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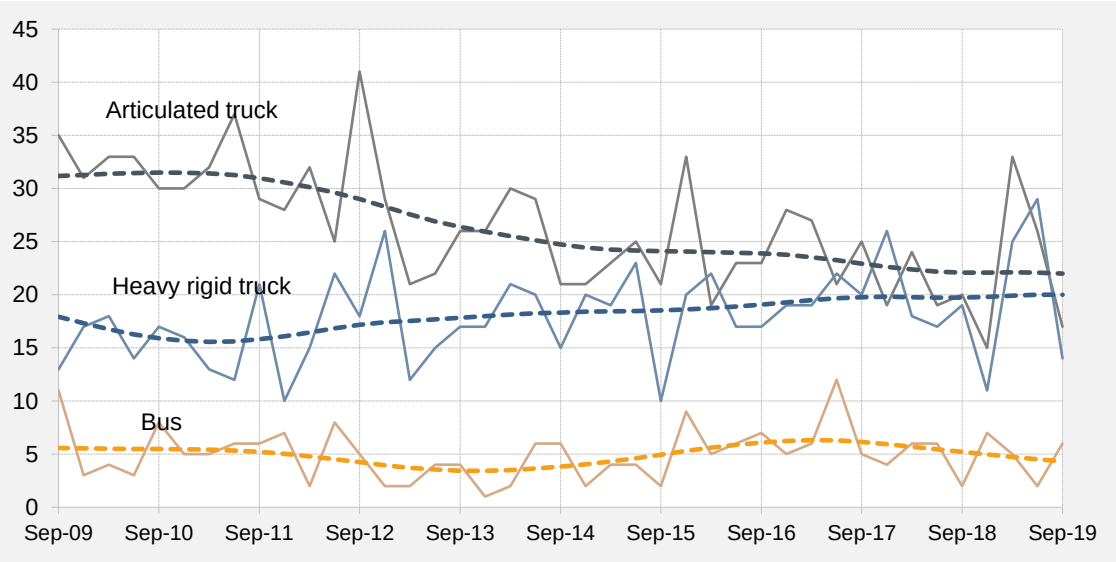
Australian Government
Department of Infrastructure, Transport, Cities and Regional Development
Bureau of Infrastructure, Transport and Regional Economics

bitre

Fatal heavy vehicle crashes Australia quarterly bulletin Jul - Sep 2019

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



Key features

- During the 12 months to the end of September 2019, 182 people died from 165 fatal crashes involving heavy trucks. These included 99 deaths from 91 crashes involving articulated trucks, 88 deaths from 79 crashes involving heavy rigid trucks and 5 deaths from 5 crashes involving both a heavy rigid truck and an articulated truck[a].

- Fatal crashes involving heavy trucks:
  - – increased over the last 12 months by 7.8 per cent when compared with the corresponding 12-month period one year earlier (from 153 to 165 crashes)
  - – decreased by an average of 2.2 per cent per year over the three years to September 2019.

  - Fatal crashes involving articulated trucks:
    - – increased over the last 12 months by 11.0 per cent compared with the corresponding period one year earlier (from 82 to 91 crashes)
    - – decreased by an average of 4.2 per cent per year over the three years to September 2019.

  - Fatal crashes involving heavy rigid trucks:
    - – decreased over the last 12 months by 1.3 per cent compared with the corresponding 12-month period one year earlier (from 80 to 79 crashes)
    - – increased by an average of 1.2 per cent per year over the three years to September 2019.

- During the 12 months to September 2019, 24 people died in 20 fatal crashes involving buses.

- Fatal crashes involving buses:
  - – increased over the last 12 months by 11.1 per cent compared with the corresponding 12-month period one year earlier (from 18 to 20 crashes)
  - – decreased by an average of 12.6 per cent per year over the three years to September 2019.

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

	Articulated Truck involved	*Heavy Rigid Truck involved*	*Any heavy truck involved*	*Bus involved*	*Any heavy vehicle involved*
12 Months ended					
September 2009	124	74	191	27	218
September 2010	127	66	188	18	206
September 2011	128	62	180	22	201
September 2012	126	65	187	22	205
September 2013	98	70	163	12	175
September 2014	106	73	177	15	191
September 2015	90	72	160	12	170
September 2016	98	76	171	27	198
September 2017	101	80	171	28	195
September 2018	82	80	153	18	171
September 2019	91	79	165	20	184
Ave. trend change p.a.(%)					
- for last 10 years	*-4.1*	*2.0*	*-1.7*	*-0.3*	*-1.6*
- for last 5 years	*-2.9*	*2.2*	*-1.4*	*8.0*	*-0.5*
- for last 3 years	*-4.2*	*1.2*	*-2.2*	*-12.6*	*-3.5*

Table 2 Fatalities

	Articulated Truck involved	*Heavy Rigid Truck involved*	*Any heavy truck involved*	*Bus involved*	*Any heavy vehicle involved*
12 Months ended					
September 2009	139	77	209	33	242
September 2010	153	80	226	19	245
September 2011	148	67	205	23	227
September 2012	143	81	220	23	239
September 2013	126	75	196	13	209
September 2014	118	82	198	16	213
September 2015	104	81	183	16	197
September 2016	111	88	194	30	224
September 2017	118	84	190	32	216
September 2018	91	90	170	19	189
September 2019	99	88	182	24	205
Ave. trend change p.a.(%)					
- for last 10 years	*-4.6*	*1.9*	*-2.1*	*0.1*	*-2.0*
- for last 5 years	*-3.4*	*1.8*	*-1.9*	*7.7*	*-1.0*
- for last 3 years	*-5.9*	*0.7*	*-3.0*	*-11.2*	*-3.9*

ARTICULATED TRUCK INVOLVEMENT

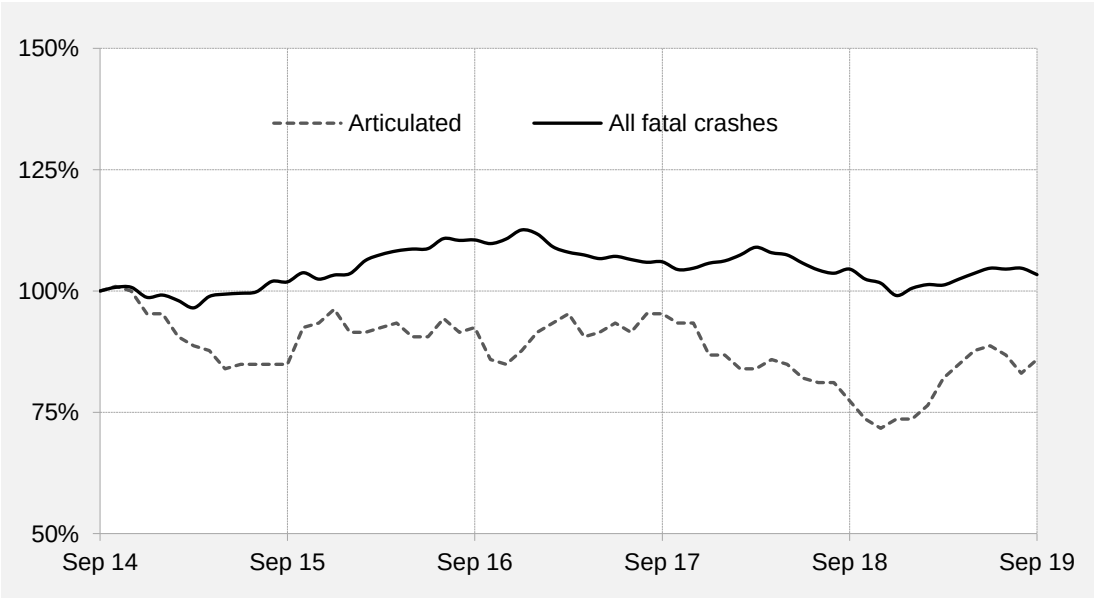
Table 3 Fatal crashes involving articulated trucks by State/Territory

	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	13	25	5	9	2	1	0	78
Quarters									
2017									
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	3	5	1	2	0	0	0	15
2019									
March	10	9	4	7	2	1	0	0	33
June	7	5	3	6	4	1	0	0	26
September	5	2	7	1	1	1	0	0	17
12 Months ended									
September 2018	25	14	23	5	12	2	1	0	82
September 2019	26	19	19	15	9	3	0	0	91
% change	4.0	35.7	-17.4	200.0	-25.0	50.0	-100.0	-	11.0
Average annual % change over 3 years [a]									
12 mths end Sep 2017 to 12 mths end Sep 2019	-4.3	-5.9	-4.2	2.0	-4.5	7.2	-	-	-4.2

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 September 2019

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 September 2014.



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	14	29	6	11	2	2	0	90
Quarters									
2017									
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	4	6	2	2	0	0	0	18
2019									
March	10	9	4	7	2	1	0	0	33
June	7	5	5	7	5	1	0	0	30
September	5	2	7	2	1	1	0	0	18
12 Months ended									
September 2018	28	14	26	5	14	2	2	0	91
September 2019	26	20	22	18	10	3	0	0	99
% change	-7.1	42.9	-15.4	260.0	-28.6	50.0	-100.0	-	8.8
Average annual % change over 3 years [a]									
12 mths end Sep 2017									
to 12 mths end Sep 2019	-8.9	-7.1	-4.4	5.2	-4.4	-8.1	-	-	-5.9

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 September 2019

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	**Australia**
Driver [a]	19	15	17	14	5	3	0	0	73
Passenger [a]	1	2	3	1	3	0	0	0	10
Pedestrian	5	1	0	1	2	0	0	0	9
Motorcyclist [b]	0	1	2	1	0	0	0	0	4
Pedal cyclist [b]	1	1	0	1	0	0	0	0	3
All road users [c]	26	20	22	18	10	3	0	0	99

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 September 2019

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	**Australia**
Single vehicle crash	7	4	3	1	2	1	0	0	18
Multiple vehicle crash	14	15	19	16	6	2	0	0	72
Pedestrian crash	5	1	0	1	2	0	0	0	9
All crash types	26	20	22	18	10	3	0	0	99

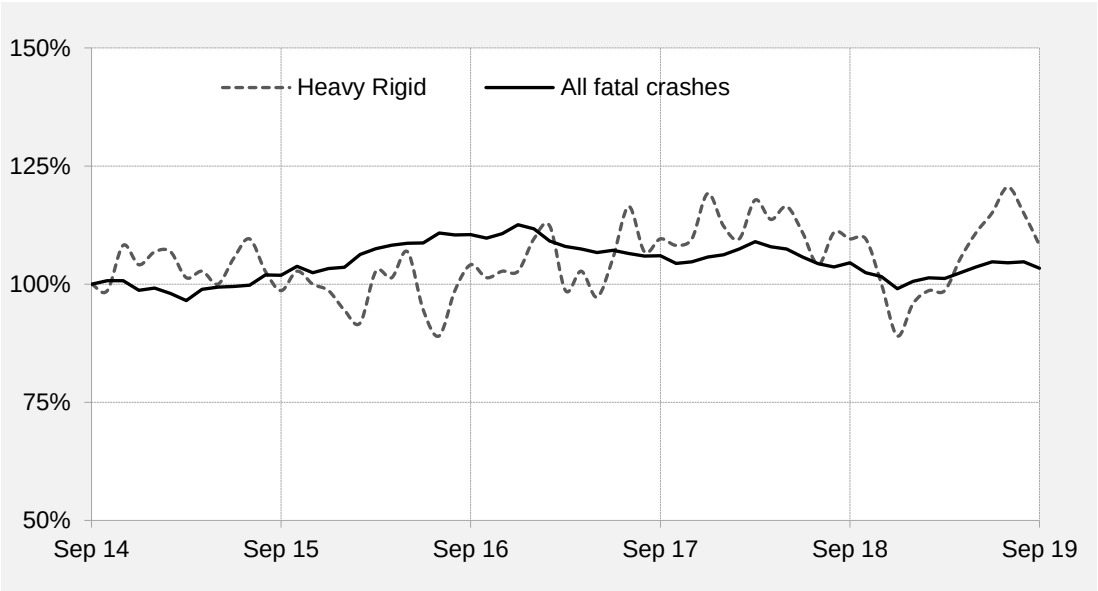
Table 7 Fatal crashes involving heavy rigid trucks by State/Territory

	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	5	0	0	87
2018	25	10	15	5	5	4	0	1	65
Quarters									
2017									
September	9	5	2	1	3	0	0	0	20
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	5	2	2	1	1	0	0	0	11
2019									
March	10	7	4	1	1	2	0	0	25
June	12	8	4	0	3	2	0	0	29
September	3	2	3	2	2	1	1	0	14
12 Months ended									
September 2018	26	15	14	6	11	7	0	1	80
September 2019	30	19	13	4	7	5	1	0	79
% change	15.4	26.7	-7.1	-33.3	-36.4	-28.6	-	-100.0	-1.3
Average annual % change over 3 years [a]									
12 mths end Sep 2017 to 12 mths end Sep 2019	-0.7	0.4	0.0	13.5	-10.9	32.1	-	-	1.2

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 September 2019

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 September 2014.



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	5	0	0	92
2018	29	10	20	5	5	4	0	1	74
Quarters									
2017									
September	11	5	2	1	3	0	0	0	22
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	5	2	3	1	1	0	0	0	12
2019									
March	12	7	5	1	1	2	0	0	28
June	14	9	4	0	4	2	0	0	33
September	3	3	3	2	2	1	1	0	15
12 Months ended									
September 2018	31	16	18	6	11	7	0	1	90
September 2019	34	21	15	4	8	5	1	0	88
% change	9.7	31.3	-16.7	-33.3	-27.3	-28.6	-	-100.0	-2.2
Average annual % change over 3 years [a]									
12 mths end Sep 2017 to 12 mths end Sep 2019	0.6	0.9	2.5	-7.8	-12.2	32.1	-	-	0.7

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 September 2019

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	**Australia**
Driver [a]	18	9	9	0	5	5	1	0	47
Passenger [a]	7	5	1	2	0	0	0	0	15
Pedestrian	4	4	1	0	3	0	0	0	12
Motorcyclist [b]	2	0	4	2	0	0	0	0	8
Pedal cyclist [b]	3	3	0	0	0	0	0	0	6
All road users [c]	34	21	15	4	8	5	1	0	88

a Includes drivers/passengers of light and heavy vehicles.
b Includes pillion passengers.
c Includes road users not separately specified.

Tabel 10 Deaths from crashes involving heavy rigid trucks by State/Territory and crash type — 12 months ended September 2019

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	**Australia**
Single vehicle crash	5	4	3	1	2	2	0	0	17
Multiple vehicle crash	25	13	11	3	3	3	1	0	59
Pedestrian crash	4	4	1	0	3	0	0	0	12
All crash types	34	21	15	4	8	5	1	0	88

BUS INVOLVEMENT

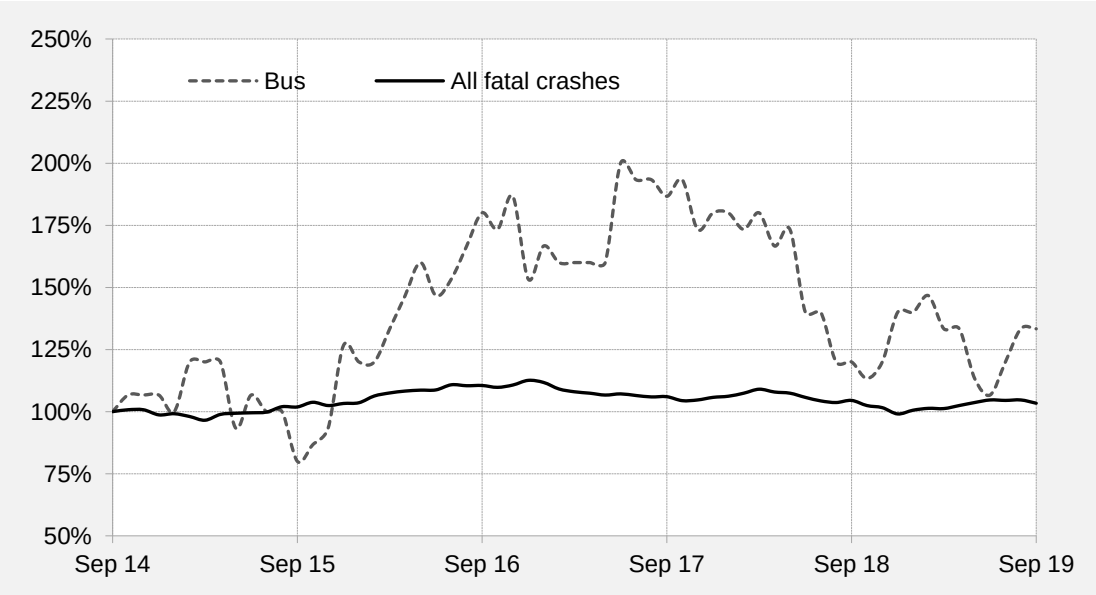
Table 11 Fatal crashes involving buses by State/Territory

	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									
2017									
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
2019									
March	3	0	0	2	0	0	0	0	5
June	1	1	0	0	0	0	0	0	2
September	2	2	0	0	2	0	0	0	6
12 Months ended									
September 2018	6	6	3	0	2	0	1	0	18
September 2019	7	4	2	2	3	1	0	1	20
% change	16.7	-33.3	-33.3	-	50.0	-	-100.0	-	11.1
Average annual % change over 3 years [a]									
12 mths end Sep 2017 to 12 mths end Sep 2019	-11.5	-6.5	-27.2	-	-8.3	-	-	-	-12.6

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 September 2019

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 September 2014.



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									
2017									
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
2019									
March	4	0	0	2	0	0	0	0	6
June	1	1	0	0	0	0	0	0	2
September	2	2	0	0	3	0	0	0	7
12 Months ended									
September 2018	6	7	3	0	2	0	1	0	19
September 2019	8	4	2	2	6	1	0	1	24
% change	33	-43	-33	-	200	-	-100	-	26
Average annual % change over 3 years [a]									
12 mths end Sep 2017 to 12 mths end Sep 2019	-7.9	-7.7	-28.7	-	12.9	-	-	-	-11.2

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 September 2019

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	**Australia**
Driver [a]	1	1	0	0	3	0	0	0	5
Passenger [a]	1	0	0	0	3	1	0	0	5
Pedestrian	3	3	1	2	0	0	0	1	10
Motorcyclist [b]	2	0	0	0	0	0	0	0	2
Pedal cyclist [b]	1	0	1	0	0	0	0	0	2
All road users [c]	8	4	2	2	6	1	0	1	24

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 September 2019

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	**Australia**
Single vehicle crash	0	0	0	0	0	0	0	0	0
Multiple vehicle crash	5	1	1	0	6	1	0	0	14
Pedestrian crash	3	3	1	2	0	0	0	1	10
All crash types	8	4	2	2	6	1	0	1	24

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;
- Department of Transport, Victoria;
- 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

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