



# AUSTRALIA

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Based on provisional data, Australia recorded 1 094 road fatalities in 2020, representing a 7.8% decrease compared to 2019. Australia has not achieved the target established under the National Road Safety Strategy (NRSS) 2011-2020 (at least 30% reductions in fatalities and serious injuries). In December 2021, the National Road Safety Strategy 2021-2030 was launched. It sets out Australia's road safety objectives over the next decade. It includes key priorities for action and targets to reduce the annual number of fatalities by at least 50% and serious injuries by at least 30% by 2030.

## Road safety management and strategy

The number of road deaths peaked in 1970 with 3 708 reported road fatalities. Since 1970, road deaths have steadily decreased with some yearly fluctuations. Improvement was particularly marked in the early 1990s. More recently, the decrease in fatalities has continued but at a much slower pace.

Key measures contributing to the reduction in road deaths, particularly over the last decade, have been implementing intensive speed compliance measures, the progressive introduction of graduated licencing restrictions, targeted safety investment in road infrastructure and continuous vehicle safety improvements.

In Australia's federal system, government responsibilities for road safety vary across jurisdictions. The Australian Government is responsible for regulating safety standards for new vehicles and for allocating infrastructure resources, including for safety, across the national highway and local road networks.

### Australia: Quick facts

**Population:** 25.7 million

**GDP per capita:** USD 53 176

**Road network:** 1 027 545 km (2018)

- urban roads: 15%
- roads outside urban areas: 85%

**Registered motor vehicles:** 19.8 million

- cars: 74%
- goods vehicles: 20%
- motorcycles: 4%

**Volume of traffic:** +42% between 2000 and 2019

#### Speed limits:

- urban roads (not arterial): 50 km/h (increasing use of 40 km/h or lower limits in urban areas with high pedestrian activities)
- urban roads (arterial): 60-80 km/h
- rural roads (divided): 100 km/h
- rural roads (undivided): 100-110 km/h
- motorways: 100 km/h (often set to 110 km/h; 130 km/h in the Northern Territory)

#### Limits on Blood Alcohol Content:

- general drivers: 0.5 g/l
- professional drivers: 0.0 g/l
- novice drivers: 0.0 g/l

**Road fatalities:** 1 094

- pedestrians: 12%
- cyclists: 4%
- car occupants: 48%
- moped riders and motorcyclists: 17%
- other: 19%

**Road fatalities per 100 000 population:** 4.3

**Road fatalities per 10 000 vehicles:** 0.6

**Cost of road crashes:** 1.8% of GDP (2006)

All data 2020 unless otherwise stated.

State and territory governments are responsible for funding, planning, designing and operating the road network; managing vehicle registration and driver licensing systems; and regulating and enforcing road user behaviour. Local governments have responsibilities for funding, planning, designing and operating the road networks in their local areas.

The Department of Infrastructure, Transport, Regional Development and Communications has a range of functions that support the Australian Government's role in road safety. These include administering vehicle safety standards for new vehicles, administering infrastructure programs such as the AUD 3 billion Road Safety Program and the National Black Spot Program, administering the awareness, innovation and young driver programs and producing national road safety statistics.

The Australian Government has established an Office of Road Safety in the Department of Infrastructure, Transport, Regional Development and Communications in 2019 to deliver the Government's new and existing road safety programmes, engage with road safety stakeholders, co-ordinate performance monitoring, develop and implement the National Road Safety Strategy 2021-2030 and develop the Road Safety Data Hub.

State, territory and federal transport ministers established the first National Road Safety Strategy in 1992. The Safe System approach used by other OECD member countries was adopted during the period of the subsequent 2000-2010 National Road Safety Strategy. It aimed to reduce the rate of road fatalities relative to the population by 40% in the stated period. An actual reduction in the road fatality rate of 34% was achieved over the period.

The National Road Safety Strategy 2011-2020 was based on Safe System principles and was framed by the guiding vision that no person should be killed or seriously injured on Australia's roads. As a step towards this long-term vision, the strategy presents a 10-year plan to reduce the annual number of both deaths and serious injuries on Australian roads by at least 30%. An actual reduction in road fatalities of 19% was achieved over the period.

In December 2021, the National Road Safety Strategy 2021-2030 was launched.

## Latest road safety measures

In Australia's federal system, all levels of government implement a range of measures to reduce deaths and serious injuries within their specific areas of responsibility. The National Road Safety Strategy 2021-30 sets out Australia's road safety objectives over the next decade and includes key priorities for action and targets to reduce the annual number of fatalities by at least 50% and serious injuries by at least 30% by 2030. The Strategy continues the commitment to the Safe System approach and strengthens all elements of the road transport system under three key themes: safe roads, safe vehicles and safe road use with speed management embedded in all key themes. The Strategy adopts a social model approach to foster a road safety culture across society and make road safety business-as-usual. The National Road Safety Strategy represents all governments' commitment to delivering significant reductions in road trauma, putting Australia on a path to achieve 'Vision Zero' or zero deaths and serious injuries on their roads by 2050.

The Strategy sets the direction for road safety in Australia for the next decade. It outlines key priorities for reducing road trauma and identifies areas where improvement is needed most. The Strategy will drive genuine road safety reform over the next decade by focusing on nine priority areas:

1. infrastructure planning and investment
2. regional road safety
3. remote road safety
4. vehicle safety
5. heavy vehicle safety
6. workplace road safety
7. Aboriginal and Torres Strait Islander Australians
8. vulnerable road users
9. risky road use.

## Costs of road crashes

The annual economic cost of road crashes in Australia is an estimated AUD 27 billion per year, based on 2006 data (1.8% of GDP). A willingness-to-pay methodology was used to value the human losses from road crashes.

The estimated cost includes non-reported crashes and injuries.

## Safety performance indicators

### Speed

Australia does not have reliable national data on the contribution of speed to serious crashes. Police crash reports have suggested that excessive speed is a factor in about one-third of all fatal crashes, though this is likely to be underestimated.

Statistical series and other evaluation studies in individual jurisdictions indicate that speed management measures have made an essential contribution to reducing road fatalities and injuries. Between 1997 and 2003, except for the Northern Territory, all Australian jurisdictions lowered their urban default speed limit from 60 km/h to 50 km/h. The evaluation study in New South Wales showed that the mean speed decreased by 0.5 km/h, while the total number of crashes decreased by 25.3% and the number of persons injured by 22.3%.

National data on speed distributions are not available. Obtaining such data has been identified as a priority to support the effective monitoring of progress under the National Road Safety Strategy.

Under Australia's National Road Safety Strategy, there have been moves to align better-posted speed limits with the objective risk profiles of roads. This has led, for example, to an expansion of lower urban speed zones (typically 40 km/h) in areas with high levels of pedestrian and cycling activity. The National Road Safety Action Plan 2018-2020 stressed the importance of reviewing speed limits on high-risk regional and remote roads.

Over the last ten years, most Australian jurisdictions have taken steps to strengthen speed enforcement programmes, particularly through increased use of mobile and fixed cameras. In recent years, several jurisdictions have introduced, or planned to introduce, point-to-point camera systems to measure average speed, though generally only a modest scale.

The National Road Safety Action Plan recommended increasing the deployment of point-to-point and mobile cameras to detect speed in all jurisdictions. It also set as a critical action the development of a national speed enforcement strategy and greater use of technology for a range of enforcement outcomes.

### **Drink-driving**

Driving under the influence of alcohol is another major cause of road crashes in Australia. In 2020, 139 deaths resulted from crashes involving a driver or a motorcycle rider with an illegal BAC. This figure may underestimate the extent to which alcohol affects Australian road safety as fatality counts for these measures use lower-bound estimates due to a substantial number of cases with unknown values.

In Australia, driving a motor vehicle with a blood alcohol content (BAC) of 0.5 g/l or higher is illegal. Lower BAC limits apply to truck, bus and taxi drivers (typically 0.2 g/l) and novice drivers (0.0 g/l). Australia uses the exact definition recommended by the European Union project SafetyNet to define drink-driving crashes as any crash in which any active participant has a BAC level above the legal limit.

All jurisdictions have had considerable success in reducing the contribution of alcohol to road trauma, mainly attributable to the combination of intensive random breath-testing programmes and ongoing public education campaigns. While absolute numbers of alcohol-related fatalities have continued to decline over the past decade, the involvement of alcohol in fatalities remains significant (12.7% of deaths in 2020).

All states and territories have mandatory alcohol interlock programmes for high range drink-drivers and repeat offenders. They continue to review and adjust these to improve their effectiveness in addressing drink-driving. To complement more extensive operations elsewhere, they maintain highly visible random breath testing, including car-based operations on the rural network.

## **Drugs and driving**

The combination of drug use and driving is a concern in Australia. According to official statistics, 178 deaths occurred in 2020 from crashes involving a driver or a motorcycle rider who had taken an illegal drug. This figure may underestimate the extent to which illegal drugs affects Australian road safety as national reporting of drug data is incomplete and inconsistent. It has been estimated that in 2020 the proportion of road deaths from crashes involving drug-impaired drivers or motorcycle riders increased 73% since 2017 in six jurisdictions.

As part of the National Road Safety Action Plan 2018-2020, Australia listed "increasing roadside drug testing significantly in all states and territories" as a Priority Action, and state and territory road authorities have been working together with police through a National Drug Driving Working Group to develop a national best practice approach to reducing drug driving. Individual jurisdictions aim for a 50% to 100% increase in roadside testing.

## **Use of mobile phones while driving**

With increased reliance on, and use of, mobile phones and other devices, distracted driving is recognised as a concerning and potentially growing problem in Australia. However, there is no official definition of "distracted driving" for national statistical collection. Mobile phone use is of particular concern. In 2020, 56 232 infringements were issued, a 41.7% decrease from 2019.

Across Australia, it is illegal to use a hand-held phone while driving. In some jurisdictions, learner and provisional licence holders are subject to further restrictions, including a total ban on phone use while driving. Breaches attract fines and licence demerit points. In recent years, state governments have undertaken promotional campaigns to warn of the dangers of distracted driving.

## **Seat belt and helmet use**

Seat belt use has been compulsory in Australia since the 1970s. In most states, there are licence demerit point penalties and fines for unbelted drivers. In some states, demerit points apply to drivers with unbelted passengers (in addition to penalties for unbelted adult passengers).

Children 7 years of age and under must be seated in a rear seat (if available) and be adequately restrained in an appropriate child restraint or booster seat, considering their weight and height.

Objective nationwide data on use rates are not available. Still, non-national observational surveys and self-report data from national surveys indicate that wearing rates for both front and rear-seat occupants are now more than 95% (2018).

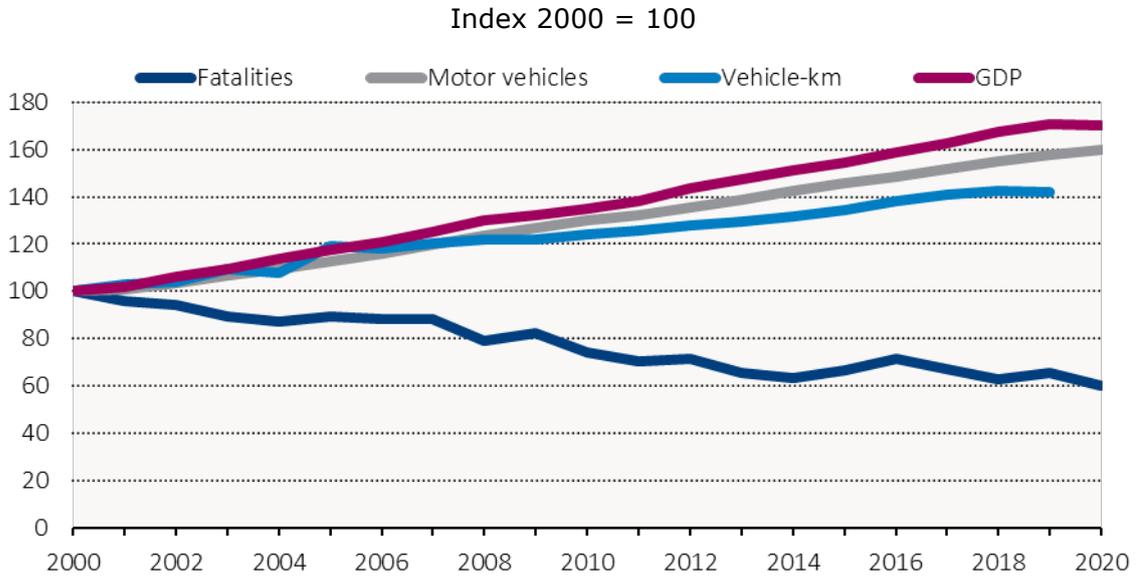
Despite generally high wearing rates, 154 vehicle occupants were killed in 2020 who were not wearing a restraint. Analysis indicates that this high figure results from a high crash involvement rate among those who do not wear belts and that they are more likely to be killed if involved in a crash.

## Road safety data for Australia at a glance

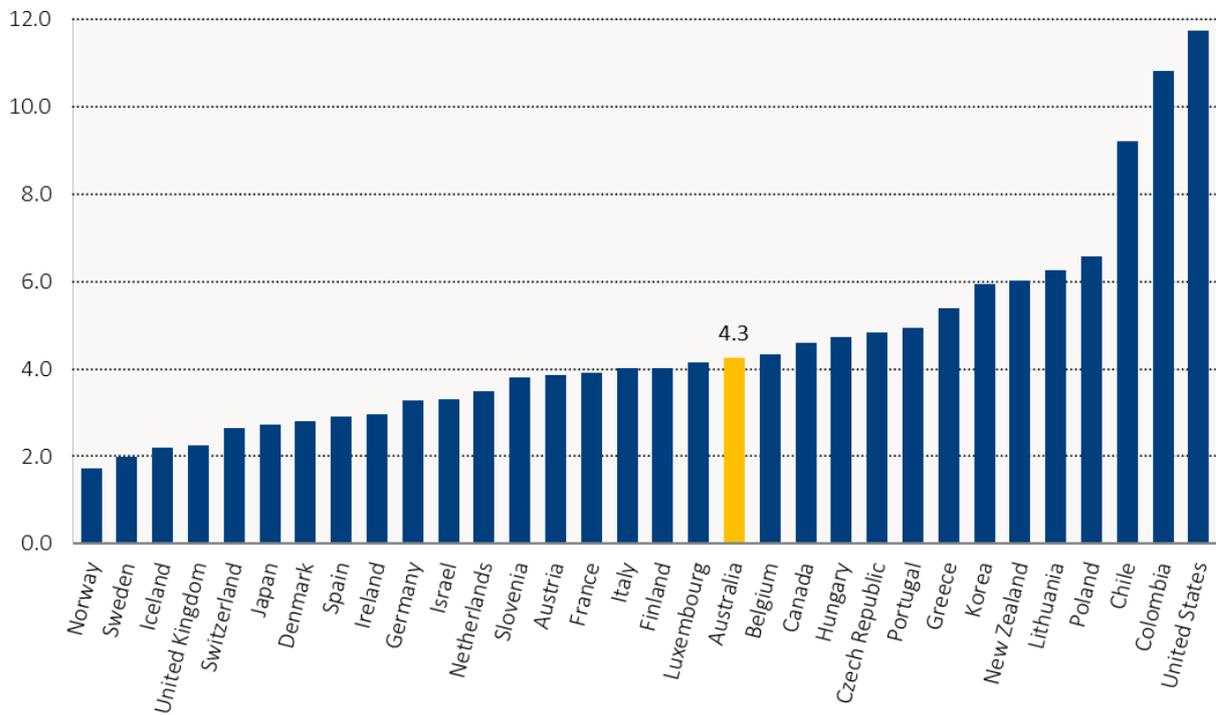
**Table 1. Long-term road safety trends for Australia**

	1990	2000	2010	2018	2019	2020	2020 % change over			
							2019	2010	2000	1990
<b>Reported safety data</b>										
Fatalities	2 331	1 817	1 350	1 135	1 187	1 094	-7.8	-19.0	-39.8	-53.1
Injured persons hospitalised	25 008	26 963	32 775	..	..	..	..	..	..	..
Deaths per 100 000 population	13.7	9.5	6.1	4.5	4.7	4.3	-9.0	-30.5	-55.4	-68.8
Deaths per 10 000 registered vehicles	2.3	1.5	0.8	0.6	0.6	0.6	-9.2	-34.3	-62.4	-76.1
Deaths per billion vehicle kilometres	14.4	9.8	5.9	4.3	4.5	..	..	..	..	..
<b>Fatalities by road user</b>										
Pedestrians	420	287	172	178	159	136	-14.5	-20.9	-52.6	-67.6
Cyclists	80	31	38	35	39	41	5.1	7.9	32.3	-48.8
Riders of motorised two-wheelers	262	191	224	191	214	190	-11.2	-15.2	-0.5	-27.5
Passenger car occupants	1 569	1 302	722	532	550	524	-4.7	-27.4	-59.8	-66.6
Other road users	0	6	194	199	225	203	-9.8	4.6	3283.3	..
<b>Fatalities by age group</b>										
0-14 years	184	114	56	34	33	41	24.2	-26.8	-64.0	-77.7
15-17 years	129	104	53	40	28	41	46.4	-22.6	-60.6	-68.2
18-20 years	340	204	138	85	89	73	-18.0	-47.1	-64.2	-78.5
21-24 years	278	178	141	96	111	88	-20.7	-37.6	-50.6	-68.3
25-64 years	1 046	923	743	635	650	639	-1.7	-14.0	-30.8	-38.9
65-74 years	..	127	96	114	106	75	-29.2	-21.9	-40.9	..
≥ 75 years	..	167	122	129	169	133	-21.3	9.0	-20.4	..
<b>Fatalities by road type</b>										
Urban roads	..	..	636	419	432	391	-9.5	-38.5	..	..
Roads outside urban areas	..	..	709	713	753	700	-7.0	-1.3	..	..
<b>Traffic data</b>										
Vehicle kilometres (millions)	162 233	184 593	228 532	263 408	261 948	..	..	..	..	..
Registered vehicles (thousands)	10 081	12 373	16 061	19 173	19 505	19 805	1.5	23.3	60.1	96.5
Registered vehicles per 1 000 population	590.7	650.2	729.0	767.5	769.0	771.0	0.3	5.8	18.6	30.5

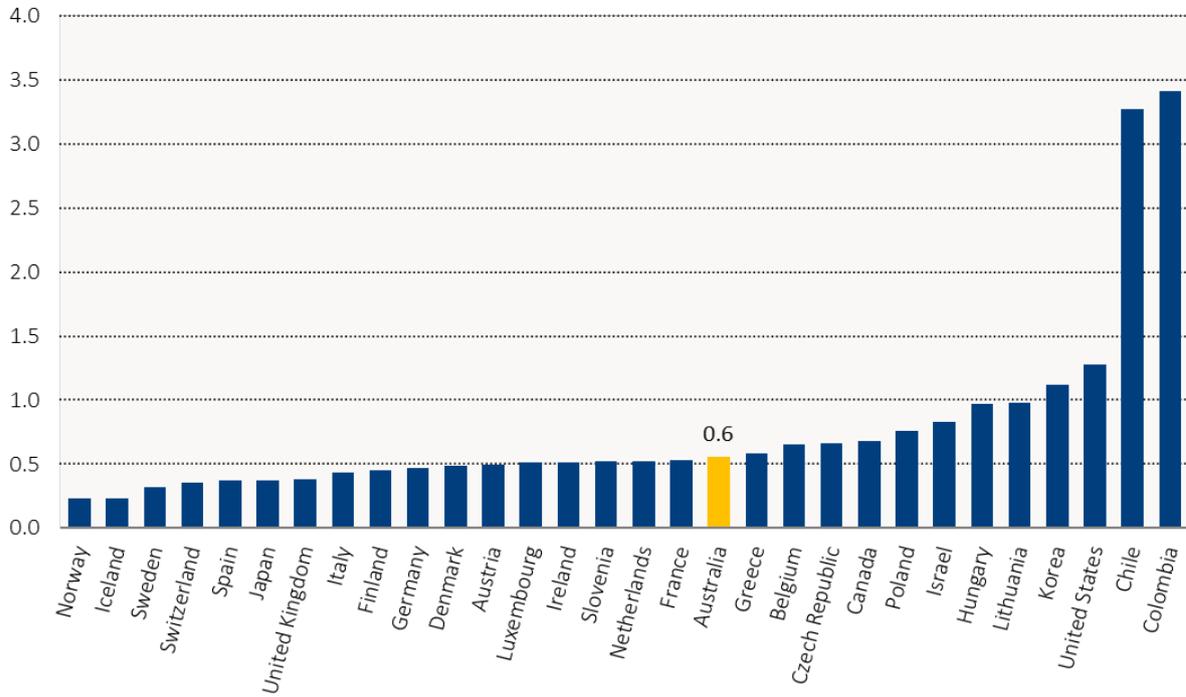
**Figure 1. Evolution of road fatalities, motorisation, traffic and GDP in Australia, 2000-20**



**Figure 2. Road fatalities per 100 000 inhabitants in Australia in comparison with IRTAD countries, 2020**

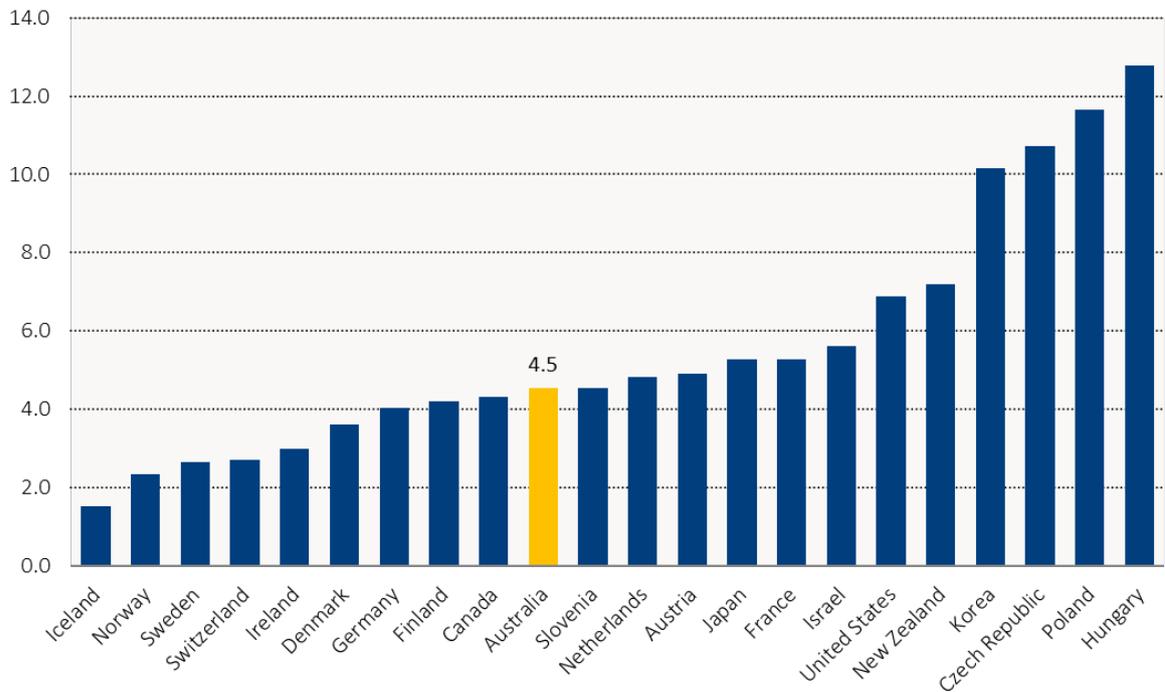


**Figure 3. Road fatalities per 10 000 vehicles in Australia in comparison with IRTAD countries, 2020**

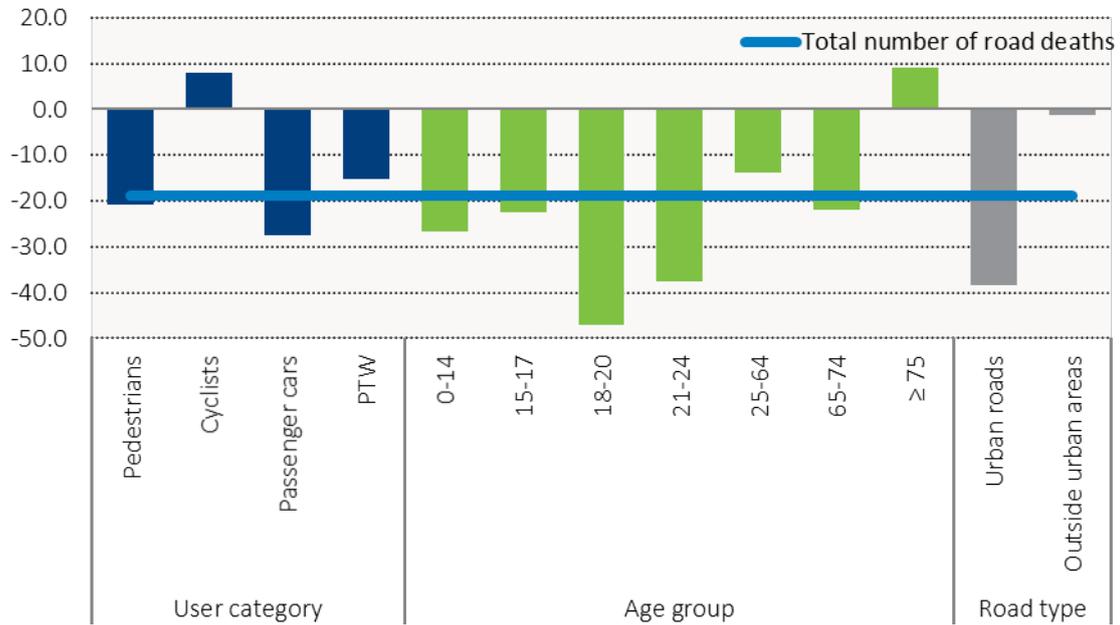


Note: in Belgium, Denmark, Germany and Hungary registered vehicles do not include mopeds.

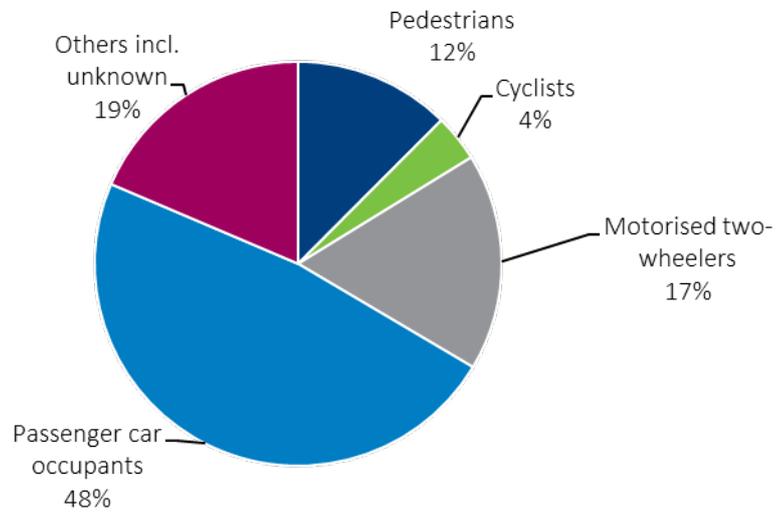
**Figure 4. Road fatalities per billion vehicle-kilometres in Australia in comparison with IRTAD countries, 2019**



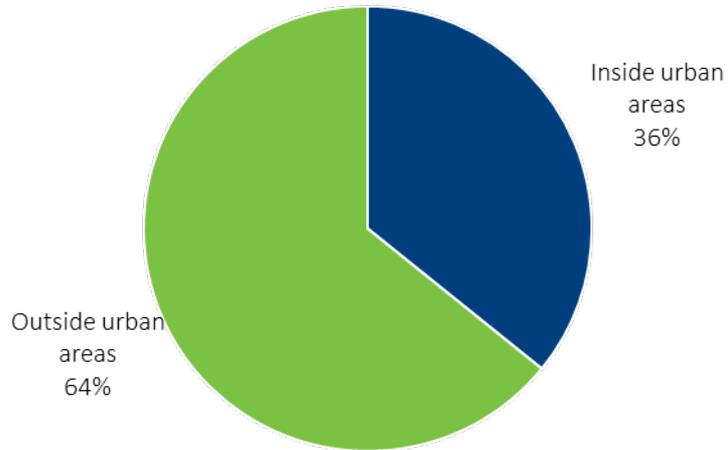
**Figure 5. Evolution of road fatalities in Australia by user category, age group and road type, 2010-20**



**Figure 6. Road fatalities in Australia by user category, 2020**

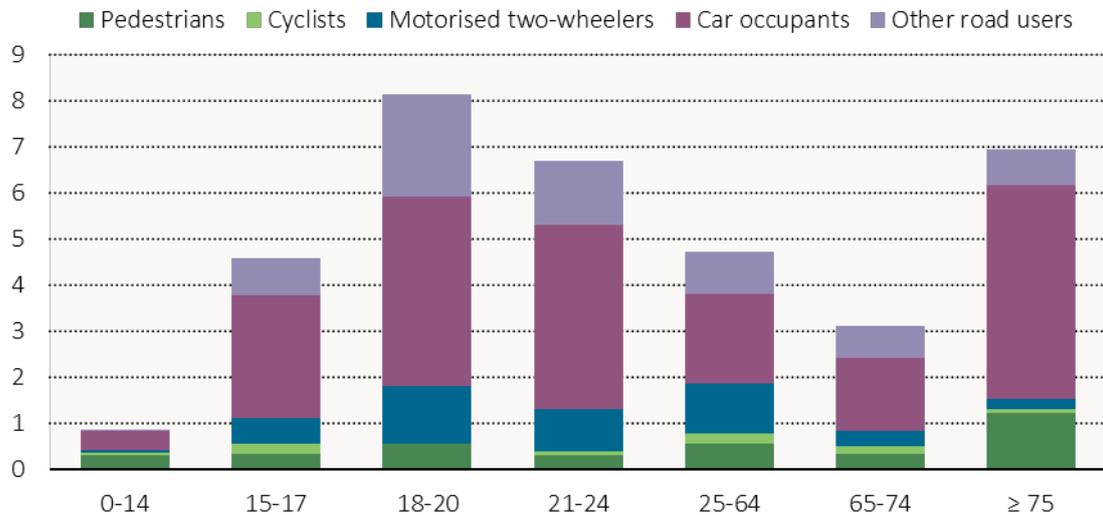


**Figure 7. Road fatalities in Australia by road type, 2020**



**Figure 8. Road fatality rate by user category and age group in Australia, 2020**

Rate per 100 000 population in the same age group



**Table 2. Cost of road crashes in Australia, 2006**

	Total (AUD)
Fatalities	9.9 billion
Injury and disability	10.3 billion
Property damage and other costs	6.9 billion
<b>Total</b>	<b>27.1 billion</b>
<b>Total as % of GDP</b>	<b>1.8</b>

**Table 3. Seat belt and helmet wearing rates**  
Percentages

	2000	2012	2018
<b>Front seats</b>			
General (driver and passenger)	96	97	97
Urban roads (driver)	..	97	97
Rural roads (driver)	..	94	97
<b>Rear seats</b>			
General	89	94	95
<b>Helmet</b>			
Riders of motorised two-wheelers	..	99	99

## Research and resources

### Publications

Australian cycling safety: [https://bitre.gov.au/publications/2015/is\\_071.aspx](https://bitre.gov.au/publications/2015/is_071.aspx).

National Road Safety Strategy 2021-2030: <https://www.roadsafety.gov.au/nrss/>.

### Websites

Austrorads programme of road safety research: <https://austrorads.com.au/projects>.

Department of Infrastructure, Transport, Regional Development and Communications: <https://www.infrastructure.gov.au/>.

Office of Road Safety: <https://officeofroadsafety.gov.au>.

Bureau of Infrastructure, Transport and Regional Economics: <https://bitre.gov.au/>.

Road safety statistics: <https://bitre.gov.au/statistics/safety/>.

Road safety performance: <http://roadsafety.gov.au/performance/>.

2018 Inquiry into the National Road Safety Strategy: <https://www.roadsafety.gov.au/nrss/inquiry.aspx>.

2019 Review into National Road Safety Governance Arrangements: <https://www.roadsafety.gov.au/nrss/2019-governance-review.aspx>.

Austrorads: <http://www.austrorads.com.au/>.

ARRB (Australian Road Research Board): <https://www.arrb.com.au/>.

Monash University Accident Research Centre: <https://www.monash.edu/muarc/research/research-areas/transport-safety>

## Definition, methodology, data collection

- Road fatality: a person who died immediately or within 30 days of a crash.
- Seriously/slightly injured: Australia does not have systems in place to reliably measure national indicators of injuries from road crashes, in part due to jurisdictional differences in injury definitions and reporting arrangements.
- The current agreed definition of a serious injury for national reporting is confirmed admitted to the hospital, irrespective of the length of stay or medical severity rating.

A national pilot project was undertaken to link hospital and crash datasets, successfully completed in April 2019. A second stage was underway to extend linkage to all jurisdictions and produce historical linked series. This second stage will provide baseline data for the next National Road Safety Strategy and inform future consideration of a national definition of what constitutes a serious injury. After completing this second stage in mid-2022, establishing an ongoing monitoring process may become possible.

In Australia, crash data are collected and validated by the police and transport agencies in each of the eight states and territories.

A national crash database of casualty crashes, managed by the federal Department of Infrastructure, Transport, Regional Development and Communications, is used for reporting against the National Road Safety Strategy 2021-2030 fatality targets. This database is the source of the fatality data included in this report. It is not possible to use this database for national reporting of injury road crash data as there are substantial differences in the injury definitions adopted by the Australian states and territories.