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Safety

Road trauma involving heavy vehicles 2014 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 2014 statistical summary

Department of Infrastructure and Regional Development
Canberra, Australia

At a glance

This report presents counts and rates of fatal crashes, fatalities and serious 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.

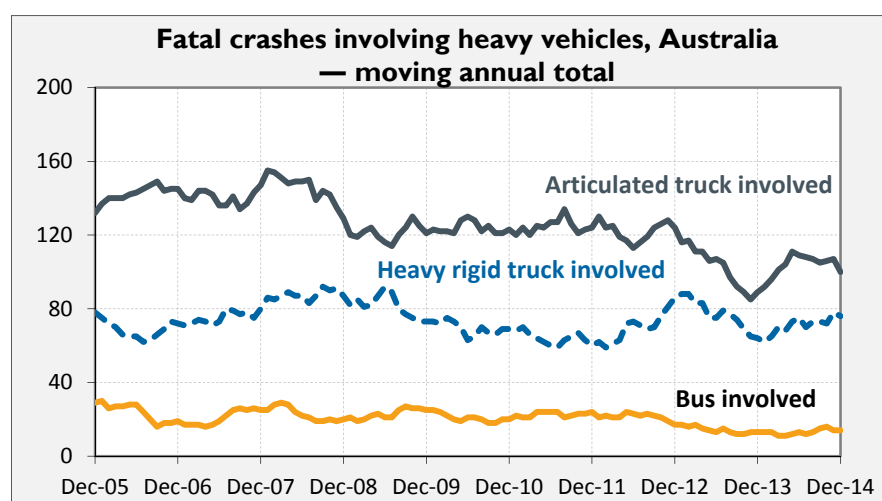
220 people were killed in crashes involving heavy vehicles in 2014. Over half (114 people, 51 per cent) were killed in crashes involving articulated trucks, 88 people (39 per cent) were killed in crashes involving heavy rigid trucks and 20 people (9 per cent) were killed in crashes involving buses (Table 1.1, p.2 and Figure 1.1, p.2).

Over the last decade, annual deaths from crashes involving heavy vehicles (articulated truck, heavy rigid truck or bus) decreased by 20.3 per cent, from 276 in 2005 to 220 in 2014. The estimated trend over the decade is a reduction of 3.2 per cent per year (Table 1.1, p.2).

In 2014, the number of fatal crashes increased for all categories of heavy vehicles compared to 2013. Over the last three years, counts of fatal crashes have reduced for all heavy vehicle types (Table 2.1, p.18).

Over the last decade, counts of fatal crashes involving heavy vehicles decreased by 19.5 per cent, from 236 in 2005 to 190 in 2014. The estimated trend over the decade is a reduction of 3.3 per cent per year (Table 2.1, p.18).

The number of crashes involving articulated trucks decreased by 24.2 per cent over the decade (an average estimated trend of -4.1 per cent per year). Counts of crashes involving heavy rigid trucks decreased by 2.6 per cent over the decade (with a flat or very slightly reducing trend) (Table 2.1, p.18).



Vehicle occupants (driver or passenger) account for 74.2 per cent of fatalities from crashes involving a heavy vehicle. The remainder are pedestrians (13.9 per cent), motorcyclists (8.1 per cent) and pedal cyclists (3.1 per cent). Of the occupant deaths, 73.8 per cent are light vehicle occupants (Table 1.8, p.11).

Approximately 1,550 people are hospitalised from crashes involving heavy vehicles per year (Table 1.12, p.15). Over the last eight years there appears to be a slight increasing trend.

Between 2008 and 2013, the majority (65 per cent) of fatal crashes involving an articulated truck occurred on national or state highways. For heavy rigid truck involvement, the proportion on national or state highways is 42.2 per cent (Table 2.6, p.25).

Analysing crashes by geographical region, 20 per cent of fatal articulated truck crashes occur in a major city. The corresponding proportion for heavy rigid truck fatal crashes is 44 per cent (Table 2.7, p.26).

Standardised by vehicle registration counts, the rates of annual fatal crashes involving heavy vehicles have trended down consistently (Table 2.12, p.32).

Of multi-vehicle fatal crashes involving heavy vehicles, two thirds involve both truck and passenger cars. The remainder involve two or more heavy trucks only (Table 2.10, p. 30).

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 March 2015 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 2013. 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.

Acknowledgements

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

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SECTION I

People

- This section presents annual counts of deaths and serious injuries from crashes that involved a heavy vehicle (articulated truck, heavy rigid truck or bus). Percentage changes for the latest calendar years and annual averages over the decade are given.
- 220 people were killed in crashes involving heavy vehicles in 2014. Over half (114 people, 51 per cent) were killed in crashes involving articulated trucks, 88 people (39 per cent) were killed in crashes involving heavy rigid trucks and 20 people (9 per cent) were killed in crashes involving buses (Table I.1, p.2 and Figure I.1, p.2).
- Over the last decade, annual deaths from crashes involving heavy vehicles (articulated truck, heavy rigid truck or bus) decreased by 20.3 per cent, from 276 in 2005 to 220 in 2014. The estimated trend over the decade is a reduction of 3.2 per cent per year (Table I.1, p.2).
- Fatality counts from crashes involving articulated trucks declined in most jurisdictions over the last decade. For heavy rigid truck involvement, reductions were seen in New South Wales and Victoria. No clear trends were evident for other jurisdictions (Table I.2, p.4).
- Vehicle occupants (driver or passenger) account for 74.2 per cent of fatalities from crashes involving a heavy vehicle. The remainder are pedestrians (13.9 per cent), motorcyclists (8.1 per cent) and pedal cyclists (3.1 per cent). Of the occupant deaths, 73.8 per cent are light vehicle occupants. (Table I.8, p.11).
- Between 2008 and 2013, 40.6 per cent of all deaths in crashes involving articulated trucks occurred in head-on crashes, and 10.3 per cent were in single vehicle run off road crashes. For deaths in crashes involving heavy rigid trucks, 36.5 per cent occurred in head-on crashes and 4.8 per cent occurred in single vehicle run off road crashes. (Table I.7, p.10).
- Fatal crashes involving a heavy vehicle driver who has failed a Blood Alcohol Concentration (BAC) test account for between 1 and 3 per cent of all heavy truck involved fatalities (Table I.10, p. 13).
- Approximately 1,550 people are hospitalised from crashes involving heavy vehicles per year (Table I.12, p.15). Over the last eight years there appears to be a slight increasing trend.

Table I.1 Deaths from crashes involving heavy vehicles

	<i>Articulated trucks</i>	<i>Heavy rigid trucks^a</i>	<i>Buses</i>	<i>Total^b</i>
1989	335	-	104	-
1990	263	-	46	-
1991	183	-	32	-
1992	181	-	39	-
1993	204	-	49	-
1994	179	-	40	-
1995	199	-	23	-
1996	194	-	38	-
1997	171	-	27	-
1998	179	-	29	-
1999	191	-	32	-
2000	208	-	24	-
2001	178	-	32	-
2002	200	-	36	-
2003	171	-	29	-
2004	151	108	30	281
2005	155	88	38	276
2006	170	80	19	265
2007	182	85	25	285
2008	149	93	21	260
2009	145	77	31	245
2010	143	84	21	237
2011	140	72	25	232
2012	148	98	18	256
2013	109	69	12	186
2014	114	88	20	220
<i>Ave. trend change p.a.(%)</i>				
- for last 10 calendar years	-4.2	-0.6	-6.2	-3.2
- for last 5 calendar years	-6.8	0.5	-8.0	-3.6
- for last 3 calendar years	-12.2	-5.2	5.4	-7.3

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

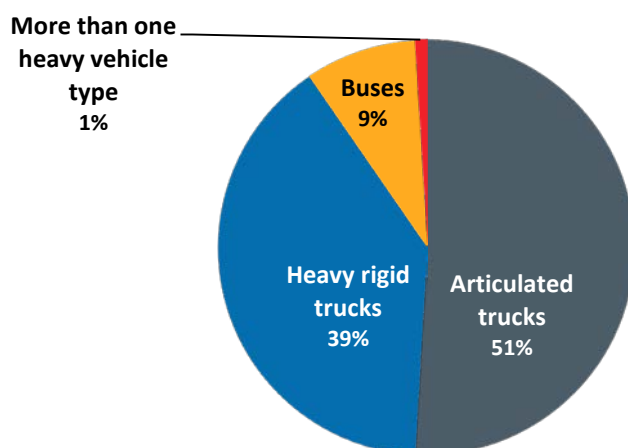
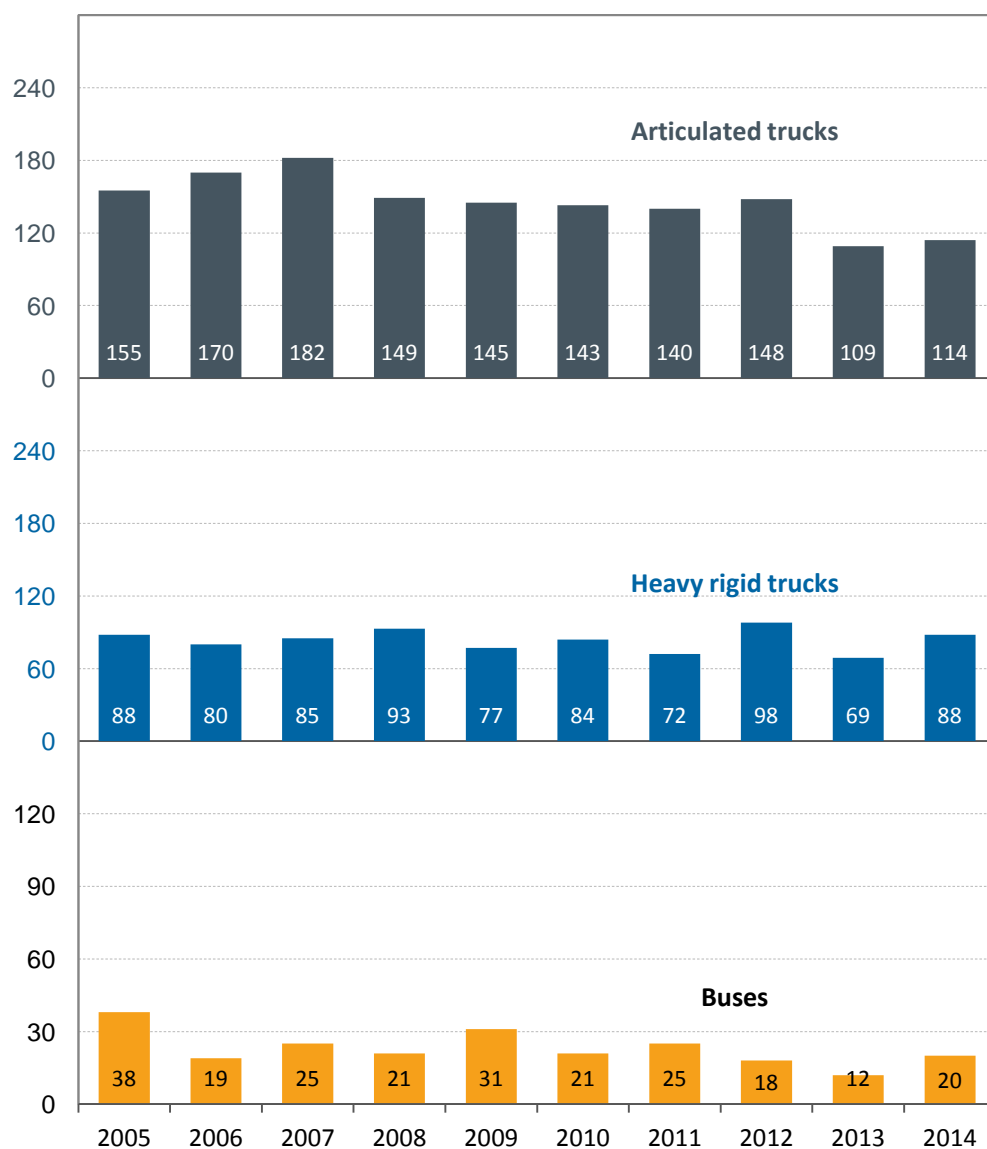
Figure I.1 2014 Snapshot — Fatalities by heavy vehicle type

Figure I.2 Deaths from crashes involving heavy vehicles

Source: Australian Road Deaths Database

Table 1.2 Deaths from crashes involving 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									
2005	52	32	35	17	13	5	1	0	155
2006	69	31	37	10	14	7	2	0	170
2007	59	48	41	7	20	5	2	0	182
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	14	35	11	11	2	4	0	109
2014	32	26	32	12	5	5	0	2	114
<i>Ave. trend change p.a.(%)</i>									
- for last 10 calendar years	-6.4	-5.4	-0.9	-0.2	-7.7	-9.2	-	-	-4.2
- for last 5 calendar years	-12.3	-10.8	0.9	9.5	-21.1	10.8	-	-	-6.8
- for last 3 calendar years	-20.0	-6.9	-15.7	9.5	-20.9	29.1	-	-	-12.2
Heavy rigid trucks									
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	25	24	9	19	2	2	0	93
2009	24	19	13	2	18	1	0	0	77
2010	24	24	15	2	13	5	0	1	84
2011	17	20	14	6	9	2	4	0	72
2012	23	16	27	7	19	4	1	1	98
2013	24	13	13	4	15	0	0	0	69
2014	21	29	9	15	11	3	0	0	88
<i>Ave. trend change p.a.(%)</i>									
- for last 10 calendar years	-2.6	-3.0	-1.1	8.5	5.1	-	-	-	-0.6
- for last 5 calendar years	0.8	-0.5	-10.4	43.7	1.8	-	-	-	0.5
- for last 3 calendar years	-4.4	34.6	-42.3	46.4	-23.9	-	-	-	-5.2

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

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Buses									
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
<i>Ave. trend change p.a.(%)</i>									
- for last 10 calendar years	-11.8	-2.6	-11.3	-	-	-	-	-	-6.2
- for last 5 calendar years	-22.2	9.1	-26.4	-	-	-	-	-	-8.0
- for last 3 calendar years	0.0	15.5	-62.2	-	-	-	-	-	5.4

Source: Australian Road Deaths Database

Figure I.3 Fatalities by state/territory — 2012 to 2014

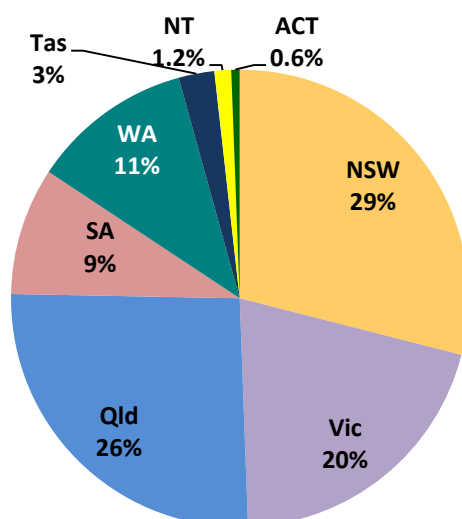


Table 1.3 Deaths from crashes involving heavy vehicles by age group

	0 to 16	17 to 25	26 to 39	40 to 54	55 to 64	≥65	Total ^a
Articulated trucks							
2005	10	41	42	24	12	25	155
2006	11	26	52	40	19	22	170
2007	10	31	48	45	22	26	182
2008	8	29	31	42	14	25	149
2009	11	25	29	48	14	18	145
2010	8	25	28	33	24	25	143
2011	3	23	27	49	19	19	140
2012	6	12	45	37	23	24	148
2013	5	14	26	25	14	25	109
2014	4	22	25	29	16	18	114
Ave. trend change p.a.(%) - for the last 10 years	-11.2	-8.9	-6.0	-1.5	1.3	-1.8	-4.2
Heavy rigid trucks							
2005	9	19	10	19	14	17	88
2006	7	19	12	17	10	15	80
2007	7	14	24	22	6	12	85
2008	5	19	23	22	7	17	93
2009	4	7	19	16	15	16	77
2010	8	14	12	21	13	16	84
2011	4	15	10	18	14	11	72
2012	3	24	22	16	12	21	98
2013	6	10	11	20	7	15	69
2014	7	10	19	26	10	16	88
Ave. trend change p.a.(%) - for the last 10 years	-4.5	-4.5	1.1	1.2	-0.1	0.6	-0.6
Buses							
2005	2	8	8	4	2	12	38
2006	2	1	4	7	0	5	19
2007	1	2	7	6	4	5	25
2008	2	6	5	2	3	3	21
2009	5	9	2	8	2	5	31
2010	0	4	9	4	2	2	21
2011	2	3	7	5	3	5	25
2012	1	1	2	3	4	7	18
2013	1	1	2	2	4	2	12
2014	4	4	4	4	2	2	20
Ave. trend change p.a.(%) - for the last 10 years	-	-	-	-	-	-	-6.2

a Includes deaths to persons with age not recorded.

Source: Australian Road Deaths Database

Table I.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						
2005	99	32	11	9	4	155
2006	101	35	20	8	6	170
2007	104	44	19	10	5	182
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	69	21	10	7	2	109
2014	73	20	11	7	3	114
<i>Ave. trend change p.a.(%)</i> <i>- for the last 10 years</i>	-3.8	-5.3	-3.3	-3.2	-	-4.2
Heavy rigid trucks						
2005	40	24	11	10	3	88
2006	40	17	12	10	1	80
2007	48	10	12	8	7	85
2008	50	13	15	11	3	93
2009	43	12	10	9	3	77
2010	40	23	7	9	5	84
2011	34	14	14	6	4	72
2012	53	16	13	12	4	98
2013	33	9	16	5	6	69
2014	47	15	10	12	4	88
<i>Ave. trend change p.a.(%)</i> <i>- for the last 10 years</i>	-0.4	-3.3	0.6	-1.8	8.7	-0.6
Buses						
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
<i>Ave. trend change p.a.(%)</i> <i>- for the last 10 years</i>	-7.7	-8.0	-10.3	-1.9	-	-6.2

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 1.5 Deaths by crash type for crashes involving heavy vehicles

	<i>Single vehicle</i>	<i>Pedestrian</i>	<i>Multiple vehicle</i>		<i>Single vehicle</i>	<i>Pedestrian</i>	<i>Multiple vehicle</i>
Articulated trucks				Buses			
2005	28	11	116	2005	8	9	21
2006	24	21	125	2006	2	9	8
2007	33	19	130	2007	1	7	17
2008	25	17	107	2008	6	4	11
2009	31	20	94	2009	9	7	15
2010	15	14	114	2010	3	3	15
2011	20	20	100	2011	3	13	9
2012	19	17	112	2012	2	5	11
2013	8	10	91	2013	0	1	11
2014	16	11	87	2014	4	6	10
<i>Ave. trend change p.a.(%)</i>							
- for last 10 calendar years	-9.7	-3.3	-3.3	-	-10.3	-4.3	
- for last 5 calendar years	-7.6	-11.1	-6.2	-	-11.1	-5.9	
- for last 3 calendar years	-8.2	-19.6	-11.9	-	9.5	-4.7	
	<i>Single vehicle</i>	<i>Pedestrian</i>	<i>Multiple vehicle</i>				
Heavy rigid trucks							
2005	7	11	70				
2006	8	12	60				
2007	6	12	67				
2008	12	15	66				
2009	7	10	60				
2010	10	7	67				
2011	7	14	51				
2012	5	13	80				
2013	4	16	49				
2014	7	10	71				
<i>Ave. trend change p.a.(%)</i>							
- for last 10 calendar years	-4.2	0.6	-0.6				
- for last 5 calendar years	-12.0	8.8	0.8				
- for last 3 calendar years	18.3	-12.3	-5.8				

Source: Australian Road Deaths Database

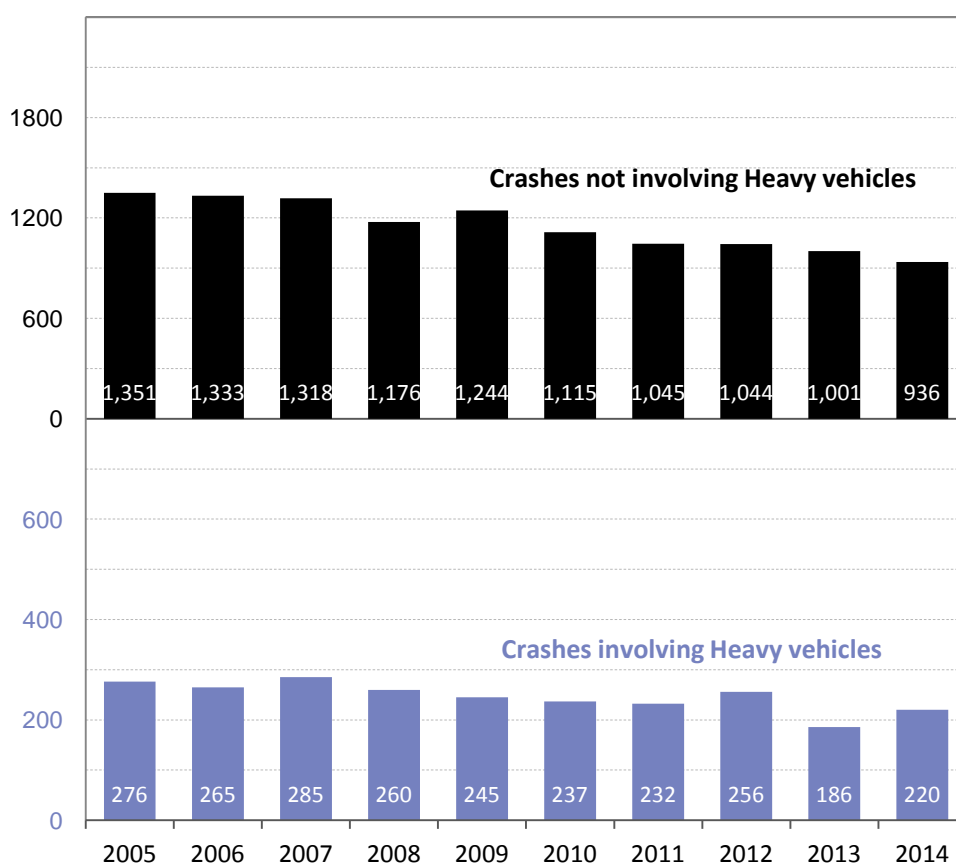
Table 1.6 Deaths by crash type for crashes involving heavy vehicles and crashes not involving heavy vehicles

	<i>Single vehicle</i>		<i>Pedestrian</i>		<i>Multiple vehicle</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>	
2005	43	661	30	198	203	492	276	1,351	1,627
2006	34	702	41	189	190	442	265	1,333	1,598
2007	40	701	38	166	207	451	285	1,318	1,603
2008	43	644	36	153	181	379	260	1,176	1,437
2009	47	653	35	161	163	430	245	1,244	1,491
2010	28	556	22	149	187	410	237	1,115	1,353
2011	30	524	45	141	157	380	232	1,045	1,277
2012	26	530	33	138	197	376	256	1,044	1,300
2013	12	538	27	131	147	332	186	1,001	1,187
2014	27	470	26	129	167	337	220	936	1,156
<i>Ave. trend change p.a.(%) - for the last 10 years</i>	-8.8	-4.2	-2.8	-4.5	-2.4	-3.8	-3.2	-4.1	-4.0

a Includes deaths with undetermined vehicle type.

Source: Australian Road Deaths Database

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



Source: Australian Road Deaths Database

Table 1.7 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	56	13	139
2011	31	50	16	143
2012	25	70	17	154
2013	29	50	5	115
Heavy rigid trucks				
2008	27	35	4	88
2009	26	25	6	73
2010	22	33	4	77
2011	29	17	3	66
2012	24	34	2	89
2013	17	23	3	64
Buses				
2008	11	1	3	23
2009	9	6	6	31
2010	7	7	3	22
2011	12	5	1	24
2012	11	6	1	26
2013	5	4	0	12

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**

	<i>Heavy vehicle</i>		<i>Light vehicle^a</i>		<i>Motor-^b</i>	<i>Pedal^b</i>	<i>Pedestrian</i>	<i>Total^c</i>
	<i>Driver</i>	<i>Passenger</i>	<i>Driver</i>	<i>Passenger</i>	<i>cyclist</i>	<i>cyclist</i>		
Articulated trucks								
2008	34	3	56	20	11	4	16	147
2009	36	3	58	20	3	0	18	138
2010	20	4	56	31	7	6	14	139
2011	24	3	65	24	6	2	19	143
2012	32	5	67	26	8	0	15	154
2013	21	0	50	20	6	2	13	115
Heavy rigid trucks								
2008	9	3	35	11	13	2	15	88
2009	16	0	25	10	9	3	10	73
2010	10	2	28	19	7	5	6	77
2011	6	2	25	12	6	4	11	66
2012	5	3	44	9	11	3	13	89
2013	6	1	25	8	6	6	12	64
Buses								
2008	0	6	3	1	7	1	5	23
2009	2	8	7	3	2	1	8	31
2010	2	2	6	0	8	1	3	22
2011	1	1	3	2	2	2	13	24
2012	3	5	6	3	2	0	7	26
2013	0	0	5	1	2	3	1	12

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

b Includes pillion passengers.

c Includes deaths in vehicles not listed.

Source: *National Crash Database*

Table 1.9 **The number of deaths from heavy vehicle involved crashes – validity of heavy vehicle driver's licence**

	<i>All valid</i>	<i>Any invalid</i>	<i>Unknown</i>	<i>Total</i>
Articulated trucks				
2008	132	5	10	147
2009	129	0	9	138
2010	111	2	26	139
2011	129	3	11	143
2012	135	2	17	154
2013	101	1	13	115
Heavy rigid trucks				
2008	82	3	3	88
2009	70	1	2	73
2010	69	4	4	77
2011	53	1	12	66
2012	83	2	4	89
2013	54	0	10	64
Buses				
2008	22	0	1	23
2009	30	0	1	31
2010	21	0	1	22
2011	22	1	1	24
2012	23	0	3	26
2013	9	0	3	12

Source: National Crash Database

Table I.10 **The number of deaths from heavy vehicle involved crashes — heavy vehicle driver BAC status^a (excludes Victoria and ACT)**

	<i>All pass</i>	<i>Any fail</i>	<i>Unknown</i>	<i>Total</i>
Articulated trucks				
2008	66	5	54	125
2009	79	0	39	118
2010	65	2	36	103
2011	73	2	45	120
2012	74	2	50	126
2013	54	2	44	100
Heavy rigid trucks				
2008	37	4	24	65
2009	37	1	14	52
2010	33	4	17	54
2011	24	1	20	45
2012	42	0	29	71
2013	30	0	21	51
Buses				
2008	8	0	11	19
2009	12	0	10	22
2010	12	1	6	19
2011	12	1	7	20
2012	13	0	10	23
2013	3	0	6	9

a BAC: Blood Alcohol Concentration

Source: *National Crash Database*

Table 1.11 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>
<i>Articulated trucks</i>								
2008	5	45	11	12	21	19	37	76
2009	9	52	16	7	14	19	39	78
2010	7	56	4	6	13	25	24	87
2011	7	54	7	11	13	24	27	89
2012	10	62	11	3	16	28	37	93
2013	8	50	4	4	9	16	21	70
<i>Heavy rigid trucks</i>								
2008	3	35	6	1	3	10	12	46
2009	6	26	7	2	3	7	16	35
2010	7	31	2	3	3	13	12	47
2011	1	25	4	6	3	6	8	37
2012	2	38	3	4	3	11	8	53
2013	3	26	2	1	2	6	7	33
<i>Buses</i>								
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

a Includes any non-applicable cases.

Source: National Crash Database

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

	Heavy vehicle occupants (drivers and passengers)	Other road user	Total hospitalised persons
2005-06	605	807	1,412
2006-07	679	824	1,503
2007-08	701	862	1,563
2008-09	688	848	1,536
2009-10	na	na	na
2010-11	na	na	na
2011-12	na	na	na
2012-13	724	1,004	1,728

Sources: Berry and Harrison 2008, Henley and Harrison 2009, Henley and Harrison 2012a and Henley and Harrison 2012b

Figure I.5 Hospitalised injury due to road vehicle traffic crashes involving heavy vehicles

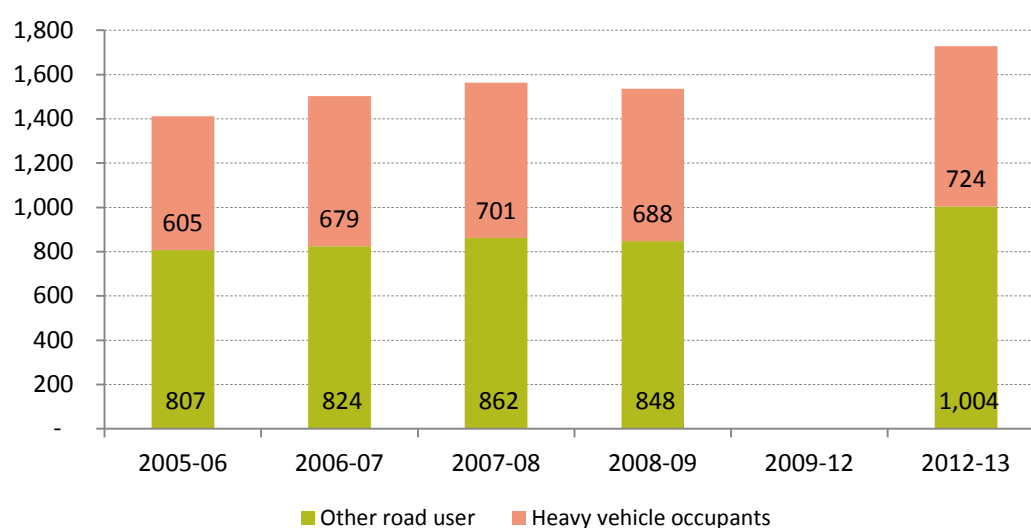


Table 1.13 **High threat to life^a injury in road traffic crashes involving heavy vehicles by state/territory**

	<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>
<i>2000-01</i>	149	125	80	52	32	7	7	6	468
<i>2001-02</i>	139	104	79	43	37	8	6	7	429
<i>2002-03</i>	129	128	87	40	30	8	-	-	439
<i>2003-04</i>	153	115	87	31	29	13	-	-	445
<i>2004-05</i>	139	125	114	28	23	12	-	-	463
<i>2005-06</i>	157	124	98	47	48	14	6	5	516
<i>2006-07</i>	171	114	107	45	44	17	-	-	520
<i>2007-08</i>	159	118	104	43	61	9	5	8	514
<i>2008-09</i>	175	138	112	37	41	16	12	7	551
<i>Ave. trend change p.a.(%)</i> <i>- for the last 9 years</i>	2.8	1.0	4.6	-1.2	6.5	9.1	-	-	2.8

a See Glossary

Source: Henley and Harrison 2012c

SECTION 2

Crashes and Rates

- This section focuses on counts, standardised rates and characteristics of fatal crashes involving heavy vehicles. Tabulations include counts by number of vehicles involved, posted speed limit, road type and time of the day.
- In 2014, the number of fatal crashes increased for all categories of heavy vehicles compared to 2013. Over the last three years, counts of fatal crashes have reduced for all heavy vehicle types (Table 2.1, p.18).
- Over the last decade, the number of crashes involving articulated trucks decreased by 24.2 per cent (an average estimated trend of -4.1 per cent per year). Counts of crashes involving heavy rigid trucks decreased by 2.6 per cent over the decade (with a flat or very slightly reducing trend) (Table 2.1, p.18).
- Compared to multi-vehicle and pedestrian involved fatal heavy vehicle crashes, single vehicle crashes show the strongest decline (Table 2.4, p.23).
- Between 2008 and 2013, the majority (65 per cent) of fatal crashes involving an articulated truck occurred on national or state highways. For heavy rigid truck involvement, the proportion on national or state highways is 42.2 per cent (Table 2.6, p.25).
- The distribution of fatal crashes across the week by time of day is largely similar for all three heavy vehicle types. Peaks generally occur on the weekday afternoons (Figure 2.5, p.30). Compared to the total, single vehicle crashes have a greater proportion occurring in the early morning and late evening.
- Analysing crashes by geographical region, 20 per cent of fatal articulated truck crashes occur in a major city. The corresponding proportion for heavy rigid truck fatal crashes is 44 per cent (Table 2.7, p.26).
- Over the last decade, 65.5 per cent of articulated fatal crashes occur in zones of 100km/h per hour or greater, whereas only 44.0 per cent heavy rigid truck fatal crashes occur in these zones (Table 2.3, p.22).
- Standardised by vehicle registration counts, the rates of annual fatal crashes involving heavy vehicles have trended down consistently (Table 2.12, p.32).
- Comparing articulated trucks and heavy rigid trucks, the former are more likely to be head-on or single vehicle run-off road crashes (Table 2.5, p.24).
- Of multi-vehicle fatal crashes involving heavy vehicles, two thirds involve both truck and passenger cars. The remainder involve two or more heavy trucks only (Table 2.10, p. 30).

Table 2.1 Fatal crashes involving heavy vehicles

	<i>Articulated trucks</i>	<i>Heavy rigid trucks^a</i>	<i>Buses</i>	<i>Total^b</i>
1989	250	-	45	-
1990	205	-	32	-
1991	156	-	30	-
1992	154	-	28	-
1993	171	-	36	-
1994	151	-	28	-
1995	165	-	22	-
1996	161	-	31	-
1997	146	-	24	-
1998	151	-	23	-
1999	163	-	29	-
2000	165	-	23	-
2001	146	-	28	-
2002	171	-	28	-
2003	142	-	26	-
2004	138	92	30	253
2005	132	78	29	236
2006	145	72	19	232
2007	147	80	25	245
2008	129	87	20	233
2009	121	73	25	211
2010	123	69	20	203
2011	124	60	24	203
2012	124	86	17	219
2013	89	64	11	160
2014	100	76	16	190
<i>Ave. trend change p.a.(%)</i>				
- for last 10 calendar years	-4.1	-1.1	-6.3	-3.3
- for last 5 calendar years	-7.2	2.6	-11.5	-3.6
- for last 3 calendar years	-10.2	-6.0	-3.0	-6.9

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

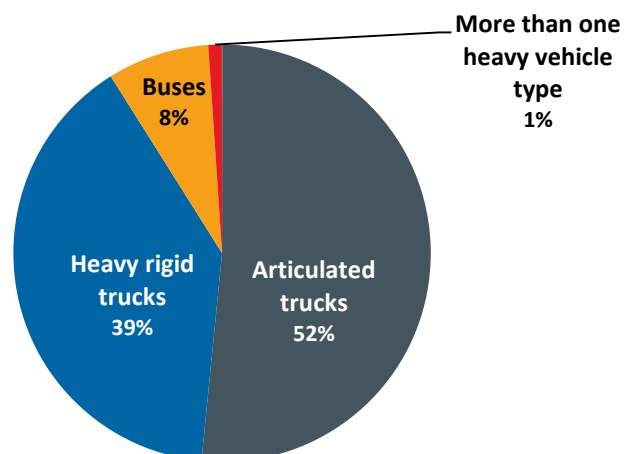
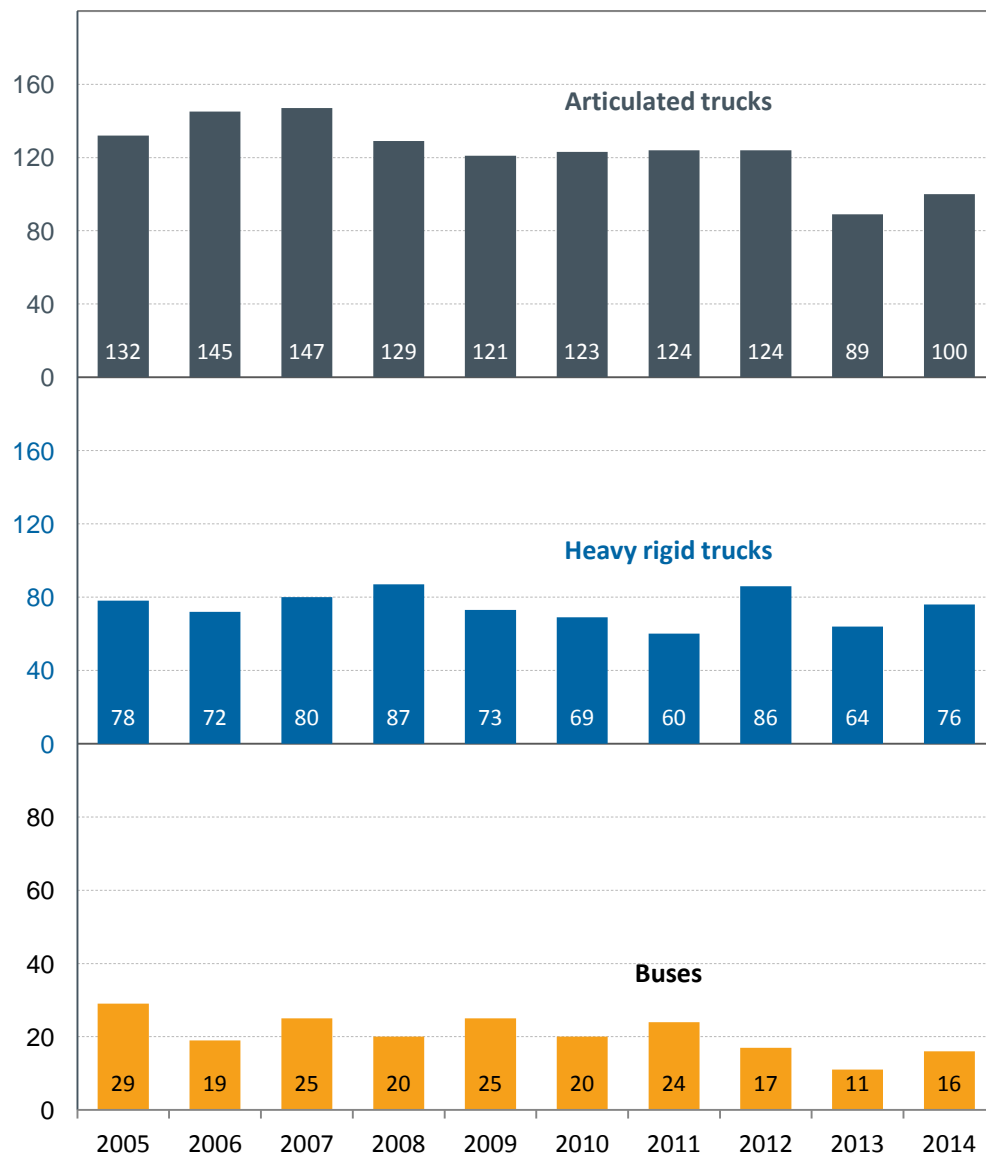
Figure 2.1 2014 Snapshot — Fatal crashes by heavy vehicle type

Figure 2.2 Fatal crashes involving heavy vehicles

Source: Australian Road Deaths Database

Table 2.2 Fatal crashes involving 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									
2005	45	28	27	15	11	5	1	0	132
2006	57	26	34	9	12	5	2	0	145
2007	53	30	38	6	14	4	2	0	147
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	12	26	8	8	2	3	0	89
2014	29	24	26	10	5	4	0	2	100
<i>Ave. trend change p.a.(%)</i>									
- for last 10 calendar years	-5.9	-3.9	-2.0	-1.1	-6.8	-8.3	-	-	-4.1
- for last 5 calendar years	-10.0	-10.2	-1.3	3.1	-21.2	5.9	-	-	-7.2
- for last 3 calendar years	-13.8	-9.0	-13.8	5.4	-15.5	15.5	-	-	-10.2
Heavy rigid trucks									
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	24	21	8	18	2	2	0	87
2009	23	18	13	2	16	1	0	0	73
2010	20	19	12	2	11	4	0	1	69
2011	15	14	13	6	8	2	2	0	60
2012	22	15	23	6	16	2	1	1	86
2013	22	12	11	4	15	0	0	0	64
2014	21	23	9	10	10	3	0	0	76
<i>Ave. trend change p.a.(%)</i>									
- for last 10 calendar years	-1.9	-4.3	-0.3	5.8	4.4	-	-	-	-1.1
- for last 5 calendar years	4.9	2.3	-7.2	32.5	4.5	-	-	-	2.6
- for last 3 calendar years	-2.3	23.8	-37.4	29.1	-20.9	-	-	-	-6.0

Table 2.2 Fatal crashes involving heavy vehicles by state/territory
(continued)

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Buses									
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
<i>Ave. trend change p.a.(%)</i>									
- for last 10 calendar years	-10.1	-2.7	-11.2	-	-	-	-	-	-6.3
- for last 5 calendar years	-22.2	3.0	-22.4	-	-	-	-	-	-11.5
- for last 3 calendar years	0.0	0.0	-59.2	-	-	-	-	-	-3.0

Source: Australian Road Deaths Database

Figure 2.3 Fatal crashes by state/territory — 2012 to 2014

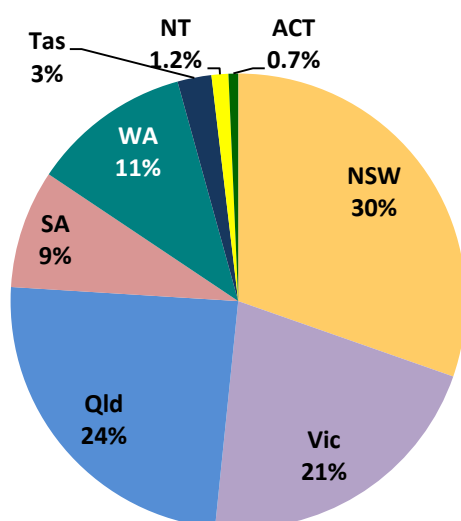


Table 2.3 Fatal crashes involving heavy vehicles by speed zone

	0 to 60 km/h	70 to 90 km/h	100 km/h	≥110 km/h	Total ^a
Articulated trucks					
2005	18	31	60	23	132
2006	22	26	68	29	145
2007	26	24	68	28	146
2008	25	27	55	21	128
2009	14	21	59	27	121
2010	22	23	58	20	123
2011	17	32	50	24	123
2012	18	22	57	27	124
2013	15	14	39	21	89
2014	13	14	49	22	98
Ave. trend change p.a.(%) - for the last 10 years	-4.8	-6.6	-4.1	-1.6	-4.2
Heavy rigid trucks					
2005	25	23	26	3	77
2006	23	20	20	8	71
2007	25	17	27	10	79
2008	21	29	28	8	86
2009	16	20	26	11	73
2010	19	17	24	9	69
2011	18	16	19	7	60
2012	32	16	25	12	85
2013	21	15	23	4	63
2014	23	17	23	12	75
Ave. trend change p.a.(%) - for the last 10 years	-0.3	-4.1	-1.1	4.9	-1.1
Buses					
2005	15	8	4	2	29
2006	15	1	1	2	19
2007	13	6	5	1	25
2008	10	6	2	1	19
2009	13	8	3	1	25
2010	11	6	3	0	20
2011	19	1	4	0	24
2012	13	3	1	0	17
2013	8	0	1	2	11
2014	11	1	3	1	16
Ave. trend change p.a.(%) - for the last 10 years	-3.2	-	-	-	-6.2

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>Pedestrian involved</i>	<i>Multiple vehicle</i>	<i>Total</i>
Articulated trucks				
2005	26	11	95	132
2006	21	20	104	145
2007	31	19	97	147
2008	23	17	89	129
2009	29	18	74	121
2010	15	14	94	123
2011	18	19	87	124
2012	18	16	90	124
2013	8	9	72	89
2014	15	11	74	100
<i>Ave. trend change p.a.(%)</i> <i>- for the last 10 years</i>	-9.1	-3.8	-3.0	-4.1
Heavy rigid trucks				
2005	7	11	60	78
2006	8	11	53	72
2007	6	12	62	80
2008	11	15	61	87
2009	7	10	56	73
2010	8	7	54	69
2011	6	14	40	60
2012	5	12	69	86
2013	4	16	44	64
2014	7	10	59	76
<i>Ave. trend change p.a.(%)</i> <i>- for the last 10 years</i>	-4.4	0.7	-1.3	-1.1
Buses				
2005	5	9	15	29
2006	2	9	8	19
2007	1	7	17	25
2008	5	4	11	20
2009	5	6	14	25
2010	3	3	14	20
2011	3	13	8	24
2012	2	5	10	17
2013	0	1	10	11
2014	3	6	7	16
<i>Ave. trend change p.a.(%)</i> <i>- for the last 10 years</i>	-	-10.3	-5.3	-6.3

Source: Australian Road Deaths Database

Table 2.5 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	42	13
2011	28	45	14
2012	22	51	15
2013	21	40	5
Heavy rigid trucks			
2008	26	32	4
2009	26	23	6
2010	20	23	4
2011	22	15	3
2012	22	30	2
2013	16	21	3
Buses			
2008	11	1	2
2009	8	5	3
2010	6	7	3
2011	12	4	1
2012	8	4	1
2013	5	3	0
Crash involving any heavy vehicle^c			
	<i>Intersection</i>	<i>Head-on</i>	<i>Single vehicle run-off road^b</i>
2008	64	82	21
2009	50	63	28
2010	54	70	20
2011	61	62	18
2012	51	82	18
2013	41	62	8

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 2.6 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	79	15	11	12	2	120
2011	81	21	14	8	2	127
2012	89	18	7	9	4	127
2013	62	17	4	8	4	95
Heavy rigid trucks						
2008	35	11	19	9	6	82
2009	33	14	11	10	2	70
2010	32	14	4	7	7	64
2011	14	15	9	13	3	54
2012	31	17	10	17	4	81
2013	28	11	10	6	4	59
Buses						
2008	4	7	3	6	2	22
2009	6	6	3	8	2	25
2010	1	8	4	1	7	21
2011	4	5	3	4	7	23
2012	4	6	4	5	2	21
2013	2	3	3	3	0	11
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	35	33	22	16	228
2009	100	40	27	27	6	200
2010	108	36	19	19	15	198
2011	98	40	26	24	12	201
2012	118	40	21	30	10	221
2013	89	31	17	17	7	161

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

Table 2.7 Fatal crashes involving heavy vehicles by remoteness region^a

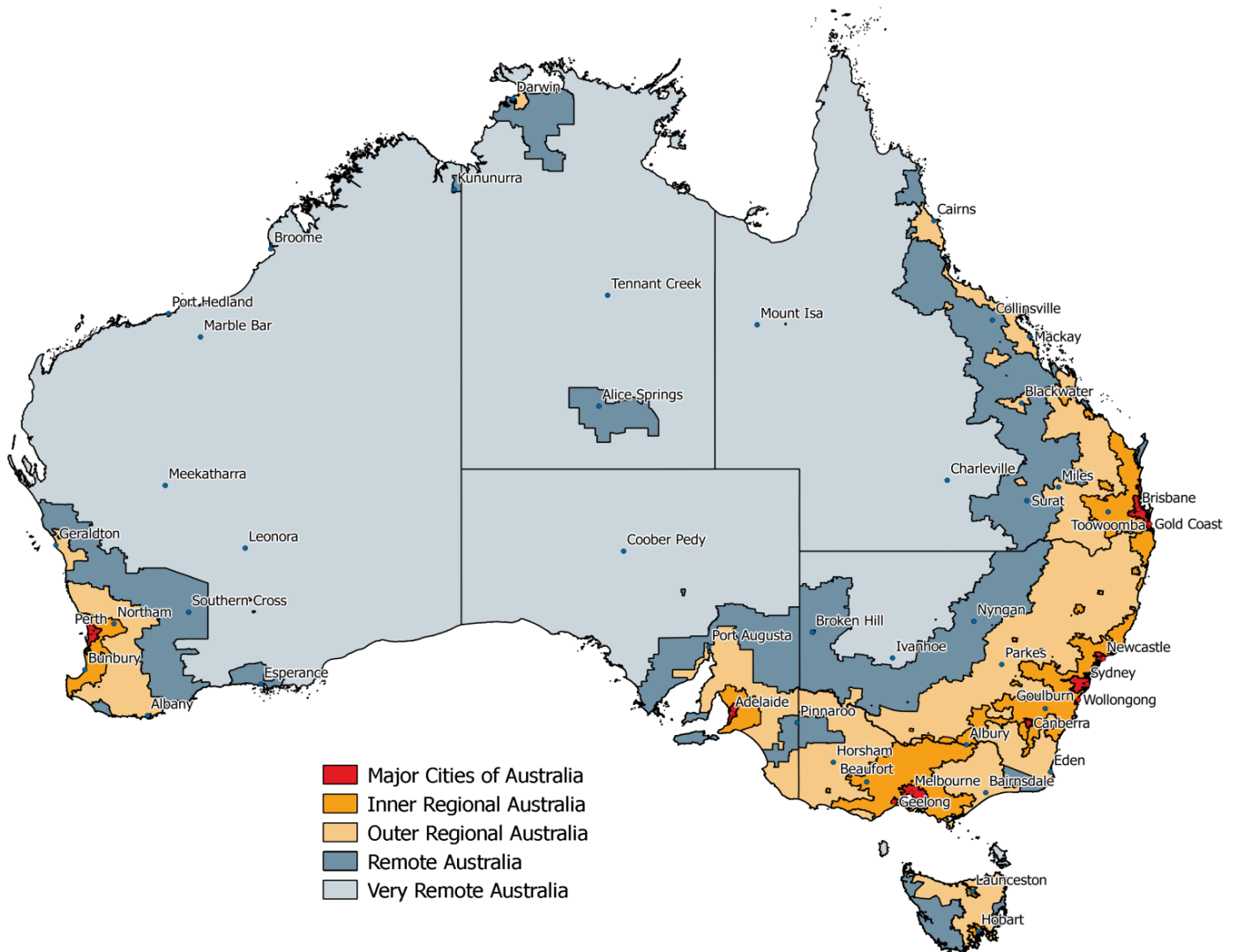
	<i>Major cities</i>	<i>Inner regional</i>	<i>Outer regional</i>	<i>Remote</i>	<i>Very remote</i>	<i>Total^b</i>
Articulated trucks						
2008	25	52	39	3	6	126
2009	21	36	39	13	5	114
2010	25	43	40	8	4	120
2011	32	46	37	6	6	127
2012	22	49	42	8	6	127
2013	19	36	24	9	7	95
Heavy rigid trucks						
2008	40	24	14	2	1	82
2009	32	23	14	1	0	70
2010	31	22	8	2	1	64
2011	18	21	12	2	1	54
2012	26	28	19	2	4	81
2013	34	14	9	1	1	59
Buses						
2008	13	5	2	2	0	22
2009	10	8	6	1	0	25
2010	12	6	3	0	0	21
2011	18	3	1	1	0	23
2012	14	1	4	1	1	21
2013	6	3	1	0	1	11
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	78	79	55	7	7	228
2009	61	61	58	15	5	200
2010	65	69	50	10	4	198
2011	67	68	50	9	7	201
2012	61	74	63	10	11	221
2013	58	52	33	10	8	161

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*

Figure 2.4 ASGS^a Remoteness Areas 2011 and selected cities and towns

a ASGS: Australian Statistical Geography Standard

Source: Australian Bureau of Statistics 2013

Table 2.8 **Fatal crashes involving heavy vehicles — validity of heavy vehicle driver's licence**

	<i>All valid</i>	<i>Any invalid</i>	<i>Unknown</i>	<i>Total</i>
Articulated trucks				
2008	114	3	9	126
2009	105	0	9	114
2010	98	2	20	120
2011	115	3	9	127
2012	112	2	13	127
2013	83	1	11	95
Heavy rigid trucks				
2008	76	3	3	82
2009	67	1	2	70
2010	56	4	4	64
2011	47	1	6	54
2012	75	2	4	81
2013	49	0	10	59
Buses				
2008	21	0	1	22
2009	24	0	1	25
2010	20	0	1	21
2011	21	1	1	23
2012	20	0	1	21
2013	9	0	2	11

Source: National Crash Database

Table 2.9 **Fatal crashes involving heavy vehicles — specified heavy vehicle driver BAC status (excludes Victoria and ACT)**

	<i>All pass</i>	<i>Any fail</i>	<i>Unknown</i>	<i>Total</i>
Articulated trucks				
2008	55	4	46	105
2009	60	0	37	97
2010	58	1	30	89
2011	67	2	37	106
2012	60	2	38	100
2013	46	2	34	82
Heavy rigid trucks				
2008	36	3	21	60
2009	35	1	14	50
2010	27	4	13	44
2011	20	1	18	39
2012	39	0	25	64
2013	28	0	19	47
Buses				
2008	8	0	10	18
2009	11	0	8	19
2010	12	1	5	18
2011	12	1	6	19
2012	11	0	7	18
2013	3	0	5	8

Source: National Crash Database

Table 2.10 Counts of fatal multi-vehicle crashes by types of vehicle involved^a

	<i>Heavy truck / passenger car</i>	<i>Heavy truck / heavy truck</i>	<i>Passenger car / passenger car</i>	<i>Passenger car / light commercial vehicle</i>
2008	81	38	220	62
2009	73	23	254	74
2010	77	30	220	83
2011	74	23	204	78
2012	82	33	221	58
2013	68	28	191	56

a These are crashes where no bus is involved.

b This table includes crashes involving four-wheeled vehicles only. These comprise approximately 70 per cent of all fatal multi-vehicle crashes.

Source: National Crash Database

Figure 2.5 Fatal crashes involving heavy vehicles by weekly time block
— 2010 to 2014

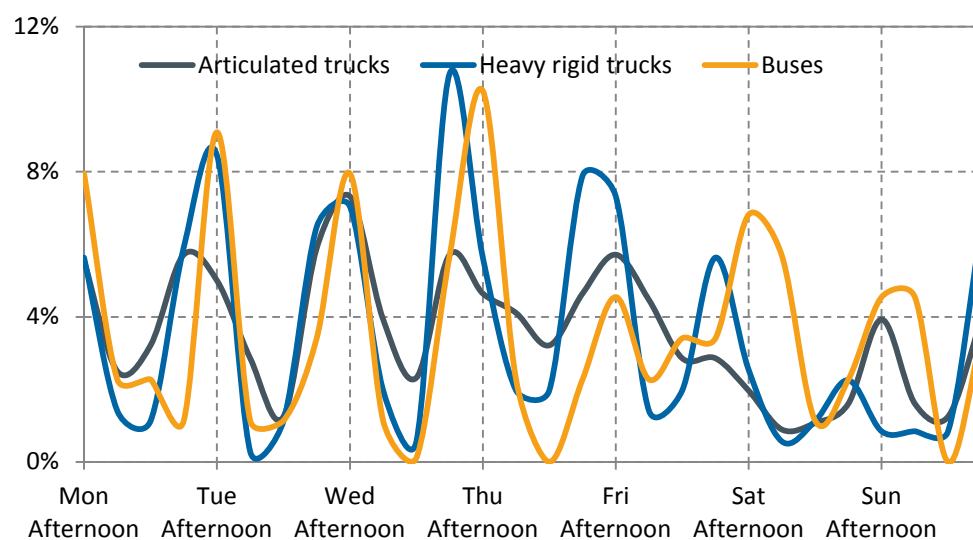


Table 2.11 **Fatal crashes involving heavy vehicles by weekly time block**
— 2010 to 2014

<i>Crash time of week</i>		<i>Articulated truck involvement</i>	<i>Heavy rigid truck involvement</i>	<i>Bus involvement</i>
<i>Monday</i>	<i>Early</i>	7	3	0
	<i>Morning</i>	22	23	3
	<i>Afternoon</i>	31	20	7
	<i>Evening</i>	14	5	2
<i>Tuesday</i>	<i>Early</i>	18	4	2
	<i>Morning</i>	32	21	1
	<i>Afternoon</i>	28	30	8
	<i>Evening</i>	16	1	1
<i>Wednesday</i>	<i>Early</i>	7	4	1
	<i>Morning</i>	33	23	3
	<i>Afternoon</i>	41	25	7
	<i>Evening</i>	22	7	1
<i>Thursday</i>	<i>Early</i>	13	2	0
	<i>Morning</i>	32	38	5
	<i>Afternoon</i>	26	20	9
	<i>Evening</i>	23	7	2
<i>Friday</i>	<i>Early</i>	18	7	0
	<i>Morning</i>	26	28	2
	<i>Afternoon</i>	32	26	4
	<i>Evening</i>	25	5	2
<i>Saturday</i>	<i>Early</i>	16	7	3
	<i>Morning</i>	16	20	3
	<i>Afternoon</i>	11	9	6
	<i>Evening</i>	5	2	5
<i>Sunday</i>	<i>Early</i>	6	4	1
	<i>Morning</i>	9	8	2
	<i>Afternoon</i>	22	3	4
	<i>Evening</i>	9	3	4

Early Midnight - 6am
Morning 6am - Noon

Afternoon Noon - 6pm
Evening 6pm - Midnight

a Excludes crashes with unrecorded time.

Source: Australian Road Deaths Database

Table 2.12 **Heavy vehicle involved fatal crash rates per 10,000 heavy vehicles registrations**

	<i>Articulated trucks</i>	<i>Heavy rigid trucks^a</i>	<i>Buses</i>
1989	48.7	-	4.7
1990	40.4	-	3.2
1991	30.5	-	6.1
1992	30.4	-	5.3
1993	33.5	-	6.6
1994	28.4	-	4.9
1995	28.3	-	4.2
1996	27.6	-	5.3
1997	24.6	-	3.9
1998	24.2	-	3.6
1999	25.8	-	4.4
2000	-	-	-
2001	23.3	-	4.1
2002	26.8	-	4.0
2003	22.1	-	3.7
2004	20.8	3.4	4.2
2005	18.9	2.8	4.0
2006	20.2	2.5	2.5
2007	19.7	2.7	3.2
2008	16.3	2.9	2.5
2009	14.9	2.3	3.0
2010	14.9	2.2	2.3
2011	14.4	1.9	2.7
2012	14.1	2.7	1.9
2013	9.8	2.0	1.2
2014	10.7	2.3	1.7
<i>Ave. trend change p.a.(%)</i>	-7.2	-2.9	-9.0
<i>- for the last 10 years</i>			

a Only available from 2004.

Source: Australian Road Deaths Database

Figure 2.6 Heavy vehicle involving fatal crash rates per 10,000 heavy vehicles registrations



Source: Australian Road Deaths Database; Australian Bureau of Statistics 2014

Table 2.13 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									
2005	21.1	18.9	21.1	26.8	17.5	35.7	14.3	0.0	20.9
2006	26.4	17.2	25.2	15.8	18.5	35.7	28.6	0.0	22.4
2007	23.8	19.1	26.8	10.3	20.6	26.7	28.6	0.0	21.9
2008	20.6	13.7	23.8	15.0	9.7	40.0	42.9	0.0	18.7
2009	14.6	10.7	26.2	15.3	13.9	66.7	28.6	100.0	17.7
2010	18.0	19.3	17.0	11.7	18.9	20.0	14.3	50.0	17.7
2011	18.3	12.7	20.9	19.4	13.8	13.3	42.9	0.0	17.2
2012	16.3	17.0	21.7	13.8	8.2	20.0	28.6	0.0	16.6
2013	12.3	6.9	15.4	12.1	8.9	13.3	37.5	0.0	11.6
2014	11.7	13.6	14.9	15.2	5.3	26.7	0.0	100.0	12.8
Ave. trend change p.a.(%) - for the last 10 years	-7.4	-5.7	-5.0	-3.0	-10.9	-8.9	-	-	-6.2
Heavy rigid trucks									
2005	9.8	15.2	5.4	5.9	7.4	10.5	12.5	16.7	9.6
2006	8.9	7.9	7.8	9.6	8.2	15.0	12.5	14.3	8.6
2007	10.2	12.2	5.0	9.4	9.8	4.8	12.5	14.3	9.3
2008	4.2	11.9	10.2	14.8	17.1	9.1	22.2	0.0	9.8
2009	8.3	9.1	6.4	3.7	15.2	4.5	0.0	0.0	8.3
2010	7.1	9.2	5.8	3.6	10.0	18.2	0.0	14.3	7.7
2011	5.2	6.6	6.1	10.5	7.1	9.1	22.2	0.0	6.5
2012	7.5	6.9	10.3	10.3	14.0	9.1	11.1	12.5	9.1
2013	7.4	5.4	4.8	6.9	12.6	0.0	0.0	0.0	6.6
2014	7.0	10.1	3.8	16.9	8.1	13.6	0.0	0.0	7.7
Ave. trend change p.a.(%) - for the last 10 years	-3.2	-6.4	-2.8	4.1	1.6	-	-	-	-3.1
Buses									
2005	28.8	11.8	15.6	7.1	6.7	0.0	0.0	0.0	15.2
2006	13.2	8.8	10.6	7.1	3.2	20.0	12.5	0.0	9.7
2007	20.4	11.1	14.3	6.7	6.5	0.0	0.0	0.0	12.5
2008	9.1	10.5	16.0	6.7	6.3	0.0	0.0	0.0	9.8
2009	14.0	15.0	15.4	13.3	0.0	20.0	0.0	0.0	11.8
2010	15.3	4.8	5.6	18.8	0.0	20.0	11.1	33.3	9.1
2011	18.0	11.4	12.5	0.0	2.9	0.0	0.0	0.0	10.6
2012	9.5	6.4	10.3	6.3	2.9	0.0	0.0	0.0	7.2
2013	3.2	6.4	8.5	0.0	0.0	0.0	11.1	0.0	4.6
2014	9.4	6.3	1.7	6.3	10.8	0.0	0.0	25.0	6.6
Ave. trend change p.a.(%) - for the last 10 years	-12.4	-6.8	-14.1	-	-	-	-	-	-9.0

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

Table 2.14 **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	0.3
2011	2.2	0.3
2012	2.3	0.4
2013	1.6	0.3

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 2014

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SECTION 3

Historical series

The source of the tables in this section is the Australian Road Deaths Database.

The historical series for the Heavy rigid trucks is only available from 2004.

Table 3.1 Deaths from crashes involving heavy vehicles by state/territory
1989 – 2004

	<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

Heavy rigid trucks

2004	38	30	22	7	7	4	0	0	108
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Note: The historical series for the Heavy rigid trucks is only available from 2004.

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

Table 3.2 Deaths from crashes involving heavy vehicles by age group
1989 — 2004

	0 to 16	17 to 25	26 to 39	40 to 54	55 to 64	≥65	Total ^a
Articulated trucks							
1989	28	91	103	58	24	27	335
1990	17	81	67	46	24	28	263
1991	13	49	56	24	11	29	183
1992	7	42	58	43	14	17	181
1993	7	35	73	50	20	19	204
1994	16	42	47	34	18	22	179
1995	13	46	54	38	22	26	199
1996	11	38	61	40	15	29	194
1997	18	27	50	36	13	25	171
1998	11	35	52	44	15	20	179
1999	15	30	68	33	14	31	191
2000	11	43	67	54	14	19	208
2001	13	36	39	43	16	31	178
2002	12	43	59	44	18	24	200
2003	14	40	25	51	17	23	171
2004	8	29	42	33	23	16	151

Heavy rigid trucks

2004	7	20	20	30	13	18	108
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Note: The historical series for the Heavy rigid trucks is only available from 2004.

Buses

1989	12	23	22	20	9	13	104
1990	6	7	8	3	3	19	46
1991	7	7	3	5	0	10	32
1992	3	7	7	6	8	8	39
1993	3	12	10	11	6	7	49
1994	9	7	3	3	2	16	40
1995	0	7	5	3	1	7	23
1996	4	6	6	7	5	10	38
1997	3	2	10	4	4	4	27
1998	3	6	6	5	2	7	29
1999	0	11	4	8	3	6	32
2000	5	4	5	4	3	3	24
2001	2	6	9	3	4	8	32
2002	2	10	5	9	0	10	36
2003	1	5	3	4	9	7	29
2004	3	4	5	5	3	10	30

Table 3.3 Deaths from crashes involving heavy vehicles by road user
1989 – 2004

	<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

Heavy rigid trucks

2004	61	18	15	8	6	108
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Note: The historical series for the Heavy rigid trucks is only available from 2004.

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

Table 3.4 Deaths by crash type for crashes involving heavy vehicles
1989 – 2004

	Single vehicle	Pedestrian	Multiple vehicle		Single vehicle	Pedestrian	Multiple vehicle
Articulated trucks				Buses			
1989	44	34	257	1989	2	14	88
1990	45	15	203	1990	14	8	24
1991	30	12	141	1991	1	11	20
1992	33	15	133	1992	7	10	22
1993	31	15	158	1993	1	10	38
1994	24	15	140	1994	14	10	16
1995	35	15	149	1995	1	8	14
1996	24	13	157	1996	2	14	22
1997	31	11	129	1997	6	6	15
1998	34	16	129	1998	3	7	19
1999	20	17	154	1999	1	9	22
2000	25	18	165	2000	1	12	11
2001	18	18	142	2001	4	11	17
2002	31	16	153	2002	8	13	15
2003	20	13	138	2003	4	7	18
2004	27	14	110	2004	1	7	22
	Single vehicle	Pedestrian	Multiple vehicle				
Heavy rigid trucks							
2004	11	15	82				

Note: The historical series for the Heavy rigid trucks is only available from 2004.

Table 3.5 **Fatal crashes involving heavy vehicles by state/territory**
1989 – 2004

	<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

Heavy rigid trucks

2004	30	25	19	7	7	4	0	0	92
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Note: The historical series for the Heavy rigid trucks is only available from 2004.

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

Table 3.6 **Fatal crashes involving heavy vehicles by speed zone**
1989 – 2004

	0 to 60 km/h	70 to 90 km/h	100 km/h	≥ 110 km/h	Total ^a
Articulated trucks					
1989	62	22	129	34	247
1990	43	37	99	24	203
1991	30	21	81	22	154
1992	33	24	78	18	153
1993	32	24	83	30	169
1994	26	29	71	25	151
1995	31	24	83	25	163
1996	31	22	69	38	160
1997	27	19	64	36	146
1998	20	27	72	31	150
1999	36	29	64	33	162
2000	25	22	85	33	165
2001	28	19	66	29	142
2002	24	35	80	32	171
2003	20	39	59	24	142
2004	17	35	56	29	137

Heavy rigid trucks

2004	24	22	38	7	91
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Note: The historical series for the Heavy rigid trucks is only available from 2004.

Buses

1989	23	4	14	1	42
1990	19	4	6	3	32
1991	22	1	6	0	29
1992	18	3	6	0	27
1993	19	3	10	3	35
1994	18	3	3	3	27
1995	8	5	7	2	22
1996	18	6	5	0	29
1997	13	3	5	2	23
1998	13	4	6	0	23
1999	15	8	5	0	28
2000	16	4	3	0	23
2001	14	6	6	0	26
2002	18	7	1	1	27
2003	13	5	5	3	26
2004	14	5	7	3	29

Table 3.7 **Fatal crashes involving heavy vehicles by crash type**
1989 – 2004

	<i>Single vehicle</i>	<i>Pedestrian involved</i>	<i>Multiple vehicle</i>	<i>Total</i>
Articulated trucks				
1989	41	30	179	250
1990	41	15	149	205
1991	27	12	117	156
1992	30	15	109	154
1993	29	14	128	171
1994	24	15	112	151
1995	33	15	117	165
1996	24	13	124	161
1997	31	11	104	146
1998	32	16	103	151
1999	18	17	128	163
2000	25	18	122	165
2001	17	18	111	146
2002	30	16	125	171
2003	20	13	109	142
2004	27	14	97	138

Heavy rigid trucks

2004	10	15	67	92
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Note: The historical series for the Heavy rigid trucks is only available from 2004.

Buses

1989	2	14	29	45
1990	4	8	20	32
1991	1	11	18	30
1992	3	9	16	28
1993	1	10	25	36
1994	3	10	15	28
1995	1	8	13	22
1996	2	14	15	31
1997	5	6	13	24
1998	3	7	13	23
1999	1	9	19	29
2000	1	12	10	23
2001	1	11	16	28
2002	4	13	11	28
2003	4	7	15	26
2004	1	7	22	30

SECTION 4

Exposure data

The footnotes for Table 4.I have been revised in order to clarify several issues relating to data collection and definitions that affected vehicle registration data during the period 1990 to 1996.

Table 4.1 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									
1989	16,700	13,100	10,200	4,400	5,300	-	1,300	400	51,300
1990	16,800	14,200	10,600	2,100	5,700	-	1,200	300	50,800
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

Table 4.1 **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									
1989	186,300	206,500	56,700	47,900	78,600	18,700	2,100	3,900	600,800
1990	190,900	210,700	55,600	51,000	83,800	19,500	2,100	4,400	618,000
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

Note The Australian vehicle classification was revised in the 1991 Motor Vehicle Census. Under the new classification, only freight-carrying vehicles with a gross vehicle mass (GVM) greater than 3.5 tonnes are classified as rigid or articulated trucks and freight-carrying vehicles with a GVM of less than or equal to 3.5 tonnes were classified as light commercial vehicles (LCVs). Hence the series for rigid trucks and light commercial vehicles contain breaks between 1990 and 1991.

During 1995 and 1996, the State/Territory jurisdictions introduced the National Heavy Vehicle Registration 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.

The introduction of unique Vehicle Identification Numbers (VINs) by motor vehicle authorities from July 1990 onwards resulted in re-classification of minibuses in some jurisdictions. The effect was a reduction in registered buses and an increase in registered passenger vehicles between 1990 and 1991. This results in a series break for buses.

Source: Australian Bureau of Statistics 2014

Table 4.1 **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									
1989	57,100	13,900	10,500	3,000	7,900	1,900	700	1,200	96,200
1990	59,500	13,800	10,700	3,100	8,600	2,000	700	1,000	99,200
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

Note The Australian vehicle classification was revised in the 1991 Motor Vehicle Census. Under the new classification, only freight-carrying vehicles with a gross vehicle mass (GVM) greater than 3.5 tonnes are classified as rigid or articulated trucks and freight-carrying vehicles with a GVM of less than or equal to 3.5 tonnes were classified as light commercial vehicles (LCVs). Hence the series for rigid trucks and light commercial vehicles contain breaks between 1990 and 1991.

During 1995 and 1996, the State/Territory jurisdictions introduced the National Heavy Vehicle Registration 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.

The introduction of unique Vehicle Identification Numbers (VINs) by motor vehicle authorities from July 1990 onwards resulted in re-classification of microbuses in some jurisdictions. The effect was a reduction in registered buses and an increase in registered passenger vehicles between 1990 and 1991. This results in a series break for buses.

Source: Australian Bureau of Statistics 2014

Table 4.2 **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

a Preliminary

Source: Bureau of Infrastructure, Transport and Regional Economics Unpublished

Table 4.2 **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

a Preliminary

Source: Bureau of Infrastructure, Transport and Regional Economics Unpublished

Table 4.2 **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>
<i>Buses</i>									
1989	0.45	0.28	0.30	0.11	0.21	0.04	0.06	0.02	1.47
1990	0.46	0.31	0.31	0.12	0.23	0.04	0.06	0.02	1.56
1991	0.45	0.29	0.31	0.12	0.22	0.04	0.06	0.02	1.51
1992	0.44	0.28	0.31	0.12	0.22	0.04	0.06	0.02	1.48
1993	0.44	0.28	0.31	0.12	0.22	0.04	0.06	0.02	1.49
1994	0.45	0.29	0.33	0.12	0.23	0.04	0.06	0.02	1.55
1995	0.46	0.30	0.34	0.12	0.24	0.04	0.06	0.02	1.59
1996	0.47	0.30	0.36	0.13	0.25	0.05	0.07	0.02	1.64
1997	0.48	0.30	0.36	0.13	0.24	0.04	0.07	0.02	1.65
1998	0.49	0.31	0.37	0.13	0.26	0.04	0.07	0.03	1.69
1999	0.49	0.32	0.37	0.13	0.26	0.05	0.07	0.02	1.71
2000	0.50	0.32	0.39	0.13	0.27	0.05	0.07	0.02	1.76
2001	0.51	0.33	0.40	0.13	0.28	0.05	0.07	0.03	1.80
2002	0.51	0.33	0.41	0.14	0.28	0.05	0.08	0.03	1.82
2003	0.52	0.34	0.43	0.14	0.29	0.05	0.08	0.03	1.87
2004	0.52	0.34	0.44	0.14	0.30	0.05	0.08	0.03	1.89
2005	0.52	0.34	0.45	0.14	0.30	0.05	0.08	0.03	1.91
2006	0.53	0.34	0.47	0.14	0.31	0.05	0.08	0.03	1.96
2007	0.54	0.36	0.49	0.15	0.31	0.05	0.08	0.03	2.00
2008	0.55	0.38	0.50	0.15	0.32	0.05	0.08	0.03	2.05
2009	0.57	0.40	0.52	0.15	0.32	0.05	0.09	0.03	2.12
2010	0.59	0.42	0.54	0.16	0.33	0.05	0.09	0.03	2.20
2011	0.61	0.44	0.56	0.16	0.34	0.05	0.09	0.03	2.27
2012	0.63	0.47	0.58	0.16	0.35	0.05	0.09	0.03	2.35
2013	0.63	0.47	0.59	0.16	0.36	0.05	0.09	0.04	2.39
2014 ^a	0.64	0.48	0.60	0.16	0.37	0.05	0.10	0.04	2.43

a Preliminary

Source: Bureau of Infrastructure, Transport and Regional Economics Unpublished

Table 4.3 **Licensed^a heavy vehicle operators by vehicle type**

NSW	<i>Highest class of heavy vehicle licence</i>				
	<i>Light Rigid</i>	<i>Medium Rigid</i>	<i>Heavy Rigid</i>	<i>Heavy Combination</i>	<i>Multi Combination</i>
Full licence					
30 June 2010	82,835	121,937	201,164	113,554	18,960
30 June 2011	84,913	124,294	200,038	111,704	19,978
30 June 2012	86,022	126,495	202,116	110,908	21,054
30 June 2013	89,597	127,577	200,451	108,849	22,073
Provisional licence					
30 June 2010	112	1111	616	0	0
30 June 2011	145	1162	712	0	0
30 June 2012	164	1184	776	0	0
30 June 2013	160	1174	868	0	0
L Permits					
30 June 2010	0	0	0	0	0
30 June 2011	0	0	0	0	0
30 June 2012	0	0	0	0	0
30 June 2013	0	0	0	0	0

Vic	<i>Highest class of heavy vehicle licence</i>				
	<i>Light Rigid</i>	<i>Medium Rigid</i>	<i>Heavy Rigid</i>	<i>Heavy Combination</i>	<i>Multi Combination</i>
Full licence					
30 June 2010	28,575	85,073	159,569	134,079	20,234
30 June 2011	29,805	87,926	163,805	133,691	21,443
30 June 2012	31,393	89,818	168,585	132,852	23,011
30 June 2013	33,249	91,344	171,765	131,558	24,763
Provisional licence					
30 June 2010	51	734	304	62	9
30 June 2011	33	668	328	56	5
30 June 2012	60	1,114	859	159	15
30 June 2013	51	1,343	1,066	182	36
L Permits					
30 June 2010	0	0	0	0	0
30 June 2011	0	0	0	0	0
30 June 2012	0	0	0	0	0
30 June 2013	0	0	0	0	0

Table 4.3 Licensed^a heavy vehicle operators by vehicle type
(continued)

Qld	<i>Highest class of heavy vehicle licence</i>				
	<i>Light Rigid</i>	<i>Medium Rigid</i>	<i>Heavy Rigid</i>	<i>Heavy Combination</i>	<i>Multi Combination</i>
Full licence					
30 June 2010	41,811	86,459	233,136	90,612	37,954
30 June 2011	43,729	89,726	237,179	90,475	40,948
30 June 2012	45,113	91,204	241,747	89,729	43,788
30 June 2013	46,511	92,758	244,520	88,487	46,649
Provisional licence					
30 June 2010	272	1,539	2,034	586	457
30 June 2011	302	1,657	2,003	574	449
30 June 2012	275	1,568	1,754	481	412
30 June 2013	295	1,638	1,980	489	459
L Permits					
30 June 2010	0	0	7	244	20
30 June 2011	0	0	4	232	20
30 June 2012	0	0	1	211	16
30 June 2013	0	0	0	188	15

SA	<i>Highest class of heavy vehicle licence</i>				
	<i>Light Rigid</i>	<i>Medium Rigid</i>	<i>Heavy Rigid</i>	<i>Heavy Combination</i>	<i>Multi Combination</i>
Full licence					
30 June 2010	21,054	39,416	58,872	39,827	8,909
30 June 2011	21,776	39,643	58,566	38,988	9,258
30 June 2012	23,305	39,724	58,489	38,369	9,722
30 June 2013	26,056	40,467	59,502	38,273	10,425
Provisional licence					
30 June 2010	12	361	175	140	27
30 June 2011	16	418	212	146	23
30 June 2012	18	420	285	161	33
30 June 2013	16	427	308	149	44
L Permits					
30 June 2010	1	3	9	422	0
30 June 2011	1	4	10	353	0
30 June 2012	0	6	7	367	0
30 June 2013	0	2	7	306	0

a Heavy Combination, Multi Combination and the Heavy Rigid (HR) licence classes allow for operation of lighter trucks (LR ,MR) and cars (C). Licence count data include driver licences with an active status.

They do not include driver licences with the following status: Cancelled, Suspended; Surrendered; Expired; Disqualified or Restricted. WA licence data by class are not available.

For Licence Class Definition, see Glossary.

Source: Bureau of Infrastructure, Transport and Regional Economics 2014

Table 4.3 **Licensed^a heavy vehicle operators by vehicle type**
(continued)

Tas	<i>Highest class of heavy vehicle licence</i>				
	<i>Light Rigid</i>	<i>Medium Rigid</i>	<i>Heavy Rigid</i>	<i>Heavy Combination</i>	<i>Multi Combination</i>
Full licence					
30 June 2010	4,383	28,678	13,382	13,380	1,746
30 June 2011	5,333	28,575	13,708	13,140	1,861
30 June 2012	6,214	28,084	13,868	12,644	1,935
30 June 2013	7,063	27,713	13,930	12,300	2,005
Provisional licence					
30 June 2010	11	75	7	3	0
30 June 2011	7	76	19	5	0
30 June 2012	2	77	15	6	0
30 June 2013	6	95	15	5	0
L Permits					
30 June 2010	0	0	0	0	0
30 June 2011	0	0	0	0	0
30 June 2012	0	0	0	0	0
30 June 2013	0	0	0	0	0

NT	<i>Highest class of heavy vehicle licence</i>				
	<i>Light Rigid</i>	<i>Medium Rigid</i>	<i>Heavy Rigid</i>	<i>Heavy Combination</i>	<i>Multi Combination</i>
Full licence					
30 June 2010	5,554	7,081	11,164	5,544	4,105
30 June 2011	5,588	6,913	11,267	5,407	4,142
30 June 2012	5,651	6,797	12,263	5,337	4,270
30 June 2013	5,807	6,685	12,988	5,311	4,491
Provisional licence					
30 June 2010	1	5	4	2	2
30 June 2011	5	5	5	1	4
30 June 2012	5	3	7	0	2
30 June 2013	0	3	3	0	0
L Permits					
30 June 2010	0	0	2	0	0
30 June 2011	0	0	3	0	1
30 June 2012	0	0	1	0	1
30 June 2013	0	1	0	0	1

Source: Bureau of Infrastructure, Transport and Regional Economics 2014

Table 4.3 **Licensed^a heavy vehicle operators by vehicle type**
(continued)

ACT	<i>Highest class of heavy vehicle licence</i>				
	<i>Light Rigid</i>	<i>Medium Rigid</i>	<i>Heavy Rigid</i>	<i>Heavy Combination</i>	<i>Multi Combination</i>
Full licence					
30 June 2010	2,498	6,854	9,723	3,494	524
30 June 2011	2,595	6,903	9,734	3,418	523
30 June 2012	2,695	6,958	9,787	3,347	530
30 June 2013	2,718	6,983	9,748	3,252	517
Provisional licence					
30 June 2010	2	32	6	0	32
30 June 2011	2	19	5	0	0
30 June 2012	4	32	6	0	0
30 June 2013	4	27	6	1	0
L Permits					
30 June 2010	0	0	0	0	0
30 June 2011	0	0	0	0	0
30 June 2012	0	0	0	0	0
30 June 2013	0	0	0	0	0

a Heavy Combination, Multi Combination and the Heavy Rigid (HR) licence classes allow for operation of lighter trucks (LR ,MR) and cars (C). Licence count data include driver licences with an active status. They do not include driver licences with the following status: Cancelled, Suspended; Surrendered; Expired; Disqualified or Restricted. WA licence data by class are not available.
 For Licence Class Definition, see Glossary.

Source: Bureau of Infrastructure, Transport and Regional Economics 2014

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>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>Bus</i>	A motor vehicle constructed for the carriage of passengers which has at least 10 seats, including the driver's seat.
<i>Road Death or Fatality</i>	A person who dies within 30 days of a crash as a result of injuries received in that crash.
<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>BAC</i>	Blood alcohol concentration (BAC) refers to the amount of alcohol present in the bloodstream.
<i>Gross Vehicle Mass (GVM)</i>	Tare weight (i.e. unladen weight) of the motor vehicle plus its maximum carrying capacity excluding trailers.
<i>Estimation of ten year trends</i>	In this report, the figures for the 'average trend change p.a.(%)' are calculated by fitting an exponential trend line to the last ten 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.
<i>High threat to Life Injury</i>	'High threat to life' serious injury cases are a subset of all serious injury cases, referred to also as 'life-threatening' injuries. They are selected on the basis of having an ICISS score (survival probability) of less than 0.941. See Henley and Harrison 2012c for definition and discussion.

Licence Classes

<i>Light rigid vehicle licence (LR)</i>	The person with a valid licence may drive: a motor vehicle that: (a) has a GVM greater than 4.5 tonnes but not greater than 8 tonnes; or (b) seats more than 12 adults (including the driver) and has a GVM not greater than 8 tonnes.
<i>Medium rigid vehicle licence (MR)</i>	The person with a valid licence may drive: a motor vehicle that has: (a) 2 axles; and (b) a GVM greater than 8 tonnes.
<i>Heavy rigid vehicle licence (HR)</i>	The person with a valid licence may drive: a motor vehicle that has: (a) 3 or more axles; and (b) a GVM greater than 8 tonnes.
<i>Heavy combination vehicle licence (HC)</i>	The person with a valid licence may drive: (a) a prime mover to which is attached a single semi-trailer plus any unladen converter dolly; or (b) a rigid motor vehicle to which is attached a trailer that has a GVM greater than 9 tonnes plus any unladen converter dolly.
<i>Multi combination vehicle licence (MC)</i>	The person with a valid licence may drive: any motor vehicle or combination of vehicles. <i>Does not include:</i> a motor bike; or a motor trike.

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