

Older Road Users Involved in Road Crashes in South Australia

There are on average 21 road fatalities and 172 serious injuries of persons aged 60 years or above each year. Persons over the age of 60 make up 22% of the population and account for 18% of fatalities and only 15% of serious injuries. Older people are more likely to die from their injuries due to their relative frailty. However, older drivers are at least two times less likely to be involved in a crash than younger drivers. Figure 1 shows the casualty rates for road users aged 16-24 and road users aged 60+.

Consistent with fatal and serious injuries generally a decline has been seen in road trauma involving those aged 60 and over (Figure 1). From a total of 252 fatal and serious injuries in 1990, there has been a decline to 214 in 2010 a reduction of 15%. This compares to an overall reduction of 55% for all road fatalities and serious injuries for the same period and 66% reduction for road users aged 16 to 24 years, demonstrating that serious casualties of older road users are declining at a *slower* rate than the rate for other road users. This is likely to be in part due to increases in the numbers of people aged 60 and over, consistent with South Australia's ageing population.

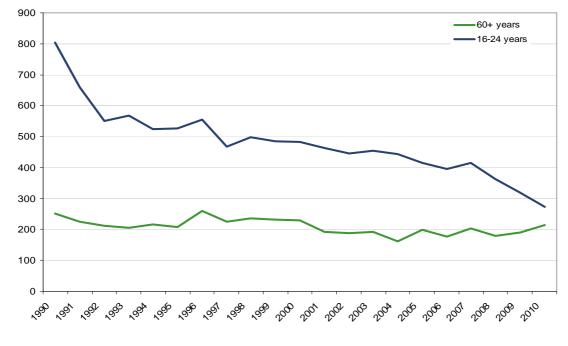
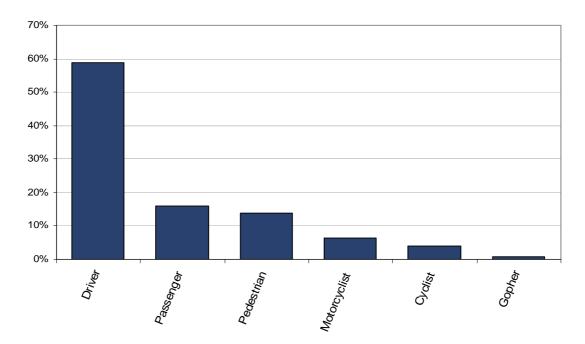


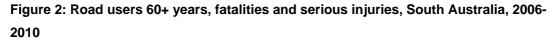
Figure 1: Fatal and Serious Injuries to persons 60+ years and 16-24 years, South Australia, 1990-2010



Older Road User Types

Figure 2 shows that the majority of fatalities and serious injuries among older road users are drivers, passenger and pedestrians. 89% of older road users fall into these categories, compared to 80% for all road users generally.





Older Driver Crash Rates

There are relatively few older drivers on the road compared to their younger counterparts and they tend to travel shorter distances. As noted above, older road users are not major contributors to overall road casualty numbers.

Older drivers are also more likely to be responsible for the crash they are involved in. In South Australia, on average, drivers over the age of 60 involved in fatal and serious injury crashes were responsible in 66% of cases. The figures increase when looking at the older ages within this group. Drivers aged 70-79 involved in fatal and serious injury crashes were responsible in 70% of cases and drivers aged 80 years and over were responsible in 81% of cases.

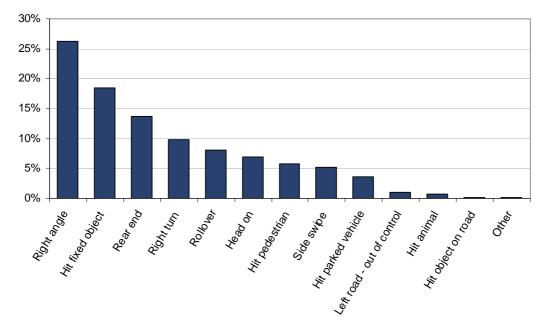
Crashes involving older drivers are most likely to occur between the hours of 9am and 5pm – 71% happen during these times. By contrast, only 44% of all fatal and serious crashes happen between these times. The higher proportion for older drivers is to be expected, given that older drivers generally prefer to drive during off peak daylight hours than at night time.

Types of Crashes Involving Older Drivers

Older drivers are also more likely to be involved in fatal and serious injury crashes at intersections than other drivers – 46% of older driver crashes occur at intersections, compared to 36% of all crashes generally.

As seen in figure 3, more fatal and serious crashes involving older drivers are right angle crashes – just over a quarter of them, compared to 14% of fatal and serious crashes generally. Intersections and junctions are complex traffic environments in which the driver has to attend to a variety of information while under time pressures. A typical right angle crash in which an older driver is at fault occurs when the driver fails to notice another road user in time and/or fails to give way. A higher rate amongst older drivers could be due to a number of factors, including impaired vision and slower reaction time. Rear end and right turn crashes involving older drivers are also more frequent than fatal and serious injury crashes generally (14% and 10% respectively). Older drivers are, however, less likely to be involved in a crash that results in hitting a fixed object (18% compared to 30% for fatal and serious crashes generally).





Crash Location and Speed Limits

Just over half (54%) of fatal and serious injury crashes involving drivers aged 60 and over occur in metropolitan areas. Table 1 shows the breakdown of crashes by speed limits and area. The figures seen are consistent with fatal and serious injury crashes generally. Although there is a perception that older drivers have higher crash rates on low speed roads compared to other drivers, this is shown not to be the case.

Table 1: Crash location road speed limits involving drivers aged 60+ years, SouthAustralia, 2006-2010

Speed Limit	Metropolitan	Rural
50km/h and under	24%	18%
60km/h	60%	12%
70-90km/h	12%	13%
100km/h and over	4%	58%
Total	100%	100%

Older drivers are also more likely than other drivers to be involved in crashes in the locality they reside in (as classified by post code). 30% of older drivers are involved in fatal and serious crashes in their resident locality, compared to 24% for all drivers.

Gender

Males generally far exceed females in road user fatalities and serious injuries. Between 2006-2010, 64% of serious road casualties were male and 36% female. However, in the older road user population, the gap between male and females is not as large. Over the age of 60, 58% of serious casualties were male, compared to 42% of women. This can be partly explained by the longer life expectancy of females and a reduction in risk taking behaviour in the older male age groups. Older drivers are far less likely than young drivers to be involved in crashes characterised by loss of control, speeding, risky overtaking or drink driving.

Older Pedestrians

Road users aged 70 and over have a significantly higher risk of being seriously injured as a result of a pedestrian crash, as seen in figure 4.

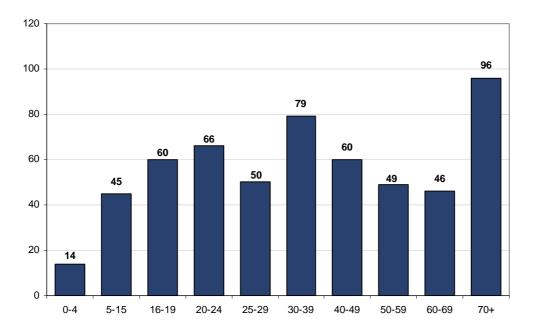
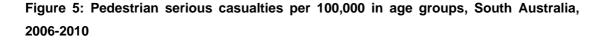


Figure 4: Serious pedestrian casualties by age group, South Australia, 2006-2010

Figure 5 shows the number of pedestrian fatalities and serious injuries per 100,000 of population in each respective age group.

Older pedestrians have a higher risk of death than injury on comparing figure 4 and figure 5. Elderly pedestrians in particular have a higher risk of collision with road vehicles due to the perceptual, cognitive and physical deterioration associated with ageing. If an older person is hit by a car, the outcome is likely to be more severe, resulting in a fatality rather than an injury. The higher involvement of older people in pedestrian fatalities is indicative of the relative frailty of older people. Many elderly people also have a greater reliance on walking and are therefore more likely to be exposed to traffic as pedestrians than younger age groups¹.



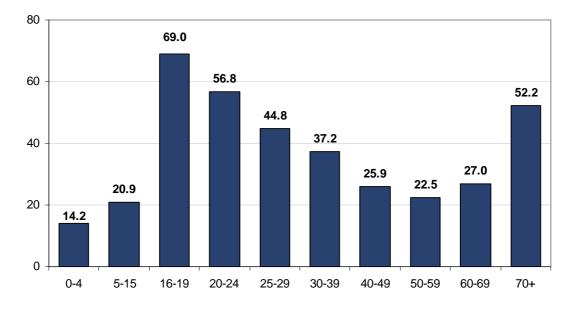


Figure 5 also shows a high serious casualty and fatality rate in the 16-19 year age group. For more information on younger road users, please see the Young Road Users Fact Sheet.

¹ Page 203 'Road Safety in Australia. A publication commemorating World Health Day 2004' Australian Transport Safety Bureau.

Definitions of police reported casualty types:

Casualty Crash - A crash where <u>*at least one*</u> fatality, serious injury <u>*or*</u> minor injury occurs. **Casualty** – A fatality, serious injury or minor injury.

Fatal Crash - A crash for which there is at least one fatality.

Fatality - 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 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 for <u>at least one</u> person sustains injury but no person is admitted to hospital 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 does not die as a result of those injuries with 30 days of the crash.

Property Damage Only Crash – A crash resulting in property damage in excess of the prescribed amount in which no person is injured or dies within 30 days of the crash.

Data sources

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

Figures relating to the current year are preliminary and are subject to revision.

Enquiries

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