



2017

**Preliminary summary
of fatalities on
Western Australian roads**



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by the Road Safety Commission

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Foreword



Michelle Roberts MLA
Minister for Police and Road Safety

This report reminds us that our roads can be dangerous places and we cannot take our safety for granted.

While there are many causes of road fatalities, their results are the same; needless deaths and tragic consequences for those left behind.

The McGowan Government is implementing measures to enhance road safety in Western Australia to reduce road fatalities and serious injuries.

We have restored the primacy of the work of the Road Safety Council, put in place new laws to protect cyclists and roadside

emergency workers, and are strengthening penalties for drink and drug drivers, including strict bans for recidivist offenders.

I commend the Road Safety Council and the Road Safety Commission for the important work that they do. I thank the Acting Road Safety Commissioner, Mr Iain Cameron, and his staff, for producing this document. It serves both as a milestone on our journey to safer roads and as a spur to further action.

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Introduction



Iain Cameron
Acting Road Safety Commissioner

The preliminary crash statistics show 161 people were killed on WA roads during 2017, the equal lowest since reliable records began in 1961 but no comfort to the families and friends and a higher burden for our community compared to most other States.

While the 161 road fatalities are a 20% reduction since the start of the State's *Towards Zero* safety strategy for 2008-2020, it is well above the 120 or less required to achieve the aspirational aim of a 40% reduction by 2020.

Fatalities on metropolitan roads continue to reduce gradually but the fatalities on regional roads are fluctuating with the 91 people killed last year, lower than the five-year average.

Police suspect that in 102 of the fatalities at least one of four behavioural factors (speed, alcohol, inattention and fatigue) contributed. There was a 112% increase (n=28) in inattention related crashes above the five-year average of 13.

Males comprised 81% of all fatalities.

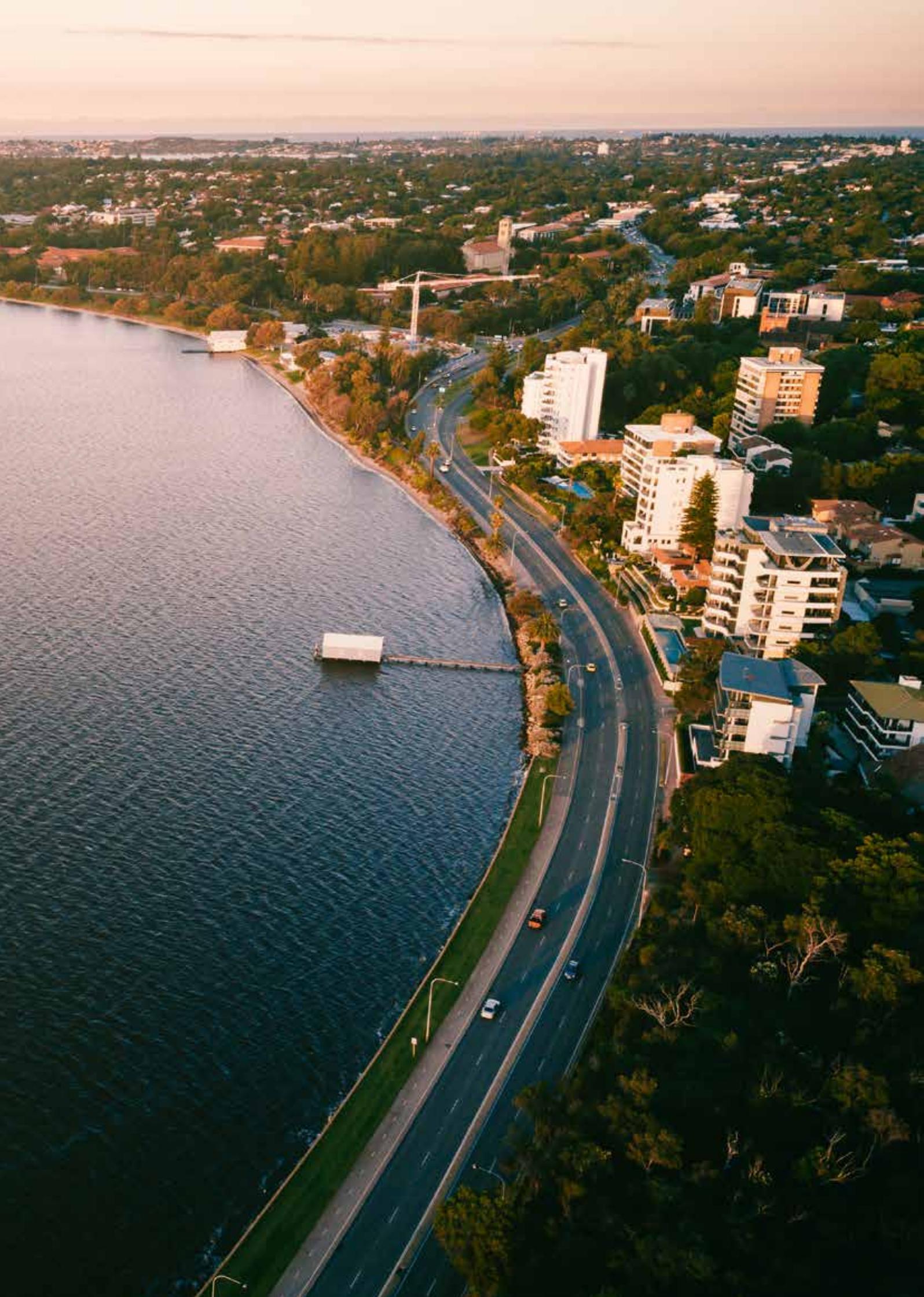
One third (n=52) of fatalities were vulnerable users (motorcyclists, cyclists and pedestrians).

A holistic, safe system approach to road safety improvement is the focus in WA. This is consistent with leading national and international practice. A safe system recognises about 70% of all serious crashes are due to human error rather than deliberate risk taking and seeks to improve behaviour through education and enforcement while managing the safety of vehicles, speeds and the road and roadside infrastructure to provide room for driver error so that when a crash occurs, the consequences are less likely to be serious.

The analysis of crash data continues to inform practice as we all work together *Towards Zero* on our roads.

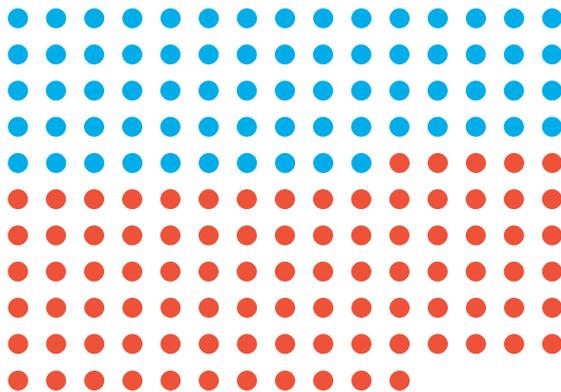






Preliminary summary of fatalities in 2017

161 people died on WA roads in 2017 with **70** in the metropolitan area and **91** in regional areas.



2017 had the equal lowest number of road deaths since records began in 1961.



50 people were killed in crashes related to speed.

20-29

Overall, the most people killed in road crashes were aged between 20 and 29 (n=32).



35 deaths were due to alcohol-related crashes.



81% (n=130) of people who died were male.



28 people were killed in inattention-related crashes.



62% (n=16) of motorbike deaths were in the metropolitan area.



16 lives were lost in fatigue-related crashes.



Of the seven cyclists killed, three were not wearing helmets.



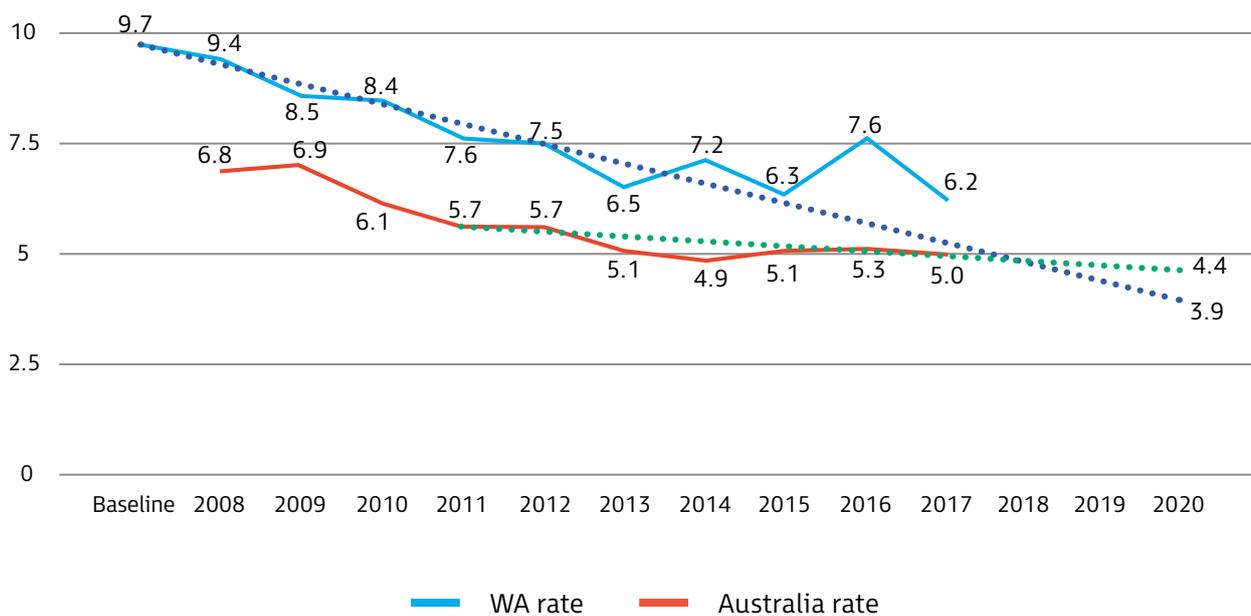
22 motor vehicle occupants (includes passengers) killed were not wearing seatbelts.

Overview

In 2017, the WA fatality rate per 100,000 persons was 6.2, the equal lowest since records began in 1961. This is also lower than the baseline rate (2005-2007 average: 9.7) before implementation of the State Government's road safety strategy *Towards Zero 2008-2020*.

Despite this reduction, WA's fatality rate is currently higher than anticipated if we are to meet the ambitions of the *Towards Zero Road Safety Strategy* (estimated to be 3.9 fatalities per 100,000 persons) and also higher than the current national average (5.0).²

Figure 1. Fatality rates per 100,000 population¹



- WA Towards Zero 2008-2020
- National Road Safety Strategy 2011-2020

¹Denominators from Australian Bureau of Statistics. (2017). Australian demographic statistics, Australia, June 2017, (Catalogue No. 3101.0). Retrieved from <http://www.abs.gov.au/ausstats/abs@.nsf/mf/3101.0>

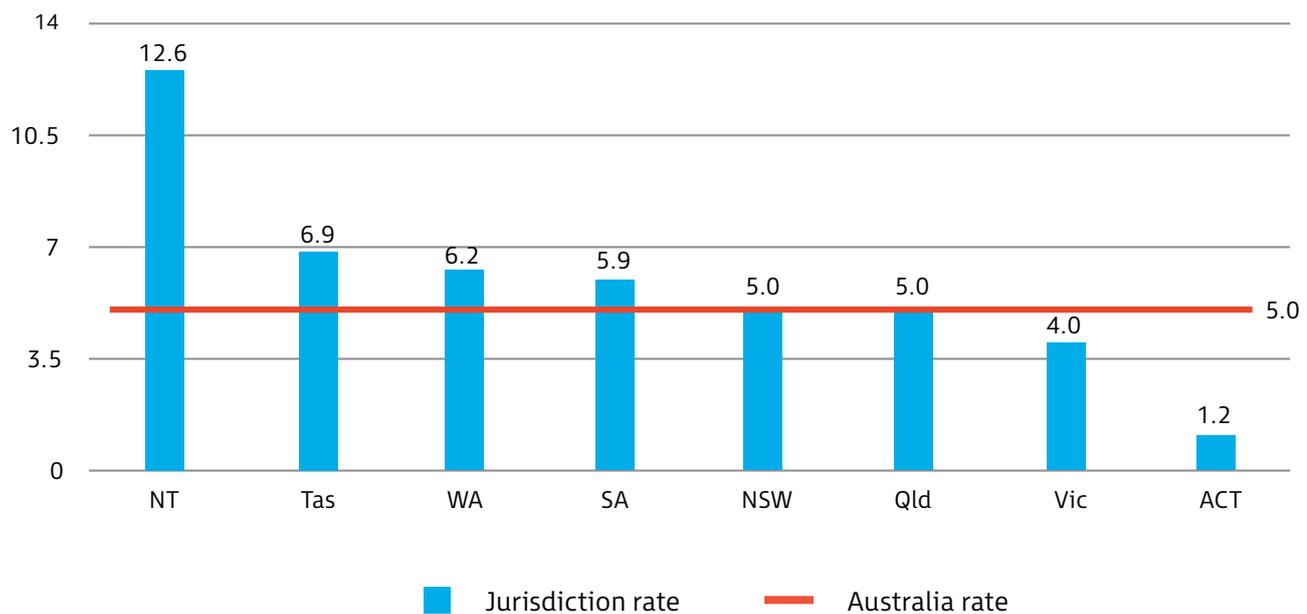
²Department of Infrastructure, Regional Development and Cities (BITRE). Australian Road Deaths Database, December 2017. Retrieved from https://bitre.gov.au/statistics/safety/files/BITRE_ARDD_Fatalities_December_2017.xlsx

In 2017, there were 161 fatalities in reported road crashes in Western Australia.

This represents a nine per cent reduction compared with the preceding five-year average of 176.

These reductions have occurred despite ongoing increases in our population and the number of registered motor vehicles and licensed drivers and riders.^{3,4,5}

Figure 2. Fatality rates per 100,000 persons by jurisdiction, 2017^{1,2}



³Australian Bureau of Statistics. (2017). Australian demographic statistics, Australia, June 2017, (Catalogue No. 3101.0). Retrieved from <http://www.abs.gov.au/ausstats/abs@.nsf/mf/3101.0>

⁴Australian Bureau of Statistics. (2017). Motor Vehicle Census, 31 January 2017, (Catalogue No. 9309.0). Retrieved from <http://www.abs.gov.au/AUSSTATS/abs@.nsf/mf/9309.0>

⁵Motor vehicle drivers licence counts provided by Department of Transport, Western Australia.

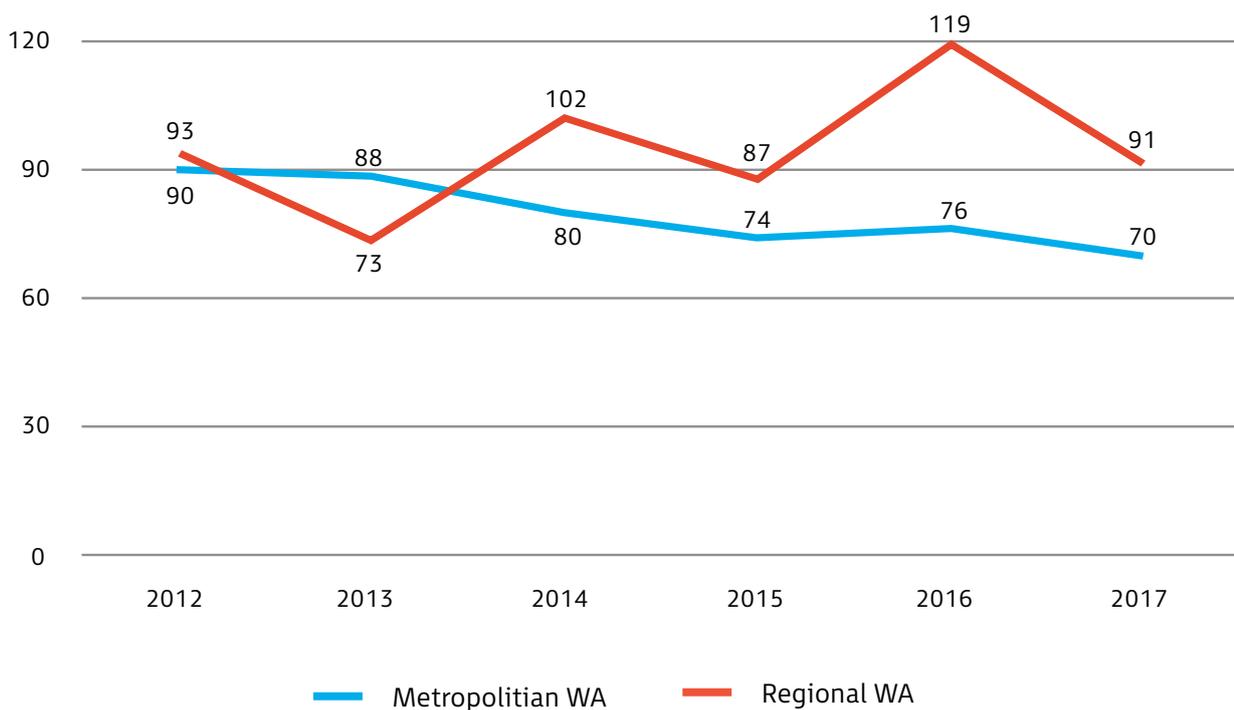
Table 1. Fatality counts and rates

	Fatality Count	Rate per 100,000 persons
2012	183	7.5
2013	161	6.5
2014	182	7.2
2015	161	6.3
2016	195	7.6
2017	161	6.2

Consistent with trends, the majority (57%, n=91) of the 2017 road fatalities were a result of crashes in regional WA. This is fewer than the preceding five-year average (n=95).

There were 70 deaths in metropolitan WA; a reduction compared with the preceding five-year average (n=82).

Figure 3. Fatality counts by region





WA Police Force Districts

These districts are based on WA Police Force operational boundaries and are different from regions normally reported by the Road Safety Commission.

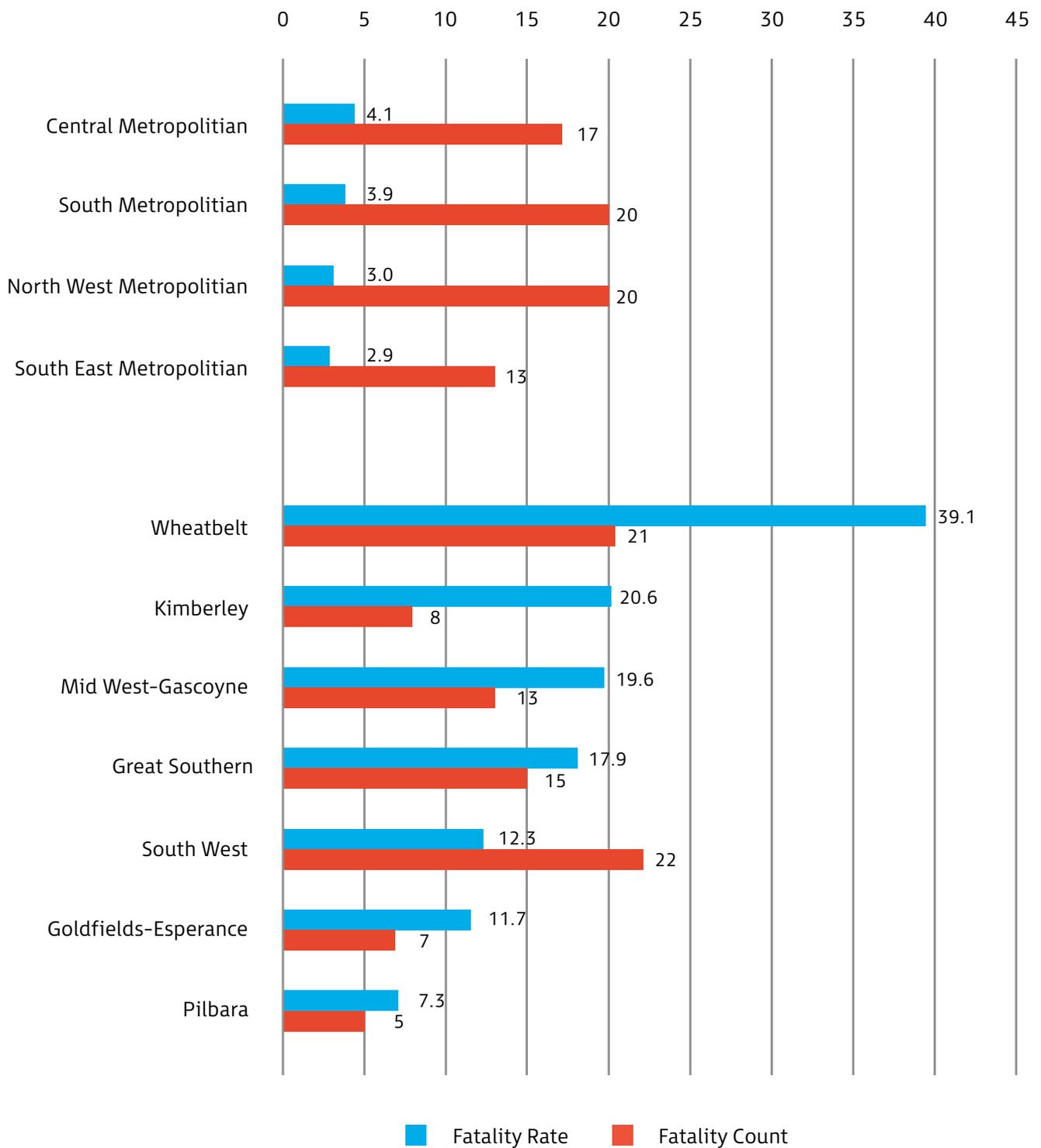
Consistent with previous years, the regional districts had consistently higher fatality rates than

districts in the metropolitan area.

In 2017, the Wheatbelt police district had the highest fatality rate per 100,000 persons (39.1). In contrast, the South East Metropolitan police district had the lowest fatality rate (2.9).⁶



Figure 4. Indicative fatality rates per 100,000 persons and fatality counts by WA Police district, 2017⁶



⁶The rate denominators are estimated population counts for WA Police Force districts which were prepared for the WA Police Force by the Australian Bureau of Statistics in 2015. District boundaries may have changed since then and this may affect reliability of the calculated rates.

Local Government areas (LGAs)

The LGAs with the highest fatality count are shown in Table 2. These 11 LGAs accounted for one third (37%, n=59) of all fatalities in 2017.

The crashes in these LGAs were distributed evenly across local government (56%) and State-controlled roads (44%).

Table 2. Fatalities by LGA of crash - Top 11

Local Government Areas	Fatality Count
Shire of Gingin	7
City of Stirling	7
City of Wanneroo	7
City of Armadale	6
City of Albany	5
City of Cockburn	5
City of Rockingham	5
City of Swan	5
Shire of Broome	4
City of Geraldton	4
City of Joondalup	4
Total	59

Temporal characteristics

In 2017, there was an average of 13 fatalities a month. The number of fatalities were highest in December (n=22) and April (n=19).

Friday had the highest number of fatalities (n=33)

when compared with other days of the week.

Fatalities in metropolitan and regional areas were most common between the hours of 3:00pm and 5:59pm (n=37).

Roads and speed zones

Of the 161 fatalities in 2017, 82 were a result of crashes on state roads and 79 were on local government roads.

Most fatalities occurred in 110km/h zones (36%, n=58), followed by 50km/h zones (16%, n=25) and 60km/h zones (14%, n=23). The 50km/h speed zones were the only zones to see an increase in

fatalities in 2017 compared with the preceding five-year average.

Most regional fatalities happened in 110km/h speed zones (57%, n=52), while most metropolitan fatalities occurred in 60km/h speed zones (26%, n=18).

WA's road network currently comprises 5,115 km of National Land Transport Routes (maintained by the State), 13,399 km of state roads and 129,159 km of local roads.⁷

Table 3. Fatalities by speed zone

	2012	2013	2014	2015	2016	Five-year average	2017
<=40km/h	4	2	5	1	0	2.4	5
50km/h	19	20	17	11	19	17.2	25
60km/h	31	29	30	21	24	27.0	23
70km/h	14	20	21	16	16	17.4	15
80km/h	20	18	14	19	16	17.4	15
90km/h	11	6	11	17	13	11.6	8
100km/h	8	12	14	11	10	11.0	10
110km/h	67	52	65	65	94	68.6	58
Not recorded	9	2	5	0	3	3.8	2
Total	183	161	182	161	195	176.4	161

⁷Main Roads WA. (2017). Road Facts Summary Sheet.

Retrieved from <https://annualreports.mainroads.wa.gov.au/AR-2017/appendices/road-fact-summary/>

Crash nature

Nearly one third (30%, n=48) of the 2017 fatalities resulted from crashes into objects such as walls and trees. This is fewer compared with the preceding five-year average (n=56).

Crashes into objects such as walls and trees was also the most common crash type for fatalities in metropolitan WA (26%, n=18). This is comparable to the preceding five-year average (n=22). While the distribution across crash nature remained reasonably constant, metropolitan fatalities in

rear-end crashes increased in 2017 (n=12) when compared with the preceding five-year average (n=6).

The most common crash type for fatalities in regional WA was also crashes into objects such as walls and trees (33%, n=30). The distribution of fatalities by crash nature remained relatively stable when compared with the preceding five-year averages.

30% of fatalities in WA were from crashes involving collisions with objects such as walls or trees.



Common behavioural factors *definitions*

Common behavioural factors include alcohol use, speed, fatigue and inattention. These categories should not be summed, as they are not mutually exclusive.



Speed-related crashes include those crashes where police recorded speed as a primary crash factor, either alone or in combination with other factors, and/or where police record speed as a contributing factor. Police may record speed as a contributing factor where at least one vehicle is travelling in excess of the speed limit or at an inappropriate speed for the prevailing conditions.



Fatigue-related crashes include those crashes where police suspected fatigue as a contributing factor and/or the primary crash factor.



Inattention-related crashes include those crashes where police suspected inattention as the primary crash factor.



Alcohol-related crashes include those crashes where the attending police officer suspected alcohol as a primary crash factor, either alone or in combination with other factors, and/or where police suspected that at least one driver or rider in control of a motor vehicle had consumed alcohol.

Common behavioural factors

In 2017, 102 (63%) fatalities were a result of crashes that police suspect involved at least one driver/rider behavioural factor.

Of the behavioural factors reviewed, speed was the most frequently recorded behavioural category. Around one third (31%, n=50) of fatalities were in speed-related crashes. While this is comparable to the preceding five-year average (n=54), it is a decrease of 25% compared with 2016 (n=67).

Approximately one quarter (22%, n=35) of those killed were in alcohol-related crashes – a decrease of 28% on the preceding five-year average (n=49). It is also a 44% decrease compared to the peak in 2016 of 62 fatalities.

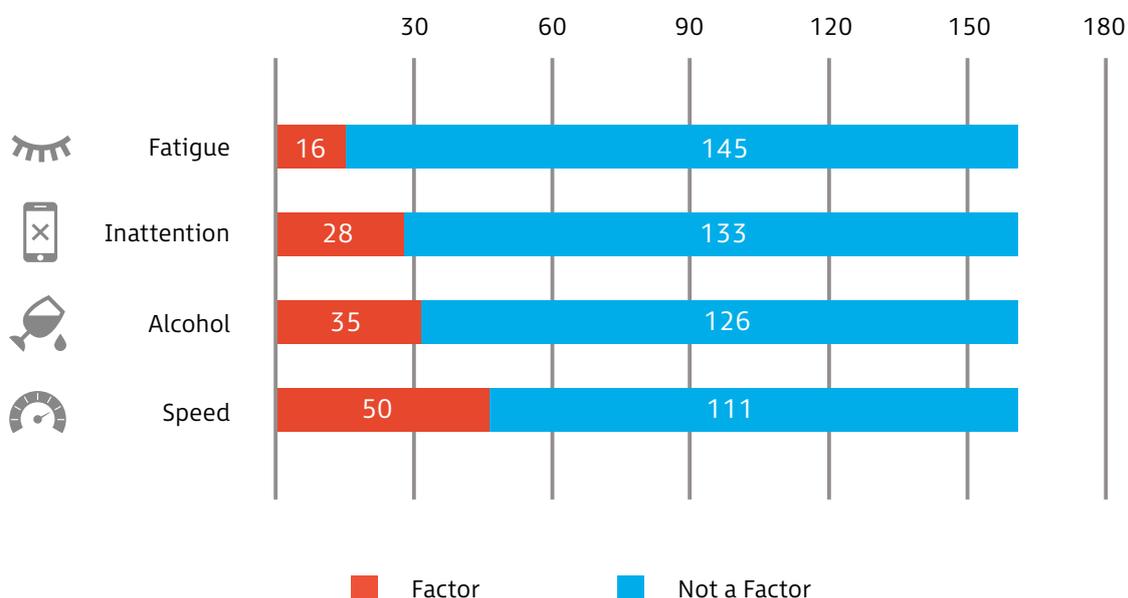
Most (80%, n=28) of the fatalities in alcohol-related crashes occurred in regional WA.

Twenty-eight (17%) fatalities were in inattention-related crashes. This was a 112% increase compared to the preceding five-year average fatality count of 13. This increase was driven largely by fatalities in the metropolitan area, which more than doubled in 2017 (n=16) when compared with the preceding five-year average (n=6).

One in ten (10%, n=16) of those killed in 2017 were in fatigue-related crashes. This was a 25% reduction compared to the preceding five-year average of 21. Most (81%, n=13) occurred in regional WA.

In 2017, 63% of fatalities were a result of crashes with recorded driver behavioural factors.

Figure 5. Number of fatalities by behavioural factor, 2017





Road user type

About a third (32%, n=52) of fatalities in 2017 were vulnerable road users, such as motorcyclists, pedestrians, cyclists and other unprotected road users.

In 2017, motorcyclist fatalities (n=26) decreased compared to the preceding five-year average (n=33). However, motorcyclists were still overrepresented in fatalities. Despite representing only six per cent of the registered vehicles in WA, 16% of fatalities were motorcyclists (n=26).⁴

All of the motorcyclist fatalities in 2017 were male and 42% (n=11) were aged between 20 and 29 years old. The majority (62%, n=16) of motorcyclist fatalities in 2017 were in the metropolitan area.

The number of pedestrian fatalities in 2017 (n=15) is comparable with the preceding five-year average (n=14). The majority (67%, n=10) were in the metropolitan area. The most common age group for pedestrian fatalities was 80 years old or more (n=5).

Cyclist fatalities in 2017 (n=7) were comparable with the preceding five-year average (n=5). Of the seven cyclists killed, three were aged 70-79 years old and five were in the metropolitan area.

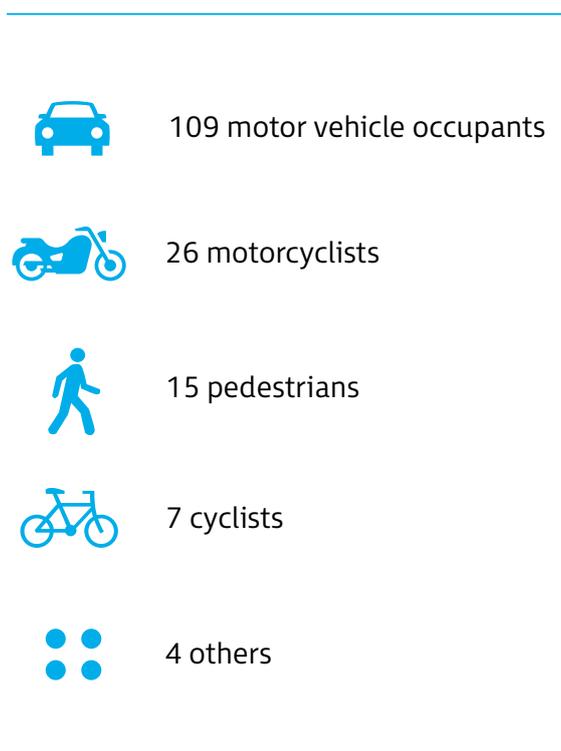


Table 4. Fatalities by road user and year

Road user type	2012	2013	2014	2015	2016	Five-year average	2017
Motor vehicle occupant	123	96	113	120	137	117.8	109
Vulnerable road user	60	65	69	41	58	58.6	52
Motorcyclist	34	25	44	23	39	33.0	26
Pedestrian	23	31	16	13	14	19.4	15
Bicyclist	3	6	8	4	3	4.8	7
Other*	0	3	1	1	2	1.4	4
Total	183	161	182	161	195	176.4	161

*Other includes gophers, horse and skateboard riders

Gender

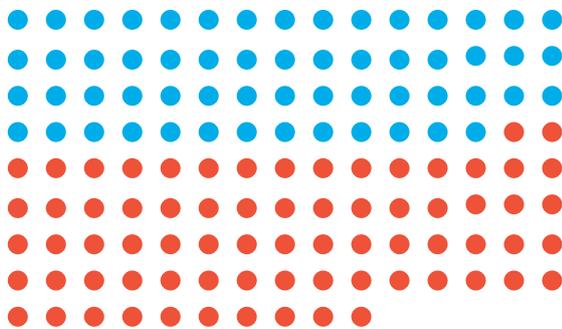
Males were overrepresented in fatalities, comprising 81% (n=130) of lives lost in 2017, but only 50% of the WA population.¹

Of the 161 fatalities, 31 (19%) were female.

While the proportion of fatalities who are female has decreased compared with the preceding five-year average (26%, n=46), males representation has increased compared to the five-year average (74%, n=130).

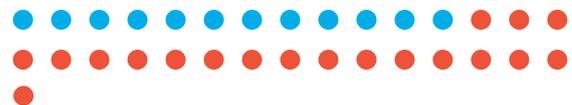
Males

58 metropolitan, 72 regional



Females

12 metropolitan, 19 regional



¹Denominators from Australian Bureau of Statistics. (2017). Australian demographic statistics, Australia, June 2017, (Catalogue No. 3101.0). Retrieved from <http://www.abs.gov.au/ausstats/abs@.nsf/mf/3101.0>

⁴Australian Bureau of Statistics. (2017). Motor Vehicle Census, 31 January 2017, (Catalogue No. 9309.0). Retrieved from <http://www.abs.gov.au/AUSSTATS/abs@.nsf/mf/9309.0>

Age

The highest number of fatalities in 2017 was in the 20-29 year age group (20%, n=32). Figure 6 shows that this age group and fatalities aged 30-39 years decreased compared with the preceding five-year average. However, fatalities aged 80 years and over (12%, n=20) increased markedly compared with the five-year average (5%, n=9). The majority of these fatalities were in the metropolitan area, where fatalities aged 80 years and over increased from five in the preceding five-year average to 15 in 2017.

The 80 years and over age group fatality rate (23.1) was substantially higher than the Statewide rate (6.2) and was also the highest age-specific fatality

rate for 2017^{1,2}. It should be noted that this may vary year to year due to the comparatively small proportion of people aged 80 years and over.

Figure 7 shows the age-specific fatality rates for 2017 and the preceding five-year average. The age group with the lowest fatality rate in 2017 was the 0-16 age group (1.4 per 100,000 population). When compared with the preceding five-year average, most age groups remained relatively stable. The biggest changes were seen in an increase in the 80 years and over age group and decreases in the 17-19, 20-29 and 30-39 year age groups.

Eight children aged 0-16 were killed in road crashes in 2017.



¹Denominators from Australian Bureau of Statistics. (2017). Australian demographic statistics, Australia, June 2017, (Catalogue No. 3101.0). Retrieved from <http://www.abs.gov.au/ausstats/abs@.nsf/mf/3101.0>

Figure 6. Fatalities by age, five-year average and 2017

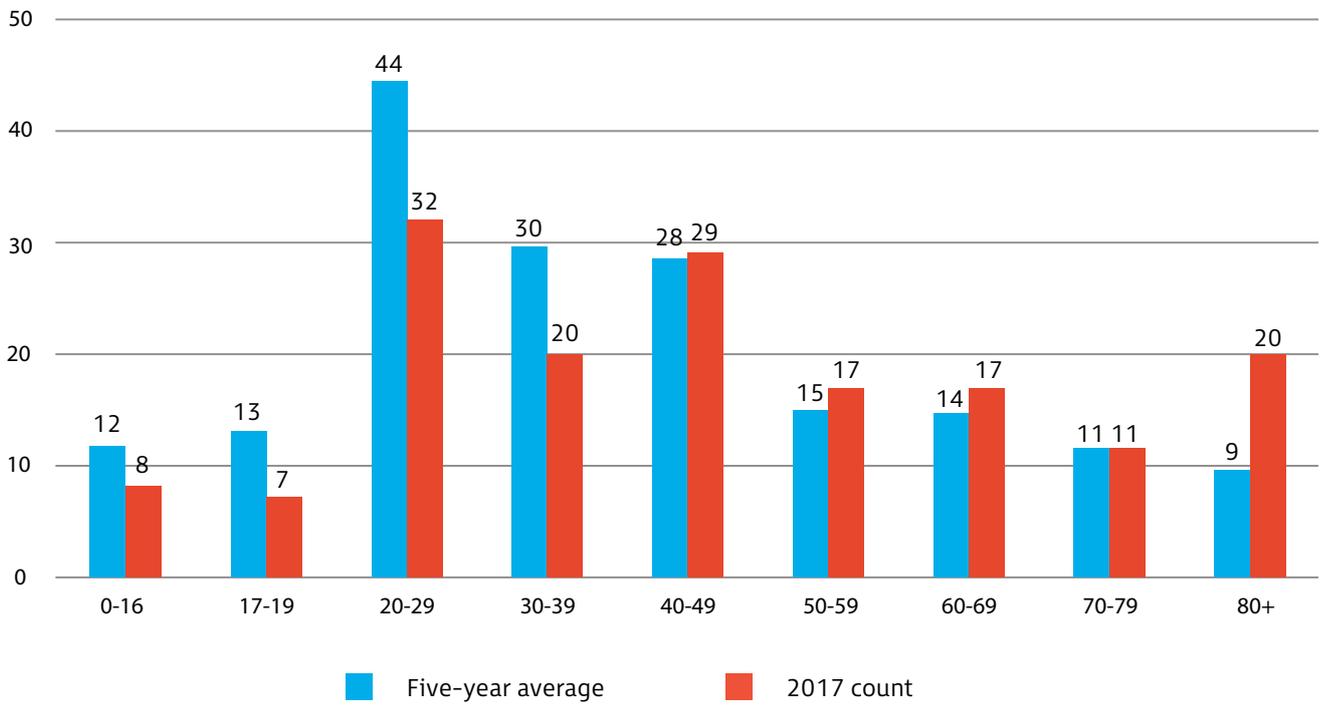
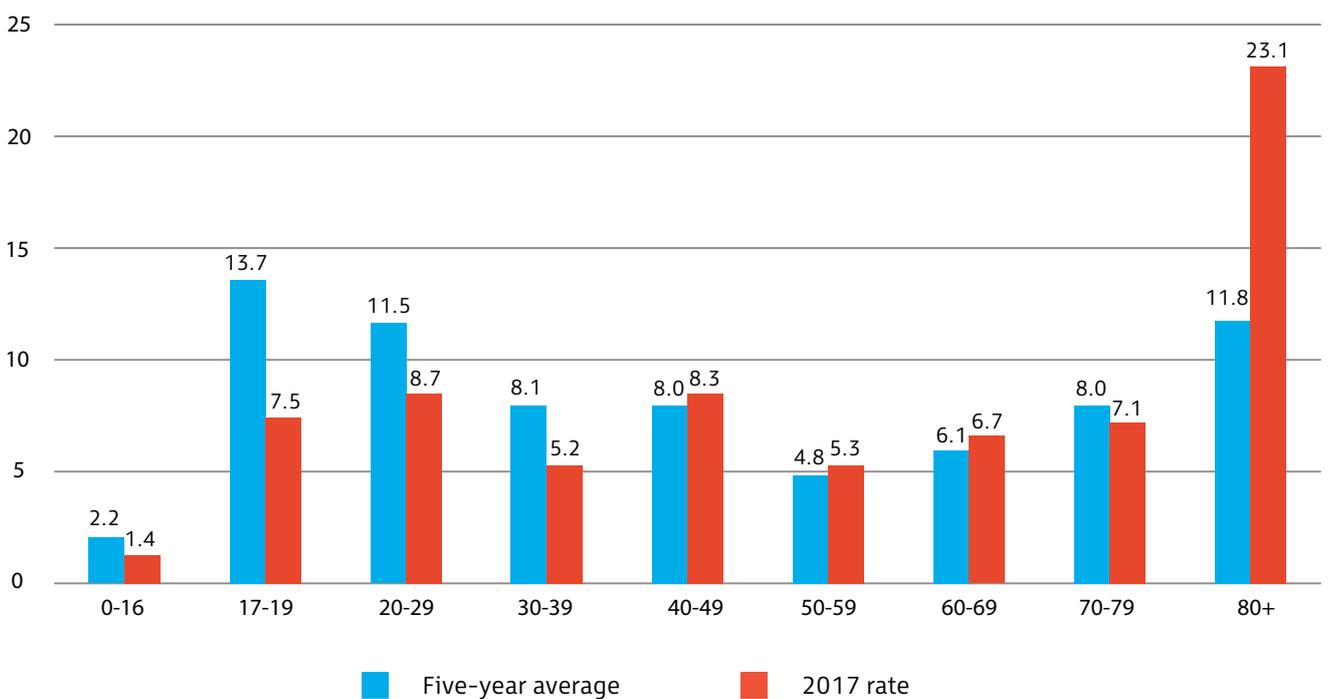


Figure 7. Age-specific fatality rates, five-year average and 2017¹



¹Department of Infrastructure, Regional Development and Cities (BITRE).
 Australian Road Deaths Database, December 2017.
 Retrieved from https://bitre.gov.au/statistics/safety/files/BITRE_ARDD_Fatalities_December_2017.xlsx

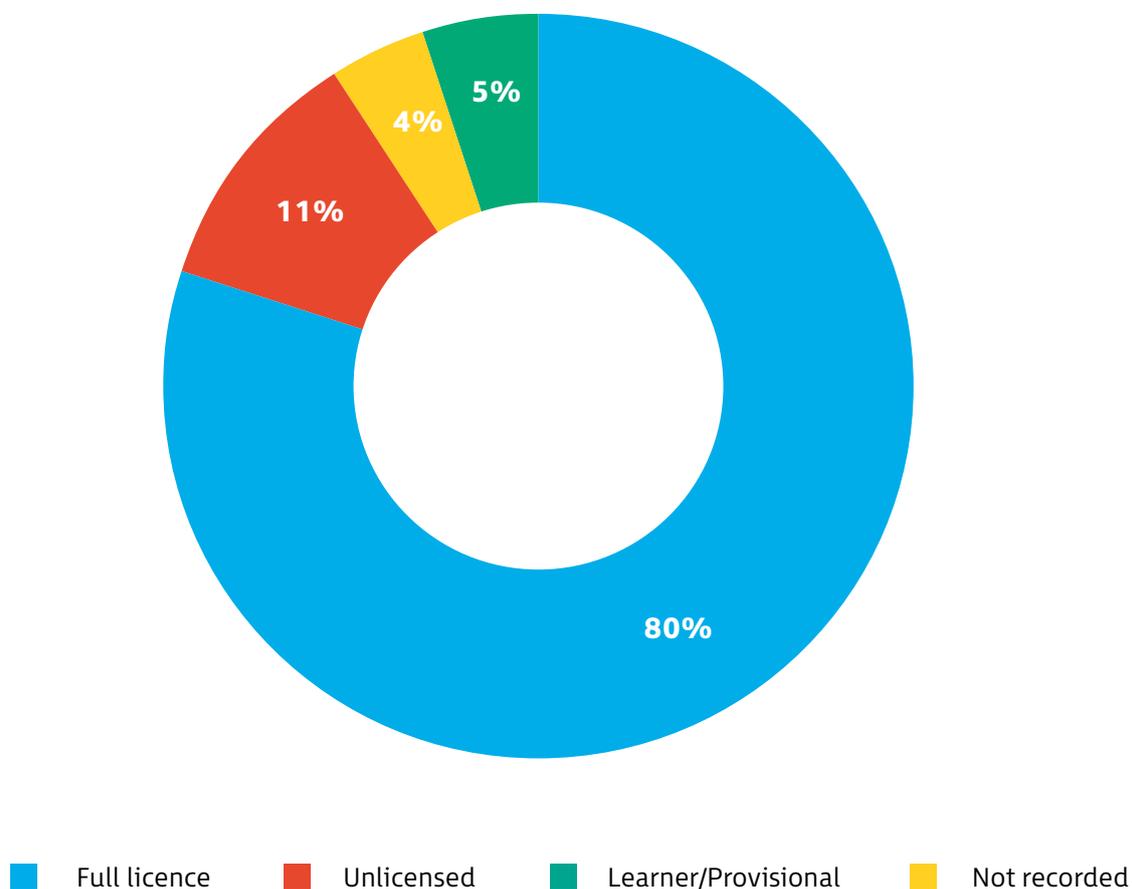
Licence type

In 2017, the majority (80%, n=171) of recorded motor vehicle drivers and riders involved in fatal crashes had a full licence (This includes people who were involved in crashes but did not necessarily die e.g. they were driving the other car in a crash where someone was killed).

However, one in ten (11%, n=24) had no licence or an expired, inappropriate, suspended or cancelled licence. This number is fewer than the preceding five-year average of 34. It should be noted, however, that involvement does not infer liability.

11% of recorded drivers/riders involved in fatal crashes were unlicensed.

Figure 8. Motor vehicle driver/riders involved in fatal crashes by licence type, 2017



Seatbelts and helmets

Of the 109 Motor Vehicle Occupant (MVO) fatalities in 2017, 22 (20%) were not wearing a seat belt at the time of the crash. Most (82%, n=18) of these 22 fatalities occurred in regional WA.

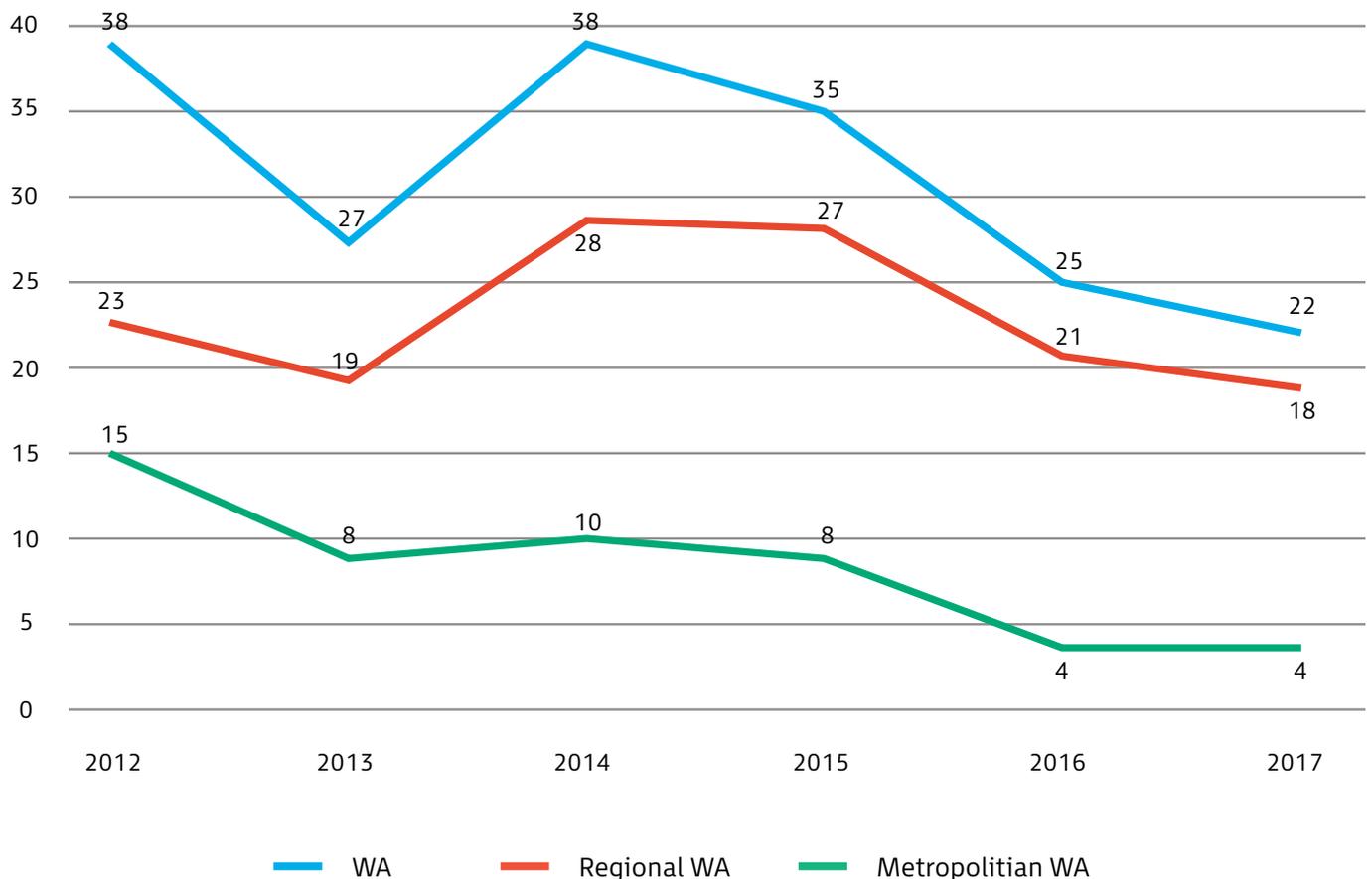
There was a 24% decrease in the number of regional fatalities not wearing a seat belt at the

time of the crash in 2017 (n=18) compared with the preceding five-year average (n=24).

Four of the 26 motorcyclists and three of the seven cyclist fatalities were not wearing a helmet at the time of the crash.

Three of the seven cyclist fatalities were not wearing a helmet at the time.

Figure 9. Motor vehicle occupant fatalities recorded as not wearing an appropriate restraint by region and year



Definitions

This publication presents statistics on fatalities as a result of crashes that occurred from 1 January up to and including 31 December 2017.

Unless otherwise identified, the Road Safety Commission prepared the numbers reported in this publication based on preliminary fatality data provided by the WA Police Force. This data was extracted on 18 January, 2018. Numbers may change in the future due to police investigation, coronial inquiry or upgrade of injuries. For this reason, comparisons between this publication and others may result in discrepancies.

A fatality is defined as a person killed immediately or within 30 days of the crash, as result of the crash.

This publication reports on fatalities as a result of reportable road crashes that occurred on roads open to the public including normal road use in metropolitan and regional WA.

Regional WA includes remote areas. This definition excludes fatalities from crashes where the cause of the crash was a medical condition or premeditated intent to cause harm. This publication adopts WA Police Force definitions.

Please note that these may differ from those regularly reported by the Road Safety Commission (or by the former Office of Road Safety). This information should also be considered with the following caveats:

- (1) These statistics have been derived from WA Police Force data, but the calculations have not been endorsed by WA Police Force.
- (2) The information was sourced from the WA Police Force via the WA Police Force Traffic Enforcement and Crash Executive Information System.
- (3) The information is provisional and may be subject to revision.
- (4) Any minor apparent discrepancies in percentages when comparing current year to five-year average are due to rounding of the average in the publication text. The percentages are correct using the raw five-year average.



Saving Lives Together