

# 2020 Road safety performance overview

July 2022



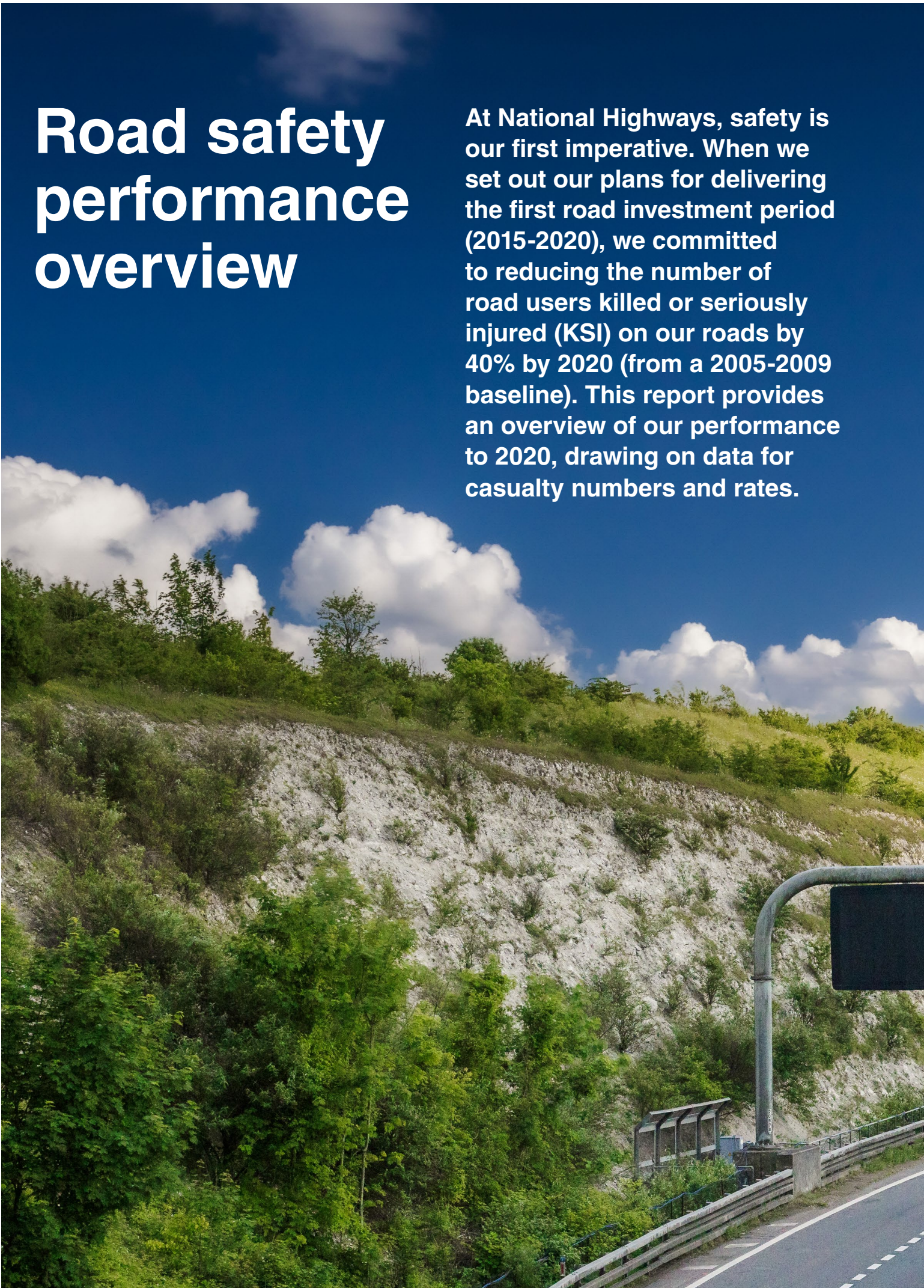


# Road safety performance overview

Casualty trends.....	6
Across the network.....	8
Casualty groups.....	9
A global perspective.....	14
Summary.....	16
Key definitions.....	17

# Road safety performance overview

At National Highways, safety is our first imperative. When we set out our plans for delivering the first road investment period (2015-2020), we committed to reducing the number of road users killed or seriously injured (KSI) on our roads by 40% by 2020 (from a 2005-2009 baseline). This report provides an overview of our performance to 2020, drawing on data for casualty numbers and rates.



The strategic road network (SRN) is a vital national asset, supporting economic growth, regional development, and employment opportunities across England and the rest of the UK. It connects families, communities and businesses, enriching the lives of many citizens. Billions of miles are travelled on the SRN each year. The vast majority of these are safe and reliable journeys. We have high levels of safety on our network but more can be achieved. We are committed to create the safest roads in the world. Our approach reflects the safe system pillars, and we are active in delivering, supporting, enabling or motivating activity in the areas of safe roads, safe people, safe speeds, safe vehicles, post collision response and safety management.

This report, which is mainly based on the reported 2020 STATS19 data, puts our safety performance into context, including how safety on our roads compares with those in other countries.

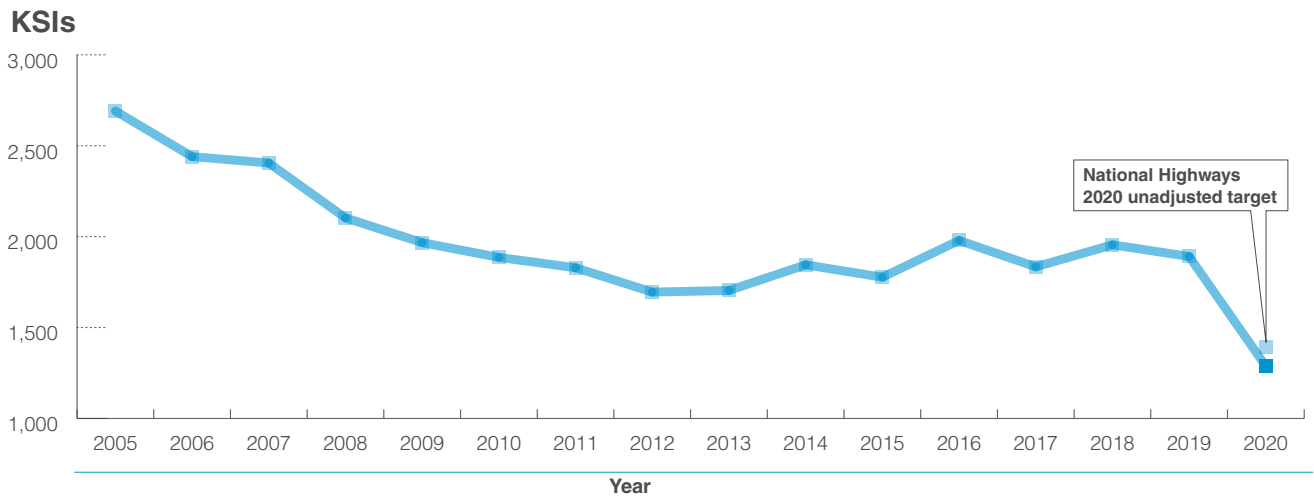
Every death or serious injury on our roads is a tragedy. Improving safety on our roads benefits not just those who are able to complete their journeys free from harm, but also the wider community of family, friends and colleagues affected when death or injury occur. A safer network also improves journey time reliability and there is economic value to reducing the number of collisions.



# Casualty trends

In 2020, the number of KSIs on the SRN fell notably following the fluctuations since 2012. This pattern has also been reflected on the rest of the road network in England.

**Figure 1**  
Killed or seriously injured reported road casualties on the SRN, 2005 to 2020



The numbers reported in figure 1 are unadjusted numbers. See Reporting of road casualty data on the next page for an explanation of how changes to reporting systems have led to adjustment factors in the data.

Changes to the ways in which collisions are recorded by some police forces has increased the number of serious injuries identified, please see “reporting of road casualty data” on the next page.

Although the recording of fatalities is unaffected by these changes, the 2020 value does in part reflect reduced exposure to risk arising from reduced traffic flow during covid-related restrictions. The number of fatalities in 2020 was 138, three fifths lower than the 2005-2009 baseline. However, since 2012 the overall trend in fatalities

has been fairly flat, ranging between 210 and 250 per year, until the drop in 2020 which at least in part is influenced by covid restrictions.

Apart from the difference in reporting for the most recent years and covid influence in 2020, there are wider factors affecting the casualty numbers on the SRN.

**138** fatalities on the SRN in 2020



People are travelling further, there are more vehicles on the road and a wider mix of vehicle types. Road casualty figures can vary from year to year because of things like a single collision/multiple casualty incident or external factors such as the weather.

There are many factors that affect safety on our network, including vehicle safety and improvements to our roads.

We are committed to reducing all categories of casualties on the network. This will require a targeted approach with investments informed by evidence.

**Table 1**  
**Reported road casualties and traffic on the SRN by severity for selected years**

	2005-2009 baseline	2019	2020	2020 percentage change from:	
				2019	2005-2009 baseline
Fatalities	357	210	138	-34.3%	-61.4%
Seriously injured	1,964	1,681	1,150	-31.6%	-41.4%
<b>KSIs</b>	<b>2,321</b>	<b>1,891</b>	<b>1,288</b>	<b>-31.9%</b>	<b>-44.5%</b>
Slightly injured	19,382	10,456	6,585	-37.0%	-66.0%
<b>All casualties</b>	<b>21,703</b>	<b>12,347</b>	<b>7,873</b>	<b>-36.2%</b>	<b>-63.7%</b>
Traffic (hmv <sup>m</sup> *)	834.2	968.7	725.5	-25.1%	-13.0%

\* Hundred million vehicle miles

Figures in all tables have been rounded.

### Reporting of road casualty data

Since 2012, many police forces have changed the way they collect STATS19 data. These changes mean casualty severity is now categorised automatically based on the most severe injury, rather than the judgement of an attending police officer. Police forces using the new systems, called injury-based severity reporting systems, (also known as CRaSH and COPA) report more seriously injured casualties than those which don't. The Department for Transport (DfT) analytical guidance was updated in October 2021 to further strengthen the advice on including injury-based adjusted figures where possible. By 2020, the system was being used by 21 of the 38 police forces which cover the SRN. These represent approximately 55% of the network.

The DfT commissioned the Office for National Statistics (ONS), to estimate adjustment factors for historic KSI data. This enables the production

of consistent numbers over a time period 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 accidents and casualty data: final report*<sup>1</sup> was published in July 2019. It is complemented by the *Annex: Update to severity adjustment methodology which was published in September 2019*<sup>2</sup>.

The DfT is inviting users to adopt the methodology and to provide feedback on it and the way in which the statistics are being used, including any challenges faced. The model is likely to be updated annually and as experienced in 2020, there may be a resulting uplift in the adjusted serious injuries across all years back to 2005. Adjustments are likely to be needed until all forces have adopted the injury-based reporting system. The figures in this report are based on reported figures, not adjusted figures.

<sup>1</sup> <https://www.gov.uk/government/publications/guide-to-severity-adjustments-for-reported-road-casualty-statistics/guide-to-severity-adjustments-for-reported-road-casualties-great-britain>

<sup>2</sup> [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/922708/annex-update-severity-adjustments-methodology.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/922708/annex-update-severity-adjustments-methodology.pdf)

# Across the network

Compared to the amount of traffic they carry, collisions on England's motorways continue to result in proportionately **lower fatal and serious injuries than other types of roads**.

In 2020, motorways carried 64% of the SRN's traffic, but accounted for only 42% of KSIs. For an in depth analysis of safety on smart motorways specifically, see the progress report<sup>1</sup> published in May 2022. In terms of KSIs, single carriageway A-roads on the SRN have approximately 5 times the KSI rate (5.58 KSI casualties per hundred million vehicle miles) of motorways (1.15 KSI casualties per hundred million vehicle miles). Single carriageway A-roads account for just 5.6% of traffic on the SRN but 21% of fatalities.

**Table 2**  
Reported road casualties and rates by road type and severity on the SRN, 2020

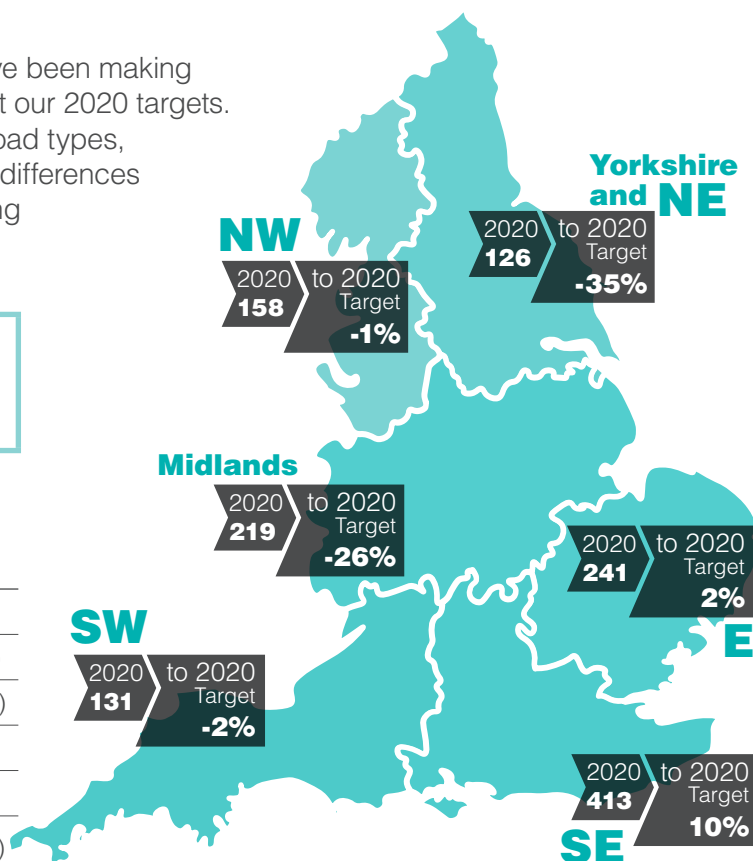
	Number of casualties				Rates (casualties per hmvm)		
	Fatalities	Serious injuries	KSIs	Traffic (hmvm)	Fatalities	Serious injuries	KSIs
<b>Motorways</b>	64	473	537	465.4	0.14	1.02	1.15
<b>All A-roads</b> of which	74	677	751	260.1	0.28	2.60	2.89
Dual carriageway A-roads	45	480	525	219.6	0.20	2.19	2.39
Single carriageway A-roads	29	197	226	40.5	0.72	4.87	5.58
<b>Whole SRN</b>	<b>138</b>	<b>1,150</b>	<b>1,288</b>	<b>725.5</b>	<b>0.19</b>	<b>1.59</b>	<b>1.78</b>

Figures in the table have been rounded up.

Across every National Highways region, we have been making concerted efforts to further reduce KSIs to meet our 2020 targets. Each region is different because of the mix of road types, traffic patterns and demography as well as the differences in the introduction of changes in police recording practices.

**Table 3**  
Killed or seriously injured reported road casualties on the SRN by region

Region	2020	2020 relative to 2005-2009 baseline	2020 relative to 2020 target
East	241	-39%	2% (236)
South East	413	-34%	10% (375)
Midlands	219	-56%	-26% (296)
South West	131	-41%	-2% (134)
North West	158	-40%	-1% (159)
Yorkshire and North East	126	-61%	-35% (193)



<sup>1</sup> <https://nationalhighways.co.uk/media/uivj2zem/smart-motorways-stocktake-second-year-2022.pdf>



# Casualty groups

**KSI rates on the SRN** can also be examined by road user type, using traffic survey data to standardise for distance travelled.

Occupants of HGVs and LGVs have the lowest risk rate; 0.57 and 0.70 KSI casualties per hundred million vehicle miles respectively. However, this does not take into consideration people using other modes injured in collisions with goods vehicles. KSI rates for car occupants are higher at 1.75 KSI casualties per hundred million vehicle miles; the KSI rate for motorcyclists is substantially higher at 77.86 KSI casualties per hundred million vehicle miles.

The SRN motorcycle rate (77.86) is still considerably lower than the reported national







average for motorcyclists (including passengers) on all roads in Great Britain, which is approximately 179.5 KSI casualties per hundred million vehicle miles. The number of cyclists on the SRN is subject to some uncertainty and rates for pedestrians are not available. However, the 23 pedestrian fatalities reported in 2020 do represent a significant proportion of fatalities (17%).

Pedestrian casualties include casualties who were travelling in a vehicle on the network and were outside their vehicle at the time of the collision, for example, on the hard shoulder.



**Table 4**

**Reported road casualties by severity and KSI rates on the SRN, 2020**

	Number of casualties			KSI rate (per hmvm)
	Fatalities	Serious injuries	KSIs <sup>2</sup>	
<b>Vulnerable Users</b>	<b>40</b>	<b>239</b>	<b>279</b>	
 Pedestrians	23	42	65	– <sup>1</sup>
 Pedal cyclists	1	35	36	– <sup>1</sup>
 Motorcyclists	16	162	178	77.86
<b>Other road users</b>	<b>98</b>	<b>906</b>	<b>1,004</b>	
 Car occupants	80	771	851	1.75
 LGV (up to 3.5 tonnes gvw) occupants	7	90	97	0.70
 HGV (over 3.5 tonnes gvw) occupants	11	45	56	0.57

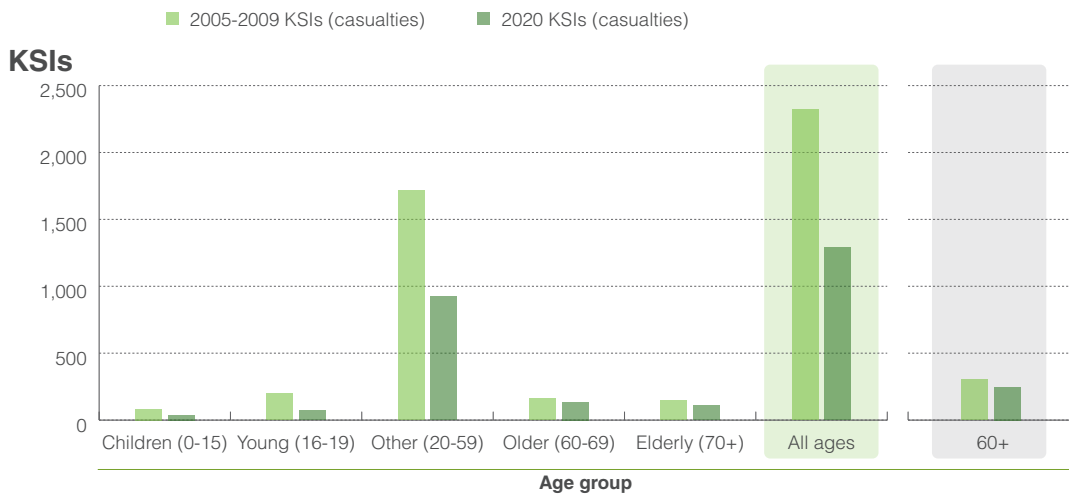
<sup>1</sup> It is not possible to calculate a rate for pedestrians and measurement of the distance travelled by cyclists on the SRN is subject to considerable uncertainty.

<sup>2</sup> Excludes 5 KSIs relating to other or unknown road user types.

Child casualties (aged 15 or under) represent a much lower number on the SRN (compared to the whole of Great Britain) with the vast majority injured as vehicle occupants. On the SRN in 2020, child casualties accounted for 3.0% of all KSIs with 84% being vehicle occupants. This differs to the overall Great Britain picture, with child casualties accounting for 7.5% of all KSIs of which 55% were pedestrians, 25% vehicle occupants and 20% were cyclists.

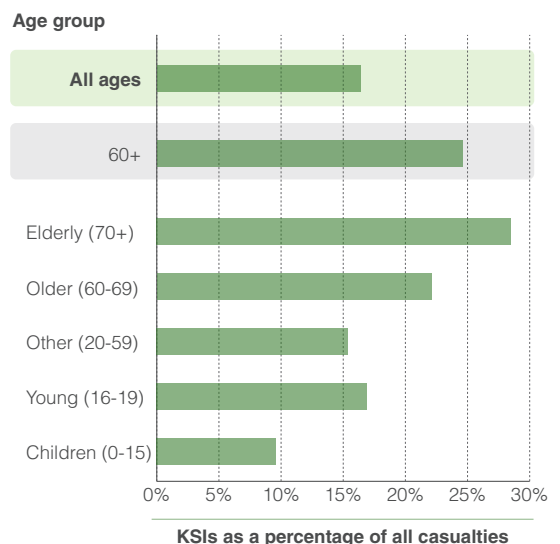
Although KSIs for those aged below 60 have decreased by 48% since the baseline, KSIs for older road users (aged 60 to 69) and elderly road users (aged 70+) have decreased less notably; down 16% for 60-69-year-olds and 23% for those aged 70+. In 2020, 19% of all KSIs on the SRN were aged 60 or older, compared to 13% in 2005-2009 baseline average. This could be consistent with the demographic changes and increasing numbers of older and elderly people in the population as a whole.

**Figure 2**  
**Reported road KSIs by age group on the SRN, baseline (2005 to 2009) and 2020**



Severity of injuries among casualties increases noticeably with age. In 2020, for the SRN 25% of casualties aged 60 or older were classified as KSIs, compared to 16% for all age of casualties. Within the 60 and older population, the risk increases notably beyond the age of 70.

**Figure 3**  
**KSIs as a share of all casualties by age group on SRN, 2020**



### Analysing KSIs by age groups

Analysis of KSIs on the SRN by age groups only allows for a reflection on the numbers rather than a rate. This is because there is no information available about the number of vehicle miles travelled by age of users. The age profile of SRN users is likely to differ from the national picture due to the mode mix, with higher levels of non-motorised travel on non-SRN roads.

**Table 5**

**Share of all collisions where a contributory factor (CF) is reported – selected contributory factors only**

Contributory factor category	Description	Motorways			A-roads		
		2005-2009 baseline (%)	2020 (%)	2020 percentage points change from baseline (%)	2005-2009 baseline (%)	2020 (%)	2020 percentage points change from baseline (%)
Driver/rider error or reaction	Failed to look properly	25.7	28.2	2.5	30.1	31.9	1.8
	Failed to judge other person's path or speed	24.6	24.9	0.3	25.4	24.6	-0.8
	Loss of control	21.3	17.0	-4.3	19.3	15.7	-3.6
	Sudden braking	12.3	8.0	-4.3	12.4	8.7	-3.7
	Poor turn or manoeuvre	11.2	8.0	-3.2	13.3	10.1	-3.2
Injudicious action	Following too close	16.6	11.7	-4.9	12.6	10.5	-2.1
Behaviour or inexperience	Careless, reckless or in a hurry	9.8	13.1	3.3	13.3	16.5	3.2
Impairment or distraction	Fatigue	6.2	5.8	-0.4	4.0	4.2	0.2
	Impaired by alcohol	3.8	6.3	2.5	4.2	5.3	1.1
	Distraction in vehicle	3.0	4.3	1.3	3.1	6.0	2.9
	Illness or disability, mental or physical	1.7	3.8	2.1	1.6	3.5	1.9

NB. Because up to six contributory factors can be reported for an individual collision, the percentages summed across all contributory factors will exceed 100%. Contributory factors are not reported for all collisions. In 2020, they were reported for 76.1% of all reported casualty collisions on the SRN.

Failed to look properly and failed to judge person's path or speed are by far the most commonly reported contributory factors. For the baseline period (2005-2009), each of these contributory factors were reported in around one in four collisions. For 2020, failed to look properly was reported for three in ten collisions with slightly less (one in four) in the reporting of failed to judge other person's path or speed.

Contributory factors within the impairment or distraction category are relatively less frequent, however they are being reported on an increased basis in 2020 compared to the baseline period. The main ones reported are fatigue, impaired by alcohol, distraction in vehicle and illness or disability, mental or physical. The latter was reported at least twice as often in 2020 than in the baseline period.

---

# 75%

**The contributory factors associated with most casualty collisions are those falling within the driver/rider error or reaction category**

---

### Contributory factors

Contributory factors are reported for most but not all collisions where a police officer attended. Up to six contributory factors can be reported per collision drawing from a list of 78 available factors. It is important to note that the contributory factor(s) assigned to a collision represent the initial opinion of the attending officer relating to possible factors leading to the collision and are not intended to be a definitive representation of actual cause.



**Figure 4**  
Distribution of KSIs on the SRN by mode and road type, 2020



	Motorway	A-road dual carriageway	A-road single carriageway	All SRN
 Pedestrians	26	28	11	<b>65</b>
 Pedal cyclists	2	29	5	<b>36</b>
 Motorcyclists	51	86	41	<b>178</b>
 Car occupants	369	329	153	<b>851</b>
 LGVs occupants	54	32	11	<b>97</b>
 HGVs occupants	34	17	5	<b>56</b>
Not known/ other	1	4	0	<b>5</b>

national  
highway

# A global perspective

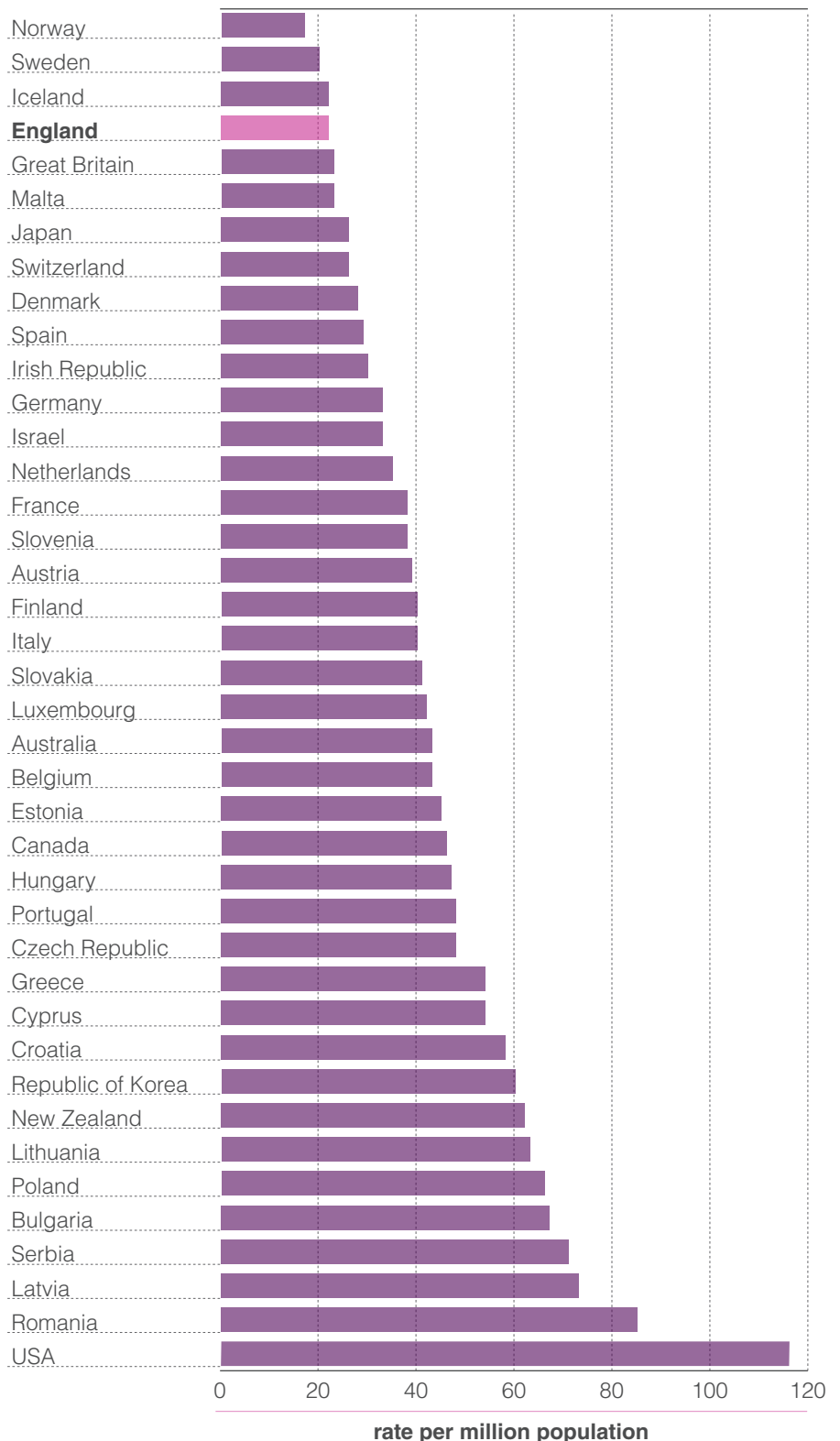
Our national road safety record stands the test of international comparison.

In 2020, the fatality rate by population on England’s road network was 22 per million population. This is amongst the best performing road networks globally for which data is available (see figure 5); with only Norway (17) and Sweden (20) recording lower fatality rates.

We are striving for further improvement. This is reflected in our second road period’s stretched target to reduce the number of people killed or seriously injured on the SRN by 50% by 2025 (from a 2005-2009 baseline average) and our long-term ambition of zero harm.

<sup>1</sup>Source: The Department for Transport RAS52001

**Figure 5**  
**Fatality rates on road networks in selected countries (2020)**  
**(rate per million population)**



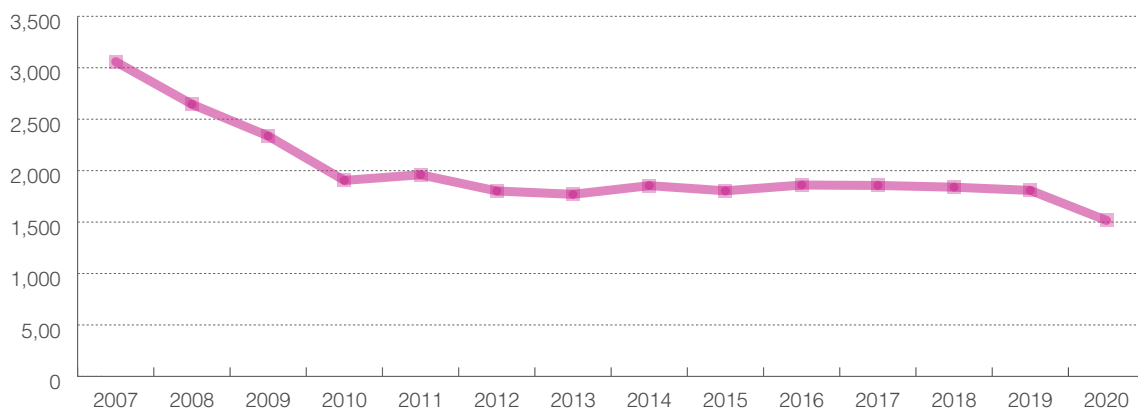


Throughout the EU there have been significant reductions in road deaths since the 2005-2009 baseline period. The reduction across the EU (excluding UK roads) from 2007 to 2020 was approximately 53%. Over the same period, the UK reduction was approximately 50%. However, the corresponding reduction from 2010 to 2020 for EU and UK were 36% and 20% respectively.

This indicates that following a significant reduction initially, the UK's rate of reduction is subsequently lower to that of the EU. However, the EU also has a stalling pattern which occurs later than UK (from 2013) due partially to the notable reductions in countries with previously poor road safety records.

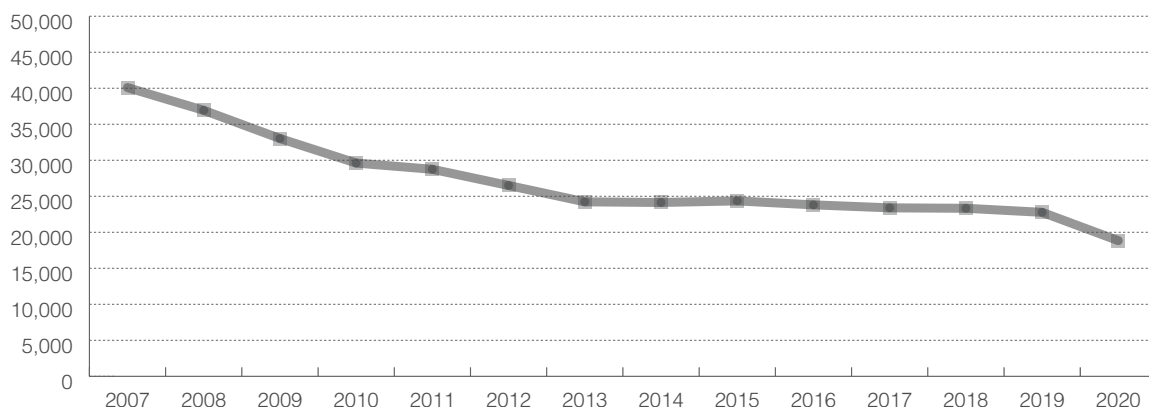
**Figure 6**  
**Road casualty fatalities in the UK compared to the EU**

**UK fatalities**



Source:  
 European Road Safety Observatory – Annual statistical report on road safety in the EU, April 2022; and European Commission Annual Accident Report 2018

**EU fatalities**



# Summary

Safety is our top priority, and we are committed to creating a safe and reliable network for our customers. **We continue to make significant progress in reducing the number of casualties on the SRN and our roads are some of the safest in the world.** We still have much work to do to reach our goal of no one being killed or seriously injured on our roads.

The rate of reduction in casualties across all road types has slowed in recent years (2020 being the exception, due to the covid travel restrictions). This slowing of progress is not just on the SRN but across other non-SRN roads in the country and across Europe. We need to renew our focus on the areas where we can affect the most benefit.

As the report shows there are opportunities for improvement across all road types, user groups and age groups. The greater opportunities for reducing the number of casualties on the SRN, however, will come from A-roads (58% of all KSIs) and also focussing on the key groups such as car users, motorcyclists and older drivers.





## Key definitions

**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.

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

**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, crushings, burns (excluding friction burns), severe cuts, severe general shock requiring medical treatment and injuries causing death 30 or more days after the incident.

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

**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.

**GVW** – Gross vehicle weight.

**Road user safety plans** – Sets out our approach with interventions being delivered through safer roads, safer vehicles and safer people. They are produced nationally and for each of our regions. They summarise safety performance, the evidence and intelligence led actions that have been carried out and planned interventions to realise safety improvements. The plans and associated activities support the government's key priorities for road safety.

**Strategic road network** – In England, the SRN is made up of motorways and trunk roads (the most significant A-roads). They are administered by National Highways, a government-owned company.

---

If you need help accessing this or any other National Highways information, please call **0300 123 5000** and we will help you.

© Crown copyright 2022.

You may re-use this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence. To view this licence:

visit [www.nationalarchives.gov.uk/doc/open-government-licence/](http://www.nationalarchives.gov.uk/doc/open-government-licence/)

write to the **Information Policy Team, The National Archives, Kew, London TW9 4DU**, or email [psi@nationalarchives.gsi.gov.uk](mailto:psi@nationalarchives.gsi.gov.uk).

Mapping (where present): © Crown copyright and database rights 2022 OS 100030649. You are permitted to use this data solely to enable you to respond to, or interact with, the organisation that provided you with the data. You are not permitted to copy, sub-licence, distribute or sell any of this data to third parties in any form.

This document is also available on our website at [www.nationalhighways.co.uk](http://www.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](mailto:info@highwaysengland.co.uk) or call **0300 123 5000**\*. Please quote the National Highways publications code **PR158/22**.

National Highways creative job number GFD22\_0088

\*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.

Printed on paper from well-managed forests and other controlled sources when issued directly by National Highways.

Registered office Bridge House, 1 Walnut Tree Close, Guildford GU1 4LZ

National Highways Limited registered in England and Wales number 09346363