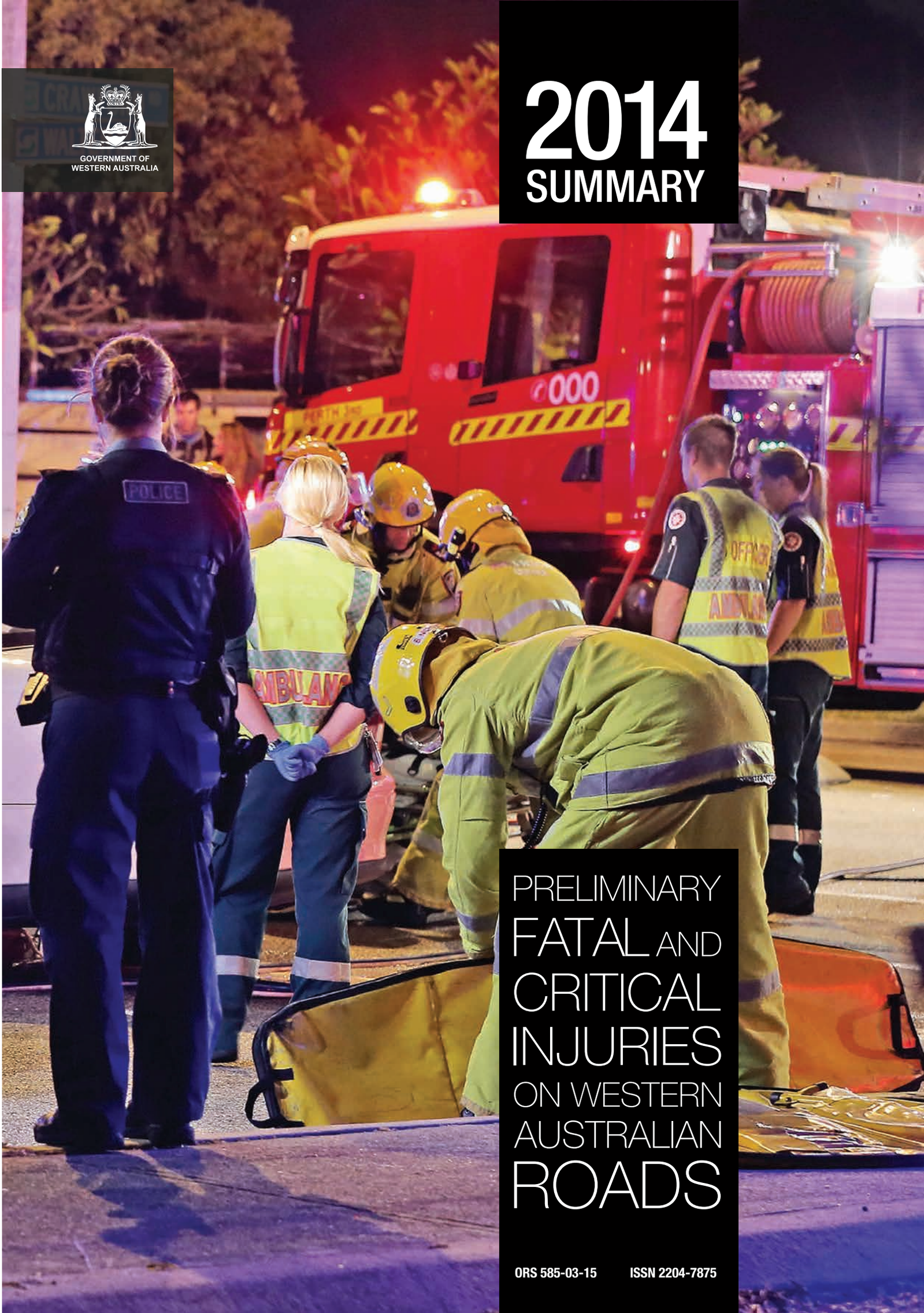

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Foreword

There have been encouraging signs that Western Australians may be heeding life-saving road safety messages based on the preliminary fatal and critical injury statistics summarised in this document.

The rate of fatalities on Western Australian roads has dropped 25 per cent since 2008 and we are on the way towards meeting the ambitions of the State Government's road safety strategy, *Towards Zero*. As the Minister for Road Safety, I welcome this promising data as we pass the halfway mark of this twelve-year strategy.

However this positive trend will bring little comfort to the families and friends of the 184 individuals killed on WA roads last year. Our State's fatality rate remains higher than the national rate and critical injuries in 2014 were above the preceding five-year average.

This Government continues to employ measures to reduce serious road trauma through safer roads, enforcement and education to ensure WA's road fatality rate continues on a long-term, downward trend. We remain committed to building a safe road system which provides the greatest chance of survival – even when road users make a mistake on the road.

As we start 2015, our community must strive harder to reduce road trauma. The Government is doing a lot of work to make driving safer in Western Australia, but it cannot ride in the passenger seat of every vehicle and motorists must do their bit. Road safety is a shared responsibility.

This document provides a statistical snapshot of road trauma for policy makers, the media and the broader community, in turn allowing for key evidence-based decisions to be made to make WA roads safer for everyone.

Liza Harvey

Hon. Liza Harvey MLA
Minister for Police; Road Safety;
Training and Workforce Development; Women's Interests

Preliminary fatal and critical injuries summary 2014

Unless otherwise identified, the numbers reported in this publication are prepared by the Office of Road Safety (ORS) based on preliminary fatal and critical injury data provided by the WA Police. This data is accurate as at 27 January, 2015. Numbers may change in the future due to police investigation, coronial inquiry or upgrade of injuries. WA Police definitions will be used throughout the publication. Please note that these may differ from those regularly reported by the ORS.

This publication reports on fatalities and critical injuries sustained in reportable road crashes occurring on roads open to the public and arising from normal use of the road in Perth metropolitan, WA regional and remote areas. The regional figures include the remote areas.

This will exclude injuries from crashes where there was a medical condition or premeditated intent to cause harm. Fatalities are defined as those persons killed immediately or within 30 days of the crash from injuries sustained in the crash. Critical injuries are defined as those who sustain injuries in a road crash that 'are of such a nature as to endanger life, or to cause, or be likely to cause, permanent injury to health'. [1]

WA and national trends

As shown in Figure 1, WA's fatality rate has reduced significantly since 2001 but it currently sits a bit above the expected trend required to meet the ambitions of the *Towards Zero* Road Safety Strategy. However, there are still more fatalities per 100,000 persons (7.2) than the national fatality rate (4.9).

Western Australia has a growing road network, currently comprised of 5,111 km of National Land Transport Routes, 13,490 km of State roads and 130,820 km of local roads (Regional Digest 2013-2014).[2]

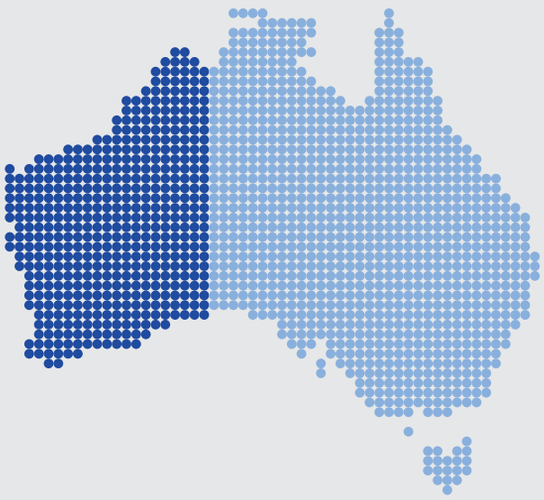
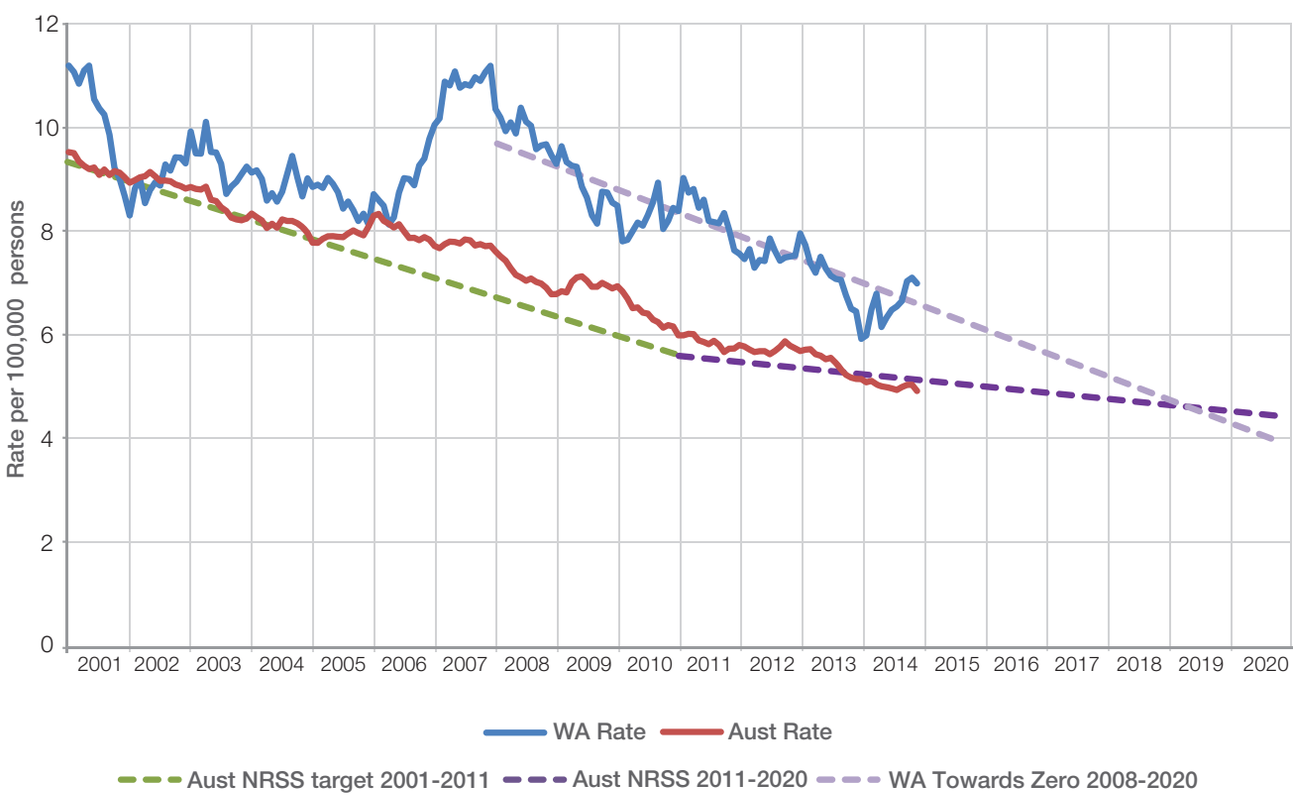


Figure 1. Rolling 12 month fatality rates per 100,000 persons for WA compared to Australia[3]

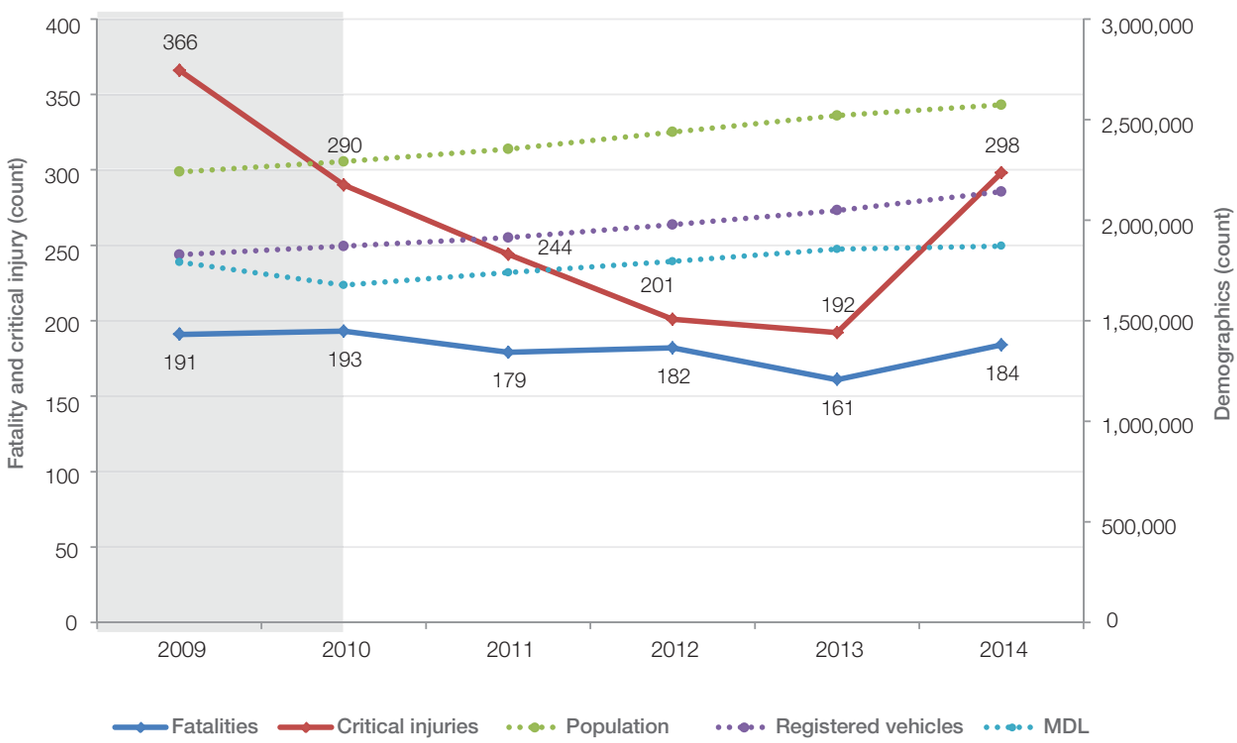


[1] *RAC & WA Police (2012). Fatal & serious injury summary 2011, p7.*
[2] *Regional Road Length Statistics, Road Information Services, Main Roads WA, August 2013.*
[3] *Source: Road Deaths Australia - Monthly Bulletins Series, BITRE ; ABS Australian Demographic Statistics series (3101.0), Population Projections, Australia (3222.0).*

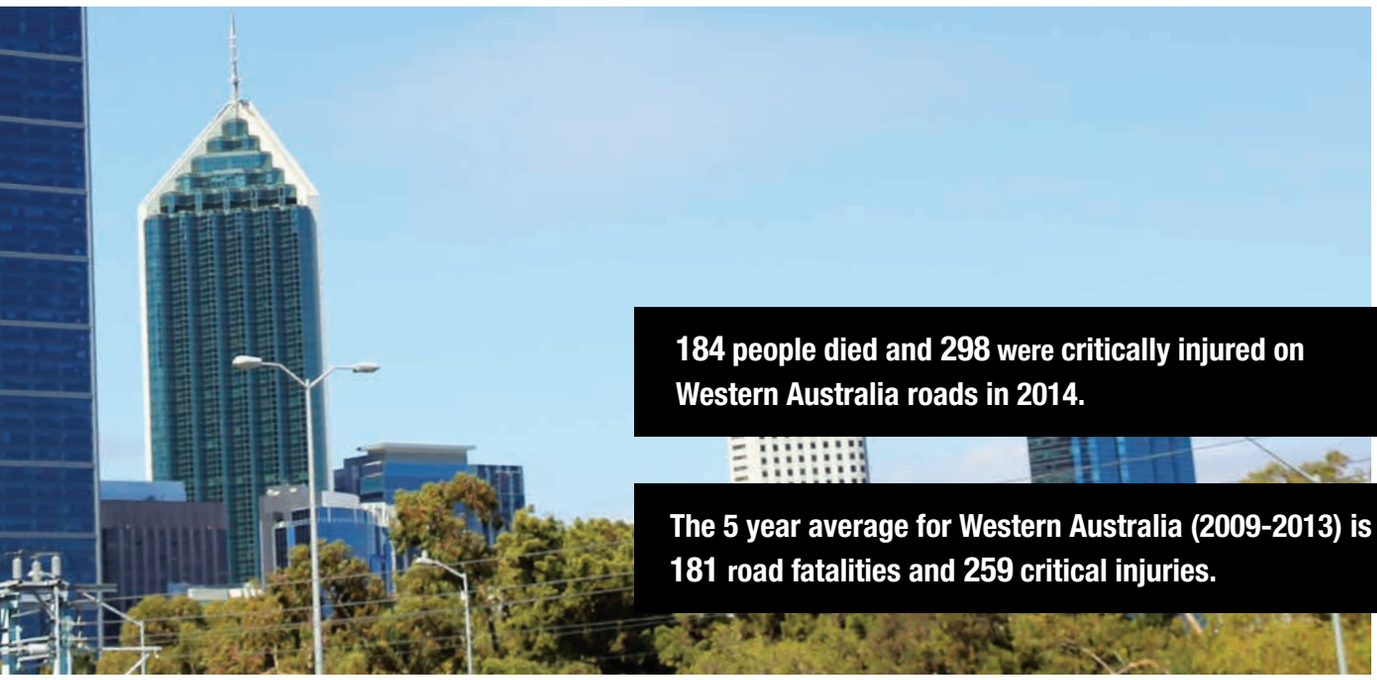
Trends in WA fatalities and critical injuries

In 2014, there were 184 fatalities and 298 critical injuries in reported road crashes in Western Australia, compared to the preceding five-year average (2009-2013) of 181 fatalities and 259 critical injuries. This increase has occurred at the same time as ongoing increases in WA's population, vehicle kilometres travelled, registered vehicles and licensed motor vehicle drivers.

Figure 2. Fatalities, critical injuries and demographics by year, WA, 2009-2014



In mid-2010, the process for confirming a critical injury was improved.
This change may affect the comparability of critical injuries before and after this time.



184 people died and 298 were critically injured on Western Australia roads in 2014.

The 5 year average for Western Australia (2009-2013) is 181 road fatalities and 259 critical injuries.

The fatality rate per 100,000 persons has reduced over the past six years from 8.5 in 2009 to 7.2 in 2014. The critical injury rate per 100,000 persons has also reduced from 16.3 in 2009 to 11.6 in 2014.

Table 1. Fatality and critical injury rates, WA, 2009-2014 [4]

Year	Fatalities	Rate per 100,000 persons	Rate per 100 million VKT	Rate per 10,000 registered vehicles	Rate per 10,000 Motor Vehicle Driver's Licences
Fatalities					
2009	191	8.5	0.8	1	1.1
2010	193	8.4	0.8	1	1.2
2011	179	7.6	0.7	0.9	1
2012	182	7.5	0.7	0.9	1
2013	161	6.4	0.6	0.8	0.9
2014	184	7.2	0.7	0.9	1
Critical injuries					
2009	366	16.3	1.4	2	2
2010	290	12.7	1.2	1.6	1.7
2011	244	10.4	1	1.3	1.4
2012	201	8.2	0.8	1	1.1
2013	192	7.6	0.7	0.9	1
2014	298	11.6	1.1	1.4	1.6

[4] *Sources: Population counts (ABS Cat no. 3101.0, release 18/12/2014); VKT (BITRE < http://www.bitre.gov.au/publications/2012/is_044.aspx >); Registered vehicle counts (ABS cat no. 9309.0, release 30/07/2014); MDL counts (Department of Transport, 2014)*

Trends in WA fatalities and critical injuries

Although there have been decreases in the fatality and critical injury counts in WA, these reductions were not experienced equally across Metropolitan and Regional WA. As Figures 3 and 4 show, Regional WA has seen a greater reduction in both fatality and critical injuries over the five years than Metropolitan WA. In 2014 the number of regional fatalities returned to 2010 levels, up from the record low in 2013. Critical injuries in 2014 increased sharply following several years of decline.

Figure 3. Fatalities by region and year, 2009-2014

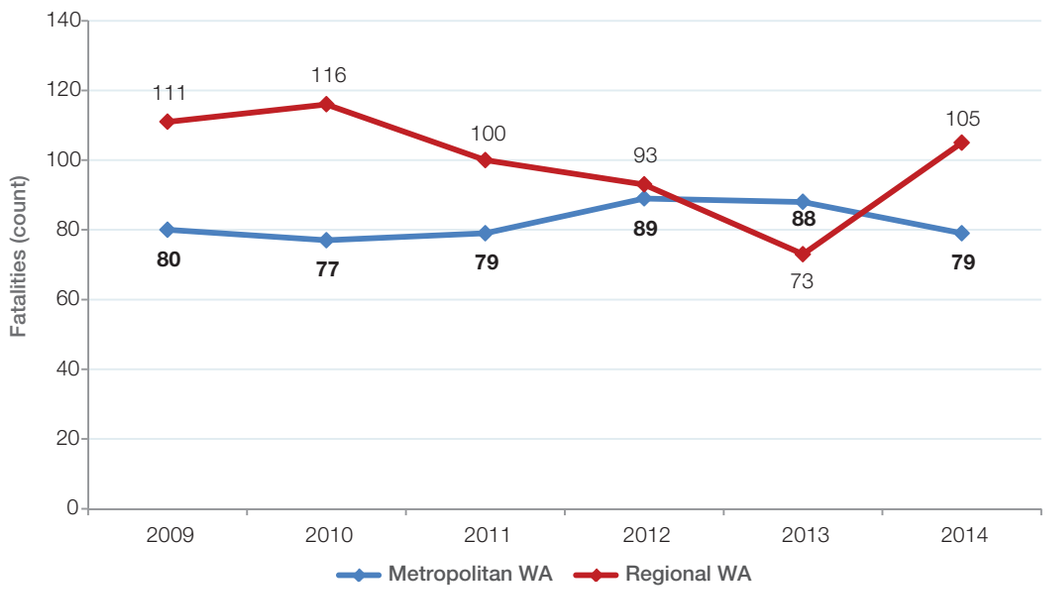
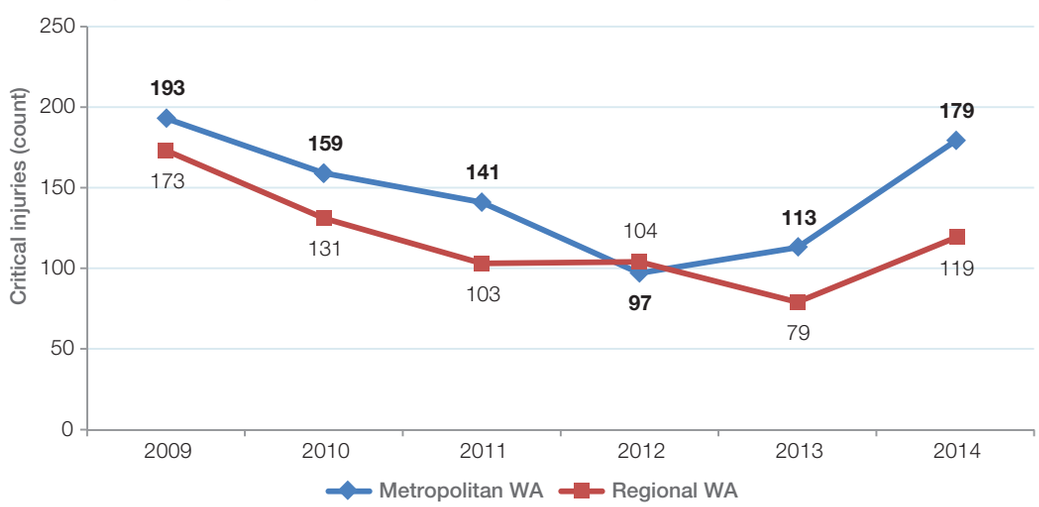


Figure 4. Critical injuries by region and year, 2009-2014



Police district

The districts reported here are based on WA Police boundaries for operational districts and do not equate to those regions normally reported by the ORS. As shown in Figure 5, fatality rates per 100,000 persons are higher in regional WA than in the Metropolitan area.

In 2014, the Wheatbelt police district had the highest fatality rate per 100,000 persons (49.8), while the North West Metropolitan district had the lowest rate at 3.2 fatalities per 100,000 persons.

Gender

Despite males consistently representing half of the WA population over the past six years, 73% (135) of the 184 fatalities in 2014 were male and 27% (49) were female. This gender distribution of fatalities is similar to the preceding five-year average, where 72% (130) were male and 28% (51) were female. Of the 298 critical injuries in 2014, 69% (205) were male and 31% (93) were female. This is similar to the average gender distribution of critical injuries in the preceding five years, where 32% (83) were female and 68% (175) were male.

Figure 5. Indicative fatality rates per 100,000 persons and fatality counts by WA Police district, 2014 [5]

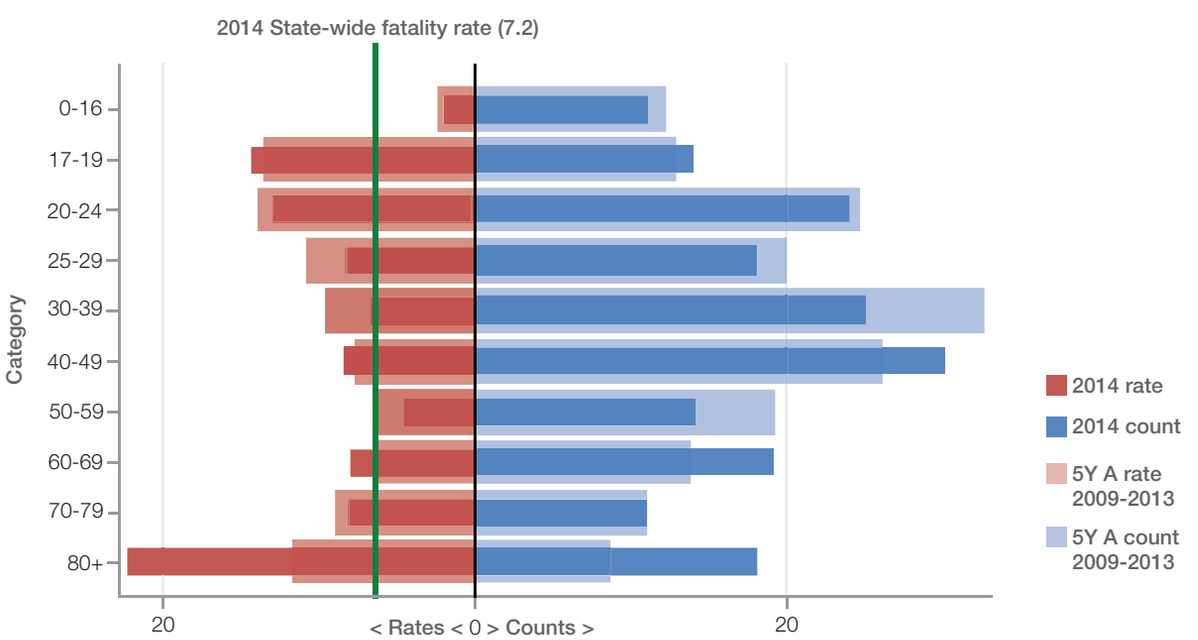
Age

In 2014, the highest number of fatalities 16% (30) was in the 40 – 49 year age group. The highest number of critical injuries 16% (49) was in the 25 – 29 year age group. Many of the age groups showed a reduction in fatality counts and an increase in critical injury counts when compared to the preceding five-year average. Of concern are the increases in the number of 60 – 69 year old fatalities (19 in 2014 compared to the preceding five-year average of 14), and the number of 80 years and over age group fatalities (18 in 2014 from a preceding five-year average of nine). The number of 20 – 24 year old critical injuries decreased to 36 in 2014 from a preceding five-year average of 41.

The number of 30 – 39 year old critical injuries also decreased to 39 in 2014 from a preceding five-year average of 42. Figure 6 compares the 2014 age-specific fatality counts and rates to the preceding five-year average. Taking into account age-specific populations, the 80 years and over age group had the highest fatality rate per 100,000 persons (22.3) in 2014.

In 2014, the 17 – 19 and 25 – 29 year age groups had the highest critical injury rates per 100,000 persons (30.5 and 22.7 respectively).

Figure 6. Comparison of 2014 fatality counts and rates to the preceding five-year averages



[5] *Rate denominators were prepared for the WA Police by the Australian Bureau of Statistics and are population counts for 2011 by WA Police district.*

Trends in WA fatalities and critical injuries

Road user type

The proportion of motor vehicle occupant fatalities has decreased from 71% (135) in 2009 to 63% (115) in 2014. This improvement has not been mirrored in the number of road users killed in 2014. The proportion of motorcyclist fatalities has increased from 16% (31) in 2009 to 24% (44) in 2014. Cyclist fatalities have increased to 4% (8) in 2014 from 0% (0) in 2009. Pedestrian fatalities have reduced to 9% (17) in 2014, from 13% (25) in 2009.

Table 2. Fatalities by road user type and year, WA

Road user type	2009		2010		2011		2012		2013		2014	
	n	%	n	%	n	%	n	%	n	%	n	%
Motor vehicle occupant	135	71	138	72	122	68	122	67	95	59	115	63
Motorcyclist	31	16	35	18	28	16	34	19	25	16	44	24
Pedestrian	25	13	15	8	26	15	23	13	31	19	17	9
Cyclist	0	0	4	2	3	2	3	2	6	4	8	4
Other	0	0	1	1	0	0	0	0	4	2	0	0
Total	**191**	**100**	**193**	**100**	**179**	**100**	**182**	**100**	**161**	**100**	**184**	**100**

Licence type

In 2014, the majority 79% (183) of motor vehicle drivers/riders who were involved in fatal crashes were driving with an appropriate licence. However, 19% (43) had either no licence or an expired, inappropriate, suspended, or cancelled licence. This proportion was higher than the preceding five-year average 12% (26). It must be noted that this information does not infer liability: drivers and riders involved may not have been at fault in the crash.

Common contributing factors

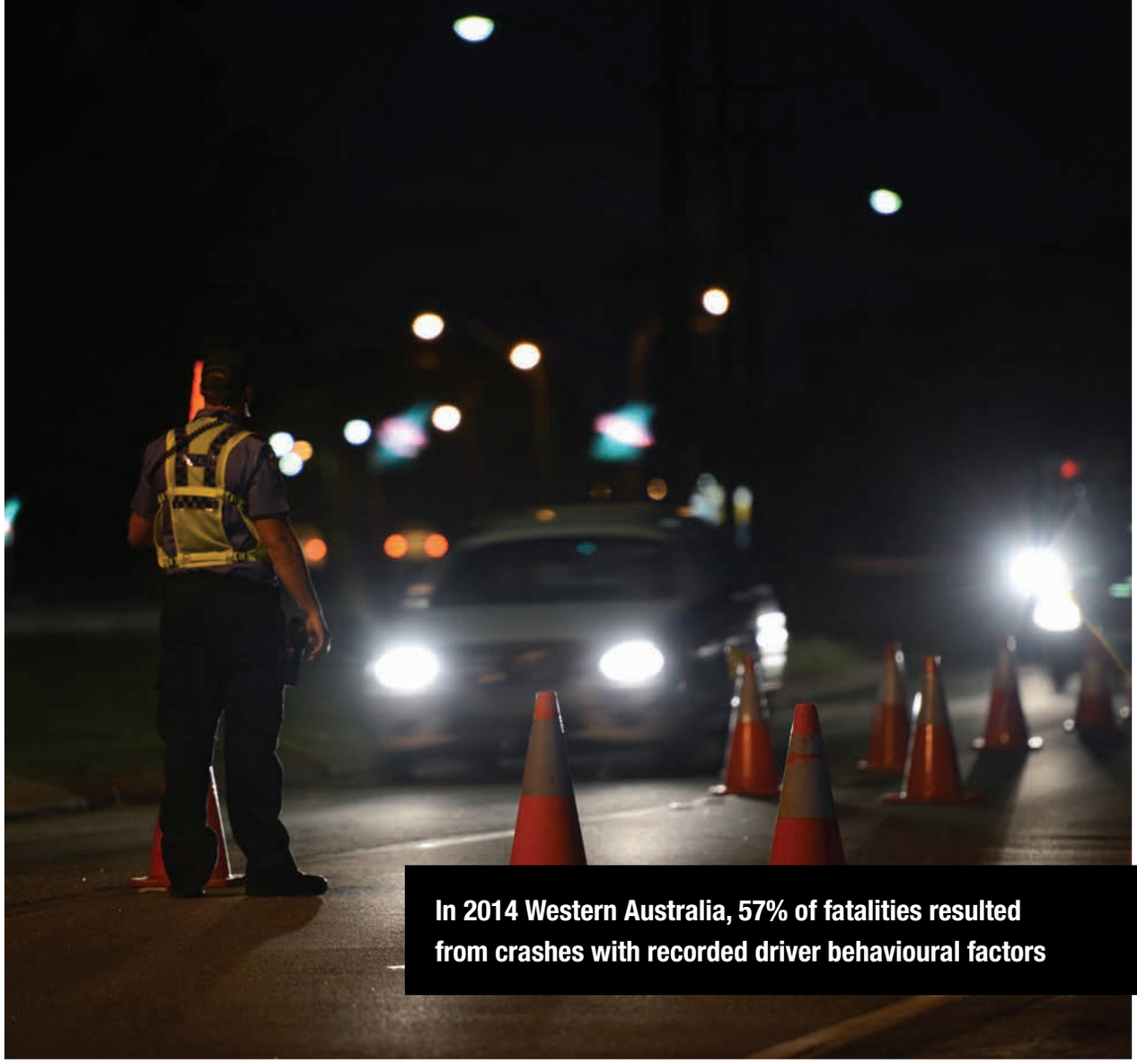
Alcohol-related crashes include those crashes where the attending police officer identified as a primary crash factor, the consumption of alcohol by at least one driver/rider of a motor vehicle alone and/or in combination with other contributing factors.

Speed-related crashes include those crashes where speed was recorded as a contributing factor and/or identified as a primary crash factor (alone or in combination) by the attending police officer. Speed may be listed as contributing to a crash when at least one of the vehicles was travelling in excess of the speed limit or at a speed inappropriate for prevailing conditions.

Fatigue as a factor includes those crashes where fatigue was flagged as a contributing factor and/or as a primary crash factor by the attending police officer.

Inattention is recorded as a factor in crashes where inattention was identified as a primary crash factor by the attending police officer.

These factors are discussed overleaf in Figure 8.

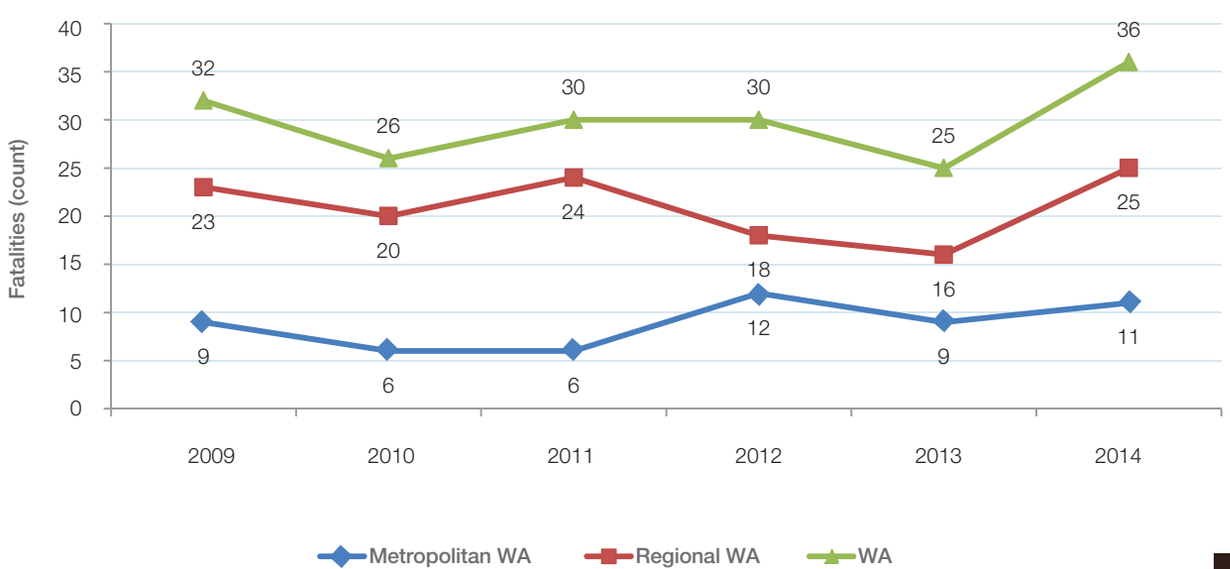


In 2014 Western Australia, 57% of fatalities resulted from crashes with recorded driver behavioural factors

Restraint and helmet usage

There were 115 known motor vehicle occupant (MVO) fatalities in 2014, 31% (36) of these were recorded as not wearing an appropriate restraint at the time of the crash. In Regional WA, 30% (25) of the 84 MVO fatalities in 2014 were recorded as not wearing a restraint, compared to 24% (23) in 2009. In Metropolitan WA, 35% (11) of the 31 MVO fatalities were recorded as not wearing a restraint compared to 24% (9) in 2009. Two of the 44 motorcyclist fatalities and three of the eight bicycle fatalities were recorded as not wearing a helmet at the time of the crash.

Figure 7. Motor vehicle occupant fatalities recorded as not wearing an appropriate restraint by region and year, WA, 2009-2014



Trends in WA fatalities and critical injuries

Figure 8 shows the number of fatalities in 2014 and their contributing factors. A significant proportion - 43% (80) - were killed in crashes that did not have alcohol, speed, fatigue, or inattention recorded as a contributing factor by the attending police officer.

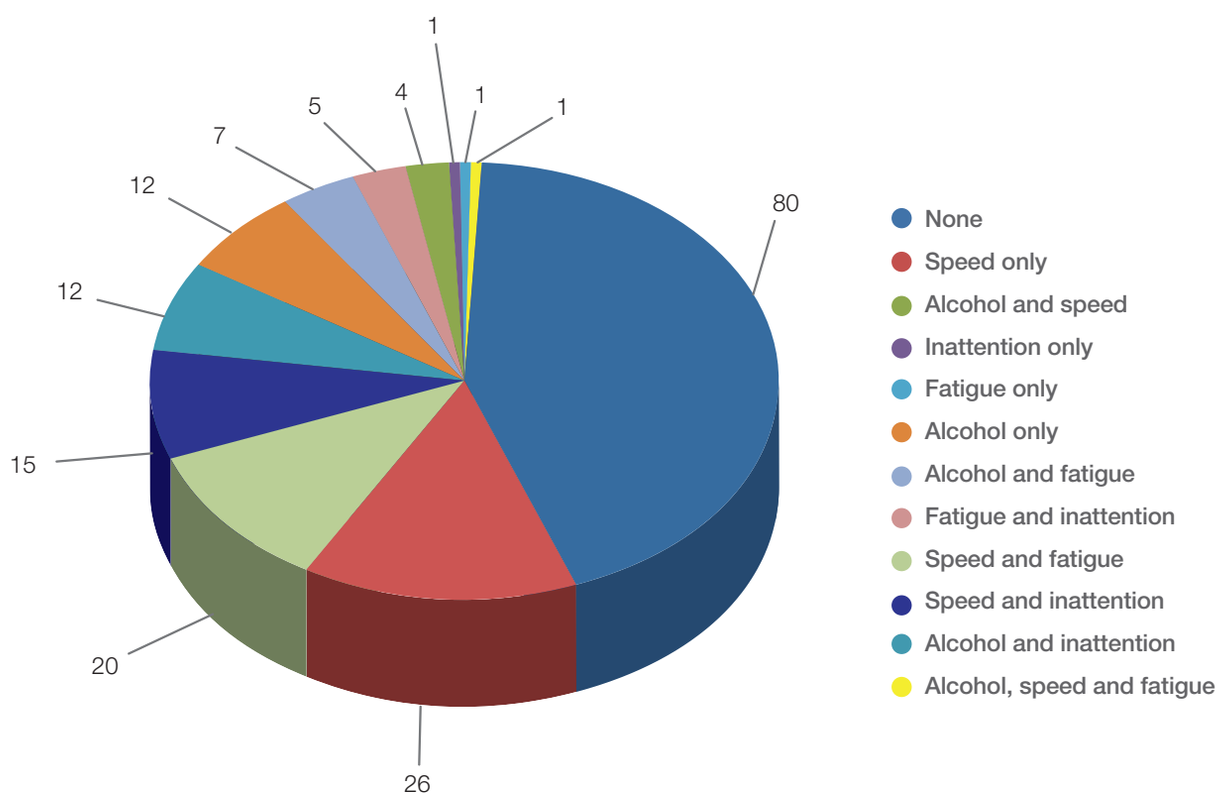
The results for critical injuries are different to fatalities. For critical injuries, the most common contributing factors were inattention alone and speed alone, with 14% (41) and 13% (40) respectively.

Positive results continue to be seen in the reduction in the number of fatalities in crashes involving speed and/or alcohol. In 2014, there were 41 fatalities in crashes involving alcohol, which is a 25% decrease compared to those in the preceding five-year average (55). Similarity, there were 52 fatalities in speed-related crashes, a 3% decrease on the preceding five-year average (53.8).

Fatigue was a factor in the crashes where 29 people were killed, a 65% increase compared to those in the preceding five-year average (17.6). A significant increase (53%) in fatalities involving inattention was also seen in 2014, rising from 14 to 22.[6]

Critical injuries in crashes involving speed, alcohol, inattention or fatigue increased across the board in 2014, compared to the five-year average. The involvement of alcohol in critical injuries increased 11% (76) in 2014, speed related increased 16% (78), fatigue was a factor in crashes resulting in 28 critical injuries, an increase of 35%. There were 49 critical injuries arising out of inattention-related crashes in 2014, which is 61% higher than the preceding five-year average of 30.4.[6]

Figure 8. Number of fatalities by contributing factor in 2014



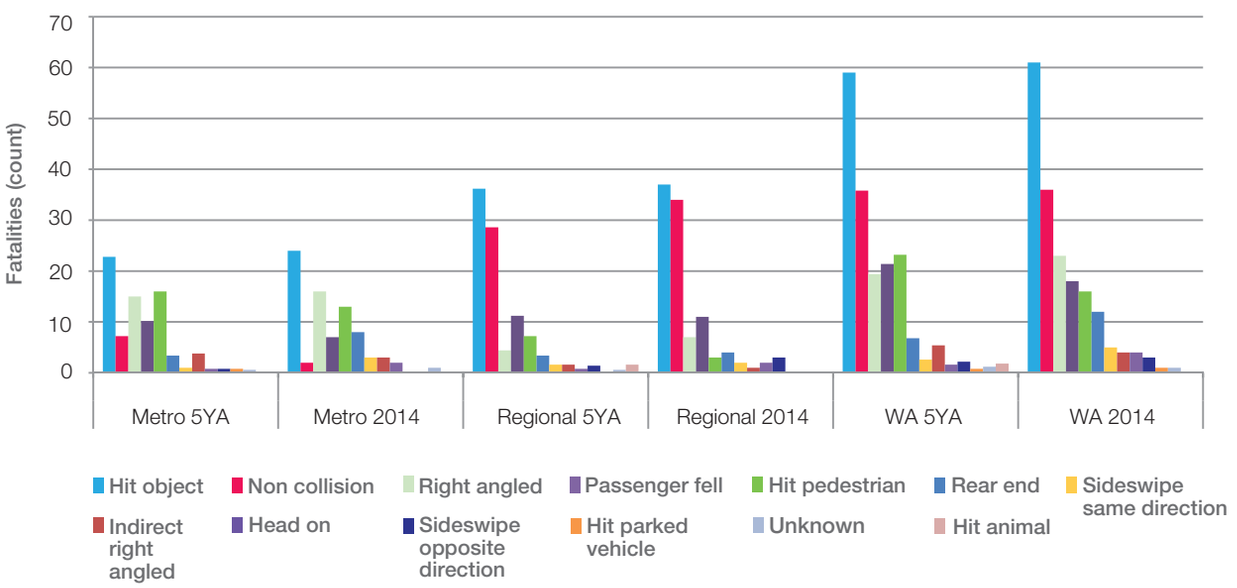
[6]*Note that categories are not mutually exclusive in this paragraph so counts cannot be summed as they may overlap.*

Crash nature

Hit object crashes in both metropolitan and regional WA continue to be of concern, accounting for around one-third of fatalities statewide. There were marginal increases in this crash type in 2014, compared to the five-year average for both Perth and regional WA. There was a significant decrease in the number of non-collisions (overturn, fall from moving vehicle) in Perth in 2014 and a corresponding increase in regional WA.

Non-collisions account for around 20% of crashes statewide. Right angle crashes accounted for 13% of crashes across the State, with an increase seen in regional WA in 2014, compared to the five-year average. The increase in fatalities in the Perth metropolitan area was in rear end crashes, doubling from less than four critical injuries on average over the five years 2009 - 2013 to 8 in 2014.

Figure 9. Number of fatalities by nature of the crash and region, 5YA and 2014



Speed zone

Approximately one-third, 35% (65) of the 184 fatalities and 22% (65) of the 298 critical injuries in WA in 2014 resulted from crashes that occurred in 110 km/h speed zones. This speed zone has consistently had the highest proportion of fatalities and critical injuries in each of the last six years. However, the proportion of fatalities in the 110 km/h speed zone has reduced from a peak of 46% (89) in 2010, and the proportion of critical injuries has reduced from a peak of 34% (83) in 2011. Of the 79 fatalities in Metropolitan WA, 29% (23) resulted from crashes that occurred in 60 km/h speed zones.

This represented the highest proportion of fatalities in the Metropolitan area, closely followed by 70 km/h speed zones 22% (17). In contrast, nearly two-thirds 61% (64) of the 105 fatalities in Regional WA in 2014 resulted from crashes that occurred in 110 km/h speed zones, followed by 8% (8) in 90 km/h speed zones. Of the 179 critical injuries in Metropolitan WA, over one-quarter, 29% (52) resulted from crashes that occurred in 50 km/h speed zones. As with Regional WA, the highest proportion, 50% (59) of the 119 critical injuries resulted from crashes that occurred in 110 km/h speed zones.

WA motorcyclist fatalities and critical injuries

In 2014, 44 motorcyclists were killed and 61 were critically injured as a result of a crash in WA. The majority of both the fatalities 59% (26) and those who were critically injured 70% (43), were due to crashes in the Metropolitan area. Most of the motorcyclist fatalities 93% (41) and those critically injured 92% (56) were male and most were adults 25 years or older. However, 2% (1) of the fatalities and 7% (4) of the critically injured were children (0-16 years). A large proportion 43% (19) of the fatalities were involved in crashes occurring between 3.00 pm and 6.00 pm.

Nearly half 45% (20) of the fatalities and a third 33% (20) of the critically injured motorcyclists were involved in crashes occurring on the weekend.

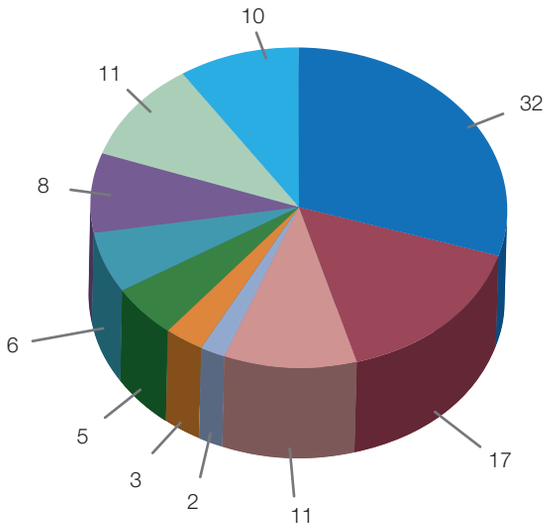
Twenty seven (61%) of the motorcyclist fatalities occurred as a result of multiple vehicle crashes. The most common multiple vehicle crash types were right angled 27% (12) and rear end 14% (6) crashes.

Twelve (27%) of the single vehicle fatalities were involved in hit object crashes and 11% (5) non-collisions.

Of the critically injured motorcyclists, 54% (33) were injured in multiple vehicle crashes, most often in right angle 26% (16) and rear end crashes 10% (6). Twenty eight motorcyclists were critically injured in single vehicle crash types, most often in hit object 25% (15) and non-collision crashes 16% (10).

Over a third 36% (16) of the motorcyclist fatalities were due to crashes where speed alone was the major contributing factor, followed by alcohol in combination with speed 9% (4) and crashes where one of the vehicles involved failed to give way 9% (4). In the case of crashes where motorcyclists were critically injured, speed alone was the main contributing factor in over a quarter 26% (16) of the crashes, followed by failure to give way 11% (7) and alcohol in combination with speed 10% (6).

Figure 10. Number of motorcyclists killed and critically injured by contributing factors to the crash, WA 2014



- Speed only
- Alcohol only
- Alcohol and speed
- Overtaking
- Fail to give way
- Contravene traffic control lights
- Inattention only
- Unknown
- Reckless
- Other specified factors:
  - *fell from vehicle*
  - *alcohol and fatigue*
  - *alcohol and inattention*
  - *animals*
  - *contravene give way*
  - *fatigue only*
  - *mechanical*
  - *road condition*
  - *speed and inattention*
  - *stop sign*
  - *visibility*

WA cyclist fatalities and critical injuries

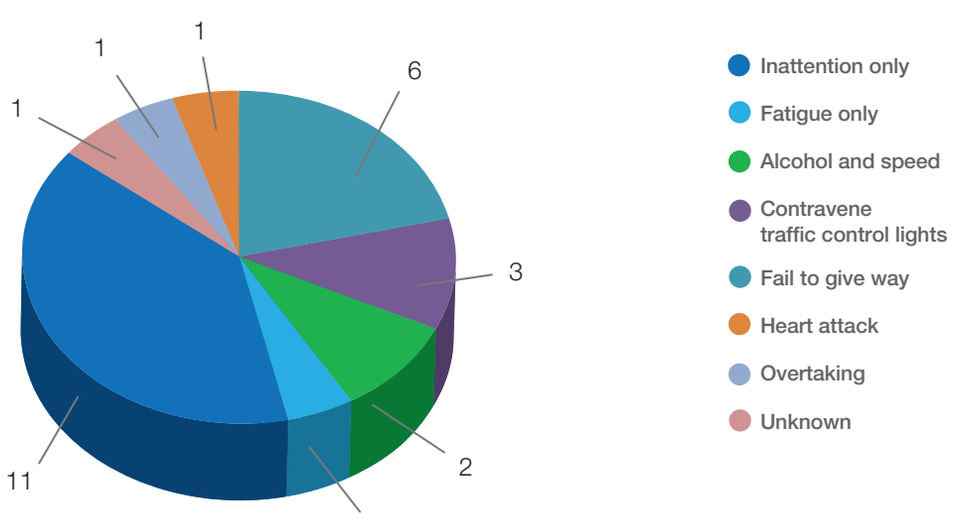
In 2014, eight cyclists were killed and 18 were critically injured as a result of a crash in WA, an increase of 19% on the five-year average. All these fatalities, and most of the critically injured 83% (15), were due to crashes in the Metropolitan area. Most of the cyclist fatalities 75% (6) and those critically injured 78% (14) were male and most were adults twenty years or older. None of these fatalities were children under 16 years of age. Most of the fatalities 63% (5) and half (9) the critically injured cyclists were involved in crashes in the morning between 6.00 am and noon.

Of the cyclist fatalities 75% (6) were killed as a result of a collision with a motor vehicle, in rear end crashes (2), in right angle crashes (2), in an indirect right angle crash (1) and in a head on crash (1). The remaining fatalities (2) occurred as a result of crashes involving just the cyclist, one where the cyclist hit an object and the other due to a fall triggered by a cardiac arrest.

Information available to date about the six fatal multiple vehicle crashes suggest that the cyclist was primarily at fault in four of the six crashes, either because of inattention (2), failing to give way (1) or contravening traffic lights (1).

Of the critically injured cyclists, 83% (15) were injured in multiple vehicle crashes, most often in right angle 44% (8) and rear end crashes 22% (4). There where three cyclists that were critically injured in single vehicle crashes, two where the cyclist struck a pedestrian (11%) and one who was involved in a non-collision crash (6%)

Figure 11. Number of cyclists killed and critically injured by contributing factors to the crash, WA 2014



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TOWARDS ZERO

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