Government of **Western Australia**
Road Safety Commission

2015 summary

Preliminary fatal and critical injuries on Western Australian roads

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FOREWORD

When the State Government devised the landmark *Towards Zero* strategy in 2008 it understood that this forward-thinking road safety plan would make a long-term difference.

Since then, there has been a 34 per cent drop in the fatality* rate in Western Australia, with 2015's preliminary data revealing the State's equal-lowest road toll and lowest number of fatal crashes since record keeping began in 1961.

However, from 142 crashes, 161 people perished on our roads.

We must never forget that each person killed was loved by someone and is not a simple statistic. A life has been lost and the lives of those left behind will never be the same.

With this in mind, we don't celebrate the 2015 preliminary crash data. We only acknowledge that the number of fatalities on Western Australian roads has reduced to its lowest level since the *Towards Zero* strategy was conceived.

It is very sad to see so many young people taken on our roads last year, in the prime of their lives.

While most fatalities - across the genders - occurred between the ages of 25 and 29, 47 people aged under 25 died in crashes in 2015.

The *Towards Zero* strategy aims to reduce road fatalities and serious injury by 40 per cent – or 11 thousand – by 2020, by focussing on safe vehicles, roads, speeds and driver behaviour.

We are on the way but there's still a way to go. This financial year the Government allocated a record $111m from the Road Trauma Trust Account for proven road safety projects. This Government will remain relentless in further reducing road trauma through education, enforcement and safer roads.

This document provides a snapshot of how 2015 unfolded on our roads. It will set the agenda for policy makers, inform the community and remind us all that each one of us has a role in promoting road safety.

> *"We must never forget that each person killed was loved by someone and is not a simple statistic."*

Liza Harvey

Hon. Liza Harvey – Road Safety Minister
(Also Minister for Police; Training and Workforce Development; Women's Interests)

* The numbers reported in this document are subject to change, if someone injured in a late-year crash dies within a 30 day period. There may also be a change after police or coronial review.

A message from the WA Road Safety Commissioner

As Western Australia's first Road Safety Commissioner I feel enormous privilege to be able to take charge of an issue so vital to us all.

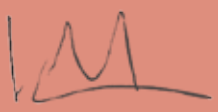
The purpose of the Road Safety Commission is to harness the knowledge, expertise and interest in the community of Western Australia to reduce trauma on our roads.

My mission, and that of those dedicated people with whom I work, is to continue to deliver road safety projects which will save lives and reduce serious injury on our roads.

Each road user killed in 2015 – whether a pedestrian, cyclist, motorbike rider or vehicle driver – left home that day, expecting to return.

Each of their loved ones endures now - and will continue to endure - the severe distress associated with sudden loss.

While road safety is the responsibility of all road users, my responsibility – indeed my duty – is to put forward evidence-based measures and to ensure the appropriate governance of public funds, to help save lives on WA roads.



Commissioner Kim Papalia

Below: Photo courtesy of WA Police Corporate Communications Branch

PRELIMINARY FATAL AND CRITICAL INJURIES SUMMARY 2015

Unless otherwise identified, the Road Safety Commission (RSC) prepared the numbers reported in this publication based on preliminary fatal and critical injury data provided by the WA Police. This data is accurate as at January 5th , 2016. Numbers may change in the future due to police investigation, coronial inquiry or upgrade of injuries. The publication adopts WA Police definitions. Please note that these may differ from those regularly reported by the RSC (or by the former Office of Road Safety). This publication reports on fatalities and critical injuries sufffered in reportable road crashes which happened on roads open to the public and arising from normal road use in metropolitan and regional WA. (Regional WA includes remote areas.)

This will exclude injuries from crashes where there was a medical condition or premeditated intent to cause harm. The definition of a fatality is a person killed immediately or within 30 days of the crash, as result of the crash. The definition of a critical injury is that of such a nature as to endanger life or cause permanent injury.

Photo (right) courtesy of WA Police Corporate Communications Branch

Most motorbike fatalities were in metro WA.

KEY INFORMATION AT A GLANCE

161 people died on WA roads in 2015 - 87 in regional areas and 74 in the metropolitan area.

It was the lowest fatality rate per 100,000 head of population, for a calendar year since records began in 1961.

Overall, the most people killed in crashes were aged between 25 and 29.

More males died in regional WA than females (63-24) and, similarly, in metropolitan WA (55-19).

Of the 4 cyclists killed (all metro), two were not wearing helmets.

Seatbelts were not being worn by 31 motor vehicle occupants (includes passengers).

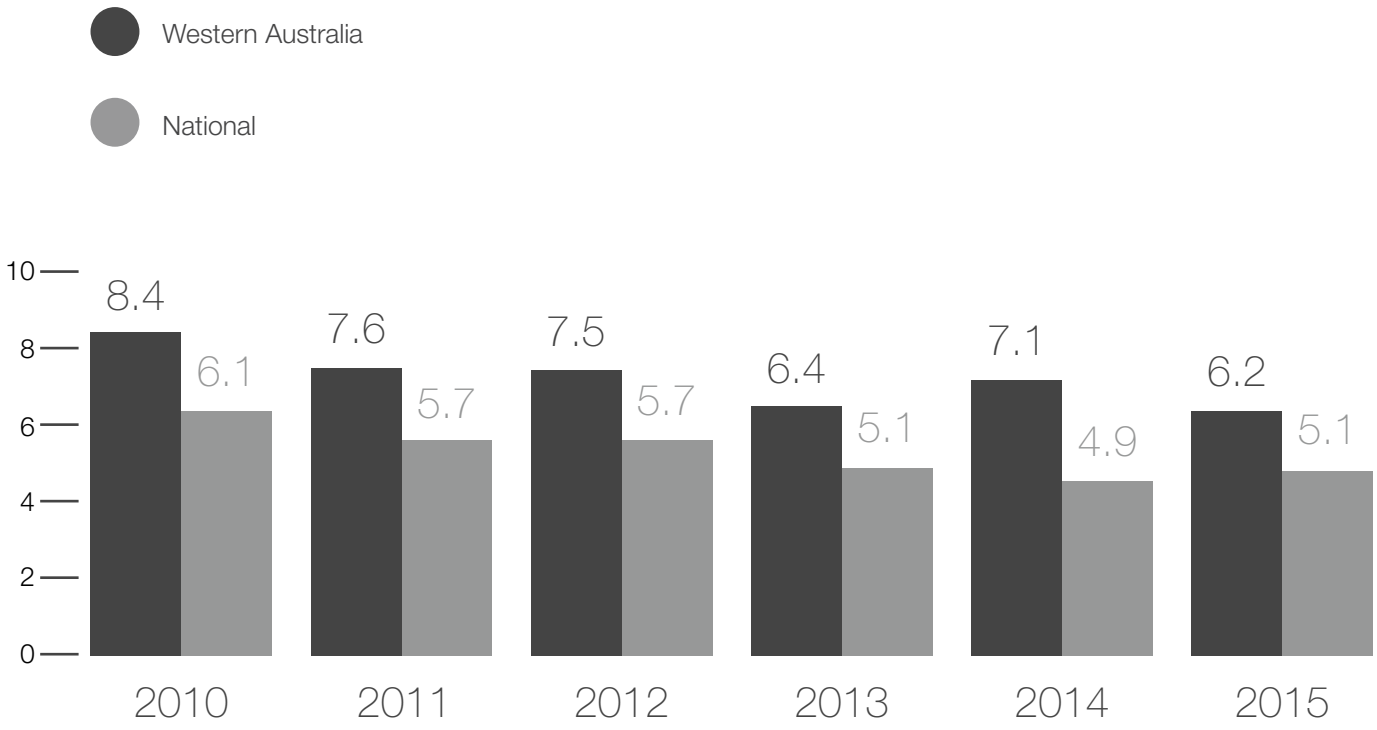
Most motorbike fatalities were in metro WA.

39 fatalities were in alcohol-related crashes.

62 fatalities were in speed-related crashes.

16 fatalities were in fatigue-related crashes.

Figure 1. Fatality rates per 100,000 persons for WA compared to Australia[1]



WA AND NATIONAL TRENDS

WA's fatality rate has reduced significantly since 2001 and currently follows the expected trend line required to meet the ambitions of the *Towards Zero* Road Safety Strategy. However, there are still more fatalities per 100,000 (6.2) than the national fatality rate (5.1). (See Fig.1)

WA's road network currently comprises 5,111 km of National Land Transport Routes, 13,490 km of State roads and 130,820 km of local roads.[2]

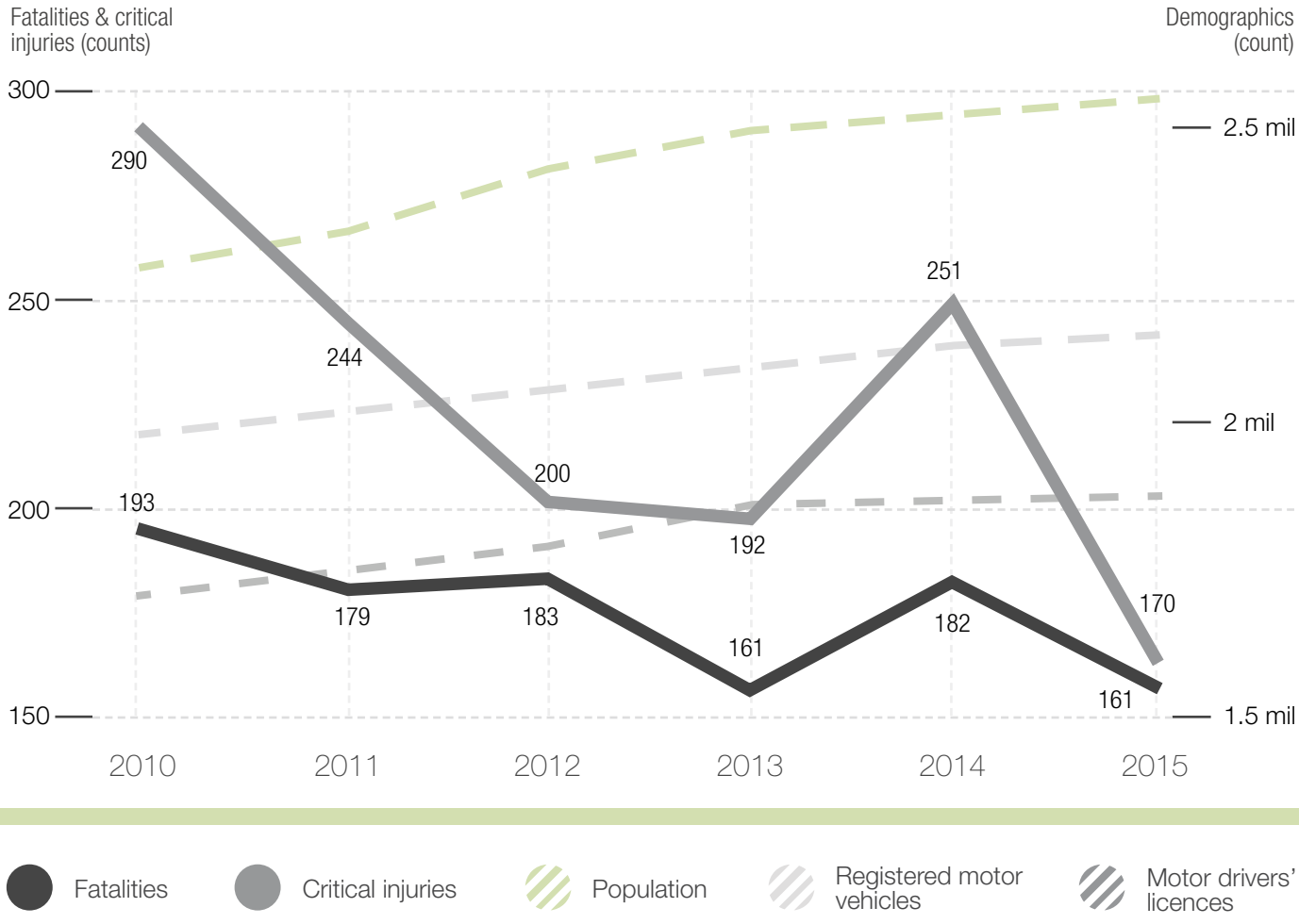
[1] Source: WA population counts used as denominators (ABS cat no. 3101.0, release 17/12/2015) Australian Fatality rate 2011-2015, BITRE **http://bitre.gov.au/publications/ongoing/rda/**

[2] Regional Road Digest 2014-2015; Regional road length statistics, Road Information Services, Main Roads WA, August 2013.

In 2015, there were 161 fatalities and 170 critical injuries in reported road crashes in Western Australia, compared to the preceding five-year average (2010-2014) of 180 fatalities and 235 critical injuries. This reduction has happened despite increases in WA's population, registered motor vehicles and licensed drivers.

The fatality rate per 100,000 persons has reduced over the past six years from 8.4 in 2010 to 6.2 in 2015. This is the lowest fatality rate for a calendar year since records began in 1961.[3] The critical injury rate per 100,000 persons has almost halved from 12.7 in 2010 to 6.6 in 2015.

Figure 2. Fatalities, critical injuries and rates by year, WA, 2010 - 2015[4 5]



[3] In mid-2010, WA Police improved the process for confirming a critical injury. This change may affect the comparability of critical injuries in 2010 and after this time.

[4] Sources: Population counts (ABS cat no. 3101.0, release 17/12/2015); 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). Note: VKT for 2013-2015 and MDLs for 2014-2015 were estimated using annual percentage growth rate.

[5] Source: Reported Road Crashes in Western Australia 2013, Office of Road Safety, p.38 **http://www.rsc.wa.gov.au/Stats/Annual/annual-crash-statistics-2013.aspx.**

Table 1. Fatality and critical injury rates, WA, 2010 - 2015[7]

	Year	Total	Rate per 100,000 persons	Rate per 100 million VKT (vehicle kilometres travelled)	Rate per 10,000 registered vehicles	Rate per 10,000 motor vehicle driver's licences
Fatalities	2010	193	8.4	0.8	1	1.2
	2011	179	7.6	0.7	0.9	1
	2012	183	7.5	0.7	0.9	1
	2013	161	6.4	0.6	0.8	0.9
	2014	182	7.1	0.7	0.8	1
	2015	161	6.2	0.6	0.7	0.9
Critical injuries	2010	290	12.7	1.2	1.6	1.7
	2011	244	10.4	1	1.3	1.4
	2012	200	8.2	0.8	1	1.1
	2013	192	7.6	0.7	0.9	1
	2014	251	9.8	0.9	1.2	1.3
	2015	170	6.6	0.6	0.8	0.9

In 2015, metropolitan and regional WA showed decreases in fatality counts of 11% and 10%, respectively, compared to the preceding five-year average. However, there were bigger decreases in critical injury counts for both areas (34% and 20%, respectively). As Figures 3 and 4 show, generally more fatalities happen in regional WA than in the metropolitan area, with the reverse for critical injuries.

Photo courtesy of WA Police Corporate Communications Branch

[7] Sources: Population counts (ABS cat no. 3101.0, release 17/12/2015); 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). Note: VKT for 2013-2015 and MDLs for 2014-2015 were estimated using annual percentage growth rate.

161

is the equal-lowest fatality count since records began in 1961.

170

people were critically injured on Western Australian roads in 2015.

180

was the five-year average for Western Australia (2010-2014) is 180 fatalities, with 235 critical injuries.

Figure 3. Fatalities by region and year, 2010 - 2015

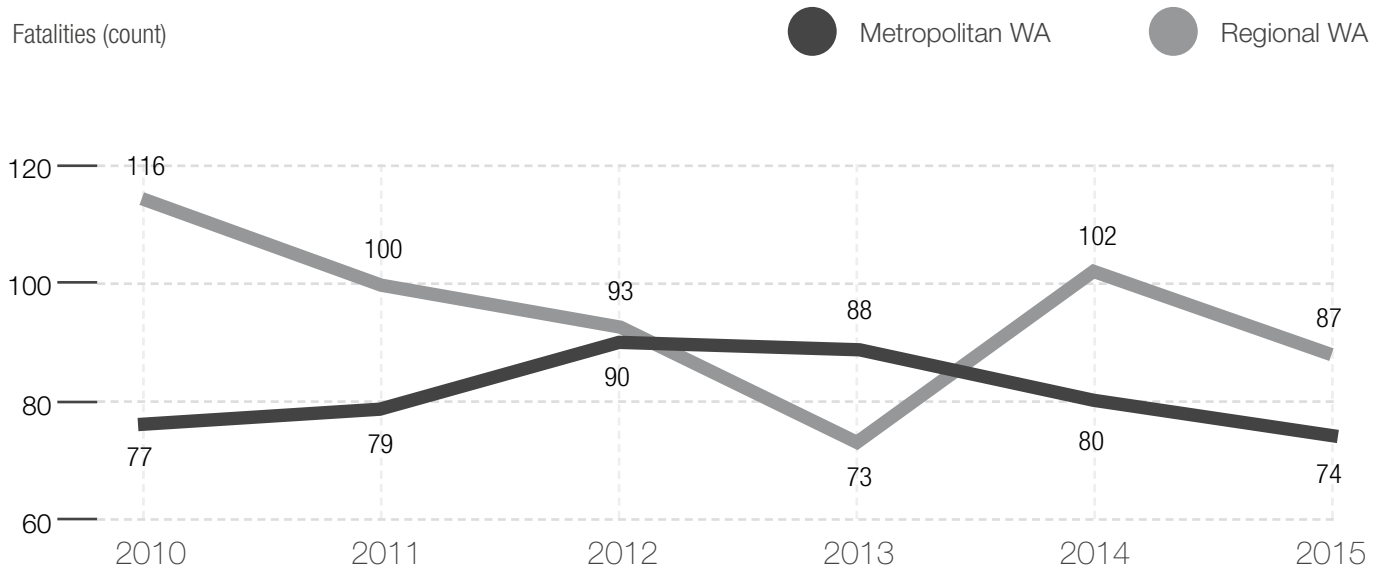
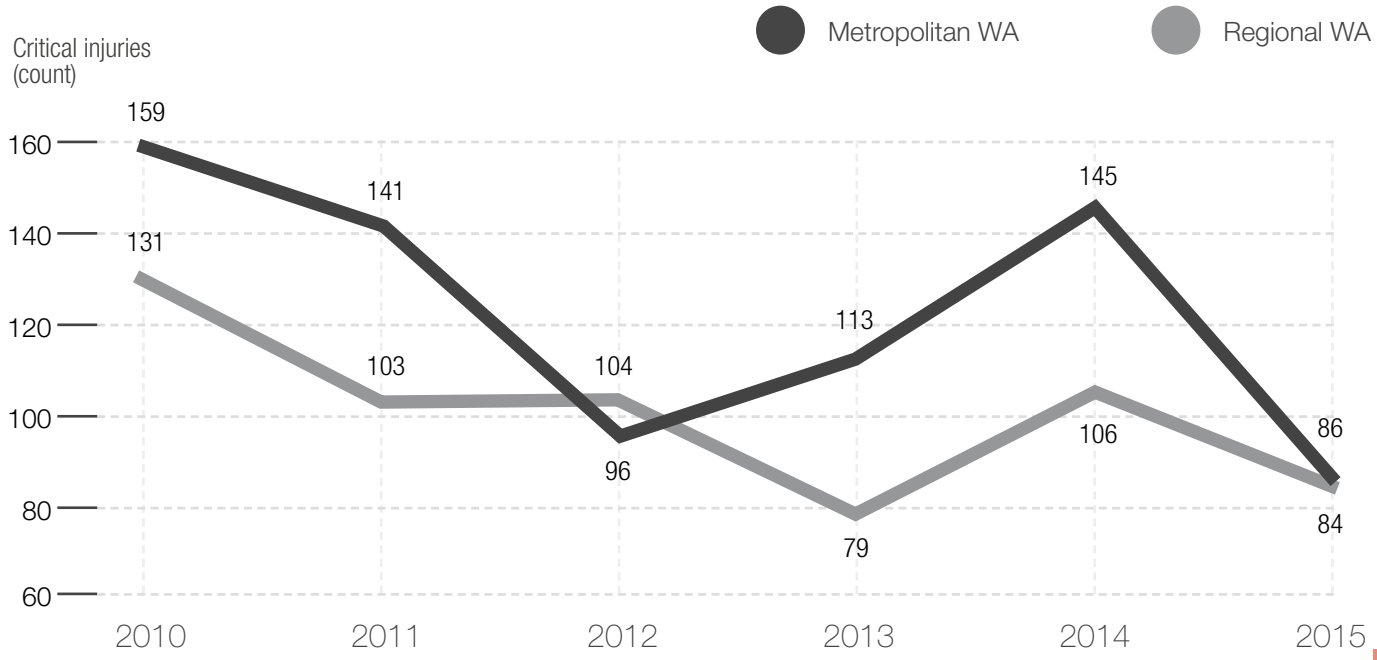
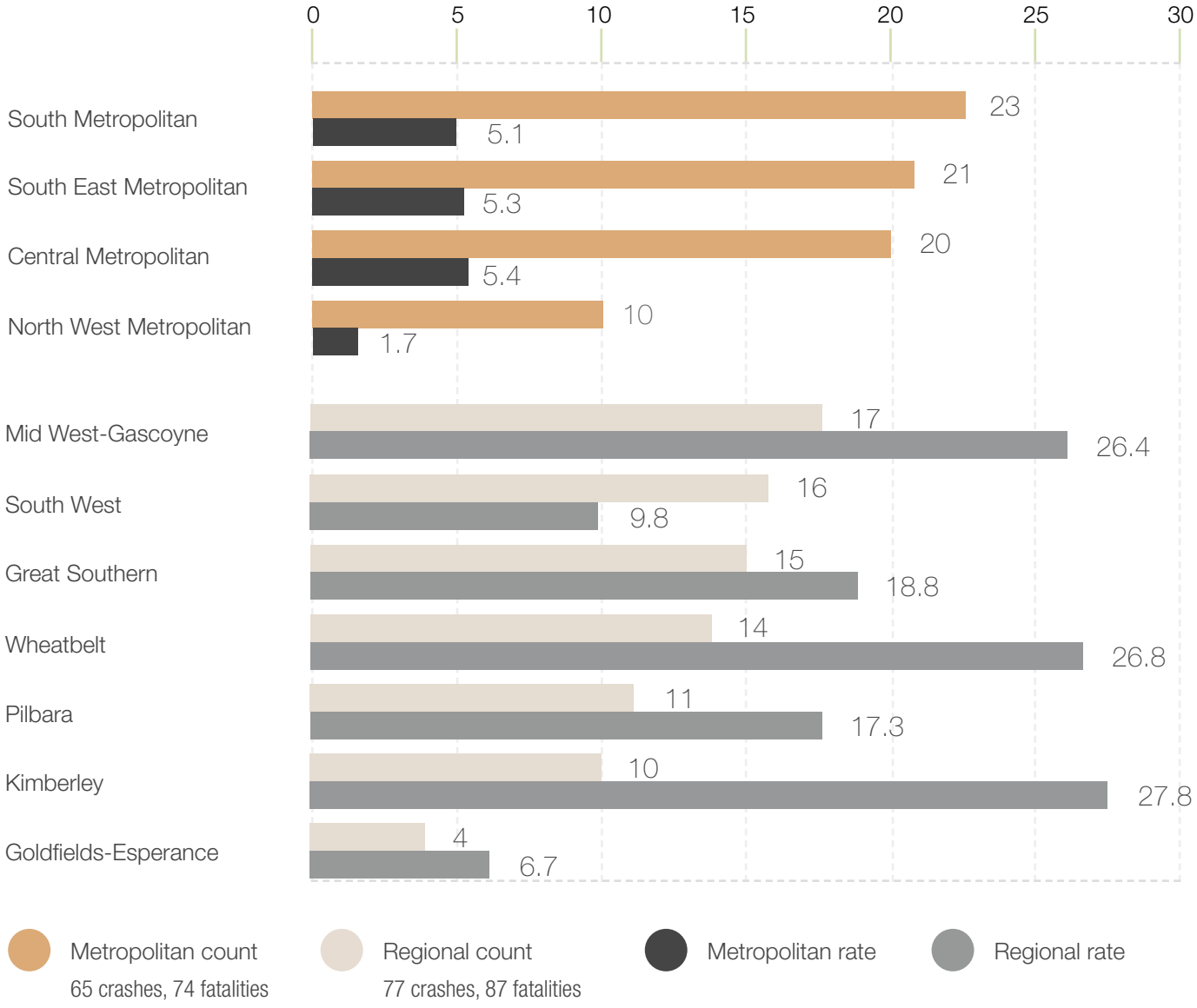


Figure 4. Critical injuries by region and year, 2010 - 2015



142 crashes resulted in 161 fatalities.

Figure 5. Indicative fatality rates per 100,000 persons and fatality counts by WA Police district, 2015[9]



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

Due to the population varying significantly between districts, the highest fatality rate does not necessarily reflect as the highest per head of population. The Kimberley police district had the highest fatality rate per 100,000 persons (27.8) but the equal second lowest fatality rate, with 10.[8]

[8] It is important to note that the population varies significantly between police districts and may exaggerate the variation over time.

[9] The rate denominators were prepared for the WA Police by the Australian Bureau of Statistics and are population counts for 2011 by WA Police district. District boundaries may have changed since then and this may affect reliability of the calculated rates.

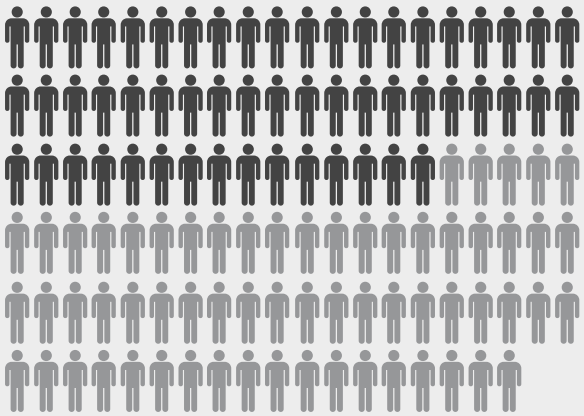
Photo courtesy of WA Police Corporate Communications Branch

Of the 161 fatalities in 2015, 118 (73%) were male and 43 (27%) were female. This gender distribution is similar to the preceding five-year average, where 129 (72%) were male and 51 (28%) were female.

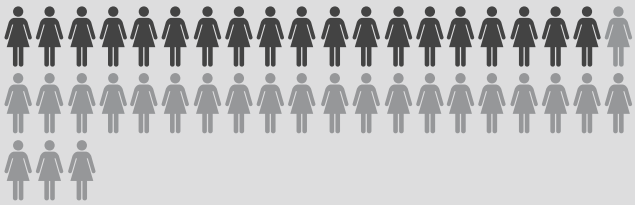
Of the 170 critical injuries in 2015, 111 (65%) were male and 59 (35%) were female. This is similar to the average gender distribution of critical injuries in the preceding five years, where 164 (70%) were male and 72 (30%) were female.

GENDER REPRESENTATION

118 males



43 females

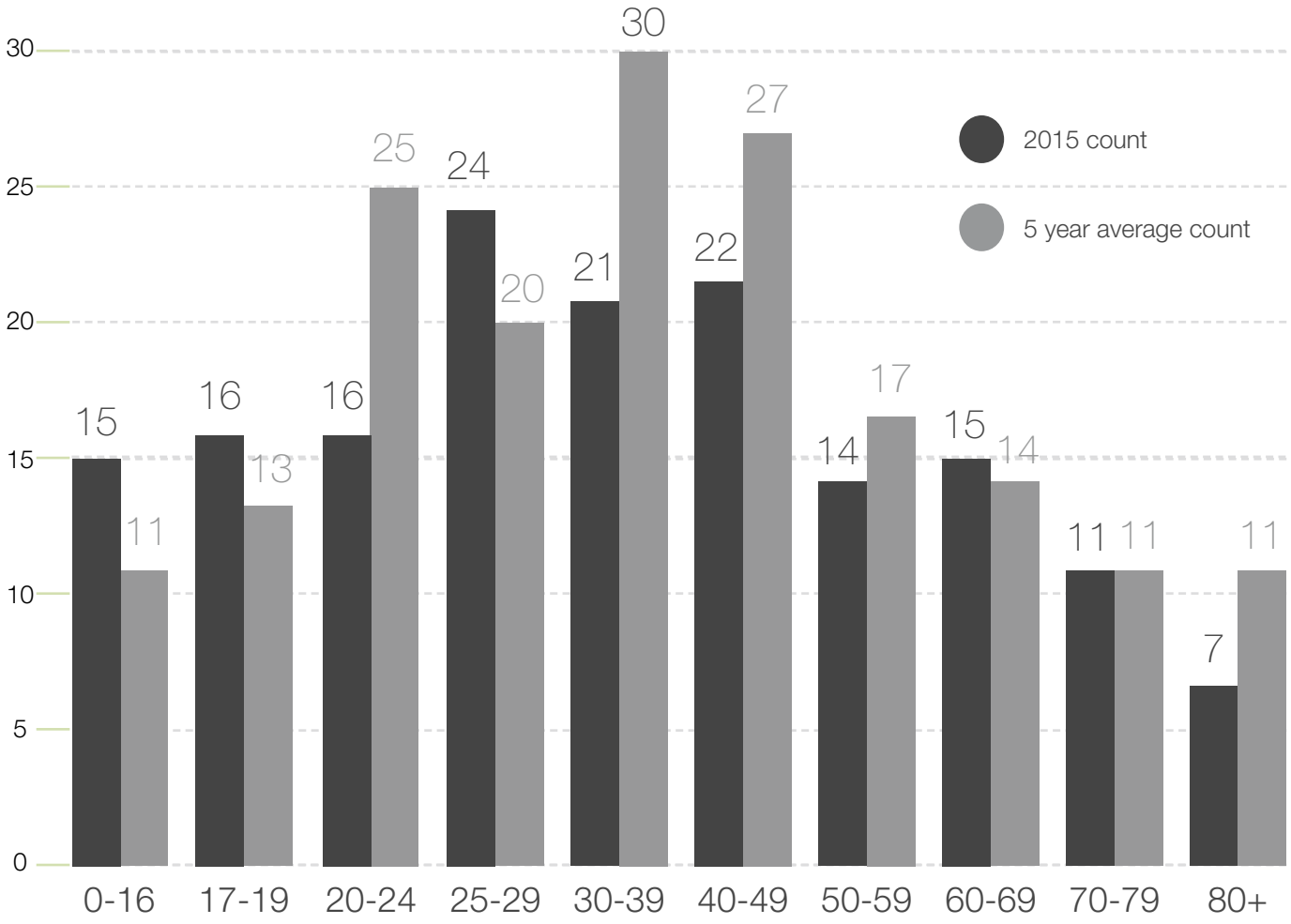


Metropolitan Regional

Photo courtesy of the Royal Flying Doctor Service

AGE REPRESENTATION

Figure 6. Fatalities by age, WA, five-year average and 2015



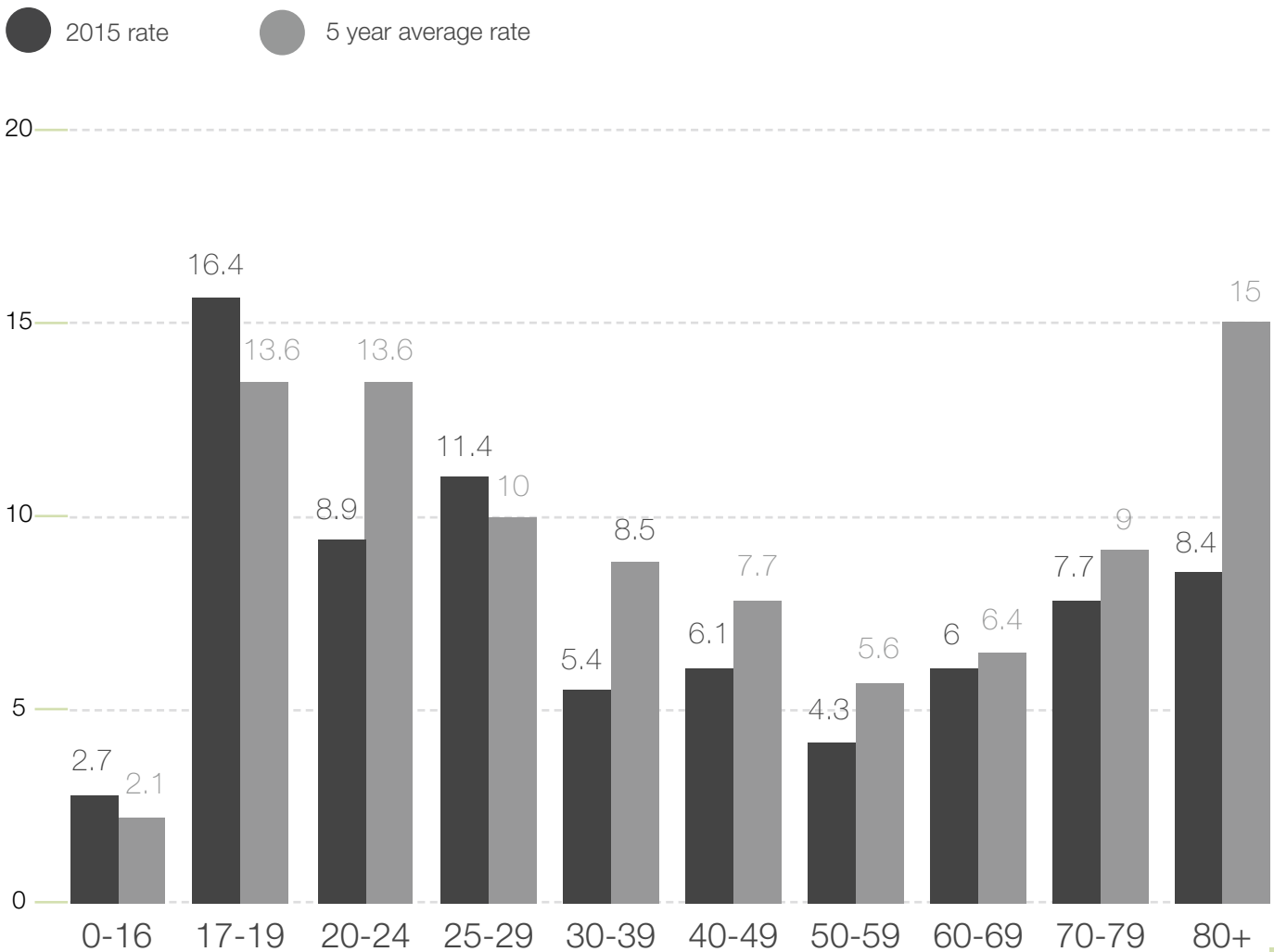
The highest number of fatalities in 2015 was in the 25-29 year age bracket (24 or 15%). The highest number of critical injuries was in the 20-24 year age bracket (32 or 19%). As shown in Figure 6, the 0-16, 17-19 and 25-29 year age groups showed an increase in fatality counts, while the 60-69 and 70-79 year age groups remained relatively stable. All age groups showed a decrease in critical injury counts, compared to the preceding five-year average.

The 17-19 and 25-29 year age groups fatality rates were already greater than the Statewide rate. In 2015, 17-19 year olds had the highest age-specific fatality rate of 16 per 100,000 population[10], which was also an increase when compared to the fatality rate for this age group in the preceding five-year average (14). All age groups showed a reduction in the critical injury rates when compared to the preceding five-year average.

[10] Age-specific rates use population counts of that age group as the denominator.

Photo (right) courtesy of WA Police Corporate Communications Branch

Figure 7. Comparison of 2015 fatality age-specific rates to the preceding five-year averages



ROAD USER TYPE

Table 2. Fatalities by road user type and year, WA, 2010 - 2015

	2010		2011		2012		2013		2014		2015	
Motor vehicle occupant	138	72%	122	68%	123	67%	96	60%	113	62%	119	74%
Motorcyclist	35	18%	28	16%	34	19%	25	16%	44	24%	22	14%
Pedestrian	15	8%	26	15%	23	13%	31	19%	16	9%	15	9%
Bicyclist	4	2%	3	2%	3	2%	6	4%	8	4%	4	2%
Other[11]	1	1%	0	0%	0	0%	3	2%	1	1%	1	1%
Total	193	100%	179	100%	183	100	161	100%	182	100%	161	100%

Of the 22 motorbike riders and their pillions killed in 2015, 18 were male. The highest numbers of motorcyclist fatalities were in the 40-49 year age group (7). Two were recorded as being involved in alcohol-related crashes and 13 were involved in crashes where speed was suspected to be a factor.

Of the 15 pedestrians killed, five were in the 0 -16 year age group and 10 were male. One of those was a result of an alcohol-related crash, while three were a result of crashes where inattention was suspected to be a contributing factor.

Of the four cyclists killed, all were male and three were aged 60 years or over. All were in the metropolitan area.

LICENCE TYPE

In 2015, the vast majority of motor vehicle drivers and riders involved in fatal crashes were driving with the appropriate licence. However, 29 (14%) had either no licence or an expired, inappropriate, suspended or cancelled licence. This number is similar to the preceding five-year average of 29 (13%).

[11]Other includes gophers, horse and skateboard riders.

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.

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.

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.

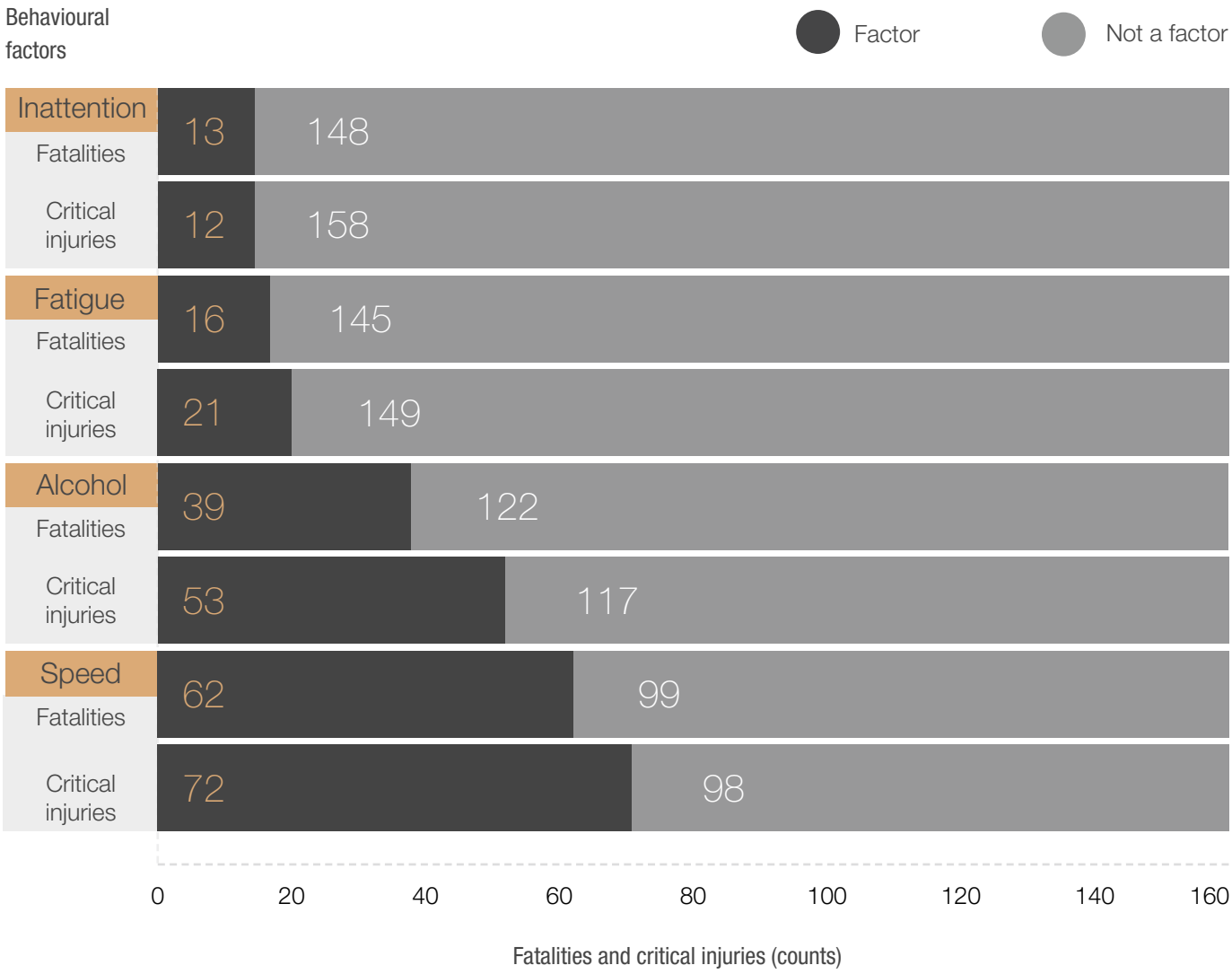
Overall, in 2015, 97 (60%) fatalities were a result of crashes police suspect involved at least one driver behavioural factor.

Over a third (62 or 39%) of those killed were in speed-related crashes - an increase of 5% on the preceding five-year average (59).

Approximately one quarter (39 or 24%) of those killed were in alcohol-related crashes - down by 20% on the preceding five-year average (49).

In 2015, 16 (or 10%) of those killed were in in fatigue-related crashes and 13 (8%) were in inattention-related crashes. Compared to the preceding five-year fatality counts these categories remain reasonably stable (18 and 14, respectively).

Figure 8. Number of fatalities and critical injuries by behavioural factor, WA, 2015[13]



In 2015, 60% of fatalities were a result of crashes with recorded driver behavioural factors.

Of the critical injuries, 106 (62%) were a result of crashes police suspect involved at least one driver behavioural factor.

72 (42%) people suffered critical injuries in speed-related crashes - consistent with previous years.

53 (31%) people suffered critical injuries in alcohol-related crashes - a 10% decrease on the preceding five-year average (59).

21 (12%) of critical injuries were a result of fatigue-related crashes - an 11% increase on the preceding five-year average (19).

12 (7%) people were critically injured in inattention-related crashes - a 60% decrease on the preceding five-year average (30).

[13] Do not add categories, as they are not mutually exclusive.


NEXT
20 km

SEATBELTS AND HELMETS

Of the 119 known motor vehicle occupant (MVO) fatalities in 2015, 31 (26%) were recorded as not wearing a seat belt at the time of the crash.

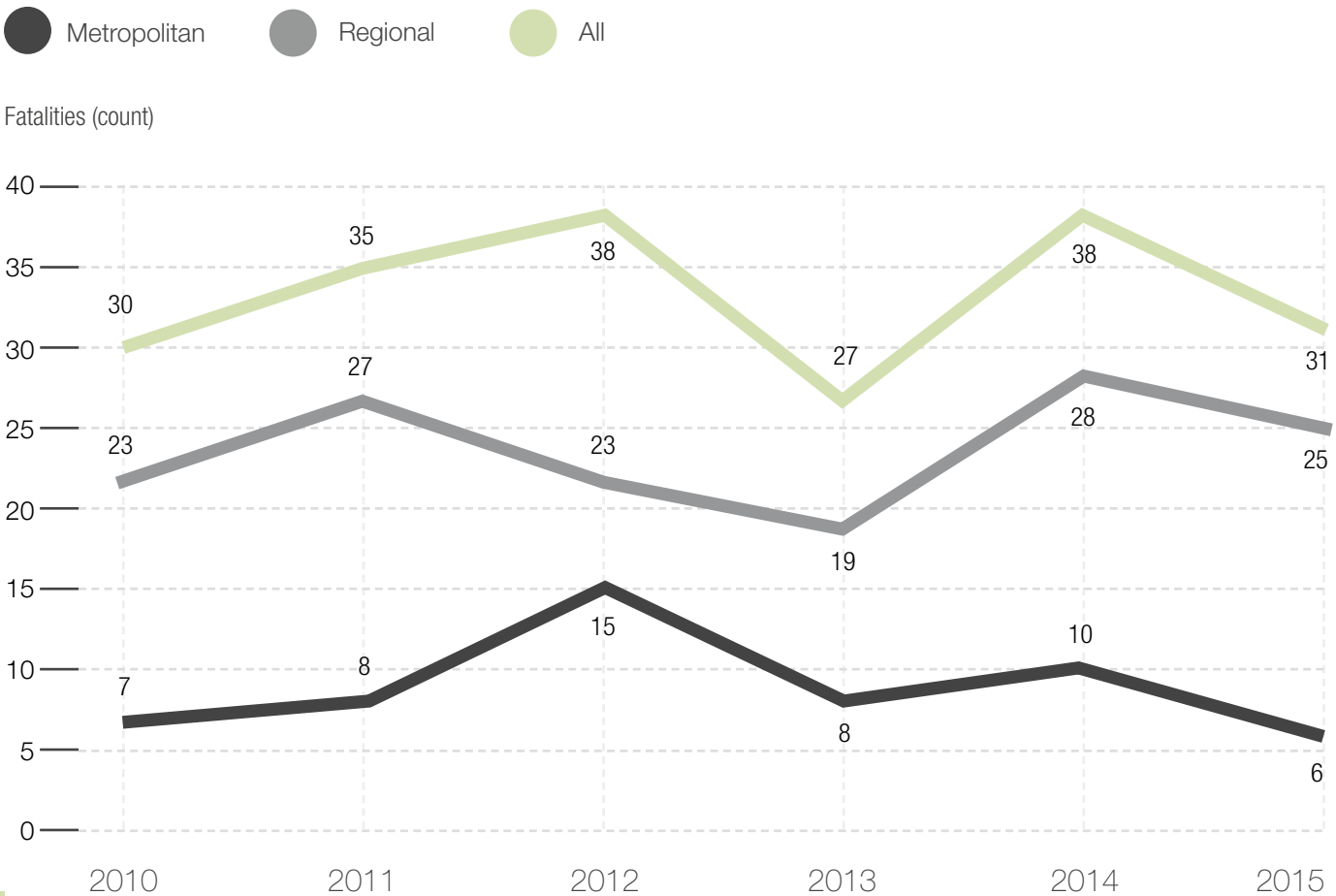
Twenty-five (32%) of the 77 MVOs killed in regional WA were not wearing a seatbelt. 6 (14%) of the 42 MVOs in the metropolitan area were not wearing a seatbelt.

All of the 22 motorcyclists killed in 2015 were wearing a helmet.

Two of the four cyclists killed were not wearing a helmet.

Photos (right and below right) courtesy of St John Ambulance

Figure 9. Motor vehicle occupant fatalities recorded as not wearing appropriate restraint by region and year, 2010-2015



SPEED ZONE

64 (40%) of the 161 fatalities and 56 (33%) of the 170 critical injuries in WA in 2015 resulted from crashes in 110 km/h speed zones.

This speed zone represented the highest proportion of fatalities, Statewide.

Most metropoilitan area fatalities happened in 60 km/h speed zones (18 or 24%).

Most regional fatalities were in 110 km/h speed zones (58 or 67%).

Nearly two-thirds of critical injuries in regional WA happened in 110 km/h speed zones (52 or 62%).

Two-thirds of critical injuries in the metropolitan area were reasonably evenly distributed between 50 km/h (19 or 22%) 60 km/h (17 or 20%) and 70 km/h (19 or 22%) speed zones.

Most of the 2015 fatalities resulted from collisions with objects such as walls and trees. However, there was a 26% decrease in "hit object" crashes Statewide in 2015 (42), compared to the preceding five-year average (57).

Right-angled crashes were down 43% in 2015 (12), compared to the preceding five-year average (21).

There was a small increase in 2015 in head-on crashes in metropolitan (13) and regional (14) WA, compared to the preceding five-year averages (10 and 10, respectively.)

Metropolitan WA recorded a 55% decrease in fatalities from right-angled crashes (7) and a 27% decrease in fatalities arising from pedestrians being hit (11), compared to the preceding five year average.

Regional WA recorded a 21% increase in fatalities from non-collision crashes in 2015 (35), compared to the preceding five-year average (29).

Figure 10. Fatalities by nature of the crash, WA, five-year average (5YA) and 2015