International Transport Forum | irtad Road Safety Data

UNITED KINGDOM

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In 2020, 1 516 persons lost their lives in road crashes in the United Kingdom, a decrease of 16.2% compared to 2019. Overall, road deaths have considerably declined in the past two decades. However, since 2010 the rate of decline has slowed. In July 2019, the government published the Road Safety Statement 2019: A Lifetime of Road Safety. It sets out a two-year action plan containing 74 action measures. The statement emphasises the mentality shift towards a safe system approach. A new Road Safety Strategy Framework (RSSF) will be published in 2022.

Road safety management and strategy

Road fatalities reached a peak in 1941 at just over 9 000 in Great Britain. Since then, fatalities have decreased by more than 80%. In addition to the longer-term trends in improved vehicle safety, road engineering, trauma care and education, various factors may have contributed to significant reductions in fatalities.

The recession and economic downturn led to falling traffic levels, and the continued reduction in average speeds has also played a significant part in reduced deaths. Similarly, large fatality reductions were seen during the recession in the early 1990s. However, traffic levels have risen again in recent years, surpassing pre-recession levels. This may be why casualty levels have plateaued at best, except in 2020.

A statistical weather model for Great Britain has been used to assess the impact of weather on the number of road casualties reported in 2015. The model indicates that the weather had little net effect for most months of the year, so the weather adjusted figures for 2015 differ little from the actual reported figures. In 2016, the warmer and drier weather may have led to 20 more deaths.

United Kingdom: Quick facts

Population: 67.1 million
GDP per capita: USD 40 365
Road network: 424 480 km
- urban roads: 37%
- rural roads: 62%
- motorways: 1%

Registered motor vehicles: 39.8 million
- cars: 82%
- goods vehicles: 12%
- motorcycles: 3%

Speed limits:
- urban roads: 30 mph
- rural roads: 60-70 mph
- motorways: 70 mph

Limits on Blood Alcohol Content:
- England, Wales, Northern Ireland: 0.8 g/l
- Scotland: 0.5 g/l

Road fatalities: 1 516
- pedestrians: 23%
- cyclists: 10%
- car occupants: 43%
- moped riders and motorcyclists: 19%
- other: 5%

Road fatalities per 100 000 population: 2.3
Road fatalities per 10 000 vehicles: 0.4
Cost of road crashes: 1.5% of GDP (2019)

All data 2020 unless otherwise stated.

Responsibility for the organisation of road safety in the United Kingdom lies with the Department for Transport (DfT). It sets the overall road safety strategy for Great Britain. This includes decisions about road safety targets and legislating on crucial safety issues.

Transport Scotland has certain powers concerning road safety in Scotland. For example, it can vary the drink-driving limit. The Welsh Assembly has set a Welsh road safety target. Local highway authorities are responsible for safety on their roads and can use engineering measures and local education campaigns to improve safety. Road safety in Northern Ireland is the responsibility of the Department for Infrastructure in Northern Ireland.

In July 2019, the DfT published the Road Safety Statement, which sets out the Department's action plan for the two following years. It focuses on its priority road user groups: young road users, rural road users, motorcyclists and older vulnerable road users. The document outlines additional actions for safer vehicles, safer speed and safer infrastructure in line with the principles of the safe system approach. The statement sets out 74 different actions the department will work towards, including further research into road safety management.

The statement emphasises the mentality shift towards a safe system approach, which commits the department to the idea that road deaths and casualties are not merely the result of poor driving but a transport system as a whole, from signage and road user education to enforcement, infrastructure design and construction. This approach should raise standards and improve co-ordination so that avoidable road deaths and injuries are reduced to an absolute minimum. Accordingly, national and local agencies, road safety charities, stakeholder groups, emergency services and other actors are integral to achieving safer roads.

A new RSSF will be published in 2022.

Latest road safety measures

An innovation competition with a GBP 350 000 prize is currently underway to provide police forces with the next generation of mobile breathalyser equipment – enabling swifter and timelier read-outs on drink-driving tests.

In January 2018, the secretary of state announced the department would be taking over responsibility for CRASH, a collision reporting and sharing/investigation IT system currently managed by the Home Office. DfT helped to redevelop and enhance the system, and it has now been rolled out to all police forces that use the previous CRASH system.

A report on the evaluation of the three-year project on 20 mph limits was published in 2019. The purpose was to address a gap in the evidence on the effectiveness of 20 mph

speed limit (signed only) schemes. Twelve case study schemes were studied from various area types, road types and scales. The research concluded the following:

- The majority of residents and drivers support 20 mph limits.
- There has been a slight reduction in average (median) speed – less than one mph.
- Vehicles travelling at higher speeds before introducing the 20 mph limit have reduced their speed more than those travelling at lower speeds.
- There is not enough evidence to conclude that there has been a significant change in collisions and casualties following the introduction of 20 mph limits in residential areas.

The first statutory Cycling and Walking Investment Strategy was published in April 2017. In March 2018, the government published a public call for evidence on the topic. The government response to the call for evidence was published in November 2018 and includes a range of safety measures that will bring cycling and walking closer together as part of the government's overall ambition to increase active travel. The response also sets out a vision and a two-year plan of action, with 21 packages of measures addressing the key themes and issues raised in the call for evidence.

The Department for Transport announced a GBP 480 000 partnership between police forces and the RAC Foundation to trial an innovative approach to road collision investigation, carrying out a more in-depth, qualitative analysis of the underlying causes of road safety incidents.

The Safer Roads Fund makes GBP 100 million available to enable local authorities to improve England's 50 most dangerous stretches of A-roads (major roads between regional towns and cities). This improvement project is currently underway and the department is working closely with local authorities and the Road Safety Foundation.

Costs of road crashes

In 2019, the estimated total value of unreported accidents was around GBP 17 billion a year, higher than the value of reported injury accidents. This raises the total estimate for all reported and unreported accidents to around GBP 33 billion a year (1.5% of GDP).

Safety performance indicators

Speed

Exceeding the speed limit is one of the main contributory factors to road crashes. In Great Britain, 14% of all reported road fatalities in 2019 involved excessive speed as a contributory factor. Exceeding the speed limit was reported as a contributory factor in 6% of all crashes in Great Britain in 2019.

A report on the evaluation of the three-year project on 20 mph limits was published in 2018. The purpose was to address a gap in the evidence on the effectiveness of 20 mph speed limit (signed only) schemes.

Drink-driving

Driving under the influence of alcohol is another cause of road crashes in the United Kingdom. In 2020, between 190 and 250 people were killed in road crashes in Great Britain where at least one driver was over the BAC limit, with a central estimate of 220 deaths.

In a survey on drink driving in England and Wales undertaken in 2019-20, around 5% of drivers said they had driven at least once or twice within the previous 12 months when they thought they were over the legal alcohol limit. This proportion is similar to 2018-19 but lower than 2009/10 to 2017/18.

In England, Wales and Northern Ireland, the maximum authorised BAC is 0.8 g/l. In Scotland, the maximum limit was reduced to 0.5 g/l in December 2014.

For statistical purposes, a drink-driving accident is defined as an incident on a public road in which someone is killed or injured and where at least one of the motor vehicle drivers or riders involved meets one of the following criteria:

- They refuse to give a breath test specimen when requested by police (other than when incapable of doing so for medical reasons).
- They fail a roadside breath test by registering over 35 micrograms of alcohol per 100 millilitres of breath in England and Wales or 22 micrograms of alcohol per 100 millilitres of breath in Scotland.
- They die and are subsequently found to have more than the authorised BAC.

Drugs and driving

Drugs and driving are an occurrence in the United Kingdom, but there is no data on the role of drug use by road users in reported road crashes. In 2019-20 in England and Wales, 0.4% of drivers said they had driven under the influence of illegal drugs at least once in the previous year. Although lower than earlier years, this is not significantly different from 2015/16 to 2018/19. Both drink and drug driving are more prevalent among males and younger drivers. More detailed results on self-reported drink and drug

driving are published at https://www.gov.uk/government/statistical-data-sets/reported-drinking-and-driving-ras51.

The United Kingdom introduced new legislation on 2 March 2015 on driving with a specified controlled drug above a specified limit. The previous legislation required the police to demonstrate drug-impaired driving to prosecute. An evaluation of this new drug driving legislation was conducted in 2017, and the conclusions are available at https://www.gov.uk/government/publications/drug-driving-law-evaluation.

Use of mobile phones while driving

A problem for traffic safety in the United Kingdom is distraction, for instance, through the use of mobile phones while driving or crossing a street. An observational survey held in 2017 in Great Britain showed the proportion of drivers using hand-held mobile phones while driving was 1.1% overall: 1% for car drivers, 2.1% for van drivers and 0.6% for truck drivers (https://www.gov.uk/government/statistics/seatbelt-and-mobile-phoneuse-surveys-2017).

In the United Kingdom, driving while using a hand-held device is not allowed, although hands-free devices are tolerated. New penalties were introduced in March 2017. Motorists using a phone while driving now receive 6 points on their licence and a GBP 200 fine – up from 3 points and GBP 100. Motorists caught using their mobile phones twice or accruing 12 points on their licence will face a magistrates' court and risk being disqualified, with fines of up to GPB 1 000. Drivers who have not had their licence for more than two years risk having it revoked, and lorry or bus drivers can be suspended if caught.

Seat belt and helmet use

Seat belt wearing has been compulsory in the United Kingdom since 1983 in front seats and since 1991 in rear seats. Seat belt wearing regulations for children in rear seats came into force in 1989. Depending on age, children must be restrained by a suitable combination of car seats and belts.

For motorcyclists, helmet wearing is the most effective passive safety habit. In the United Kingdom, helmets have been compulsory on motorcycles since 1973 and on mopeds (up to 50 cc, maximum speed 45 km/h) since 1977.

A helmet is not compulsory on bicycles.

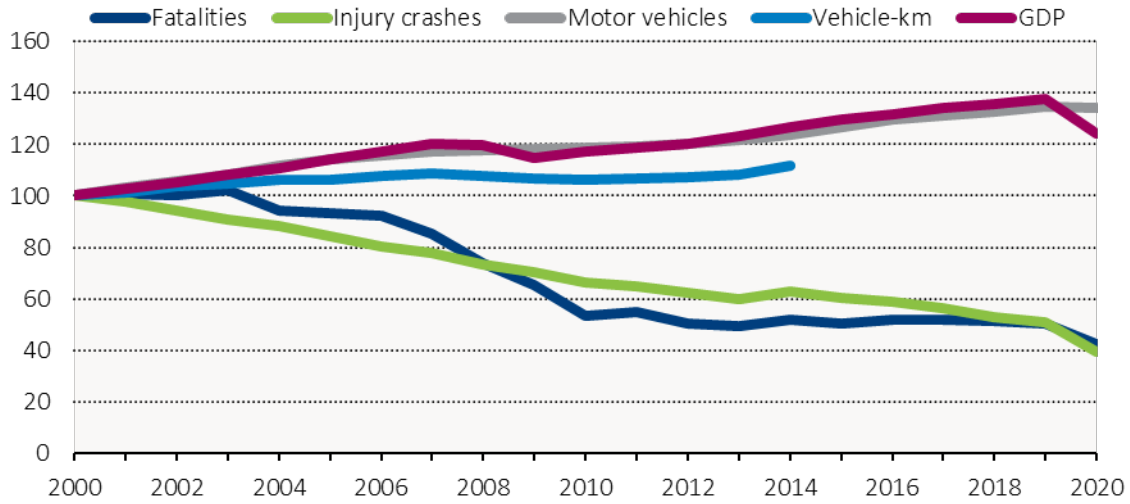
Road safety data for the United Kingdom at a glance

Long-term road safety trends for the United Kingdom

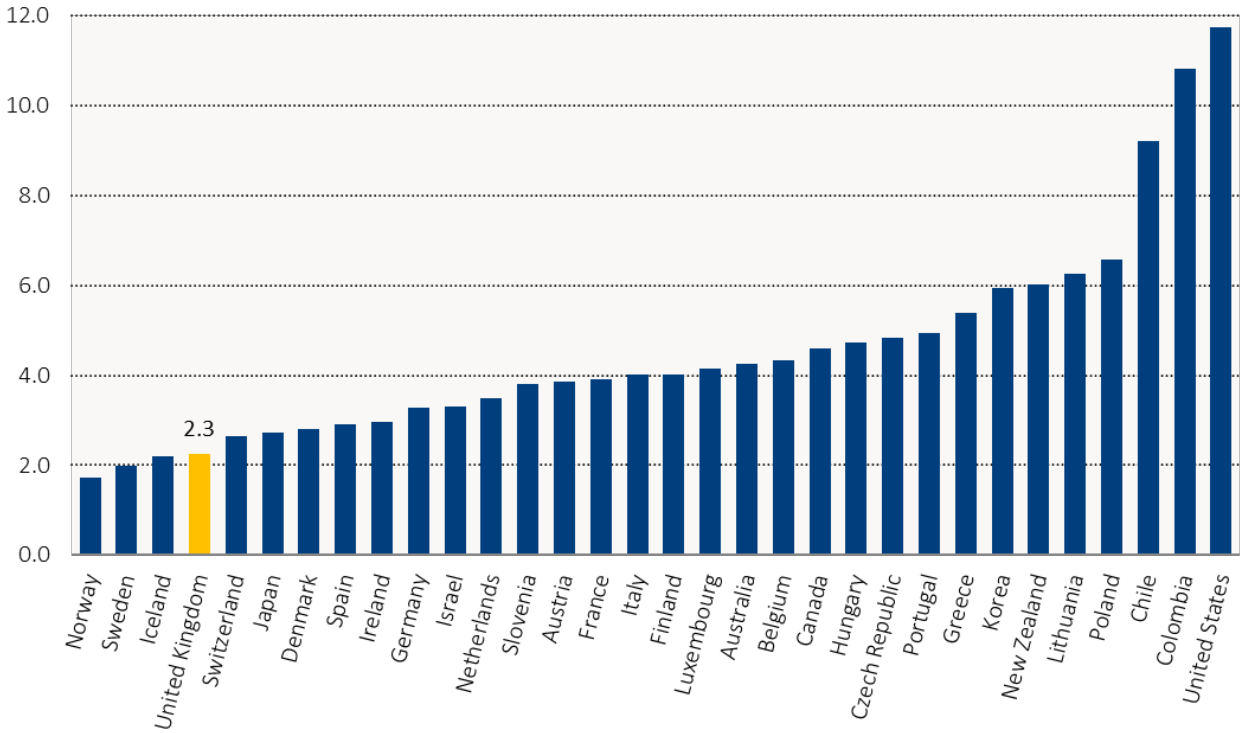
							2020 % change over			
	1990	2000	2010	2018	2019	2020	*2019*	*2010*	*2000*	*1990*
Reported safety data										
Fatalities	5 402	3 580	1 905	1 839	1 808	1 516	-16.2	-20.4	-57.7	-71.9
Injury crashes	265 600	242 117	160 080	128 384	123 212	95 422	-22.6	-40.4	-60.6	-64.1
Deaths per 100 000 population	9.4	6.1	3.0	2.8	2.7	2.3	-16.5	-25.5	-62.8	-76.1
Deaths per 10 000 registered vehicles	2.1	1.2	0.5	0.5	0.5	0.4	-16.0	-29.7	-68.5	-82.2
Deaths per billion vehicle kilometres	..	7.4	3.7	..	..	..	..	..	..	..
Fatalities by road user										
Pedestrians	1 754	889	415	472	487	352	-27.7	-15.2	-60.4	-79.9
Cyclists	267	131	111	100	102	145	42.2	30.6	10.7	-45.7
Motorised two-wheelers	671	612	413	361	339	294	-13.3	-28.8	-52.0	-56.2
Passenger car occupants	2 462	1 784	867	807	768	651	-15.2	-24.9	-63.5	-73.6
Other road users	248	164	99	99	112	74	-33.9	-25.3	-54.9	-70.2
Fatalities by age group										
0-14 years	394	171	42	41	33	37	12.1	-11.9	-78.4	-90.6
15-17 years	335	169	57	44	40	40	0.0	-29.8	-76.3	-88.1
18-20 years	558	342	197	111	97	80	-17.5	-59.4	-76.6	-85.7
21-24 years	616	304	178	158	139	117	-15.8	-34.3	-61.5	-81.0
25-64 years	2 223	1 908	1 046	998	947	877	-7.4	-16.2	-54.0	-60.5
65-74 years	..	272	128	197	202	157	-22.3	22.7	-42.3	..
≥ 75 years	..	407	257	290	350	208	-40.6	-19.1	-48.9	..
Fatalities by road type										
Urban roads	2 462	1 240	603	660	..	..	..	..	..	..
Rural roads	2 706	2 149	1 184	1 069	..	..	..	..	..	..
Motorways	234	191	118	109	106	79	-25.5	-33.1	-58.6	-66.2
Traffic data										
Vehicle kilometres (millions)	..	482 951	511 954	..	..	..	..	..	..	..
Registered vehicles (thousands)	25 191	29 629	35 170	39 365	39 891	39 801	-0.2	13.2	34.3	58.0
Registered vehicles per 1 000 population	440.1	503.0	560.4	592.5	597.2	593.3	-0.6	5.9	17.9	34.8

Evolution of road fatalities, injury crashes, motorisation, traffic and GDP in the United Kingdom, 2000-20

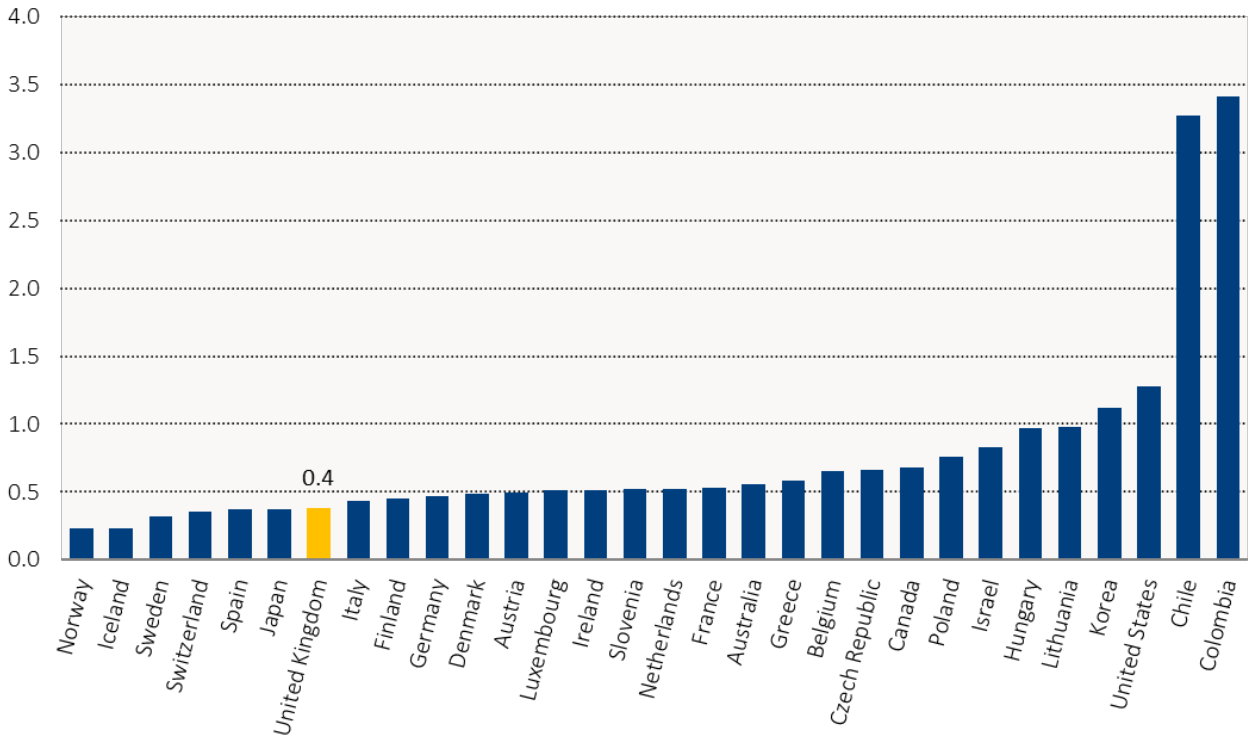
Index 2000 = 100



Road fatalities per 100 000 inhabitants in the United Kingdom in comparison with IRTAD countries, 2020

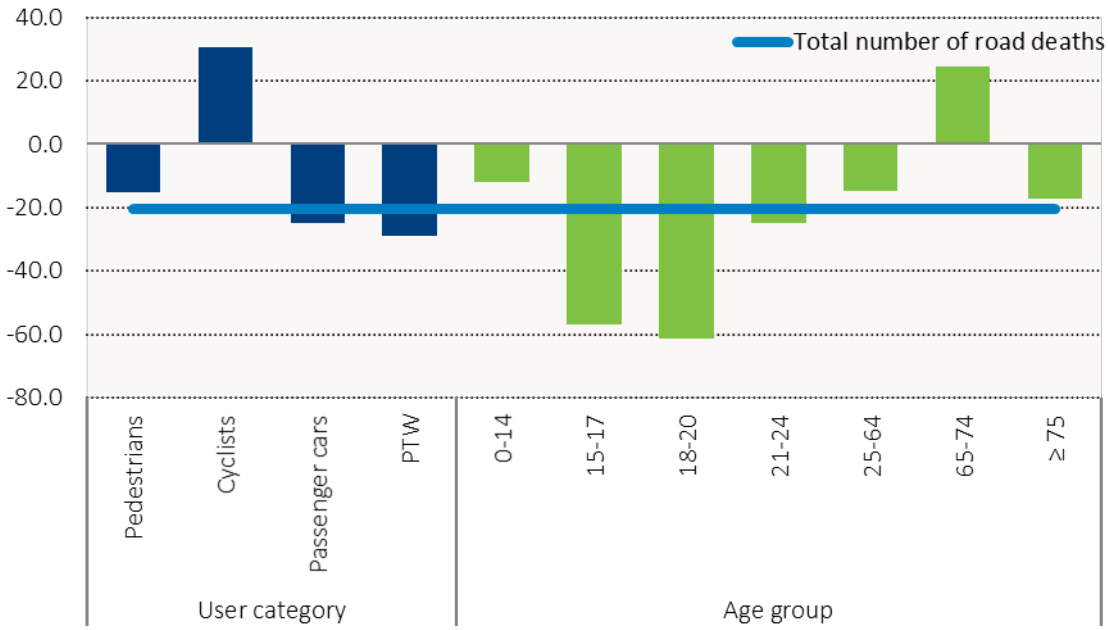


Road fatalities per 10 000 vehicles in the United Kingdom in comparison with IRTAD countries, 2020

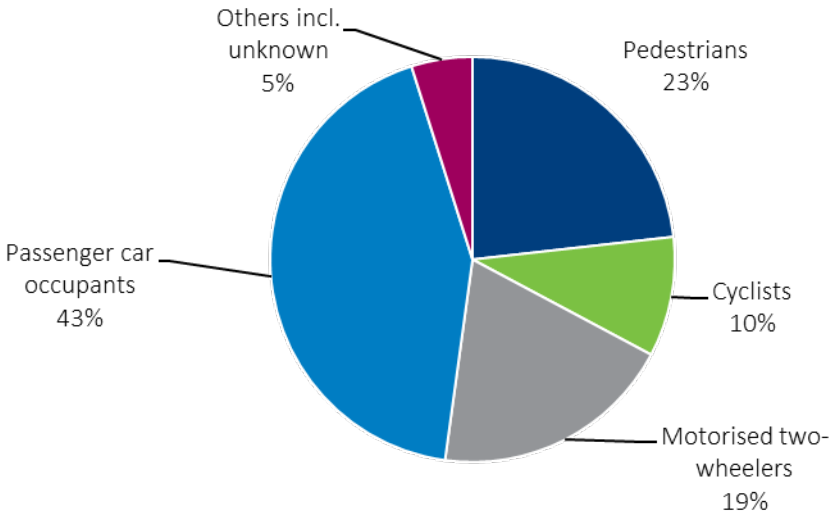


Note: in Belgium, Denmark, Germany and Hungary registered vehicles do not include mopeds.

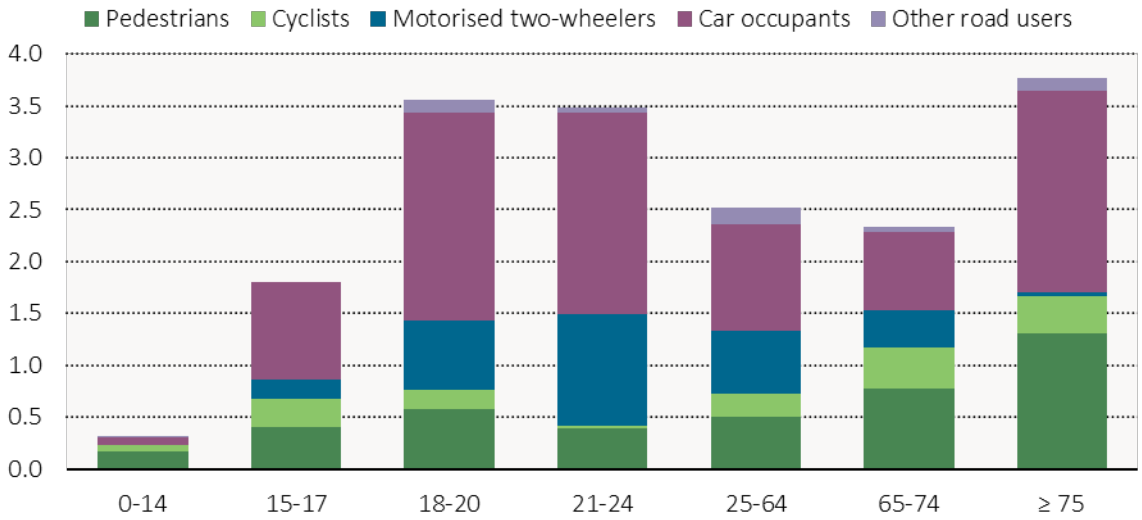
Evolution of road fatalities in the United Kingdom by user category, age group and road type, 2010-20



Road fatalities in the United Kingdom by user category, 2020



Road fatality rate in the United Kingdom by user category and age group, 2020
Rate per 100 000 population in the same age group



Cost of road crashes in the United Kingdom, 2019

	Unit cost (GBP)	Total (GBP)
Fatalities	2.13 million	3.7 billion
Severe injuries	0.24 million	6.1 billion
Slight injuries	0.25 million	2.5 billion
Property damage costs	0.02 million	4.4 billion
Non-fatal crashes not reported to police		16.7 billion
Total		**33.4 billion**
Total as % of GDP		**1.5%**

Seat belt and helmet wearing rates
Percentages

	2017
Front seats	
Driver	99
Passenger	97
Rear seats	
General	93
Children (use of child restraint)	97

Research and resources

Publications

An evaluation of the national speed awareness course was published in March 2018: https://www.gov.uk/government/publications/national-speed-awareness-course-impactevaluation.

The report from phase one of an ongoing review of the Safer Roads Fund was published in June 2018: https://www.gov.uk/government/publications/safer-road-fund-processevaluation.

An evaluation of 20 mph zones was published in November 2018: https://www.gov.uk/government/publications/20-mph-speed-limits-on-roads.

A report on the problem of seat belt non-wearing in the UK was published in 2019: http://www.pacts.org.uk/wp-content/uploads/sites/2/PACTS-Seat-Belts-ReportFinal3.pdf.

A review of the existing evidence on the effectiveness of interventions designed to improve cyclist and pedestrian safety was published in March 2020: https://www.gov.uk/government/publications/cycling-and-walking-safety-rapidevidence-assessment.

A report on the contribution of road policing toward road safety was published in June 2020: https://www.pacts.org.uk/2020/06/roads-policing-and-its-contribution-to-roadsafety-report-from-pacts/.

A report of analysis of data from the U-drive naturalistic driving study to understand mobile phone use while driving was published in October 2020: https://www.gov.uk/government/publications/mobile-phone-use-by-drivers.

Websites

UK Department for Transport – Road Safety policy: https://www.gov.uk/transport/roadsafety-driving-rules-and-penalties.

UK Department for Transport – Road Safety Statistics: https://www.gov.uk/government/collections/road-accidents-and-safety-statistics.

UK Road safety observatory: key facts and summaries of research on road safety topics: http://www.roadsafetyobservatory.com/.

Definition, methodology, data collection

A road fatality is defined as a human casualty where injuries result in death within 30 days of a road accident. Confirmed suicides are excluded.

A serious injury is an injury for which a person is detained in hospital as an in-patient or any of the following injuries whether or not they are detained in hospital: fractures, concussions, internal injuries, being crushed, burns (excluding friction burns), severe cuts, severe general shock requiring medical treatment and injuries causing death 30 or more days after the accident. Casualties are recorded as seriously or slightly injured by police based on information available within a short time of the accident. This generally will not reflect the medical examination results but may be influenced according to whether the casualty is hospitalised.

A slight injury is minor, such as a sprain (including whiplash), bruise or cut not judged to be severe, or a small shock requiring roadside attention. This definition includes injuries not requiring medical treatment.

There are three primary sources of safety information in the United Kingdom:

- the national road accident reporting system, STATS19, which is based upon police reports
- information from coroners in England and Wales and fiscal procurators in Scotland on the levels of alcohol in the blood of people killed in road traffic accidents
- hospital episode statistics (HES).

Most of the data in this report, also included in the IRTAD database, come from STATS19. While the police report all fatal crashes, data from hospitals, surveys, and compensation claims indicate that many non-fatal casualties are unknown to the police. According to the best current estimate – primarily from the 2017 National Travel Survey data – the total number of road casualties in Great Britain each year, including those not reported to the police, is within the range of 590 000 to 760 000, with a central estimate of 670 000.

Linking HES data from hospitals and police data for England gives a better understanding of injury severity and outcomes. Around 40% of the police-reported seriously injured casualties for England alone match the hospital records. As part of this linkage, the DfT has been working with the Maximum Abbreviated Injury Scale (MAIS) to rate the severity of injury crashes.

In 2015/16, some police forces changed their reporting system for severe injuries. The recording of serious injuries is likely more accurate for police forces using the new reporting systems. This significantly impacted the number of serious injuries reported in 2016 and 2017, which cannot be directly compared to previous years.