



South Australia ROAD SAFETY Progress Report October - December Quarter, 2016

This report provides a quarterly snapshot¹ of crash and injury statistics and factors that influence road safety including numbers of insurance claims, levels of enforcement and the numbers of new cars sold with safety technologies. It provides an indication of how South Australia is progressing against the targets outlined in *Towards Zero Together*, South Australia’s Road Safety Strategy 2020, and how South Australia is performing compared to other jurisdictions.

A summary of progress towards 2020 road safety targets

Information on road fatalities and fatal crashes is provided for the quarter ending on 31 December 2016. As three months are required to finalise case details and to process injury data compared to fatality data, serious injury and casualty data can only be reported up to 30 September 2016. Data on road safety enforcement and motor vehicle insurance and vehicle safety are also reported for the quarter ending 30 September 2016.

For the most up to date fatality data please visit dpti.sa.gov.au/towardszerotogether

	2020 Target	2014	2015	1 Jan 2015 to 31 Dec 2016
Fatalities	less than 80 (per year)	108	102	86
Fatality rate (per 100,000 population)	4.5	6.4	6.0	5.0

	2020 Target	2014	2015	1 Oct 2015 to 30 Sep 2016
Serious injuries	less than 800 (per year)	711	759	730
Serious injury rate (per 100,000 population)	45.0	42.2	44.7	42.7

The data presented in this report are for information purposes only and should be used with care before drawing conclusions not contained in the report. Numbers may not always match due to rounding off and because the databases are continuously updated with new information.

¹ Figures relating to the current quarter are provisional and are subject to revision as detailed crash reports, enforcement data and CTP insurance claims are finalised. Crash data are sourced from the Traffic Accident Reporting System (TARS) maintained by Department of Planning, Transport and Infrastructure in South Australia as at 30 March 2016. Population numbers are as at 30 June 2016 (Australian Bureau of Statistics, 2016, Australian Demographic Statistics, Cat no. 3101.0, ABS, Canberra).

MANAGING FOR RESULTS

Key performance indicators are used to monitor and regularly report on South Australia's progress toward reducing serious casualty crashes by at least 30% over the decade.

The range of performance indicators below draws on crash, transport, enforcement and other road safety data. These indicators may be further developed and refined throughout the life of the *Towards Zero Together* strategy. The performance indicators for the most recent years are reported for comparison against the 2008-2010 annual average, which is the benchmark from the *Towards Zero Together* strategy.

Performance Indicators	Annual Average 2008-2010	2014	2015
Number of single vehicle run-off road serious casualty crashes	465	317	351
Number of intersection serious casualty crashes	368	228	238
Average metro traffic speed ²	56.1 km/h (2010)	55.6 km/h	55.8 km/h
Average rural traffic speed ²	103.2 km/h (2010)	102.6 km/h	102.4 km/h
Percentage of vehicles exceeding stated speed limit ²	23.6% (2010)	20.1%	20.5%
Percentage of new vehicles sold in SA with a 5 star safety rating	40.9% (2010)	67.5%	75%
Number of young people (16-24) killed or seriously injured	318	187	171
Number of drivers/riders killed with a BAC (Blood Alcohol Concentration) above legal limit	22	13	13
Number of drivers/riders tested positive for alcohol ³	10,269	6,380	6,220
Number of drivers/riders tested positive for drugs	1,159	4,672	5,248
Number of people killed or seriously injured not wearing a seatbelt	77	55	42
Number of new Compulsory Third Party insurance claims	6,024	3,991	3,543

² Based on Centre for Automotive Safety Research (CASR) speed surveys (free speeds): Average metro speed is based on Adelaide 60 km/h speed limit arterial roads; average rural traffic speed is based on 110 km/h speed limit arterial roads; percentage of vehicles exceeding signed speed limit is based on Adelaide 60 and 80 km/h limit roads and rural 110 km/h limit arterial roads. Since 2013, Adelaide 80 km/h limit roads are no longer included in the speed surveys, and hence use of the performance indicator "Percentage of vehicles exceeding stated speed limit" after 2013 is based only on Adelaide 60 km/h limit roads and rural 110 km/h limit arterial roads. Values may be subject to change as speed survey site characteristics change over time.

³ Note, due to changes in SA Police reporting and data extraction procedures, enforcement statistics have been revised from previously published results in *Towards Zero Together* South Australia's Road Safety Strategy 2020 and the previous Quarterly Reports.

OVERVIEW OF CASUALTIES AND CRASHES

Road fatalities

Table 1: Numbers of fatalities per month in South Australia, 2013-2016

Month	2013	2014	2015	2016
January	10	8	13	7
February	4	5	4	4
March	17	12	3	8
April	4	5	9	10
May	5	7	8	7
June	13	6	11	7
July	11	9	4	4
August	9	8	11	6
September	3	11	7	7
October	6	9	19	10
November	8	8	8	10
December	7	20	5	6
Total	97	108	102	86

Table 2: Numbers of fatal crashes per month in South Australia, 2013-2016

Month	2013	2014	2015	2016
January	8	7	10	5
February	4	5	4	4
March	15	11	3	7
April	4	4	9	7
May	5	7	8	7
June	11	5	9	7
July	11	8	4	4
August	7	6	10	6
September	3	11	7	7
October	6	9	19	10
November	8	7	8	7
December	7	16	5	6
Total	89	96	96	77

Serious injuries

Table 3: Numbers of serious injuries per month in South Australia, 2013-2016

Month	2013	2014	2015	2016
January	59	66	56	56
February	51	44	59	50
March	73	79	74	67
April	70	64	62	72
May	76	61	66	71
June	55	57	54	59
July	65	48	62	50
August	54	64	70	55
September	65	38	57	51
October	65	57	65	
November	89	64	72	
December	68	69	62	
Total	790	711	759	531

Table 4: Numbers of serious injury crashes per month in South Australia, 2013-2016

Month	2013	2014	2015	2016
January	54	51	52	42
February	46	43	57	46
March	63	68	64	55
April	58	54	44	60
May	61	51	58	59
June	47	52	40	51
July	54	39	55	44
August	43	54	64	43
September	57	28	55	43
October	59	46	50	
November	68	53	65	
December	56	55	53	
Total	666	594	657	443

Road users

Table 5: Numbers of serious casualties by road user, South Australia, 2015-2016

Road User	Sep Qtr 2015	Dec Qtr 2015	Mar Qtr 2016	Jun Qtr 2016	Sep Qtr 2016
Drivers ⁴	104	111	89	107	76
Passengers	30	44	41	49	35
Motorcyclists ⁵	37	40	25	34	31
Cyclists	17	19	22	15	11
Pedestrians ⁶	23	17	15	21	20
Total	211	231	192	226	173

Table 6: Numbers of serious casualties by participant age, South Australia, 2015-2016

Age Group	Sep Qtr 2015	Dec Qtr 2015	Mar Qtr 2016	Jun Qtr 2016	Sep Qtr 2016
0-15	10	7	11	11	6
16-24	32	43	37	58	36
25-29	20	24	24	25	22
30-39	33	33	19	26	22
40-49	27	36	34	28	29
50-59	31	34	21	32	26
60-69	24	25	17	12	14
70-79	17	16	10	16	11
80-89	9	8	12	11	5
90+	1	1	5	6	1
Unknown	7	4	2	1	1
Total	211	231	192	226	173

⁴ Includes heavy vehicle drivers. Heavy vehicles include rigid trucks, semi-trailers and B-doubles.

⁵ Includes pillion passengers and scooter riders/passengers. A scooter is a motorcycle with step-through architecture and either a platform for the operator's feet or footrests integral with the bodywork.

⁶ Includes motorised wheelchairs and small wheel vehicles.

Vehicles

Table 7: Numbers of vehicles involved in serious casualty crashes by vehicle type, 18, South Australia, 2015-2016

Vehicle Type	Sep Qtr 2015	Dec Qtr 2015	Mar Qtr 2016	Jun Qtr 2016	Sep Qtr 2016
Passenger vehicles ⁷	209	222	191	223	164
Heavy vehicles ⁸	11	17	8	12	10
Buses	1	0	3	0	0
Motorcycles ⁹	40	37	25	35	30
Bicycles	19	21	23	18	12
Other vehicle types ¹⁰	0	7	0	2	1
Total	280	304	250	290	217

Table 8: Numbers of passenger vehicles involved in serious casualty crashes, by vehicle age, South Australia, 2015-2016¹¹

Vehicle Age (years)	Sep Qtr 2015	Dec Qtr 2015	Mar Qtr 2016	Jun Qtr 2016	Sep Qtr 2016
0-4	41	42	33	31	22
5-9	39	47	46	47	23
10-14	56	59	50	74	48
15-19	40	37	35	35	39
20+	30	32	21	34	26
Unknown	3	5	6	2	6
Total	209	222	191	223	164

⁷ Passenger vehicles include light trucks (trucks < 4.5 tonnes GVM)

⁸ Heavy vehicles include rigid trucks, semi-trailers and B-doubles.

⁹ Includes scooters.

¹⁰ 'Other vehicle types' include other defined motor vehicles, animal drawn vehicles, riders of animals, railway vehicles, trams, small wheel vehicles and motor vehicles - type unknown.

¹¹ Excludes motorcycles, scooters, buses, heavy vehicles and other vehicle types.

Regions within the State

Table 9: Serious casualty crashes by region, South Australia, 2015-2016¹²

Regions	Sep Qtr 2015	Dec Qtr 2015	Mar Qtr 2016	Jun Qtr 2016	Sep Qtr 2016
Metropolitan Adelaide	117	100	96	105	88
Rural	78	100	63	86	59
Total	195	200	159	191	147

Crash types

Table 10: Serious casualty crashes by type and region, South Australia, 2015-2016¹³

Regions	Crash Type	Sep Qtr 2015	Dec Qtr 2015	Mar Qtr 2016	Jun Qtr 2016	Sep Qtr 2016
Metro	Intersection crashes	47	38	44	57	42
	Single vehicle run-off-road crashes	38	29	35	28	32
	All other crash types	40	36	25	30	23
Rural	Intersection crashes	11	23	14	23	10
	Single vehicle run-off-road crashes	56	57	35	53	38
	All other crash types	15	25	20	17	15

¹² The boundary used for defining the Adelaide metropolitan area has been changed to be consistent with the ABS Greater Adelaide Statistical Area definition (ABS Australian Statistical Geography Standard). For comparison purposes within this report, all crash and casualty data by region for previous quarters have been updated to reflect the new boundaries defining the metropolitan and rural regions. As a result of this change, data by region presented in previous reports cannot be compared to data in this report.

¹³ **Intersection crashes** are any crashes that occurred at the junction of two or more transport paths (including roll over, left road out of control or hit fixed object crashes). **Single vehicle run-off-road crashes** are roll over, left road out of control or hit fixed object crashes (including those at intersections). The types of crash categories are not necessarily mutually exclusive and shouldn't be added together. **All other crash types** include any other crash type not included in intersection crashes or single vehicle run-off-road crashes.

Speed limits

Table 11: Serious casualty crashes by speed limit and region, South Australia, 2015-2016

Regions	Speed Limit	Sep Qtr 2015	Dec Qtr 2015	Mar Qtr 2016	Jun Qtr 2016	Sep Qtr 2016
Metro	Below 40 km/h	0	1	0	0	0
	40 km/h	2	3	2	2	1
	50 km/h	36	22	19	27	26
	60 km/h	49	45	47	43	30
	70 – 90 km/h	26	22	23	23	21
	100 km/h	2	4	5	5	5
	110 km/h	2	3	0	5	5
Rural	Below 40 km/h	0	1	0	0	0
	40 km/h	0	2	1	0	1
	50 km/h	4	14	8	13	6
	60 km/h	7	9	5	5	2
	70 – 90 km/h	7	10	5	8	9
	100 km/h	32	34	23	33	20
	110 km/h	28	30	21	27	21
Total		195	200	159	191	147

ENFORCEMENT ACTIVITY

The enforcement data presented in this section have been supplied by the Traffic Intelligence and Planning Section, South Australia Police (SAPOL)¹⁴.

Speed offences

For speeding offences, the number of expiations per quarter are reported in Figures 1 and 2. A number of methods for detecting speed offences are employed. Speed offences are detected by mobile safety cameras deployed by SAPOL's Traffic Camera Unit and also fixed cameras and red light safety cameras. Non safety-camera speed offences are detected using laser speed detection devices, hand held radars, mobile radars within police vehicles and also include expiations issued as indicated by the speed of police vehicles. Variations in speeding offences over time may be due to differences in the incidence of speeding, hours of speed enforcement and the number of speed camera devices used by police.

Figure 1: Number of expiations issued for safety camera enforcement per quarter, September 2013 to September 2016

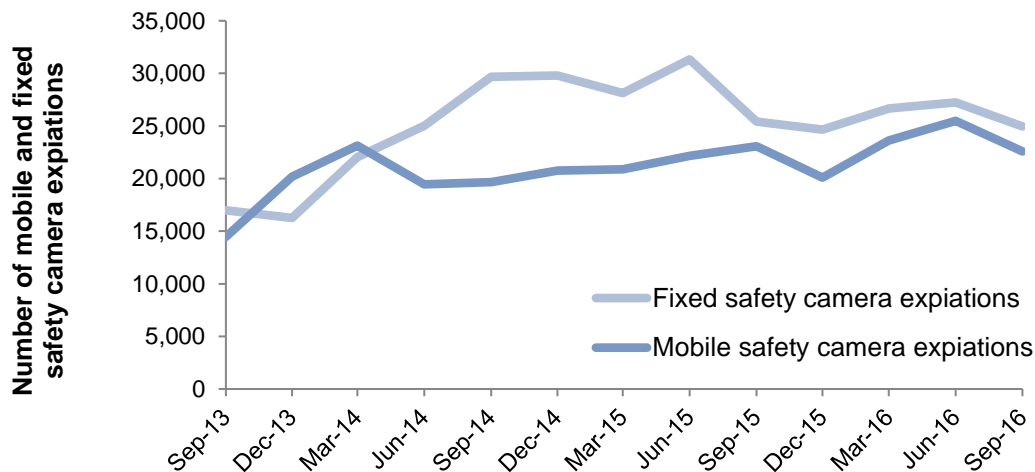
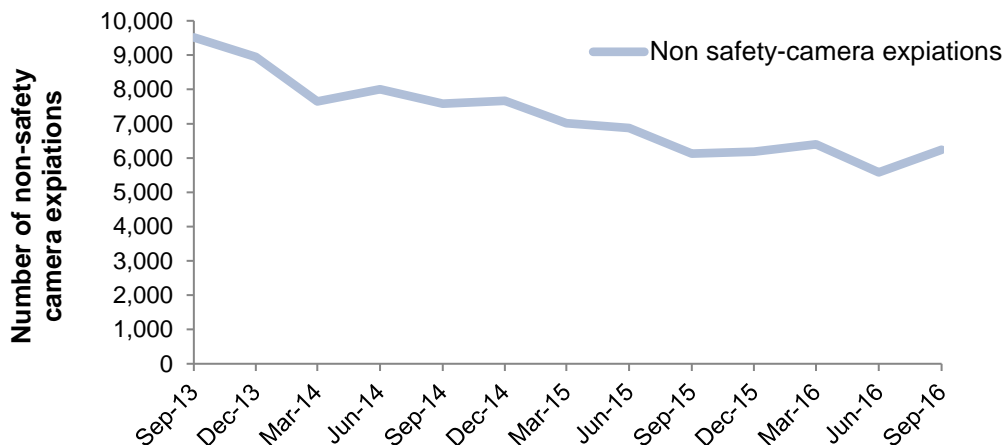


Figure 2: Number of expiations issued for non safety-camera enforcement per quarter, September 2013 to September 2016



¹⁴ Due to changes in SA Police reporting and data extraction procedures, enforcement statistics may differ from those previously reported. Additionally, static and mobile detection rates are no longer reported separately for alcohol or drug detections. Expiation data are based on issued date and not offence date. These data are correct as at 21/11/2016. Future data calculations may show some differences as data are continually refreshed. Comparisons should not be made between point in time data.

Alcohol and drug offences

Alcohol and drug offences are detected through Driver Screening Tests (DST) and numbers of detections per 1,000 drivers tested, per quarter, are reported in Figures 3 and 4. Offences are detected through static testing and mobile testing. Static testing for alcohol or drugs occurs when drivers passing police checkpoints are randomly pulled over to undergo alcohol breath tests or oral fluid drug tests. Mobile testing for alcohol or drugs occurs when drivers are randomly pulled over by police officers in mobile vehicles to undergo alcohol breath tests or oral fluid drug tests. Mobile testing also includes drivers tested as a result of involvement in a crash.

Figure 3: Rate of expiations and apprehensions for alcohol offences using static and mobile Driver Screening Tests (DST) per 1,000 tested, per quarter, September 2013 to September 2016

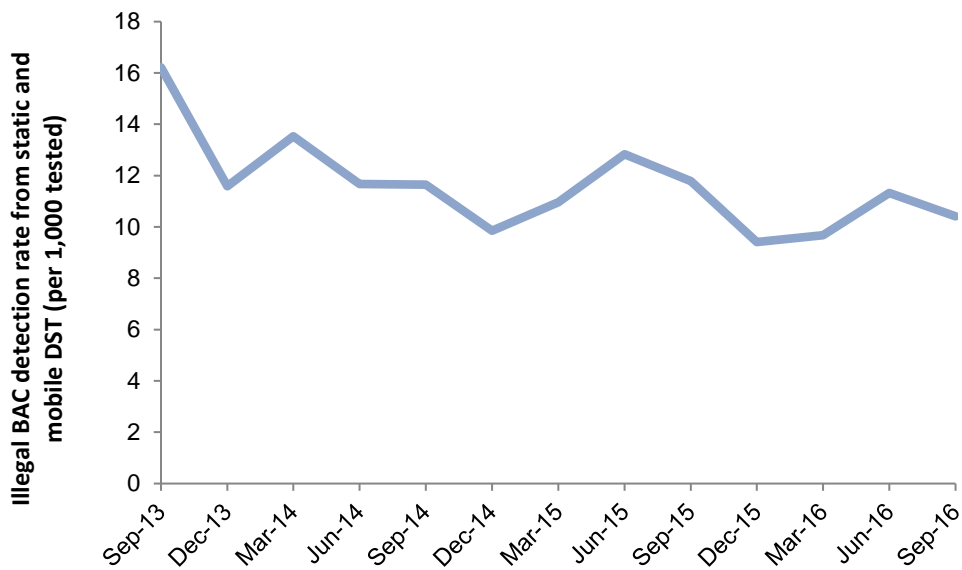
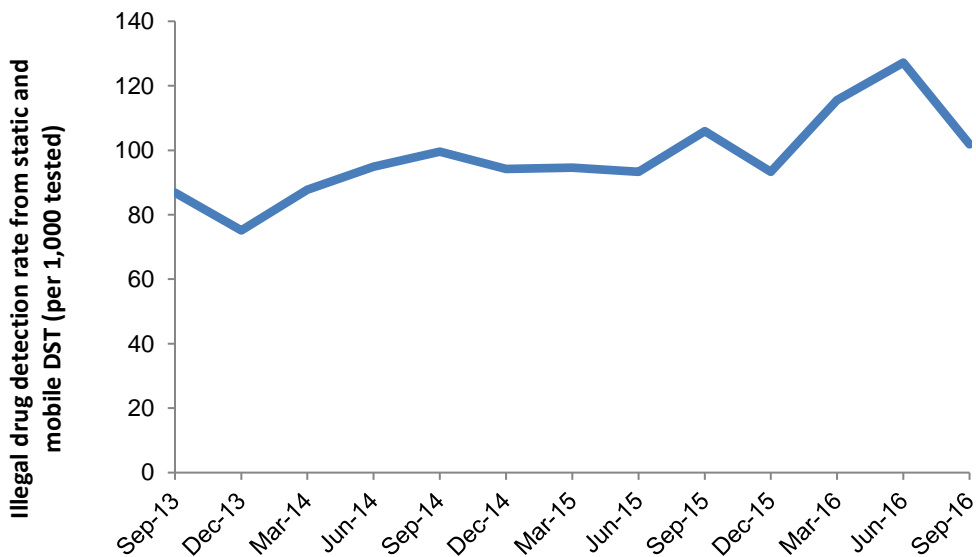


Figure 4: Rate of expiations and apprehensions for drug offences using static and mobile Driver Screening Tests (DST) per 1,000 tested, per quarter, September 2013 to September 2016



Mobile phone and restraint use offences

Driver expiations for mobile phone use and restraint use offences are reported per quarter in Figures 5 and 6. Variations in mobile phone and restraint use offences over time may be due to differences in the incidence of mobile phone and restraint use while driving, as well as varying enforcement activities by police.

Figure 5: Number of expiations for mobile phone use offences per quarter, September 2013 to September 2016

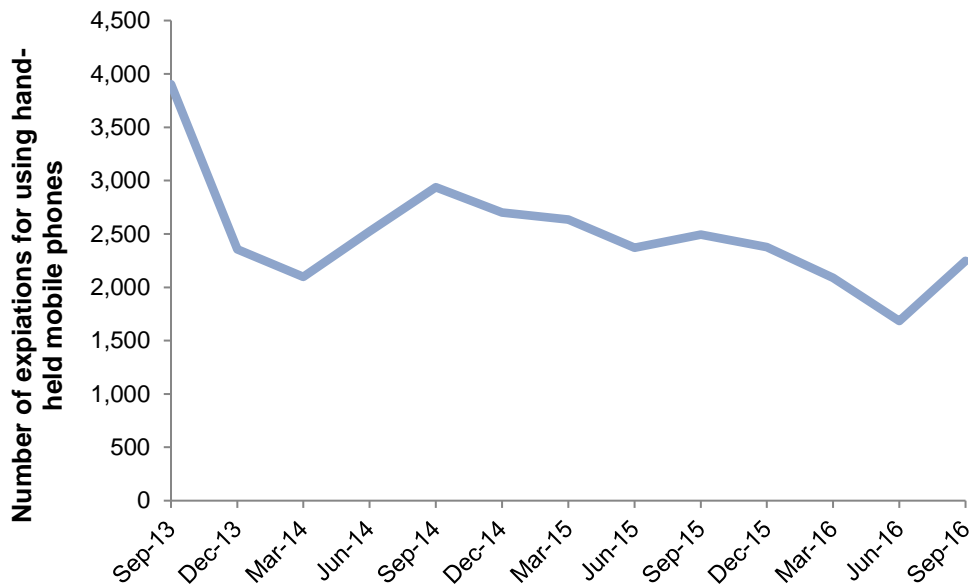
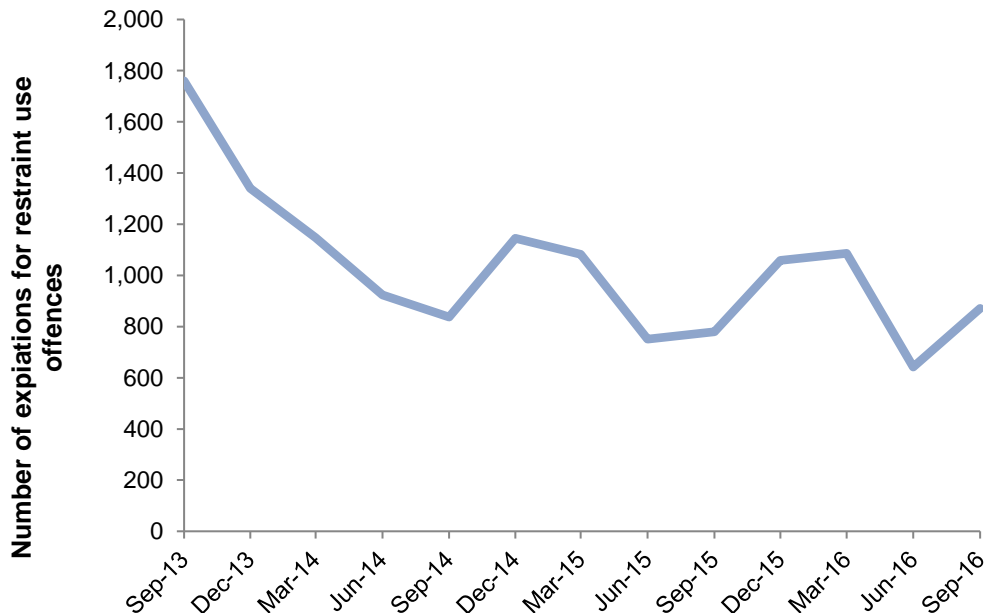


Figure 6: Number of expiations for restraint use offences per quarter, September 2013 to September 2016



ROAD SAFETY MANAGEMENT PRACTICES AND OTHER MEASURES

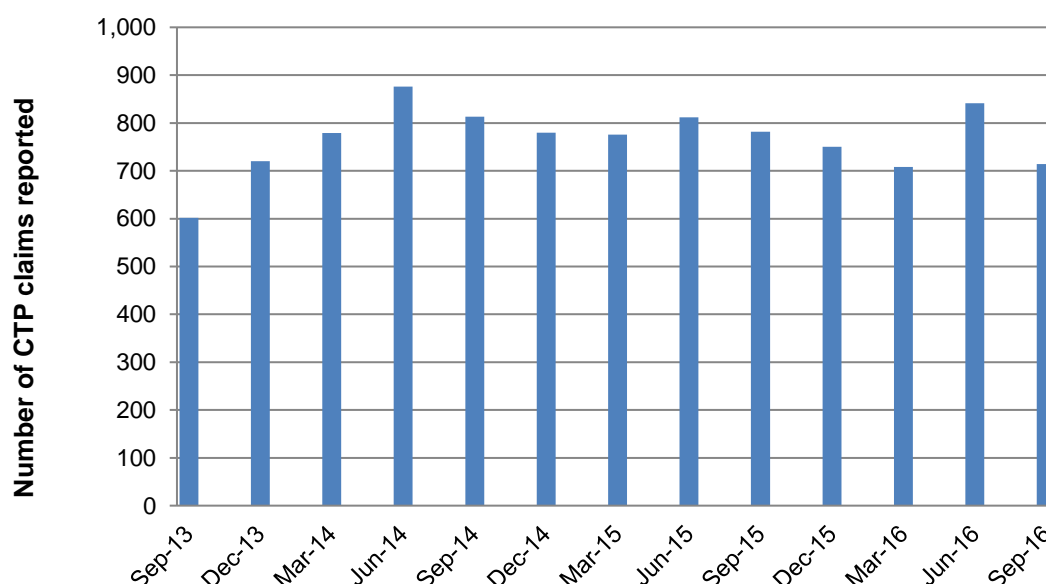
Compulsory third party (CTP) insurance claims

Historically, the Motor Accident Commission (MAC) has been responsible for the administration of South Australia’s CTP insurance scheme. This scheme provides cover to people injured in road crashes. There are differences between CTP statistics and Police statistics on crashes, largely because a driver fully responsible for a crash cannot make a claim for his or her injuries, and some claims arise from crashes not reported to police. In the past, approximately 45% of CTP costs arose from fatality and serious injury crashes. Minor injury crashes account for the remaining costs.

Since July 2016, the administration of Compulsory Third Party Insurance is no longer the responsibility of the MAC. The provision of CTP insurance is now allocated to one of the four private approved insurers being; AAMI, Allianz Australia Insurance Limited, QBE Insurance (Australia) Limited and SGIC. Under the privately underwritten Scheme, Early Notification Forms (ENFs) are no longer used, this has had an effect on reporting¹⁵.

Figure 7 shows the numbers of historical CTP claims per quarter as reported by the MAC, for the period September 2013 to June 2013¹⁵ while the September 2016 quarter figures show the total CTP claims under the new CTP insurance provision system^{Error! Bookmark not defined.}. For consistent CTP claims reporting prior to and after 30 June 2016, previously published MAC claims data in Figure 7 have been adjusted so that ENF claims are not reported, and hence the number of claims has reduced in comparison to previous reports.

Figure 7: Numbers of new CTP insurance claims per quarter, September 2013 to September 2016

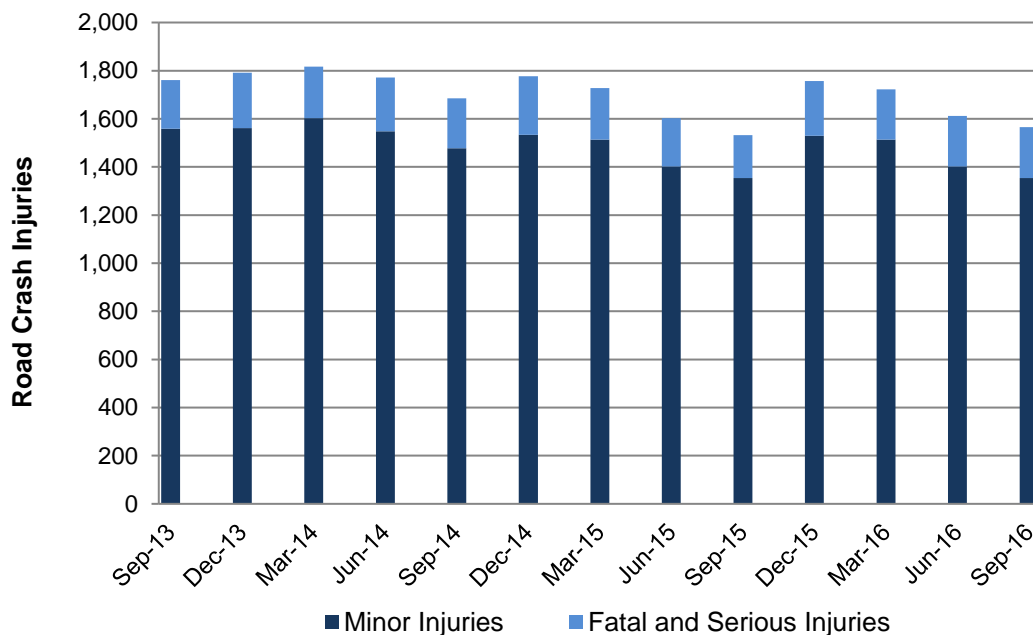


¹⁵ Early Notification Forms (ENFs) were historically used by private medical practitioners, who examined persons injured in a motor accident, to notify the MAC of a potential claim. All ENFs received by MAC triggered the creation of a claim, however, not all ENFs resulted in a genuine CTP claim. Claims reported as of 31st March 2017.

CTP claims in relation to crash injury data

In South Australia there are four categories of injury severity recorded by police. These are crashes with (i) fatal injuries, (ii) serious injuries (admitted to hospital), (iii) treated at hospital injuries and (iv) injuries treated by private doctor. The latter two categories are collectively referred to as minor injuries. In 2015, fatal and serious injuries accounted for 13% of crash injuries while minor injuries accounted for the remaining 87% of injuries. Figure 8 shows the total numbers of injuries per quarter in South Australia and indicates that there has been a general decline in all road crash injuries over the reporting period. Not all road crash injuries result in a CTP claim being made, and hence Figures 7 and 8 are not directly comparable.

Figure 8: Total numbers of road crash injuries per quarter, September 2013 to September 2016



The safety of new vehicles being sold

The Australasian New Car Assessment Program (ANCAP) provides safety star ratings to vehicles sold on the Australian market. It has been estimated that vehicle occupants have twice the chance of being killed or seriously injured in an ANCAP 1-star rated vehicle compared to an ANCAP 5-star rated vehicle.

The requirements for a vehicle to achieve a 5-star rating are changing over time. In order to gain an ANCAP 5-star rating, a vehicle's performance on a number of crash tests must meet or exceed specified criteria. Also, the vehicle must have been fitted with mandatory Safety Assist Technology (SAT) as a standard for that vehicle, as well as a specified number of additional SATs which are dependent on whether the technology is fitted as standard or optional equipment.

In 2011, the requirements for a vehicle to achieve a 5-star rating included¹⁶:

- achieving a suitable standard in frontal offset, side impact and side pole impact tests
- electronic stability control (ESC) and 3-point seat belts for all forward facing seats
- head-protecting technology (side airbags¹⁷) for the front seats.

In 2012 this was extended to also include a marginal pedestrian rating, an acceptable whiplash rating two additional SATs (or more if not fitted as standard equipment).

In 2013, in addition to the 5-star rating requirements of previous years, there is now a mandatory requirement for seatbelt reminders in the front seats, emergency brake assist and a minimum of three additional SATs.

In 2014, in addition to the 5-star rating requirements of previous years, there is now a mandatory requirement for head-protecting technology (side airbags) for the second row seats of vehicles, an acceptable pedestrian rating, an acceptable whiplash rating and a minimum of four additional SATs.

As of 2015, in addition to the 5-star rating requirements of previous years, there is now a mandatory requirement for seatbelt reminders for the second row of fixed seats in vehicles, a good whiplash rating and a minimum of five additional SATs.

The 5-star requirements for 2016 are consistent with those of 2015, although a minimum of six additional SATs are now required.

Table 12 shows the percentages of new vehicles sold in South Australia per quarter with a 5-star rating, while Table 13 shows the percentages with various safety features. The percentages of new vehicles sold with a pre-crash safety system (a relatively new, but potentially very beneficial vehicle safety technology) are also now shown in Table 13.

Table 12: Percentages of new vehicles sold with a 5-star rating, South Australia, 2015-2016¹⁸

New Vehicles sold	Sep Qtr 2015	Dec Qtr 2015	Mar Qtr 2016	Jun Qtr 2016	Sep Qtr 2016
5-star	75%	81%	84%	83%	83%
Total number of new vehicles	15,181	16,576	16,209	17,651	16,533

¹⁶ ANCAP, *ANCAP Rating Road Map 2011-2017*, 23 April 2014.

¹⁷ Front airbags for the driver and passenger of a vehicle are not required to achieve a 5-star rating. Although this is the case, in the September Quarter of 2016, 100% of vehicles sold were fitted with driver's airbags as a standard feature and 99.98% were fitted with a front passenger airbag. Some classes of vehicles sold were less likely to have these features as a standard (POLK, *SA Safety Report*, July – September 2016).

¹⁸ POLK, *SA ANCAP report*, July – September 2016.

Table 13: Percentages of new vehicles sold in South Australia with specified safety features as standard, 2015-2016¹⁹

Safety Feature	Sep Qtr 2015	Dec Qtr 2015	Mar Qtr 2016	Jun Qtr 2016	Sep Qtr 2016
Electronic stability control	95%	98%	98%	98%	98%
Front side curtain airbags	93%	95%	95%	95%	95%
Emergency brake assist	90%	94%	96%	96%	96%
Rear side curtain airbags	88%	87%	86%	85%	86%
Centre 2 nd row lap/sash belt	88%	91%	90%	90%	90%
Pre-crash safety system	9%	10%	12%	13%	17%

¹⁹ The June Quarter 2016 and March Quarter 2016 percentages are current as of POLK, *SA Safety Report*, April - June 2016. Due to methods used by POLK to combine data from vehicle records and a significant change in the VFACTS vehicle segmentation in early 2012 there may be differences in some of the percentages reported previously.

MEASURES OF EXPOSURE TO THE ROAD SYSTEM

Crash data, when combined with various exposure measures, can be used to compare crash rates among different populations that use the road system. The crash rates per 100,000 licence holders (drivers and riders) and per 100,000 registered vehicles in SA, are shown in Table 14 for the 12 months ending September 2016. A comparison of the fatality rate per 100,000 total population for each of the states and territories of Australia is shown in Figure 9. Table 15 shows the total number of fatalities for each of the states and territories in Australia for the 12 months ending December, for the last three years.

Table 14: Fatality and serious injury rates per licence holder and per registered vehicle, South Australia, 12 months ending September 2016²⁰

	South Australia	Fatality Rate (per 100,000)	Serious Injury Rate (per 100,000)
Licence Holders ²¹	1,219,238	4.3	37.2
Registered Vehicles ²²	1,397,823	6.6	52.2

National Comparisons

Figure 9: Fatalities per 100,000 population by state and territory, Australia, 12 months ending December 2016²³

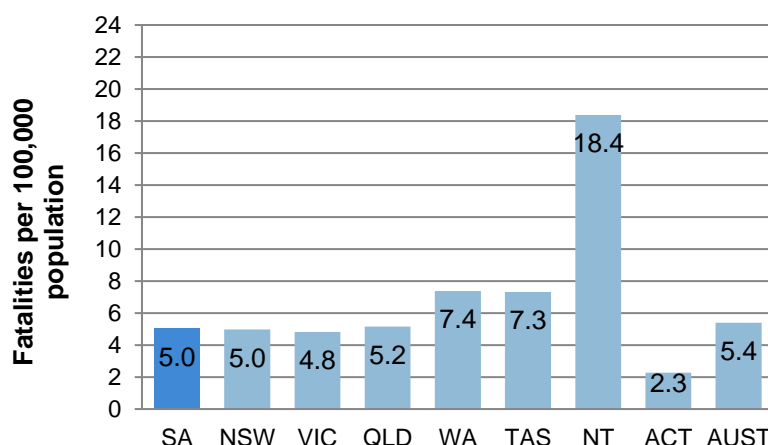


Table 15: Yearly deaths in each state and territory, Australia - 12 monthly periods ending December 2016

Year	SA	NSW	VIC	QLD	WA	TAS	NT	ACT	AUST
2016	86	384	292	250	193	38	45	9	1,297
2015	102	350	252	243	160	34	49	15	1,205
2014	107	307	248	223	183	33	39	10	1,150

²⁰ Licence holder fatality and serious injury rates are based on drivers and riders only. Registered vehicle rates are based on all fatalities or serious injuries.

²¹ Registration and Licensing, SA Department of Planning, Transport and Infrastructure, 30 June 2016.

²² Excludes trailers and caravans. Registration and Licensing, SA Department of Planning, Transport and Infrastructure, 30 June 2016.

²³ Department of Infrastructure and Transport, Bureau of Infrastructure, Transport and Regional Economics, *Road Deaths Australia, December 2016*. Note: as quality assurance, auditing and finalising of jurisdictional data are ongoing, the data presented in Figure 9 and Table 15 are preliminary and a snap shot jurisdictional comparison as of December 2016. However, SA data and the Australian total for the year ending December 2016 have been adjusted to reflect the most recent SA crash data for the quarter ending December 2016.

Definitions

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.

Minor Injury Crash - A crash where at least one person sustains injuries but no person is admitted to hospital or dies within 30 days of the crash.

Minor Injury - A person who sustains injuries requiring medical or surgical treatment, either by a doctor or in a hospital, but is not 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.

Serious Casualty Crash – A crash where at least one 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.

Useful links

Towards Zero Together - South Australia's Road Safety Strategy:

www.dpti.sa.gov.au/tzt

Centre for Automotive Safety Research (CASR) road safety research:

www.casr.adelaide.edu.au

Motor Accident Commission (MAC):

www.mac.sa.gov.au/

CTP Insurance Regulator:

<http://www.ctp.sa.gov.au/>

SA Police:

www.sapolice.sa.gov.au/

Enquiries

For further information about data in this report, contact:

Safer People, Department of Planning, Transport and Infrastructure

GPO Box 1533

Adelaide SA 5001

Email: dpti.enquiries@sa.gov.au

Internet: www.dpti.sa.gov.au