk between Red Lodge and Fiveways roundabout is a high-risk location for collisions. Most of these occur at or near the junctions of Newmarket Road North, Herringswell Road, and Golf Links Road. To reduce the number of collisions and improve safety, we propose to close three right turn gaps in the central reservation on the A11 and improve the safety barriers, road markings and signage at targeted locations to improve safety.

Safety in the South West Region

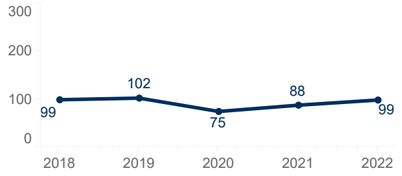
KPI 1.1 KSI performance over time (2005 to 2022) compared to 2022 adjusted target / monitoring points in the South West region

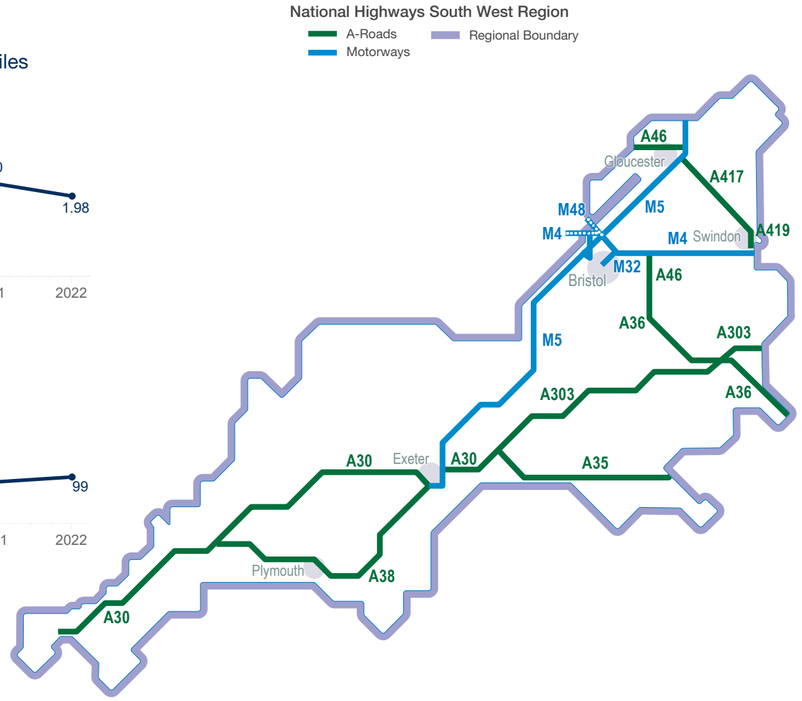


KSIs per hundred million vehicle miles (hmvm): 2018-2022



Traffic in hmvm: 2018-2022





KSI South West region performance in RIS2: 2021-2025

	2021	2022	2023	2024	2025
RIS2 KSI target / monitoring points (2022 adjusted)	157	152	146	141	135
Number of KSI (adjusted)	202	195	Ø	Ø	Ø
KSI monitoring point (achieved) or missed by	45	43	Ø	Ø	Ø

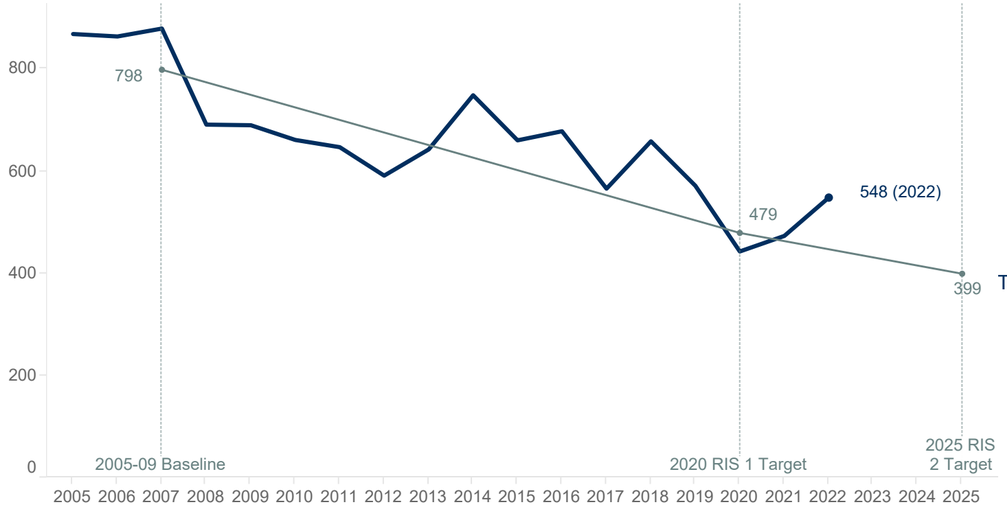
A reduction in deaths and serious injuries 2022

The number of people killed or seriously injured in the South West region decreased from 202 in 2021 to 195 in 2022 and was only one of two regions where KSI casualties decreased year on year. The volume of traffic in 2022 was similar to 2018 and 2019 levels, however the number of people killed and seriously injured was lower. This is reflected in an improvement in the KSI rate being 1.98 in 2022 compared with 2018 and 2019. The number of killed and seriously injured people in 2022 was 43 above the 2022 monitoring point for the region. A further reduction of 60 KSI casualties is required to meet the 2025 target.

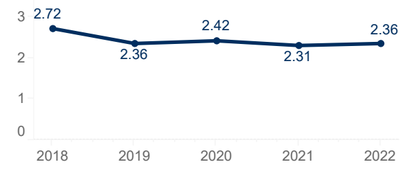
We have upgraded a three-mile section of the A303 between Sparkford and Ilchester, to make the road safer and more reliable. The delivery of this scheme is part of a long term aim to create a high-quality dual carriageway link between London and the South East and the South West. In delivering the scheme, we're aiming to make the road safer, by providing additional capacity and reducing driver stress. The scheme will make routes safer for pedestrians, cyclists, horse riders in the area. The project opened for traffic in November 2024. Upgrading the road from a single carriageway to a dual carriageway will improve both the safety of this road and provide additional capacity.

Safety in the South East Region

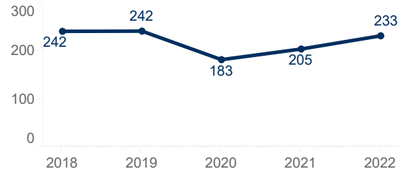
KPI 1.1 KSI performance over time (2005 to 2022) compared to 2022 adjusted target / monitoring points in the South East region

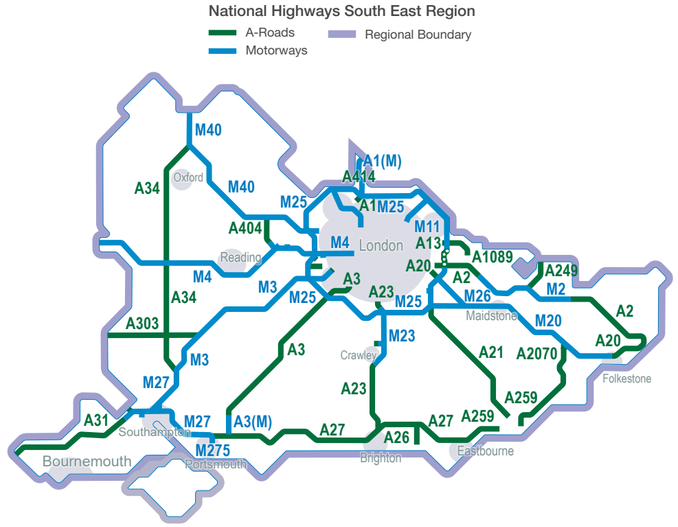


KSIs per hundred million vehicle miles (hmvm): 2018-2022



Traffic in hmvm: 2018-2022





KSI South East region performance in RIS2: 2021-2025

	2021	2022	2023	2024	2025
RIS2 KSI target / monitoring points (2022 adjusted)	463	447	431	415	399
Number of KSI (adjusted)	473	548	Ø	Ø	Ø
KSI monitoring point (achieved) or missed by	10	101	Ø	Ø	Ø

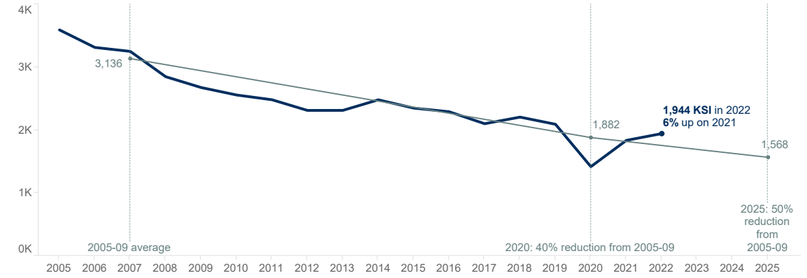
Stable KSI rates but a substantial challenge ahead

The number of people killed or seriously injured in the South East region increased from 473 in 2021 to 548 in 2022, this is fewer than in 2019. The volume of traffic in 2022 was lower than in 2019 and the number of people killed and seriously injured was also lower. This is reflected in the KSI rate being 2.36 in 2022, which is the same as in 2019 and similar to the pandemic-affected years 2020 and 2021. The number of killed and seriously injured people in 2022 was 101 above the 2022 monitoring point for the region. A further reduction of 149 KSI casualties is required to meet the 2025 target.

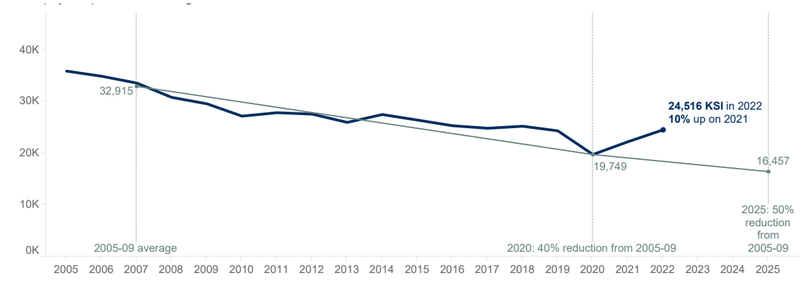
The A21 which runs from Sevenoaks to Hastings is a road which, for many years, has had a high number of collisions. We are bringing forward a series of schemes to improve safety along this corridor, which will include, amongst others: junction enhancements, improvements to road alignment and visibility, changes to speed limits and improved signing, markings and road studs. National Highways is investing an estimated £20m in this project. The project is due to finish in March 2025 with other additional safety works now planned to take place through to Winter 2026.

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

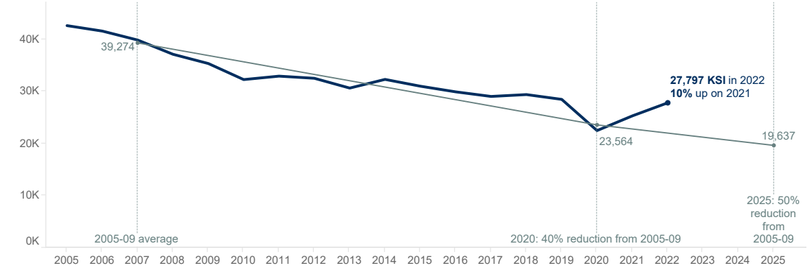
KSIs on England's Strategic Road Network (SRN)



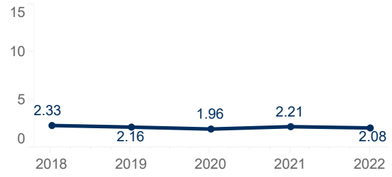
KSIs on the rest of England's roads



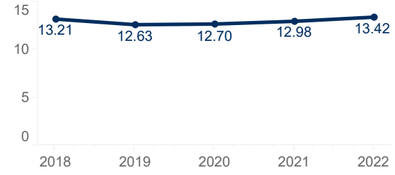
KSIs on the rest of English, Scottish and Welsh roads (GB)



KSIs per hundred million vehicle miles (hmvm) on the SRN: 2018-2022

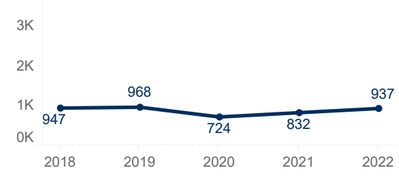


KSIs per hundred million vehicle miles (hmvm) on the rest of England's roads: 2018-2022

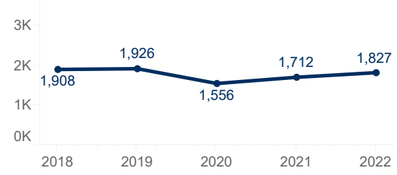


KSIs per hundred million vehicle miles (hmvm) on the rest of English, Scottish and Welsh roads (GB): 2018-2022

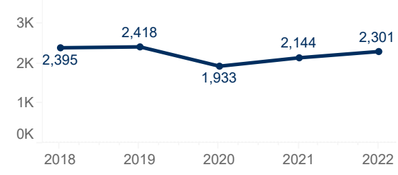
Traffic on the SRN in hmvm: 2018-2022



Traffic on the rest of England's roads in hmvm: 2018-2022



Traffic on the rest of English, Scottish and Welsh roads GB) in hmvm: 2018-2022



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 systems 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 2022, 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

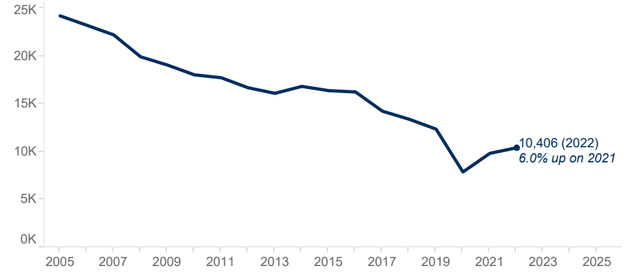
2

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

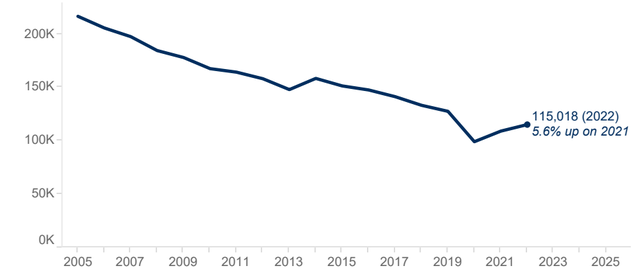
PI 1.2: Total number of people killed or injured (all casualties)

The first of our safety performance indicators (PI 1.2), the total number of individuals killed or injured on the SRN, is used to measure our progress towards our vision that no one should be harmed when travelling or working on the SRN In the last two decades the number of people killed or injured on the SRN has halved.

All casualties on the SRN



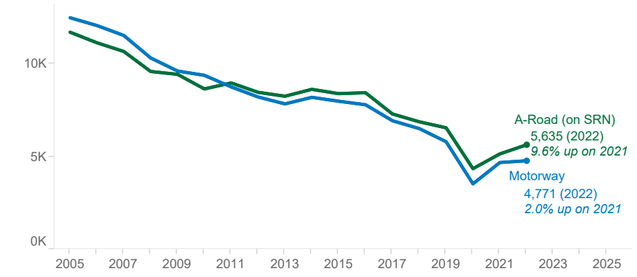
All casualties on rest of England's roads



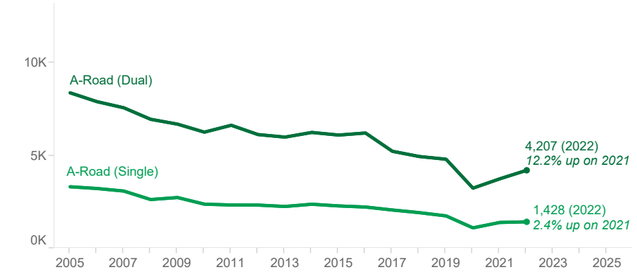
Since the 2005-2009 baseline period the number of people injured in collisions on the SRN has more than halved but more than ten thousand people were still hurt on our roads in 2022. We have a long way to go to achieve our zero-harm ambition. We will work with our partners and other stakeholders to reduce the number of collisions occurring on our network and undertake additional activities to minimise the impact of those collisions that do occur.

In 2022 there were 10,406 casualties, of all severities, on the SRN which was an increase of 587 (6.0%) from 2021. For the rest of England, the total number of casualties increased by 5.6% meaning the increase in the number of casualties on the SRN was slightly higher than the rest of England. KSIs on the SRN increased by 5.9% compared with an increase of 10.3% for the rest of England. This indicates that the increase in total casualties on the SRN was primarily a result of a 6% increase in slight casualties on the SRN compared with an increase of 4.4% for the rest of England.

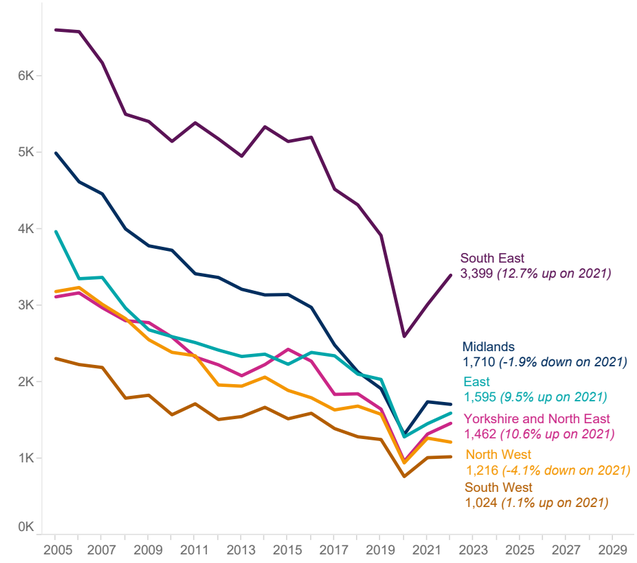
All casualties on the SRN by road class



All casualties on the SRN A-Roads by type



All casualties on the SRN by region



In the last two decades the number of people killed or sustaining an injury, of any severity, on the SRN has halved.

The biggest change on the SRN occurred on dual carriageway A-roads with total casualties increasing by 12.2% compared to 2.0% on motorways and 2.4% on single carriageway A-roads. Whilst dual carriageway A-roads had the highest year on year increase in terms of casualty numbers, dual carriageway A-roads remain safer then single carriageway A-roads overall.[2]

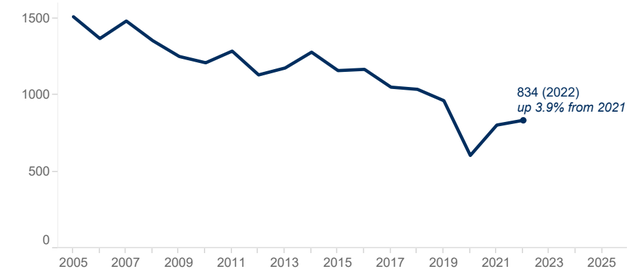
The South East region experienced the largest increase in casualties at 12.7%, with the Yorkshire & North East (10.6%) and East (9.5%) also experiencing increases in the number of casualties greater than the SRN overall.

2 See page 7

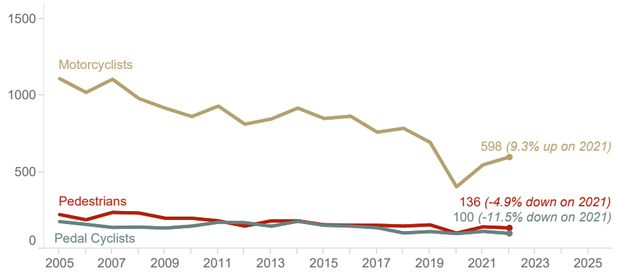
Pedestrians, cyclists and motorcyclist users killed or injured on the Strategic Road Network (SRN)

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

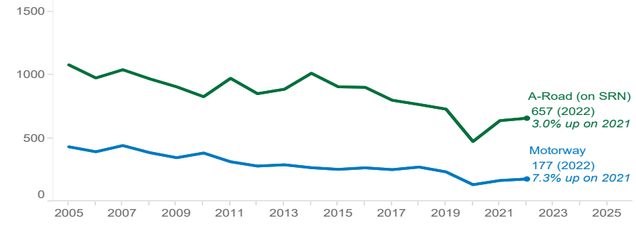
All vulnerable road user casualties on the SRN



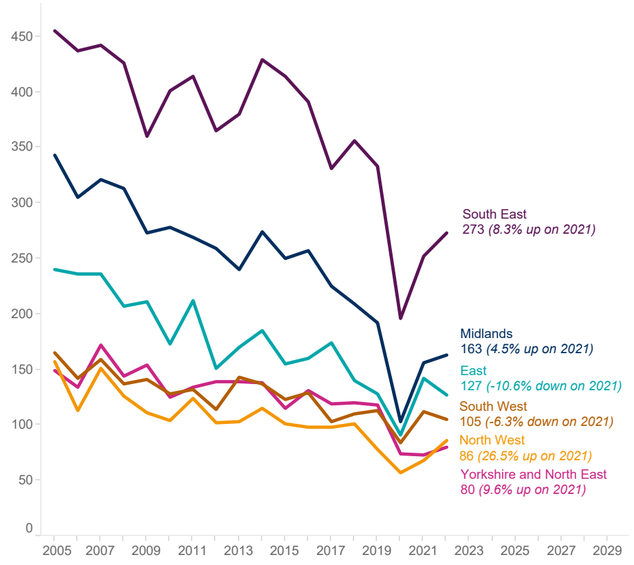
All vulnerable road user casualties on the SRN by user group



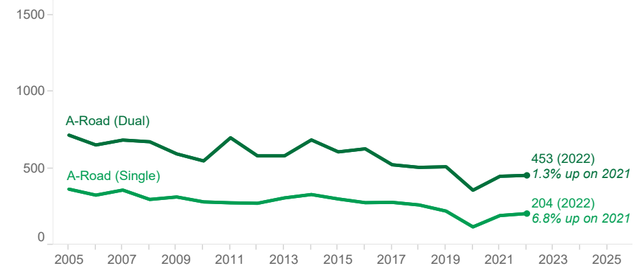
All vulnerable road user casualties on the SRN by road class



All vulnerable road user casualties on the SRN by region



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



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

Overall vulnerable road user casualties increased in 2022 by less than other casualty types

Vulnerable road users is a collective term used to describe pedestrians, cyclists, motor cyclists and horse riders. Vulnerable road user casualties on the SRN increased by 3.9% from 2021 to 2022, which is less than the 6.0% increase for total SRN casualties.

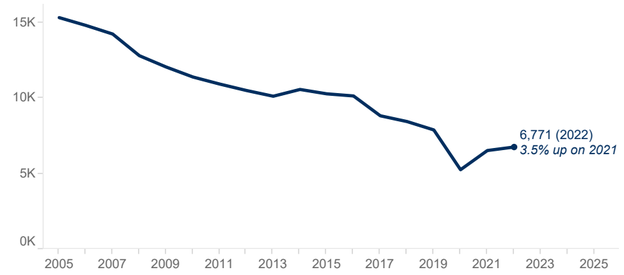
The number of pedestrian and cyclist casualties both decreased compared with 2021, with pedestrian casualties decreasing by 4.9% and cyclist casualties decreasing by 11.5%. Motorcyclist casualties increased by 9.3% which is a larger increase than total casualties on the SRN, however the total number of motorcycle casualties in 2022 was 16% lower than in 2019. Motorcycle casualties increased by 26 (44.8%) in January to March 2022 and by 25 (5.1%) during April to December 2022 when compared with the same periods in 2021. Pandemic travel restrictions were in place in January to March 2021.

Compared with 2021, in 2022 vulnerable road user casualties increased slightly more on motorways (7.3%) than on single carriageway A-roads (6.8%), whilst dual carriageway A-roads increased the least at 1.3%. Geographically the North West region had the highest increase at 26.5%. The Midlands (4.5%), South East (8.3%) and Yorkshire & North East (9.6%) regions also experienced increases in vulnerable road user casualties. The East region (-10.6%) and South West (-6.3%) had reductions in vulnerable road user casualties.

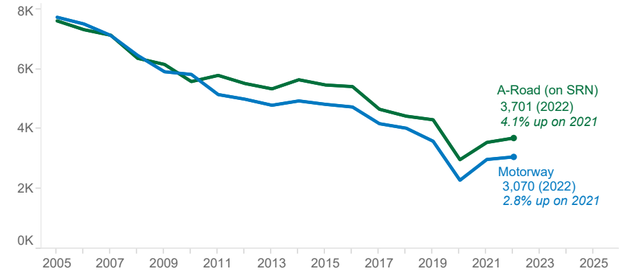
Injury collisions on the Strategic Road Network

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

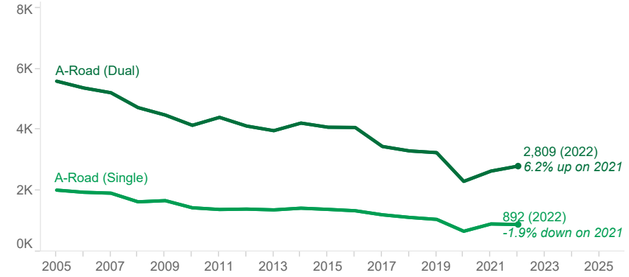
All collisions on the SRN



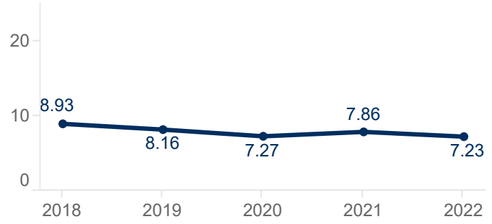
All collisions on the SRN by road class



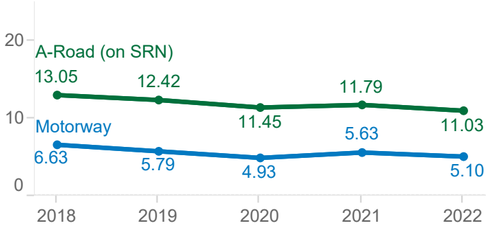
All collisions on the SRN A-Roads by type



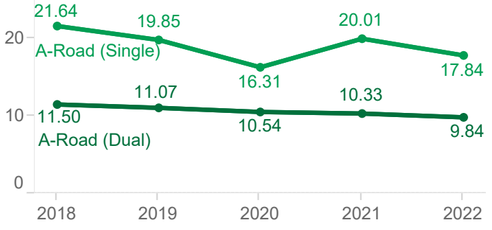
PIC rate on the SRN: 2018-2022



PIC rate on the SRN by road class: 2018-2022



PIC rate on the SRN by A-Road type: 2018-2022



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 that occur on the strategic road network is an important part of Road to Zero Harm and is an area where National Highways and our partners have made substantial progress over time. The further progress we make in reducing collisions, the more challenging the remaining collisions that occur become to prevent. We not only seek to prevent collisions from occurring but where collisions do occur, they result in better outcomes and minimise the number of deaths and serious injuries.

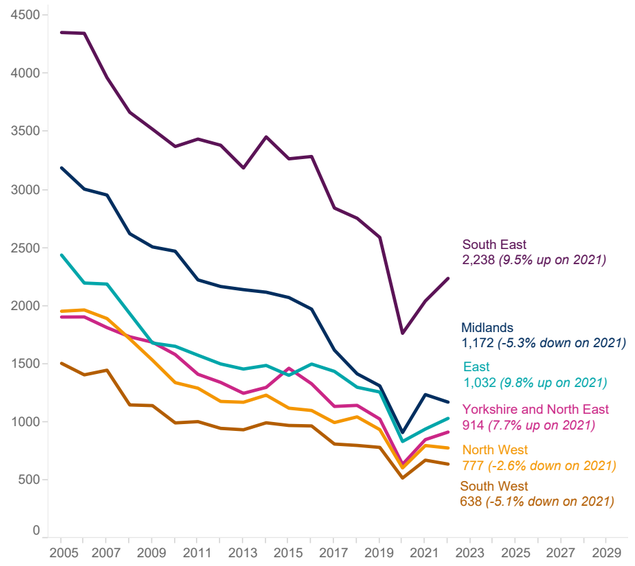
Personal injury collision (PIC) rates measure the number of injury collisions which occur on the SRN relative to the amount of traffic the network is carrying. Over the last five years we have seen a reduction in PIC rates on the SRN. There is a trend over the 2018 to 2022 period that shows PIC rates have improved on motorways, dual carriageway A-roads and single carriageway A-roads. In 2022 SRN PIC rates were highest on single carriageway A-roads at 17.84 per 100 million vehicle miles (HMVM), this is a reduction from the 2018 PIC rate of 21.64.

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 the remainder of our second Roads Period are focused on single carriageway A-roads. In our third Roads Period, our aspiration is to focus even more on delivering improvements on our one and two star iRAP rated roads.

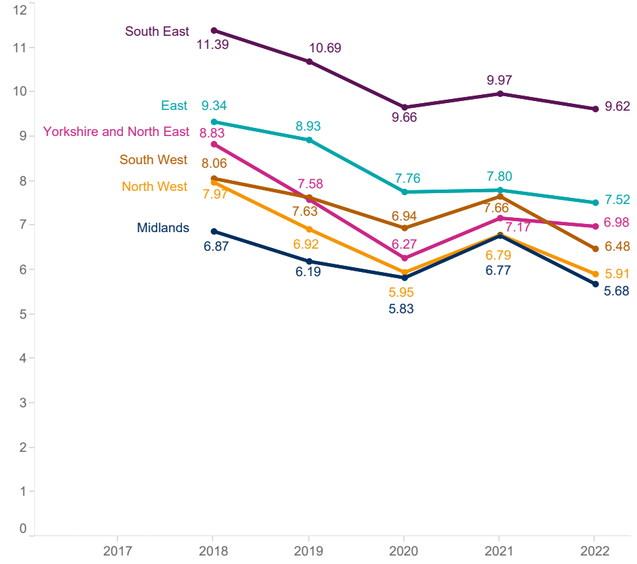
https://nationalhighways.co.uk/media/3mya00pi/the-strategic-road-network-star-rating-report.pdf

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: 2018-2022



Whilst it is helpful to consider the safety performance of our roads in any given year, it is more important to consider the trend over a longer period, with five years considered good practice in road safety analysis. Focusing on a five- year period avoids being overly influenced by outlier years, for example, 2020 which was significantly impacted by reduced traffic flows due to the Covid-19 pandemic.

The number of personal injury collisions decreased in 2022 compared to 2021 in three regions. Personal injury collisions decreased the most in the Midlands region at 5.3% and there were also decreases in the South West (5.1%) and North West (2.6%) regions. Personal Injury Collisions increased the most in the East region at 9.8%, with the South East increasing by 9.5%, and Yorkshire and North East region increasing by 7.7%. The personal injury collision rates for all regions were lower in 2022 than they were in 2021, meaning that in the three regions where personal injury collisions increased in 2022 from 2021, the increase was lower than the traffic in those regions in the same period. We can see that over the five-year period each region has shown an incremental 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

Our long-term zero harm ambition

In order to understand why personal injury collisions occur on the SRN, we need to develop an understanding of the factors involved in each collision including but not limited to; vehicle mix involved, environmental conditions and the road safety factors which explain why the collision occurred and the outcomes of the collision. We use the internationally-recognised Safe System approach to understand road safety in a more holistic way.

The Safe System is an approach to road safety management based on the principle that our life and health should not be compromised by our need to travel. The Safe System considers how roads, vehicles, people, speeds, and post-collision care come together in the way we manage and improve safety. We acknowledge within the Safe System approach, that we have a shared responsibility with other organisations and partners to prevent deaths and serious injuries on our roads.

By looking at how vehicles, people and the design of our roads interact over time, we've learnt much more about how to improve road safety. This helps us plan the types of mitigations to help reduce the number of collisions occurring and minimise the harm that they cause.

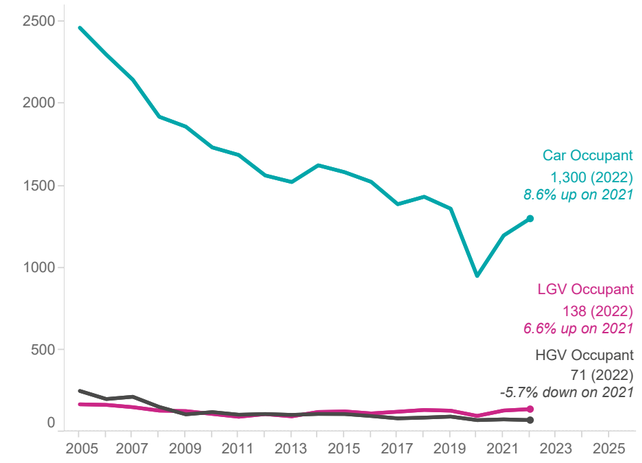
We've developed our approach to include designing safer roads, supporting the development of safer vehicles and encouraging safer driving.

Road to Zero Harm is an exciting and ambitious road safety initiative we're championing to realise our vision, that no-one should be killed or seriously injured on the strategic road network. Achieving this vision will benefit the country, and the families and individuals whose lives continue to be affected by collisions on our roads. We are committed to reducing the number of people killed or seriously injured on our road network and we understand the limits of our control.

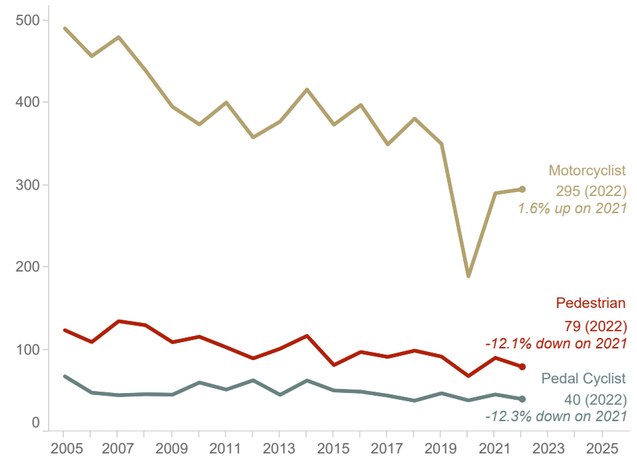
We need to work with key partners to apply the globally recognised Safe System approach to road safety management. The Road to Zero Harm roadmap will set the longer-term direction for road safety investment alongside Connecting the Country. Together with our partners and stakeholders, we will develop short-term action plans and a long-term roadmap to support a coordinated approach to delivery of effective road safety activities within the third Roads Period and beyond.

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

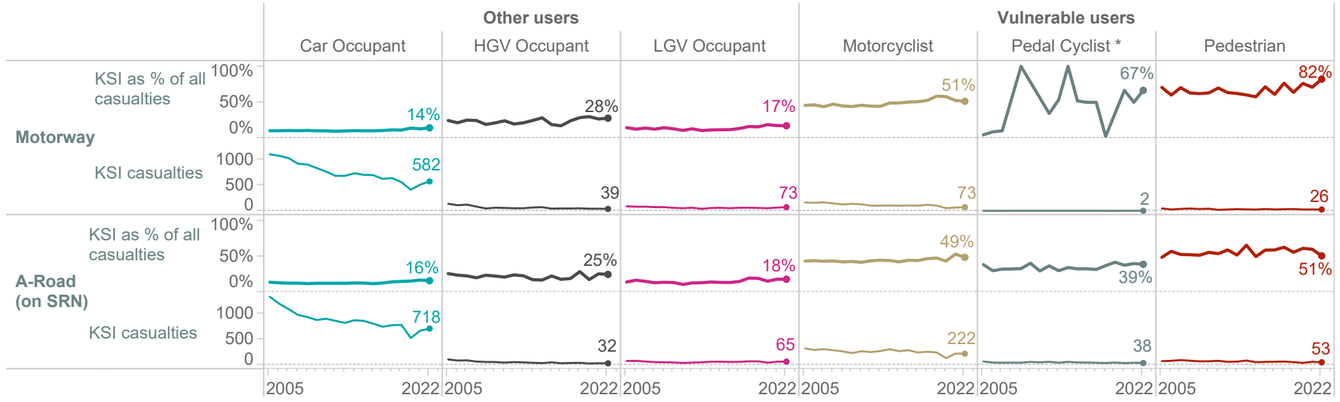
Car, LGV and HGV KSIs on the SRN



Vulnerable user KSIs on the SRN



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



Note

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

Light goods vehicle casualties increasing over time

The number of people killed or seriously injured in road traffic collisions on the SRN has reduced over time, however the number of light goods vehicle (LGV) occupant KSIs goes against this trend and has incrementally increased from a low of 91 KSIs in 2011 to 138 in 2022 (an increase of 51%). During the same period LGV traffic on the SRN has increased by 60%, meaning LGV occupant KSIs have increased at a lower rate than LGV traffic has grown.

Heavy goods vehicle (HGV) occupant casualties have reduced since 2005, with three distinct casualty reduction periods since 2005 and the early signs of a fourth reduction period emerging. Between 2005 and 2008 there were more than 150 HGV occupants killed or seriously injured every year. This reduced to between 103 and 120 per year from 2009 to 2015 and then 81 to 96 per year from 2016 to 2019. In 2021 and 2022, where HGV traffic has been higher than pre-pandemic levels, the number of HGV casualties per year has been 76 and 71 respectively.

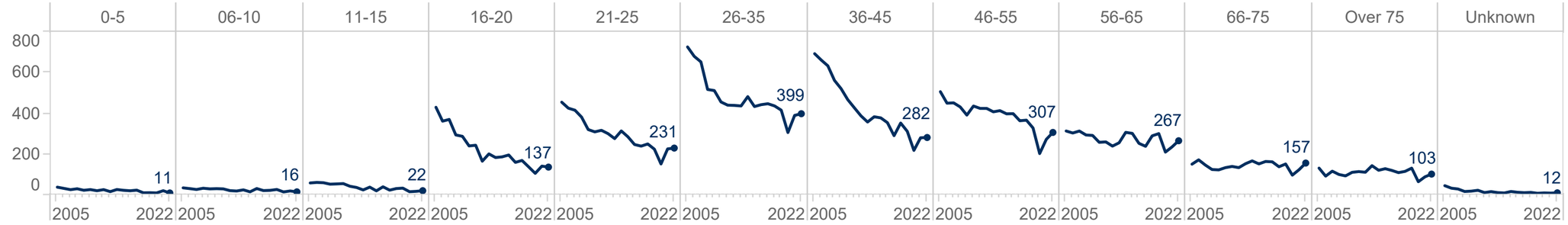
Motorcycle riders and passengers are the most likely to be killed or seriously injured in a collision on the SRN with almost half (49%) of motorcycle riders or passengers seriously injured or killed in collisions in 2022, with the more exposed position of riders and passengers compared to other motorised vehicles a factor.

Note 1 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.

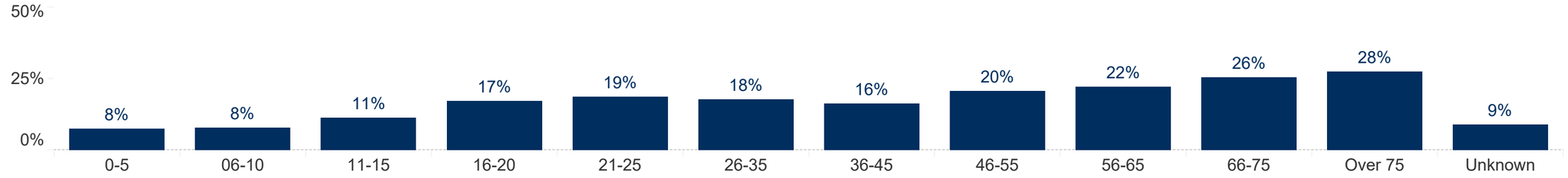
Note 2 https://assets.publishing.service.gov.uk/media/5a80d35640f0b62302695b61/motorcyclist-casualties-2013-data.pdf

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

KSIs by age group 2005-2022



2022 Deaths and serious injuries as a percentage of age group casualties



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 million in 2020 to 69 million in 2030[5], with a 2.3 million increase in those aged 66 or older. As of 2022 the National Travel survey estimates that 84% 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 collision impacts than we have seen in the past. The effects of this appear to be reflected in the age group data analysis, with the 66-75 age group not following the trend of a long-term reduction in deaths and seriously injuries that has been seen in younger age groups. The figures for the 66-75 age group in 2022 were similar to those in the 2015 to 2019 period.

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

5 https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/bulletins/nationalpopulationprojections/2020basedinterim

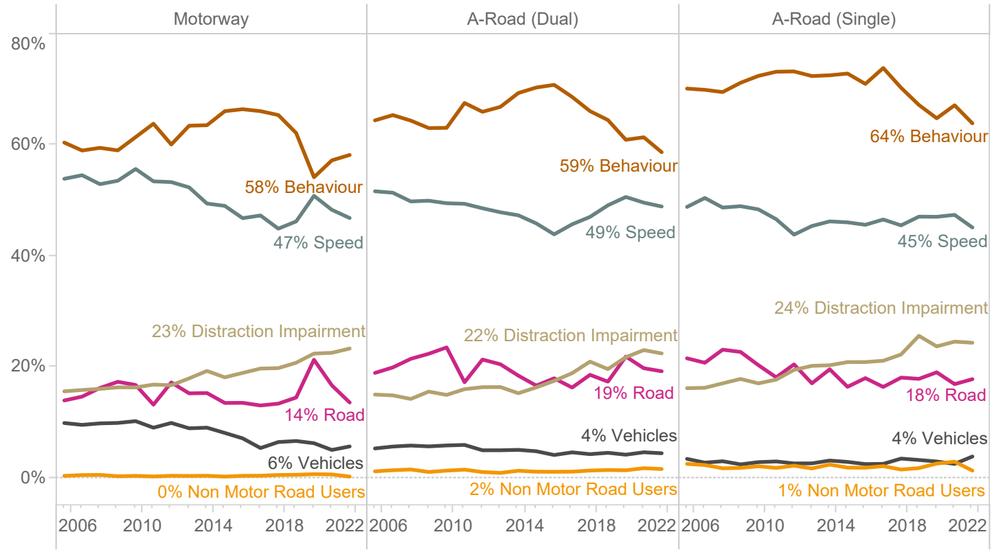
6 https://www.gov.uk/government/statistics/national-travel-survey-2022

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



The proportion of collisions where road user behaviour was identified as a factor has decreased in recent years, however 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 collisions and casualties on the SRN.

Road safety factors related to road user behaviour are the most common factors 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 at legal but inappropriate speeds for the circumstances, such as following too closely to the vehicle in front or 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 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 2022 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.

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

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.

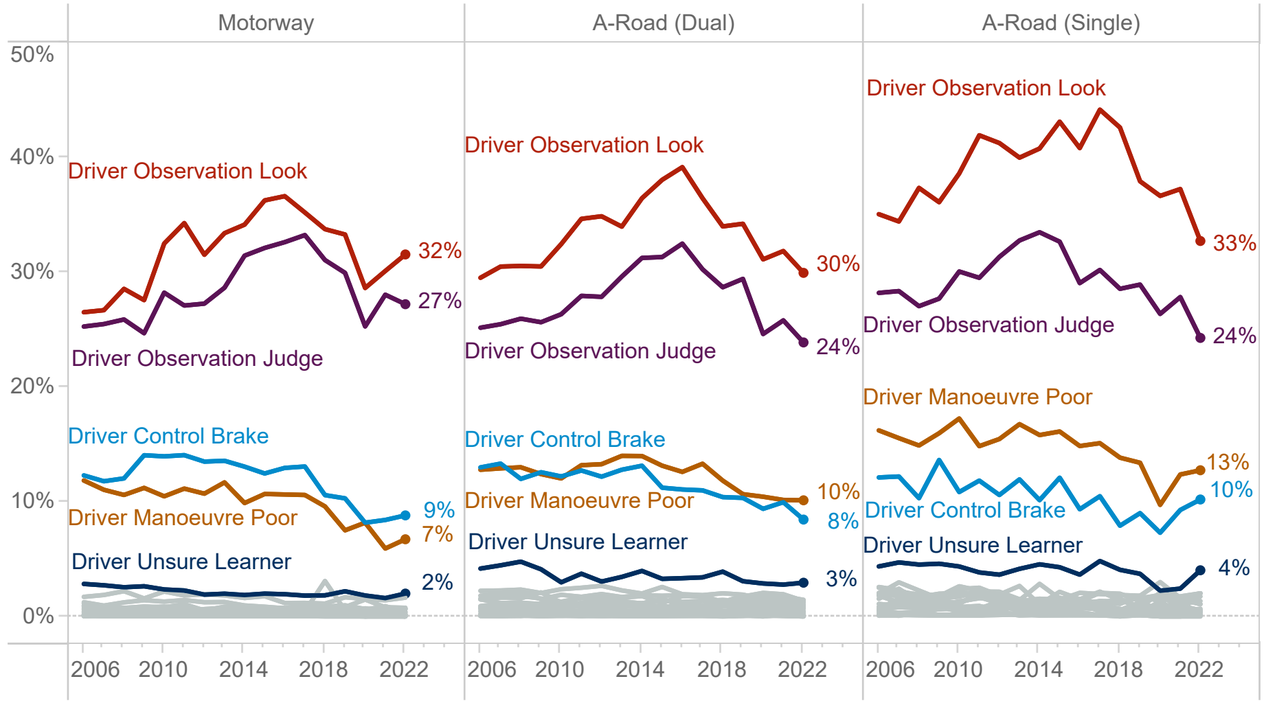
Behaviour Road Safety Factors in collisions on the Strategic Road Network

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 person'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.

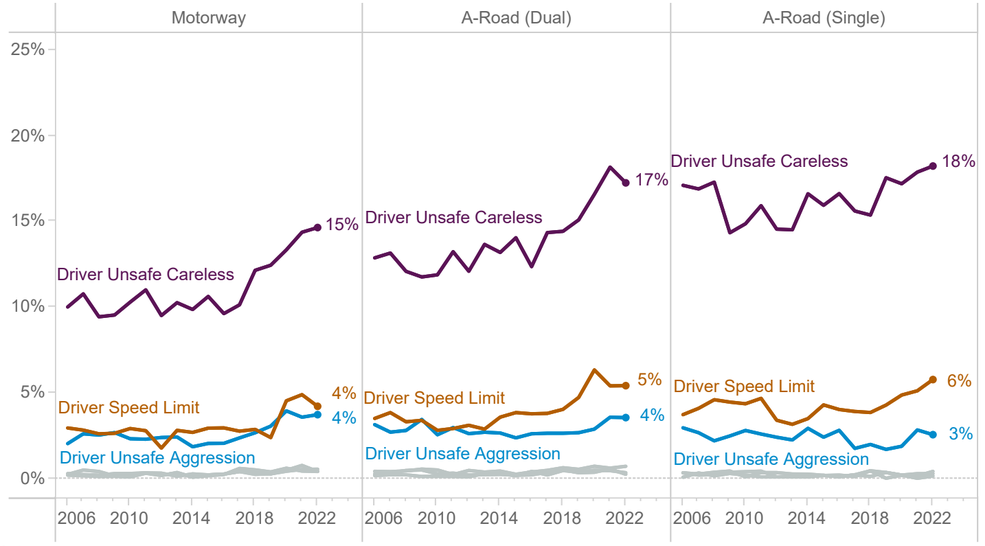
Behaviour Road Safety Factors by road class and type



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

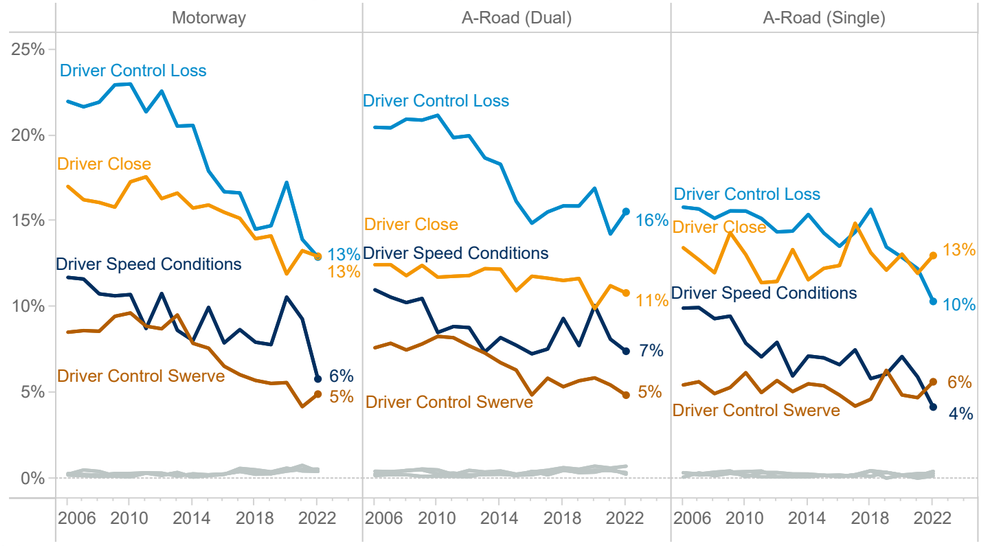
Speed Road Safety Factors in collisions on the Strategic Road Network

Speed Road Safety Factors trending upwards 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.

Speed Road Safety Factors trending downwards by road class and type

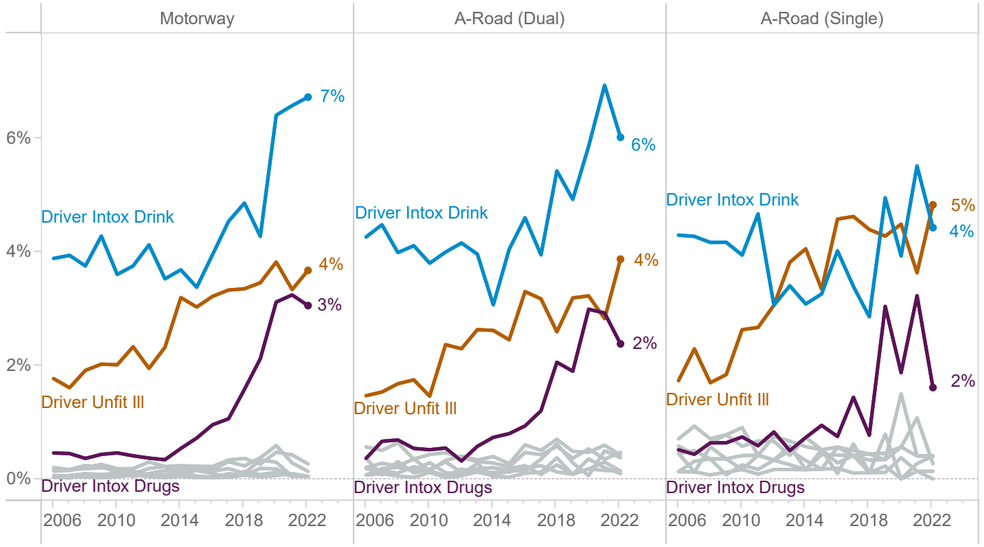


Note
All factors shown but only selected ones highlighted in colour. Other less prominent factors not labelled are shown in grey.

In collisions there is a direct link between speed and the impact and outcome of collisions. The risk of fatality or serious injury goes up even with a slight increase in speed. We also know that the risk of collisions is reduced if motorists are driving at speeds appropriate for the road environment. Overall, 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.

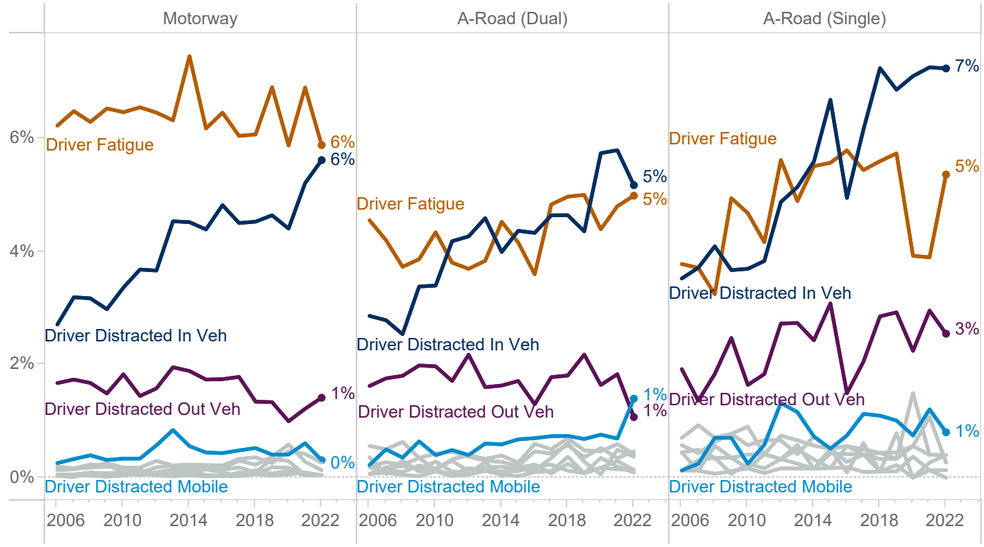
Distraction and impairment Road Safety Factors in collisions on the Strategic Road Network

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.

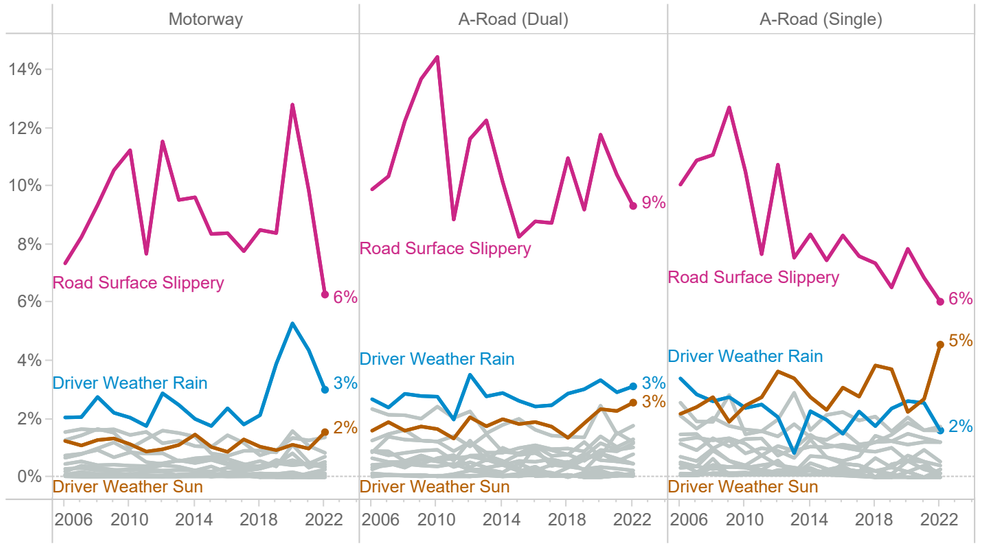
Collisions where impairment from alcohol and drugs is a factor is on the increase, as are collisions where a driver is impaired by illness or disability. Using the SRN whilst impaired through alcohol or drug use is illegal and unacceptable. We will continue to use our safety campaigns, and work with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

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.

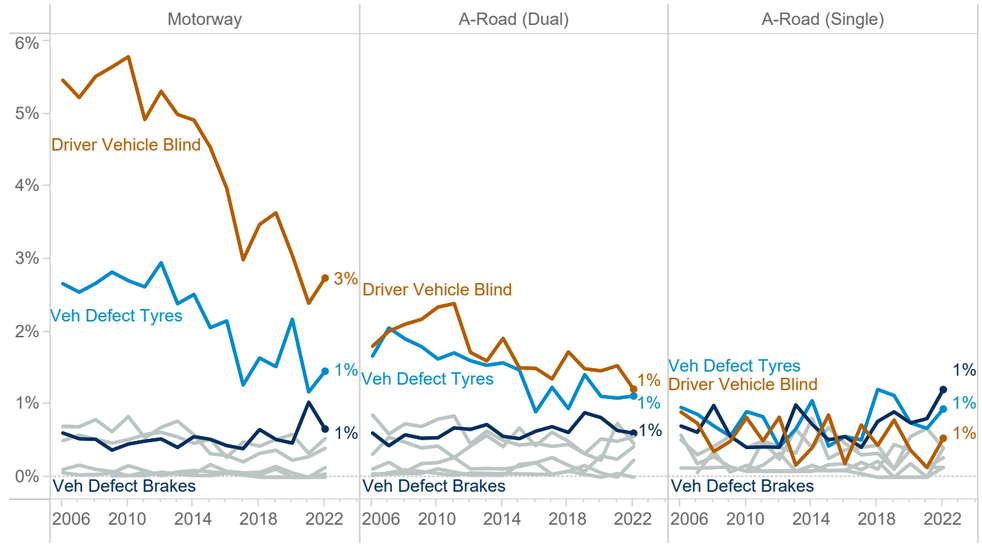
Distraction by something within the vehicle is the most common form of distraction contributing to collisions on the SRN. Since 2015, National Highways has been collaborating with the police to target dangerously driven commercial vehicles, other high sided vehicles and private cars to improve compliance and to reduce the number of incidents caused by unsafe driver behaviour. Three unmarked HGV tractor units, equipped with multiple cameras and piloted by highly trained police drivers, patrol the strategic road network, capturing unsafe driving behaviours. The elevated position of the HGV cabs allows police forces to drive alongside vehicles to film any unsafe driver behaviour taking place. We are continuing to work with police forces to trial new detection technologies, including new mobile technology which can automatically detect motorists who are not wearing a seatbelt or using mobile phones while driving.

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

Road Road Safety Factors by road class and type



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 UK is getting wetter however the role precipitation plays in collisions appears relatively consistent.

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[8], however the long term trend in the percentage of collisions on the SRN where precipitation or a slippery road surface is a factor remains quite consistent. Electronic Stability Control and Traction Control, which were made mandatory in new UK vehicles in 2014 and were present in some cars prior to this help 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[9] 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 occurring, with the most common vehicle factor being the driver being affected by a vehicle blind spot.

Blind spots are most identified as a factor on motorways, which are the roads 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 need more stopping distance. Other drivers often underestimate the size and position of these zones of limited visibility. Our 'Know the zones' campaign aims to educate on blind spots on HGVs and encourages drivers to stay visible, overtake with care and don't tailgate.

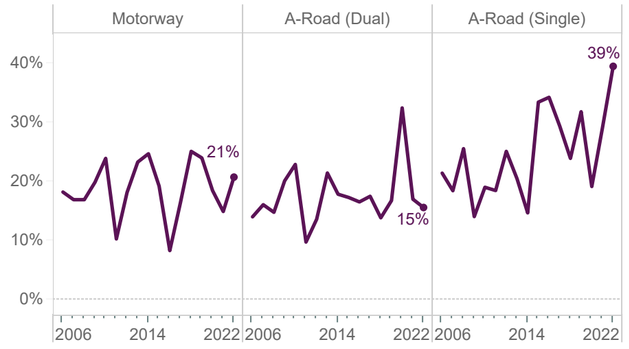
Tyre and brake defects were identified as factors in around 1% of collisions and whilst that is a small number, they are potentially mitigatable through vehicle maintenance. The National Highways T.R.I.P. campaign encourages drivers to inspect their vehicle before long journeys to help prevent vehicle 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.

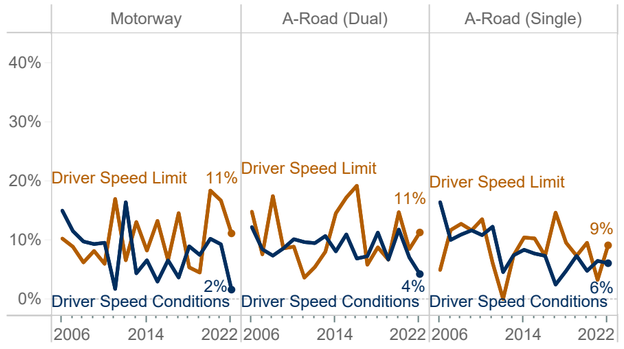
8 https://www.metoffice.gov.uk/research/climate/maps-and-data/uk-temperature-rainfall-and-sunshine-time-series
9 https://www.metoffice.gov.uk/weather/climate-change/climate-change-in-the-uk#effects-of-climate-change-in-the-uk

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

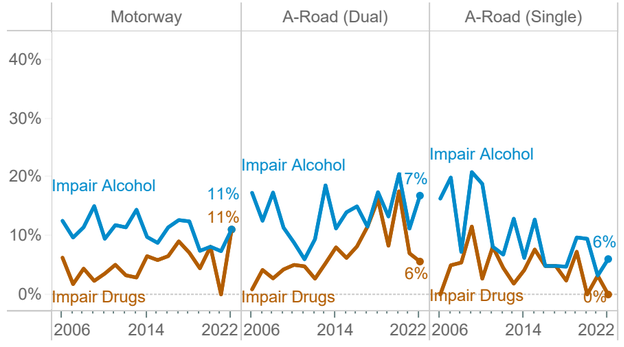
Dangerous and reckless driving by road class and type



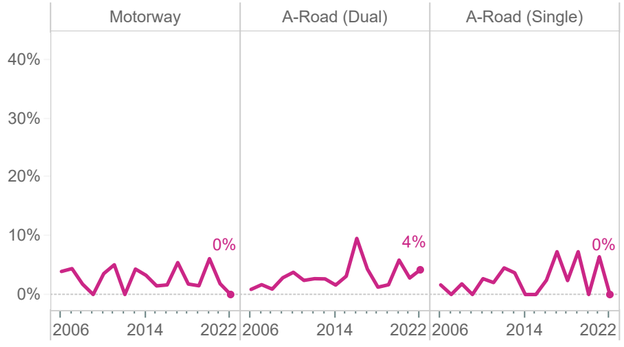
Driver excess speed by road class and type



Driver impairment by road class and type



Driver mobile device distraction by road class and type



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 supports our policing colleagues by providing them with HGVs to drive alongside vehicles to film any unsafe driver behaviour taking place. This national project aims to change driver behaviour and discourage non-compliance.

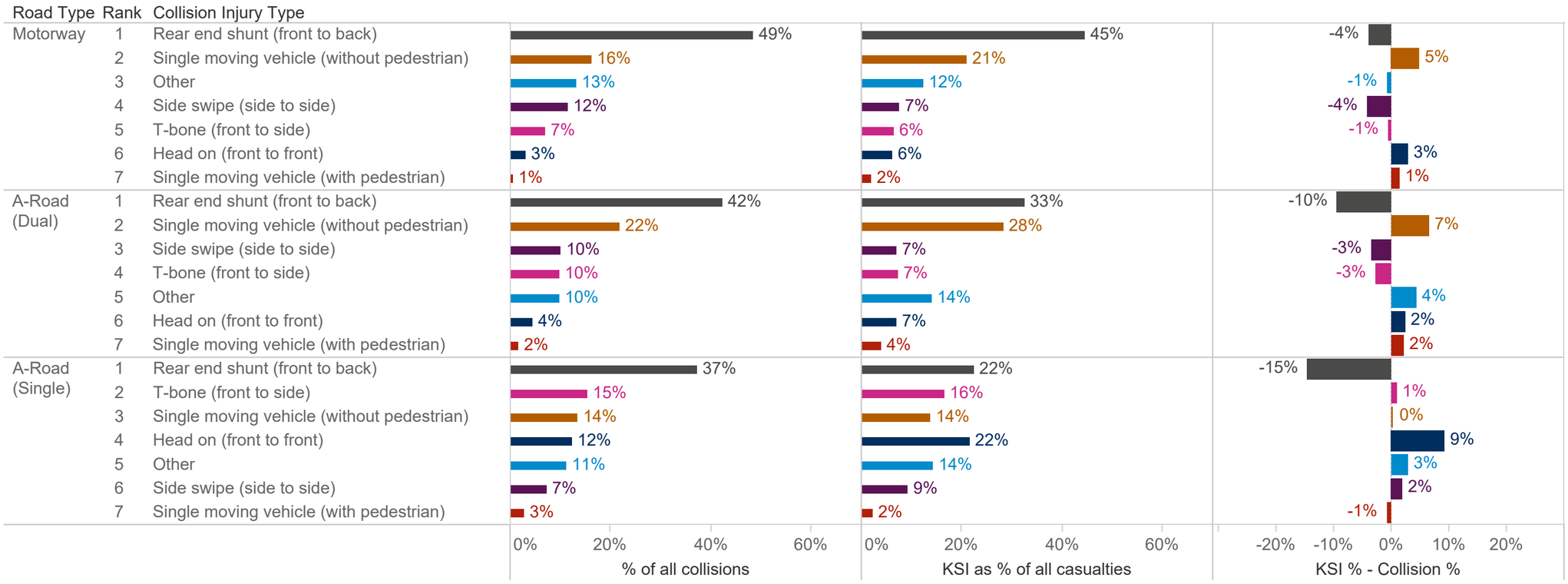
National Highways does not hold data for the fatal five offences however we have mapped road safety factors as best as possible to four of the fatal five offences.

The most common fatal five factor is Dangerous or reckless driving / riding. This was a factor in 22% of fatal collisions on the SRN in 2022 and was most frequently identified as a factor on single carriageway A-roads.

Use of a mobile device is not identified as a factor in fatal collisions very often. However, mobile device usage may be under reported in STATS19 because the STATS19 factors are identified at scene rather than later in a more detailed investigation by police.

Collision Type Analysis

Comparing percentage collisions with percentage KSI in 2022



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 which occurs on the SRN. Single vehicle collisions, whilst less common, have worse outcomes on motorways and dual carriageway A-roads.

Often shunt collisions involve traffic which is temporarily halted either at a junction or on the main carriageway in congested conditions. As a result these collisions normally happen at lower speeds than other types of collision and are more likely to result in minor injuries. 14% 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 44% of collisions and 36% 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 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 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 (18%) and typically involve the vehicle striking a barrier, hitting an object in the carriageway or leaving the carriageway and colliding with an object such as a tree.

Single vehicle collisions are by their nature high impact collisions as they often result from a loss of control of the 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. As a result of the higher impact these collisions occur at, they tend to have worse outcomes for the occupants of that vehicle than other collision types, with single vehicle collisions resulting in fatal or serious injuries for 29% of casualties. Single vehicle collisions make up 18% of all collisions and 23% 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.

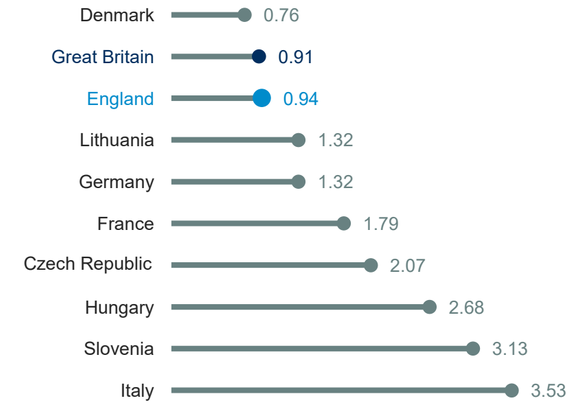
Head on collisions are relatively rare on motorways and dual carriageway A-roads due to the segregation of traffic heading in opposite directions, however they are more common on single carriageway A-roads where traffic is headed in opposite directions without physical separation.

Head on collisions are the fourth most common type of collision on single carriageway A-roads (12% of collisions) resulting in the second most number of deaths and serious injuries (22%) . The forces involved when two vehicles travelling in opposite directions collide head on with each other result in 36% of casualties sustaining fatal or serious injuries, which is the most of any collision type.

Global perspective

5

Motorway deaths by country per bnvkm – available data in 2022

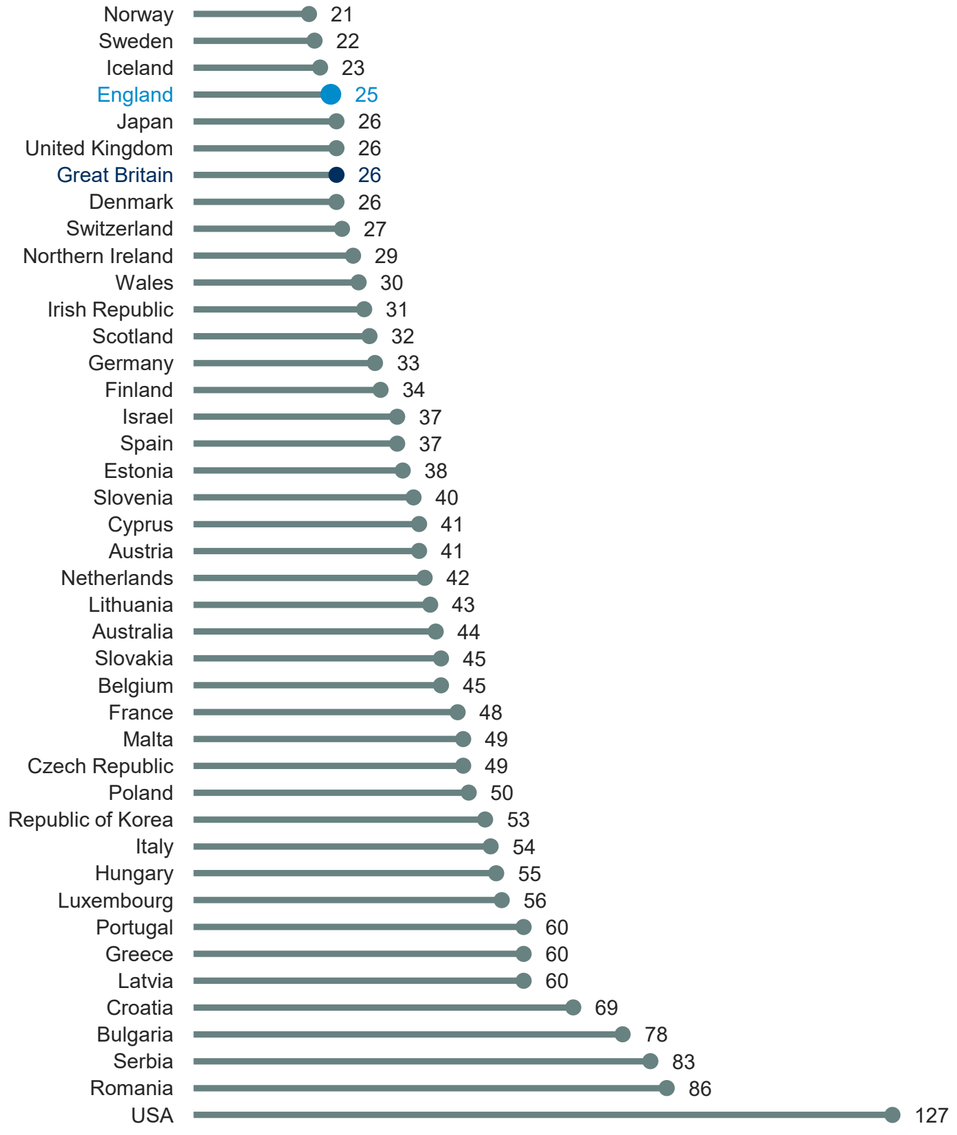


England has some of the safest roads in the world. For countries where 2022 data is available, deaths on English motorways are ranked third out of 10 nations.

Motorways continue to be the safest roads on our network. In 2022, the fatality rate on England's motorways was 0.94 per billion vehicle kilometres. This is amongst the best performing motorway networks in Europe for which data is available. Only Denmark (0.76) and Great Britain as a whole (0.91) recorded lower fatality rates.

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

Rate of road deaths by country per million of population in 2022



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

In 2022, the fatality rate by population on England's road network was 25 deaths per one million. This means England's road network is amongst the best performing road networks globally for countries where this data is available. Only Norway (21), Sweden (22) and Iceland (23) recorded lower fatality rates. We know our roads are some of the safest in the world but there's always more we can do. Our long-term ambition is that no one should be harmed 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 consisting of around 4,500 miles of motorways and major A-roads **managed** by National Highways, a government-owned company.

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