



Australian Government

Department of Infrastructure, Transport, Regional Development and Communications

Bureau of Infrastructure, Transport and Regional Economics

STATISTICAL REPORT



bitre

Safety

**Road trauma involving heavy vehicles
2018 statistical summary**

© Commonwealth of Australia 2020
ISSN: 2205-0256
ISBN: 978-1-925843-52-1

Ownership of intellectual property rights in this publication

Unless otherwise noted, copyright (and any other intellectual property rights, if any) in this publication is owned by the Commonwealth of Australia (referred to below as the Commonwealth).

Disclaimer

The material contained in this publication is made available on the understanding that the Commonwealth is not providing professional advice, and that users exercise their own skill and care with respect to its use, and seek independent advice if necessary.

The Commonwealth makes no representations or warranties as to the contents or accuracy of the information contained in this publication. To the extent permitted by law, the Commonwealth disclaims liability to any person or organisation in respect of anything done, or omitted to be done, in reliance upon information contained in this publication.

Creative Commons licence

With the exception of (a) the Coat of Arms; and (b) the Department of Infrastructure's photos and graphics, copyright in this publication is licensed under a Creative Commons Attribution 3.0 Australia Licence.

Creative Commons Attribution 3.0 Australia Licence is a standard form licence agreement that allows you to copy, communicate and adapt this publication provided that you attribute the work to the Commonwealth and abide by the other licence terms. A summary of the licence terms is available from <http://creativecommons.org/licenses/by/3.0/au/deed.en>. The full licence terms are available from <http://creativecommons.org/licenses/by/3.0/au/legalcode>.

Use of the Coat of Arms

The Department of the Prime Minister and Cabinet sets the terms under which the Coat of Arms is used. Please refer to the Department's Commonwealth Coat of Arms and Government branding web page <http://www.dpmc.gov.au/guidelines/index.cfm#brand> and, in particular, the Guidelines on the use of the Commonwealth Coat of Arms publication.

An appropriate citation for this report is:

Bureau of Infrastructure, Transport and Regional Economics (BITRE), 2020, *Road trauma involving heavy vehicles 2018 crash statistical summary*, BITRE, Canberra ACT.

Contact us

This publication is available in PDF format. All other rights are reserved, including in relation to any Departmental logos or trade marks which may exist. For enquiries regarding the licence and any use of this publication, please contact:

Bureau of Infrastructure, Transport and Regional Economics (BITRE)
Department of Infrastructure, Transport, Regional Development and Communications
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

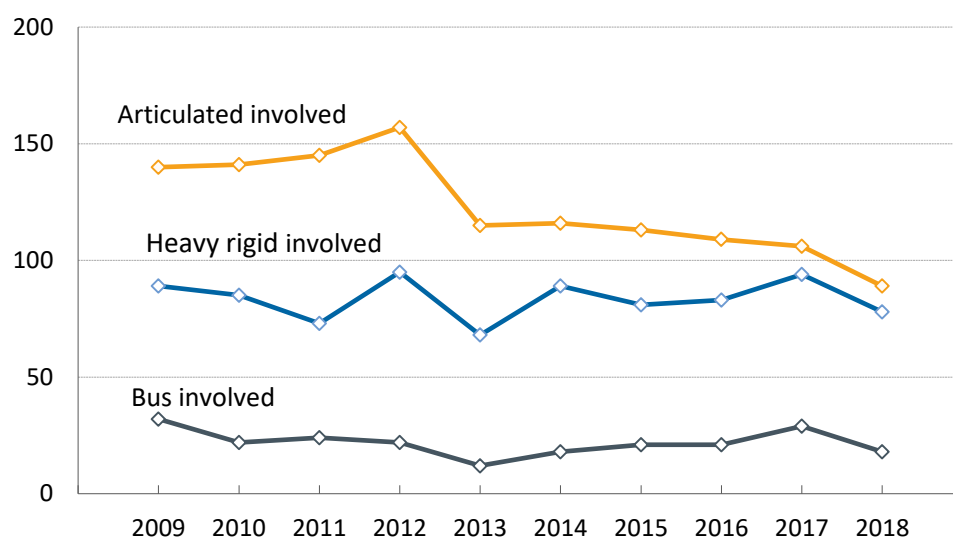
Road trauma involving heavy vehicles 2018 statistical summary

Department of Infrastructure, Transport, Regional Development and Communications
Canberra, Australia

At a glance

This report presents counts and rates of fatalities, fatal crashes, and hospitalised injuries from road crashes in which one or more heavy vehicles (heavy trucks or buses) were involved. Tabulations include counts by road user type, crash type geographic region, road type and speed zone.

Annual counts of fatalities in crashes involving heavy vehicles, 2009—2018



Heavy trucks

In 2018, 159 people were killed in crashes involving heavy trucks. This is a reduction of 16.8 per cent compared with the number in 2017 (Table I.1).

The ten-year fatality trend in crashes where an articulated truck was involved is comprised firstly of a significant level shift in 2013 (down 22.0%) and then a consistent decline to 2018 (equating to a further 21%). The overall trend over the last ten years is a decline of 5.0 per cent per year (Table I.1).

For crashes involving a heavy rigid truck, the estimated trend in fatalities over the last ten years is a flat 0.0 per cent per year (Table I.1).

Of all fatalities where a heavy truck is involved (articulated or heavy rigid), approximately 84 per cent occur in crashes which involve another vehicle in addition to the truck (Tables I.4 and I.5).

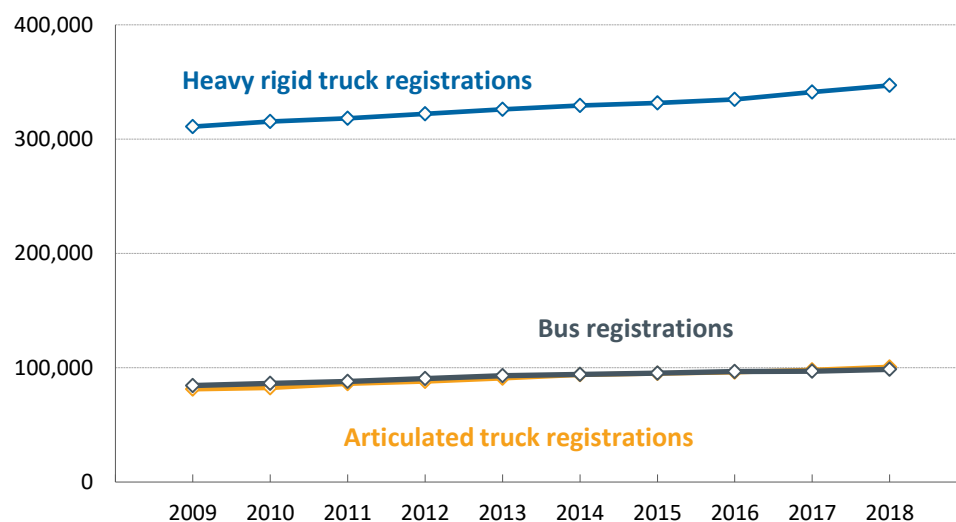
Heavy truck occupants account for approximately 20 per cent of all fatalities in crashes involving a heavy truck. Light vehicle occupants account for 55 per cent of the total, and the remainder (pedestrians, motorcyclists and pedal cyclists) together account for 25 per cent (Table I.3).

Analysis by geographic region shows that approximately 80 per cent of fatalities where an articulated truck is involved occur in a Regional or Remote area. The remainder occur in a Major city area. The corresponding proportions for fatalities where a heavy rigid truck is involved are 55 per cent (Regional or Remote) and 45 per cent (Major City). These proportions have not changed appreciably over the decade (Table 1.7).

Approximately 500 heavy truck occupants are hospitalised from road crashes each year. Of these, approximately 30 per cent are categorised with High-threat-to-life injuries (Table 1.10).

Over the ten years to 2018, numbers of registered articulated trucks increased by a total of 24.0 per cent and heavy rigid truck registrations increased by 11.6 per cent. For both vehicle types, the strongest increases in registrations occurred in New South Wales, Western Australia and the Northern Territory. Combined, heavy trucks account for 2.3 per cent of all road vehicles (Table 3.1).

Annual counts of registered (heavy) vehicles, 2009—2018



Buses

In 2018, 18 people were killed in crashes involving buses. There was a declining trend over the first half of the decade and a slight increase during the last five years (Table 2.1).

Approximately 35 per cent of people killed in crashes involving buses are occupants of another four-wheeled vehicle, and 30 per cent are pedestrians. The remainder is occupants of the bus (20 per cent), motorcyclists (10 per cent) and pedal cyclists (5 per cent) (Table 2.2).

Approximately 55 per cent of fatalities where a bus is involved occur in a Major City area. Inner or Outer Regional areas account for 35 per cent, with the remainder (10 per cent) occurring in a Remote or Very Remote area (Table 2.5).

Approximately 280 bus occupants are hospitalised from crashes each year. Of these, approximately 20 per cent are categorised with High-threat-to-life injuries (Table 2.6).

Data Sources

Crash data in this report are sourced from the National Crash Database. This database is collated by BITRE using data from the states' and territories' road safety agencies. The scope is both fatal and injury crashes, and at present it covers the years 2008 to 2018. It is updated annually. Only fatal crash data is utilized in this report.

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 Henley G & Harrison JE 2015 for information regarding inclusion criteria for traffic crash hospitalised injuries.

Vehicle registrations and vehicle-kilometres-travelled are sourced from The Australian Bureau of Statistics and BITRE respectively.

Acknowledgements

The Department of Infrastructure, Transport, Regional Development and Communications would like to acknowledge the provision of data and assistance from the following agencies:

Transport for NSW

VicRoads

Department of Transport and Main Roads, Queensland

Department of Planning, Transport and Infrastructure, South Australia

Western Australia Police

Main Roads Western Australia

Department of State Growth, Tasmania

Department of Infrastructure, Planning and Logistics, Northern Territory

Transport Canberra and City Services Directorate, Australian Capital Territory

National Injury Surveillance Unit, Flinders University

Australian Institute of Health and Welfare

Australian Bureau of Statistics

Contents

At a glance	iii
Data Sources	v
Acknowledgements	v
Section 1 Heavy trucks	I
Section 2 Bus	15
Section 3 Exposure.....	22
Glossary	26
References	28

HEAVY TRUCKS

Tables

Table I.1	Deaths from crashes involving heavy trucks.....	2
Table I.2	Deaths from crashes involving heavy trucks by state/territory.....	3
Table I.3	Deaths from crashes involving heavy trucks by road user.....	4
Table I.4	Deaths by crash type for crashes involving an Articulated truck.....	5
Table I.5	Deaths by crash type for crashes involving a Heavy rigid truck.....	6
Table I.6	Deaths from crashes involving heavy trucks by posted speed zone.....	7
Table I.7	Deaths from crashes involving heavy trucks by Remoteness Area.....	8
Table I.8	Deaths from crashes involving heavy trucks by Significant Urban Area (SUA).....	9
Table I.9	Deaths from crashes involving heavy trucks by road type.....	10
Table I.10	Deaths and hospitalised injuries of heavy truck occupants.....	11
Table I.11	Fatal crashes involving heavy trucks by state/territory.....	12
Table I.12	Annual fatal crashes per 10,000 heavy truck registrations.....	13
Table I.13	Annual fatal crashes per billion heavy truck vehicle—kilometres—travelled (VKT)	14

Figures

Figure I.1	Annual deaths in crashes involving heavy truck—with trends.....	2
Figure I.2	Annual deaths in crashes involving an Articulated truck.....	5
Figure I.3	Annual deaths in crashes involving a Heavy rigid truck.....	6
Figure I.4	Distribution of deaths by posted speeded zone—five years to 2018.....	7
Figure I.5	Distribution of deaths by Remoteness Area—five years to 2018.....	8
Figure I.6	Distribution of deaths by Significant Urban Area—five years to 2018.....	9
Figure I.7	Distribution of deaths by road type—five years to 2018.....	10
Figure I.8	Deaths and hospitalised injuries in crashes involving heavy trucks	11

BUS

Tables

Table 2.1	Deaths from crashes involving a bus by state/territory	16
Table 2.2	Deaths from crashes involving a bus by road user	16
Table 2.3	Deaths by crash type for crashes involving a bus	17
Table 2.4	Deaths from crashes involving a bus by posted speed zone	18
Table 2.5	Deaths from crashes involving a bus by Remoteness Area	18
Table 2.6	Deaths and hospitalised injuries of bus occupants	19
Table 2.7	Fatal crashes involving a bus by state/territory	20
Table 2.8	Annual fatal crashes rates—Bus involved	21

Figures

Figure 2.1	Annual deaths in crashes involving a bus—with trend	16
Figure 2.2	Deaths in crashes involving a bus	17
Figure 2.3	Distribution of deaths by Remoteness Area—five years to 2018	19
Figure 2.4	Deaths and hospitalised injuries of bus occupants	20

Exposure

Tables

Table 3.1	Motor vehicles on register—by state/territory	23
Table 3.2	Vehicle—kilometres—travelled (millions) by state/territory	24
Table 3.3	Licence holders—by state/territory	25

This page is intentionally left blank.

Section I

HEAVY TRUCKS

Table I.1 Deaths from crashes involving heavy trucks^a

	<i>Any heavy truck involved^b</i>	<i>Articulated truck involved</i>	<i>Heavy rigid truck involved</i>	<i>All crashes^c</i>
2009	220	140	89	1,490
2010	218	141	85	1,350
2011	214	145	73	1,277
2012	247	157	95	1,299
2013	179	115	68	1,185
2014	204	116	89	1,150
2015	191	113	81	1,205
2016	187	109	83	1,295
2017	191	106	94	1,223
2018	159	89	78	1,136
Change last 12 months (%)	-16.8	-16.0	-17.0	-7.1
Ave. trend change p.a.(%)				
- for last 10 calendar years	-3.1	-5.0	0.0	-2.0
- for last 5 calendar years	-4.9	-5.8	-1.1	-0.1

a Crashes involving a heavy truck may also involve other vehicles and vehicle types.

b Crash involves either an articulated truck or a heavy rigid truck (or both).

c All road crash deaths—whether or not involving a heavy truck.

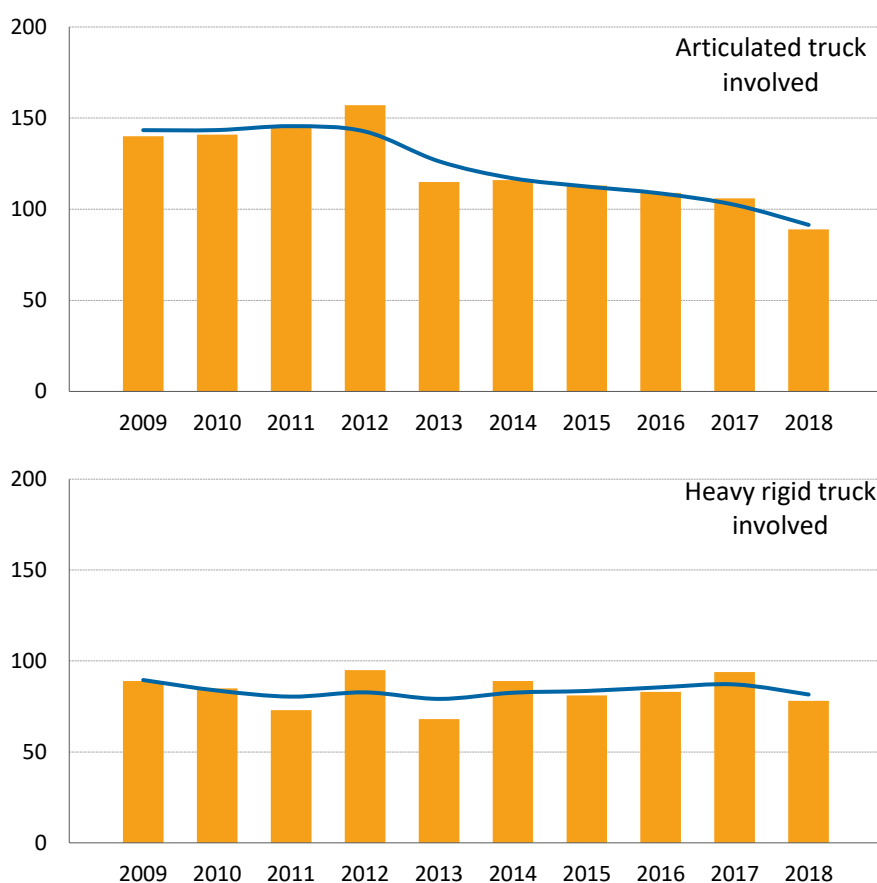
Figure I.1 Annual deaths in crashes involving heavy trucks—with trends

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

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Any heavy truck involved									
2009	70	39	54	13	29	11	2	2	220
2010	77	57	39	8	26	8	1	2	218
2011	64	42	52	19	24	5	7	1	214
2012	73	45	70	17	31	6	3	2	247
2013	55	28	48	15	27	2	4	0	179
2014	52	56	39	27	22	6	0	2	204
2015	57	41	43	18	22	8	1	1	191
2016	56	40	38	18	22	7	5	1	187
2017	81	38	29	11	24	7	1	0	191
2018	54	24	46	10	19	4	0	2	159
Change last 12 months (%)	-33.3	-36.8	58.6	-9.1	-20.8	-42.9	-100.0	-	-16.8
Ave. trend change p.a.(%)									
- for last 10 calendar years	-2.1	-4.2	-4.0	0.2	-3.6	-3.8	-	-	-3.1
- for last 5 calendar years	4.4	-16.2	-0.6	-22.0	-2.0	-9.0	-	-	-4.9
Articulated truck involved									
2009	47	20	38	11	13	9	2	0	140
2010	51	37	29	7	12	3	1	1	141
2011	47	23	39	13	18	2	3	0	145
2012	50	30	45	10	17	3	2	0	157
2013	32	15	35	11	16	2	4	0	115
2014	31	27	31	12	10	3	0	2	116
2015	34	21	28	15	11	3	0	1	113
2016	26	22	25	11	13	6	5	1	109
2017	49	20	19	6	11	1	0	0	106
2018	26	14	29	6	12	2	0	0	89
Change last 12 months (%)	-46.9	-30.0	52.6	0.0	9.1	100.0	0.0	0.0	-16.0
Ave. trend change p.a.(%)									
- for last 10 calendar years	-5.7	-4.9	-5.4	-3.6	-2.8	-8.9	-	-	-5.0
- for last 5 calendar years	0.1	-12.7	-5.1	-20.6	3.7	-17.4	-	-	-5.8
Heavy rigid truck involved									
2009	28	21	17	2	17	2	0	2	89
2010	27	22	14	2	14	5	0	1	85
2011	18	20	14	6	6	4	4	1	73
2012	24	15	27	7	15	4	1	2	95
2013	26	13	13	4	12	0	0	0	68
2014	22	29	8	15	12	3	0	0	89
2015	25	20	16	3	11	5	1	0	81
2016	32	19	13	7	10	2	0	0	83
2017	35	20	11	5	16	6	1	0	94
2018	31	10	20	5	8	2	0	2	78
Change last 12 months (%)	-11.4	-50.0	81.8	0.0	-50.0	-66.7	-100.0	-	-17.0
Ave. trend change p.a.(%)									
- for last 10 calendar years	3.4	-3.5	-1.6	9.0	-2.5	-	-	-	0.0
- for last 5 calendar years	10.8	-19.2	15.7	-15.5	-4.3	-6.1	-	-	-1.1

Table I.3 Deaths from crashes involving heavy trucks by road user

	<i>Heavy truck occupant^a</i>	<i>Light vehicle occupant^a</i>	<i>Pedestrian</i>	<i>Motor- cyclist^b</i>	<i>Pedal cyclist^b</i>	<i>Total^c</i>
Any heavy truck involved						
2009	53	123	27	13	4	220
2010	34	137	19	16	11	218
2011	34	129	32	12	6	214
2012	40	148	31	20	3	247
2013	25	104	27	12	8	179
2014	35	117	20	22	7	204
2015	34	119	16	12	9	191
2016	36	113	13	17	6	187
2017	31	107	24	19	4	191
2018	36	87	14	11	10	159
Change last 12 months (%)	16.1	-18.7	-41.7	-42.1	150.0	-16.8
Ave. trend change p.a.(%)						
- for last 10 calendar years	-2.4	-3.6	-6.5	0.3	2.7	-3.1
- for last 5 calendar years	-0.4	-6.7	-3.0	-8.9	-1.0	-4.9
Articulated truck involved						
2009	39	79	19	3	0	140
2010	24	89	14	7	6	141
2011	27	90	20	6	2	145
2012	35	93	18	8	0	157
2013	21	70	13	6	2	115
2014	24	68	9	9	3	116
2015	28	67	9	5	3	113
2016	23	68	6	7	4	109
2017	18	67	10	5	1	106
2018	26	52	3	4	3	89
Change last 12 months (%)	44.4	-22.4	-70.0	-20.0	200.0	-16.0
Ave. trend change p.a.(%)						
- for last 10 calendar years	-4.2	-4.8	-15.3	0.0	-	-5.0
- for last 5 calendar years	-2.8	-5.2	-18.9	-15.0	-10.4	-5.8
Heavy rigid truck involved						
2009	18	47	10	10	4	89
2010	12	52	7	9	5	85
2011	8	41	13	6	4	73
2012	7	57	14	12	3	95
2013	7	35	14	6	6	68
2014	11	50	11	13	4	89
2015	9	52	7	7	6	81
2016	17	46	7	10	2	83
2017	16	44	15	15	3	94
2018	16	37	11	7	7	78
Change last 12 months (%)	0.0	-15.9	-26.7	-53.3	133.3	-17.0
Ave. trend change p.a.(%)						
- for last 10 calendar years	3.7	-1.6	0.5	1.3	-0.2	0.0
- for last 5 calendar years	14.2	-7.4	7.9	-4.6	4.4	-1.1

a Includes drivers/passengers

b Includes pillion passengers.

c Includes road users not separately specified (eg. bus occupants or unknown road user)

Table I.4 Deaths by crash type for crashes involving an Articulated truck

	<i>Single vehicle crash</i>				<i>Total</i>
	<i>Non-collision (Curve)</i>	<i>Non-collision (Straight)</i>	<i>Pedestrian</i>	<i>Other</i>	
2009	19	7	7	4	37
2010	9	4	3	4	20
2011	9	10	8	4	31
2012	11	10	10	3	34
2013	4	5	9	0	18
2014	10	7	5	0	22
2015	11	6	3	2	22
2016	6	7	3	0	16
2017	5	8	3	0	16
2018	10	3	1	0	14
<i>Change last 12 months (%)</i>	100.0	-62.5	-66.7	0.0	-12.5
<i>Ave. trend change p.a.(%)</i>					
- for last 10 calendar years	-6.5	-3.4	-14.9	-	-8.5
- for last 5 calendar years	-7.6	-13.1	-27.5	-	-11.5

	<i>Multiple vehicle crash</i>				<i>Total</i>
	<i>Opposing Directions</i>	<i>Same Directions</i>	<i>Adjacent Directions</i>	<i>Other</i>	
2009	45	14	7	37	103
2010	55	11	20	35	121
2011	46	22	12	34	114
2012	63	13	14	33	123
2013	52	17	13	15	97
2014	36	18	12	28	94
2015	46	11	12	22	91
2016	55	15	12	11	93
2017	41	21	8	20	90
2018	31	17	9	18	75
<i>Change last 12 months (%)</i>	-24.4	-19.0	12.5	-10.0	-16.7
<i>Ave. trend change p.a.(%)</i>					
- for last 10 calendar years	-3.5	2.4	-2.8	-9.6	-4.1
- for last 5 calendar years	-4.1	5.5	-9.3	-9.3	-4.5

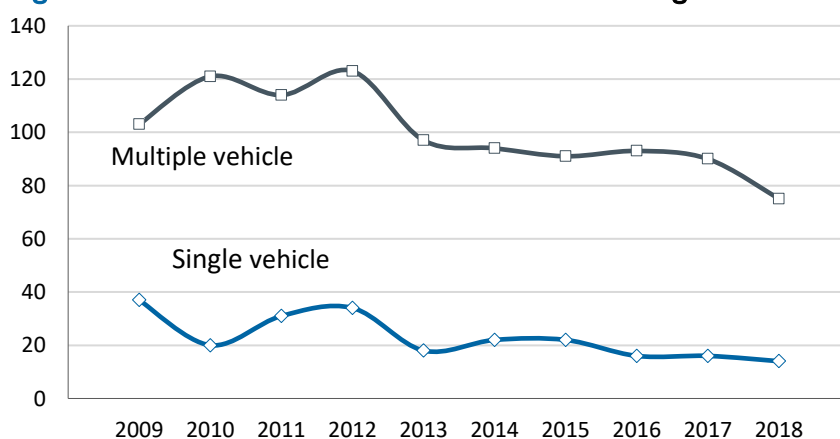
Figure I.2 Annual deaths in crashes involving an Articulated truck

Table I.5 Deaths by crash type for crashes involving a Heavy rigid truck

	<i>Single vehicle crash</i>				<i>Total</i>
	<i>Non-collision (Curve)</i>	<i>Non-collision (Straight)</i>	<i>Pedestrian</i>	<i>Other</i>	
2009	4	4	3	1	12
2010	2	3	2	1	8
2011	3	2	6	1	12
2012	1	1	9	1	12
2013	1	2	8	0	11
2014	1	4	5	0	10
2015	2	1	5	4	12
2016	4	4	4	1	13
2017	7	3	4	2	16
2018	3	4	3	1	11
Change last 12 months (%)	-57.1	33.3	-25.0	-50.0	-31.3
Ave. trend change p.a.(%)					
- for last 10 calendar years	6.1	2.6	0.4	-	2.7
- for last 5 calendar years	41.2	11.6	-11.7	-	4.9

	<i>Multiple vehicle crash</i>				<i>Total</i>
	<i>Opposing Directions</i>	<i>Same Directions</i>	<i>Adjacent Directions</i>	<i>Other</i>	
2009	36	8	16	17	77
2010	37	12	12	16	77
2011	19	8	17	17	61
2012	37	13	12	21	83
2013	21	11	6	19	57
2014	32	13	14	20	79
2015	27	16	11	15	69
2016	40	13	7	10	70
2017	29	19	8	22	78
2018	30	14	7	16	67
Change last 12 months (%)	3.4	-26.3	-12.5	-27.3	-14.1
Ave. trend change p.a.(%)					
- for last 10 calendar years	-0.1	7.2	-8.2	-1.2	-0.4
- for last 5 calendar years	-0.6	3.3	-15.7	-0.6	-2.0

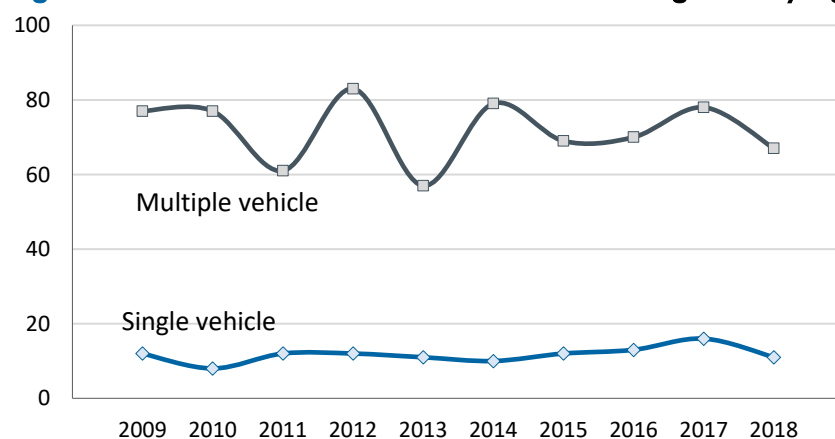
Figure I.3 Annual deaths in crashes involving a Heavy rigid truck

Table I.6 Deaths from crashes involving heavy trucks by posted 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 truck involved							
2009	0	6	8	18	73	35	140
2010	1	4	18	26	72	19	141
2011	2	6	12	31	62	31	145
2012	2	3	15	27	71	39	157
2013	1	2	12	26	47	27	115
2014	0	1	12	16	59	26	116
2015	0	3	13	17	53	24	113
2016	0	4	5	21	47	30	109
2017	2	5	7	18	43	30	106
2018	0	3	8	13	40	24	89
Change last 12 months (%)	-100.0	-40.0	14.3	-27.8	-7.0	-20.0	-16.0
Ave. trend change p.a.(%)							
- for last 10 calendar years	-	-4.4	-6.7	-5.5	-6.5	-1.1	-5.0
- for last 5 calendar years	-	31.1	-13.3	-3.5	-9.4	0.6	-5.8
Heavy rigid truck involved							
2009	2	7	11	23	32	10	89
2010	0	7	13	24	30	9	85
2011	2	6	11	22	25	6	73
2012	3	9	19	15	29	15	95
2013	0	5	19	15	26	3	68
2014	0	4	21	18	28	17	89
2015	2	4	13	22	32	6	81
2016	1	4	10	30	27	11	83
2017	3	13	12	23	30	12	94
2018	1	8	17	16	25	9	78
Change last 12 months (%)	-66.7	-38.5	41.7	-30.4	-16.7	-25.0	-17.0
Ave. trend change p.a.(%)							
- for last 10 calendar years	-	0.5	1.1	-0.4	-0.9	1.9	0.0
- for last 5 calendar years	-	29.2	-4.9	-1.9	-2.9	-5.6	-1.1

a Includes crashes where speed limit is unknown or where the posted speed limit is 30km/hr or less.

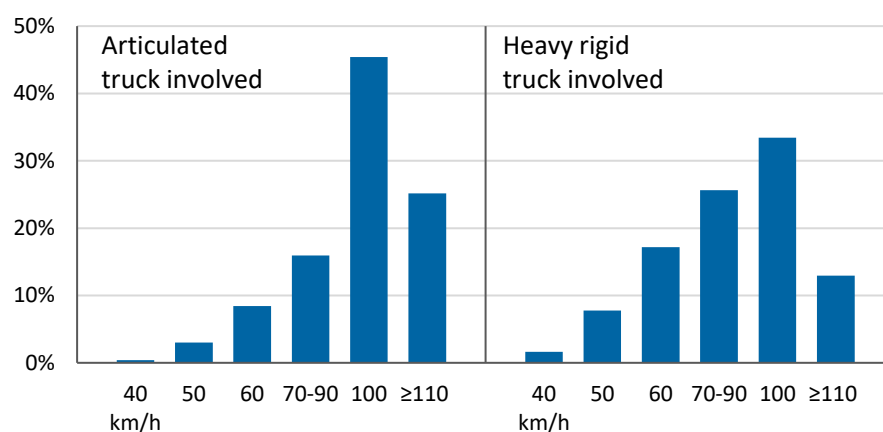
Figure I.4 Distribution of deaths by posted speed zone—five years to 2018

Table I.7 Deaths from crashes involving heavy trucks by Remoteness Area^a

	Major cities	Inner regional	Outer regional	Remote	Very remote	Total ^b
Articulated truck involved						
2009	25	52	41	17	5	140
2010	28	54	47	8	4	141
2011	39	54	40	6	6	145
2012	26	63	50	11	7	157
2013	22	49	26	11	7	115
2014	18	52	36	5	5	116
2015	18	47	35	8	5	113
2016	22	33	42	6	6	109
2017	24	34	41	2	5	106
2018	13	32	36	5	3	89
Change last 12 months (%)	-45.8	-5.9	-12.2	150.0	-40.0	-16.0
Ave. trend change p.a.(%)						
- for last 10 calendar years	-6.5	-6.4	-1.6	-12.7	-2.6	-5.0
- for last 5 calendar years	-3.6	-12.1	1.6	-12.9	-9.7	-5.8
Heavy rigid truck involved						
2009	42	23	19	2	3	89
2010	34	36	13	1	1	85
2011	21	29	19	3	1	73
2012	29	30	27	2	5	95
2013	38	16	12	1	1	68
2014	36	30	21	1	1	89
2015	33	22	20	5	1	81
2016	37	28	14	1	3	83
2017	40	27	19	6	2	94
2018	36	18	19	2	3	78
Change last 12 months (%)	-10.0	-33.3	0.0	-66.7	50.0	-17.0
Ave. trend change p.a.(%)						
- for last 10 calendar years	1.8	-2.8	0.5	6.1	3.4	0.0
- for last 5 calendar years	1.9	-7.8	-2.5	17.0	33.5	-1.1

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

b Includes undetermined Remoteness Area.

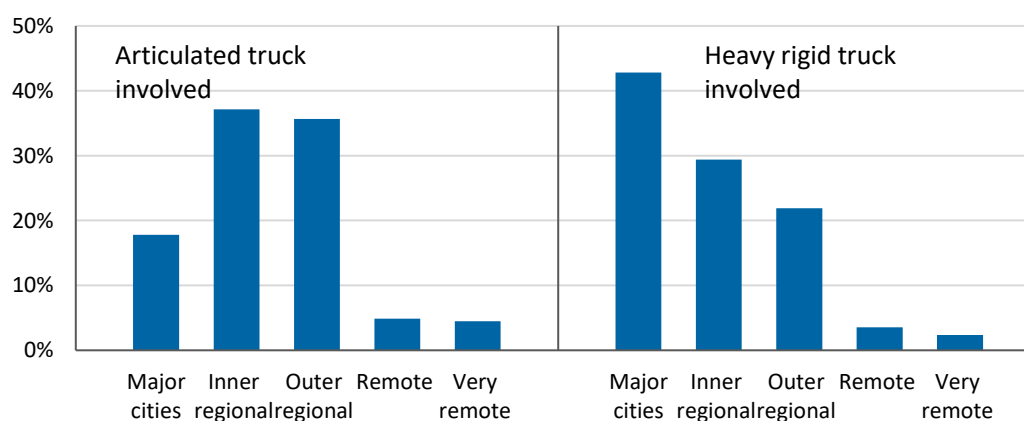
Figure I.5 Distribution of deaths by Remoteness Area—five years to 2018

Table I.8 Deaths from crashes involving heavy trucks by Significant Urban Area (SUA)^a

	Urban area	Non-urban area	Total ^b
Articulated truck involved			
2009	39	101	140
2010	49	92	141
2011	55	90	145
2012	38	119	157
2013	31	84	115
2014	29	87	116
2015	37	76	113
2016	37	72	109
2017	33	73	106
2018	20	69	89
Change last 12 months (%)	-39.4	-5.5	-16.0
Ave. trend change p.a.(%)			
- for last 10 calendar years	-6.4	-4.4	-5.0
- for last 5 calendar years	-8.2	-4.9	-5.8
Heavy rigid truck involved			
2009	49	40	89
2010	50	35	85
2011	31	42	73
2012	47	46	95
2013	41	27	68
2014	39	50	89
2015	44	37	81
2016	54	29	83
2017	52	42	94
2018	37	41	78
Change last 12 months (%)	-28.8	-2.4	-17.0
Ave. trend change p.a.(%)			
- for last 10 calendar years	0.2	-0.2	0.0
- for last 5 calendar years	0.6	-2.7	-1.1

a 'Urban area' classified as per Australian Statistical Geography Standard (ASGS). See Glossary for more information.

b Includes those crashes (< 1%) with unknown location.

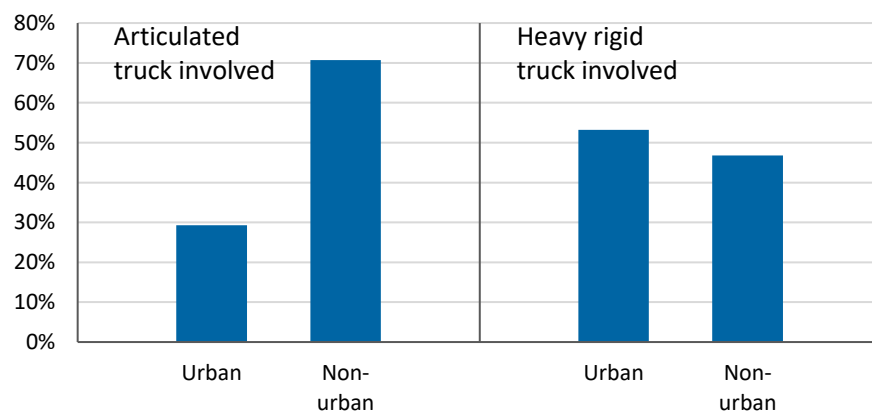
Figure I.6 Distribution of deaths by Significant Urban Area—five years to 2018

Table I.9 Deaths from crashes involving heavy trucks by road type^a

	National or State highway	Arterial	Sub-arterial	Collector	Local	Other ^b	Total ^c
Articulated truck involved							
2009	80	28	16	1	12	3	140
2010	85	22	14	2	17	1	141
2011	94	24	15	1	8	3	145
2012	112	22	8	4	10	1	157
2013	71	24	6	5	8	1	115
2014	76	20	13	4	2	1	116
2015	73	21	10	3	6	0	113
2016	64	22	10	5	7	1	109
2017	66	20	5	3	12	0	106
2018	57	9	7	4	11	1	89
Change last 12 months (%)	-13.6	-55.0	40.0	33.3	-8.3	-	-16.0
Ave. trend change p.a.(%)							
- for last 10 calendar years	-4.7	-6.8	-8.8	14.5	-4.0	-	-5.0
- for last 5 calendar years	-6.5	-15.2	-17.6	0.0	50.7	-	-5.8
Heavy rigid truck involved							
2009	39	17	14	2	17	0	89
2010	45	19	6	7	8	0	85
2011	21	21	15	3	13	0	73
2012	39	19	11	5	19	2	95
2013	32	16	9	3	6	2	68
2014	27	33	13	6	10	0	89
2015	31	21	10	8	11	0	81
2016	32	26	12	4	9	0	83
2017	34	28	12	2	16	2	94
2018	29	21	8	8	10	2	78
Change last 12 months (%)	-14.7	-25.0	-33.3	300.0	-37.5	0.0	-17.0
Ave. trend change p.a.(%)							
- for last 10 calendar years	-2.0	4.1	-0.7	4.5	-1.7	-	0.0
- for last 5 calendar years	2.4	-6.0	-7.6	-7.8	3.8	-	-1.1

a [PSMA Transport Hierarchy](#)

b Includes Access road, Path, Busway and Pedestrian thoroughfare.

c Includes crashes with undetermined road type.

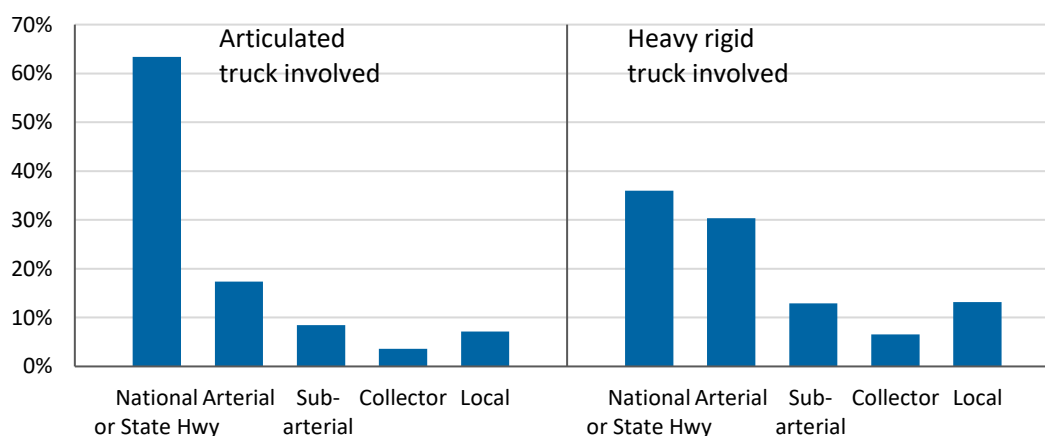
Figure I.7 Distribution of deaths by road type—five years to 2018

Table I.10 Deaths and hospitalised injuries of heavy truck occupants^a

<i>Financial year</i>	<i>Deaths Heavy truck occupants</i>	<i>Hospitalised Injury (HI) Heavy truck occupants</i>	<i>High-threat-to-life (HTTL) Injury Heavy truck occupants</i>
2007-08	-	497	143
2008-09	49	517	165
2009-10	41	454	145
2010-11	32	499	158
2011-12	34	556	181
2012-13 ^b	35	481	156
2013-14	38	500	181
2014-15	29	489	159
2015-16 ^c	36	492	161
2016-17	35	531	181
2017-18	36	-	-

a Drivers and passengers

b Due to a break in the hospitalised injury series in 2012, data from 2012-13 onwards is not directly comparable with previous years. Victoria changed case inclusion criteria to exclude cases cared for solely in Emergency Departments from 1 July 2012. NISU estimates that this decreased admitted case in Australia by 2000 cases (-5.6 per cent) in 2012-13 compared to 2011-12, with the reduction likely to differ by road user group.

Sources AIHW and BITRE 2019

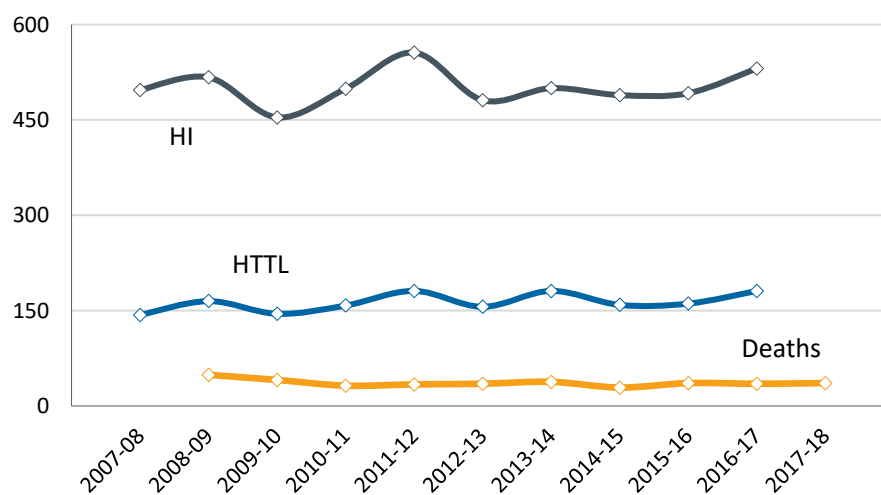
Figure I.8 Deaths and hospitalised injuries in crashes involving heavy trucks

Table I.11 Fatal crashes involving heavy trucks by state/territory

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Any heavy truck involved									
2009	54	35	51	11	25	10	2	2	190
2010	62	49	34	8	23	7	1	2	186
2011	58	34	44	18	21	5	5	1	186
2012	61	43	56	15	26	4	3	2	210
2013	51	25	37	12	24	2	3	0	154
2014	49	48	33	20	20	5	0	2	177
2015	52	39	37	14	20	7	1	1	171
2016	51	36	35	14	20	5	4	1	166
2017	68	37	27	11	23	7	1	0	174
2018	48	23	38	9	17	4	0	2	141
Change last 12 months (%)	-29.4	-37.8	40.7	-18.2	-26.1	-42.9	-100.0	-	-19.0
Ave. trend change p.a.(%)									
- for last 10 calendar years	-1.0	-3.0	-4.0	-0.3	-2.8	-3.4	-	-	-2.5
- for last 5 calendar years	2.3	-14.1	-0.3	-16.8	-1.8	-4.4	-	-	-4.3
Articulated truck involved									
2009	33	17	36	9	11	8	2	0	116
2010	41	32	25	7	12	3	1	1	122
2011	43	21	32	12	16	2	3	0	129
2012	39	29	35	9	13	3	2	0	130
2013	30	13	26	8	13	2	3	0	95
2014	28	25	25	10	9	2	0	2	101
2015	31	21	23	12	11	2	0	1	101
2016	22	20	23	10	11	4	4	1	95
2017	39	20	17	6	10	1	0	0	93
2018	23	13	25	5	10	2	0	0	78
Change last 12 months (%)	-41.0	-35.0	47.1	-16.7	0.0	100.0	0.0	0.0	-16.1
Ave. trend change p.a.(%)									
- for last 10 calendar years	-4.6	-3.7	-5.3	-3.7	-2.9	-10.3	-	-	-4.6
- for last 5 calendar years	-1.6	-12.7	-3.0	-18.8	1.2	-6.7	-	-	-5.8
Heavy rigid truck involved									
2009	26	20	16	2	15	2	0	2	83
2010	22	19	11	2	11	4	0	1	70
2011	16	14	13	6	5	4	2	1	61
2012	23	14	23	6	14	2	1	2	85
2013	24	12	11	4	12	0	0	0	63
2014	22	23	8	10	11	3	0	0	77
2015	22	18	15	2	9	5	1	0	72
2016	30	17	12	4	10	2	0	0	75
2017	31	19	11	5	16	6	1	0	89
2018	27	10	15	5	8	2	0	2	69
Change last 12 months (%)	-12.9	-47.4	36.4	0.0	-50.0	-66.7	-100.0	-	-22.5
Ave. trend change p.a.(%)									
- for last 10 calendar years	3.5	-2.3	-1.6	6.4	-0.6	-	-	-	0.5
- for last 5 calendar years	7.8	-14.9	9.9	-4.6	-0.6	-6.1	-	-	-0.1

Table I.12 Annual fatal crashes per 10,000 heavy truck registrations

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Any heavy truck involved									
2009	5.5	3.5	5.8	3.7	4.2	10.2	4.3	10.4	4.8
2010	6.2	4.8	3.8	2.6	3.8	7.0	2.0	10.6	4.7
2011	5.6	3.3	5.0	5.7	3.4	4.9	9.6	5.2	4.6
2012	5.9	4.2	6.2	4.7	4.1	3.9	5.7	10.4	5.1
2013	4.8	2.4	4.0	3.8	3.6	1.9	5.4	0.0	3.7
2014	4.6	4.6	3.5	6.4	2.9	4.9	0.0	10.8	4.2
2015	4.7	3.7	4.0	4.5	2.9	6.7	1.7	5.6	4.0
2016	4.5	3.4	3.8	4.5	2.9	4.7	6.7	5.6	3.9
2017	5.8	3.4	2.9	3.5	3.3	6.5	1.7	0.0	4.0
2018	4.0	2.1	4.0	2.8	2.5	3.6	0.0	11.2	3.1
Change last 12 months (%)	-31.4	-39.4	37.4	-18.1	-25.7	-44.7	-100.0	-	-20.5
Ave. trend change p.a.(%)									
- for last 10 calendar years	-3.0	-4.1	-4.9	-0.8	-4.7	-4.5	-	-	-3.9
- for last 5 calendar years	-0.9	-15.6	-0.8	-17.0	-1.7	-6.3	-	-	-5.6
Articulated truck involved									
2009	19.5	7.1	19.5	12.8	9.2	47.6	21.1	0.0	14.3
2010	24.3	13.1	13.4	9.6	9.8	18.3	9.7	51.0	14.8
2011	23.1	8.4	16.9	15.3	12.7	11.9	28.1	0.0	15.0
2012	20.5	11.5	17.9	11.2	9.8	18.5	18.2	0.0	14.8
2013	15.4	5.1	12.5	10.0	9.1	12.8	25.4	0.0	10.5
2014	14.1	9.6	11.6	12.0	6.0	12.6	0.0	136.1	10.8
2015	15.0	8.0	10.9	14.2	7.0	12.1	0.0	69.9	10.6
2016	10.3	7.5	11.1	11.9	7.0	23.2	31.8	62.5	9.9
2017	17.4	7.3	8.0	6.9	6.6	5.5	0.0	0.0	9.5
2018	10.1	4.6	11.3	5.7	6.5	10.5	0.0	0.0	7.7
Change last 12 months (%)	-41.9	-37.2	41.1	-18.2	-0.8	90.3	0.0	0.0	-18.3
Ave. trend change p.a.(%)									
- for last 10 calendar years	-7.8	-5.3	-7.1	-5.8	-6.1	-11.4	-	-	-6.8
- for last 5 calendar years	-5.1	-14.6	-3.5	-19.9	1.0	-10.8	-	-	-7.4
Heavy rigid truck involved									
2009	3.2	2.6	2.3	0.9	3.2	2.4	0.0	11.8	2.7
2010	2.6	2.5	1.6	0.9	2.3	4.8	0.0	5.9	2.2
2011	1.9	1.8	1.9	2.5	1.0	4.7	4.9	5.8	1.9
2012	2.7	1.8	3.3	2.5	2.8	2.3	2.4	11.5	2.6
2013	2.8	1.5	1.5	1.7	2.3	0.0	0.0	0.0	1.9
2014	2.5	2.9	1.1	4.3	2.0	3.4	0.0	0.0	2.3
2015	2.5	2.3	2.1	0.9	1.7	5.7	2.2	0.0	2.2
2016	3.3	2.1	1.7	1.7	1.8	2.3	0.0	0.0	2.2
2017	3.3	2.3	1.5	2.2	3.0	6.7	2.2	0.0	2.6
2018	2.8	1.2	2.0	2.2	1.5	2.2	0.0	12.4	2.0
Change last 12 months (%)	-15.6	-48.5	33.9	0.8	-49.5	-67.6	-100.0	-	-23.8
Ave. trend change p.a.(%)									
- for last 10 calendar years	1.6	-3.2	-2.2	6.5	-2.1	-	-	-	-0.7
- for last 5 calendar years	4.6	-16.2	9.4	-4.5	-0.4	-7.5	-	-	-1.4

Source National Crash Database; Australian Bureau of Statistics 2019

Table I.13 Annual fatal crashes per billion heavy truck vehicle—kilometres travelled (VKT)

	<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>Any heavy truck involved</i>									
2009	10.7	9.8	14.7	9.7	14.2	27.5	12.8	22.8	12.2
2010	12.1	13.3	9.6	6.9	12.5	19.1	6.3	22.7	11.7
2011	11.1	9.0	12.0	15.1	10.9	13.4	31.3	10.9	11.3
2012	11.5	11.0	14.6	12.2	13.1	10.8	18.5	21.2	12.4
2013	9.5	6.3	9.3	9.7	11.5	5.4	18.1	0.0	8.9
2014	8.9	11.9	8.1	16.0	9.2	13.5	0.0	20.6	10.0
2015	9.2	9.5	9.0	11.2	9.1	18.5	5.8	10.0	9.5
2016	8.8	8.6	8.4	11.0	9.0	12.9	23.2	9.7	9.1
2017	11.5	8.6	6.3	8.5	10.3	17.8	5.7	0.0	9.3
2018	8.0	5.2	8.7	7.0	7.6	9.9	0.0	18.1	7.4
Change last 12 months (%)	-30.7	-39.6	37.2	-18.5	-26.1	-44.3	-100.0	-	-20.5
Ave. trend change p.a.(%)								-	
- for last 10 calendar years	-2.9	-5.2	-6.5	-1.7	-5.5	-4.4	-	-	-4.6
- for last 5 calendar years	0.1	-16.0	-2.1	-17.6	-2.6	-6.4	-	-	-6.0
<i>Articulated truck involved</i>									
2009	14.6	10.7	24.9	15.2	15.3	54.3	28.2	0.0	17.0
2010	18.0	19.8	17.0	11.7	16.1	20.2	13.9	63.2	17.6
2011	18.3	12.6	20.9	19.2	20.1	13.2	41.4	0.0	17.9
2012	16.3	16.9	21.7	13.9	15.3	20.0	27.1	0.0	17.4
2013	12.3	7.5	15.4	12.2	14.4	13.5	39.5	0.0	12.4
2014	11.3	14.1	14.4	15.1	9.5	13.5	0.0	116.1	12.9
2015	12.0	11.7	13.3	18.2	11.6	13.0	0.0	55.7	12.7
2016	8.5	11.0	13.2	14.8	11.7	25.4	50.7	53.3	11.8
2017	14.8	10.9	9.6	8.8	10.6	6.2	0.0	0.0	11.4
2018	8.7	7.0	14.0	7.2	10.4	12.2	0.0	0.0	9.5
Change last 12 months (%)	-41.3	-35.9	45.1	-17.6	-1.9	95.6	0.0	0.0	-17.1
Ave. trend change p.a.(%)									
- for last 10 calendar years	-6.4	-5.5	-7.6	-5.3	-6.1	-11.3	-	-	-6.6
- for last 5 calendar years	-3.1	-13.8	-3.7	-19.8	0.8	-9.0	-	-	-6.9
<i>Heavy rigid truck involved</i>									
2009	9.4	10.1	7.9	3.7	14.3	9.3	0.0	27.8	8.8
2010	7.8	9.2	5.3	3.6	10.0	18.4	0.0	13.8	9.0
2011	5.5	6.6	6.1	10.5	4.4	18.1	23.0	13.2	9.2
2012	7.9	6.4	10.3	10.3	12.3	9.1	11.3	25.7	9.4
2013	8.1	5.4	4.8	6.9	10.1	0.0	0.0	0.0	9.6
2014	7.3	10.1	3.4	17.0	8.9	13.5	0.0	0.0	9.8
2015	7.1	7.8	6.3	3.4	7.2	22.2	10.7	0.0	10.0
2016	9.4	7.1	4.9	6.7	7.8	8.7	0.0	0.0	10.3
2017	9.5	7.8	4.4	8.3	12.4	25.8	10.5	0.0	10.6
2018	8.0	3.9	5.8	8.3	6.3	8.4	0.0	22.1	10.9
Change last 12 months (%)	-15.4	-49.4	31.9	0.6	-49.4	-67.6	-100.0	-	3.4
Ave. trend change p.a.(%)									
- for last 10 calendar years	1.4	-4.8	-4.2	5.3	-2.9	-	-	-	2.4
- for last 5 calendar years	4.9	-17.3	7.2	-5.3	-1.6	-7.8	-	-	2.6

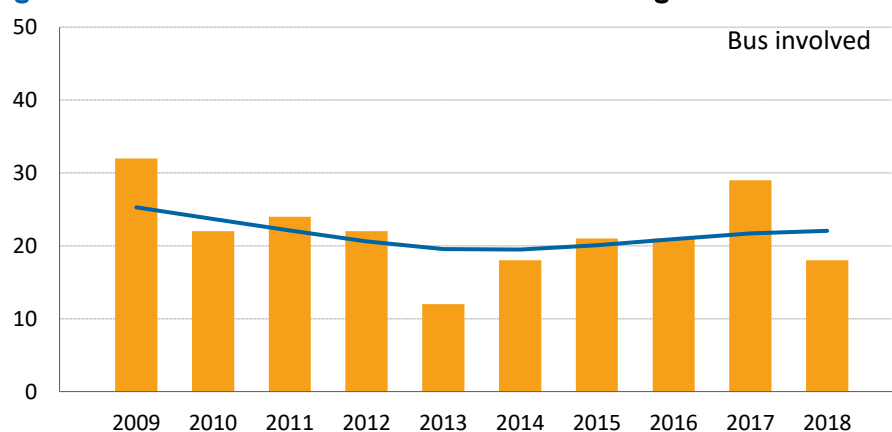
Source National Crash Database and BITRE Unpublished

Section 2

BUS

Table 2.1 Deaths from crashes involving a bus by state/territory

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Bus involved									
2009	9	9	10	2	1	1	0	0	32
2010	9	2	4	3	1	1	1	1	22
2011	11	4	8	0	1	0	0	0	24
2012	6	3	7	1	5	0	0	0	22
2013	2	3	6	0	0	0	1	0	12
2014	6	4	1	1	6	0	0	0	18
2015	5	7	2	1	2	1	3	0	21
2016	9	2	3	3	2	0	2	0	21
2017	6	10	10	0	2	0	1	0	29
2018	7	5	5	0	1	0	0	0	18
Change last 12 months (%)	16.7	-50.0	-50.0	0.0	-50.0	0.0	-100.0	0.0	-37.9
Ave. trend change p.a.(%)									
- for last 10 calendar years	-3.3	3.3	-6.0	-	-	-	-	-	-2.2
- for last 5 calendar years	5.0	8.4	62.1	-	-30.1	-	-	0.0	3.3

Figure 2.1 Annual deaths in crashes involving a bus—with trend**Table 2.2** Deaths from crashes involving a bus by road user

	Bus occupant	Other occupant	Pedestrian	Motorcyclist ^b	Pedal cyclist ^b	Total ^c
2009	10	11	8	2	1	32
2010	3	7	3	8	1	22
2011	2	5	13	2	2	24
2012	5	9	6	2	0	22
2013	0	6	1	2	3	12
2014	5	5	4	1	3	18
2015	4	13	2	2	0	21
2016	3	8	7	3	0	21
2017	12	5	10	1	1	29
2018	0	6	8	2	2	18
Change last 12 months (%)	-100.0	20.0	-20.0	100.0	100.0	-37.9
Ave. trend change p.a.(%)						
- for last 10 calendar years	-	-2.7	2.1	-7.7	-	-2.2
- for last 5 calendar years	-	-5.7	34.9	7.2	-	3.3

Table 2.3 Deaths by crash type for crashes involving a bus

	<i>Single vehicle crash</i>				<i>Total</i>
	<i>Pedestrian</i>	<i>Non-collision (Curve)</i>	<i>Non-collision (Straight)</i>	<i>Other</i>	
2009	2	2	6	1	11
2010	0	2	1	0	3
2011	6	1	0	0	7
2012	3	0	1	1	5
2013	0	0	0	0	0
2014	1	2	1	1	5
2015	2	0	1	0	3
2016	2	0	1	1	4
2017	6	4	0	2	12
2018	5	0	0	0	5
Change last 12 months (%)	-	-100.0	0.0	-100.0	-58.3
Ave. trend change p.a.(%)					
- for last 10 calendar years	-	-	-	-	-
- for last 5 calendar years	54.0	-	-	-	14.9

	<i>Multiple vehicle crash</i>				<i>Total</i>
	<i>Opposing Directions</i>	<i>Pedestrian</i>	<i>Adjacent Directions</i>	<i>Other</i>	
2009	7	3	5	6	21
2010	10	3	1	5	19
2011	6	6	4	1	17
2012	5	3	2	7	17
2013	4	0	2	6	12
2014	6	2	1	4	13
2015	12	0	2	4	18
2016	6	5	2	4	17
2017	3	3	6	5	17
2018	7	3	0	3	13
Change last 12 months (%)	133.3	0.0	-100.0	-40.0	-23.5
Ave. trend change p.a.(%)					
- for last 10 calendar years	-3.2	-	-	-0.8	-2.9
- for last 5 calendar years	-10.2	-	-	-3.5	-0.6

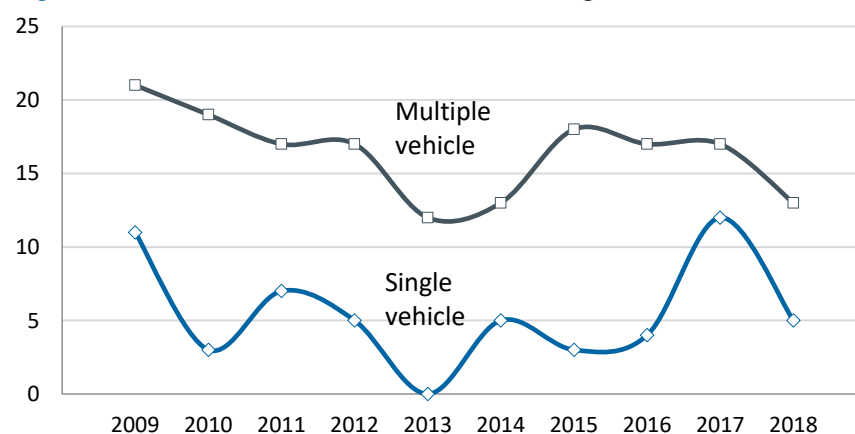
Figure 2.2 Deaths in crashes involving a bus

Table 2.4 Deaths from crashes involving a bus by posted speed zone

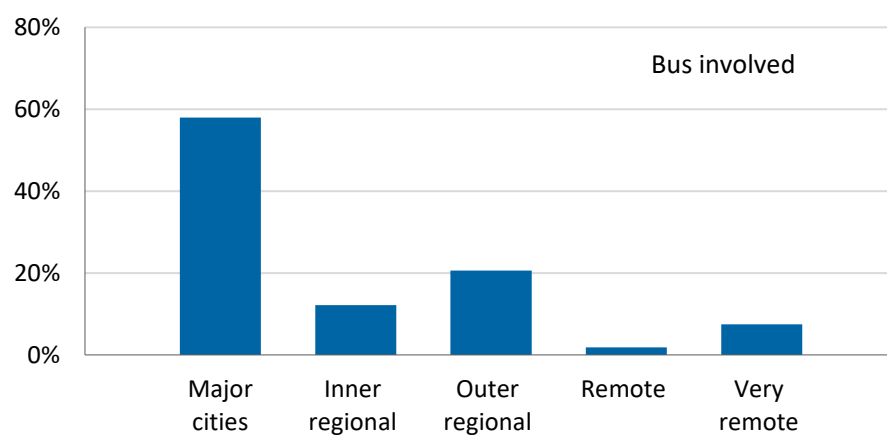
	40 km/h	50 km/h	60 km/h	70 to 90 km/h	100 km/h	≥110 km/h	Total ^a
2009	0	5	9	11	6	1	32
2010	0	2	10	6	3	0	22
2011	2	9	6	2	4	0	24
2012	1	3	9	4	1	4	22
2013	1	1	6	0	2	2	12
2014	0	2	6	2	3	5	18
2015	1	0	9	3	5	3	21
2016	1	4	11	1	2	2	21
2017	2	6	6	5	10	0	29
2018	2	4	3	3	4	1	18
Change last 12 months (%)	0.0	-33.3	-50.0	-40.0	-60.0	-	-37.9
Ave. trend change p.a.(%)							
- for last 10 calendar years	-	-	-6.1	-	4.0	-	-2.2
- for last 5 calendar years	-	-	-16.4	14.1	13.5	-	3.3

a Includes crashes where speed limit is unknown or where the posted speed limit is 30km/hr or less.

Table 2.5 Deaths from crashes involving a bus by Remoteness Area^a

	Major cities	Inner regional	Outer regional	Remote	Very remote	Total ^b
2009	10	9	11	2	0	32
2010	13	6	3	0	0	22
2011	19	3	1	1	0	24
2012	15	1	2	3	1	22
2013	6	3	2	0	1	12
2014	8	0	5	0	5	18
2015	9	4	8	0	0	21
2016	16	1	2	0	2	21
2017	18	5	4	1	1	29
2018	11	3	3	1	0	18
Change last 12 months (%)	-38.9	-40.0	-25.0	0.0	-100.0	-37.9
Ave. trend change p.a.(%)						
- for last 10 calendar years	0.6	-	-0.7	-	-	-2.2
- for last 5 calendar years	14.2	-	-15.8	-	-	3.3

a Includes undetermined remoteness regions.

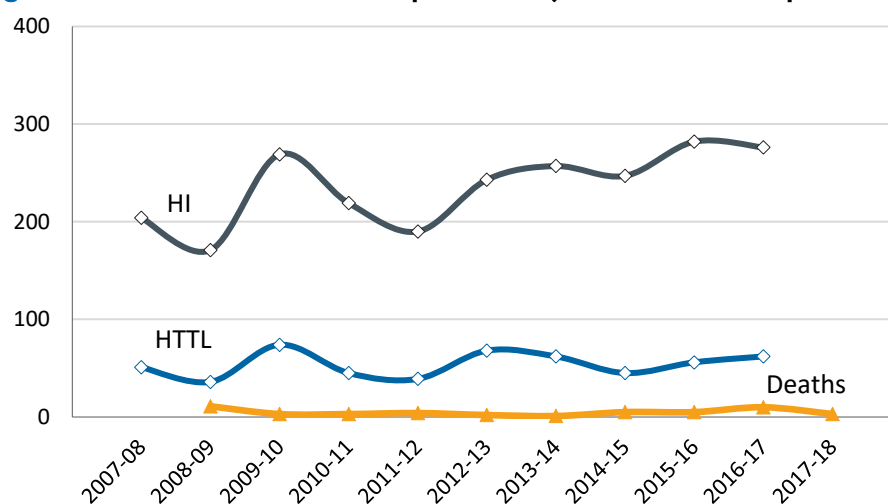
Figure 2.3 Distribution of deaths by Remoteness Area—five years to 2018**Table 2.6** Deaths and hospitalised injuries of bus occupants^a

<i>Financial year</i>	<i>Deaths Bus occupants</i>	<i>Hospitalised Injury (HI) Bus occupants</i>	<i>High-threat-to-life (HTTL) Injury Bus occupants</i>
2007-08	-	204	51
2008-09	11	171	36
2009-10	3	269	74
2010-11	3	219	45
2011-12	4	190	39
2012-13 ^b	2	243	68
2013-14	1	257	62
2014-15	5	247	45
2015-16 ^c	5	282	56
2016-17	10	276	62
2017-18	3	-	-

a Drivers and passengers

b Due to a break in the hospitalised injury series in 2012, data from 2012-13 onwards is not directly comparable with previous years. Victoria changed case inclusion criteria to exclude cases cared for solely in Emergency Departments from 1 July 2012. NISU estimates that this decreased admitted case in Australia by 2000 cases (-5.6 per cent) in 2012-13 compared to 2011-12, with the reduction likely to differ by road user group.

Sources AIHW and BITRE 2019

Figure 2.4 Deaths and hospitalised injuries of bus occupants

Table 2.7 Fatal crashes involving a bus by state/territory

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
2009	8	6	8	2	1	1	0	0	26
2010	9	2	3	3	1	1	1	0	21
2011	11	4	7	0	1	0	0	0	23
2012	6	3	6	1	3	0	0	0	19
2013	2	3	5	0	0	0	1	0	11
2014	6	3	1	1	3	0	0	0	14
2015	5	6	2	1	2	1	1	0	18
2016	9	2	3	3	2	0	1	0	20
2017	6	7	8	0	2	0	1	0	24
2018	7	5	5	0	1	0	0	0	18
Change last 12 months (%)	16.7	-28.6	-37.5	0.0	-50.0	0.0	-100.0	0.0	-25.0
Ave. trend change p.a.(%)									
- for last 10 calendar years	-2.7	3.5	-3.9	-	-	-	-	-	-1.8
- for last 5 calendar years	5.0	12.5	58.5	-	-19.7	-	-	-	8.2

Table 2.8 Annual fatal crashes rates—Bus involved

	<i>Per 10,000 bus registrations</i>	<i>Per billion bus VKT</i>
2009	3.1	12.2
2010	2.4	9.5
2011	2.6	10.1
2012	2.1	8.1
2013	1.2	4.6
2014	1.5	5.7
2015	1.9	7.3
2016	2.1	8.1
2017	2.5	9.6
2018	1.8	7.2
Change last 12 months (%)	-26.2	-25.6
Ave. trend change p.a.(%)		
- for last 10 calendar years	-3.5	-3.5
- for last 5 calendar years	7.0	7.4

Source National Crash Database; Australian Bureau of Statistics 2019 and BITRE Unpublished

This page is intentionally left blank.

Section 3

EXPOSURE

Table 3.1 Motor vehicles on register—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 truck									
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
2017	22,472	27,472	21,162	8,638	15,242	1,808	1,145	169	98,108
2018	22,795	28,456	22,061	8,797	15,368	1,900	1,149	168	100,694
Change last 12 months (%)	1.4	3.6	4.2	1.8	0.8	5.1	0.3	-0.6	2.6
Ave. trend change p.a.(%)									
- for last 10 calendar years	3.5	1.7	2.0	2.3	3.4	1.2	2.2	-2.7	2.4
- for last 5 calendar years	3.6	2.2	0.6	1.4	0.1	4.6	-2.1	4.4	1.7
Heavy rigid truck									
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
2017	94,933	81,460	72,544	23,096	53,899	8,999	4,633	1,614	341,179
2018	97,953	83,233	73,896	22,918	53,367	9,271	4,718	1,610	346,966
Change last 12 months (%)	3.2	2.2	1.9	-0.8	-1.0	3.0	1.8	-0.2	1.7
Ave. trend change p.a.(%)									
- for last 10 calendar years	1.9	0.9	0.6	-0.1	1.6	1.1	2.7	-0.8	1.2
- for last 5 calendar years	3.1	1.6	0.5	-0.1	-0.2	1.5	1.1	-1.3	1.3
Bus									
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
2017	26,761	20,626	21,361	5,766	14,746	2,859	3,768	1,043	96,930
2018	27,166	21,063	21,831	5,947	14,661	2,906	3,911	1,080	98,565
Change last 12 months (%)	1.5	2.1	2.2	3.1	-0.6	1.6	3.8	3.5	1.7
Ave. trend change p.a.(%)									
- for last 10 calendar years	2.2	1.6	1.5	1.8	1.6	1.7	1.4	0.1	1.7
- for last 5 calendar years	2.6	1.8	0.4	1.5	-1.3	2.4	-0.2	0.4	1.1

Source Australian Bureau of Statistics 2019

Table 3.2 Vehicle-kilometres-travelled (millions) by state/territory

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Articulated truck									
2009	2,255	1,586	1,448	591	717	147	71	16	6,832
2010	2,284	1,613	1,473	600	745	148	72	16	6,950
2011	2,346	1,664	1,531	624	797	151	72	16	7,202
2012	2,386	1,714	1,613	649	850	150	74	16	7,452
2013	2,432	1,731	1,692	656	901	148	76	17	7,652
2014	2,478	1,773	1,741	663	945	148	78	17	7,843
2015	2,575	1,790	1,725	658	945	154	80	18	7,945
2016	2,598	1,820	1,743	675	940	158	79	19	8,031
2017	2,630	1,842	1,763	685	945	160	79	19	8,123
2018	2,644	1,868	1,786	693	963	164	79	20	8,217
Change last 12 months (%)	0.5	1.4	1.3	1.1	1.9	2.3	0.6	2.3	1.2
Ave. trend change p.a.(%)									
- for last 10 calendar years	1.9	1.8	2.5	1.7	3.4	1.1	1.4	2.8	2.2
- for last 5 calendar years	1.5	1.3	0.7	1.3	0.4	2.5	0.2	3.6	1.2
Rigid truck									
2009	2,774	1,983	2,031	543	1,050	216	85	72	8,753
2010	2,834	2,063	2,066	553	1,099	217	87	72	8,991
2011	2,883	2,111	2,135	569	1,129	221	87	76	9,211
2012	2,923	2,185	2,233	580	1,141	220	89	78	9,447
2013	2,964	2,226	2,298	581	1,189	222	90	78	9,647
2014	3,008	2,269	2,351	587	1,234	222	92	80	9,843
2015	3,094	2,310	2,388	587	1,254	225	94	82	10,033
2016	3,186	2,379	2,449	594	1,285	230	93	85	10,300
2017	3,265	2,446	2,511	603	1,294	233	95	86	10,535
2018	3,362	2,544	2,597	600	1,278	239	97	91	10,807
Change last 12 months (%)	2.9	4.0	3.4	-0.6	-1.2	2.9	1.5	5.0	2.6
Ave. trend change p.a.(%)									
- for last 10 calendar years	2.1	2.6	2.8	1.1	2.4	1.0	1.4	2.5	2.3
- for last 5 calendar years	2.8	2.9	2.5	0.7	1.0	1.9	1.2	3.1	2.4
Bus									
2009	574	405	516	152	323	48	85	30	2,133
2010	584	428	539	156	330	49	86	31	2,203
2011	598	451	560	157	338	50	88	33	2,274
2012	616	482	583	159	348	50	89	34	2,360
2013	622	472	607	159	365	49	92	35	2,400
2014	628	473	620	159	382	50	94	36	2,441
2015	637	476	616	161	383	51	95	35	2,456
2016	646	482	620	163	385	52	97	36	2,480
2017	656	489	617	164	384	52	96	36	2,494
2018	666	497	615	164	385	53	96	37	2,514
Change last 12 months (%)	1.6	1.6	-0.3	0.0	0.3	1.9	-0.6	2.7	0.8
Ave. trend change p.a.(%)									
- for last 10 calendar years	1.6	1.9	2.0	0.8	2.2	1.0	1.6	2.1	1.8
- for last 5 calendar years	1.5	1.3	-0.1	0.9	0.2	1.4	0.5	0.7	0.7

Source BITRE Unpublished

Table 3.3 Licence holders—by state/territory

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Combination^a									
2010	132,514	154,384	131,176	49,325	-	15,129	9,653	4,050	-
2011	131,682	155,195	133,973	48,768	-	15,006	9,555	3,941	-
2012	131,962	156,037	135,525	48,652	-	14,585	9,610	3,877	-
2013	130,922	156,539	137,471	49,197	103,652	14,310	9,803	3,770	605,664
2014	130,540	156,012	136,178	49,046	103,845	14,143	10,516	3,714	603,994
2015	130,125	155,400	136,100	48,423	103,613	14,211	10,520	3,658	602,050
2016	129,917	155,565	136,721	48,042	102,434	14,299	10,521	3,612	601,111
2017	130,423	156,383	136,964	47,409	101,097	14,372	10,493	3,557	600,698
2018	130,510	158,164	137,015	47,081	99,030	14,351	10,406	3,385	599,942
Change last 12 months (%)	0.1	1.1	0.0	-0.7	-2.0	-0.1	-0.8	-4.8	-0.1
Ave. trend change p.a.(%)									
- for last 5 calendar years	0.0	0.3	0.2	-1.0	-1.2	0.4	-0.2	-2.1	-0.2
Heavy rigid truck^b									
2010	407,775	274,306	369,110	119,903		46,536	23,811	19,115	
2011	411,264	282,565	378,566	120,646		47,718	23,786	19,258	
2012	416,757	291,829	385,259	122,254		48,260	24,727	19,482	
2013	419,827	298,818	391,615	126,785	268,313	48,822	25,487	19,486	1,599,153
2014	423,460	303,957	390,245	129,102	268,941	49,359	27,657	19,565	1,612,286
2015	426,702	310,783	392,871	126,107	269,640	49,929	28,213	19,633	1,623,878
2016	432,039	317,353	397,383	124,606	268,667	50,723	28,396	19,884	1,639,051
2017	433,406	323,894	400,957	123,116	268,365	51,384	28,674	19,965	1,649,761
2018	436,309	330,882	404,299	123,130	267,513	51,927	29,089	19,728	1,662,877
Change last 12 months (%)	0.7	2.2	0.8	0.0	-0.3	1.1	1.4	-1.2	0.8
Ave. trend change p.a.(%)									
- for last 5 calendar years	0.8	2.1	0.9	-1.2	-0.2	1.3	1.2	0.3	0.8
Bus									
2010	407,775	274,306	369,110	119,903		46,536	23,811	19,115	
2011	411,264	282,565	378,566	120,646		47,718	23,786	19,258	
2012	416,757	291,829	385,259	122,254		48,260	24,727	19,482	
2013	419,827	298,818	391,615	126,785	268,313	48,822	25,487	19,486	1,599,153
2014	423,460	303,957	390,245	129,102	268,941	49,359	27,657	19,565	1,612,286
2015	426,702	310,783	392,871	126,107	269,640	49,929	28,213	19,633	1,623,878
2016	432,039	317,353	397,383	124,606	268,667	50,723	28,396	19,884	1,639,051
2017	433,406	323,894	400,957	123,116	268,365	51,384	28,674	19,965	1,649,761
2018	436,309	330,882	404,299	123,130	267,513	51,927	29,089	19,728	1,662,877
Change last 12 months (%)	0.7	2.2	0.8	0.0	-0.3	1.1	1.4	-1.2	0.8
Ave. trend change p.a.(%)									
- for last 5 calendar years	0.8	2.1	0.9	-1.2	-0.2	1.3	1.2	0.3	0.8

a Comprises 'MC' and 'HC' classes

b Comprises 'LR', 'MR' and 'HR' classes

Source BITRE 2019b

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>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.
<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>Significant Urban Areas (SUA)</i>	Aggregations of whole Statistical Area Level 2 (SA2) boundaries. 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.
<i>Trend per cent changes</i>	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.
<i>Trend estimation</i>	Trend lines presented are designed to track long-term trends and turning points in the raw data. Whittaker- Henderson smoothers have been used with value of 2 for the smoothing parameter. The application R (package pracma) can be used for such trend lines.

References

Australian Bureau of Statistics 2016, *Australian Statistical Geography Standard (ASGS) 2016* Cat No 1270.0.55.

Australian Bureau of Statistics 2019, *Motor vehicle census*, Jan 2019 Cat No 9309.0.

AIHW and BITRE 2019, Australian Institute of Health and Welfare, National Injury Surveillance Unit and Bureau of Infrastructure, Transport and Regional Economics, Hospitalisation Injuries series <<https://www.bitre.gov.au/publications/ongoing/hospitalised-injury>> .

BITRE 2019a, Bureau of Infrastructure, Transport and Regional Economics Unpublished, State and capital city vehicle kilometres travelled 2019.

BITRE 2019b, Bureau of Infrastructure, Transport and Regional Economics (BITRE), 2019, Yearbook 2019: Australian Infrastructure Statistics, Statistical Report, BITRE, Canberra ACT.

Henley G & Harrison JE 2015, *Trends in serious injury due to road vehicle traffic crashes, Australia 2001 to 2010*. Injury research and statistics series no. 89. Cat. no. INJCAT 165. Canberra: AIHW.

PSMA Australia Ltd. Transport and Topography Version 4.3 2015.