## **Rural Road**

## **Crashes in South Australia 2017-2021**

## **Overview**

Over the 5-year period 2017-2021, 57% of lives lost, 36% of serious injuries and 16% of minor injuries occurred in rural areas. Rates of driver and rider lives lost and serious injuries are much higher in the rural area compared to metropolitan Adelaide, three times for younger drivers and riders aged between 16 and 19. Crashes resulting in a life lost or serious injury in rural areas are mostly single vehicle type crashes on high-speed roads and crashes involving vehicle occupants not wearing a seatbelt are more prevalent in the rural 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 rural area covers everything outside the metro area Figure 1 shows the number of lives lost and serious injury crashes in rural areas and Metropolitan

# Figure 1 – Number of crashes resulting in a life lost or serious injury by area, South Australia, 2002-2021



THINK!



Number of serious

casualty crashes

While the total number of road deaths fluctuate from year to year, there has been a slight downward trend in serious injury crashes in the rural area. In 2021, there was an increase in lives lost and minor injuries on rural roads in South Australia as compared to the previous year. The trend for the last 5 years (2017-2021) for lives lost in rural areas has increased by an increase in the average of 5.9% per year which has been offset by a decrease in serious injuries crashes in rural areas. Table 1 shows that the trend in both serious and minor injuries have decreased in the rural area by 6.9% and 7.9% over the past 5 years.

Year	Lives lost		Serious injuries		Minor injuries	
	Metropolitan	Rural	Metropolitan	Rural	Metropolitan	Rural
2017	56	44	359	263	4583	932
2018	24	56	323	253	4572	896
2019	49	65	553	280	4294	790
2020	38	55	471	244	3391	678
2021	40	59	587	240	3731	711
Avg trend change	-2.1%	5.9%	14.6%	-2.2%	-6.9%	-7.9%

Table 1: Number of casualties by	/ area, South Australia, 2017-2021
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Table 2 shows that the proportion of minor injuries in metropolitan Adelaide and Rural South Australia over the past 5 years. Rural areas accounted for 57% of lives lost, 36% of serious injuries and 16% of minor injuries. In four out of the last 5 years, the majority of lives lost have been in rural areas.

Year	Lives lost		Serious injuries		Minor injuries	
	Metropolitan	Rural	Metropolitan	Rural	Metropolitan	Rural
2017	56%	44%	58%	42%	83%	17%
2018	30%	70%	56%	44%	84%	16%
2019	43%	57%	66%	34%	84%	16%
2020	41%	59%	66%	34%	83%	17%
2021	40%	60%	71%	29%	84%	16%
2017-2021	43%	57%	64%	36%	84%	16%





### Involvement in rural crashes by place of residence

Figure 2 shows the place of residence for drivers and riders killed or seriously injured in rural crashes. The proportions shown are estimates based on the recorded residential postcodes of lives lost and seriously injured drivers and riders seriously injured in rural crashes.

## Figure 2 – Drivers and riders killed or seriously injured in rural areas by place of residence, South Australia, 2017-2021



Figure 2 illustrates that of the known driver residence postcodes. The vast majority, 67% of driver/rider lives lost and serious injuries in rural areas, reside in rural areas, 25% reside in Adelaide and the remaining 8% lived interstate.

#### Rural and urban lives lost and serious injury rates by age group

Comparisons between urban and rural residents show that rural driver/ rider causality rates are disproportionately higher for younger age groups. Young drivers and riders aged 16–19 living in rural South Australia are 2.5 times more likely, and young rural drivers aged 20-24 are 2 times more likely, to be killed or seriously injured in a crash than those who live in the metropolitan area shown in Figure 3.



## Figure 3: Rate of death or serious injury per 10,000 licences held for drivers/riders by residence, 2017-2021





## Alcohol and drugs in urban/rural lives lost crashes

Figure 4 shows the percentage of drivers and riders killed that had their blood alcohol concentration (BAC) tested and it was above 0.05. For the 5-year period (2017–2021) 22% of drivers and riders killed in rural South Australia had an illegal BAC level compared to 15% of drivers/riders killed in metropolitan areas.



## Figure 4: Percentage of drivers/riders killed and tested with a BAC over .05 by area, South Australia, 2017-2021

#### 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 and have increased over time. Figure 5 compares seatbelt usage between metro and rural area crashes over the past 5 years. There was a greater proportion of vehicle occupants killed who were not wearing seatbelts in rural areas (30%) compared to 22% in metropolitan areas.

## Figure 5: Percentage of vehicle occupants killed who were not wearing a seatbelt by area, South Australia, 2017-2021







## Sex and age distributions of lives lost and serious injuries in rural areas

Figure 6 shows the age and gender profile for lives lost and serious injuries in rural areas on average over the 5-year period (2017-2021). Males in all age groups accounted for the highest number of lives lost and serious injuries in rural areas similarly males are also over-represented in South Australia crash data overall.





#### **Urban/rural distribution**

Figure 7 shows the proportion of lives lost and serious crashes in South Australia over the past 5 years. The majority (56%) of lives lost crashes occurred in rural areas whilst the majority (67%) of serious injury crashes occurred in metropolitan areas.





#### Characteristics of rural crashes

Figure 8 shows the types of crashes occurring in and outside of rural towns. Rural 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 80 km/h. Over the past 5 years 71% of rural crashes are out of town crashes. The most common crash type for both in and out-of-town crashes is when a vehicle hits a fixed object or when a vehicle rolls over. Together these types of crashes accounted for 61% of all out-of-town crashes in rural areas. For in-town crashes, these crashes accounted for 47% of the crashes.

## Figure 8: Average number of lives lost and serious injury crashes per year in-town and out-of-town crashes by crash type, Rural South Australia, 2017-2021







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#### Single and multi-vehicle lives lost and serious injury crashes

For the past 5 years, the majority (68%) of lives lost and serious crashes occurring outside of rural towns were single vehicle type crashes. This is consistent with the most common crash types that occur on higher speed roads – hitting fixed objects and rollovers. Single vehicle crashes refer to crashes that involve hitting a fixed object or animal, either on or off the road, a roll over and crashes where the vehicle leaves the road out of control.

Figure 9: Proportion of single, multi-vehicle and hit pedestrian lives lost and serious injury crashes occurring by speed limit, Rural South Australia, 2016-2020



#### Type of vehicle involved in crashes

Table 3 shows that over the past 5 years a higher proportion of heavy vehicles (7%) were involved in crashes in rural areas than in urban areas (3%) which is most likely due to a greater prevalence of heavy vehicles on rural roads.

Table 3: Percentage of vehicle types in crashes resulting in a life lost or serious injury, South Australia, 2017-2021

Vehicle Type	Metropolitan	Rural
Passenger vehicles	68%	69%
Heavy vehicles	3%	7%
Buses	1%	0%
Motorcycles	16%	18%
Bicycles	10%	3%
Other vehicle types	3%	3%





#### Rural crashes by weekday

Over the past 5 years, road crashes in rural areas were fairly evenly distributed throughout the week but there were more rural crashes occur on weekends (Friday through Sunday). Almost half of rural crashes (47%) occur on one of these three days.









Rural Road

#### Definitions of police reported casualty types:

Casualty Crash – crash where <u>at least one</u> 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 <u>at least one</u> 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 <u>at least one</u> 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.

**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 requiring 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.

## Enquiries

For further information, contact:

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