BELGIUM
Belgium recorded 499 road fatalities in 2020, a 23% decrease compared with 2019. The lockdown periods, followed by the relaxation of Covid-19 measures, determined the rhythm: a 55.5% reduction in crashes in April 2020 compared to April 2019, followed by a gradual increase between May and August, a strong increase in September and then again a sharp decrease in November (-38.4%). Despite the steady progress since 2010 and the pandemic restrictions, the national target of no more than 420 road deaths in 2020 has not been achieved.

Road safety management and strategy

Between 1990 and 2020, the number of fatalities decreased by 75%. The biggest share of these improvements occurred after 2000. Around the turn of the millennium, road safety became an issue of great public interest in Belgium. While the number of fatalities had been stagnating or had even increased in the late 1990s, this number has steadily declined since 2001, the year in which the first national assembly on road safety (Etats Généraux de la Sécurité Routière/Staten-Generaal van de Verkeersveiligheid) initiated many improvements in infrastructure, enforcement and education.

The most important measures to have contributed to the decline of mortality in Belgium likely are:

- a reduction of the speed limit on many rural roads
- stricter control of speed limits
- black-spot treatment and adjustment of the infrastructure
- improved safety systems in cars and trucks
- better road safety awareness through campaigns and educational measures.

Belgium: Quick facts

Population: 11.5 million
GDP per capita: USD 44,724
Road network: 154,575 km (2015)
  - motorways: 1%
Registered motor vehicles: 7.7 million (without mopeds)
  - cars: 77%
  - goods vehicles: 12%
  - motorcycles: 7%
Speed limits:
  - urban roads: 30-50 km/h
  - rural roads: 70-90 km/h
  - motorways: 120 km/h
Limits on Blood Alcohol Content:
  - general drivers: 0.5 g/l
  - professional drivers: 0.2 g/l
Road fatalities: 499
  - pedestrians: 13%
  - cyclists: 17%
  - car occupants: 44%
  - motorcyclists: 19%
  - other: 7%
Road fatalities per 100,000 population: 4.3
Road fatalities per 10,000 vehicles: 0.7
Cost of road crashes: 2.9% of GDP

All data 2020 unless otherwise stated.
As Belgium is a federal country, several public authorities and agencies are responsible for road safety policies. The federal commission has mainly a coordinating and monitoring role. The General Assembly of Road Safety is organised by the Federal Minister, who is responsible for mobility and road safety.

The current national road safety strategy was released in 2011 and was updated at the General Road Safety Assembly in 2015. Because there was no government for more than one-and-a-half years due to problems in forming a coalition, the General Road Safety Assembly that was expected in 2020 eventually took place in November 2021. The federal government then launched a new road safety action plan, with 32 measures to be implemented by 2025. Moreover, during the General Assembly, the federal and regional governments announced a new inter-federal road safety plan, “All for zero”, which is a commitment to more robust co-operation between the different authorities. The federal and inter-federal plans support the Safe System approach and aim to reach zero deaths by 2050. The goal of achieving a 50% decrease in fatalities between 2001 and 2011 and 2011-20 was renewed for 2019-2030 and extended to also include serious injuries (MAIS3+).

Other targets are:

- 90% decrease in those seriously injured by 2050
- 50% decrease in risky behaviour
- each driver every three years to be checked by the police.

The former target (-50% between 2011 and 2020) implied that in 2020 there should be no more than 420 fatalities. Eventually, there were 483 fatalities in 2020.

Since 2015, several public responsibilities about road safety shifted from the federal to the regional government. At a federal level, responsibility for traffic regulation (although speed limits on regional roads are a regional matter), vehicle safety regulation, licencing (although driver training is now a regional matter) and most of the enforcement chain has been kept. All other road safety matters (infrastructure, education, campaigns, training, local police controls) are now determined at the regional level.

For the Flemish region, the regional government has set up Road safety Flanders (VHV [Vlaams Huis voor de Verkeersveiligheid]) to align better and coordinate all road safety actions. At this moment, this structure is under review to optimise the working process. The new Road Safety Plan Flanders was published in 2021. It includes short-term (2025), medium-term (2030) and long-term (2050) targets related to fatalities, serious injuries, number of crashes, and in particular, the number of seriously injured pedestrians, cyclists, and young car drivers. Next to output targets, it also contains targets in terms of actions to be taken.

For Wallonia, the Walloon Council for Road Safety (CSWSR [Conseil Supérieur Wallon de la Sécurité Routière]) has taken over this responsibility under the leadership of the Walloon Agency for Road Safety (AWSR [Agence Wallonne pour la Sécurité routière]). A regional
general assembly was organised in December 2020, and a new road safety plan was presented, with the objective of less than 200 road deaths in Wallonia in 2020 (compared to 300 road deaths in 2016), less than 100 in 2030 and zero in 2050. Several measures were proposed, including the multiplication of zones where speed limits are 20 or 30 km/h in cities.

For the Brussels region, road safety is the responsibility of Brussels Mobility.

**Latest road safety measures**

The Highway Code reform relating to personal light electric vehicles (PLEV, up to 25 km/h) has been decided by the federal and regional governments jointly and is expected to come into force before summer 2022. The vehicles it refers to include mini e-scooters, monowheels and Segways. Usage is banned on sidewalks and for persons under 16 years of age. An exception will be made for people with reduced mobility. In a pedestrian zone, a sign will indicate whether an electric scooter can be used. If so, it will be at a walking pace. Parking will be restricted to dedicated areas, and the use of a vehicle by more than one person simultaneously will be prohibited. Fines for infractions vary between EUR 58 and 116. Wearing a helmet will not become mandatory.

To counter minor infractions without too much administration, communes can apply a local sanction (either a fee, max EURO 350 or a task) without involving the justice system. This system has been extended to traffic fines from September 2022, granting more flexibility and heterogeneity in applying penalties.

Some traffic offences have been raised in “degree”:

- The use of mobile phones while driving will be reformed (March 2022). The offence will be raised from the second to the third degree, i.e. a fine from 116 to 174 euros. Moreover, traffic legislation will allow automated detection of this behaviour.
- Entering a level crossing while traffic is congested from first to second degree (August 2021).
- Entering roads forbidden for goods vehicles from first to third degree (July 2021).

As of January 2021, the default speed limit for the Brussels region is 30 km/h. The Walloon region introduced a 30 km/h speed limit on cycle paths within built-up areas.

Since October 2020, vehicles in a traffic jam on motorways have had to leave some space between them to form a rescue lane that can be used by priority vehicles.

For Flanders, as part of the coronavirus recovery plan, an extra budget is available to create safe cycling infrastructure, safe school environments, and safe school routes get additional focus. Other priorities are black-spot treatment and section-controls for speed enforcement. A new assessment framework to support road authorities in determining the
maximum speed in urban areas has been published. Proactive conflict detection and analysis and specific infrastructure elements are implemented in special testing grounds.

**Costs of road crashes**

A joint research project for Belgium, France, Germany and the Netherlands estimated the value of a statistical life in road traffic crashes with a common methodology. For Belgium, costs of a road crash fatality are estimated at EUR 5.94 million and of a severe injury at EUR 0.94 million. In 2020, the total cost of road crashes was estimated at EUR 13 billion (2.9% of GDP).

**Safety performance indicators**

**Speed**

Speed, especially inappropriate speed, is one of the leading causes of crashes in Belgium.

While in 2017 there were only seven speed camera systems to control average speed on a section of a road, in 2020 there were more than 1,200, most of them in Flanders, seven in Wallonia, with the Brussels-Capital Region having none. However, because the available cameras are rotated across the systems, only a relatively small number (377) make recordings at any given time.

Default speed limits are not the same all over Belgium but change at regional borders. Flanders lowered the general speed limit outside built-up areas from 90 to 70 km/h on 1 January 2017; however, most roads were already limited to 70 km/h. Moreover, as of 2017, local decision makers needed to justify a speed higher than 70 km/h, whereas previously they needed to give reasons for not allowing 90 km/h as the limit. Since 1 January 2021, the default speed limit in Brussels has been 30 km/h within built-up areas and 70 km/h outside built-up areas.

New results from road-site observations within the Baseline project are expected in mid-2022.

**Drink-driving**

Driving under the influence of alcohol is another major cause of road crashes in Belgium, as in most IRTAD countries. In 2018, 1.9% of car drivers tested had a blood alcohol level above the legal limit, the same proportion as 2005 and 2007 but slightly lower than in 2012 (2.7%) and 2015 (2.7%). Furthermore, the share of highly intoxicated drivers (more than 0.35 mg or 0.8 g/l BAC) among offenders remains stable (from 69.0% in 2015 to 68.0% in 2018). Behavioural measurement highlights an alarming upward trend of driving under the influence of alcohol during the week and on weekend nights.
The maximum authorised BAC is 0.5 g/l. The limit for professional drivers has been 0.2 g/l since January 2015.

An alcohol-related crash is defined as a crash involving a road user (including a pedestrian) who was subjected to a test and either refused to be tested or had a BAC of 0.5 g/l or higher.

**Drugs and driving**

In Belgium, legislation sets limits for driving under the influence of drugs: cannabis – THC of 1 ng/ml; amphetamines – 25 ng/ml; MDMA or ecstasy – 25 ng/ml; morphine – 10 ng/ml); and cocaine – 25 ng/ml. Drivers suspected of being impaired are tested for drugs. They can also be tested if the driver transports drugs, admits having taken drugs or is involved in a crash. Since December 2015, a new executive decree under the road traffic law went into force. It offers additional tools and quicker ways to determine psychoactive substances in blood and saliva.

There are no recent data on drugs use. A pilot study to evaluate observation methods is foreseen in 2022 for the Baseline project.

**Use of mobile phones while driving**

An increasing problem for traffic safety in Belgium is distraction, for instance, through the use of mobile phones while driving. The use of hand-held phones while driving is forbidden. The use of hands-free devices while driving is authorised. A pilot observation survey was undertaken in 2015 in three large Belgian cities on the use of mobile phones by road users waiting at traffic lights. It showed that 7% of car drivers, 9% of drivers of light goods vehicles, 5% of cyclists and 18% of pedestrians used their mobile phones while stopped at traffic lights. Results from observation studies with car drivers, pedestrians and cyclists are expected from the Baseline project in mid-2022.

**Fatigue**

The share of fatigue as a causal factor in crashes is challenging to detect but believed to be a serious issue. Study results showed that in 2017, 5.1% of car journeys in Belgium involved a driver showing signs of sleepiness. The analysis of contextual variables shows that various circumstances result in a considerably higher prevalence than the overall estimate of 5.1%.

**Seat belt and helmet use**

Seat belt use has been compulsory in front seats since 1975 and rear seats since 1991. Children must be protected by a child restraint device appropriate for their size and
weight. In 2018, the seat belt use rate was 95% for drivers and 96% for front-seat passengers. For rear-seat passengers, it was, however, 86%. Clear progress in seat belt use occurred between 2003 and 2015. However, the 2010 target of 95% seat belt use has still not been met. In 2017, 87% of the children were restrained, but only 23% of them with an appropriate system and in the correct manner. New results from road-site observations within the Baseline project are expected in mid-2022.

For motorcyclists, helmet wearing is the most effective passive safety habit. All riders of powered two-wheelers are required to wear helmets. Motorcyclists (>50cc) also have to wear gloves, boots that protect the ankles, a long-sleeved jacket and long trousers. The helmet-wearing rate by riders of powered two-wheelers is not systematically monitored for the whole country. In Brussels, the observed rate was 99.3% in 2013. New results from road-site observations within the Baseline project are expected in mid-2022.

There is no mandatory helmet-use law for cyclists.
### Road safety data for Belgium at a glance

#### Table 1. Long-term road safety trends for Belgium

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<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Fatalities</td>
<td>1,976</td>
<td>1,470</td>
<td>850</td>
<td>604</td>
<td>644</td>
<td>499</td>
<td>-22.5</td>
<td>-41.3</td>
<td>-66.1</td>
<td>-74.7</td>
</tr>
<tr>
<td>Injury crashes</td>
<td>62,446</td>
<td>49,065</td>
<td>45,745</td>
<td>38,453</td>
<td>37,719</td>
<td>30,232</td>
<td>-19.8</td>
<td>-33.9</td>
<td>-38.4</td>
<td>-51.6</td>
</tr>
<tr>
<td>Injured persons hospitalised</td>
<td>17,479</td>
<td>9,847</td>
<td>5,606</td>
<td>3,637</td>
<td>3,605</td>
<td>2,988</td>
<td>-17.7</td>
<td>-47.1</td>
<td>-69.9</td>
<td>-83.0</td>
</tr>
<tr>
<td>Deaths per 100,000 population</td>
<td>19.9</td>
<td>14.4</td>
<td>7.8</td>
<td>5.3</td>
<td>5.6</td>
<td>4.3</td>
<td>-23.0</td>
<td>-44.8</td>
<td>-69.8</td>
<td>-78.2</td>
</tr>
<tr>
<td>Deaths per 10,000 registered vehicles</td>
<td>4.3</td>
<td>2.6</td>
<td>1.3</td>
<td>0.8</td>
<td>0.8</td>
<td>0.7</td>
<td>-22.9</td>
<td>-48.7</td>
<td>-74.6</td>
<td>-84.8</td>
</tr>
<tr>
<td>Deaths per billion vehicle kilometres</td>
<td>28.1</td>
<td>16.3</td>
<td>8.6</td>
<td>..</td>
<td>..</td>
<td>..</td>
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<td>..</td>
</tr>
</tbody>
</table>

#### Fatalities by road user

| Pedestrians | 301 | 142 | 108 | 74 | 65 | -29.3| -39.8| -54.2| -78.4 |
| Cyclists | 196 | 134 | 73 | 88 | 93 | 84 | -9.7| 15.1| -37.3| -57.1 |
| Moped riders | 110 | 64 | 23 | 18 | 20 | 14 | -30.0| -39.1| -78.1| -87.3 |
| Motorcyclists | 106 | 118 | 103 | 88 | 85 | 80 | -5.9| -22.3| -32.2| -24.5 |
| Passenger car occupants | 1,181| 922| 451| 275| 311| 221| -28.9| -51.0| -76.0| -81.3 |
| Other road users | 82 | 90 | 92 | 61 | 43 | 35 | -18.6| -62.0| -61.1| -57.3 |

#### Fatalities by age group

| 0-14 years | 108 | 52 | 28 | 14 | 11 | 5 | -54.5| -82.1| -90.4| -95.4 |
| 15-17 years | 72 | 55 | 21 | 9 | 11 | 10 | -9.1| -52.4| -81.8| -86.1 |
| 18-20 years | 202 | 130 | 65 | 20 | 34 | 23 | -32.4| -64.6| -82.3| -88.6 |
| 21-24 years | 245 | 198 | 108 | 45 | 53 | 38 | -28.3| -64.8| -80.8| -84.5 |
| 25-64 years | 992 | 784 | 467 | 338 | 358 | 298 | -16.8| -36.2| -62.0| -70.0 |
| 65-74 years | .. | 114 | 67 | 71 | 70 | 48 | -31.4| -28.4| -57.9| .. |
| ≥ 75 years | .. | 124 | 88 | 98 | 97 | 70 | -27.8| -20.5| -43.5| .. |

#### Fatalities by road type

| Urban roads | .. | 401 | 249 | 196 | 214 | 180 | -15.9| -27.7| -55.1| .. |
| Rural roads | .. | 836 | 459 | 310 | 311 | 230 | -26.0| -49.9| -72.5| .. |
| Motorways | 205 | 233 | 105 | 94 | 113 | 85 | -24.8| -19.0| -63.5| -58.5 |

#### Traffic data

| Vehicle kilometres (millions) | 70,276| 90,036| 98,678| ..| ..| ..| ..| ..| ..| .. |
| Registered vehicles (thousands) | 4,594| 5,735| 6,689| 7,533| 7,614| 7,651| 0.5| 14.4| 33.4| 66.5 |
| Registered vehicles per 1,000 population | 461.8| 560.1| 617.1| 660.9| 664.7| 664.0| -0.1| 7.6| 18.6| 43.8 |

Note: registered vehicles do not include mopeds.
Figure 1. Evolution of road fatalities, injury crashes, motorisation and GDP in Belgium, 2000-20

Index 2000 = 100

Note: registered vehicles do not include mopeds.

Figure 2. Road fatalities per 100 000 inhabitants in Belgium in comparison with IRTAD countries, 2020
Figure 3. Road fatalities per 10 000 vehicles in Belgium in comparison with IRTAD countries, 2020

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

Figure 4. Evolution of road fatalities in Belgium by user category, age group and road type, 2010-20
Figure 5. Road fatalities in Belgium by user category, 2020

- Passenger car occupants: 44%
- Motorcyclists: 16%
- Motorways: 17%
- Inside urban areas: 36%
- Rural roads: 47%
- Others incl. unknown: 7%
- Cyclists: 17%
- Moped riders: 3%
- Pedestrians: 13%

Figure 6. Road fatalities in Belgium by road type, 2020
Figure 7. Road fatality rate in Belgium by user category and age group, 2020
Rate per 100 000 population in the same age group

Table 2. Cost of road crashes in Belgium, 2020

<table>
<thead>
<tr>
<th></th>
<th>Unit Cost (EUR)</th>
<th>Total (EUR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatalities</td>
<td>6 810 601</td>
<td>4.4 billion</td>
</tr>
<tr>
<td>Serious injuries</td>
<td>1 032 815</td>
<td>3.7 billion</td>
</tr>
<tr>
<td>Slight injuries</td>
<td>75 481</td>
<td>3.2 billion</td>
</tr>
<tr>
<td>Property damage costs</td>
<td>5 051</td>
<td>1.7 billion</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>13 billion</strong></td>
</tr>
<tr>
<td><strong>Total as % of GDP</strong></td>
<td></td>
<td><strong>2.9</strong></td>
</tr>
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</table>

Table 3. Seat belt and helmet wearing rates

Percentages

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2010</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Front seats</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Driver</td>
<td>..</td>
<td>86</td>
<td>95</td>
</tr>
<tr>
<td>Passenger</td>
<td>..</td>
<td>86</td>
<td>96</td>
</tr>
<tr>
<td>Urban roads (driver)</td>
<td>50</td>
<td>84</td>
<td>95</td>
</tr>
<tr>
<td>Rural roads (driver)</td>
<td>57</td>
<td>87</td>
<td>96</td>
</tr>
<tr>
<td>Motorways (driver)</td>
<td>66</td>
<td>90</td>
<td>96</td>
</tr>
<tr>
<td><strong>Rear seats</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General</td>
<td>..</td>
<td>..</td>
<td>86</td>
</tr>
<tr>
<td>Children (use of child restraint)</td>
<td>..</td>
<td>..</td>
<td>87</td>
</tr>
</tbody>
</table>
Research and resources

Publications


Schoeters, A., Large, M., Koning, M., Carnis, L., Daniels, S., Mignot, D., Urmeew, R., Wijnen, W., Bijleveld, F., van der Horst, M. (2022), *Monetary valuation of the prevention of road fatalities and serious road injuries – Results of the VALOR project*, [https://vias.be/publications/Wat%20is%20de%20monetaire%20waardering%20van%20het%20voorkomen%20van%20verkeersdoden%20en%20ernstig%20verkeersgewonden/Monetary%20valuation%20of%20the%20prevention.pdf](https://vias.be/publications/Wat%20is%20de%20monetaire%20waardering%20van%20het%20voorkomen%20van%20verkeersdoden%20en%20ernstig%20verkeersgewonden/Monetary%20valuation%20of%20the%20prevention.pdf).

Websites


Vlaamse stichting verkeerskunde (Flemish Foundation for Traffic Knowledge): [https://www.vsv.be/](https://www.vsv.be/).

Definition, methodology, data collection

Road fatality is defined as a person who dies immediately or within 30 days of a crash.

A seriously injured person is someone who stays for treatment for more than 24 hours in a hospital following a crash, as reported by police.

A slightly injured person is someone who claims to need medical treatment, as reported by police.

The differentiation between a slightly and seriously injured person is not reliable, as police determine this distinction at the crash scene. Most Belgian reports, therefore, treat slightly and seriously injured jointly.

Road safety data are electronically collected and centralised by the police force. After some validation procedures, data are transferred to the National Statistics Office, which carries out some corrections and adds the fatalities occurring within 30 days to the database. This latter operation is done by linking the notification of death (a paper form with very basic information), which the Department of Justice sends to the National Statistical Office.

The number of slightly and seriously injured persons is the most likely to be underreported, as many crashes – especially those with cyclists – are not reported to the police. The number of MAIS+ victims is currently calculated based on hospital discharge data up to 2020. The numbers for 2020 are now published. The calculation method considers the practical guidelines of work package 7 of SafetyCube.

In 2014, the road safety database in Belgium was modified. The database now contains both injury crashes recorded by the police at the accident scene and those self-reported at a police station. The quality of the database has also improved thanks to changes in the data processing method, which notably allow for better identification of user types and characteristics of individuals and vehicles. The database is, therefore, more comprehensive. However, it also means that statistics from 2014 onwards are not fully comparable with those of previous years. In addition, due to the registration of cases that would not have been registered earlier, there is an increase in the number of cases in the "unknown" category. Comparisons with previous years should therefore be made with caution.