**UNITED STATES**

The United States registered a decrease in road fatalities of nearly 2% year-on-year in 2017. In total, 37,133 persons lost their lives on American roads in 2017. Early estimates for 2018 indicate that the downward trend will continue with a slight decline of 1% in fatalities compared to the same period in 2017. In February 2018, the Department of Transportation (DOT) announced its Strategic Plan for 2018 - 2022. The plan reiterated the tenet of safety as DOT’s top strategic and organizational goal. The U.S. DOT and its administrative bodies have emphasized the adoption of data-driven systemic safety management approaches.

**Trends**

The United States registered an overall decrease in the number of road deaths in 2017. According to the latest available data, 37,133 persons lost their lives in traffic crashes in the United States in 2017. This represents a 1.8% deduction on 2016. In 2016, 37,806 road deaths were reported, a 6.5% increase on 2015.

Overall, between 2000 and 2017, the number of annual road fatalities fell by 12%. However, the totality of the decline in fatalities was recorded in the period 2000-2010 (-21%), which included two large declines in 2008 (9.3%) and 2009 (9.5%) during the global economic crisis. For the period 2011-2017, annual road fatalities have risen by 14%.

In 2017, **11.4 traffic deaths per 100,000 inhabitants** were recorded, compared to 14.9 in 2000 – a drop of 23%.

Measured as **traffic deaths per billion vehicle-kilometres** (vkm) driven, the fatality risk of the United States showed a downward longer-term trend. In 2017, this metric stood at 7.2, 24% lower than in 2000.

The United States recorded **1.3 road fatalities per 10,000 registered motor vehicles** in 2017 – the latest year for which data are available. This represents a decrease of 33% compared to the year 2000, when the rate of deaths to registered vehicles stood at 1.9.

Overall, on a per capita basis, the United States’ safety performance is less effective than many European countries. However, comparing road fatality rates per capita for the
United States as a whole to individual IRTAD countries may be misleading due to geography and other factors. Number of kilometres or miles travelled is often used to compare safety performance and may better reflect exposure to risk. The National Highway Traffic Safety Administration (NHTSA) conducted a study that compared 2013 safety data from 44 US states with 43 high-income countries with population of one million or more (only states or countries with the population threshold were studied, for comparability and reliability of rates). When these states and countries were grouped by population density, urbanisation and climate, road fatalities per 100 million vehicle miles travelled (VMT) in the United States are similar to the compared countries of Western, Northern and Southern Europe, as well as Australia, New Zealand and Canada (Kahane, 2016).

This notable improvement in road safety and its subsequent decline in the years following 2008 are in part a result of the global economic crisis’s downward pressure on road fatality figures, an effect realised by means of decreased traffic volumes and other factors during these years (ITF/OECD, 2015).

Figure 1. Road safety, vehicle stock, traffic and GDP trends

The graph for **fatalities by road user groups** shows that passenger car occupants continue to be the group most affected by road crashes. In 2017, passenger car occupants accounted for the largest share of road deaths with 36% of the total. The "others" category includes SUV, van, pickup truck and large truck occupants, which accounted for 32% of road deaths. They were followed by pedestrians (16%), motorcyclists (14%) and cyclists (2%). This repartition is consistent with previous years.

Moped riders fared the best year-on-year among all road user groups seeing 22 fewer road fatalities (-12.4%) in 2017. Cyclists also experienced substantial change with 69 fewer road deaths (-8.1%) compared to 2016.
Passenger car occupants are the only group to have seen a decrease in road fatalities (-35.4%) in the period 2000-2017. Moped riders are the most affected group seeing an increase in annual fatalities of 438% over this period (29 in 2000; 156 in 2017). Similarly, motorcyclists saw 75% more fatalities while pedestrians and cyclists saw 26% and 13% more fatalities, respectively.

**Figure 2. Road fatalities by road user group in percentage of total, 2017**

Note: the "others including unknown" category includes SUV, van, pickup truck and large truck occupants.

**Road deaths by age group** developed favourably in 2017 with all age categories decreasing on the year prior, except for people over 75 years old. There was a decrease in the number of road deaths among 0-14 and 21-24 year olds of 7.8% and 8.7%, respectively, on 2016. Other age groups showed smaller decreases of 5% or less.

Looking at the longer-term trend, since 2000, youths have benefitted significantly more from road safety developments than their older compatriots. The strongest reduction in fatalities occurred among people up to 20 years old, who saw annual road deaths nearly halved over this period. This reduction is attributable in part to graduated driver licensing (GDL) programs (Foss, 2014) as well as changing economic and social factors impacting this population. Fatalities among people aged 25-64 remained static dropping 1% over the course of two decades, whereas deaths among 65-74 year olds increased by 17%. The high elderly above 75 years old saw road fatalities drop by 10% over this time.

Despite recent improvements, young people continue to be the age group the most at risk in traffic with 18-20 and 21-24 year olds sporting mortality rates of 17.5 and 18.6, respectively, per 100 000 inhabitants of the same age group.
Figure 3. Road fatality rates by age group, 2000-2017
Deaths per 100 000 population in a given age group

Figure 4. Road fatality rate by age and road user group, 2017
Fatalities per 100 000 population

Note: the "other" category includes occupants of SUVs, trucks, coaches, agricultural vehicles and unknown vehicles.

Analysis of fatalities by road type shows that in 2017 most fatalities occurred on urban roads. In 2017, 44% of deaths occurred on urban roads, 40% on rural roads and 13% on highways/motorways. Historically, though, rural roads were the deadliest on the American road network. However, since 2015, urban roads have claimed more lives every year than other road types.

This development is in large part due to larger increases in urban VMT (13%) than in rural VMT (3%), which reflects larger urban area boundaries as defined by the US Census.
and shifting population trends. Since 2000, fatalities in urban areas increased by 21%. On the contrary, rural roads and motorways claimed 29% and 17% fewer annual road fatalities.

**Figure 5. Road fatalities by road type**

<table>
<thead>
<tr>
<th>Year</th>
<th>Inside urban areas</th>
<th>Rural roads</th>
<th>Motorways</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>13,436</td>
<td>20,730</td>
<td>5,673</td>
</tr>
<tr>
<td>2010</td>
<td>12,518</td>
<td>15,855</td>
<td>4,237</td>
</tr>
<tr>
<td>2017</td>
<td>14,974</td>
<td>14,862</td>
<td>4,460</td>
</tr>
</tbody>
</table>

**Figure 6. Evolution of road deaths by user category, age group and road type, 2010-2017**

**Economic costs of road crashes**

According to a study published in 2015 by the National Highway Traffic Safety Administration (Blincoe et al., 2015), the economic costs of traffic crashes totalled USD 242 billion in 2010, representing 1.6% of the GDP of the United States. This represents the value of lifetime economic costs for 32,999 fatalities, 3.9 million non-fatal injuries and 24 million damaged vehicles. This figure includes both police-reported and
unreported crashes. When quality of life valuations are considered, the total value of societal harm from motor vehicle crashes in 2010 was USD 836 billion, nearly 6% of GDP.

Cost components include productivity losses, property damage, medical costs, rehabilitation costs, congestion costs, legal and court costs, emergency services such as medical, police and fire services, insurance administration costs and costs to employers.

**Table 1. Costs of road crashes, 2010**

<table>
<thead>
<tr>
<th>Type of crash</th>
<th>Economic cost (USD)</th>
<th>Comprehensive cost (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>242.0 billion</td>
<td>835.8 billion</td>
</tr>
<tr>
<td>Alcohol impaired</td>
<td>44.0 billion</td>
<td>201.1 billion</td>
</tr>
<tr>
<td>Speeding</td>
<td>52.0 billion</td>
<td>203.2 billion</td>
</tr>
<tr>
<td>Motorcycle crashes</td>
<td>12.9 billion</td>
<td>65.7 billion</td>
</tr>
<tr>
<td>Helmet non-use</td>
<td>1.2 billion</td>
<td>7.6 billion</td>
</tr>
<tr>
<td>Seat-belt non-use</td>
<td>10.4 billion</td>
<td>68.6 billion</td>
</tr>
<tr>
<td>Pedestrian crashes</td>
<td>11.5 billion</td>
<td>65.0 billion</td>
</tr>
<tr>
<td>Cyclist crashes</td>
<td>4.4 billion</td>
<td>21.7 billion</td>
</tr>
</tbody>
</table>

Source: Blincoe et al. (2015).

**Behaviour**

The behaviour of road users is an important determinant of a country’s road safety performance. Inappropriate and excessive speed in particular remains one of the main factors in road crashes. In 2017, 9,717 people were killed in speed-related crashes, accounting for more than a quarter (26.2%) of all traffic fatalities. Speeding-related deaths declined by 5.6% compared to 2016.

NHTSA is dedicated to eliminating risky behaviours. It works with the Federal Motor Carrier Safety Administration (FMCSA) and the Federal Highway Administration (FHWA) to provide tools, guidance and resources for state and local governments to use in designing and applying a balanced and effective speed management programme.

Speed limits in the United States are set by each state and local jurisdiction. The table below summarises speed limit ranges in the United States.

**Table 2. Passenger car speed limits by road type, 2019**

<table>
<thead>
<tr>
<th>General speed limit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban roads</td>
<td>25-35 mph</td>
</tr>
<tr>
<td>Rural roads</td>
<td>25-55 mph</td>
</tr>
<tr>
<td>Motorways</td>
<td>55-80 mph</td>
</tr>
</tbody>
</table>

Driving under the influence of alcohol is another major factor in road crashes in the United States, as in most IRTAD countries. Fatalities in alcohol-impaired-driving crashes
decreased by 1.1% (10 996 to 10 874 fatalities) from 2016 to 2017. Alcohol impaired-driving fatalities in the past 10 years have declined by 7% from 11 711 in 2008 to 10 874 in 2017.

An alcohol-impaired-driving fatality is defined as a fatality in a crash involving a driver or motorcycle rider (operator) with a blood alcohol concentration (BAC) of 0.8 g/l or greater. The 21 to 24-year-old age group had the highest percentage (27%) of drivers with BACs of 0.8 g/l or higher in fatal crashes compared to other age groups in 2017.

In forty-nine states, the District of Columbia (D.C.) and Puerto Rico it is a criminal offense to drive with a 0.8 g/l or higher blood alcohol content (BAC). At the end of 2018, Utah’s law lowering the illegal BAC to 0.5 g/l became effective. All 50 states have enacted zero tolerance laws that make it illegal for drivers under the age of 21 to have any detectable alcohol in their bodies.

There is no federal law regarding driving under the influence of drugs. Drug laws are generally written to forbid driving with certain drugs in the system. However, not all states have drug laws. Given the differences in state collection and reporting of drug data, and the large amounts of missing data, NHTSA’s data on drugs and crashes should be considered with care. Of those drivers involved in fatal crashes in 2016 (52 399 drivers), 40% were tested for drugs and of those, 42% were reported as having drugs in their system at the time of the fatal crash. In January 2018, the DOT launched a new initiative to combat drug-impaired driving. NHTSA is making the drug-impaired-driving problem a top priority.

Distraction occurs when drivers divert their attention from the driving task to focus on some other activity. Often discussions regarding distracted driving centre around cell phone use and texting, but distracted driving also includes other activities such as eating, talking to other passengers or adjusting the radio or climate controls.

In 2017, 3 166 people were killed in motor vehicle crashes involving distracted drivers, 599 of which were non-occupants (pedestrians, bicyclists, and others). NHTSA notes that distraction may be significantly underreported as a contributing crash factor since verifying distraction is challenging for on-scene law enforcement officers completing the police crash report. 19 states, D.C., Puerto Rico, Guam and the U.S. Virgin Islands prohibit all drivers from using hand-held cell phones while driving. All are primary enforcement laws—an officer may cite a driver for using a hand-held cell phone without any other traffic offense taking place.

No state bans all cell phone use for all drivers, but 38 states and D.C. ban all cell phone use by novice drivers, and 20 states and D.C. prohibit use for school bus drivers. Currently, 48 states, D.C., Puerto Rico, Guam, and the U.S. Virgin Islands ban text messaging for all drivers. All but 3 have primary enforcement. Of the 3 states without an all driver texting ban, 1 prohibits text messaging by novice drivers.

Fatalities involving a drowsy driver were 2.1% of total fatalities in 2017 i.e. 795 road deaths. This proportion has remained relatively consistent over time.
For NHTSA, drowsy driving crashes are those in which the driver was reported, on official crash documents, as drowsy, sleepy, asleep or fatigued. NHTSA recognises the difficulty in collecting data regarding fatigue in crashes and offers these figures as the only known crash data regarding fatigue.

**Seat belt laws** are divided into two categories: primary and secondary. Primary seat belt laws allow law enforcement officers to ticket a driver or passenger for not wearing a seat belt without any other traffic offense taking place. Secondary seat belt laws state that law enforcement officers may issue a ticket for not wearing a seat belt only when there is another citable traffic infraction. As of July 2018, the status of state seat belt laws was as follows:

- 34 states, D.C., American Samoa, Guam, the Northern Mariana Islands, Puerto Rico and the Virgin Islands have primary seat belt laws for front seat occupants;

- 15 states have secondary laws for adult front seat occupants. In many of these states, the law is primary for younger drivers and/or passengers;

- New Hampshire has enacted neither a primary nor a secondary seat belt law for adults, although the state does have a primary child passenger safety law that covers all drivers and passengers under 18;

- Rear seats: 28 states, D.C., Guam and the Northern Mariana Islands have laws requiring belt use for all rear seat passengers. In 18 of these states, D.C. and the two territories, the law is primary;

- 22 states do not have laws enforcing rear seat belt use.

Child passenger restraint laws vary based on age, weight and height. All 50 states and D.C. require child safety seats for infants and children fitting specific criteria, and all but two states require booster seats or other appropriate devices for children who have outgrown a child safety seat but are still too small to use an adult seat belt safely.

In 2018, seat belt use was 89.6%, slightly below the level in 2017 (89.7%). Seat belt use has shown an increasing trend since 2000 accompanied by a steady decline in the percentage of unrestrained passenger vehicle occupants killed during the daytime. Seat belt use continued to be higher in the states with primary laws where vehicle occupants can be pulled over solely for not using seat belts (Li et al., 2018).

Booster seat use among 4-7 year-old children was 44.5% in 2015.
For motorcyclists, **wearing a helmet** is the most effective passive safety habit. In the United States, currently 19 states require helmets for all motorcyclists. Most other states require helmets for certain riders, and a few have no helmet law.

In 2018, the average wearing rate of a DOT-compliant motorcycle helmet meeting DOT safety standard FMVSS218 was 71%. Use of non-compliant helmets was 9% (an increase when compared to 2017) and 20% had no helmet. Among states with universal helmet laws, 83% were wearing DOT-compliant helmets with an additional 13.7% wearing non-DOT-compliant helmets. In states without universal helmet laws, 56.9% were wearing DOT-compliant helmets and an additional 3.5% were wearing non-compliant helmets.

As of June 2018, 19 States and D.C. required all motorcyclists to wear helmets. Twenty-eight States required only a subset of riders or motorcycle passengers to use helmets (such as those under age 17, 18, or 21). Three States, Illinois, Iowa and New Hampshire, had no motorcycle helmet requirement.

Overall helmet usage rates in the United States are much lower than in most other OECD countries.

In the US, there is no national compulsory helmet law for cyclists, however, some local jurisdictions may have laws requiring children to wear helmets while cycling.

### Road safety management and strategies

There are several **factors of influence on the US’s road safety performance** as captured by the above indicators. In the first decade of the 21st century, the United States averaged more than 40,000 deaths and more than 2.5 million injuries on the roads each year. Road crashes generally are the leading cause of death for Americans aged 3 to 34. In 2008, for the first time, the number of fatalities fell below 40,000. Safety programmes such as those that have resulted in increased belt use and reduced impaired driving have successfully worked to substantially lower the number of traffic fatalities over the years. Vehicle improvements including technologies such as air bags and electronic stability control have also contributed greatly to reduce traffic deaths. However, with the large increase in fatalities in 2015-16, the decade-long downward trend of almost 25% has been reduced by almost one-third.
The United States’ federal approach divides the powers of government between the national (federal) government and state and local levels. As such, each level of government has sovereignty in some areas and shares power in others. At the national level, Congress passes legislation and assigns funding to provide the structure for the Department of Transportation (DOT) to carry out its safety mission. However, most traffic safety laws and policies are enacted and applied at the state level. For example, each of the 50 states, D.C. and Puerto Rico have the authority to set their own speed limits, distracted driving rules and seat belt use laws.

Congress can influence states by providing incentive grants if they enact certain laws that have been proven effective or penalties if they do not. It can also use performance results as eligibility criteria for grants in some cases. The DOT implements grant programmes and provides guidance to states on developing effective strategies to address their particular traffic safety challenges. Within DOT, the National Highway Traffic Safety Administration (NHTSA) has the lead role in reducing traffic crashes and fatalities.

In 2010, DOT designated reducing roadway fatalities as one of its high-priority performance goals. Three agencies, NHTSA, the Federal Highway Administration (FHWA) and the Federal Motor Carrier Safety Administration (FMCSA), work together to address multiple dimensions of roadway safety.

The DOT currently has performance targets to 2020 for the overall fatality rate expressed in fatalities per 100 million VMT. In 2017, the US recorded a rate of 1.16 fatalities per 100 million VMT. The DOT’s preliminary estimates for 2018 suggest a rate of 1.07. For 2020, DOT’s overall motor vehicle crash fatality rate target is 1.01 fatalities per 100 million VMT.

NHTSA’s strategic plan runs from 2016-2020 and centres its mission on the strategic goals of Safety, Proactive Vehicle Safety, Automated Vehicles, Human Choices and Organizational Excellence.

In February 2018, US DOT announced its Strategic Plan for fiscal years 2018 - 2022 (the U.S. government fiscal year runs from 1 October to 30 September). The plan reiterated the tenet of safety as DOT’s top strategic and organizational goal. DOT plans to mitigate risks and encourage infrastructure and behaviour change by using a data-driven systemic safety approach to identify risks, enhance standards and programs and evaluate effectiveness.

To align its mission with US DOT, FHWA announced its own plan in July 2018. Echoing the message of its parent body, FHWA FY 2019-2022 Strategic Plan’s first strategic objective commits the organization to save lives by expanding the use of data-driven, systemic safety management approaches and by increasing the adoption of proven safety solutions by all road owners.
Several measures to improve road safety management have recently been put into place.

### Road safety management

- In the U.S., a data-driven approach is promoted to save lives on all public roads, supporting the development of State Strategic Highway Safety Plans and a performance-based approach to safety for the expenditure of Highway Safety Improvement Program funds and all other Federal and State highway funds. Highway agencies are using cutting-edge methods and tools to analyse crash and roadway data to determine the expected safety performance of roadway projects more reliably. This type of analysis enables agencies to predict the safety implications of their decisions with confidence. Safety professionals can now quantify the safety impacts when making investment decisions, just as they do with environmental, traffic and other traditional impacts. The analyses result in more scientifically sound, data-driven approaches to committing resources. Through the Every Day Counts (EDC) program, the Federal Highway Administration identifies and promotes the use of underutilised innovations to enhance roadway safety. Currently, the agency is focused on innovations to address pedestrian and roadway departure safety.

### Speed management

- In the United States, crashes are defined as speeding-related if any driver in the crash was charged with a speeding-related offense or if a police officer indicated that racing, driving too fast for conditions, or exceeding the posted speed limit was a contributing factor in the crash. The Federal Highway Administration (FHWA) has developed many...
resources to help State and local agencies in the U.S. address speeding fatalities, including:

- USLIMITS2, which is a web-based tool designed to help practitioners set reasonable, safe and consistent speed limits for specific road segments;

- the Traffic Calming ePrimer and the Speed Management ePrimer for Rural Transition Zones and Town Centers are informational guides developed in collaboration with the Institute of Transportation Engineers (ITE). Both cover how traffic calming and speed management can increase the quality of life in urban, suburban and rural areas by reducing automobile speeds and traffic volumes on neighbourhood streets and town centers;

- development of Jurisdiction-wide Speed Management Action Plan, which helps States/ Locals to develop and implement speed management strategies and countermeasures to improve safety. The Office of Safety is also working directly with several agencies to develop action plans.

Road users

- NHTSA and the International Association of Chiefs of Police (IACP) announced a new USD 2.3 million grant program on 15 July 2019 to help combat drug-impaired driving on America’s roads. The grants will provide funding for state and local agencies to offer Advanced Roadside Impaired Driving Enforcement and Drug Recognition Expert training to law enforcement, judges and prosecutors. The IACP will manage the grant program through a cooperative agreement with NHTSA.

Infrastructure

- BUILD Discretionary Grants: USD 900 million in discretionary grant funding giving special consideration to projects that emphasize improved access to reliable, safe and affordable transportation for communities in rural areas. This includes projects that improve infrastructure condition, address public health and safety, promote regional connectivity, facilitate economic growth or competitiveness, deploy broadband as part of an eligible transportation project, or promote energy independence.

Post-crash response

- NHTSA hosts the National 911 Program Office. In 2019, the NHTSA and the U.S. Department of Commerce collaborated on a grant program to support 911 systems, to enable migration to an Internet Protocol-based emergency network known as Next Generation 911 (NG911). Awards are expected to be completed in late 2019. Because most 911 systems were originally built over 50 years ago using analog technologies, public safety answering points (PSAPs) across the country need to be upgraded to a digital and IP-based 911 system. While the technology to implement these enhanced 911 systems is available now, the transition to NG911 will involve much more than just new computer hardware and software. Implementing NG911 in states and
counties nationwide will require the coordination of a variety of emergency communication, public safety, legislative and governing entities.

Definition, methodology, data collection

- **Road fatality:** a fatality that occurs within 30 days of a crash involving a motor vehicle travelling on a traffic way customarily open to the public.

- **Serious injuries:** incapacitating injuries, defined as severe lacerations, broken or distorted extremities, crush injuries, internal skull/chest/abdominal injuries, significant burns, unconsciousness and paralysis.

For general crash-related injury figures, the National Highway Traffic Safety Administration (NHTSA) does not differentiate between seriously and slightly-injured people. A crash is considered an injury crash if there were no fatalities, but someone involved in the crash – occupant or non-occupant – was reported as injured.

State Police collect data on motor vehicle traffic crashes on specific roadways in each of the 50 states, D.C. and Puerto Rico. Each state also has local police jurisdictions within counties, cities and towns that collect data on motor vehicle traffic crashes on the roadways not covered by the State Police.

The Fatality Analysis Reporting System (FARS) is a nationwide census providing NHTSA, Congress and the American public annual data regarding fatal injuries suffered in motor vehicle traffic crashes. Eight data sources, starting with police crash reports, are used.

The Crash Report Sampling System is a nationally representative sample of all severities of crashes, conducted annually to provide data on property damage and injury crashes involving all types of vehicles. The only source of data is police crash reports.

The Crash Investigation Sampling System is a nationally representative sample of serious passenger vehicle crashes involving an in-depth, on-scene investigation by trained crash technicians.

Resources

Recent research


Young drivers are at greater risk for alcohol-related crash deaths than any other age group, and there has been only limited progress. One innovative possibility that has not yet been tried for most young drivers is the implementation of a voluntary alcohol ignition interlock program as a preventative approach. This study examined its feasibility through discussions conducted in 2010 with ignition interlock manufacturers and service providers, insurance companies, community groups, parents, teens and young adults. Finally, ignition interlock recorder data on users 16 to 26 years old were examined, and a web survey with parents of voluntary users and voluntary users themselves was analysed.


https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812433


https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/812445-interlock-data-utilization.pdf. This report summarises findings on ignition interlock data that is used for DWI offender monitoring and offender-related programs such as screening, assessments and treatment for alcohol abuse problems. It describes the uses of interlock data, procedures for using interlock data, and challenges and issues related to using interlock data.

**Websites**


U.S. Department of Transportation: https://www.transportation.gov/

Federal Highway Administration: https://www.fhwa.dot.gov/

Federal Motor Carrier Safety Administration: https://www.fmcsa.dot.gov/


**References**

https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812013

Foss, R., S. Masten and C. Martell (2014), *Examining the Safety Implications of Later Licensure: Crash Rates of Older vs. Younger Novice Drivers Before and After Graduated*


## Road safety and traffic data

### Reported safety data

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</thead>
<tbody>
<tr>
<td>Fatalities</td>
<td>44 599</td>
<td>41 945</td>
<td>32 999</td>
<td>37 806</td>
<td>37 133</td>
<td>-1.8%</td>
<td>12.5%</td>
<td>-11.5%</td>
<td>-16.7%</td>
<td></td>
</tr>
<tr>
<td>Injury crashes</td>
<td>2 161 757</td>
<td>2 107 431</td>
<td>1 572 400</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td></td>
</tr>
<tr>
<td>Deaths per 100,000 population</td>
<td>17.9</td>
<td>14.9</td>
<td>10.7</td>
<td>11.7</td>
<td>11.4</td>
<td>-2.5%</td>
<td>6.9%</td>
<td>-23.3%</td>
<td>-36.2%</td>
<td></td>
</tr>
<tr>
<td>Deaths per 10,000 registered vehicles</td>
<td>2.4</td>
<td>1.9</td>
<td>1.3</td>
<td>1.3</td>
<td>1.3</td>
<td>-1.0%</td>
<td>1.4%</td>
<td>-32.7%</td>
<td>-46.3%</td>
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</tr>
<tr>
<td>Deaths per billion vehicle kilometres</td>
<td>12.9</td>
<td>9.5</td>
<td>6.9</td>
<td>7.4</td>
<td>7.2</td>
<td>-2.7%</td>
<td>4.2%</td>
<td>-24.1%</td>
<td>-44.3%</td>
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</table>

### Fatalities by road user

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<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedestrians</td>
<td>6 482</td>
<td>4 763</td>
<td>4 302</td>
<td>6 080</td>
<td>5 977</td>
<td>-1.7%</td>
<td>38.9%</td>
<td>25.5%</td>
<td>-7.8%</td>
<td></td>
</tr>
<tr>
<td>Cyclists</td>
<td>859</td>
<td>693</td>
<td>623</td>
<td>852</td>
<td>783</td>
<td>-8.1%</td>
<td>25.7%</td>
<td>13.0%</td>
<td>-8.8%</td>
<td></td>
</tr>
<tr>
<td>Moped riders</td>
<td>49</td>
<td>29</td>
<td>113</td>
<td>178</td>
<td>156</td>
<td>-12.4%</td>
<td>38.1%</td>
<td>437.9%</td>
<td>218.4%</td>
<td></td>
</tr>
<tr>
<td>Motorcyclists</td>
<td>3 195</td>
<td>2 868</td>
<td>4 405</td>
<td>5 159</td>
<td>5 016</td>
<td>-2.8%</td>
<td>13.9%</td>
<td>74.9%</td>
<td>57.0%</td>
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</tr>
<tr>
<td>Passenger car occupants</td>
<td>24 092</td>
<td>20 699</td>
<td>12 491</td>
<td>13 508</td>
<td>13 363</td>
<td>-1.1%</td>
<td>7.0%</td>
<td>-35.4%</td>
<td>-44.5%</td>
<td></td>
</tr>
<tr>
<td>Other road users</td>
<td>9 922</td>
<td>12 893</td>
<td>11 065</td>
<td>12 029</td>
<td>11 838</td>
<td>-1.6%</td>
<td>7.0%</td>
<td>-8.2%</td>
<td>19.3%</td>
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</tr>
</tbody>
</table>

### Fatalities by age group

<table>
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</thead>
<tbody>
<tr>
<td>0-14 years</td>
<td>2 878</td>
<td>2 363</td>
<td>1 211</td>
<td>1 244</td>
<td>1 147</td>
<td>-7.8%</td>
<td>-5.3%</td>
<td>-51.5%</td>
<td>-60.1%</td>
<td></td>
</tr>
<tr>
<td>15-17 years</td>
<td>2 744</td>
<td>2 467</td>
<td>1 216</td>
<td>1 094</td>
<td>1 056</td>
<td>-3.5%</td>
<td>-13.2%</td>
<td>-57.2%</td>
<td>-61.5%</td>
<td></td>
</tr>
<tr>
<td>18-20 years</td>
<td>4 564</td>
<td>3 967</td>
<td>2 449</td>
<td>2 330</td>
<td>2 230</td>
<td>-4.3%</td>
<td>-8.9%</td>
<td>-43.8%</td>
<td>-51.1%</td>
<td></td>
</tr>
<tr>
<td>21-24 years</td>
<td>5 049</td>
<td>4 061</td>
<td>3 340</td>
<td>3 629</td>
<td>3 312</td>
<td>-8.7%</td>
<td>-0.8%</td>
<td>-18.4%</td>
<td>-34.4%</td>
<td></td>
</tr>
<tr>
<td>25-64 years</td>
<td>22 812</td>
<td>22 267</td>
<td>19 213</td>
<td>22 544</td>
<td>22 465</td>
<td>-0.4%</td>
<td>16.9%</td>
<td>0.9%</td>
<td>-1.5%</td>
<td></td>
</tr>
<tr>
<td>65-74 years</td>
<td>...</td>
<td>3 809</td>
<td>3 296</td>
<td>3 450</td>
<td>3 274</td>
<td>-5.1%</td>
<td>36.6%</td>
<td>16.6%</td>
<td>...</td>
<td></td>
</tr>
<tr>
<td>≥ 75 years</td>
<td>...</td>
<td>3 892</td>
<td>3 128</td>
<td>3 396</td>
<td>3 510</td>
<td>3.4%</td>
<td>12.2%</td>
<td>-9.8%</td>
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### Fatalities by road type

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</thead>
<tbody>
<tr>
<td>Urban roads</td>
<td>16 539</td>
<td>13 436</td>
<td>12 518</td>
<td>16 532</td>
<td>16 278</td>
<td>-1.5%</td>
<td>30.0%</td>
<td>21.2%</td>
<td>-1.6%</td>
<td></td>
</tr>
<tr>
<td>Rural roads</td>
<td>23 012</td>
<td>20 730</td>
<td>15 855</td>
<td>15 447</td>
<td>14 789</td>
<td>-4.3%</td>
<td>-6.7%</td>
<td>-28.7%</td>
<td>-35.7%</td>
<td></td>
</tr>
<tr>
<td>Motorways</td>
<td>4 993</td>
<td>5 673</td>
<td>4 237</td>
<td>5 081</td>
<td>4 737</td>
<td>-6.8%</td>
<td>11.8%</td>
<td>-16.5%</td>
<td>-5.1%</td>
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</table>

### Traffic data

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</tr>
</thead>
<tbody>
<tr>
<td>Registered vehicles (thousands)</td>
<td>184 275</td>
<td>217 028</td>
<td>257 312</td>
<td>288 034</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td></td>
</tr>
<tr>
<td>Vehicle kilometres (millions)</td>
<td>3 451 016</td>
<td>4 420 747</td>
<td>4 775 352</td>
<td>5 108 714</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td></td>
</tr>
<tr>
<td>Registered vehicles per 1,000 population</td>
<td>738.7</td>
<td>769.2</td>
<td>831.8</td>
<td>890.6</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
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