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STATISTICAL REPORT



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Safety

**Road trauma involving heavy vehicles
2016 statistical summary**

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Bureau of Infrastructure, Transport and Regional Economics (BITRE)

Department of Infrastructure and Regional Development

GPO Box 501, Canberra ACT 2601, Australia

Telephone: (international) +61 2 6274 7210

Fax: (international) +61 2 6274 6855

Email: bitre@infrastructure.gov.au

Website: www.bitre.gov.au

Bureau of Infrastructure, Transport and Regional Economics

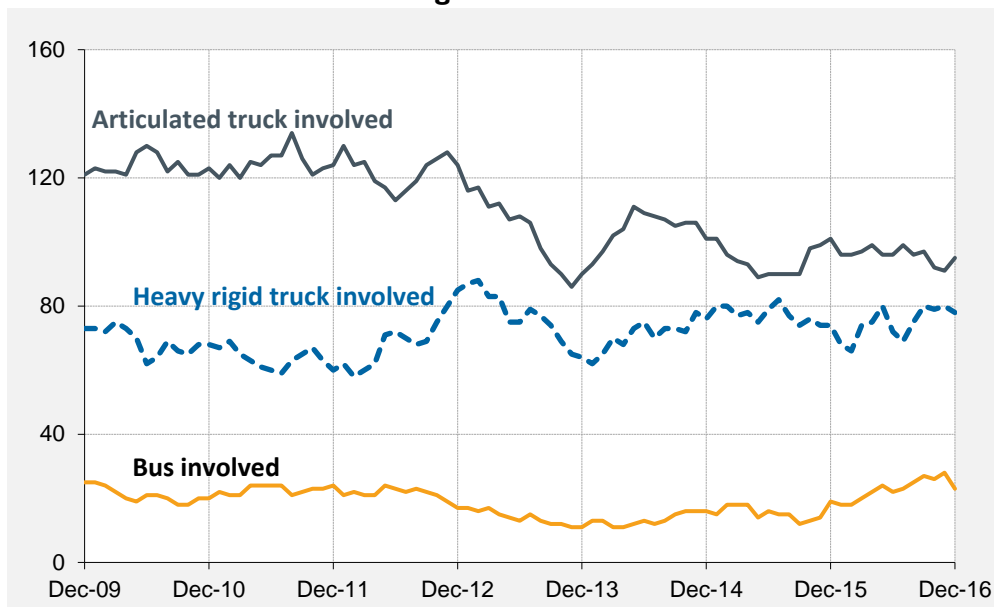
Road trauma involving heavy vehicles
2016 statistical summary

Department of Infrastructure and Regional Development
Canberra, Australia

At a glance

This report presents counts and rates of fatal crashes, fatalities and hospitalised injuries from road traffic crashes in which one or more heavy vehicles were involved. Percentage changes for the latest calendar year, and annual average changes over recent years are given.

Counts of fatal crashes – moving 12 months



In 2016, 213 people were killed in crashes involving heavy vehicles. This was the same number of people killed as 2015. Of this total, 50.2 per cent occurred in crashes involving an articulated truck (down compared to 2015), 42.7 per cent involved a heavy rigid truck (up compared to 2015), and 11.3 per cent involved a bus (up marginally on 2015). (Table I.1, p. 2 and Figure I.1, p. 2).

In 2016, there were 190 fatalities in crashes involved heavy trucks (articulated and rigid trucks), a reduction of three on 2015. Over the last decade, the annual number of fatalities in crashes involving a heavy truck has decreased at an average estimated trend of 3.0 per cent per year (Table I.1, p. 2).

Over the last ten years, annual deaths from crashes involving heavy vehicles decreased by 25.3 per cent. The estimated trend over the decade is a reduction of 3.0 per cent per year (Table I.1, p. 2).

Vehicle occupants (driver or passenger) account for 77.0 per cent of fatalities from crashes involving a heavy vehicle (average for 2012-2015, up on the previous four year period). The remainder are pedestrians (11.4 per cent), motorcyclists (7.8 per cent) and pedal cyclists (3.7 per cent). Of total vehicle occupant deaths, 23.9 per cent are heavy vehicle occupants – this proportion was down compared with the previous four year period (Table I.8, p. 10 and Figure I.5, p. 10).

Approximately 1,700 people are hospitalised from crashes involving heavy vehicles each year – 5.0 per cent of all road traffic crash hospitalised injuries. This estimate is unchanged for the last three years of available data (2012-13 to 2014-15) (Table 1.12, p. 14).

In 2016, there were 169 fatal crashes involved heavy trucks (articulated or rigid trucks), a reduction of four crashes on 2015. Over the last decade, the annual number of fatal crashes involving a heavy truck has decreased at an average estimated trend of 2.7 per cent per year (Table 2.1, p. 18).

Analysis by geographical region for 2015 shows that most (73.7 per cent) fatal articulated truck involved crashes occur in a Regional area, down marginally on 2014. The remainder occur in a Remote area (10.1 per cent, up marginally) and in a Major city (16.2 per cent, down marginally). The corresponding proportions for fatal heavy rigid truck involved crashes are 58.9 per cent (Regional, up), 6.8 per cent (Remote, up) and 34.2 (Major city, down) (Table 2.8, p. 28).

Between 2011 and 2015, 50.8 per cent of fatal crashes involving heavy vehicles occurred on national or state highways. For the three types of heavy vehicles the proportions are: articulated trucks (65.2 per cent), heavy rigid trucks (36.1 per cent) and buses (21.8 per cent) (Table 2.7, p. 26).

Over the decade to 2016, national rates of fatal-crashes-involving-heavy-vehicles per registration have fallen substantially. For articulated truck involved crashes the reduction was 50.2 per cent, for fatal crashes involving heavy rigid trucks the reduction was 11.9 per cent and for bus involved fatal crashes the rate declined by 26.1 per cent. (Table 3.1, p. 36).

Over the last 25 years, counts of fatal crashes involving articulated trucks have decreased by 39.7 per cent. By jurisdiction, the reductions range from 0.0 per cent for Queensland to 64.1 per cent for New South Wales (Table 4.5, p. 50). During this time however, registrations have increased by 44 per cent (New South Wales) and 134 per cent (Queensland).

Vulnerable road users (pedestrians, motorcyclists and pedal cyclists) account for 15 per cent of fatalities in crashes where an articulated truck is involved. This proportion has not changed in 25 years. For bus involved crashes, vulnerable road users account for 50 per cent of fatalities (slightly higher than 25 years ago) (Table 4.3, p. 46).

Data Sources

The tables in this report are based on two databases: the Australian Road Deaths Database (ARDD) and the National Crash Database (NCD).

The Australian Road Deaths Database contains national road crash fatality data comprising basic demographic and crash information. Fatal crashes since 1989 are included and it is updated each month. The current data in spreadsheet format is available at <<https://www.bitre.gov.au>>. For this report, the May 2017 data was used.

The scope of the National Crash Database is national fatal and injury crashes and at present it covers the years 2008 to 2015. It is updated annually.

Due to the timing differences in data receipt and ongoing validation by data providers, there are minor data differences between the two databases.

Non-fatal road traffic crash casualty data (referred to here as ‘hospitalised injury’) is collated from published reports by the Australian Institute of Health and Welfare (AIHW) and by the National Injury Surveillance Unit (NISU), as well as from unpublished National Hospital Morbidity Database reports compiled by NISU. Refer to AIHW 2008 for information regarding inclusion criteria for traffic crash hospitalised injuries.

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SECTION I

People

This section presents annual counts of deaths and hospitalised injuries from crashes which involve a heavy vehicle (articulated truck, heavy rigid truck or bus). Percentage changes for the latest calendar years and annual averages over the last several years are given.

Deaths

- In 2016, 213 people were killed in crashes involving heavy vehicles. This was the same number of people killed as 2015. Of this total, 50.2 per cent occurred in crashes involving an articulated truck (down compared to 2015), 42.7 per cent involved a heavy rigid truck (up compared to 2015), and 11.3 per cent involved a bus (up marginally on 2015). (Table 1.1, p. 2 and Figure 1.1, p. 2).
- In 2016, there were 190 fatalities in crashes involved heavy trucks (articulated and rigid trucks), a reduction of three on 2015. Over the last decade, the annual number of fatalities in crashes involving a heavy truck has decreased at an average estimated trend of 3.0 per cent per year (Table 1.1, p. 2).
- Over the last ten years, annual deaths from crashes involving heavy vehicles decreased by 25.3 per cent. The estimated trend over the decade is a reduction of 3.0 per cent per year (Table 1.1, p. 2).
- Vehicle occupants (driver or passenger) account for 77.0 per cent of fatalities from crashes involving a heavy vehicle (average for 2012-2015, up on the previous four year period). The remainder are pedestrians (11.4 per cent), motorcyclists (7.8 per cent) and pedal cyclists (3.7 per cent). Of total vehicle occupant deaths, 23.9 per cent are heavy vehicle occupants – this proportion was down compared with the previous four year period (Table 1.8, p. 10 and Figure 1.5, p. 10).
- Most fatalities in crashes that involve heavy vehicles occur in multiple vehicle crashes. Such crashes account for 85.0 per cent of fatalities (for articulated truck involved crashes), 81.3 per cent of fatalities (for heavy rigid involved crashes) and 54.2 per cent of fatalities (for bus involved crashes) (Table 1.5, p. 7).
- Other key heavy vehicle crash types tabulated are ‘intersection’ crashes, ‘head-on’ crashes and ‘single vehicle run-off road’ crashes. For crashes with articulated truck involvement, the proportions of fatalities in each are 22.5 per cent, 38.7 per cent and 9.0 per cent respectively. For heavy rigid truck involved crashes, the respective proportions of fatalities are 29.3 per cent, 30.5 per cent and 3.7 per cent (Table 1.7, p. 9).

Hospitalised injuries

- Approximately 1,700 people are hospitalised from crashes involving heavy vehicles each year – 5.0 per cent of all road traffic crash hospitalised injuries. This estimate is unchanged for the last three years of available data (2012-13 to 2014-15) (Table 1.12, p. 14).
- Approximately 43 per cent of hospitalised injuries in crashes involving heavy vehicles are of occupants of the heavy vehicle (Table 1.12, p. 14).

Table I.1 Deaths from crashes involving heavy vehicles

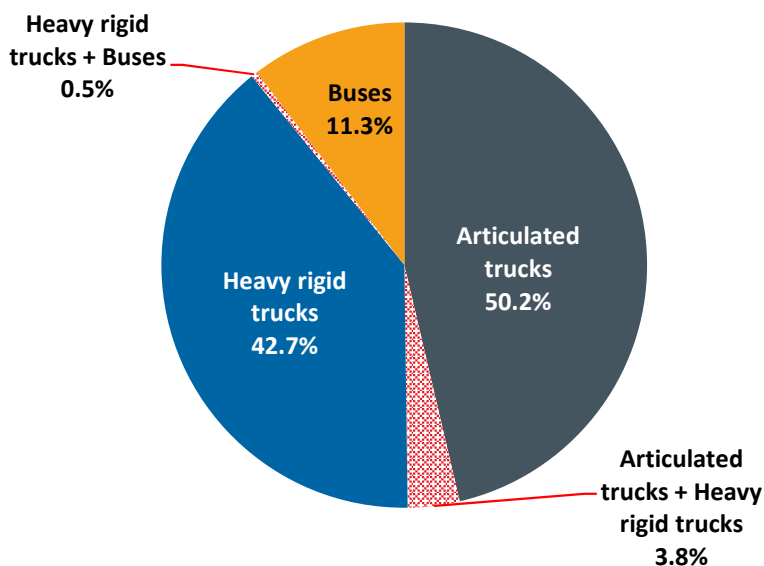
	<i>Articulated trucks</i>	<i>Heavy rigid trucks^a</i>	<i>Any heavy truck^b</i>	<i>Buses</i>	<i>Any heavy vehicle^b</i>
2007	181	85	261	25	285
2008	149	91	237	21	258
2009	145	77	214	31	245
2010	143	81	214	21	234
2011	140	72	208	25	232
2012	148	97	240	18	255
2013	110	69	175	12	187
2014	115	88	202	20	221
2015	114	82	193	22	213
2016	107	91	190	24	213
<i>Ave. trend change p.a.(%)</i>					
- for last 10 calendar years	-5.0	0.2	-3.0	-2.5	-3.0
- for last 5 calendar years	-5.9	0.5	-3.6	12.5	-2.3
- for last 3 calendar years	-3.5	1.7	-3.0	9.5	-1.8

a Only available from 2004.

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

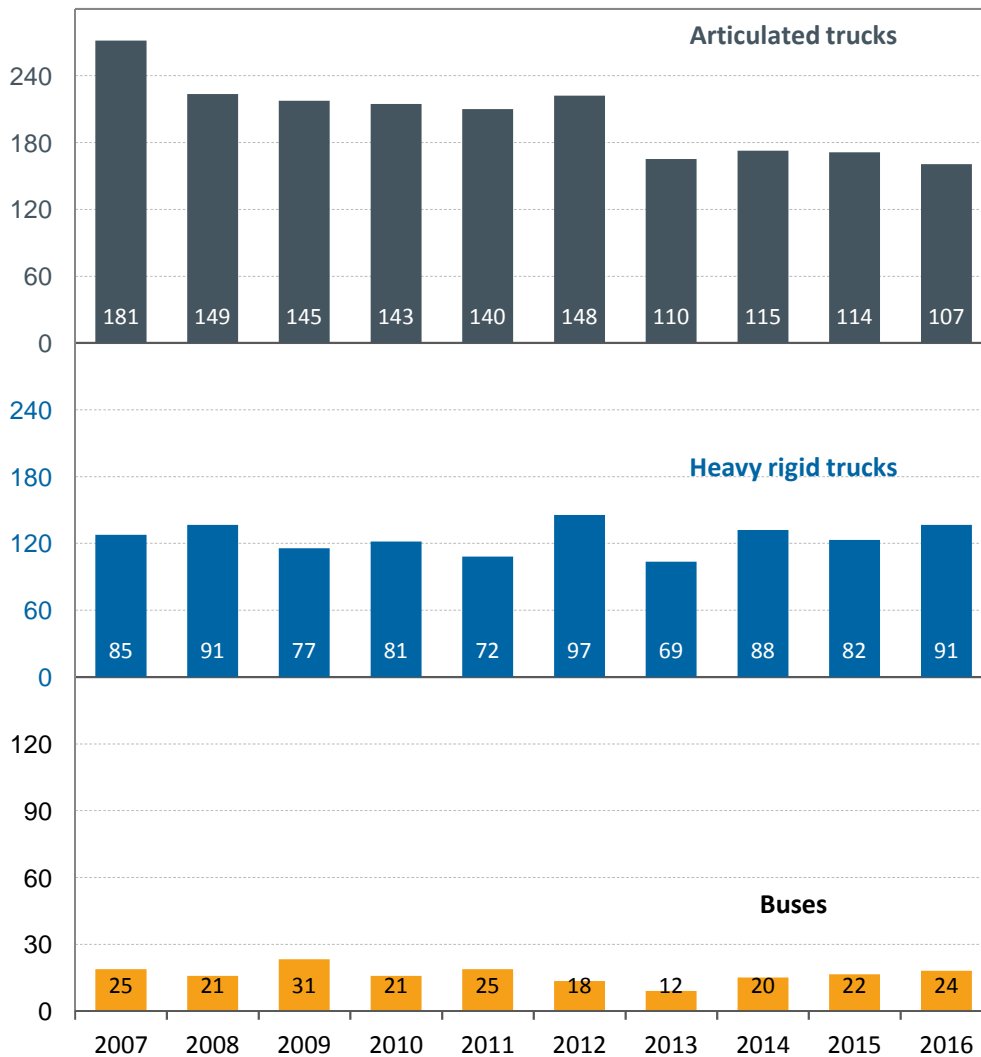
Source Australian Road Deaths Database

Figure I.1 2016 Snapshot – fatalities by type of heavy vehicle involved



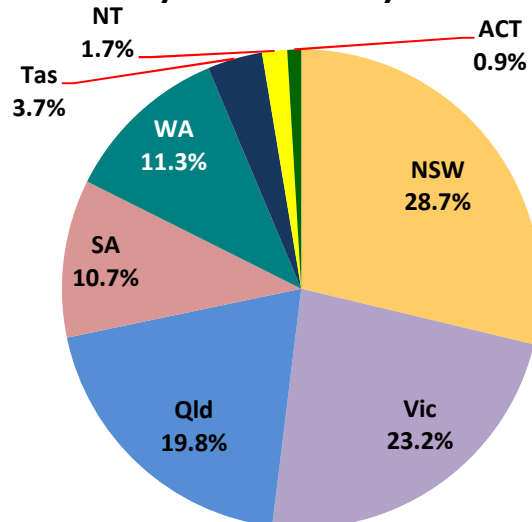
Source Australian Road Deaths Database

Figure I.2 Deaths from crashes involving heavy vehicles



Source Australian Road Deaths Database

Figure I.3 Distribution of fatalities in crashes involving heavy vehicles by state/territory 2014–2016



Source Australian Road Deaths Database

Table I.2 Deaths from crashes involving heavy vehicles by state/territory

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Articulated trucks									
2007	59	47	41	7	20	5	2	0	181
2008	53	23	46	10	8	6	3	0	149
2009	47	20	40	11	12	11	2	2	145
2010	51	36	29	7	15	3	1	1	143
2011	47	23	39	13	13	2	3	0	140
2012	50	30	45	10	8	3	2	0	148
2013	32	15	35	11	11	2	4	0	110
2014	31	27	32	12	6	5	0	2	115
2015	34	21	28	15	12	3	0	1	114
2016	27	23	25	11	10	5	5	1	107
<i>Ave. trend change p.a.(%)</i>									
- for last 10 calendar years	-7.9	-4.7	-4.9	5.2	-4.9	-5.7	-	-	-5.0
- for last 5 calendar years	-11.1	-1.9	-13.1	5.1	5.5	15.3	-	-	-5.9
- for last 3 calendar years	-6.7	-7.7	-11.6	-4.3	29.1	0.0	-	-29.3	-3.5
Heavy rigid trucks									
2007	29	26	11	5	10	1	2	1	85
2008	12	23	24	9	19	2	2	0	91
2009	24	19	13	2	18	1	0	0	77
2010	24	21	15	2	13	5	0	1	81
2011	17	20	14	6	9	2	4	0	72
2012	23	15	27	7	19	4	1	1	97
2013	24	13	13	4	15	0	0	0	69
2014	21	29	9	15	11	3	0	0	88
2015	25	20	17	3	11	5	1	0	82
2016	34	19	13	8	11	6	0	0	91
<i>Ave. trend change p.a.(%)</i>									
- for last 10 calendar years	3.8	-2.0	-1.5	5.5	-2.5	-	-	-	0.2
- for last 5 calendar years	8.6	9.5	-11.3	-0.2	-13.1	-	-	-	0.5
- for last 3 calendar years	27.2	-19.1	20.2	-27.0	0.0	41.4	-	-	1.7
Buses									
2007	11	4	7	1	2	0	0	0	25
2008	5	4	9	1	2	0	0	0	21
2009	9	9	10	2	0	1	0	0	31
2010	9	2	4	3	0	1	1	1	21
2011	11	5	8	0	1	0	0	0	25
2012	6	3	7	1	1	0	0	0	18
2013	2	3	6	0	0	0	1	0	12
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
<i>Ave. trend change p.a.(%)</i>									
- for last 10 calendar years	-4.7	-3.4	-15.9	-	-	-	-	-	-2.5
- for last 5 calendar years	21.4	0.4	-24.4	-	-	-	-	-	12.5
- for last 3 calendar years	29.1	-29.3	73.2	73.2	-34.5	-	-	-	9.5

Source Australian Road Deaths Database

Table I.3 Deaths from crashes involving heavy vehicles by age group

	0 to 16	17 to 25	26 to 39	40 to 64	≥65	Total ^a
Articulated trucks						
2007	10	31	48	66	26	181
2008	8	29	31	56	25	149
2009	11	25	29	62	18	145
2010	8	25	28	57	25	143
2011	3	23	27	68	19	140
2012	6	12	45	60	24	148
2013	5	14	26	40	25	110
2014	4	22	26	45	18	115
2015	3	15	24	48	24	114
2016	2	14	27	47	17	107
<i>Ave. trend change p.a.(%) - for the last 10 years</i>	-15.2	-8.6	-4.3	-4.1	-2.3	-5.0
Heavy rigid trucks						
2007	7	14	24	28	12	85
2008	5	19	22	29	16	91
2009	4	7	19	31	16	77
2010	8	14	12	32	15	81
2011	4	15	10	32	11	72
2012	3	24	22	27	21	97
2013	6	10	11	27	15	69
2014	7	10	19	36	16	88
2015	2	9	25	28	18	82
2016	6	19	15	35	16	91
<i>Ave. trend change p.a.(%) - for the last 10 years</i>	-3.7	-0.7	-1.7	1.1	2.5	0.2
Buses						
2007	1	2	7	10	5	25
2008	2	6	5	5	3	21
2009	5	9	2	10	5	31
2010	0	4	9	6	2	21
2011	2	3	7	8	5	25
2012	1	1	2	7	7	18
2013	1	1	2	6	2	12
2014	4	4	4	6	2	20
2015	1	2	6	8	5	22
2016	0	2	5	8	9	24
<i>Ave. trend change p.a.(%) - for the last 10 years</i>	-	-9.8	-2.4	-0.8	2.8	-2.5

a Includes deaths to persons with age not recorded.
Source Australian Road Deaths Database

Table 1.4 Deaths from crashes involving heavy vehicles by road user

	<i>Driver^a</i>	<i>Passenger^a</i>	<i>Pedestrian</i>	<i>Motorcyclist^b</i>	<i>Pedal cyclist^b</i>	<i>Total^c</i>
Articulated trucks						
2007	103	44	19	10	5	181
2008	94	23	17	11	4	149
2009	97	25	20	3	0	145
2010	80	36	14	7	6	143
2011	86	26	20	6	2	140
2012	93	30	16	8	0	148
2013	70	21	10	7	2	110
2014	74	20	10	8	3	115
2015	79	19	8	5	3	114
2016	72	19	5	8	3	107
<i>Ave. trend change p.a.(%) - for the last 10 years</i>	-3.6	-6.7	-12.5	-1.4	-	-5.0
Heavy rigid trucks						
2007	48	10	12	8	7	85
2008	49	13	15	11	2	91
2009	43	12	10	9	3	77
2010	39	21	7	9	5	81
2011	34	14	14	6	4	72
2012	53	16	13	12	3	97
2013	33	9	16	5	6	69
2014	47	15	10	12	4	88
2015	49	11	9	7	6	82
2016	57	13	7	10	3	91
<i>Ave. trend change p.a.(%) - for the last 10 years</i>	1.2	-0.1	-3.6	-0.5	1.1	0.2
Buses						
2007	10	3	7	2	3	25
2008	2	7	4	7	1	21
2009	9	12	7	2	1	31
2010	7	2	3	8	1	21
2011	3	5	13	2	2	25
2012	6	4	5	3	0	18
2013	5	1	1	2	3	12
2014	3	6	6	2	3	20
2015	10	7	2	3	0	22
2016	9	3	9	3	0	24
<i>Ave. trend change p.a.(%) - for the last 10 years</i>	2.8	-3.4	-4.5	-3.6	-	-2.5

a Includes drivers/passengers of light and heavy vehicles.

b Includes pillion passengers.

c Includes road users not separately specified.

Source Australian Road Deaths Database

Table I.5 Deaths by crash type for crashes involving heavy vehicles

	<i>Single vehicle</i>	<i>Multiple vehicle</i>	<i>Pedestrian</i>		<i>Single vehicle</i>	<i>Multiple vehicle</i>	<i>Pedestrian</i>
Articulated trucks				Buses			
2007	33	129	19	2007	1	17	7
2008	25	107	17	2008	6	11	4
2009	31	94	20	2009	9	15	7
2010	15	114	14	2010	3	15	3
2011	20	100	20	2011	3	9	13
2012	19	112	17	2012	2	11	5
2013	8	92	10	2013	0	11	1
2014	17	88	10	2014	4	10	6
2015	19	87	8	2015	1	19	2
2016	11	91	5	2016	2	13	9
<i>Ave. trend change p.a.(%)</i>							
- for last 10 calendar years	-9.7	-3.2	-12.4		-	-0.8	-4.5
- for last 5 calendar years	-2.3	-4.6	-23.4		-	9.2	20.5
- for last 3 calendar years	-19.6	1.7	-29.3		-29.3	14.0	22.5
Heavy rigid trucks							
2007	6	67	12				
2008	12	64	15				
2009	7	60	10				
2010	7	67	7				
2011	7	51	14				
2012	5	79	13				
2013	4	49	16				
2014	7	71	10				
2015	7	66	9				
2016	10	74	7				
<i>Ave. trend change p.a.(%)</i>							
- for last 10 calendar years	-0.7	0.9	-3.6				
- for last 5 calendar years	21.5	1.7	-16.6				
- for last 3 calendar years	19.5	2.1	-16.3				

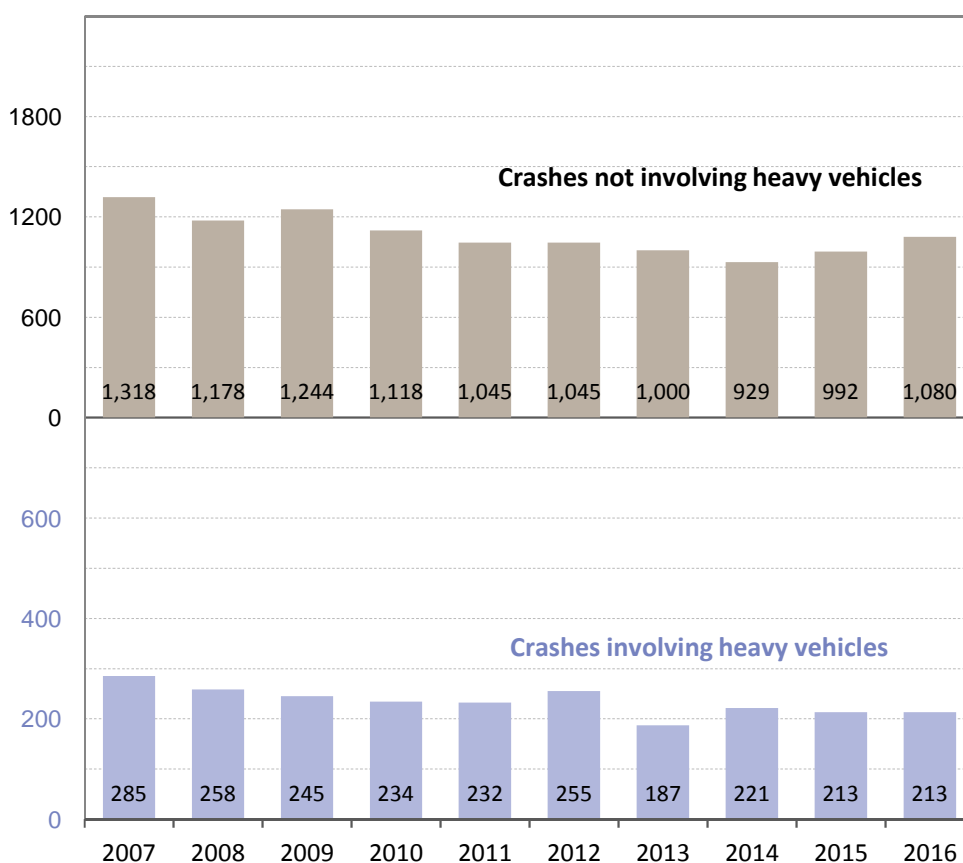
Source Australian Road Deaths Database

Table 1.6 Deaths by crash type for crashes involving heavy vehicles and crashes not involving heavy vehicles

	<i>Single vehicle</i>		<i>Multiple vehicle</i>		<i>Pedestrian</i>		<i>Total</i>		<i>Grand Total^a</i>
	<i>Heavy</i>	<i>Non-heavy</i>	<i>Heavy</i>	<i>Non-heavy</i>	<i>Heavy</i>	<i>Non-heavy</i>	<i>Heavy</i>	<i>Non-heavy</i>	
2007	40	701	207	451	38	166	285	1,318	1,603
2008	43	644	179	381	36	153	258	1,178	1,437
2009	47	653	163	430	35	161	245	1,244	1,491
2010	25	559	187	410	22	149	234	1,118	1,353
2011	30	524	157	380	45	141	232	1,045	1,277
2012	26	530	196	377	33	138	255	1,045	1,300
2013	12	538	148	331	27	131	187	1,000	1,187
2014	28	465	168	335	25	129	221	929	1,150
2015	27	505	167	344	19	143	213	992	1,205
2016	22	546	170	386	21	148	213	1,080	1,293
<i>Ave. trend change p.a.(%) - for the last 10 years</i>	-7.9	-3.4	-1.6	-2.4	-6.6	-1.8	-3.0	-2.9	-2.9

a Includes deaths with undetermined vehicle type.
Source Australian Road Deaths Database

Figure 1.4 Deaths by crash type for crashes involving heavy vehicles and crashes not involving heavy vehicles



Source Australian Road Deaths Database

Table I.7 Deaths from crashes involving heavy vehicles by common crash sub-types^a

	<i>Intersection</i>	<i>Head-on</i>	<i>Single vehicle run-off road^b</i>	<i>Total^c</i>
Articulated trucks				
2008	30	65	15	147
2009	20	48	20	138
2010	34	54	13	137
2011	31	50	16	144
2012	25	70	17	154
2013	28	50	5	115
2014	20	38	14	115
2015	25	43	10	111
Heavy rigid trucks				
2008	28	35	4	90
2009	27	28	7	77
2010	24	40	4	87
2011	30	18	4	71
2012	25	37	2	93
2013	19	23	3	67
2014	28	26	4	87
2015	24	25	4	82
Buses				
2008	11	1	3	23
2009	9	6	6	31
2010	7	6	3	21
2011	12	5	1	24
2012	11	6	1	26
2013	5	4	0	12
2014	6	6	2	19
2015	4	12	1	20

a Categories not mutually exclusive, nor exhaustive.

b Excludes South Australia.

c Includes all other crash types.

Source National Crash Database

Table I.8 Vehicle type and road user type of killed person from crashes involving heavy vehicles

	Heavy vehicle		Light vehicle ^a		Pedestrian	Motor- ^b cyclist	Pedal ^b cyclist	Total ^c
	Driver	Passenger	Driver	Passenger				
Articulated trucks								
2008	34	3	57	20	16	11	4	147
2009	36	3	58	20	18	3	0	138
2010	20	4	55	31	14	7	6	137
2011	24	3	66	24	19	6	2	144
2012	32	5	67	26	15	8	0	154
2013	21	0	52	21	13	6	2	115
2014	23	2	52	18	9	8	3	115
2015	25	5	52	14	8	4	3	111
Heavy rigid trucks								
2008	9	3	36	12	15	13	2	90
2009	17	0	27	11	10	9	3	77
2010	10	2	33	21	6	9	6	87
2011	7	2	28	12	12	6	4	71
2012	5	3	46	12	13	11	3	93
2013	6	1	25	9	14	6	6	67
2014	10	1	36	13	11	12	4	87
2015	9	1	41	11	7	7	6	82
Buses								
2008	0	6	3	1	5	7	1	23
2009	2	8	7	3	8	2	1	31
2010	2	2	6	0	3	8	0	21
2011	1	1	3	2	13	2	2	24
2012	3	5	6	3	7	2	0	26
2013	0	0	5	1	1	2	3	12
2014	0	5	2	3	4	2	3	19
2015	0	4	10	3	1	2	0	20

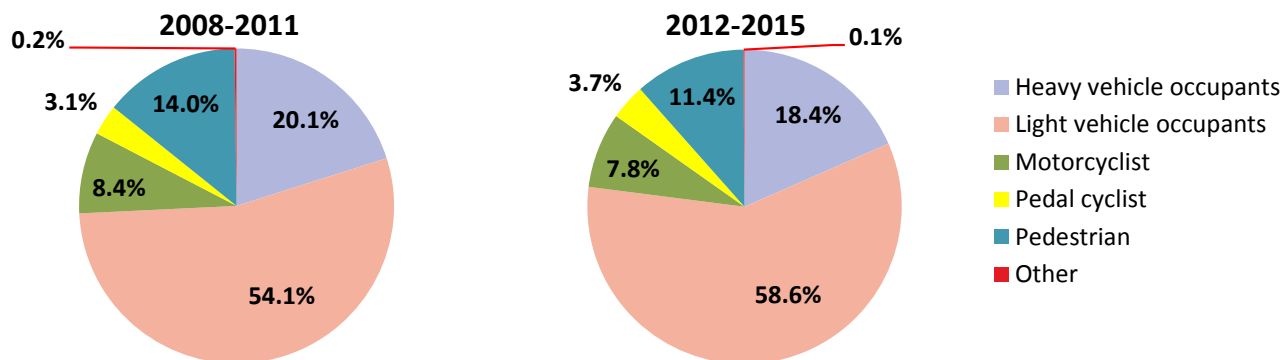
a Includes passenger car, light commercial vehicle, utility, panel van, cab chassis, goods carrying van, light rigid truck and other not specified vehicle.

b Includes pillion passengers.

c Includes deaths in vehicles not listed.

Source National Crash Database

Figure I.5 Composition of fatalities in crashes involving heavy vehicles



Source National Crash Database

Table I.9 The number of deaths from heavy vehicle involved crashes – validity of heavy vehicle driver's licence (excludes WA)

	<i>All valid</i>	<i>Any invalid</i>	<i>Unknown</i>	<i>Total</i>
Articulated trucks				
2008	122	5	10	137
2009	116	0	9	125
2010	97	2	25	124
2011	113	3	10	126
2012	122	1	14	137
2013	91	0	8	99
2014	89	1	15	105
2015	86	0	13	99
Heavy rigid trucks				
2008	69	4	0	73
2009	60	3	1	64
2010	66	4	2	72
2011	56	1	8	65
2012	74	2	3	79
2013	52	0	3	55
2014	73	0	0	73
2015	67	2	2	71
Buses				
2008	19	0	0	19
2009	29	0	1	30
2010	19	0	1	20
2011	21	1	1	23
2012	21	0	0	21
2013	9	0	3	12
2014	12	1	0	13
2015	17	0	1	18

Source National Crash Database

Table 1.10 The number of deaths from heavy vehicle involved crashes – heavy vehicle driver BAC status^a (excludes Victoria and WA)

	<i>All pass</i>	<i>Any fail</i>	<i>Unknown</i>	<i>Total</i>
Articulated trucks				
2008	55	6	54	115
2009	66	0	39	105
2010	51	2	36	89
2011	56	3	44	103
2012	61	1	47	109
2013	44	2	38	84
2014	45	1	32	78
2015	49	2	28	79
Heavy rigid trucks				
2008	24	4	22	50
2009	28	0	17	45
2010	30	4	17	51
2011	26	2	17	45
2012	33	0	31	64
2013	26	0	16	42
2014	38	0	8	46
2015	34	1	17	52
Buses				
2008	5	0	10	15
2009	11	0	10	21
2010	11	0	7	18
2011	11	1	7	19
2012	11	0	7	18
2013	3	0	6	9
2014	8	0	1	9
2015	8	0	3	11

a Source BAC: Blood Alcohol Concentration
National Crash Database

Table I.11 The number of deaths from heavy vehicle involved crashes – restraint use of killed vehicle occupants

	<i>Restraint used</i>		<i>Not used</i>		<i>Unknown</i>		<i>Total^a</i>	
	<i>Heavy vehicle</i>	<i>Light vehicle</i>	<i>Heavy vehicle</i>	<i>Light vehicle</i>	<i>Heavy vehicle</i>	<i>Light vehicle</i>	<i>Heavy vehicle</i>	<i>Light vehicle</i>
Articulated trucks								
2008	5	45	11	12	21	20	37	77
2009	9	52	16	7	14	19	39	78
2010	7	54	4	6	13	26	24	86
2011	7	55	7	11	13	24	27	90
2012	10	62	11	3	16	28	37	93
2013	8	52	4	4	9	17	21	73
2014	2	43	6	6	17	21	25	70
2015	7	53	9	5	13	8	30	66
Heavy rigid trucks								
2008	3	35	6	2	3	11	12	48
2009	6	28	8	2	3	8	17	38
2010	7	37	2	3	3	14	12	54
2011	1	27	5	7	3	6	9	40
2012	2	41	3	4	3	12	8	58
2013	3	27	2	1	2	6	7	34
2014	6	36	3	3	2	10	11	49
2015	5	39	1	5	4	8	10	52
Buses								
2008	0	2	3	0	3	2	6	4
2009	4	8	2	1	4	1	10	10
2010	0	6	3	0	1	0	4	6
2011	0	4	2	0	0	1	2	5
2012	5	6	1	0	2	3	8	9
2013	0	3	0	0	0	3	0	6
2014	0	4	4	0	1	1	5	5
2015	3	9	1	0	0	4	4	13

a Includes any non-applicable cases.
Source National Crash Database

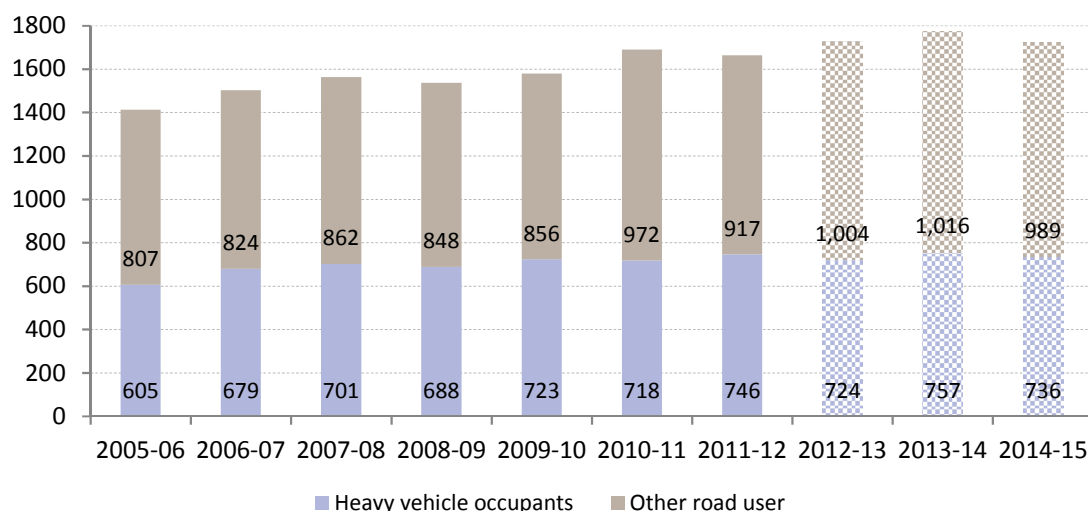
Table I.12 Hospitalised injury due to road vehicle traffic crashes involving heavy vehicles

Financial year	Heavy vehicle occupants (drivers and passengers) involved in heavy vehicle crashes	Other road user	Total hospitalised persons	% of total hospitalised injury due to road vehicle
2005-06	605	807	1,412	4.5
2006-07	679	824	1,503	4.6
2007-08	701	862	1,563	4.8
2008-09	688	848	1,536	4.5
2009-10	723	856	1,579	4.8
2010-11	718	972	1,690	5.1
2011-12	746	917	1,663	4.8
2012-13 ^a	724	1,004	1,728	5.1
2013-14 ^a	757	1,016	1,773	5.0
2014-15 ^a	736	989	1,725	4.8

a 202012 calendar year data is not directly comparable with previous years due to a break in the hospitalised injury series in 2012. Victoria changed case inclusion criteria to exclude cases cared for solely in Emergency Departments from 1 July 2012. NISU estimates this decreased admitted case counts in Australia by 2000 cases (-5.6 per cent) in 2012-13 compared to 2011-12. The estimated decrease in 2012 was approximately 1000 cases, or -2.8 per cent, with the reduction likely to differ by road user group.

Sources Berry JG and Harrison JE 2008; Henley G and Harrison JE 2009; Henley G and Harrison JE 2012a; Henley G and Harrison JE 2012b and National Injury Surveillance Unit.

Figure I.6 Hospitalised injury due to road vehicle traffic crashes involving heavy vehicles



a 202012 calendar year data is not directly comparable with previous years due to a break in the hospitalised injury series in 2012. Victoria changed case inclusion criteria to exclude cases cared for solely in Emergency Departments from 1 July 2012. NISU estimates this decreased admitted case counts in Australia by 2000 cases (-5.6 per cent) in 2012-13 compared to 2011-12. The estimated decrease in 2012 was approximately 1000 cases, or -2.8 per cent, with the reduction likely to differ by road user group.

Sources Berry JG and Harrison JE 2008; Henley G and Harrison JE 2009; Henley G and Harrison JE 2012a; Henley G and Harrison JE 2012b and National Injury Surveillance Unit.

Table I.13 High threat to life^a injury in road traffic crashes involving heavy vehicles by state/territory

<i>Calendar year</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas</i>	<i>NT</i>	<i>ACT</i>	<i>Australia</i>
2001	143	116	75	56	44	9	6	7	463
2002	140	125	88	39	28	5	-	-	442
2003	137	117	87	38	30	14	-	-	439
2004	155	114	96	25	26	11	-	-	447
2005	149	123	105	40	40	13	7	5	499
2006	168	125	105	48	38	18	6	5	525
2007	162	114	101	40	51	12	9	7	503
2008	171	125	112	40	54	11	9	6	534
2009	162	158	113	37	45	14	6	5	558
2010	167	155	112	42	52	7	9	6	561
<i>Ave. trend change p.a.(%) - for the last 9 years</i>	2.3	2.1	4.7	-1.4	6.0	7.5	-	-	3.0

a See Glossary
Source Henley G & Harrison JE 2015

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SECTION 2

Crashes

This section focuses on counts and characteristics of fatal crashes involving heavy vehicles. Percentage changes for the latest calendar years and annual averages over the last several years are given.

- In 2016, there were 191 fatal crashes involving a heavy vehicle. This is similar to 2015 (190). Over the last decade, the annual number of fatal crashes involving a heavy vehicle has decreased at an average estimated trend of 2.8 per cent per year. (Table 2.1, p. 18).
- In 2016, there were 169 fatal crashes involved heavy trucks (articulated and rigid trucks), a reduction of four crashes on 2015. Over the last decade, the annual number of fatal crashes involving a heavy truck has decreased at an average estimated trend of 2.7 per cent per year. (Table 2.1, p. 18)
- In 2016, the proportions of fatal crashes that involved an articulated truck, a heavy rigid truck or a bus were 49.2 per cent, 41.9 per cent and 12.0 per cent respectively. (Table 2.1, p. 18). These proportions are similar to the fatality counts in these crashes.
- The most common heavy vehicle crash types are 'opposing direction – head-on' (34.0 per cent), 'pedestrian involved' (12.1 per cent) and 'same direction – rear-end' (13.2 per cent) (Table 2.5, p. 24).
- During 2011 to 2015, 1.6 per cent of articulated truck drivers involved in a fatal crash did not have a valid licence. The proportions for heavy rigid truck drivers and bus drivers are 1.4 per cent and 2.3 per cent respectively (Table 2.11, p. 31).
- Analysis by geographical region for 2015 shows that most (73.7 per cent) fatal articulated truck involved crashes occur in a Regional area, down marginally on 2014. The remainder occur in a Remote area (10.1 per cent, up marginally) and in a Major city (16.2 per cent, down marginally). The corresponding proportions for fatal heavy rigid truck involved crashes are 58.9 per cent (Regional, up), 6.8 per cent (Remote, up) and 34.2 (Major city, down) (Table 2.8, p. 28).
- Between 2011 and 2015, 50.8 per cent of fatal crashes involving heavy vehicles occurred on national or state highways. For the three types of heavy vehicles the proportions are: articulated trucks (65.2 per cent), heavy rigid trucks (36.1 per cent) and buses (21.8 per cent) (Table 2.7, p. 26).

Table 2.1 Fatal crashes involving heavy vehicles

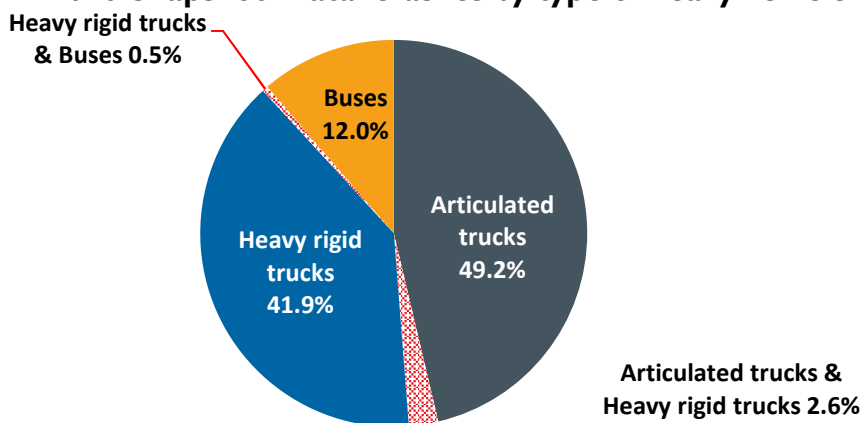
	<i>Articulated trucks</i>	<i>Heavy rigid trucks^a</i>	<i>Any heavy truck^b</i>	<i>Buses</i>	<i>Any heavy vehicle^b</i>
2007	146	80	221	25	245
2008	129	85	211	20	231
2009	121	73	186	25	211
2010	123	68	183	20	202
2011	124	60	180	24	203
2012	124	85	204	17	218
2013	90	64	150	11	161
2014	101	76	176	16	191
2015	101	74	173	19	190
2016	94	80	169	23	191
<i>Ave. trend change p.a.(%)</i>					
- for last 10 calendar years	-4.5	-0.4	-2.7	-3.3	-2.8
- for last 5 calendar years	-4.3	0.2	-2.3	12.2	-1.0
- for last 3 calendar years	-3.5	2.6	-2.0	19.9	0.0

a Only available from 2004.

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

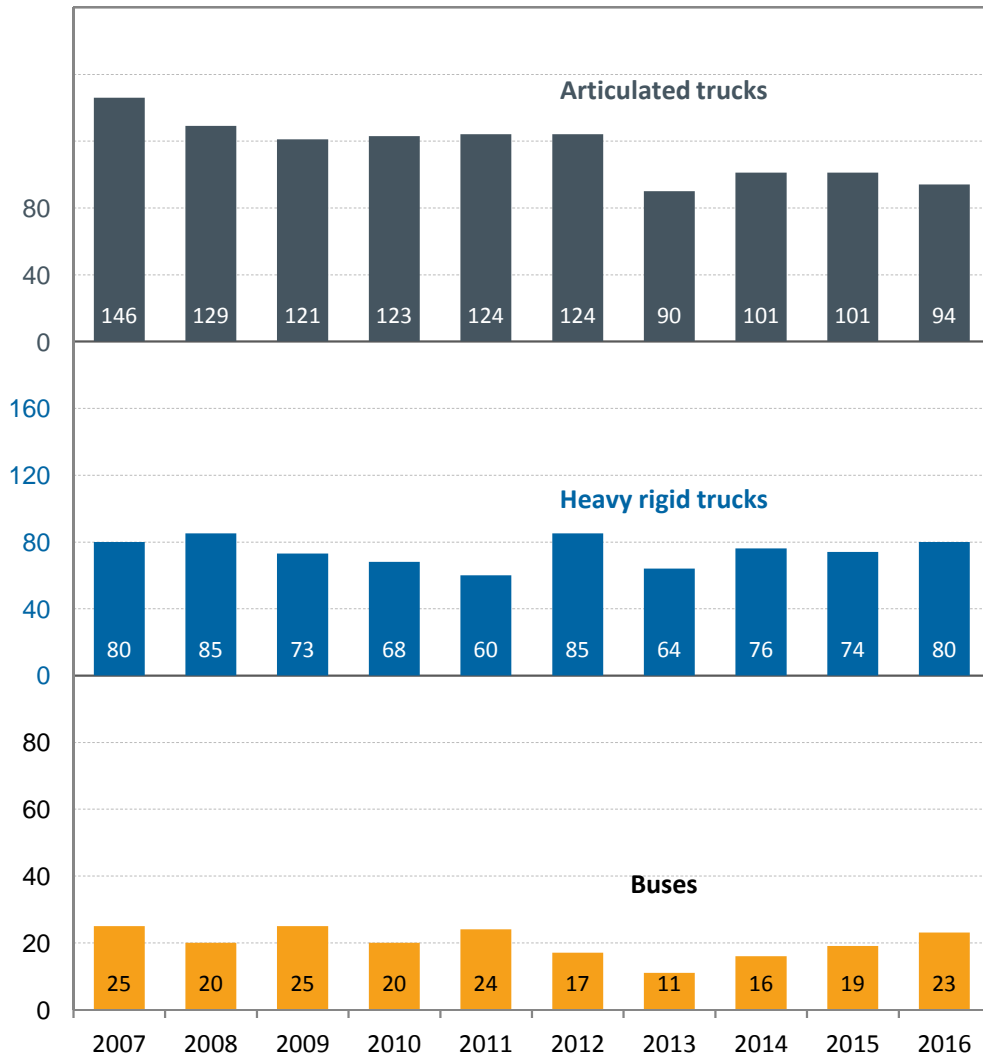
Source Australian Road Deaths Database

Figure 2.1 2016 Snapshot – fatal crashes by type of heavy vehicle involved



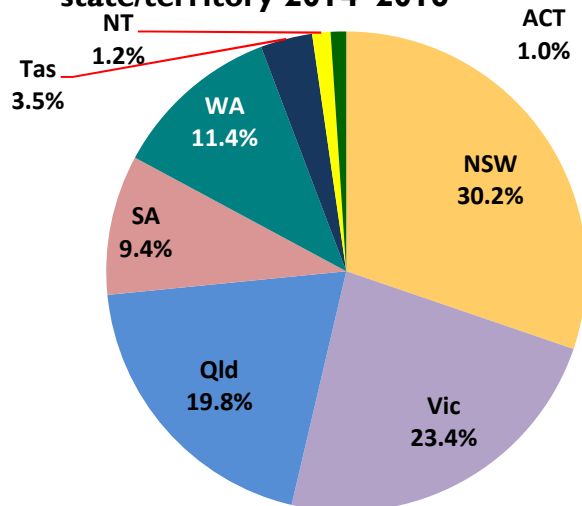
Source Australian Road Deaths Database

Figure 2.2 Fatal crashes involving heavy vehicles



Source Australian Road Deaths Database

Figure 2.3 Distribution of fatal crashes involving heavy vehicles by state/territory 2014–2016



Source Australian Road Deaths Database

Table 2.2 Fatal crashes involving heavy vehicles by state/territory

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Articulated trucks									
2007	53	29	38	6	14	4	2	0	146
2008	47	22	35	9	7	6	3	0	129
2009	33	17	38	9	10	10	2	2	121
2010	41	31	25	7	14	3	1	1	123
2011	43	21	32	12	11	2	3	0	124
2012	39	29	35	9	7	3	2	0	124
2013	30	13	26	8	8	2	3	0	90
2014	28	25	26	10	6	4	0	2	101
2015	31	21	23	12	11	2	0	1	101
2016	23	21	23	10	9	3	4	1	94
<i>Ave. trend change p.a.(%)</i>									
- for last 10 calendar years	-7.2	-2.2	-5.4	4.5	-3.3	-9.1	-	-	-4.5
- for last 5 calendar years	-9.7	-1.6	-9.2	6.4	8.6	0.0	-	-	-4.3
- for last 3 calendar years	-9.4	-8.3	-5.9	0.0	22.5	-13.4	-	-29.3	-3.5
Heavy rigid trucks									
2007	28	24	10	5	10	1	1	1	80
2008	12	22	21	8	18	2	2	0	85
2009	23	18	13	2	16	1	0	0	73
2010	20	18	12	2	11	4	0	1	68
2011	15	14	13	6	8	2	2	0	60
2012	22	14	23	6	16	2	1	1	85
2013	22	12	11	4	15	0	0	0	64
2014	21	23	9	10	10	3	0	0	76
2015	22	18	16	2	10	5	1	0	74
2016	32	17	12	5	10	4	0	0	80
<i>Ave. trend change p.a.(%)</i>									
- for last 10 calendar years	3.5	-2.7	-1.1	0.3	-2.9	-	-	-	-0.4
- for last 5 calendar years	7.8	8.3	-8.8	-10.0	-12.6	-	-	-	0.2
- for last 3 calendar years	23.4	-14.0	15.5	-29.3	0.0	15.5	-	-	2.6
Buses									
2007	11	4	7	1	2	0	0	0	25
2008	5	4	8	1	2	0	0	0	20
2009	8	6	8	2	0	1	0	0	25
2010	9	2	3	3	0	1	1	1	20
2011	11	5	7	0	1	0	0	0	24
2012	6	3	6	1	1	0	0	0	17
2013	2	3	5	0	0	0	1	0	11
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
<i>Ave. trend change p.a.(%)</i>									
- for last 10 calendar years	-4.4	-3.7	-14.8	-	-	-	-	-	-3.3
- for last 5 calendar years	21.4	-1.2	-20.6	-	-	-	-	-	12.2
- for last 3 calendar years	29.1	-18.4	73.2	73.2	-13.4	-	-	-	19.9

Source Australian Road Deaths Database

Table 2.3 Fatal crashes involving heavy vehicles by speed zone

	40 km/h	50 km/h	60 km/h	70 to 90 km/h	100 km/h	≥110 km/h	Total ^a
Articulated trucks							
2007	2	6	18	24	67	28	146
2008	0	7	18	27	55	21	129
2009	0	7	7	21	59	27	121
2010	1	4	17	23	58	20	123
2011	2	5	10	32	50	24	124
2012	2	3	13	22	57	27	124
2013	1	3	11	14	40	21	90
2014	0	1	13	14	49	22	101
2015	0	3	14	14	46	23	101
2016	0	2	4	22	41	24	94
Ave. trend change p.a.(%) - for the last 10 years	-	-15.1	-7.7	-5.5	-4.5	-0.9	-4.5
Heavy rigid trucks							
2007	0	7	18	17	27	10	80
2008	0	2	18	28	28	8	85
2009	0	6	10	20	26	11	73
2010	0	7	12	17	23	9	68
2011	1	5	12	16	19	7	60
2012	2	9	19	15	25	12	85
2013	0	4	17	15	23	4	64
2014	0	3	19	17	23	12	76
2015	2	5	13	21	27	3	74
2016	1	5	12	28	25	9	80
Ave. trend change p.a.(%) - for the last 10 years	-	-0.7	-0.7	0.7	-0.8	-5.5	-0.4
Buses							
2007	1	4	8	6	5	1	25
2008	0	2	8	6	2	1	20
2009	0	5	8	8	3	1	25
2010	0	2	9	6	3	0	20
2011	2	10	6	1	4	0	24
2012	1	3	9	3	1	0	17
2013	1	1	6	0	1	2	11
2014	1	2	8	1	3	1	16
2015	1	0	8	4	3	3	19
2016	1	6	11	1	2	1	23
Ave. trend change p.a.(%) - for the last 10 years	-	-	1.3	-	-5.9	-	-3.3

a Includes crashes where speed limit is unknown.



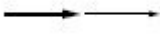
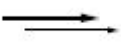

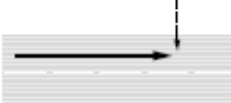
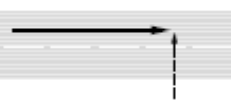
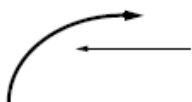

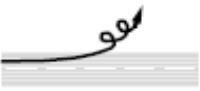

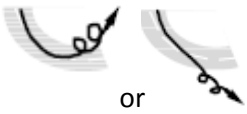
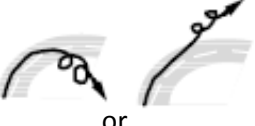
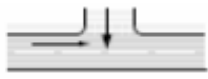

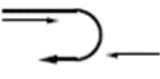
Source Australian Road Deaths Database

Table 2.4 Fatal crashes involving heavy vehicles by crash type

	<i>Single vehicle</i>	<i>Multiple vehicle</i>	<i>Pedestrian involved</i>	<i>Total</i>
Articulated trucks				
2007	31	96	19	146
2008	23	89	17	129
2009	29	74	18	121
2010	15	94	14	123
2011	18	87	19	124
2012	18	90	16	124
2013	8	73	9	90
2014	16	75	10	101
2015	18	75	8	101
2016	10	79	5	94
<i>Ave. trend change p.a.(%) - for the last 10 years</i>	-9.7	-2.2	-12.3	-4.5
Heavy rigid trucks				
2007	6	62	12	80
2008	11	59	15	85
2009	7	56	10	73
2010	7	54	7	68
2011	6	40	14	60
2012	5	68	12	85
2013	4	44	16	64
2014	7	59	10	76
2015	6	59	9	74
2016	10	63	7	80
<i>Ave. trend change p.a.(%) - for the last 10 years</i>	-0.9	0.2	-3.6	-0.4
Buses				
2007	1	17	7	25
2008	5	11	4	20
2009	5	14	6	25
2010	3	14	3	20
2011	3	8	13	24
2012	2	10	5	17
2013	0	10	1	11
2014	3	7	6	16
2015	1	16	2	19
2016	2	12	9	23
<i>Ave. trend change p.a.(%) - for the last 10 years</i>	-	-2.8	-4.1	-3.3

Source Australian Road Deaths Database

Figure 2.4 Common crash type (sub-groups) for fatal crashes involving a heavy truck 2013–2015

Main Crash Type	Sub-group		
Opposing directions	 <p>Opposing directions Head on</p>	 <p>Opposing directions Right thru</p>	
Same direction	 <p>Same direction Rear end</p>	 <p>Same direction Side Swipe</p>	
Pedestrian	 <p>Pedestrian Playing/Working</p>	 <p>Pedestrian Near side</p>	 <p>Pedestrian Far side</p>
Adjacent directions	 <p>Adjacent directions Right Near</p>	 <p>Adjacent directions Cross traffic</p>	
Non-collision (Straight)	 <p>Non-collision (Straight) - Off Left</p>	 <p>Non-collision (Straight) - Off Right</p>	
Non-collision (Curve)	 <p>or Non-collision (Curve) - Off Car/way at left bend</p>	 <p>or Non-collision (Curve) - Off Car/way at right bend</p>	
Manoeuvring	 <p>Manoeuvring Emerge from Driveway</p>	 <p>Manoeuvring From Footpath</p>	 <p>Manoeuvring U-turn</p>

Source Austrroads 2009

Figure 2.5 Common crash type (main groups) for fatal crashes involving a heavy truck 2013–2015

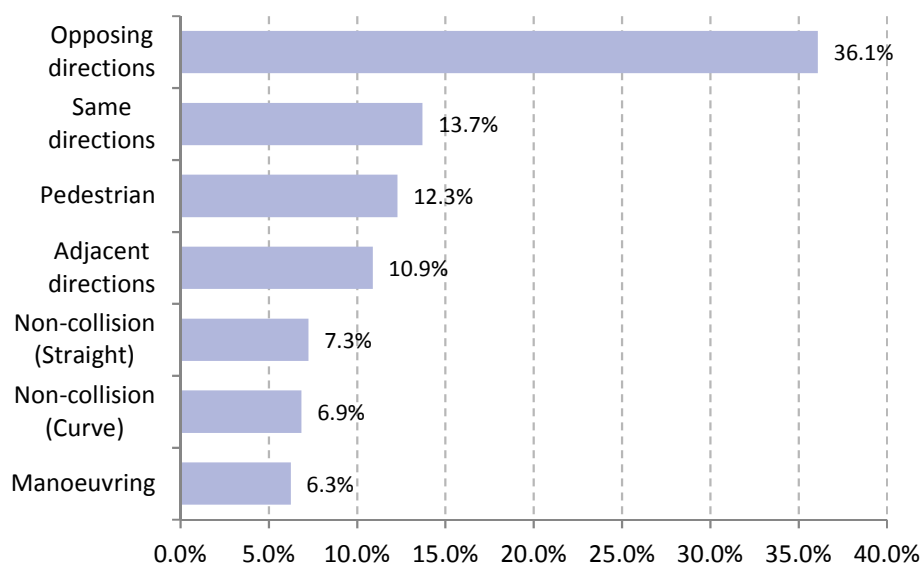


Table 2.5 Common crash type (sub-groups) for fatal crashes involving a heavy truck 2013–2015

Crash type (Main)	Total %	Crash type (Sub-group)	%
Opposing directions	36.1	<i>Head on</i>	33.8
		<i>Right thru</i>	2.2
Same directions	13.7	<i>Rear-end</i>	9.7
		<i>Side-swipe</i>	3.2
		<i>Other</i>	0.8
Pedestrian	12.3	<i>Play/Work</i>	4.2
		<i>Nearside</i>	3.2
		<i>Farside</i>	1.6
		<i>Other</i>	3.2
Adjacent directions	10.9	<i>Cross traffic</i>	6.4
		<i>Right near</i>	3.8
		<i>Other</i>	0.6
Non-collision (Curve)	7.3	<i>Off carriageway at left bend</i>	2.8
		<i>Off carriageway at right bend</i>	2.2
		<i>Other</i>	2.2
Non-collision (Straight)	6.9	<i>Off left</i>	3.6
		<i>Off right</i>	1.8
		<i>Other</i>	1.4
Manoeuvring	6.3	<i>Emerge from Driveway</i>	2.2
		<i>From footway</i>	1.8
		<i>U-turn</i>	1.8

Note The data in Figure 2.5 and Table 2.5 are based on state and territory Road User Movement (RUM) and DCA Definitions for Coding Accidents (DCA) codes. Data from each jurisdiction has been collated into a national system using the diagrams in (Austroads 2009). In these coding systems there are 10 main crash type groups; within each main group there are several sub-groups.

Source Not shown in this table are 'On path', 'Miscellaneous' and 'Unknown' crash types, which together account for 6% of the total. Austroads 2009; National Crash Database

Table 2.6 Fatal crashes involving heavy vehicles by common crash sub-types^a

	<i>Intersection</i>	<i>Head-on</i>	<i>Single vehicle run-off road^b</i>
Articulated trucks			
2008	27	51	15
2009	17	40	19
2010	29	40	13
2011	28	45	14
2012	22	51	15
2013	20	40	5
2014	18	33	13
2015	24	36	9
Heavy rigid trucks			
2008	27	32	4
2009	27	25	7
2010	22	29	4
2011	23	16	4
2012	23	31	2
2013	18	21	3
2014	20	23	4
2015	21	22	4
Buses			
2008	11	1	2
2009	8	5	3
2010	6	6	3
2011	12	4	1
2012	8	4	1
2013	5	3	0
2014	6	3	1
2015	4	9	1
Crash involving any heavy vehicle^c			
	<i>Intersection</i>	<i>Head-on</i>	<i>Single vehicle run-off road^b</i>
2008	65	82	21
2009	51	65	29
2010	56	73	20
2011	62	63	19
2012	52	83	18
2013	42	62	8
2014	43	59	18
2015	48	67	14

a Categories not mutually exclusive.

b Excludes South Australia.

c This is not the total of three individual heavy vehicle counts. The categories are not mutually exclusive.

Source National Crash Database

Table 2.7 Fatal crashes involving heavy vehicles by road type

	<i>National or State highway</i>	<i>Arterial</i>	<i>Sub-arterial</i>	<i>Local</i>	<i>Other^a</i>	<i>Total^b</i>
Articulated trucks						
2008	82	17	11	7	8	126
2009	68	21	14	9	2	114
2010	77	15	11	12	2	118
2011	82	21	14	8	2	128
2012	89	17	7	10	4	127
2013	62	17	4	7	5	95
2014	63	18	12	2	5	100
2015	62	18	11	4	4	99
Heavy rigid trucks						
2008	35	12	20	9	6	84
2009	33	16	12	10	2	73
2010	37	16	5	7	7	72
2011	16	18	9	13	3	59
2012	32	19	10	17	4	83
2013	28	12	11	6	4	62
2014	25	24	10	11	4	75
2015	26	19	8	11	9	73
Buses						
2008	4	7	3	6	2	22
2009	6	6	3	8	2	25
2010	1	7	4	1	7	20
2011	4	5	3	4	7	23
2012	4	6	4	5	2	21
2013	2	3	3	3	0	11
2014	3	5	1	4	2	15
2015	6	3	2	5	1	17
Crash involving any heavy vehicle^c						
	<i>National or State highway</i>	<i>Arterial</i>	<i>Sub-arterial</i>	<i>Local</i>	<i>Other^a</i>	<i>Total^b</i>
2008	119	36	34	22	16	230
2009	100	42	28	27	6	203
2010	111	37	20	19	15	203
2011	100	43	26	24	12	206
2012	119	40	21	31	10	222
2013	89	32	18	16	8	164
2014	91	46	23	17	10	188
2015	91	40	20	20	14	185

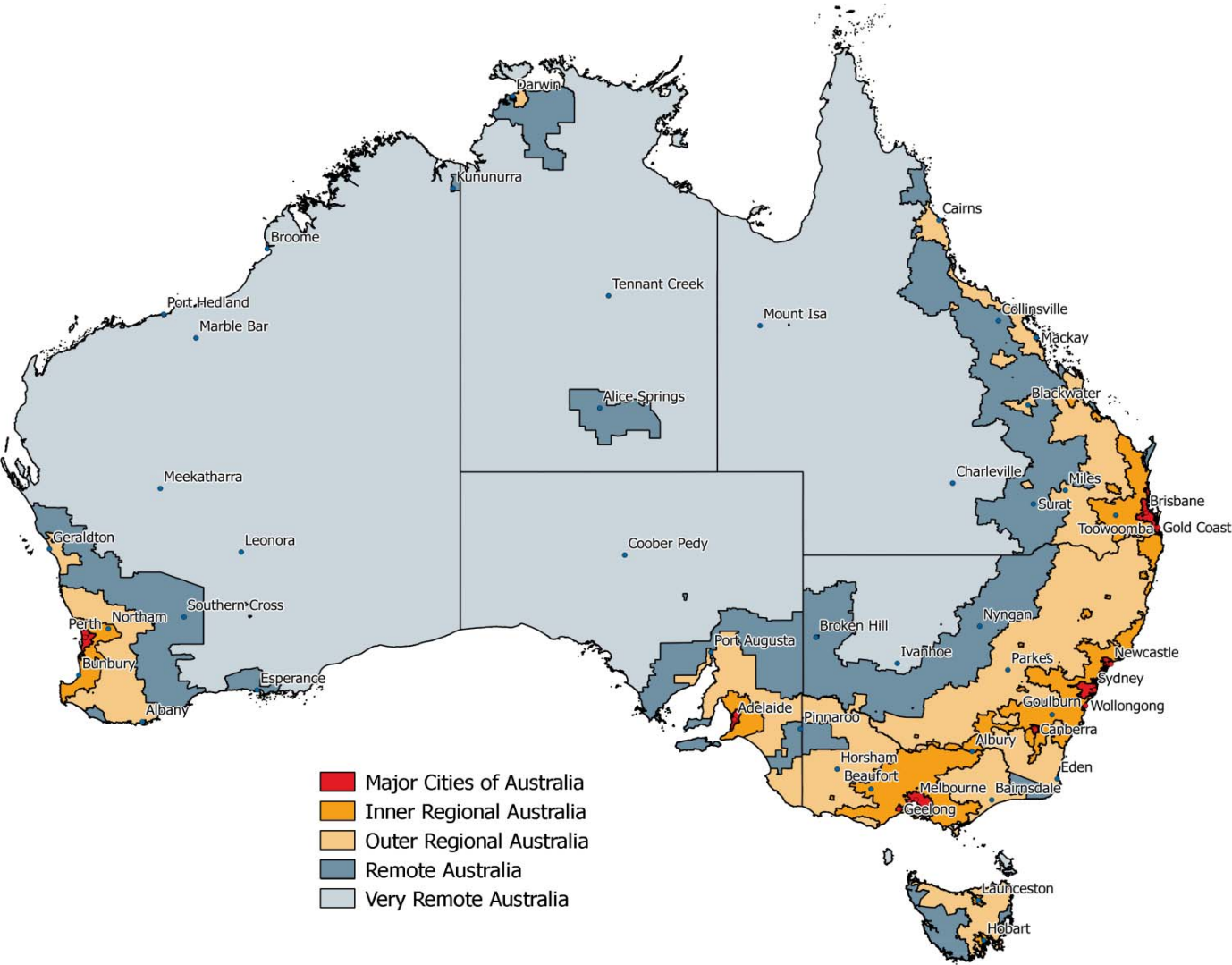
a Includes Collector road, Access road, Path and Busway.

b Includes crashes with undetermined road type.

c This is not the total of three individual heavy vehicle counts. The categories are not mutually exclusive.

Source National Crash Database

Figure 2.6 ASGS^a Remoteness Areas 2011 and selected cities and towns



a Source ASGS: Australian Statistical Geography Standard Australian Bureau of Statistics 2013

Table 2.8 Fatal crashes involving heavy vehicles by remoteness region^a

	<i>Major cities</i>	<i>Inner regional</i>	<i>Outer regional</i>	<i>Remote</i>	<i>Very remote</i>	<i>Total^b</i>
Articulated trucks						
2008	25	53	39	3	6	126
2009	21	36	39	13	5	114
2010	25	43	38	8	4	118
2011	32	47	37	6	6	128
2012	22	49	42	8	6	127
2013	19	36	24	9	7	95
2014	17	43	31	5	4	100
2015	16	44	29	5	5	99
Heavy rigid trucks						
2008	41	25	14	2	2	84
2009	34	23	15	1	0	73
2010	31	25	13	2	1	72
2011	18	26	12	2	1	59
2012	28	28	21	2	4	83
2013	35	15	9	1	1	62
2014	33	24	16	1	1	75
2015	25	26	17	4	1	73
Buses						
2008	13	5	2	2	0	22
2009	10	8	6	1	0	25
2010	12	6	2	0	0	20
2011	18	3	1	1	0	23
2012	14	1	4	1	1	21
2013	6	3	1	0	1	11
2014	8	0	4	1	2	15
2015	7	4	6	0	0	17
Crash involving any heavy vehicle^c						
	<i>Major cities</i>	<i>Inner regional</i>	<i>Outer regional</i>	<i>Remote</i>	<i>Very remote</i>	<i>Total^a</i>
2008	79	81	55	7	8	230
2009	63	61	59	15	5	203
2010	65	72	52	10	4	203
2011	67	73	50	9	7	206
2012	63	74	64	10	11	222
2013	59	53	33	10	8	164
2014	57	67	50	7	7	188
2015	48	72	50	9	6	185

a Remoteness regions are classified as per Australian Statistical Geography Standard (ASGS).

b Includes undetermined remoteness regions.

c This is not the total of three individual heavy vehicle counts. The categories are not mutually exclusive.

Source National Crash Database

Table 2.9 Fatal crashes by Significant Urban Area (SUA)^a

	<i>Urban area</i>	<i>Non-urban area</i>
Articulated trucks		
2008	36	90
2009	34	80
2010	39	79
2011	44	84
2012	32	95
2013	28	67
2014	27	73
2015	32	67
Heavy rigid trucks		
2008	50	34
2009	41	32
2010	44	28
2011	26	33
2012	44	39
2013	39	23
2014	37	38
2015	38	35
Buses		
2008	15	7
2009	14	11
2010	14	6
2011	21	2
2012	18	3
2013	8	3
2014	9	6
2015	11	6
Crash involving any heavy vehicle		
	<i>Urban area</i>	<i>Non-urban area</i>
2008	101	129
2009	86	117
2010	94	109
2011	89	117
2012	91	131
2013	74	90
2014	72	116
2015	81	104

a 'Urban' refers to Significant Urban Area. Significant Urban Areas (SUA) represent aggregations of whole Statistical Area Level 2 (SA2) boundaries and are used to define and contain major urban and near-urban concentrations of over 10,000 people. They include the urban population, any immediately associated populations, and may also incorporate one or more closely associated Urban Centres and Localities and the areas between. They are designed to incorporate any likely growth over the next 20 years. Significant Urban Areas do not cover the whole of Australia, and may cross state or territory boundaries.

Sources National Crash Database; Australian Bureau of Statistics 2017b

Table 2.10 Fatal crashes by Urban Centre and Locality (UCL)^a

	<i>All</i>	<i>Remainder</i>
Articulated trucks		
2008	44	82
2009	28	86
2010	32	86
2011	39	89
2012	30	97
2013	23	72
2014	22	78
2015	24	75
Heavy rigid trucks		
2008	49	35
2009	30	43
2010	34	38
2011	26	33
2012	40	43
2013	38	24
2014	35	40
2015	30	43
Buses		
2008	15	7
2009	14	11
2010	14	6
2011	21	2
2012	18	3
2013	7	4
2014	9	6
2015	10	7
Crash involving any heavy vehicle		
	<i>All</i>	<i>Remainder</i>
2008	107	123
2009	71	132
2010	77	126
2011	85	121
2012	85	137
2013	66	98
2014	65	123
2015	64	121

a 'UCL' refers to Urban Centre and Locality. An 'Urban Centre' is generally defined as a population centre with a 'core urban population' of 1,000 or more people. A 'Locality' is generally defined as a population centre of between 200 and 999 people. People living in Urban Centres are classified as urban for statistical purposes while those in 'Localities' are classified as rural, that is, non-urban.

Sources National Crash Database; Australian Bureau of Statistics 2013

Table 2.11 Fatal crashes involving heavy vehicles – validity of heavy vehicle driver's licence (excludes WA)

	<i>All valid</i>	<i>Any invalid</i>	<i>Unknown</i>	<i>Total</i>
Articulated trucks				
2008	106	3	9	118
2009	94	0	9	103
2010	84	2	19	105
2011	101	3	9	113
2012	101	2	13	116
2013	75	1	11	87
2014	77	2	21	100
2015	76	0	22	98
Heavy rigid trucks				
2008	77	4	3	84
2009	69	2	1	72
2010	64	4	3	71
2011	52	1	5	58
2012	78	2	3	83
2013	52	0	10	62
2014	63	0	11	74
2015	60	2	11	73
Buses				
2008	21	0	1	22
2009	24	0	1	25
2010	19	0	1	20
2011	21	1	1	23
2012	20	0	1	21
2013	9	0	2	11
2014	11	1	3	15
2015	14	0	3	17

Source National Crash Database

Table 2.12 Fatal crashes involving heavy vehicles – specified heavy vehicle driver BAC status (excludes Victoria and WA)

	<i>All pass</i>	<i>Any fail</i>	<i>Unknown</i>	<i>Total</i>
Articulated trucks				
2008	55	5	45	105
2009	60	0	37	97
2010	56	1	30	87
2011	67	3	37	107
2012	60	2	38	100
2013	46	2	34	82
2014	39	1	34	74
2015	42	1	34	77
Heavy rigid trucks				
2008	37	3	22	62
2009	37	1	15	53
2010	34	5	13	52
2011	24	2	18	44
2012	42	0	25	67
2013	29	0	21	50
2014	33	0	19	52
2015	30	1	25	56
Buses				
2008	8	0	10	18
2009	11	0	8	19
2010	12	0	5	17
2011	12	1	6	19
2012	11	0	7	18
2013	3	0	5	8
2014	8	0	4	12
2015	6	0	5	11

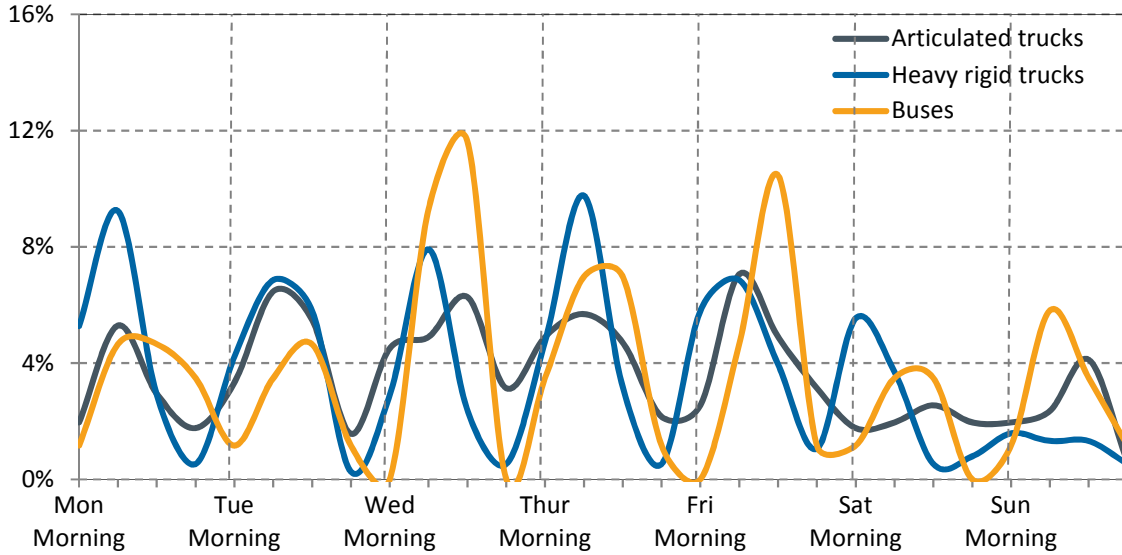
Source National Crash Database

**Table 2.13 Fatal crashes involving heavy vehicles by weekly time block
2012–2016**

Crash time of week		Articulated truck involvement	Heavy rigid truck involvement	Bus involvement
Monday	Morning	10	20	1
	Midday	27	35	4
	Evening	15	11	4
	Night	9	2	3
Tuesday	Morning	17	16	1
	Midday	33	26	3
	Evening	28	22	4
	Night	8	1	1
Wednesday	Morning	23	11	0
	Midday	25	30	8
	Evening	32	9	10
	Night	16	2	0
Thursday	Morning	25	18	3
	Midday	29	37	6
	Evening	24	12	6
	Night	11	2	1
Friday	Morning	13	22	0
	Midday	36	26	4
	Evening	25	15	9
	Night	16	4	1
Saturday	Morning	9	21	1
	Midday	10	14	3
	Evening	13	2	3
	Night	10	3	0
Sunday	Morning	10	6	1
	Midday	12	5	5
	Evening	21	5	3
	Night	3	2	1
Morning	3 am to 8:59 am		Evening	3 pm to 8:59 pm
Midday	9 am to 2:59 pm		Night	9 pm to 2:59 am

a Excludes crashes with unrecorded time.
Source Australian Road Deaths Database

Figure 2.7 Fatal crashes involving heavy vehicles by weekly time block 2012–2016



Morning 3 am to 8:59 am **Evening** 3 pm to 8:59 pm
Midday 9 am to 2:59 pm **Night** 9 pm to 2:59 am
 Source Australian Road Deaths Database

SECTION 3

Rates

This section presents rates for fatal crashes standardised by vehicle registrations, vehicle kilometres travelled (VKT) and licence counts. In general, rates are composed of fatal crashes during the calendar year divided by the exposure measure at the mid-point.

- Over the decade to 2016, national rates of fatal-crashes-involving-heavy-vehicles per registration have fallen substantially. For articulated truck involved crashes the reduction was 50.2 per cent, for heavy rigid truck fatal crashes the reduction was 50.2 per cent and for bus involved fatal crashes the rate declined by 26.1 per cent (Table 3.1, p. 36).
- Over the latest three years (2014-2016) however, the rates have increased for all type of crash (Table 3.1, p. 36).
- National rates per vehicle-kilometre-travelled show similar reductions over the decade, and similar increases over the last three years. However there are significant differences between the jurisdictions. (Table 3.2, p. 38).
- Fatal crash rates per (heavy vehicle) licence holder are available for the six years to 2015. During this time, articulated truck rates trended down but rates for heavy rigid truck crashes were flat (Table 3.3, p. 39).

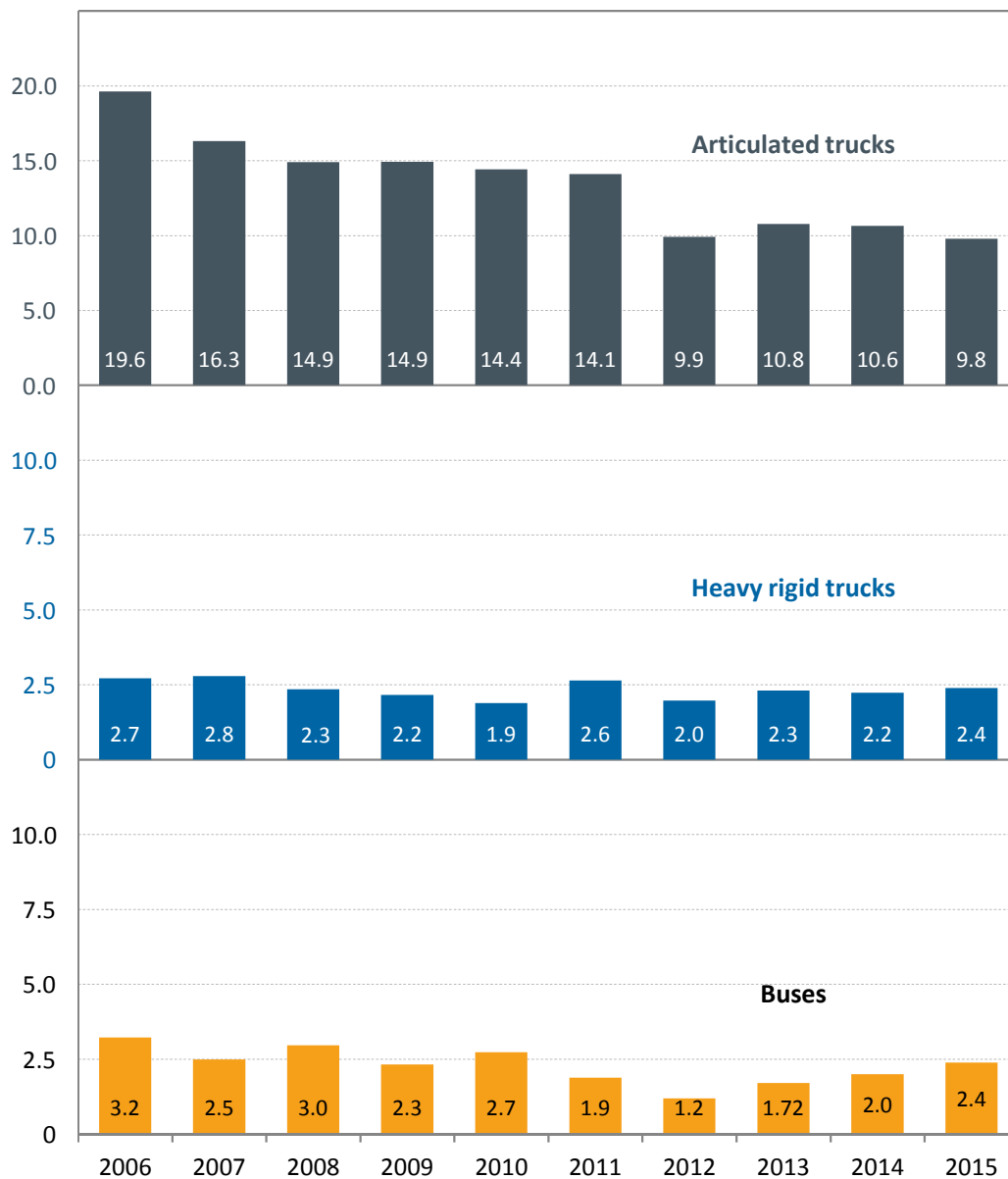
Table 3.1 Heavy vehicle involved fatal crash rates per 10,000 heavy vehicles registrations

	<i>Articulated trucks</i>	<i>Heavy rigid trucks^a</i>	<i>Any heavy truck^b</i>	<i>Buses</i>
2007	19.6	2.7	6.0	3.2
2008	16.3	2.8	5.5	2.5
2009	14.9	2.3	4.7	3.0
2010	14.9	2.2	4.6	2.3
2011	14.4	1.9	4.5	2.7
2012	14.1	2.6	5.0	1.9
2013	9.9	2.0	3.6	1.2
2014	10.8	2.3	4.2	1.7
2015	10.6	2.2	4.1	2.0
2016	9.8	2.4	3.9	2.4
<i>Ave. trend change p.a.(%) - for the last 10 years</i>	-7.1	-1.6	-4.3	-5.5

a Only available from 2004.

Source Australian Road Deaths Database; Australian Bureau of Statistics 2015

Figure 3.1 Heavy vehicle involved fatal crash rates per 10,000 heavy vehicles registrations



Source Australian Road Deaths Database; Australian Bureau of Statistics 2015

Table 3.2 Heavy vehicle involved fatal crash rates per billion vehicle kilometres travelled (VKT) by state

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas</i>	<i>NT</i>	<i>ACT</i>	<i>Australia</i>
Articulated trucks									
<i>2007</i>	23.8	18.5	26.7	10.3	20.5	27.5	27.5	0.0	21.7
<i>2008</i>	20.6	13.6	23.8	15.1	9.8	40.4	41.9	0.0	18.7
<i>2009</i>	14.6	10.7	26.2	15.2	14.0	67.8	28.2	127.6	17.7
<i>2010</i>	18.0	19.2	17.0	11.7	18.8	20.2	13.9	63.2	17.7
<i>2011</i>	18.3	12.6	20.9	19.2	13.8	13.2	41.4	0.0	17.2
<i>2012</i>	16.3	16.9	21.7	13.9	8.2	20.0	27.1	0.0	16.6
<i>2013</i>	12.3	7.5	15.4	12.2	8.9	13.5	39.5	0.0	11.8
<i>2014</i>	11.3	14.1	14.9	15.1	6.4	27.0	0.0	116.1	12.9
<i>2015</i>	12.2	11.5	12.7	17.7	11.2	13.6	0.0	57.4	12.5
<i>2016</i>	8.9	11.1	12.2	14.5	8.8	20.4	47.7	56.6	11.3
<i>Ave. trend change p.a.(%) - for the last 10 years</i>	-8.7	-4.1	-8.4	2.4	-7.8	-9.1	-	-	-6.8
Heavy rigid trucks									
<i>2007</i>	10.2	12.2	5.0	9.4	9.8	4.8	12.0	14.1	9.3
<i>2008</i>	4.2	10.9	10.3	14.7	17.2	9.3	23.4	0.0	9.6
<i>2009</i>	8.3	9.1	6.4	3.7	15.2	4.6	0.0	0.0	8.3
<i>2010</i>	7.1	8.7	5.8	3.6	10.0	18.4	0.0	13.8	7.6
<i>2011</i>	5.2	6.6	6.1	10.5	7.1	9.0	23.0	0.0	6.5
<i>2012</i>	7.5	6.4	10.3	10.3	14.0	9.1	11.3	12.8	9.0
<i>2013</i>	7.4	5.4	4.8	6.9	12.6	0.0	0.0	0.0	6.6
<i>2014</i>	7.0	10.1	3.8	17.0	8.1	13.5	0.0	0.0	7.7
<i>2015</i>	7.2	7.8	6.6	3.4	7.8	22.5	10.7	0.0	7.4
<i>2016</i>	10.2	7.2	4.8	8.4	7.5	17.8	0.0	0.0	7.8
<i>Ave. trend change p.a.(%) - for the last 10 years</i>	2.1	-4.8	-3.6	-1.1	-5.7	-	-	-	-2.4
Buses									
<i>2007</i>	20.4	11.2	14.4	6.9	6.4	0.0	0.0	0.0	12.5
<i>2008</i>	9.0	10.4	16.1	6.7	6.3	0.0	0.0	0.0	9.7
<i>2009</i>	13.9	14.8	15.5	13.2	0.0	20.6	0.0	0.0	11.7
<i>2010</i>	15.4	4.7	5.6	19.3	0.0	20.6	11.6	31.8	9.1
<i>2011</i>	18.4	11.1	12.5	0.0	3.0	0.0	0.0	0.0	10.6
<i>2012</i>	9.7	6.2	10.3	6.3	2.9	0.0	0.0	0.0	7.2
<i>2013</i>	3.2	6.4	8.2	0.0	0.0	0.0	10.9	0.0	4.6
<i>2014</i>	9.6	6.3	1.6	6.3	10.5	0.0	0.0	28.1	6.6
<i>2015</i>	7.8	12.6	3.2	6.2	5.2	19.6	10.5	28.4	7.7
<i>2016</i>	15.5	4.2	4.8	18.4	7.8	19.4	10.3	0.0	9.3
<i>Ave. trend change p.a.(%) - for the last 10 years</i>	-6.3	-6.7	-17.3	-	-	-	-	-	-5.7

Source Australian Road Deaths Database; Bureau of Infrastructure, Transport and Regional Economics Unpublished

Table 3.3 Fatal crash rates involving heavy vehicles per 10,000 heavy vehicle licence holders^{a,b,c}

	<i>Articulated trucks</i>	<i>Heavy rigid trucks</i>
2010	2.2	0.5
2011	2.3	0.4
2012	2.3	0.5
2013	1.6	0.4
2014	1.9	0.5
2015	1.8	0.5

a Excludes WA due to unavailability of licence data by class.

b Licence data is at June each year.

c For Licence Class definition, see Glossary.

Source Bureau of Infrastructure, Transport and Regional Economics 2015

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SECTION 4 Historical series

This section presents longer time series of annual fatalities and fatal crashes.

- Over the last 25 years, counts of fatal crashes involving articulated trucks have decreased by 39.7 per cent. By jurisdiction, the reductions range from 0.0 per cent for Queensland to 64.1 per cent for New South Wales (Table 4.5, p. 50). During this time however, registrations have increased by 44 per cent (New South Wales) and 134 per cent (Queensland).
- Vulnerable road users (pedestrians, motorcyclists and pedal cyclists) account for 15 per cent of fatalities in crashes where an articulated truck is involved. This proportion has not changed in 25 years. For bus involved crashes, vulnerable road users account for 50 per cent of fatalities (also not significantly changed in 25 years) (Table 4.3, p. 46).

Table 4.1 Deaths from crashes involving heavy vehicles by state/territory
1989–2016

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas</i>	<i>NT</i>	<i>ACT</i>	<i>Australia</i>
Articulated trucks									
1989	143	68	60	31	20	9	3	1	335
1990	94	68	37	26	17	13	8	0	263
1991	78	40	26	22	12	4	1	0	183
1992	84	32	38	14	10	1	2	0	181
1993	69	50	42	18	21	3	1	0	204
1994	67	38	41	15	16	1	1	0	179
1995	63	38	55	19	14	5	4	1	199
1996	56	39	42	25	26	2	2	2	194
1997	71	27	35	18	14	4	2	0	171
1998	71	32	33	24	13	2	2	2	179
1999	64	39	38	21	23	2	3	1	191
2000	84	40	40	19	13	6	6	0	208
2001	60	45	33	18	14	5	0	3	178
2002	86	49	28	13	14	3	7	0	200
2003	63	41	35	13	17	1	1	0	171
2004	64	37	13	13	18	4	2	0	151
2005	52	32	35	17	13	5	1	0	155
2006	69	29	37	10	14	7	2	0	168
2007	59	47	41	7	20	5	2	0	181
2008	53	23	46	10	8	6	3	0	149
2009	47	20	40	11	12	11	2	2	145
2010	51	36	29	7	15	3	1	1	143
2011	47	23	39	13	13	2	3	0	140
2012	50	30	45	10	8	3	2	0	148
2013	32	15	35	11	11	2	4	0	110
2014	31	27	32	12	6	5	0	2	115
2015	34	21	28	15	12	3	0	1	114
2016	27	23	25	11	10	5	5	1	107
Heavy rigid trucks									
2004	38	30	22	7	7	4	0	0	108
2005	28	33	13	3	7	2	1	1	88
2006	30	15	16	5	9	3	1	1	80
2007	29	26	11	5	10	1	2	1	85
2008	12	23	24	9	19	2	2	0	91
2009	24	19	13	2	18	1	0	0	77
2010	24	21	15	2	13	5	0	1	81
2011	17	20	14	6	9	2	4	0	72
2012	23	15	27	7	19	4	1	1	97
2013	24	13	13	4	15	0	0	0	69
2014	21	29	9	15	11	3	0	0	88
2015	25	20	17	3	11	5	1	0	82
2016	34	19	13	8	11	6	0	0	91

Note Data for the Heavy rigid truck involved is only available from 2004.

Table 4.1 Deaths from crashes involving heavy vehicles by state/territory
1989–2016 (continued)

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas</i>	<i>NT</i>	<i>ACT</i>	<i>Australia</i>
Buses									
1989	84	5	9	2	1	0	0	3	104
1990	16	6	15	5	3	0	1	0	46
1991	7	6	13	3	1	1	0	1	32
1992	20	4	4	3	2	5	0	1	39
1993	15	15	8	2	6	1	1	1	49
1994	8	7	19	0	3	1	1	1	40
1995	9	3	6	2	2	1	0	0	23
1996	18	5	9	0	3	1	0	2	38
1997	14	1	3	0	5	2	1	1	27
1998	15	2	10	0	0	1	1	0	29
1999	13	2	12	2	1	1	0	1	32
2000	13	3	6	1	0	1	0	0	24
2001	12	7	4	2	0	5	0	2	32
2002	16	6	7	5	2	0	0	0	36
2003	15	3	4	3	2	1	1	0	29
2004	15	6	6	2	0	0	0	1	30
2005	21	5	9	1	2	0	0	0	38
2006	7	3	5	1	1	1	1	0	19
2007	11	4	7	1	2	0	0	0	25
2008	5	4	9	1	2	0	0	0	21
2009	9	9	10	2	0	1	0	0	31
2010	9	2	4	3	0	1	1	1	21
2011	11	5	8	0	1	0	0	0	25
2012	6	3	7	1	1	0	0	0	18
2013	2	3	6	0	0	0	1	0	12
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

Source Australian Road Deaths Database

Table 4.2 Deaths from crashes involving heavy vehicles by age group
1989–2016

	<i>0 to 16</i>	<i>17 to 25</i>	<i>26 to 39</i>	<i>40 to 64</i>	<i>≥65</i>	<i>Total^a</i>
Articulated trucks						
1989	28	91	103	82	27	335
1990	17	81	67	70	28	263
1991	13	49	56	35	29	183
1992	7	42	58	57	17	181
1993	7	35	73	70	19	204
1994	16	42	47	52	22	179
1995	13	46	54	60	26	199
1996	11	38	61	55	29	194
1997	18	27	50	49	25	171
1998	11	35	52	59	20	179
1999	15	30	68	47	31	191
2000	11	43	67	68	19	208
2001	13	36	39	59	31	178
2002	12	43	59	62	24	200
2003	14	40	25	68	23	171
2004	8	29	42	56	16	151
2005	10	41	42	36	25	155
2006	11	26	52	57	22	168
2007	10	31	48	66	26	181
2008	8	29	31	56	25	149
2009	11	25	29	62	18	145
2010	8	25	28	57	25	143
2011	3	23	27	68	19	140
2012	6	12	45	60	24	148
2013	5	14	26	40	25	110
2014	4	22	26	45	18	115
2015	3	15	24	48	24	114
2016	2	14	27	47	17	107
Heavy rigid trucks						
2004	7	20	20	30	18	108
2005	9	19	10	19	17	88
2006	7	18	11	17	15	80
2007	7	14	24	28	12	85
2008	5	19	22	29	16	91
2009	4	7	19	31	16	77
2010	8	14	12	32	15	81
2011	4	15	10	32	11	72
2012	3	24	22	27	21	97
2013	6	10	11	27	15	69
2014	7	10	19	36	16	88
2015	2	9	25	28	18	82
2016	6	19	15	35	16	91

Note Data for the Heavy rigid truck involved is only available from 2004.

Table 4.2 Deaths from crashes involving heavy vehicles by age group
1989–2016 (continued)

	0 to 16	17 to 25	26 to 39	40 to 64	≥65	Total ^a
Buses						
1989	12	23	22	29	13	104
1990	6	7	8	6	19	46
1991	7	7	3	5	10	32
1992	3	7	7	14	8	39
1993	3	12	10	17	7	49
1994	9	7	3	5	16	40
1995	0	7	5	4	7	23
1996	4	6	6	12	10	38
1997	3	2	10	8	4	27
1998	3	6	6	7	7	29
1999	0	11	4	11	6	32
2000	5	4	5	7	3	24
2001	2	6	9	7	8	32
2002	2	10	5	9	10	36
2003	1	5	3	13	7	29
2004	3	4	5	8	10	30
2005	2	8	8	6	12	38
2006	2	1	4	7	5	19
2007	1	2	7	10	5	25
2008	2	6	5	5	3	21
2009	5	9	2	10	5	31
2010	0	4	9	6	2	21
2011	2	3	7	8	5	25
2012	1	1	2	7	7	18
2013	1	1	2	6	2	12
2014	4	4	4	6	2	20
2015	1	2	6	8	5	22
2016	0	2	5	8	9	24

a Includes deaths to persons with age not recorded.
Source Australian Road Deaths Database

Table 4.3 Deaths from crashes involving heavy vehicles by road user
1989–2016

	<i>Driver^a</i>	<i>Passenger^a</i>	<i>Pedestrian</i>	<i>Motorcyclist^b</i>	<i>Pedal cyclist^b</i>	<i>Total^c</i>
Articulated trucks						
1989	178	103	32	14	8	335
1990	161	69	15	9	9	263
1991	108	41	12	15	7	183
1992	112	43	15	11	0	181
1993	132	47	15	6	4	204
1994	110	45	15	4	5	179
1995	115	50	15	18	1	199
1996	126	44	13	7	4	194
1997	104	42	11	9	5	171
1998	108	43	16	7	5	179
1999	117	38	17	15	4	191
2000	128	48	18	7	3	208
2001	110	39	18	5	6	178
2002	123	42	16	15	4	200
2003	104	40	13	13	1	171
2004	111	20	14	3	3	151
2005	99	32	11	9	4	155
2006	100	35	19	8	6	168
2007	103	44	19	10	5	181
2008	94	23	17	11	4	149
2009	97	25	20	3	0	145
2010	80	36	14	7	6	143
2011	86	26	20	6	2	140
2012	93	30	16	8	0	148
2013	70	21	10	7	2	110
2014	74	20	10	8	3	115
2015	79	19	8	5	3	114
2016	72	19	5	8	3	107
Heavy rigid trucks						
2004	61	18	15	8	6	108
2005	40	24	11	10	3	88
2006	56	13	6	10	3	89
2007	48	10	12	8	7	85
2008	49	13	15	11	2	91
2009	43	12	10	9	3	77
2010	39	21	7	9	5	81
2011	34	14	14	6	4	72
2012	53	16	13	12	3	97
2013	33	9	16	5	6	69
2014	47	15	10	12	4	88
2015	49	11	9	7	6	82
2016	57	13	7	10	3	91

Note Data for the Heavy rigid truck involved is only available from 2004.

Table 4.3 Deaths from crashes involving heavy vehicles by road user
1989–2016 (continued)

	<i>Driver^a</i>	<i>Passenger^a</i>	<i>Pedestrian</i>	<i>Motorcyclist^b</i>	<i>Pedal cyclist^b</i>	<i>Total^c</i>
Buses						
1989	18	65	14	6	1	104
1990	8	24	8	1	5	46
1991	7	6	11	6	2	32
1992	8	18	10	1	2	39
1993	16	17	10	4	2	49
1994	9	18	10	1	2	40
1995	9	4	8	1	1	23
1996	9	14	14	1	0	38
1997	11	8	6	0	2	27
1998	8	8	7	5	1	29
1999	16	5	9	1	1	32
2000	2	9	12	1	0	24
2001	9	9	11	1	2	32
2002	7	13	13	2	1	36
2003	11	7	7	4	0	29
2004	9	5	7	6	3	30
2005	13	14	9	2	0	38
2006	4	2	9	3	1	19
2007	10	3	7	2	3	25
2008	2	7	4	7	1	21
2009	9	12	7	2	1	31
2010	7	2	3	8	1	21
2011	3	5	13	2	2	25
2012	6	4	5	3	0	18
2013	5	1	1	2	3	12
2014	3	6	6	2	3	20
2015	10	7	2	3	0	22
2016	9	3	9	3	0	24

a Includes drivers/passengers of light and heavy vehicles.

b Includes pillion passengers.

c Includes road users not separately specified.

Source Australian Road Deaths Database

Table 4.4 Deaths by crash type for crashes involving heavy vehicles 1989–2016

	<i>Single vehicle</i>	<i>Multiple vehicle</i>	<i>Pedestrian</i>		<i>Single vehicle</i>	<i>Multiple vehicle</i>	<i>Pedestrian</i>
Articulated trucks				Buses			
1989	44	257	34	1989	2	88	14
1990	45	203	15	1990	14	24	8
1991	30	141	12	1991	1	20	11
1992	33	133	15	1992	7	22	10
1993	31	158	15	1993	1	38	10
1994	24	140	15	1994	14	16	10
1995	35	149	15	1995	1	14	8
1996	24	157	13	1996	2	22	14
1997	31	129	11	1997	6	15	6
1998	34	129	16	1998	3	19	7
1999	20	154	17	1999	1	22	9
2000	25	165	18	2000	1	11	12
2001	18	142	18	2001	4	17	11
2002	31	153	16	2002	8	15	13
2003	20	138	13	2003	4	18	7
2004	27	110	14	2004	1	22	7
2005	28	116	11	2005	8	21	9
2006	24	124	20	2006	2	8	9
2007	33	129	19	2007	1	17	7
2008	25	107	17	2008	6	11	4
2009	31	94	20	2009	9	15	7
2010	15	114	14	2010	3	15	3
2011	20	100	20	2011	3	9	13
2012	19	112	17	2012	2	11	5
2013	8	92	10	2013	0	11	1
2014	17	88	10	2014	4	10	6
2015	19	87	8	2015	1	19	2
2016	11	91	5	2016	2	13	9

Table 4.4 Deaths by crash type for crashes involving heavy vehicles
1989–2016 (continued)

	<i>Single vehicle</i>	<i>Multiple vehicle</i>	<i>Pedestrian</i>
Heavy rigid trucks			
2004	11	82	15
2005	7	70	11
2006	7	60	13
2007	6	67	12
2008	12	64	15
2009	7	60	10
2010	7	67	7
2011	7	51	14
2012	5	79	13
2013	4	49	16
2014	7	71	10
2015	7	66	9
2016	10	74	7

Note Data for the Heavy rigid truck involved is only available from 2004.
Source Australian Road Deaths Database

Table 4.5 Fatal crashes involving heavy vehicles by state/territory 1989–2016

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas</i>	<i>NT</i>	<i>ACT</i>	<i>Australia</i>
Articulated trucks									
1989	99	57	45	23	18	4	3	1	250
1990	77	51	31	18	15	10	3	0	205
1991	64	35	23	18	11	4	1	0	156
1992	73	27	34	8	10	1	1	0	154
1993	60	34	38	17	18	3	1	0	171
1994	52	36	34	14	13	1	1	0	151
1995	49	31	47	17	12	4	4	1	165
1996	48	33	34	19	23	2	1	1	161
1997	60	26	29	12	13	4	2	0	146
1998	58	30	28	18	12	2	2	1	151
1999	55	35	30	17	20	2	3	1	163
2000	69	32	28	15	12	6	3	0	165
2001	48	32	31	17	11	4	0	3	146
2002	76	41	24	12	12	3	3	0	171
2003	50	33	31	13	13	1	1	0	142
2004	57	35	13	10	17	4	2	0	138
2005	45	28	27	15	11	5	1	0	132
2006	57	24	34	9	12	5	2	0	143
2007	53	29	38	6	14	4	2	0	146
2008	47	22	35	9	7	6	3	0	129
2009	33	17	38	9	10	10	2	2	121
2010	41	31	25	7	14	3	1	1	123
2011	43	21	32	12	11	2	3	0	124
2012	39	29	35	9	7	3	2	0	124
2013	30	13	26	8	8	2	3	0	90
2014	28	25	26	10	6	4	0	2	101
2015	31	21	23	12	11	2	0	1	101
2016	23	21	23	10	9	3	4	1	94
Heavy rigid trucks									
2004	30	25	19	7	7	4	0	0	92
2005	26	28	10	3	7	2	1	1	78
2006	24	15	15	5	8	3	1	1	72
2007	28	24	10	5	10	1	1	1	80
2008	12	22	21	8	18	2	2	0	85
2009	23	18	13	2	16	1	0	0	73
2010	20	18	12	2	11	4	0	1	68
2011	15	14	13	6	8	2	2	0	60
2012	22	14	23	6	16	2	1	1	85
2013	22	12	11	4	15	0	0	0	64
2014	21	23	9	10	10	3	0	0	76
2015	22	18	16	2	10	5	1	0	74
2016	32	17	12	5	10	4	0	0	80

Note Data for the Heavy rigid truck involved is only available from 2004.

Table 4.5 Fatal crashes involving heavy vehicles by state/territory
1989–2016 (continued)

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas</i>	<i>NT</i>	<i>ACT</i>	<i>Australia</i>
Buses									
1989	25	5	9	2	1	0	0	3	45
1990	14	6	4	4	3	0	1	0	32
1991	6	6	12	3	1	1	0	1	30
1992	11	4	4	3	2	3	0	1	28
1993	14	5	7	2	5	1	1	1	36
1994	8	7	7	0	3	1	1	1	28
1995	9	3	6	1	2	1	0	0	22
1996	15	4	6	0	3	1	0	2	31
1997	13	1	2	0	5	1	1	1	24
1998	12	2	7	0	0	1	1	0	23
1999	10	2	12	2	1	1	0	1	29
2000	13	3	5	1	0	1	0	0	23
2001	11	7	4	2	0	2	0	2	28
2002	13	6	6	2	1	0	0	0	28
2003	13	3	4	2	2	1	1	0	26
2004	15	6	6	2	0	0	0	1	30
2005	15	4	7	1	2	0	0	0	29
2006	7	3	5	1	1	1	1	0	19
2007	11	4	7	1	2	0	0	0	25
2008	5	4	8	1	2	0	0	0	20
2009	8	6	8	2	0	1	0	0	25
2010	9	2	3	3	0	1	1	1	20
2011	11	5	7	0	1	0	0	0	24
2012	6	3	6	1	1	0	0	0	17
2013	2	3	5	0	0	0	1	0	11
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

Source

Australian Road Deaths Database

Table 4.6 Fatal crashes involving heavy vehicles by crash type
1989–2016

	<i>Single vehicle</i>	<i>Multiple vehicle</i>	<i>Pedestrian involved</i>	<i>Total</i>
Articulated trucks				
1989	41	179	30	250
1990	41	149	15	205
1991	27	117	12	156
1992	30	109	15	154
1993	29	128	14	171
1994	24	112	15	151
1995	33	117	15	165
1996	24	124	13	161
1997	31	104	11	146
1998	32	103	16	151
1999	18	128	17	163
2000	25	122	18	165
2001	17	111	18	146
2002	30	125	16	171
2003	20	109	13	142
2004	27	97	14	138
2005	26	95	11	132
2006	21	103	19	143
2007	31	96	19	146
2008	23	89	17	129
2009	29	74	18	121
2010	15	94	14	123
2011	18	87	19	124
2012	18	90	16	124
2013	8	73	9	90
2014	16	75	10	101
2015	18	75	8	101
2016	10	79	5	94
Heavy rigid trucks				
2004	10	15	67	92
2005	7	11	60	78
2006	7	12	53	72
2007	6	62	12	80
2008	11	59	15	85
2009	7	56	10	73
2010	7	54	7	68
2011	6	40	14	60
2012	5	68	12	85
2013	4	44	16	64
2014	7	59	10	76
2015	6	59	9	74
2016	10	63	7	80

Note Data for the Heavy rigid truck involved is only available from 2004.

**Table 4.6 Fatal crashes involving heavy vehicles by crash type
1989–2016 (continued)**

	<i>Single vehicle</i>	<i>Multiple vehicle</i>	<i>Pedestrian involved</i>	<i>Total</i>
Buses				
1989	2	29	14	45
1990	4	20	8	32
1991	1	18	11	30
1992	3	16	9	28
1993	1	25	10	36
1994	3	15	10	28
1995	1	13	8	22
1996	2	15	14	31
1997	5	13	6	24
1998	3	13	7	23
1999	1	19	9	29
2000	1	10	12	23
2001	1	16	11	28
2002	4	11	13	28
2003	4	15	7	26
2004	1	22	7	30
2005	5	15	9	29
2006	2	8	9	19
2007	1	17	7	25
2008	5	11	4	20
2009	5	14	6	25
2010	3	14	3	20
2011	3	8	13	24
2012	2	10	5	17
2013	0	10	1	11
2014	3	7	6	16
2015	1	16	2	19
2016	2	12	9	23

Source Australian Road Deaths Database

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SECTION 5 Exposure series

This section presents longer time series of exposure data.

- On average, articulated trucks travel 87,000 km per year, largely unchanged over the last 20 years. The number of annually registered articulated trucks over this period however has increased by 62 per cent. (Tables 5.1, p. 56 and Table 5.2, p. 59).
- Heavy rigid trucks travel on average 31,000 km per year. This is also largely unchanged over 20 years. The number of registered heavy rigid trucks over this period however has increased by 24 per cent. (Tables 5.1, p. 57 and Table 5.2, p. 60).

Table 5.1 Motor vehicles on register, heavy vehicles, by state/territory

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas</i>	<i>NT</i>	<i>ACT</i>	<i>Australia</i>
Articulated trucks									
1991	14,900	14,600	8,900	3,800	5,800	1,600	1,200	300	51,100
1992	15,300	14,300	10,400	3,700	5,600	-	1,100	300	50,700
1993	14,100	14,600	10,700	4,700	5,800	1,600	900	300	51,000
1994	14,500	15,300	11,300	4,700	6,100	-	900	400	53,200
1995	15,028	16,516	11,710	5,309	6,748	1,646	1,069	296	58,322
1996	15,100	16,800	11,500	5,100	6,900	1,600	994	300	58,352
1997	15,800	17,100	11,800	5,100	7,000	1,500	800	300	59,300
1998	16,800	17,300	12,400	5,900	7,300	1,500	800	300	62,300
1999	16,300	18,100	12,800	5,900	7,600	1,500	800	200	63,300
2000	-	-	-	-	-	-	-	-	-
2001	15,253	18,262	12,921	6,077	7,672	1,489	665	258	62,597
2002	15,294	18,553	13,285	6,394	7,981	1,483	653	262	63,905
2003	14,766	19,254	13,823	6,436	7,653	1,382	697	250	64,261
2004	15,300	20,200	14,100	6,200	8,000	1,500	700	200	66,300
2005	15,951	21,183	15,093	6,344	8,602	1,571	741	238	69,723
2006	16,234	21,508	15,802	6,389	9,260	1,498	754	235	71,680
2007	16,342	22,389	16,734	6,446	9,985	1,491	832	233	74,452
2008	16,735	23,690	17,940	6,914	11,111	1,591	927	224	79,132
2009	16,893	24,069	18,420	7,047	11,944	1,679	949	216	81,217
2010	16,907	24,476	18,648	7,310	12,229	1,637	1,033	196	82,436
2011	18,578	25,134	18,899	7,835	12,590	1,677	1,069	183	85,965
2012	19,009	25,265	19,595	8,016	13,217	1,625	1,099	169	87,995
2013	19,505	25,560	20,720	7,988	14,226	1,563	1,181	161	90,904
2014	19,906	26,107	21,496	8,326	15,054	1,584	1,233	147	93,853
2015	20,622	26,160	21,060	8,429	15,680	1,652	1,229	143	94,975
2016	21,450	26,779	20,784	8,423	15,609	1,721	1,259	160	96,185

Table 5.1 Motor vehicles on register, heavy vehicles, by state/territory
(continued)

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas</i>	<i>NT</i>	<i>ACT</i>	<i>Australia</i>
Heavy rigid trucks									
1991	106,900	87,000	56,600	28,300	41,600	11,200	2,200	1,100	334,900
1992	104,900	73,000	54,400	34,200	87,900	20,600	2,000	2,100	379,100
1993	107,700	74,200	55,200	34,400	91,100	21,300	2,300	2,300	388,500
1994	108,400	86,100	56,500	34,500	95,300	22,100	2,400	2,500	407,800
1995	103,109	84,652	63,593	26,451	43,044	11,056	2,834	2,682	337,421
1996	76,371	69,452	50,707	22,026	36,811	8,384	2,649	1,798	268,198
1997	77,664	69,478	51,158	22,246	36,978	8,189	2,772	1,796	270,281
1998	80,993	68,817	52,354	22,966	38,163	7,688	2,846	1,739	275,566
1999	78,801	68,889	54,229	21,833	37,647	7,600	2,875	1,680	273,554
2000	-	-	-	-	-	-	-	-	-
2001	75,996	68,113	52,305	21,459	37,506	7,331	2,811	1,742	267,263
2002	75,082	69,123	52,612	21,443	37,213	7,153	2,836	1,760	267,222
2003	75,823	69,714	53,708	21,467	37,728	7,131	2,885	1,738	270,194
2004	77,700	69,300	55,600	21,600	38,300	7,300	2,900	1,700	274,400
2005	78,981	70,079	57,724	21,559	39,312	7,436	2,974	1,687	279,752
2006	80,413	71,879	60,410	21,916	40,870	7,774	3,108	1,724	288,094
2007	80,539	73,339	63,709	21,938	42,538	7,917	3,218	1,724	294,922
2008	81,811	74,760	67,748	22,335	45,248	8,088	3,478	1,716	305,184
2009	82,056	75,588	69,804	22,595	47,340	8,171	3,687	1,698	310,939
2010	83,267	76,604	70,000	23,241	48,352	8,385	3,888	1,698	315,435
2011	84,401	77,339	69,262	23,692	49,089	8,597	4,116	1,727	318,223
2012	85,087	78,324	70,124	23,566	50,483	8,578	4,207	1,746	322,115
2013	85,807	78,490	71,366	23,326	52,218	8,720	4,359	1,712	325,998
2014	86,973	78,376	72,362	23,134	53,739	8,698	4,478	1,704	329,464
2015	88,977	78,446	71,911	22,982	54,366	8,773	4,600	1,644	331,699
2016	91,242	79,506	71,776	22,886	54,219	8,838	4,724	1,621	334,812

Note During 1995 and 1996, the State/Territory jurisdictions introduced the National Heavy Vehicle Registrations Scheme. Using data from this scheme resulted in improved accuracy for counts of registrations of articulated and rigid trucks but its introduction caused some fluctuations in the data for the period 1991 through 1996.

Source Australian Bureau of Statistics 2015

Table 5.1 Motor vehicles on register, heavy vehicles, by state/territory
(continued)

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas</i>	<i>NT</i>	<i>ACT</i>	<i>Australia</i>
Buses									
1991	10,600	14,400	8,900	3,000	8,100	2,000	1,000	1,400	49,400
1992	9,300	15,600	11,100	3,200	9,500	2,000	700	1,300	52,700
1993	10,100	15,900	11,500	3,400	9,900	2,100	700	1,300	54,900
1994	11,000	16,600	12,100	3,400	9,900	2,100	800	1,500	57,400
1995	13,473	13,770	9,328	3,525	7,125	2,145	1,883	921	52,170
1996	15,200	13,900	12,400	3,600	8,200	2,200	2,261	1,000	58,800
1997	15,900	14,300	12,900	3,700	8,800	2,200	2,500	1,000	61,100
1998	16,500	14,500	13,500	3,900	9,500	2,200	2,900	1,100	64,100
1999	16,600	15,000	14,100	4,000	9,900	2,200	3,000	1,000	65,900
2000	-	-	-	-	-	-	-	-	-
2001	17,238	15,484	14,677	4,186	10,096	2,240	2,643	1,008	67,572
2002	18,702	15,950	15,114	4,284	10,326	2,259	2,590	971	70,196
2003	18,805	15,887	15,457	4,285	10,044	2,194	2,493	957	70,122
2004	20,100	15,700	15,100	4,200	10,300	2,000	3,000	900	71,300
2005	20,279	15,837	15,682	4,233	10,572	2,138	2,956	923	72,620
2006	20,733	16,508	16,516	4,413	11,051	2,219	2,989	946	75,375
2007	20,772	16,887	17,336	4,544	11,673	2,308	3,094	948	77,562
2008	21,657	17,398	18,148	4,693	12,098	2,404	3,217	966	80,581
2009	22,401	18,061	19,127	4,916	13,007	2,422	3,439	1,040	84,413
2010	22,865	18,407	19,403	5,118	13,418	2,548	3,577	1,031	86,367
2011	23,390	18,817	19,542	5,271	13,597	2,594	3,592	1,080	87,883
2012	23,762	19,354	20,220	5,462	14,371	2,701	3,660	1,069	90,599
2013	24,210	19,509	21,026	5,529	15,133	2,744	3,810	1,073	93,034
2014	24,617	19,623	21,337	5,622	15,322	2,667	3,882	1,061	94,131
2015	25,249	19,832	21,432	5,554	15,463	2,690	3,888	1,041	95,149
2016	25,939	20,302	21,455	5,691	15,362	2,818	3,964	1,051	96,582

Source Australian Bureau of Statistics 2015

Table 5.2 **Estimated vehicle kilometres travelled (VKT) – billion kilometres (financial year)**

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas</i>	<i>NT</i>	<i>ACT</i>	<i>Australia</i>
Articulated trucks									
1989	1.38	0.97	0.71	0.39	0.38	0.12	0.09	0.02	4.05
1990	1.38	1.01	0.73	0.40	0.39	0.12	0.09	0.02	4.13
1991	1.33	1.02	0.72	0.39	0.39	0.12	0.08	0.01	4.07
1992	1.32	1.04	0.74	0.40	0.39	0.12	0.08	0.01	4.10
1993	1.41	1.11	0.81	0.42	0.42	0.12	0.08	0.01	4.39
1994	1.46	1.13	0.84	0.43	0.44	0.13	0.08	0.01	4.53
1995	1.58	1.19	0.90	0.45	0.46	0.13	0.09	0.02	4.82
1996	1.67	1.22	0.94	0.46	0.48	0.13	0.08	0.02	5.02
1997	1.76	1.26	0.99	0.48	0.51	0.13	0.08	0.02	5.21
1998	1.84	1.29	1.03	0.49	0.53	0.13	0.08	0.02	5.40
1999	1.91	1.30	1.06	0.51	0.55	0.13	0.08	0.02	5.55
2000	1.98	1.33	1.09	0.52	0.56	0.13	0.08	0.02	5.70
2001	1.97	1.31	1.08	0.50	0.55	0.13	0.08	0.01	5.62
2002	2.01	1.35	1.13	0.52	0.57	0.13	0.08	0.01	5.81
2003	2.04	1.40	1.19	0.53	0.59	0.13	0.08	0.02	5.97
2004	2.09	1.45	1.24	0.55	0.61	0.14	0.08	0.02	6.16
2005	2.13	1.48	1.28	0.56	0.63	0.14	0.07	0.01	6.32
2006	2.16	1.51	1.35	0.57	0.65	0.14	0.07	0.02	6.46
2007	2.23	1.57	1.42	0.58	0.68	0.15	0.07	0.02	6.72
2008	2.28	1.61	1.47	0.60	0.72	0.15	0.07	0.02	6.91
2009	2.26	1.59	1.45	0.59	0.72	0.15	0.07	0.02	6.83
2010	2.28	1.61	1.47	0.60	0.74	0.15	0.07	0.02	6.95
2011	2.35	1.66	1.53	0.62	0.80	0.15	0.07	0.02	7.20
2012	2.39	1.71	1.61	0.65	0.85	0.15	0.07	0.02	7.45
2013	2.43	1.73	1.69	0.66	0.90	0.15	0.08	0.02	7.65
2014 ^a	2.48	1.77	1.74	0.66	0.94	0.15	0.08	0.02	7.84
2015 ^a	2.53	1.82	1.81	0.68	0.98	0.15	0.08	0.02	8.07
2016 ^a	2.59	1.89	1.88	0.69	1.03	0.15	0.08	0.02	8.32

a Preliminary
Source Bureau of Infrastructure, Transport and Regional Economics Unpublished

Table 5.2 Estimated vehicle kilometres travelled (VKT) – billion kilometres (financial year) (continued)

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas</i>	<i>NT</i>	<i>ACT</i>	<i>Australia</i>
Heavy rigid trucks									
1989	2.33	1.70	1.11	0.51	0.75	0.20	0.06	0.07	6.73
1990	2.30	1.73	1.18	0.53	0.76	0.20	0.07	0.07	6.84
1991	2.00	1.55	1.12	0.47	0.68	0.17	0.06	0.07	6.12
1992	1.90	1.47	1.14	0.45	0.65	0.16	0.06	0.07	5.91
1993	1.86	1.44	1.16	0.44	0.64	0.15	0.06	0.07	5.82
1994	1.94	1.48	1.22	0.44	0.66	0.15	0.06	0.07	6.02
1995	2.05	1.52	1.31	0.44	0.69	0.16	0.06	0.07	6.32
1996	2.19	1.55	1.42	0.45	0.74	0.16	0.07	0.07	6.65
1997	2.36	1.65	1.53	0.48	0.81	0.17	0.07	0.07	7.15
1998	2.39	1.66	1.56	0.48	0.84	0.16	0.07	0.07	7.24
1999	2.39	1.63	1.55	0.47	0.84	0.16	0.07	0.06	7.17
2000	2.44	1.65	1.59	0.47	0.85	0.16	0.07	0.06	7.29
2001	2.42	1.62	1.56	0.46	0.83	0.15	0.07	0.06	7.17
2002	2.52	1.68	1.62	0.47	0.86	0.16	0.07	0.06	7.44
2003	2.63	1.73	1.67	0.49	0.88	0.17	0.08	0.06	7.70
2004	2.60	1.77	1.76	0.49	0.90	0.18	0.08	0.06	7.85
2005	2.64	1.84	1.84	0.51	0.94	0.19	0.08	0.06	8.10
2006	2.71	1.91	1.92	0.52	0.98	0.20	0.08	0.07	8.39
2007	2.75	1.96	1.99	0.53	1.02	0.21	0.08	0.07	8.62
2008	2.83	2.02	2.05	0.54	1.05	0.22	0.09	0.07	8.86
2009	2.77	1.98	2.03	0.54	1.05	0.22	0.09	0.07	8.75
2010	2.83	2.06	2.07	0.55	1.10	0.22	0.09	0.07	8.99
2011	2.88	2.11	2.14	0.57	1.13	0.22	0.09	0.08	9.21
2012	2.92	2.18	2.23	0.58	1.14	0.22	0.09	0.08	9.45
2013	2.96	2.23	2.30	0.58	1.19	0.22	0.09	0.08	9.65
2014 ^a	3.01	2.27	2.35	0.59	1.23	0.22	0.09	0.08	9.84
2015 ^a	3.06	2.31	2.42	0.59	1.28	0.22	0.09	0.08	10.06
2016 ^a	3.13	2.37	2.49	0.60	1.33	0.22	0.10	0.08	10.32

Table 5.2 Estimated vehicle kilometres travelled (VKT) – billion kilometres (financial year) (continued)

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas</i>	<i>NT</i>	<i>ACT</i>	<i>Australia</i>
Buses									
1989	0.42	0.27	0.28	0.11	0.20	0.04	0.05	0.02	1.39
1990	0.45	0.28	0.30	0.11	0.21	0.04	0.06	0.02	1.47
1991	0.46	0.31	0.31	0.12	0.23	0.04	0.06	0.02	1.56
1992	0.45	0.29	0.31	0.12	0.22	0.04	0.06	0.02	1.52
1993	0.44	0.28	0.31	0.12	0.22	0.04	0.06	0.02	1.48
1994	0.44	0.28	0.31	0.12	0.22	0.04	0.06	0.02	1.49
1995	0.45	0.29	0.33	0.12	0.23	0.04	0.06	0.02	1.55
1996	0.46	0.30	0.34	0.12	0.24	0.04	0.06	0.02	1.59
1997	0.47	0.30	0.36	0.13	0.25	0.05	0.07	0.02	1.64
1998	0.48	0.30	0.36	0.13	0.24	0.04	0.07	0.02	1.65
1999	0.49	0.31	0.37	0.13	0.26	0.04	0.07	0.03	1.69
2000	0.49	0.32	0.37	0.13	0.26	0.05	0.07	0.02	1.71
2001	0.50	0.32	0.39	0.13	0.27	0.05	0.07	0.02	1.76
2002	0.51	0.33	0.40	0.13	0.28	0.05	0.07	0.03	1.80
2003	0.51	0.33	0.41	0.14	0.28	0.05	0.08	0.03	1.82
2004	0.52	0.34	0.43	0.14	0.29	0.05	0.08	0.03	1.86
2005	0.52	0.34	0.44	0.14	0.30	0.05	0.08	0.03	1.89
2006	0.52	0.34	0.45	0.14	0.30	0.05	0.08	0.03	1.91
2007	0.53	0.34	0.47	0.14	0.31	0.05	0.08	0.03	1.96
2008	0.54	0.36	0.49	0.15	0.31	0.05	0.08	0.03	2.00
2009	0.55	0.38	0.50	0.15	0.32	0.05	0.08	0.03	2.06
2010	0.57	0.41	0.52	0.15	0.32	0.05	0.08	0.03	2.13
2011	0.58	0.43	0.54	0.16	0.33	0.05	0.09	0.03	2.20
2012	0.60	0.45	0.56	0.16	0.34	0.05	0.09	0.03	2.27
2013	0.62	0.48	0.58	0.16	0.35	0.05	0.09	0.03	2.36
2014 ^a	0.62	0.47	0.61	0.16	0.37	0.05	0.09	0.04	2.40
2015 ^a	0.63	0.47	0.62	0.16	0.38	0.05	0.09	0.04	2.44
2016 ^a	0.64	0.48	0.62	0.16	0.38	0.05	0.10	0.04	2.46

a Preliminary
Source Bureau of Infrastructure, Transport and Regional Economics Unpublished

Glossary

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.

Road deaths from recent months are preliminary and subject to revision.

<i>Articulated truck</i>	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.
<i>BAC</i>	Blood alcohol concentration (BAC) refers to the amount of alcohol present in the bloodstream.
<i>Bus</i>	A motor vehicle constructed for the carriage of passengers which has at least 10 seats, including the driver's seat.
<i>Counterpart</i>	The other vehicle or object that collides with the mode of transport of an injured person.
<i>Crash</i>	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.
<i>Fatal crash</i>	A crash for which there is at least one death.
<i>Fatal crash involving heavy vehicles</i>	Fatal road traffic crashes in which one or more heavy vehicles were involved (articulated truck, heavy rigid truck or bus).
<i>Gross Vehicle Mass (GVM)</i>	Tare weight (i.e. unladen weight) of the motor vehicle plus its maximum carrying capacity excluding trailers.
<i>Heavy rigid truck</i>	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.
<i>Heavy truck</i>	A heavy rigid truck or an articulated truck
<i>High threat to life injury</i>	'High threat to life' hospitalised injury cases are a subset of all hospitalised injury cases, referred to also as 'life-threatening' injuries. They are selected on the basis of having an ICD Injury severity Score (ICISS) of less than 0.941. See Henley G & Harrison JE 2015 for definition and discussion.
<i>Hospitalised injury</i>	A person admitted to hospital from a crash occurring in 'traffic', which is defined here as excluding off-road and unknown locations.

Road death or fatality

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

Trend estimation

In this report, the figures for the 'average trend change p.a.(%)' are calculated by fitting an exponential trend line to the set of data points. The Excel function LOGEST performs the fit. The resulting trend line represents a constant annual percent change over the period. Notes: (i) The occurrence of a zero in the original series precludes trend estimation by this method; (ii) When fitted to a series containing small numbers, the result may not be a reliable indicator of a stable trend.

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