

# Cyclists Involved in Road Crashes in South Australia

## **Cycling casualties**

The following data represents police reported incidents of fatal, serious and minor casualties. Police data does not show the location of the injury sustained (i.e. head, neck, thorax or limb) but rather the <u>severity</u> of the injuries, based upon whether a hospital stay is required.

Table 1 – Number of cyclist fatalities per year for the period 1981-2010

	Number of fatalities		Number of fatalities	
1981	12	1996	7	
1982	11	1997	4	
1983	12	1998	4	
1984	8	1999	3	
1985	6	2000	1	
1986	10	2001	6	
1987	10	2002	3	
1988	4	2003	5	
1989	13	2004	3	
1990	6	2005	3	
1991	10	2006	4	
1992	2	2007	5	
1993	6	2008	1	
1994	5	2009	2	
1995	8	2010	5	
		Total	179	

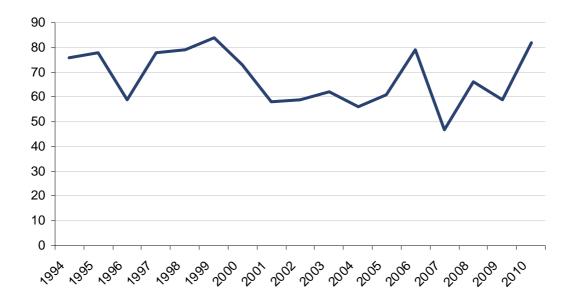
- A total of 179 cyclists have been killed on South Australian roads since 1981.
- In the last 5 years there have been on average 3 cyclist deaths per year.
- This is below the average of 4 per year for the previous 10-year period.

#### **Casualty trends**

After a jump in the number of serious injuries reported to police in 2006, in 2007 there was a return back to levels seen in the previous 5 year period. However in 2010 the number of serious injuries was above the previous 5 year average of 62 reaching 82.



Figure 2 – Cyclists with serious injuries reported to police for the period 1994-2010



The number of cyclists with minor injuries reported to police has risen slightly in the last few years. This could be due to a rise in the incidence of injuries or a change in the incidence of reporting to police.

Figure 3 – Cyclists with minor injuries reported to police for the period 1994-2010

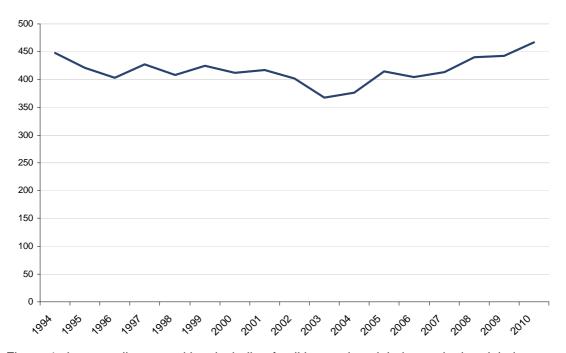
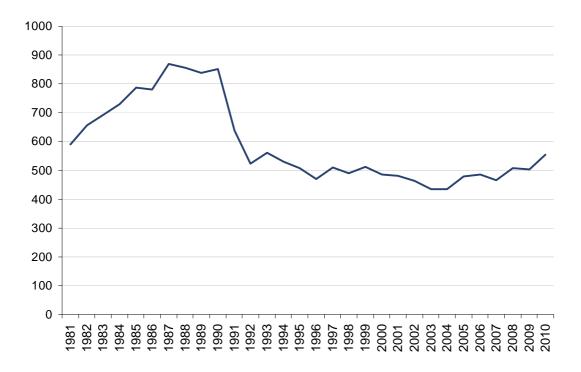


Figure 4 shows cycling casualties, including fatalities, serious injuries and minor injuries over the longer term. Casualties decreased considerably coinciding with the introduction of mandatory helmet wearing legislation for bicyclists in the early 1990s.

Figure 4 – Longer term cyclist casualties (includes fatalities, serious injuries and minor injuries), 1981-2010



#### 5 year trend

For the 5-year period 2006-2010, an average of 503 casualties were reported to SA police each year. Of these:

- · 3 were fatalities
- 67 were seriously injured
- 433 received minor injuries
- 81% were male
- 91% were in metropolitan Adelaide
- 4% were not wearing helmets

On average cyclist fatalities account for three percent of the total road deaths in South Australia and five percent of the total serious injuries.

# Intersections / midblock

Of the 350 crashes where a cyclist was killed or seriously injured between 2006 and 2010, 54% occurred at intersections and 46% occurred at a midblock section of the road.

Table 1 – Fatal and serious injury cyclist crashes by intersection type, South Australia 2006-2010

	Serious	Fatal	Total
INTERSECTION			
Interchange	0	1	1
Cross road	69	2	71
Y-junction	1	0	1
T-junction	110	1	111
Multiple	5	0	5
TOTAL Intersection	185	4	189
MIDBLOCK			
Rail Crossing - midblock	1	0	1
Divided Road	47	2	49
Not Divided Road	95	11	106
Pedestrian Crossing	2	0	2
Other	3	0	3
TOTAL Midblock	148	13	161

## Speed limit / roads

Figure 5 – Percentage of crashes resulting in a fatal or serious injury of a cyclist by speed limit of road, South Australia, 2006-2010

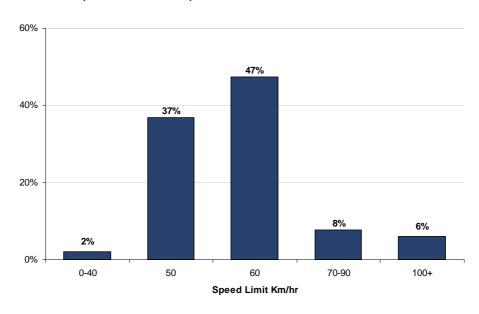
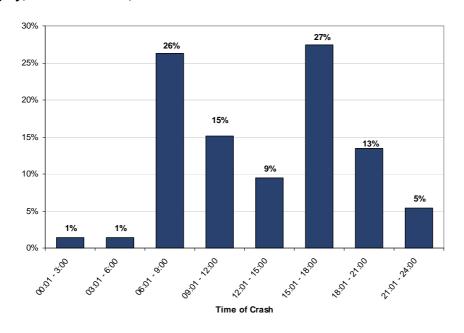


Figure 5 shows a breakdown of crashes where a cyclist was killed or seriously injured by the speed limit of the road they were travelling on. It is evident that most occur on low speed roads, this is to be expected as more bicycle traffic is expected in these areas. Additionally 78 percent of the crashes occurred in metropolitan Adelaide, the remainder in rural areas.

#### Time of crash

The risk of a crash resulting in the serious injury or death of a cyclist increases at peak times of the day. Over half of these types of crashes occur during either 6 - 9 am or 3 - 6 pm.

Figure 7 – Time of day distribution of crashes involving cyclists sustaining serious or fatal injury, South Australia, 2006-2010



# Age of cyclists

Figure 6 – Age distribution of cyclists fatally and seriously injured, South Australia, 2006-2010

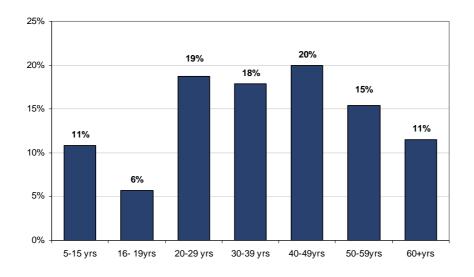


Figure 6 represents the breakdown of serious casualty ages. The 5-15 year age group represents 11% of the cyclist serious casualties, half of these are 12 years or younger. Comparatively this age group (5-15yrs) represents 4% the total serious casualties sustained on the roads.

#### **Helmets**

Between 2006 – 2010, 4% of all cyclist casualties on South Australian roads were not wearing a helmet.

A 2010 survey of cyclists entering the City of Adelaide between the hours of 7am and 10am, conducted by the Adelaide City Council revealed that 2180 out of 2188 cyclists wore helmets - that is a 99.63% compliance rate to Australian Road Rule 256 – Bicycle Helmets.

Definitions of police reported casualty types:

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

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 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** 

For further information about data in this report, contact:

Safer People, Department for Transport, Energy and Infrastructure

**GPO Box 1533** 

Adelaide SA 5001

Email: dtei.enquiries@sa.gov.au

Internet: www.dtei.sa.gov.au/roadsafety

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