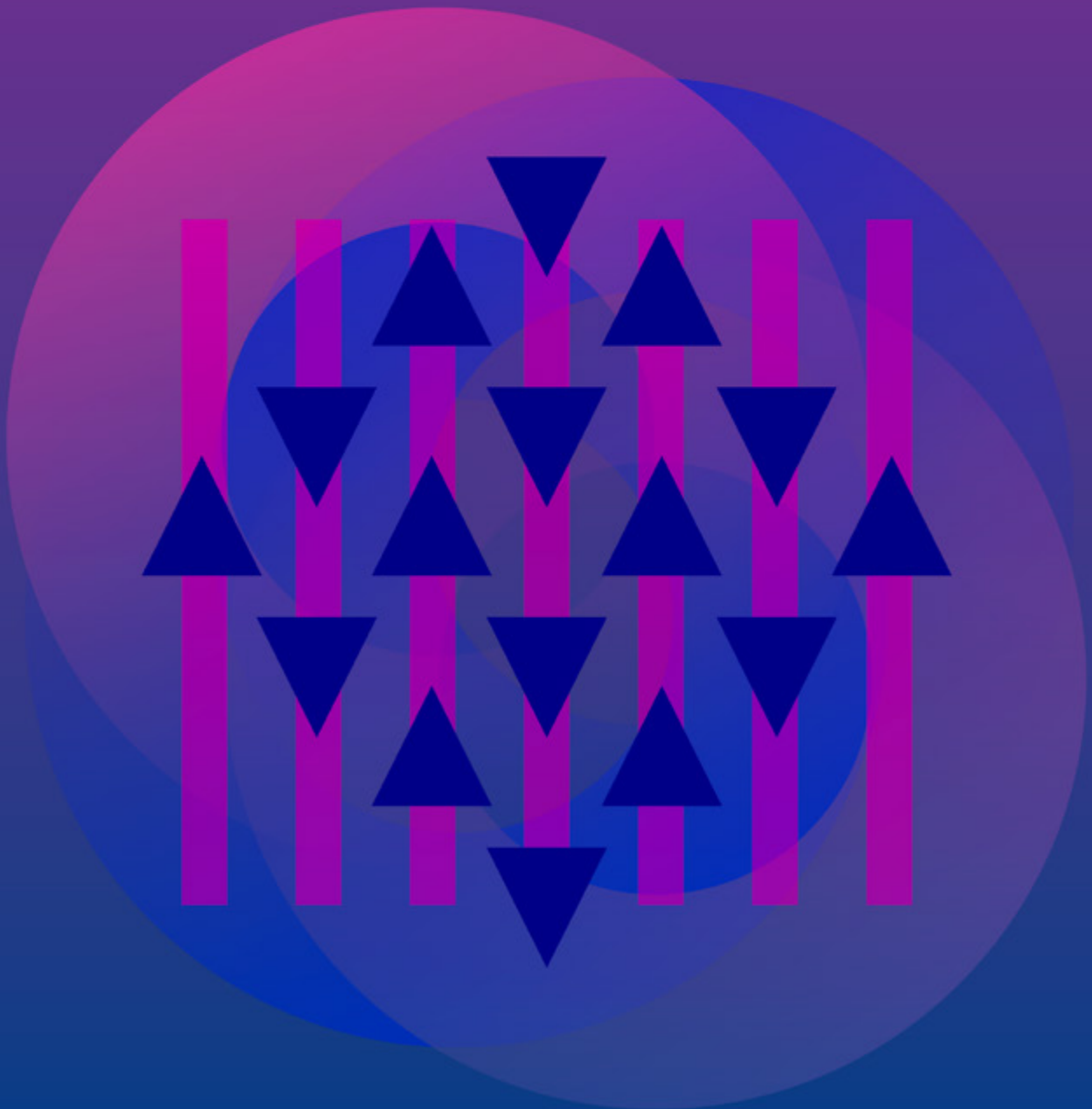


Road Safety Country Profile

Belgium 2023



Overview

Belgium recorded 540 road fatalities in 2022, a 12.8% decrease compared to the 2017-19 average. Belgium's federal road safety plan, the Plan Fédéral de Sécurité Routière 2021-25, is based on Vision Zero and established 32 measures to be implemented by 2025.

Quick facts: Belgium (all data from 2022, unless otherwise stated)

Population	11.7 million				
GDP per capita	USD 49 804				
Road network	154 575 km (2015)				
Total number of motor vehicles	7.8 million				
	Cars	Motorcycles	Goods vehicles	Buses	
	76%	7%	12%	0.2%	
Speed limits	Urban roads	Rural roads		Motorways	
	30-50 km/h 20 km/h for the "living streets" regime	70-90 km/h		120 km/h	
Limits on blood alcohol content	General drivers			Professional drivers	
	0.5 grams/litre (g/l)			0.2 g/l	
Road fatalities	370				
	Pedestrians	Cyclists	Car occupants	Motorised two-wheelers	Other and unknown
	13%	12%	49%	15%	9%
Road fatalities per 100 000 population	4.1				
Road fatalities per 10 000 vehicles	0.5				
Cost of road crashes	2.8% of GDP (2021)				

Short-term trends

Mobility and road safety in Belgium were significantly impacted by the Covid-19 pandemic that hit the world in 2020. Figure 1 illustrates the number of road deaths in 2020, 2021 and 2022 compared to the linear trend before the pandemic. It shows that road death figures for 2020 and 2021 were below the trend.

Due to the impact of the Covid-19 pandemic on mobility and road crashes, the data for 2020 and 2021 represent a poor reference point for benchmarking. Therefore, for short-term trends, this report compares data for 2022 and 2021 with the average for 2017-19.

In 2022, Belgium recorded 540 road deaths, a 4.7% increase compared to 2021. However, in 2022, road deaths decreased by 12.8 % compared to the average in 2017-19.

Table 1. Road fatalities in Belgium, 2017-2022

	2017	2018	2019	Average 2017-19	2020	2021	2022	2022 compared with average 2017-19
January	44	35	44	41	37	37	38	-7.3%
February	45	36	50	44	54	36	47	7.6%
March	49	40	54	48	39	28	49	2.8%
April	48	45	56	50	26	38	50	0.7%
May	50	49	55	51	41	41	44	-14.3%
June	53	45	60	53	39	50	61	15.8%
July	52	79	69	67	35	49	49	-26.5%
August	47	57	57	54	50	41	48	-10.6%
September	58	57	47	54	76	57	35	-35.2%
October	63	52	47	54	37	39	44	-18.5%
November	60	55	52	56	32	52	34	-38.9%
December	40	54	53	49	33	48	41	-16.3%
Total	609	604	644	619	499	516	540	-12.8%

In 2022, the number of cyclists killed increased by 16.9% compared to the average 2017-19, while the number of car occupants, users of powered two-wheelers and pedestrians killed decreased respectively by 25.6%, 18.8 % and 4.5%. Road deaths strongly decreased (-38.5%) among young people aged 0-14 compared to the 2017-19 average (Figure 2).

In 2022, Belgium had a mortality rate of 4.6 road deaths per 100 000 population. The fatality risk was 0.7 road deaths per 10 000 registered vehicles (Figures 3, 4 and 5).

People aged above 75 are the most at risk in road traffic, with a mortality rate of 8.0 deaths per 100 000 population. The second group at the most risk is the younger population aged 21-24 (Figure 7).

Figure 1. Road fatalities in Belgium in 2020, 2021 and 2022 compared to the linear trend since 2012



Figure 2. Evolution of road fatalities in Belgium by user category, age group and road type, 2022 compared to the average 2017-19

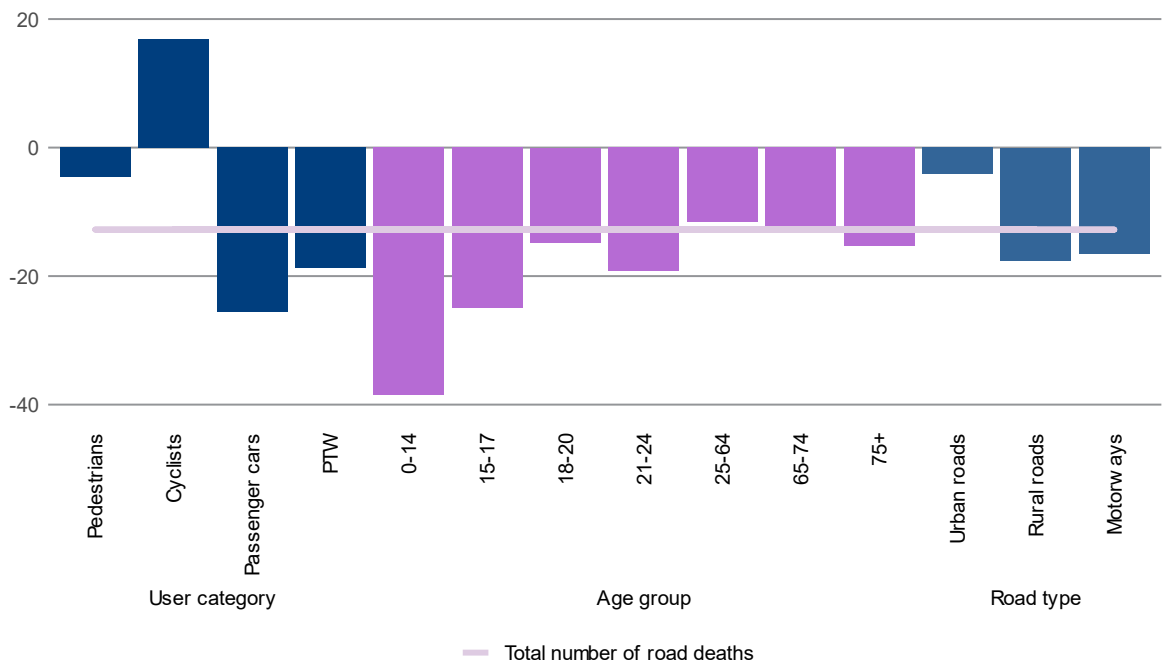


Figure 3. Road fatalities per 100 000 inhabitants in Belgium compared to other IRTAD countries, 2022

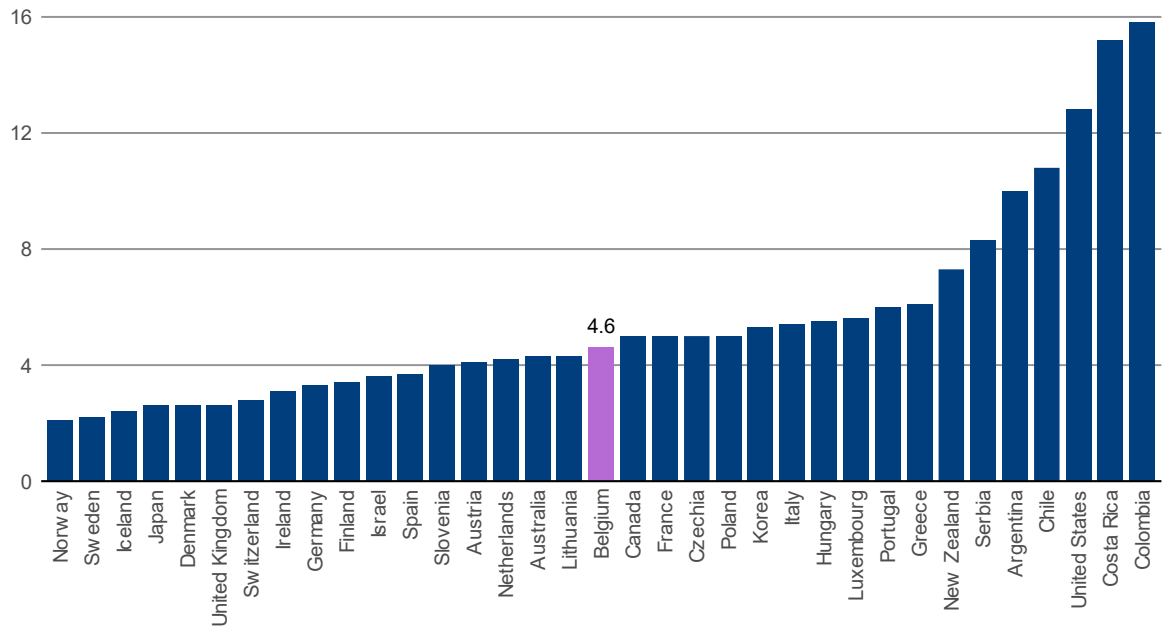
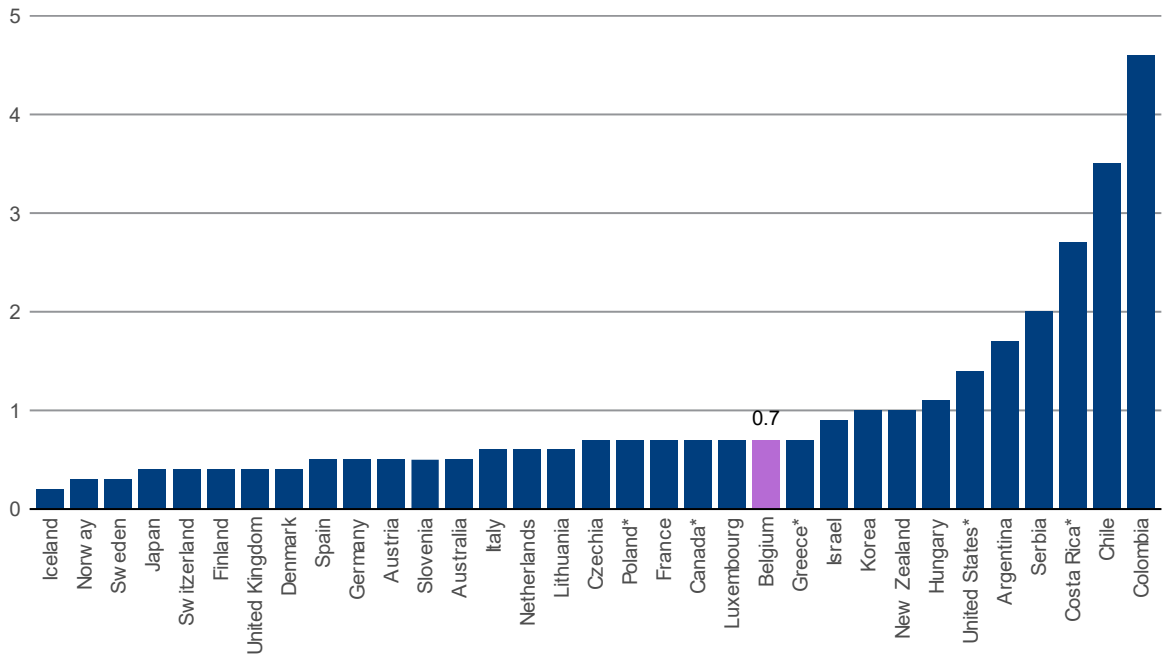


Figure 4. Road fatalities per 10 000 registered vehicles in Belgium compared to other IRTAD countries, 2022



Note: in Belgium, Denmark, Germany and Hungary, registered vehicles do not include mopeds. * 2021 data.

Figure 5. Road fatalities in Belgium by user category, 2022

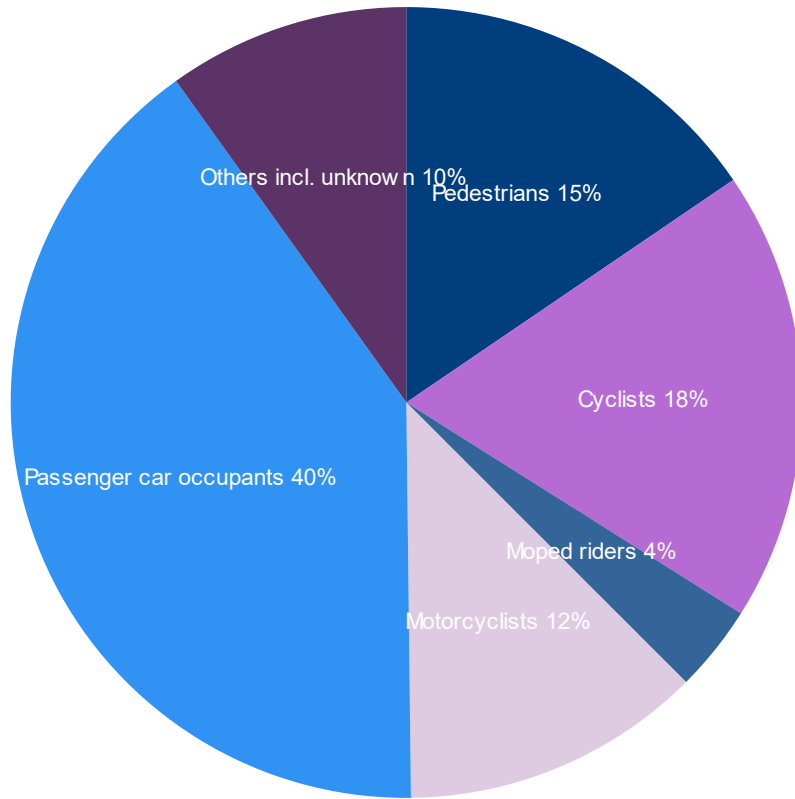


Figure 6. Road fatalities in Belgium by road type, 2022

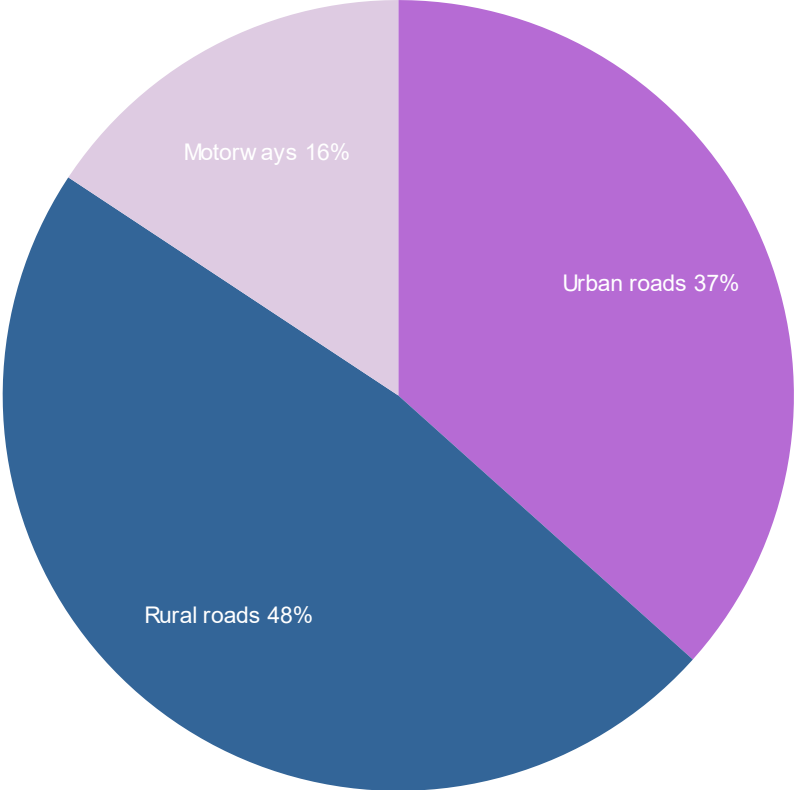
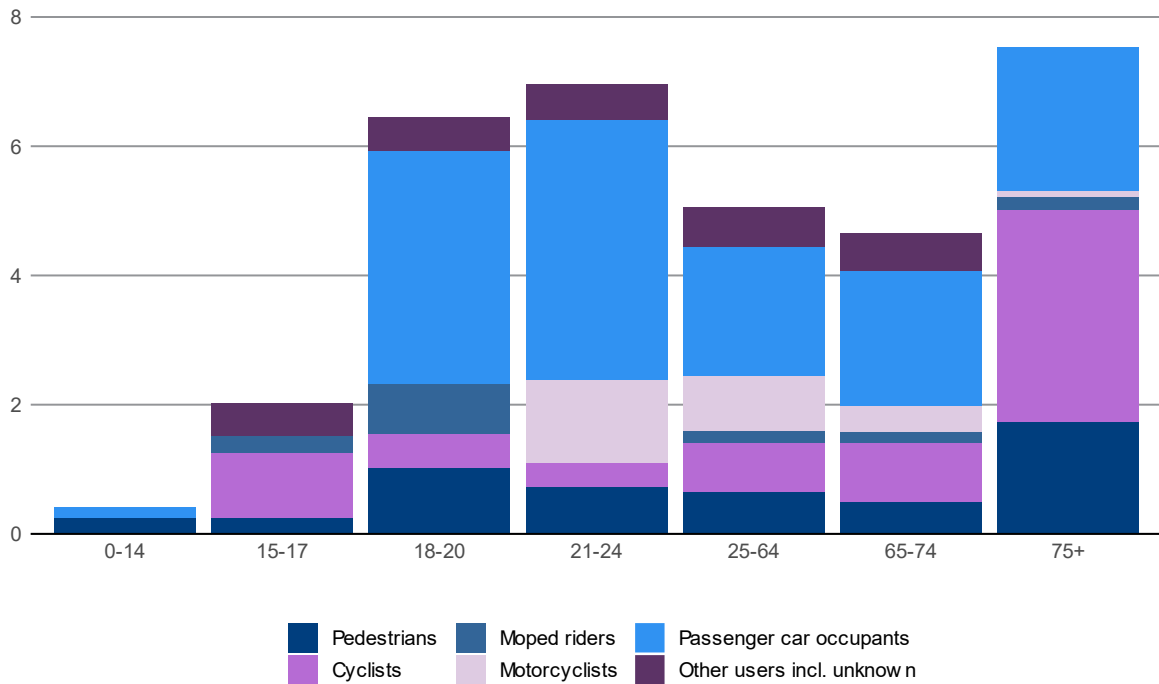


Figure 7. Road fatality rate in Belgium by user category and age group, 2022

Rate per 100 000 population in the same age group



Road safety data 2012-22

Between 2012 and 2022, road deaths decreased by 34.7%. During the same period, registered vehicles increased by 12.7% (Table 2 and Figure 8).

The number of road deaths decreased for motorcyclists (-33.3%), car occupants (-46.5%) and pedestrians (-28.4%) and increased by 17.9% for cyclists and by 11.8% for moped riders (Table 2 and Figure 9).

The number of road deaths decreased for all age categories. Older people experienced the lowest reduction: -28.2% for 65-74 and -28.4% for 75 and above. Children below 14 recorded a significant decrease of 65.2% (Figure 9).

Road mortality decreased on all road types, with the strongest decrease on rural roads (-31.6%). Road deaths decreased by 15.2% on urban roads (Figure 9).

Table 2. Crash, casualty and traffic data in Belgium, 2012-22

	2012	2020	2021	2022	Evolution 2012-22
Reported safety data					
Fatalities	827	499	516	540	-34.7%
Injury crashes	44 259	30 251	34 660	37 643	-14.9%
Injured persons hospitalised	4 736	2 978	3 119	3 400	-28.2%
Deaths per 100 000 population	7.5	4.3	4.5	4.6	-37.7%
Deaths per 10 000 registered vehicles	1.2	0.7	0.7	0.7	-42.0%
Fatalities by road user					
Pedestrians	116	65	75	83	-28.4%
Cyclists	84	85	83	99	17.9%
Moped riders	17	15	17	19	11.8%
Motorcyclists	99	78	62	66	-33.3%
Passenger car occupants	404	221	215	216	-46.5%
Other road users	107	34	60	53	-50.5%
Fatalities by age group					
0-14 years	23	5	18	8	-65.2%
15-17 years	19	10	7	8	-57.9%
18-20 years	52	23	30	25	-51.9%
21-24 years	80	38	32	38	-52.5%
25-64 years	448	298	270	308	-31.3%
65-74 years	78	48	62	56	-28.2%
≥ 75 years	116	70	83	83	-28.4%
Fatalities by road type					
Urban roads	231	180	179	196	-15.2%
Rural roads	373	230	251	255	-31.6%
Motorways	108	85	78	84	-22.2%
Traffic data					
Registered vehicles (thousands)	6 921	7 651	7 751	7 797	12.7%
Registered vehicles per 1 000 population	827	499	516	540	-34.7%

Figure 8. Evolution of road fatalities, motorisation and GDP in Belgium, 2012-22
Index 2012 = 100

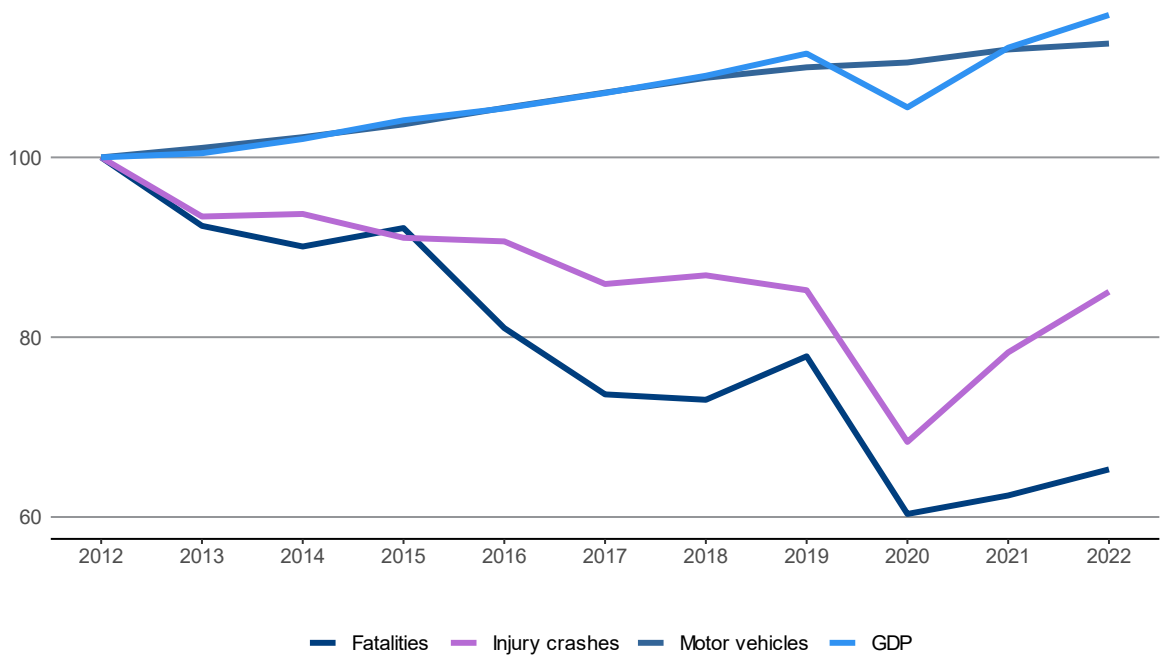
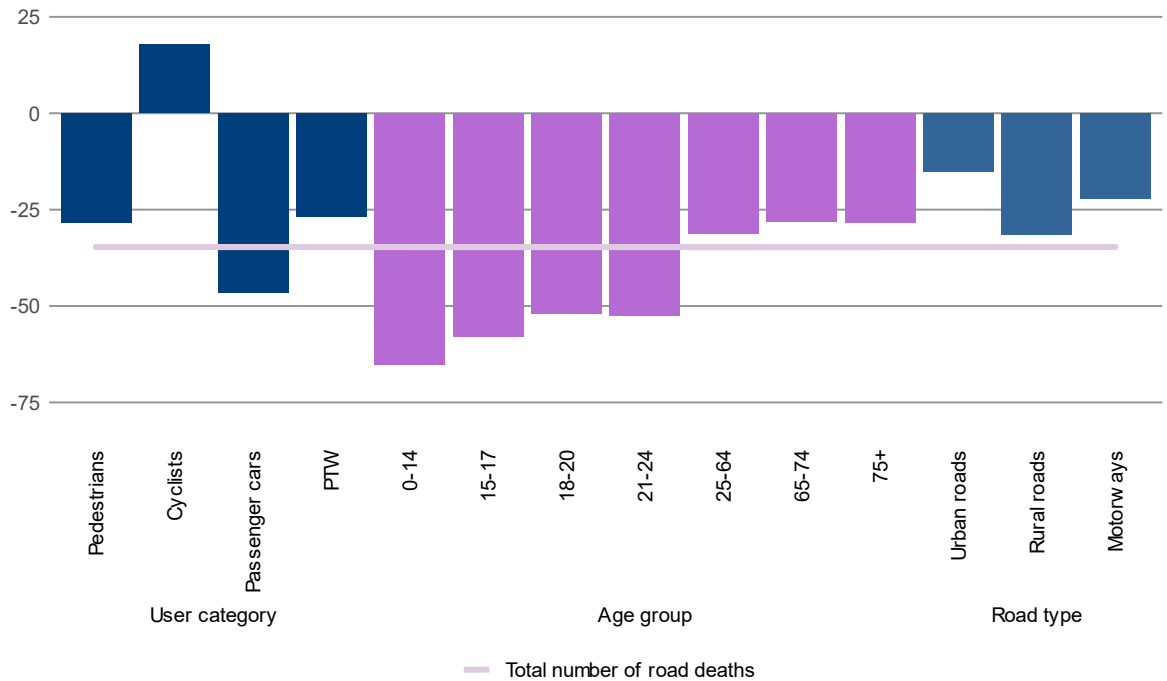


Figure 9. Evolution of road fatalities in Belgium by user category, age group and road type, 2012-2022



Safety performance indicators

Speed

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

Default speed limits are not the same all over Belgium, but they 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 were required 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. In some Belgian cities, there is the "living streets" regime, where the speed limit is 20 km/h.

Table 3 summarises the main speed limits for passenger cars in Belgium.

Table 3. Passenger car speed limits by road type in Belgium, 2023

	General speed limit	Comments
Urban roads	30-50 km/h	20 km/h for the "living streets" regime
Rural roads	70-90 km/h	
Motorways	120 km/h	

Drink driving

Driving under the influence of alcohol is another major cause of road crashes in Belgium, as in most IRTAD countries. In 2021, 1.6% of car drivers tested had a blood alcohol level above the legal limit, slightly lower than in 2018 (1.9%). Alcohol-related crashes decreased from 4 511 in 2012 to 4 091 in 2022.

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, the 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. In 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 saliva.

The drug related offences increased from 5 117 in 2014 to 12 104 in 2022.

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.

According to the Baseline project, 2.6% of car drivers, 5.3% of light goods vehicle drivers and 0.7% of bus drivers use a mobile device.

Fatigue

The share of sleepiness and fatigue is an important factor in crashes, but it is especially challenging to detect. 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 in rear seats since 1991. Children must be protected by a child restraint device appropriate for their size and weight. In 2022, the seat belt use rate was 95% for drivers and 92% for front-seat passengers. For rear seat passengers, it was, however, 79%, a reduction from 2018 levels (86%).

For motorcyclists, helmet wearing is the most effective passive safety habit. All riders of powered two-wheelers are required to wear helmets. Motorcyclists (>50cc) must also wear gloves, boots that protect the ankles, long-sleeved jackets and long trousers. The helmet wearing rate of powered two-wheeler riders is not systematically monitored throughout the country. In Belgium, the observed rate was 99.3% in 2013. In 2022, this increased to 100%.

Table 4. Seat belt and helmet wearing rates in Belgium

Percentages

	2010	2018	2022
Front seats			
Driver	86	95	94
Passenger	86	96	92
Urban roads (driver)	84	95	92
Rural roads (driver)	87	96	95
Motorways (driver)	90	96	96
Rear seats			
General	..	86	79
Helmet			
Mopeds	99
Motorcycles	100

Cost 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 using a common methodology. In 2020, the total cost of road crashes was estimated at EUR 13 billion (2.9% of GDP).

Table 5. Cost of road crashes in Belgium, 2020

	Unit Cost (EUR)	Total cost (EUR)
Fatalities	6 810 601	4.4 billion
Seriously injured	1 032 815	3.7 billion
Slight injuries	75 481	3.2 billion
Property damage costs	5 051	1.7 billion
Total	..	13 billion
Total as % of GDP	..	2.9 %

Road safety management and strategy

Evolution of road safety

Between 1990 and 2020, the number of fatalities decreased by 75%. The most significant share of these improvements fell in the period following 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 that have contributed to the decline of mortality in Belgium 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.

Governance of road safety

As Belgium is a federal country, several public authorities and agencies are responsible for road safety policies. The Federal Commission mainly has a co-ordinating and monitoring role. The General Assembly of Road Safety is organised by the Federal Minister, responsible for mobility and road safety.

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 better align and co-ordinate all road safety actions. This structure is currently under review to optimise the working process.

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]).

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

Road safety strategy

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 forming a coalition, the General Road Safety Assembly that had been foreseen for 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 serious injuries (MAIS3+).

Other targets are:

- -90% of seriously injured by 2050;
- -50% of 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.

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, the number of crashes, and, in particular, the number of seriously injured among pedestrians, cyclists, and young car drivers. Next to output targets, it also contains targets in terms of actions to be taken.

In Wallonia, 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 limited to 20 or 30 km/h in cities.

Latest road safety measures

The reform of the highway code concerning personal light electric vehicles (PLEV, up to 25 km/h) has been decided by the federal and regional governments jointly and applied in 2022. The vehicles it refers to include mini-e-scooters, monowheels, segways, and others. Usage is banned on the sidewalks and for persons under 16. An exception will be made for people with reduced mobility. In a pedestrian zone, a sign will indicate whether or not an electric scooter can be used. If so, it will be at a walking pace. Parking will be restricted to dedicated areas, and using 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 (a fee, max EURO 350, or a task) without involving justice. This system has been extended to traffic fines in 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 EUR 116 to EUR 174. Moreover, traffic legislation will allow automatised 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).

The Walloon region introduced a 30 km/h speed limit on cycle paths within built-up areas.

As of January 2021, the default speed limit for the Brussels region is 30 km/h.

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.

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>

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<https://vias.be/publications/Effecten%20van%20in%20de%20helm%20ge%C3%AFntegreerde%20schermen/Effets%20sur%20la%20conduite%20moto%20de%20l'Affichage%20T%C3%AAt%20Haute%20int%C3%A9gr%C3%A9%20dans%20le%20casque.pdf>

Websites

Vias Institute: <https://www.vias.be/en/>

Dashboard Victims of road traffic crashes in Belgium: <https://www.vias-roadsafety.be/en/>

Road safety barometers: <https://www.vias.be/en/research/road-safety-monitoringsurvey/>

Conseil supérieur wallon de la sécurité routière: <http://www.cswsr.be/>

Agence wallonne pour la Sécurité routière: <http://www.awsr.be/>

Instituut voor Mobiliteit Universiteit Hasselt: <https://www.uhasselt.be/IMOB-EN>

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

Vlaamse overheid – departement MOW: <https://www.vlaanderen.be/verkeersveiligheidsplan-vlaanderen-2021-2025>

Definition, methodology, data collection

Term	Definition
Road death	A person who dies immediately or within 30 days of the crash.
Person seriously injured	A person who stays for treatment for more than 24 hours in a hospital following a crash, as reported by police. The differentiation between a slightly and seriously injured person is unreliable, as police determine this distinction at the crash scene. Most Belgian reports, therefore, treat slightly and seriously injured jointly.
Person slightly injured	A person who claims to need medical treatment, as reported by police. The differentiation between a slightly and seriously injured person is unreliable, 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 makes 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 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 calculated based on hospital discharge data up to 2021. The numbers for 2021 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 injury crashes recorded by the police at the crash 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 allows 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.

About the IRTAD Database

The IRTAD Database includes road safety data, aggregated by country and year from 1970 onwards. It provides an empirical basis for international comparisons and more effective road safety policies.

The IRTAD Group validates data for quality before inclusion in the database. At present, the database includes validated data from 35 countries: Argentina, Australia, Austria, Belgium, Canada, Chile, Colombia, Costa Rica, Czechia, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Lithuania, Luxembourg, the Netherlands, New Zealand, Norway, Poland, Portugal, Serbia, Slovenia, Spain, Sweden, Switzerland, the United Kingdom and the United States.

The data is provided in a common format based on definitions developed and agreed by the IRTAD Group. Selected data is available for free; full online access requires IRTAD membership.

Access the IRTAD Database via the OECD statistics portal:

https://stats.oecd.org/Index.aspx?DataSetCode=IRTAD_CASUAL_BY_AGE

About the International Transport Forum

The International Transport Forum (ITF) is an intergovernmental organisation with 66 member countries that organises global dialogue for better transport. It acts as a think tank for transport policy and hosts the Annual Summit of transport ministers. The ITF is the only global body that covers all transport modes. The ITF is administratively integrated with the OECD, yet politically autonomous.

www.itf-oecd.org

About the IRTAD Group

The International Traffic Safety Data and Analysis (IRTAD) Group is the ITF's permanent working group for road safety. It brings together road safety experts from national road administrations, road safety research institutes, international organisations, automobile associations, insurance companies, car manufacturers, etc. With 80 members and observers from more than 40 countries, the IRTAD Group is a central force in promoting international co-operation on road-crash data and its analysis.

www.itf-oecd.org/irtad

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Data in this country profile have been provided by countries to the database of the International Traffic Safety Data and Analysis (IRTAD) Group. Where data has not been independently validated by IRTAD, this is indicated.

Read more country profiles online:

<https://www.itf-oecd.org/road-safety-annual-report-2023>

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