Almost everyone is a pedestrian at some time and, as such, is a vulnerable road user. Risks to safety are heightened because pedestrians are not surrounded by the protection of a vehicle and in the event of a crash, are more susceptible to the possibility of death or serious injury. As a pedestrian we are at greater risk of death and injury if hit at impact speeds above 30 km/h. The most vulnerable are children and older people. Pedestrians are most exposed in busy areas, with almost 1 in 6 serious casualties on metropolitan roads.

Over the last five years (2014-2018) almost 1 in every 7 road deaths in South Australia was a pedestrian. In addition to fatalities, there are on average 55 pedestrians seriously injured and 231 who received minor injuries on South Australian roads each year. Please note that users of wheelchairs, motorised wheelchairs and gopher/mobility scooters are also considered pedestrians and are included as pedestrians in this document.

Figure 1: Pedestrian fatalities per year, South Australia, 2009-2018
Figure 1 shows the number of pedestrian fatalities per year for the period 2009-2018. Whilst in the last ten years pedestrian fatalities have fluctuated, in 2018 six pedestrians were killed. This is the lowest number in the past 10 years and more than half the fatalities from the previous year. The 5 year average is 13.

**Time of Day**

Pedestrian serious casualty crashes occur during all times of the day, however there are peak times when the number of serious casualties is particularly high. Nearly one quarter of all serious casualty crashes involving a pedestrian were during the hours of 3 pm and 6 pm.

**Figure 2: Percentage of fatal and serious injury crashes involving a pedestrian by time of day, South Australia, 2014-2018**

The risk of a crash involving a pedestrian resulting in a serious or fatal outcome increases substantially at night. Around one third of casualty crashes occur during the hours of 6 pm to 6am and of these 31% resulted in a fatal or serious injury. By comparison, of the casualty crashes that occurred during day light hours (6am to 6pm), less than a quarter (21%) resulted in fatal or serious injury as illustrated in Table 1.
Table 1: Percentage of casualty crashes in which a pedestrian was hit by time of day and severity, South Australia, 2014-2018

<table>
<thead>
<tr>
<th>Time</th>
<th>Minor injury crash</th>
<th>Serious or fatal injury crash</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>6am - 6pm</td>
<td>79%</td>
<td>21%</td>
<td>100%</td>
</tr>
<tr>
<td>6pm - 6am</td>
<td>69%</td>
<td>31%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Figure 3 shows the frequency of fatal and serious injury pedestrian crashes by weekday and indicates the lowest number of crashes occur on a Monday, and the spread across weekdays is somewhat even with the highest number occurring on a Tuesday and Friday.

Figure 3: Percentage of fatal and serious injury crashes involving a pedestrian by weekday, South Australia, 2014-2018

Rural versus Metropolitan

During the years 2014-2018, 84% of all serious injury and fatal crashes involving a pedestrian in South Australia occurred in metropolitan areas. This is not surprising given the higher volume of pedestrians and traffic present. Fifteen percent of all serious injury and fatal crashes in the metropolitan area involved a pedestrian, this compares to 4% in rural South Australia.

Table 2 shows the Local Government Areas where the highest number of fatal and serious injury pedestrian crashes occurred. These crashes represent 70% of all pedestrian serious casualty crashes.
Table 2: Top 11 Local Government Areas where a fatal and serious injury crash involving a pedestrian occurred, South Australia, 2014-2018

<table>
<thead>
<tr>
<th>Local Government Area</th>
<th>Fatal or serious injury pedestrian crashes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adelaide</td>
<td>55</td>
</tr>
<tr>
<td>Port Adelaide Enfield</td>
<td>28</td>
</tr>
<tr>
<td>West Torrens</td>
<td>28</td>
</tr>
<tr>
<td>Salisbury</td>
<td>27</td>
</tr>
<tr>
<td>Charles Sturt</td>
<td>27</td>
</tr>
<tr>
<td>Playford</td>
<td>23</td>
</tr>
<tr>
<td>Onkaparinga</td>
<td>23</td>
</tr>
<tr>
<td>Marion</td>
<td>14</td>
</tr>
<tr>
<td>Norwood Payneham St Peters</td>
<td>13</td>
</tr>
<tr>
<td>Tea Tree Gully</td>
<td>10</td>
</tr>
<tr>
<td>Campbelltown</td>
<td>10</td>
</tr>
</tbody>
</table>

Speed Limit of Road

There is evidence that small reductions in urban travel speeds can markedly reduce the number of fatal pedestrian crashes. On 1 March 2003, the default urban speed limit in South Australia was reduced from 60 km/h to 50 km/h. Studies found that on roads where the speed limit was reduced from 60 km/h to 50 km/h the average travelling speed fell by 2.3 km/h in the first year the 50 km/h default limit was introduced and the number of people injured in crashes fell by 24%. The number of hit pedestrian casualty crashes had a significant drop of 21% in the 3 years after the limit was reduced to 50 km/h.

Figure 4: Percentage of fatal and serious injury crashes involving a pedestrian by speed limit of road, South Australia, 2014-2018

---

1 From the report ‘Further evaluation of the South Australian default 50 km/h speed limit’ CN Kloeden, JE Woolley, AJ McLean CASR report serious CASR034, December 2006
During the years 2014-2018, 44% of all fatal and serious injury crashes involving a pedestrian in South Australia occurred on roads with a 50 km/h speed limit and a further 41% were on roads with a 60 km/h speed limit. This is to be expected as most of the pedestrian activity would occur on these roads.

**Pedestrian Crossings and Traffic Signals**

Pedestrian serious casualties are much higher when no pedestrian crossing or signalised intersection is present. Such casualties are primarily the result of pedestrians attempting to cross the road where there are no facilities to aid them in crossing. Attempting to cross the road where there is no assisting traffic facilities can be further impaired by the presence of alcohol and drugs and also by a person’s age. Younger and older people can have difficulty making speed and gap judgements.

33% of fatal and serious injury crashes involving a pedestrian occur at intersections and 67% at mid-block sections of road (i.e. where there are no intersecting roads). Of those that occurred at intersections, 67% occurred where there was no traffic signal. About 3% of all pedestrian crashes occurred at pedestrian crossings.

**Table 3: Fatal and serious injury crashes at intersections involving a pedestrian, by control, South Australia, 2014–2018**

<table>
<thead>
<tr>
<th>Intersection Control</th>
<th>Fatal and serious injury crashes</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No control</td>
<td>48</td>
<td>39%</td>
</tr>
<tr>
<td>Traffic signals</td>
<td>41</td>
<td>33%</td>
</tr>
<tr>
<td>Stop sign</td>
<td>17</td>
<td>14%</td>
</tr>
<tr>
<td>Give way sign</td>
<td>14</td>
<td>11%</td>
</tr>
<tr>
<td>Roundabout</td>
<td>3</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>123</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

- Of 123 fatal and serious injury crashes where a pedestrian was involved, pedestrians were the ones who were fatally or seriously injured in 113 of the crashes.
- Out of the 113 fatal and serious injury crashes:
  - There are five crashes that occurred in left turn slip lane. Among these five crashes four fatal crashes occurred in slip lane where there were traffic signals and one serious injury crash occurred in give way sign slip lane.
Pedestrians affected by Alcohol and/or Other Drugs

The presence of alcohol or drugs in a pedestrian’s system can impair their ability to safely negotiate roads and traffic. Between 2014 and 2018, 25% of pedestrians tested following a fatality were found to have a blood alcohol content of more than 0.05. Of those over 0.05, most had a very high blood alcohol content of 0.15 or more. On average, 12% of pedestrians involved in a fatality tested positive to cannabis, MDMA, methamphetamine or a combination of these drugs.

Age of Pedestrians

Figure 5 shows the percent of pedestrians killed or seriously injured by age group along with the percent of the population they represent. This indicates that the most over-represented are the 70+ age group.

Figure 5: Percentage of killed or seriously injured by age group and population, South Australia, 2014-2018

Elderly pedestrians have an elevated risk of injury from a collision, in particular 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 or serious 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 groups.²

Child pedestrians are smaller, harder for drivers to see and less predictable than other pedestrians. Children are more likely to have serious than minor injuries when hit because their whole body is more likely to be hit by the vehicle frontage, compared with adult pedestrians where the legs only are more likely to be hit and the body thrown up onto the bonnet.

Figures 6 and 7 show the number of pedestrian serious injuries and fatalities per 100,000 population in each respective age group. Again, it shows that the most over-represented groups are those aged in the 70+ age group.

Figure 6: Pedestrian serious injuries per 100,000 population\(^3\) by age, South Australia, 2014-2018

![Figure 6](image)

Figure 7 – Pedestrian fatalities per 100,000 population\(^4\) by age, South Australia, 2014-2018

![Figure 7](image)

---

\(^3\) Australian Bureau of Statistics, Australian Demographic Statistics, Cat no. 3101.0

\(^4\) Australian Bureau of Statistics, Australian Demographic Statistics, Cat no. 3101.0
Gender of Pedestrians

Over the last five years a higher proportion of male pedestrians have been involved in serious casualty crashes than female. Of the total number of pedestrians killed and seriously injured between 2014 and 2018, 62% were male. This is indicative of the overall road toll, where males are over-represented in more serious crashes. Males represent the majority of pedestrians seriously injured or killed, however this difference is less prominent in the older age groups and the very young.

Figure 8: Serious and fatal pedestrian injuries by age group and gender, South Australia, 2014-2018

![Graph showing serious and fatal pedestrian injuries by age group and gender, South Australia, 2014-2018.](image)

National Comparison

Figure 9 shows the average fatality rate per 100,000 population in the last 5 year period for Australian States and Territories. South Australia currently has a rate of 0.8 deaths per 100,000 population, this is slightly higher than the rate for Australia which is 0.7 deaths.

Figure 9 – Pedestrian fatalities\(^5\) per 100,000 population for states and territories, 2014-2018

![Graph showing pedestrian fatalities per 100,000 population for states and territories, 2014-2018.](image)

---

\(^5\) Bureau of Infrastructure, Transport and Regional Economics, Road Deaths Australia – 2018 Statistical Summary
Definitions of police reported casualty types:

**Casualty Crash** – crash where at least one fatality, serious injury or 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 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.

**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 of Planning, Transport and Infrastructure Road Crash Database. The information was compiled from police reported road casualty crashes only.

Enquiries

For further information about data in this report, contact:
Department of Planning, Transport and Infrastructure
GPO Box 1533
Adelaide SA  5001

Email : [http://www.dpti.sa.gov.au/contact_us](http://www.dpti.sa.gov.au/contact_us)