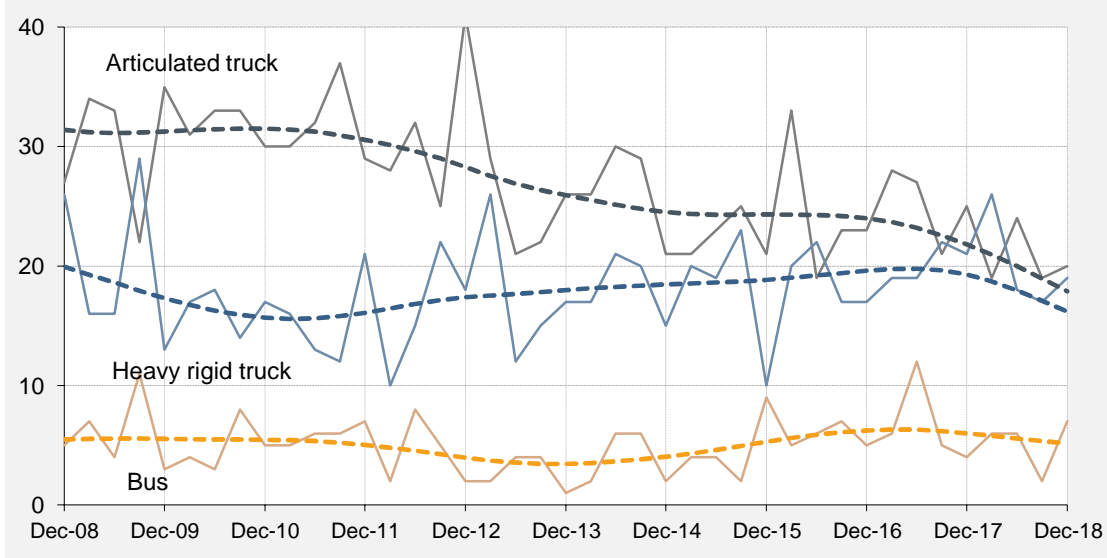




Quarterly counts of fatal crashes involving heavy vehicles, Australia, with trends



Key features

- During the 12 months to the end of December 2018, 154 people died from 136 fatal crashes involving heavy trucks. These included 89 deaths from 78 crashes involving articulated trucks, 74 deaths from 65 crashes involving heavy rigid trucks and 9 deaths from 7 crashes involving both a heavy rigid truck and an articulated truck^a.
- Fatal crashes involving heavy trucks:
 - decreased by 20.5 per cent compared with the corresponding period one year earlier (from 171 to 136 crashes)
 - decreased by an average of 6.1 per cent per year over the three years to December 2018.
 - Fatal crashes involving articulated trucks:
 - decreased by 15.2 per cent compared with the corresponding period one year earlier (from 92 to 78 crashes)
 - decreased by an average of 7.8 per cent per year over the three years to December 2018.
 - Fatal crashes involving heavy rigid trucks:
 - decreased by 26.1 per cent compared with the corresponding period one year earlier (from 88 to 65 crashes)
 - decreased by an average of 1.5 per cent per year over the three years to December 2018.
- During the 12 months to December 2018, 23 people died in 21 fatal crashes involving buses.
- Fatal crashes involving buses:
 - decreased by 22.2 per cent compared with the corresponding period one year earlier (from 27 to 21 crashes)
 - increased by an average of 4.7 per cent per year over the three years to December 2018.

a Figures sum to more than the total because some crashes involved more than one type of heavy vehicle.

ANNUAL TRENDS

Table 1 Fatal crashes

	<i>Articulated Truck involved</i>	<i>Heavy Rigid Truck involved</i>	<i>Any heavy truck involved</i>	<i>Bus involved</i>	<i>Any heavy vehicle involved</i>
12 Months ended					
<i>December 2008</i>	128	83	209	20	229
<i>December 2009</i>	121	75	187	25	212
<i>December 2010</i>	126	65	183	20	202
<i>December 2011</i>	126	56	177	24	200
<i>December 2012</i>	127	81	203	17	217
<i>December 2013</i>	95	61	151	11	162
<i>December 2014</i>	101	76	176	16	191
<i>December 2015</i>	102	72	170	19	187
<i>December 2016</i>	93	75	164	23	186
<i>December 2017</i>	92	88	171	27	195
<i>December 2018</i>	78	65	136	21	157
<i>Ave. trend change p.a.(%)</i>					
<i>- for last 10 years</i>	-4.6	0.3	-2.7	0.4	-2.5
<i>- for last 5 years</i>	-3.8	2.3	-1.8	15.3	-0.3
<i>- for last 3 years</i>	-7.8	-1.5	-6.1	4.7	-4.7

Table 2 Fatalities

	<i>Articulated Truck involved</i>	<i>Heavy Rigid Truck involved</i>	<i>Any heavy truck involved</i>	<i>Bus involved</i>	<i>Any heavy vehicle involved</i>
12 Months ended					
<i>December 2008</i>	148	89	235	21	256
<i>December 2009</i>	145	79	215	31	246
<i>December 2010</i>	146	78	214	21	234
<i>December 2011</i>	142	68	205	25	229
<i>December 2012</i>	153	91	239	18	254
<i>December 2013</i>	115	66	176	12	188
<i>December 2014</i>	115	88	202	20	221
<i>December 2015</i>	115	81	190	22	210
<i>December 2016</i>	106	84	185	24	208
<i>December 2017</i>	105	93	188	32	215
<i>December 2018</i>	89	74	154	23	177
<i>Ave. trend change p.a.(%)</i>					
<i>- for last 10 years</i>	-4.9	0.2	-3.0	0.8	-2.7
<i>- for last 5 years</i>	-4.6	2.2	-2.6	14.5	-1.1
<i>- for last 3 years</i>	-7.5	-1.7	-6.0	4.3	-4.7

ARTICULATED TRUCK INVOLVEMENT

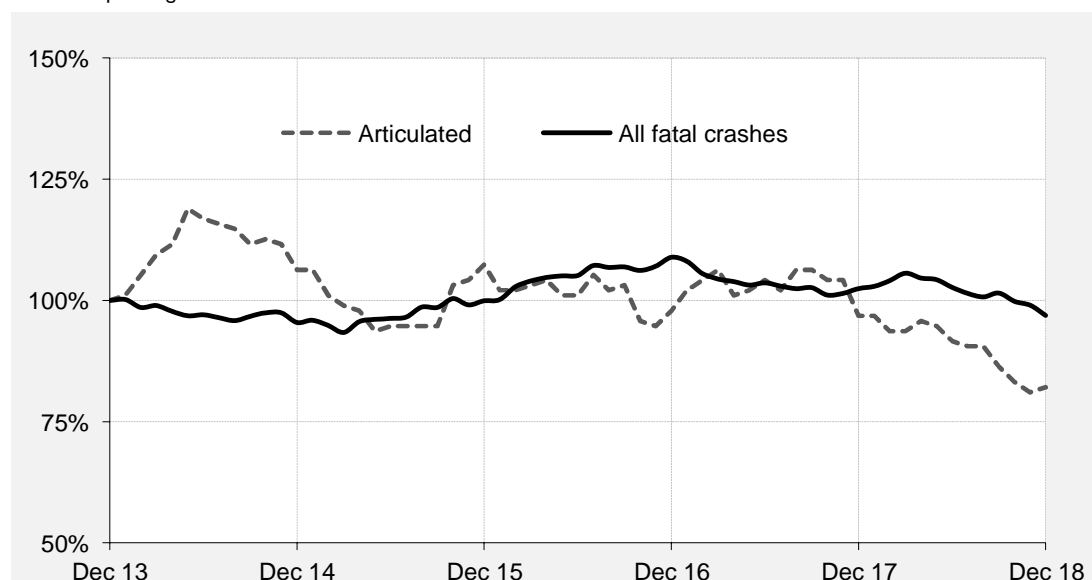
Table 3 Fatal crashes involving articulated trucks by State/Territory

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Calendar Years									
2014	28	25	26	10	6	4	0	2	101
2015	31	21	23	12	12	2	0	1	102
2016	22	20	23	10	10	3	4	1	93
2017	39	20	17	6	9	1	0	0	92
2018	23	12	25	6	9	2	1	0	78
Quarters									
2016									
December	6	6	6	3	4	0	3	0	28
2017									
March	11	7	6	2	1	0	0	0	27
June	11	3	3	1	2	1	0	0	21
September	11	6	5	2	1	0	0	0	25
December	6	4	3	1	5	0	0	0	19
2018									
March	8	3	7	3	2	1	0	0	24
June	6	4	5	1	2	1	0	0	19
September	5	3	8	0	3	0	1	0	20
December	4	2	5	2	2	0	0	0	15
12 Months ended									
December 2017	39	20	17	6	9	1	0	0	92
December 2018	23	12	25	6	9	2	1	0	78
% change	-41.0	-40.0	47.1	0.0	0.0	100.0	-	-	-15.2
Average annual % change over 3 years^a									
12 mths end Dec 2016									
to 12 mths end Dec 2018	-3.2	-15.5	-0.5	-22.8	-9.2	-10.4	-	-	-7.8

a Average annual percentage change based on the exponential trend for the last three 12-month periods.

Index of fatal crashes involving articulated trucks in Australia — five years ended December 2018

Each point shows the number of fatal crashes in the preceding 12 months expressed as a percentage of the corresponding number of fatal crashes in the 12 months to the end of December 2013.



ARTICULATED TRUCK INVOLVEMENT

Table 4 Deaths from crashes involving articulated trucks by State/Territory

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Calendar Years									
2014	31	27	32	12	6	5	0	2	115
2015	34	21	28	15	13	3	0	1	115
2016	26	22	25	11	11	5	5	1	106
2017	49	20	19	6	10	1	0	0	105
2018	26	12	29	7	11	2	2	0	89
Quarters									
2016									
December	8	6	6	3	5	0	4	0	32
2017									
March	13	7	6	2	1	0	0	0	29
June	16	3	5	1	3	1	0	0	29
September	14	6	5	2	1	0	0	0	28
December	6	4	3	1	5	0	0	0	19
2018									
March	10	3	8	3	2	1	0	0	27
June	6	4	6	1	3	1	0	0	21
September	6	3	9	0	4	0	2	0	24
December	4	2	6	3	2	0	0	0	17
12 Months ended									
December 2017	49	20	19	6	10	1	0	0	105
December 2018	26	12	29	7	11	2	2	0	89
% change	-46.9	-40.0	52.6	16.7	10.0	100.0	-	-	-15.2
Average annual % change over 3 years^a									
12 mths end Dec 2016									
to 12 mths end Dec 2018	-1.7	-16.3	-1.7	-25.1	-5.8	-24.6	-	-	-7.5

a Average annual percentage change based on the exponential trend for the last three 12-month periods.

Table 5 Deaths from crashes involving articulated trucks by State/Territory and road user — 12 months ended December 2018

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Drivers ^a	18	7	22	4	4	2	0	0	57
Passengers ^a	5	2	4	1	5	0	0	0	17
Pedestrians	2	1	1	0	0	0	0	0	4
Motorcyclists ^b	0	2	1	1	1	0	0	0	5
Pedal cyclists ^b	1	0	1	1	1	0	0	0	4
All road users ^c	26	12	29	7	11	2	2	0	89

a Includes drivers/passengers of light and heavy vehicles.

b Includes pillion passengers.

c Includes road users not separately specified.

Table 6 Deaths from crashes involving articulated trucks by State/Territory and crash type — 12 months ended December 2018

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Single vehicle crashes	4	1	5	0	2	1	2	0	15
Multiple vehicle crashes	20	10	23	7	9	1	0	0	70
Pedestrian crashes	2	1	1	0	0	0	0	0	4
All crash types	26	12	29	7	11	2	2	0	89

HEAVY RIGID TRUCK INVOLVEMENT

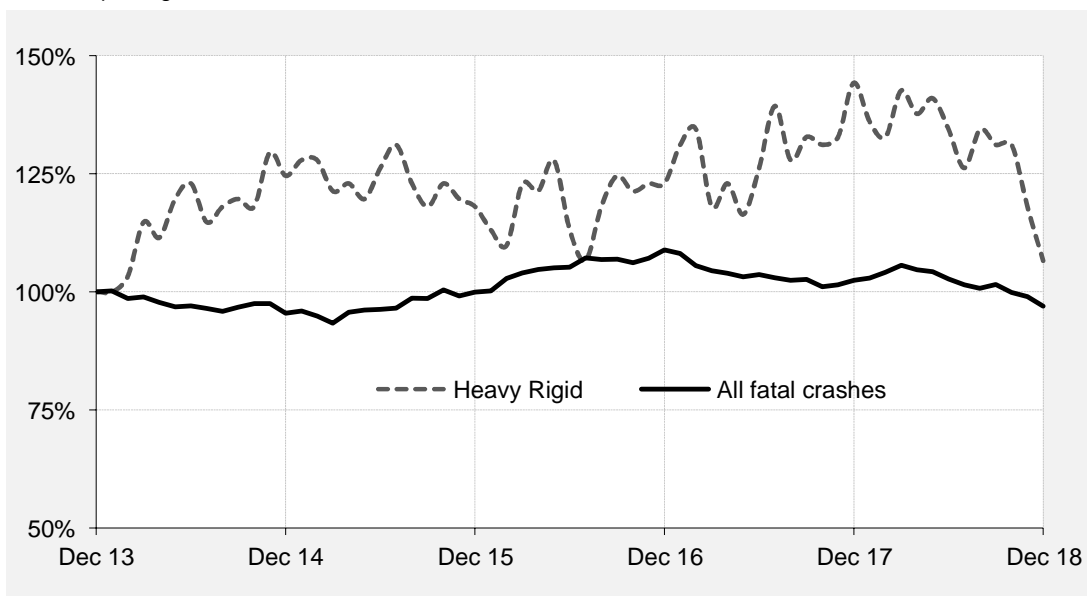
Table 7 Fatal crashes involving heavy rigid trucks by State/Territory

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Calendar Years									
2014	21	23	8	10	11	3	0	0	76
2015	22	18	15	2	9	5	1	0	72
2016	30	17	12	4	11	1	0	0	75
2017	31	19	11	5	16	6	0	0	88
2018	26	10	15	4	5	4	0	1	65
Quarters									
2016									
December	6	5	4	1	3	0	0	0	19
2017									
March	9	4	2	1	2	1	0	0	19
June	7	3	6	1	4	1	0	0	22
September	9	5	2	1	3	1	0	0	21
December	6	7	1	2	7	3	0	0	26
2018									
March	7	2	5	1	1	2	0	0	18
June	5	4	4	2	1	1	0	0	17
September	8	2	4	1	2	1	0	1	19
December	6	2	2	0	1	0	0	0	11
12 Months ended									
December 2017	31	19	11	5	16	6	0	0	88
December 2018	26	10	15	4	5	4	0	1	65
% change	-16.1	-47.4	36.4	-20.0	-68.8	-33.3	-	-	-26.1
Average annual % change over 3 years^a									
12 mths end Dec 2016									
to 12 mths end Dec 2018	5.5	-15.2	-0.9	25.9	-13.0	11.9	-	-	-1.5

a Average annual percentage change based on the exponential trend for the last three 12-month periods.

Index of fatal crashes involving heavy rigid trucks in Australia — five years ended December 2018

Each point shows the number of fatal crashes in the preceding 12 months expressed as a percentage of the corresponding number of fatal crashes in the 12 months to the end of December 2013.



HEAVY RIGID TRUCK INVOLVEMENT

Table 8 Deaths from crashes involving heavy rigid trucks by State/Territory

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Calendar Years									
2014	21	29	8	15	12	3	0	0	88
2015	25	20	16	3	11	5	1	0	81
2016	32	19	13	7	12	1	0	0	84
2017	35	20	11	5	16	6	0	0	93
2018	30	10	20	4	5	4	0	1	74
Quarters									
2016									
December	7	5	4	1	3	0	0	0	20
2017									
March	10	4	2	1	2	1	0	0	20
June	7	3	6	1	4	1	0	0	22
September	11	5	2	1	3	1	0	0	23
December	7	8	1	2	7	3	0	0	28
2018									
March	10	2	6	1	1	2	0	0	22
June	5	4	4	2	1	1	0	0	17
September	9	2	7	1	2	1	0	1	23
December	6	2	3	0	1	0	0	0	12
12 Months ended									
December 2017	35	20	11	5	16	6	0	0	93
December 2018	30	10	20	4	5	4	0	1	74
% change	-14.3	-50.0	81.8	-20.0	-68.8	-33.3	-	-	-20.4
Average annual % change over 3 years^a									
12 mths end Dec 2016									
to 12 mths end Dec 2018	6.6	-18.4	5.2	5.4	-18.8	11.9	-	-	-1.7

a Average annual percentage change based on the exponential trend for the last three 12-month periods.

Table 9 Deaths from crashes involving heavy rigid trucks by State/Territory and road user — 12 months ended December 2018

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Drivers ^a	15	2	13	3	4	3	0	0	40
Passengers ^a	5	2	4	0	1	0	0	1	13
Pedestrians	5	3	1	0	0	0	0	0	9
Motorcyclists ^b	3	1	2	0	0	0	0	0	6
Pedal cyclists ^b	2	2	0	1	0	1	0	0	6
All road users ^c	30	10	20	4	5	4	0	1	74

a Includes drivers/passengers of light and heavy vehicles.

b Includes pillion passengers.

c Includes road users not separately specified.

Table 10 Deaths from crashes involving heavy rigid trucks by State/Territory and crash type — 12 months ended December 2018

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Single vehicle crashes	1	1	3	1	2	1	0	0	9
Multiple vehicle crashes	24	6	16	3	3	3	0	1	56
Pedestrian crashes	5	3	1	0	0	0	0	0	9
All crash types	30	10	20	4	5	4	0	1	74

BUS INVOLVEMENT

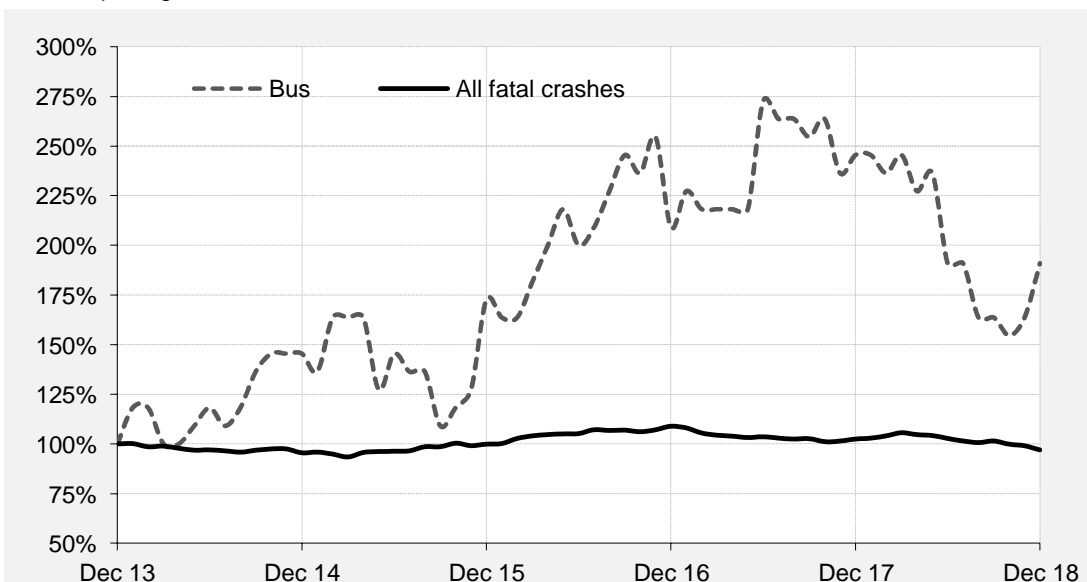
Table II Fatal crashes involving buses by State/Territory

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Calendar Years									
2014	6	3	1	1	4	0	0	1	16
2015	5	6	2	1	2	1	1	1	19
2016	10	2	3	3	3	1	1	0	23
2017	6	7	8	0	3	1	2	0	27
2018	7	5	5	0	2	1	0	1	21
Quarters									
2016									
December	1	1	1	2	0	0	0	0	5
2017									
March	2	0	4	0	0	0	0	0	6
June	4	2	3	0	1	1	1	0	12
September	0	3	1	0	1	0	0	0	5
December	0	2	0	0	1	0	1	0	4
2018									
March	3	1	1	0	1	0	0	0	6
June	2	2	2	0	0	0	0	0	6
September	1	1	0	0	0	0	0	0	2
December	1	1	2	0	1	1	0	1	7
12 Months ended									
December 2017	6	7	8	0	3	1	2	0	27
December 2018	7	5	5	0	2	1	0	1	21
% change	16.7	-28.6	-37.5	-	-33.3	0.0	-100.0	-	-22.2
Average annual % change over 3 years^a									
12 mths end Dec 2016									
to 12 mths end Dec 2018	5.1	7.3	45.2	-	0.0	0.0	-	-	4.7

a Average annual percentage change based on the exponential trend for the last three 12-month periods.

Index of fatal crashes involving buses in Australia — five years ended December 2018

Each point shows the number of fatal crashes in the preceding 12 months expressed as a percentage of the corresponding number of fatal crashes in the 12 months to the end of December 2013.



BUS INVOLVEMENT

Table 12 Deaths from crashes involving buses by State/Territory

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Calendar Years									
2014	6	4	1	1	7	0	0	1	20
2015	5	7	2	1	2	1	3	1	22
2016	10	2	3	3	3	1	2	0	24
2017	6	10	10	0	3	1	2	0	32
2018	7	5	5	0	4	1	0	1	23
Quarters									
2016									
December	1	1	1	2	0	0	0	0	5
2017									
March	2	0	4	0	0	0	0	0	6
June	4	4	5	0	1	1	1	0	16
September	0	3	1	0	1	0	0	0	5
December	0	3	0	0	1	0	1	0	5
2018									
March	3	1	1	0	1	0	0	0	6
June	2	2	2	0	0	0	0	0	6
September	1	1	0	0	0	0	0	0	2
December	1	1	2	0	3	1	0	1	9
12 Months ended									
December 2017	6	10	10	0	3	1	2	0	32
December 2018	7	5	5	0	4	1	0	1	23
% change	16.7	-50.0	-50.0	-	33.3	0.0	-100.0	-	-28.1
Average annual % change over 3 years^a									
12 mths end Dec 2016									
to 12 mths end Dec 2018	5.1	6.2	48.5	-	23.1	0.0	-	-	4.3

a Average annual percentage change based on the exponential trend for the last three 12-month periods.

Table 13 Deaths from crashes involving buses by State/Territory by road user – 12 months ended December 2018

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Drivers ^a	3	1	2	0	1	0	0	0	7
Passengers ^a	0	0	0	0	2	1	0	0	3
Pedestrians	3	3	2	0	0	0	0	1	9
Motorcyclists ^b	1	1	0	0	0	0	0	0	2
Pedal cyclists ^b	0	0	1	0	1	0	0	0	2
All road users ^c	7	5	5	0	4	1	0	1	23

a Includes drivers/passengers of light and heavy vehicles.

b Includes pillion passengers.

c Includes road users not separately specified.

Table 14 Deaths from crashes involving buses by State/Territory by crash type - – 12 months ended December 2018

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Single vehicle crashes	0	0	0	0	0	0	0	0	0
Multiple vehicle crashes	4	2	3	0	4	1	0	0	14
Pedestrian crashes	3	3	2	0	0	0	0	1	9
All crash types	7	5	5	0	4	1	0	1	23

APPENDIX

Glossary Note. The following definitions are general explanations only. The precise definitions vary across the organisations that provide the source data. These differences may result in minor inconsistencies between jurisdictions for some variables.

Articulated truck A motor vehicle primarily for load carrying, consisting of a prime mover that has no significant load carrying area but with a turntable device which can be linked to one or more trailers.

Heavy rigid truck A motor vehicle of GVM greater than 4.5 tonnes constructed with a load carrying area. Includes a rigid truck with a tow bar, draw bar or other non-articulated coupling on the rear of the vehicle.

Gross Vehicle Mass (GVM) Tare weight (i.e. unladen weight) of the motor vehicle plus its maximum carrying capacity excluding trailers.

Bus A motor vehicle constructed for the carriage of passengers which has at least 10 seats, including the driver's seat.

Crash Any apparently unpremeditated event reported to police, or other relevant authority, and resulting in death, injury or property damage attributable to the movement of a road vehicle on a public road.

Road Death or Fatality A person who dies within 30 days of a crash as a result of injuries received in that crash.

Fatal crash A crash for which there is at least one death.

Preliminary data Data for recent months are preliminary and subject to revision.

Estimation of three year trends In this bulletin, the figures for the 'Average annual per cent change over 3 years' are calculated by fitting an exponential trend line to the last four data points (years 0 to 3). The Excel function LOGEST performs the fit. The resulting trend line represents a constant annual percent change over the period. (Note: when fitted to a series containing small numbers, this may not be a reliable indicator of a stable trend.)

Smooth trend lines Whittaker-Henderson smoothers are used with value of 80 for the smoothing parameter. The application R (package pracma) can be used for such trend lines.

Data Sources The data presented here are obtained from the following sources:

- Transport for New South Wales
- VicRoads
- Queensland Department of Transport and Main Roads
- Department of Planning, Transport and Infrastructure South Australia
- Western Australian Police
- Department of State Growth, Tasmania
- Department of Transport, Northern Territory
- Territory and Municipal Services Directorate, Australian Capital Territory

An online version of the database used to produce this bulletin is available from:

< http://www.bitre.gov.au/statistics/safety/fatal_road_crash_database.aspx >

Inquiries For further information about data in this bulletin, contact:

Bureau of Infrastructure, Transport and Regional Economics
Department of Infrastructure, Regional Development and Cities
GPO Box 501 Canberra ACT 2601
Email: roadsafety@infrastructure.gov.au
Internet: < <http://www.bitre.gov.au> >