Regional Roads

Road crashes in South Australia, 2019-2023

Overview

Between 2019 and 2023, 55% of lives lost, 35% of serious injuries and 17% of minor injuries occurred in regional areas. Rates of driver and rider lives lost and serious injuries are much higher in regional areas compared to metropolitan Adelaide, around two times for younger drivers and riders aged between 16 and 19. Crashes resulting in a life lost or serious injury in regional areas are mostly single vehicle type crashes on high-speed roads. Crashes involving vehicle occupants not wearing a seatbelt are more prevalent in the regional areas.

Broadly defined, the Adelaide metropolitan region extends as far as Roseworthy to the north, to Sellicks Hill in the south and Harrogate in the east. The regional areas cover everything outside the metropolitan region[1].

Figures 1 and 2 show the number of lives lost and serious injury crashes in regional areas and metropolitan Adelaide for the 20-year period from 2004 to 2023.

Figure 1: Number of crashes resulting in a life lost by area, South Australia, 2004-2023

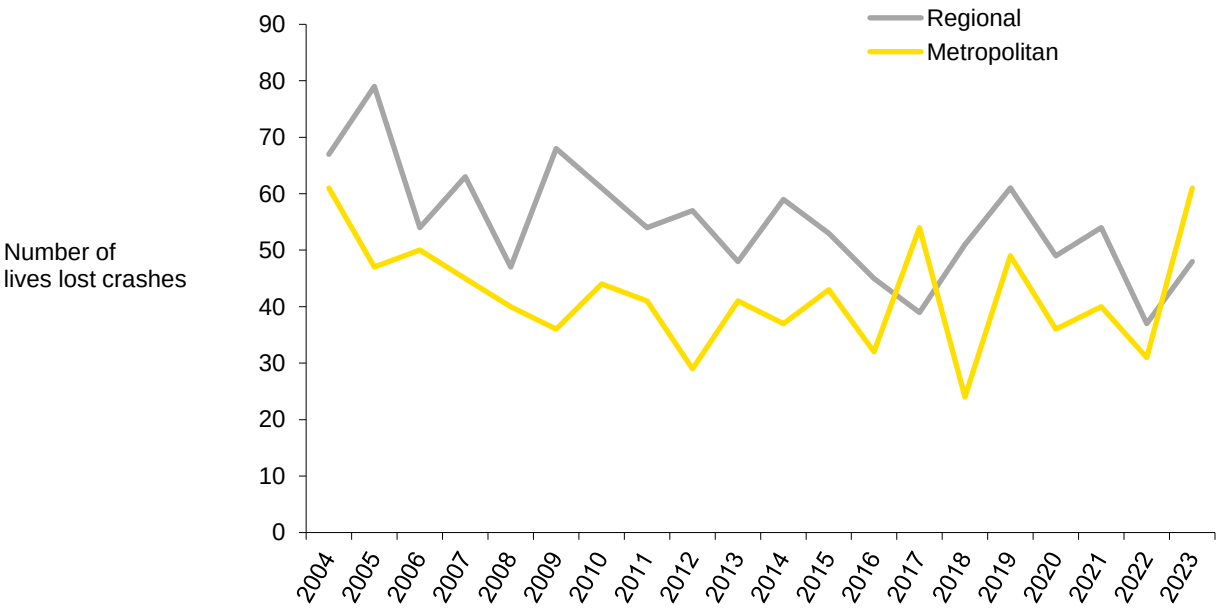
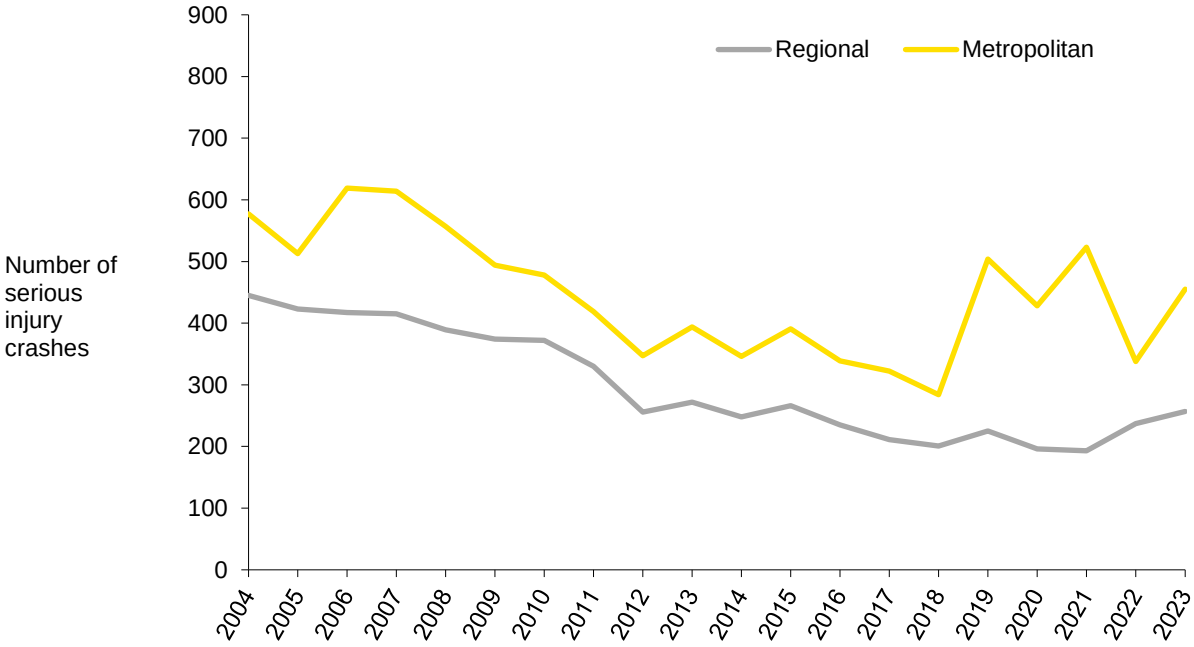


Figure 2: Number of crashes resulting in a serious injury by area, South Australia, 2004-2023



While the total number of road deaths fluctuate from year to year, there has been a slight downward trend in the number of lives lost in regional areas over the last five years. The opposite is true for serious injuries on regional roads, where the trend shows an increase over the most recent five years (2019-2023). There was an increase in lives lost and serious injuries on both metropolitan and regional roads in South Australia in 2023 compared to the previous year (Table 1). The trend for the last five years (2019-2023) for lives lost in regional areas has declined by an average of 6.2% per year (Table 1). Table 1 also shows that the trend in serious injuries have increased in regional areas by 4.3% and minor injuries have decreased in regional areas by 4.4% over the past five years.

Table 1: Number of casualties by area, South Australia, 2019-2023

Year	Lives lost		Serious injuries		Minor injuries	
	Metropolitan	Regional	Metropolitan	Regional	Metropolitan	Regional
2019	49	65	553	280	4294	790
2020	38	55	471	244	3391	678
2021	40	59	587	240	3731	711
2022	32	39	373	279	2975	626
2023	61	56	501	323	2989	655
Average trend change	**2.7%**	**-6.2%**	**-4.2%**	**4.3%**	**-8.2%**	**-4.4%**

Table 2 shows the proportion of casualties in metropolitan Adelaide and regional South Australia over the past five years (2019-2023). Regional areas accounted for 55% of lives lost, 35% of serious injuries and 17% of minor injuries. In four out of the last five years, most lives lost in crashes were in regional areas.

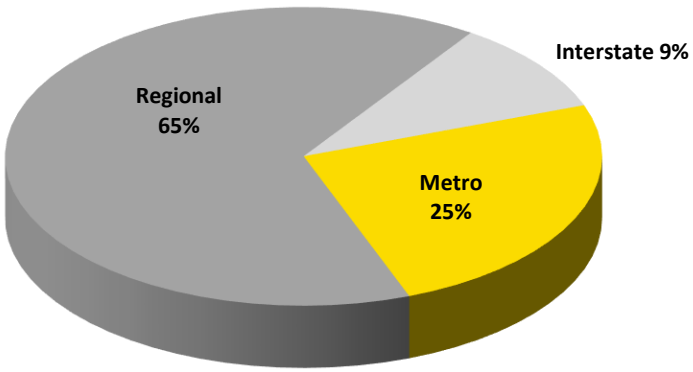
Table 2: Percent of lives lost, serious and minor injuries by area, South Australia, 2019-2023

Year	Lives lost		Serious injuries		Minor injuries	
	Metropolitan	Regional	Metropolitan	Regional	Metropolitan	Regional
2019	43%	57%	66%	34%	84%	16%
2020	41%	59%	66%	34%	83%	17%
2021	40%	60%	71%	29%	84%	16%
2022	45%	55%	57%	43%	83%	17%
2023	52%	48%	61%	39%	82%	18%
2019-2023	**45%**	**55%**	**65%**	**35%**	**83%**	**17%**

Involvement in regional crashes by place of residence

The proportions shown in Figure 3 are estimates based on the recorded residential postcodes of drivers and riders who lost their life or were seriously injured in crashes on regional roads. It illustrates that of the known residence postcodes, the vast majority (65%) of driver/rider lives lost and serious injuries in regional areas were people who also lived in regional areas, 25% reside in metropolitan Adelaide and the remaining 9% lived interstate.

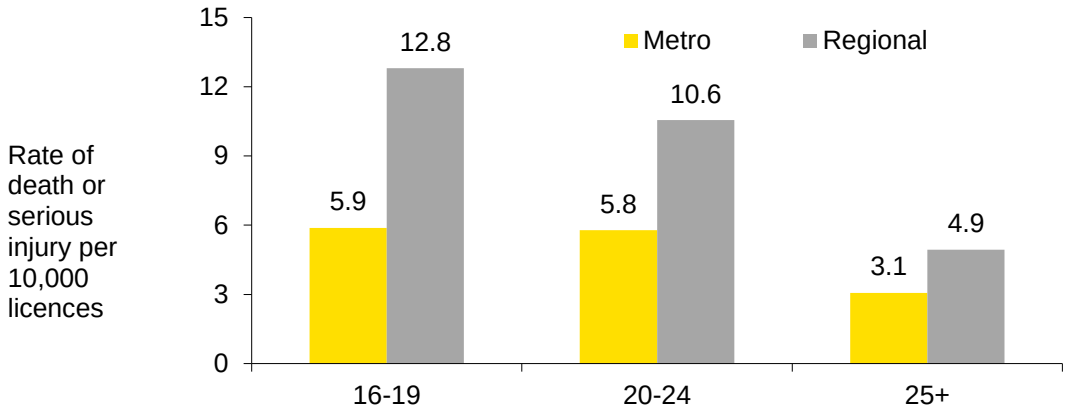
Figure 3: Drivers and riders killed or seriously injured in regional areas by place of residence, South Australia, 2019-2023



Regional and metropolitan lives lost and serious injury rates by age group

Comparisons between metropolitan and regional residents show that regional driver/rider serious casualty rates are disproportionately higher for younger age groups (Figure 4). Young drivers and riders aged 16 to19 living in regional South Australia were over two times more likely to be killed or seriously injured in a crash than those living in the metropolitan area. Similarly, drivers and riders aged 20 to 24 living in regional South Australia were around 1.8 times more likely to be killed or seriously injured in a crash than those living in the metropolitan area.

Figure 4: Rate of death or serious injury per 10,000 licences held for drivers/riders by residence, 2019-2023



Alcohol and drugs involved lives lost crashes in metropolitan and regional areas

Figure 5 shows the percentage of drivers and riders killed that had a blood alcohol concentration (BAC) of 0.05 or above when tested. Between 2019 and 2023, 22% of drivers and riders killed in regional South Australia had an illegal BAC level compared to 16% of drivers/riders killed in metropolitan areas.

Figure 5: Percentage of drivers/riders killed and tested with a BAC 0.05 of over by area, South Australia, 2019-2023

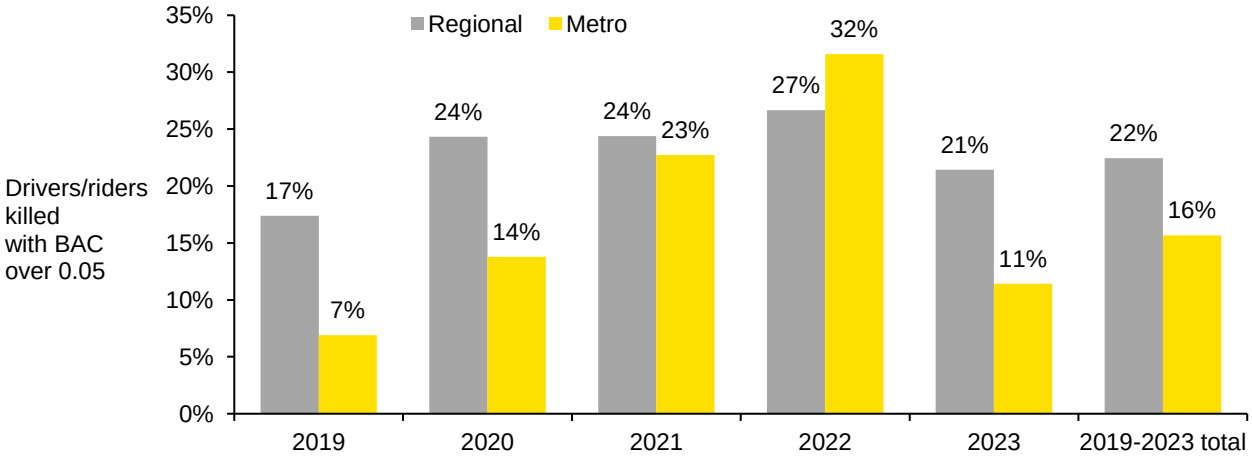
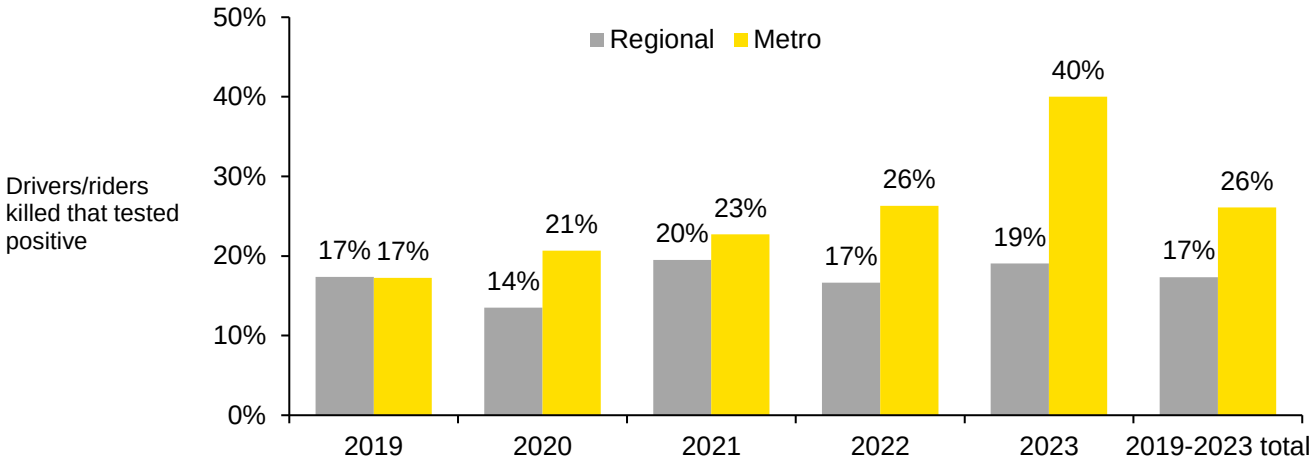


Table 6 shows the number of lives lost and number and the percentage of drug tests of drivers and riders tested over the past five years**.** Between 2019 and 2023, 17% of drivers and riders killed in regional South Australia were tested to drugs compared to 26% of drivers/riders killed in metropolitan areas.

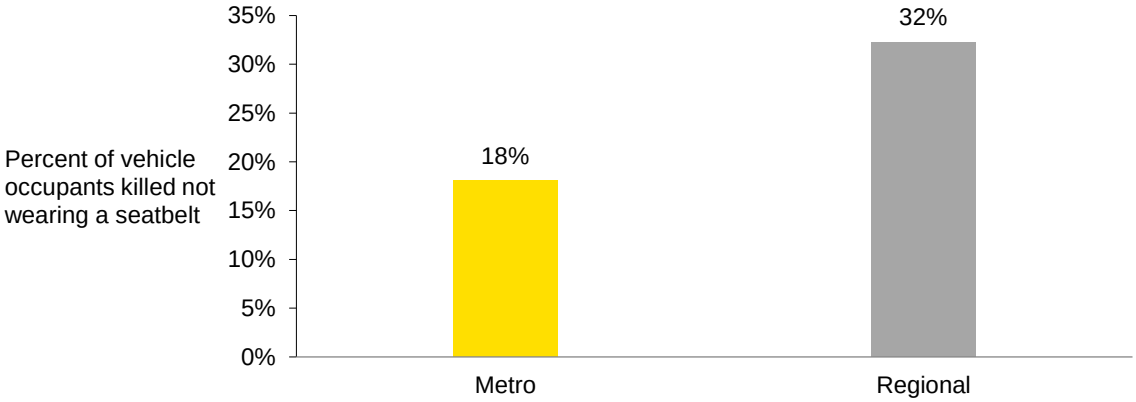
Figure 6: Percentage of drivers/riders killed and tested positive to THC, Methyl-amphetamine or MDMA by area, South Australia, 2019-2023



Seatbelts

Failure to wear a seatbelt or child restraint in cars travelling on higher speed roads can increase the chances of a life lost or serious injury in the event of a crash. On road observational studies indicate that seatbelt wearing rates are quite high in South Australia[1]. Figure 7 compares seatbelt usage between metropolitan and regional areas crashes over the past five years. There was a greater proportion of vehicle occupants killed who were not wearing seatbelts in regional areas (32%) compared to metropolitan areas (18%).

Figure 7: Percentage of vehicle occupants killed who were not wearing a seatbelt by area, South Australia, 2019-2023

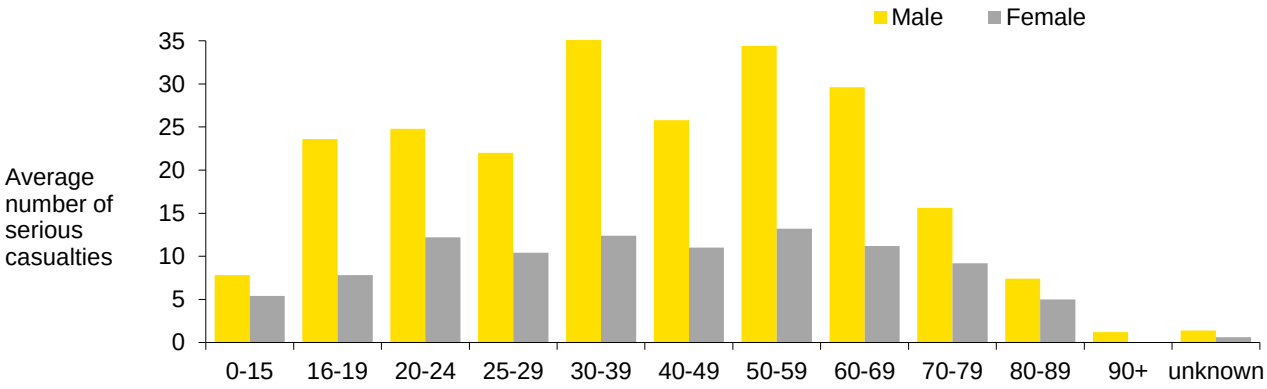


[1]Centre for Automotive Safety Research (CASR), https://casr.adelaide.edu.au/publications/list/?id=1091

Sex[2] and age distributions of lives lost and serious injuries in regional areas

Figure 8 shows the age and sex profile of average lives lost and serious injuries in regional areas between 2019 and 2023. Males in all age groups accounted for the highest number of lives lost and serious injuries in regional areas. Similarly males were also over-represented in South Australia crash data overall.

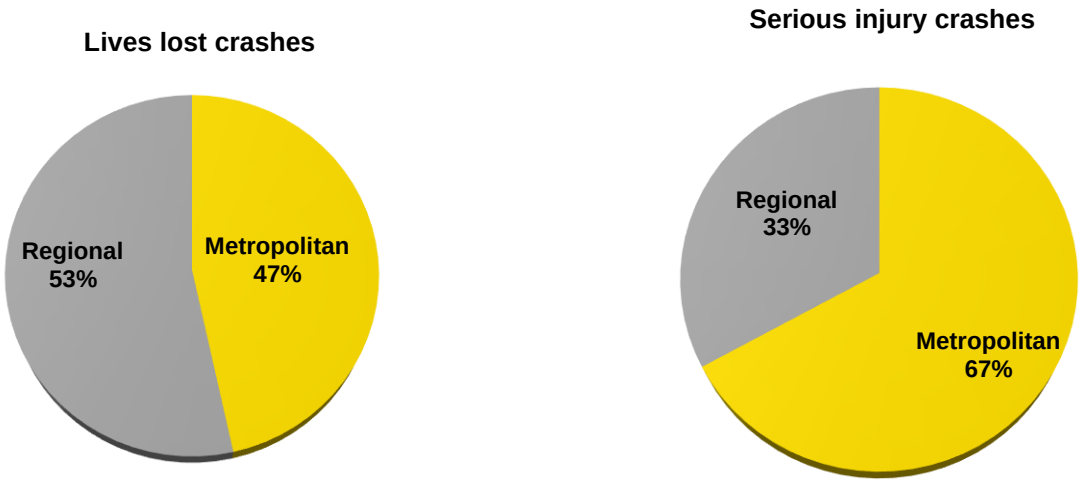
Figure 8: Age and sex distribution of lives lost and serious injuries, regional South Australia, 2019-2023



Metropolitan /regional distribution

Figure 9 shows the proportion of lives lost and serious injury crashes in South Australia over the past five years. The majority (53%) of lives lost crashes occurred in regional areas whilst the majority (67%) of serious injury crashes occurred in metropolitan areas.

Figure 9: Distribution of lives lost and serious injuries road crashes by region, South Australia, 2019-2023

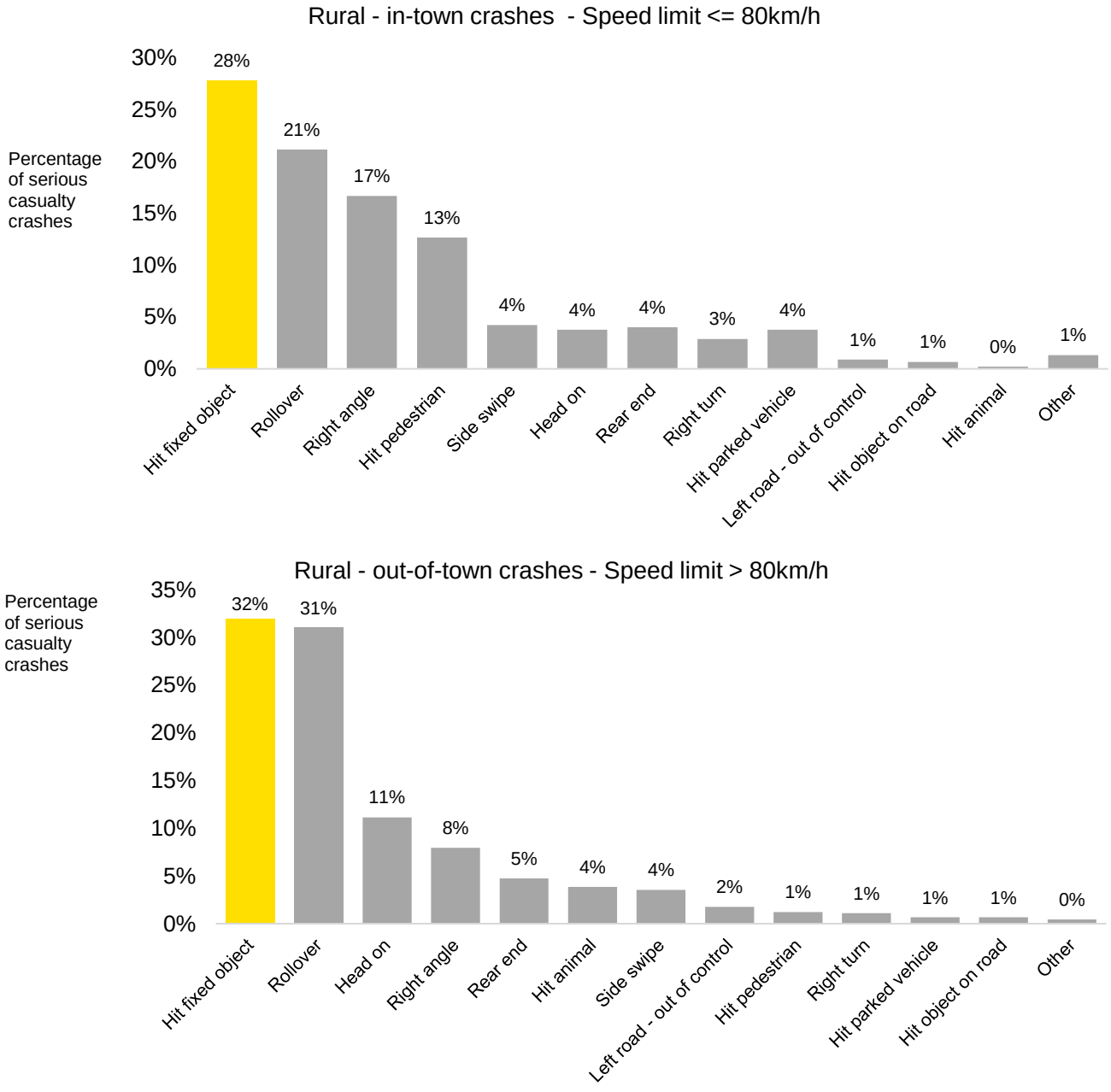


[2] Sex as captured by SAPOL officer or as recorded in the Department's registration and licensing system (TRUMPS). Gender data is not currently collected.

Characteristics of regional crashes

Figure 10 shows the types of light and heavy vehicles crashes occurring in and outside of regional towns. Regional zones with a speed limit of up to 80km/h are considered as in-town crashes whereas out-of-town crashes are those occurring in zones greater than 80km/h. Over the past five years 67% of regional crashes were out-of-town crashes. The most common crash type for both in and out-of-town crashes was when a vehicle hits a fixed object or when a vehicle rolls over. Together these types of crashes accounted for 63% of all out-of-town crashes in regional areas. For in-town crashes, these crashes accounted for 49% of the crashes.

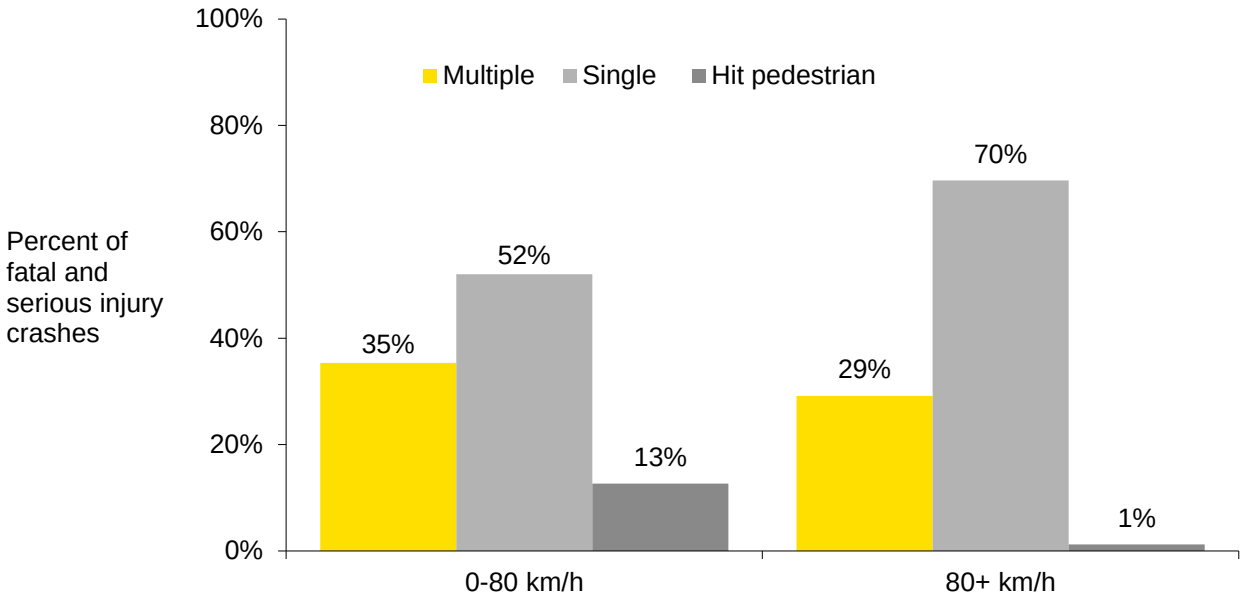
Figure 10: Proportions of lives lost and serious injury crashes per year in-town and out-of-town crashes by crash type, regional South Australia, 2019-2023



Single and multi-vehicle lives lost and serious injury crashes

For the past 5 years, the majority (70%) of lives lost and serious injury crashes on regional roads occurring in the speed zones greater than 80km/h were single vehicle type crashes, which is higher than the proportion of single vehicle crashes in lower speed zones (52% on roads with a speed zone of 80km/h or less) (Figure 11). This is consistent with the most common crash types that occur on higher speed roads which are hit fixed object and rollover crashes. Single vehicle crashes refer to crashes that involve hitting a fixed object or animal, roll over crashes and crashes where the vehicle leaves the road out of control.

Figure 11: Proportion of single, multi-vehicle and hit pedestrian lives lost and serious injury crashes occurring by speed limit, regional South Australia, 2019-2023



Type of vehicle involved in crashes

Table 3 shows that over the past five years a higher proportion of heavy vehicles (7%) were involved in life lost and serious injury crashes in regional areas than in metropolitan areas (2%) which is most likely due to a greater proportion of heavy vehicles on regional roads. In regional serious casualty crashes involving a heavy vehicle, 41% of heavy vehicle drivers were considered responsible for the crash they were involved in.

Table 3: Percentage of vehicle types involved in crashes resulting in a life lost or serious injury by area, South Australia, 2019-2023

Vehicle Type	Metropolitan		Regional	
	n	%	n	%
Passenger vehicles	2699	67%	1230	67%
Heavy vehicles	98	2%	137	7%
Buses	27	1%	7	0%
Motorcycles	672	17%	363	20%
Bicycles	404	10%	50	3%
Other vehicle types	100	3%	60	3%
Total	**4000**	**100%**	**1847**	**100%**

Type of road user

Table 4 shows that between 2019 and 2023, 71% of lives lost and serious injuries in regional roads were drivers or passengers, 22% were motorcyclists, 5% were pedestrians, and 3% were cyclists.

Table 4: Percentage of casualty types resulting in a life lost or serious injury by region, South Australia, 2019-2023

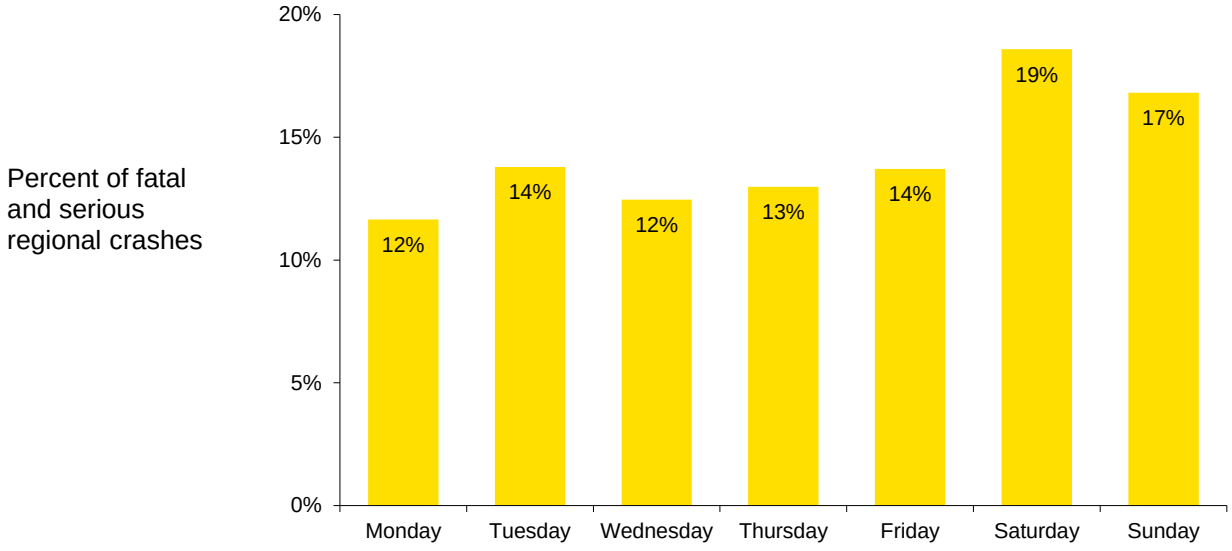
Casualty Type	Metropolitan		Regional	
	n	%	n	%
Light vehicle driver	955	35%	798	49%
Heavy vehicle driver	23	1%	59	4%
Passenger	307	11%	300	18%
Motorcyclist^	671	25%	355	22%
Cyclist	382	14%	45	3%
Pedestrians^^	353	13%	78	5%
Other^^^	15	1%	4	0%
Total	**2706**	**100%**	**1639**	**100%**

Note: ^includes scooter operator and pillion passengers. ^^includes gopher & wheelchair users.
^^^Personal mobility device (PMD) is included in 'other' road user types.

Regional crashes by weekday

Over the past five years, road crashes in regional areas were fairly evenly distributed throughout the week but there were more regional crashes that occurred on weekends (Friday through Sunday). Almost half of regional crashes (49%) occurred on these days (Figure 12).

Figure 12: Percent of lives lost and serious injury regional crashes by day of week, regional South Australia, 2019-2023



Definitions of police reported casualty types:

Casualty crash – crash where at least one life lost, serious injury or minor injury occurs.

Casualty – A life lost, serious injury or minor injury.

Lives lost crash – A crash for which there is at least one life lost.

Life lost – A person who dies within 30 days of a crash as a result of injuries sustained in that crash.

Serious injury crash – A non-fatal crash in which at least one person is seriously injured.

Serious injury – A person who sustains injuries and is admitted to hospital for a minimum period of an overnight stay as a result of a road crash and who does not die as a result of those injuries within 30 days of the crash.

Serious casualty – Any person who lost their life or is seriously injured in a crash.

Minor injury crash – A crash in which at least one person sustains injury but no person is seriously injured or dies within 30 days of the crash.

Minor injury – A person who sustains injuries that require medical treatment, either by a doctor or in a hospital, as a result of a road crash and who was not admitted to hospital and who does not die as a result of those injuries within 30 days of the crash.

Data sources

The data presented in this report was obtained from the Department for Infrastructure and Transport Road Crash Database. The information was compiled from police reported road casualty crashes only.

Note- Percentage totals may not add to 100% due to rounding.

Enquiries

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