

Australian Government

Department of Infrastructure, Transport, Regional Development, Communications and the Arts

BUREAU OF INFRASTRUCTURE AND TRANSPORT RESEARCH ECONOMICS STATISTICAL REPORT



Road

Road Vehicles, Australia January 2023 (Re-issue)

August 2024

Bureau of Infrastructure and Transport Research Economics

Road Vehicles, Australia January 2023 (Re-issue)

Department of Infrastructure, Transport, Regional Development, Communications and the Arts The Department of Infrastructure, Transport, Regional Development, Communications and the Arts acknowledges the Traditional Custodians of Country of the land on which we work and live. We recognise and respect the continuing connections to land, waters and communities. We pay our respects to them and their cultures and to their Elders both past and present and to all Aboriginal and Torres Strait Islander people.

© Commonwealth of Australia 2024 ISSN: 2205-4235 August 2024

Cover photograph: Getty Images, AaronMcAuleyPhotography.

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/deed.en.

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 and Transport Research Economics (BITRE) 2024, *Motor Vehicles, Australia, January 2023*, BITRE, Canberra, Australia.

Contact us

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

Bureau of Infrastructure and Transport Research Economics (BITRE) Department of Infrastructure, Transport, Regional Development, Communications and the Arts GPO Box 501, Canberra ACT 2601, Australia Telephone: (international) +61 2 6274 7210 Email: bitre@infrastructure.gov.au Website: www.bitre.gov.au

Foreword

This report presents aggregate estimates of all road vehicles registered for road use in Australia on 31 January 2023. The estimates have been derived from state and territory vehicle registry data as recorded on the National Exchange of Vehicle and Driver Information System (NEVDIS), on 31 January 2023.

This is a re-issue of the second issue of a planned annual statistical release, and is intended as a replacement to the Australian Bureau of Statistics' (ABS) Motor Vehicle Census (MVC), which was discontinued in 2021. The re-issue features revisions to original estimates arising from further development and improvements to BITRE's data processing methods. This release also includes estimates of total registered caravans, trailers and plant and equipment. More detailed estimates, by make-model, registered postcode, year of manufacture and other selected vehicle characteristics, are available via the BITRE website and data.gov.au.

This report was prepared by David Mitchell and Weihua Chen, with support from Joe O'Sullivan, Jordan Lorenzatto and Marcus To. BITRE gratefully acknowledges the assistance of the following current Austroads staff in arranging and providing the raw NEVDIS data: Geoff Allen, Sohail Ejaz and Bill Newman.

Georgia O'Cianain Head of Bureau Bureau of Infrastructure and Transport Research Economics August 2024

Contents

Foreword	iii
Summary	I
Introduction	2
Registered vehicles by state and territory	3
Registered motor vehicles by vehicle type	5
Registered motor vehicles per capita	6
Average vehicle age by state/territory and vehicle type	8
Registered motor vehicles by motive power type	10
Age distribution by state/territory and vehicle type	13
Top passenger vehicle makes	16
Electric vehicle makes	18
Rigid trucks by gross vehicle mass (GVM)	20
Articulated trucks by gross combination mass (GCM)	22
Caravans by tare weight	24
Trailers by type	26
Plant and equipment by tare weight	28
Explanatory notes	
Glossary	33
References	36

Summary

- There were 21.2 million registered motor vehicles on 31 January 2023 an increase of approximately 2.3 per cent between January 2022 and January 2023.
- There were a further 4.7 million caravans, trailers and plant and equipment (e.g. construction equipment, tractors and agricultural equipment, all-terrain vehicles, forklifts, golf buggies, etc.) not included in total registered motor vehicles.
- Toyota remained the largest passenger vehicle make for the 18th consecutive year, with approximately 3.1 million registered vehicles.
- The number of registered vehicles increased across every state and territory. Queensland, Western Australia and Tasmania experienced the largest proportionate increases in vehicle registrations, 3.0 per cent, 2.9 per cent and 2.3 per cent, respectively.
- New South Wales, Victoria and Queensland have the highest number of vehicle registrations, and together account for over 76 per cent of all registered motor vehicles.
- Petrol-powered vehicles accounted for around 68.7 per cent of registered motor vehicles on 31 January 2023, down from 70.0 per cent in 2022. Diesel-powered vehicles accounted for 28.3 per cent of the fleet at end January 2023, up from 27.5 per cent on 31 January 2022.
- There were approximately 79,100 registered battery and fuel-cell electric vehicles (BEVs and FCEVs) on 31 January 2023, an increase of just over 100 per cent over the end of January 2022. These figures include 72,231 battery and fuel-cell electric passenger cars, approximately 0.5 per cent of all registered passenger vehicles in 2023, and an increase of 114 per cent over 2022.
- There were approximately 364,000 registered hybrid electric vehicles (HEVs) on 31 January 2023, an increase of 31 per cent over the end of January 2022. Hybrid electric passenger vehicles on register numbered 362,798 on 31 January 2023, accounting for approximately 2.4 per cent of all registered passenger vehicles.
- The average age of vehicles across Australia increased from around 11.0 years in 2022 to around 11.3 years in 2023. The average age of passenger vehicles increased from around 10.8 years in 2022 to 11.0 years in 2023.
- There were approximately 592,300 registered rigid trucks on 31 January 2023 a 5.3 per cent increase on January 2022. In addition, there were approximately 120,300 registered articulated trucks on 31 January 2023 – a 4.0 per cent increase on January 2022.
- There were 765,150 registered caravans on 31 January 2023 an increase of approximately 5.3 per cent on the number of registered caravans at the end of January 2022.
- There were approximately 3.62 million registered trailers on 31 January 2023 an increase of approximately 1.8 per cent on the number of registered trailers at the end of January 2022.

Introduction

This report presents Bureau of Infrastructure and Transport Research Economics' (BITRE) estimates of the number of registered motor vehicles in Australia on 31 January 2023. It is the second issue of BITRE's annual statistical release, and is intended as a replacement for the Australian Bureau of Statistics' (ABS) Motor Vehicle Census (MVC), discontinued in 2022.

This report provides aggregate estimates of the number of vehicles on register by state and territory, vehicle type, fuel type, vehicle make and vehicle age. The report also includes estimates of battery electric vehicles (BEVs), fuel-cell electric vehicles (FCEVs) and hybrid electric vehicles (HEVs) in the fleet.

In addition to this report, aggregate estimates of the number of vehicles on register are available in spreadsheet files, similar in format to the previous ABS MVC Data Cubes (ABS, 2022), on the BITRE website and on data.gov.au.

BITRE's estimates include:

- State/territory of registration
- Postcode of registration
- Postcode of vehicle garaging
- Vehicle type
- Make-model
- Year of manufacture
- Fuel type
- Number of cylinders
- Engine capacity
- Seating capacity
- Tare weight
- Gross vehicle mass/gross combination mass
- National Heavy Vehicle charge code
- Industry (ANZSIC Sub-division, for company-registered vehicles)

Registered vehicles by state and territory

Figure 1 shows total motor vehicle registrations by state and territory of registration, on 31 January 2023, 31 January 2022, and 31 January 2021. Table 1 shows total motor vehicle registrations by state and territory of registration and by vehicle type.

- There were 21.2 million registered motor vehicles as at 31 January 2023 an increase of approximately 2.3 per cent since the end of January 2022.
- The number of registered vehicles increased across every state and territory between 2022 and 2023.
 - Queensland, Western Australia and Tasmania recorded the largest proportionate increases in motor vehicle registrations, 3.0 per cent, 2.9 per cent and 2.3 per cent, respectively.
 - The Northern Territory vehicle fleet grew slowest, by 0.9 per cent between 31 January 2022 and 31 January 2023.
- New South Wales, Victoria and Queensland have the highest number of motor vehicle registrations, and together accounted for over 76 per cent of all registered motor vehicles as at 31 January 2023.
- There were a further 4.7 million trailers, caravans, campers and plant and equipment (e.g. agricultural tractors and equipment, construction equipment, all-terrain vehicles, forklifts, golf buggies) not included in total registered motor vehicles.

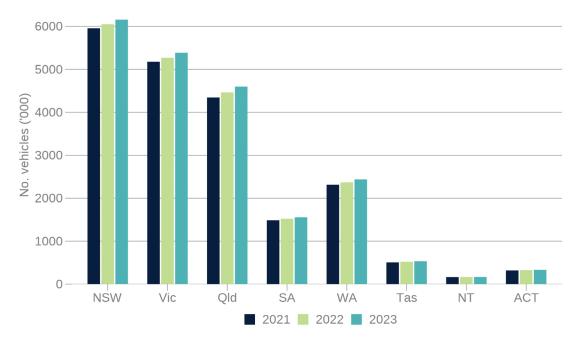


Figure 1 Total registered motor vehicles, by state/territory, 2021, 2022 and 2023

Table 1Total registered motor vehicles, by vehicle type and state/territory of
registration, 2021, 2022 and 2023

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)
	Passenger vehi	icles							
2021	4,442,998	3,956,393	2,979,754	1,123,683	1,638,795	338,396	98,072	262,873	14,840,964
2022	4,479,340	4,000,138	3,044,416	1,143,377	1,671,564	346,638	98,214	266,841	15,050,528
2023	4,537,272	4,071,171	3,120,553	1,165,023	1,708,017	352,494	98,570	272,239	15,325,339
	Campervans								
2021	28,169	21,449	24,425	3,213	1,858	5,502	112	710	85,438
2022	30,064	22,779	25,745	3,456	1,925	5,729	96	779	90,573
2023	31,297	24,222	26,848	3,673	1,958	5,857	110	846	94,811
	Light commerc	ial vehicles							
2021	989,680	807,194	948,872	243,825	436,182	121,590	48,650	36,441	3,632,434
2022	1,029,014	842,658	988,778	255,221	455,138	126,766	49,436	37,941	3,784,952
2023	1,063,842	873,216	1,031,137	265,135	477,300	131,238	50,322	39,279	3,931,469
	Light rigid truc	ks							
2021	58,915	42,770	39,529	9,401	16,598	3,974	1,728	1,555	174,470
2022	62,388	45,479	42,071	10,212	17,667	4,248	1,744	1,668	185,477
2023	67,820	50,136	47,219	11,347	20,037	4,609	1,935	1,871	204,974
	Heavy rigid tru	cks							
2021	103,845	88,649	76,878	25,334	56,554	10,023	4,774	1,700	367,757
2022	106,143	90,883	79,502	25,834	57,713	10,356	4,847	1,756	377,034
2023	108,213	92,895	82,463	26,219	60,221	10,615	4,897	1,780	387,303
	Articulated tru	cks							
2021	25,582	31,343	23,927	9,541	16,692	2,183	1,202	206	110,676
2022	26,794	32,635	25,067	9,817	17,658	2,205	1,285	189	115,650
2023	27,625	33,793	26,047	10,313	18,771	2,269	1,320	191	120,329
	Non-freight-ca	rrying vehicle	S						
2021	6,649	10,612	6,313	3,622	6,959	998	388	166	35,707
2022	6,714	10,916	6,389	3,780	7,069	1,033	391	167	36,459
2023	6,853	11,283	6,459	3,891	7,474	1,088	391	172	37,611
	Buses								
2021	25,964	20,053	20,645	6,034	14,568	2,835	2,489	1,047	93,635
2022	26,256	20,145	21,189	6,198	15,043	2,962	2,603	1,071	95,467
2023	26,866	20,494	21,947	6,386	15,697	3,071	2,701	1,045	98,207
	Motorcycles								
2021	272,595	196,521	222,940	60,698	124,059	20,081	6,112	13,652	916,658
2022	281,575	202,501	228,870	61,872	125,453	20,496	5,924	13,765	940,456
2023	284,995	206,967	234,274	62,970	127,768	20,916	5,813	13,990	957,693
	Total motor ve	hicles							
2021	5,954,397	5,174,984	4,343,283	1,485,351	2,312,265	505,582	163,527	318,350	20,257,739
2022	6,048,288	5,268,134	4,462,027	1,519,767	2,369,230	520,433	164,540	324,177	20,676,596
2023	6,154,783	5,384,177	4,596,947	1,554,957	2,437,243	532,157	166,059	331,413	21,157,736

Registered motor vehicles by vehicle type

Figure 2 shows total motor vehicle registrations by vehicle type on 31 January 2023, 31 January 2022, and 31 January 2021.

- Passenger vehicles remain the largest vehicle type on register, with 15.3 million registered vehicles on 31 January 2023, an increase of 1.8 per cent over the number of registered passenger vehicles on 31 January 2022.
- Passenger vehicles comprised 72.4 per cent of all registered motor vehicles on 31 January 2023, down from 72.8 per cent in 2022.
- Light commercial vehicles comprise the second-largest vehicle type on register, with 4.08 million vehicles (18.6 per cent of the fleet) on 31 January 2023, up 3.8 per cent over the end of January 2022.



Figure 2 Total registered motor vehicles, by vehicle type, 2021, 2022 and 2023

Registered motor vehicles per capita

Figure 3 shows total motor vehicle registrations per 1000 persons, by state and territory of registration, on 31 January 2023, 31 January 2022, and 31 January 2021. Table 2 shows total motor vehicle registrations per 1000 persons, by state and territory of registration and by vehicle type.¹

- Between 31 January 2022 and 31 January 2023, the number of registered passenger vehicles per capita decreased across the whole of Australia from 584.0 to 582.4 passenger vehicles per 1000 persons.
- Tasmania experienced the largest proportionate increase in per capita passenger vehicle registrations, between 2022 and 2023, increasing from 609.6 to 615.9 passenger vehicles per 1000 persons.
- Northern Territory, Victoria, New South Wales and Western Australia all experienced a decline in per capita passenger vehicle registrations between 2022 and 2023.



Figure 3 Total registered motor vehicles per capita, by state/territory of registration, 2021, 2022 and 2023

Sources: BITRE estimates.

¹ Per capita vehicle registrations are calculated as total registrations divided by the latest available ABS Estimated Resident Population (ERP) on 31 December of the calendar year prior to the date of the NEVDIS vehicle snapshot. The latest available ABS ERP estimates (ABS 2023) include revised ERP estimates for December 2020, which impact the January 2021 per capita vehicle estimates.

Table 2Total registered motor vehicles per capita, by vehicle type and
state/territory of registration, 2021, 2022 and 2023

Year	New South Wales		Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
				(vehic	les / '000 perso	ons)			
	Passenger vehic	cles							
2021	548.9	602.4	574.8	626.2	600.7	602.3	395.7	587.2	579.0
2022	552.9	609.2	578.7	633.2	605.0	609.6	395.8	589.5	584.0
2023	550.0	605.9	579.3	634.5	602.7	615.9	392.3	590.4	582.4
	Campervans								
2021	3.5	3.3	4.7	1.8	0.7	9.8	0.5	1.6	3.3
2022	3.7	3.5	4.9	1.9	0.7	10.1	0.4	1.7	3.5
2023	3.8	3.6	5.0	2.0	0.7	10.2	0.4	1.8	3.6
	Light commerci	al vehicles							
2021	122.3	122.9	183.0	135.9	159.9	216.4	196.3	81.4	141.7
2022	127.0	128.3	187.9	141.3	164.7	222.9	199.2	83.8	146.9
2023	129.0	130.0	191.4	144.4	168.4	229.3	200.3	85.2	149.4
	Light rigid truck	S							
2021	7.3	6.5	7.6	5.2	6.1	7.1	7.0	3.5	6.8
2022	7.7	6.9	8.0	5.7	6.4	7.5	7.0	3.7	7.2
2023	8.2	7.5	8.8	6.2	7.1	8.1	7.7	4.1	7.8
	Heavy rigid true	:ks							
2021	12.8	13.5	14.8	14.1	20.7	17.8	19.3	3.8	14.3
2022	13.1	13.8	15.1	14.3	20.9	18.2	19.5	3.9	14.6
2023	13.1	13.8	15.3	14.3	21.2	18.5	19.5	3.9	14.7
	Articulated true	ks							
2021	3.2	4.8	4.6	5.3	6.1	3.9	4.9	0.5	4.3
2022	3.3	5.0	4.8	5.4	6.4	3.9	5.2	0.4	4.5
2023	3.3	5.0	4.8	5.6	6.6	4.0	5.3	0.4	4.6
	Non-freight-car	rying vehicle	S						
2021	0.8	1.6	1.2	2.0	2.6	1.8	1.6	0.4	1.4
2022	0.8	1.7	1.2	2.1	2.6	1.8	1.6	0.4	1.4
2023	0.8	1.7	1.2	2.1	2.6	1.9	1.6	0.4	1.4
	Buses								
2021	3.2	3.1	4.0	3.4	5.3	5.0	10.0	2.3	3.7
2022	3.2	3.1	4.0	3.4	5.4	5.2	10.5	2.4	3.7
2023	3.3	3.0	4.1	3.5	5.5	5.4	10.8	2.3	3.7
	Motorcycles								
2021	33.7	29.9	43.0	33.8	45.5	35.7	24.7	30.5	35.8
2022	34.8	30.8	43.5	34.3	45.4	36.0	23.9	30.4	36.5
2023	34.5	30.8	43.5	34.3	45.1	36.5	23.1	30.3	36.4
	Total motor vel	nicles							
2021	735.6	788.0	837.8	827.7	847.5	899.8	659.9	711.2	790.4
2022	746.6	802.3	848.1	841.6	857.5	915.2	663.1	716.1	802.3
2023	746.1	801.3	853.4	846.9	860.0	929.8	660.9	718.7	804.0

Note: Per capita vehicle registrations are calculated as total registrations divided by the latest available ABS Estimated Resident Population (ERP) on 31 December of the calendar year prior to the date of the NEVDIS vehicle snapshot. The latest available ERP estimates (ABS

2023) include revised ERP estimates for December 2020, which impact the January 2021 per capita vehicle estimates. Sources: ABS (2023) and BITRE estimates.

Average vehicle age by state/territory and vehicle type

Figure 4 shows average vehicle age of the registered motor vehicle fleet, by state and territory of registration, at 31 January 2023, 31 January 2022, and 31 January 2021. Table 3 shows average vehicle age across all registered motor vehicles, by state and territory of registration and by vehicle type.

- The average age across all registered motor vehicles in Australia increased from around 11.0 years in 2022 to around 11.3 years in 2023.
- The average age of vehicles increased across all jurisdictions between 2022 and 2023.
- The Tasmania registered vehicle fleet is the oldest at just over 13.2 years.
- The Australian Capital Territory registered vehicle fleet is newest at 10.2 years.
- The average age of registered passenger vehicles across Australia increased from around 10.8 years in 2022 to around 11.0 years in 2023. The average age of registered LCVs across Australia increased from around 11.1 years in 2022 to around 11.3 years in 2023.

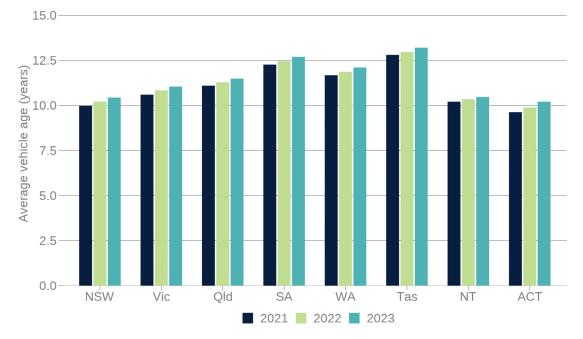


Figure 4 Average vehicle age, by state/territory of registration, 2021, 2022 and 2023

Table 3Average vehicle age of registered motor vehicles, by vehicle type and
state/territory of registration, 2021, 2022 and 2023

Year	New South Wales	,	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
	(years)	(years)	(years)	(years)	(years)	(years)	(years)	(years)	(years)
	Passenger vehic		(years)	(years)	(years)	(years)	(years)	(years)	(years)
2021	9.77	10.30	10.78	12.14	11.19	12.25	9.98	9.51	10.50
2022	10.03	10.57	10.99	12.37	11.41	12.43	10.12	9.80	10.75
2023	10.27	10.81	11.21	12.64	11.70	12.70	10.25	10.12	11.00
	Campervans								
2021	15.47	16.33	16.97	16.99	22.45	22.48	17.18	17.53	16.79
2022	15.50	16.41	17.12	17.35	22.55	22.54	17.00	17.52	16.87
2023	15.61	16.38	17.31	17.73	22.96	22.75	16.30	17.92	16.98
	Light commercia	al vehicles							
2021	10.17	11.00	11.20	11.91	11.74	13.46	10.10	9.52	11.03
2022	10.30	11.08	11.34	11.98	11.79	13.53	10.23	9.73	11.14
2023	10.46	11.21	11.51	12.10	11.87	13.71	10.33	9.95	11.28
	Light rigid truck	s							
2021	10.17	9.58	11.87	10.94	11.32	14.02	12.79	8.69	10.66
2022	10.17	9.68	11.79	10.94	11.41	13.97	12.80	8.78	10.68
2023	9.94	9.45	11.19	10.54	10.91	13.54	12.12	8.81	10.33
	Heavy rigid truc	ks							
2021	14.69	16.60	15.37	18.95	18.39	18.23	14.43	11.69	16.24
2022	14.85	16.58	15.42	18.79	18.57	18.39	14.63	11.65	16.31
2023	14.84	16.51	15.39	18.63	18.50	18.62	14.75	11.92	16.27
	Articulated truc	ks							
2021	11.85	12.46	12.05	12.82	13.48	11.73	13.26	11.31	12.41
2022	12.00	12.52	12.18	13.03	13.53	12.05	13.32	11.74	12.52
2023	11.85	12.52	12.18	13.15	13.58	12.40	13.53	12.44	12.52
	Non-freight-car	rying vehicle	s						
2021	11.96	14.05	12.80	12.95	14.92	15.67	13.15	10.66	13.52
2022	12.39	14.21	13.00	12.52	15.02	15.71	13.82	11.36	13.67
2023	12.58	14.13	13.14	12.48	14.75	15.62	13.93	11.47	13.66
	Buses								
2021	11.26	12.09	11.75	12.74	11.73	14.57	10.01	10.31	11.77
2022	11.52	12.34	11.98	12.96	11.82	14.63	10.03	10.94	11.98
2023	11.88	12.59	12.14	13.06	11.87	14.84	10.37	11.47	12.21
	Motorcycles								
2021	10.12	11.29	12.37	13.16	14.30	12.48	9.86	11.55	11.76
2022	10.27	11.48	12.63	13.40	14.74	12.74	10.05	11.58	11.98
2023	10.50	11.70	12.91	13.71	15.15	13.07	10.27	11.96	12.26
	Total motor veh	nicles							
2021	9.98	10.60	11.10	12.27	11.68	12.81	10.21	9.63	10.81
2022	10.22	10.84	11.29	12.46	11.87	12.97	10.35	9.89	11.03
2023	10.44	11.05	11.49	12.70	12.11	13.21	10.47	10.21	11.25

Registered motor vehicles by motive power type

Figure 5 shows the number of vehicles on register by motive power type on 31 January 2023, 31 January 2022, and 31 January 2021. Tables 4 and 5 show the number of vehicles on register by motive power type, vehicle type or state/territory of registration, on 31 January 2023, 31 January 2022, and 31 January 2021.

- There were approximately 14.5 million registered petrol-fuelled motor vehicles on 31 January 2023, up 0.5 per cent on 2022. Petrol-fuelled motor vehicles comprised around 68.7 per cent of the fleet at end January 2023, down from 70.0 per cent in January 2022.
- Diesel-fuelled vehicles on register numbered approximately 6.0 million on 31 January 2023, an increase of 5.3 per cent over 31 January 2022. Diesel-fuelled motor vehicles accounted for 28.3 per cent of the fleet on 31 January 2023, up from 27.5 per cent in 2022.
- Hybrid electric vehicles (HEV) numbered approximately 364,000 vehicles on 31 January 2023, an increase of around 31 per cent over 2022.
- Battery electric vehicles (BEV) and fuel-cell electric vehicles (FCEV) on register increased from approximately 38,750 vehicles on 31 January 2022 to approximately 79,100 vehicles on 31 January 2023, an increase of approximately 104 per cent.
 - BEV and FCEV passenger vehicles increased from around 33,800 vehicles on 31 January 2022 to around 72,230 vehicles on 31 January 2023, an increase of 114 per cent.

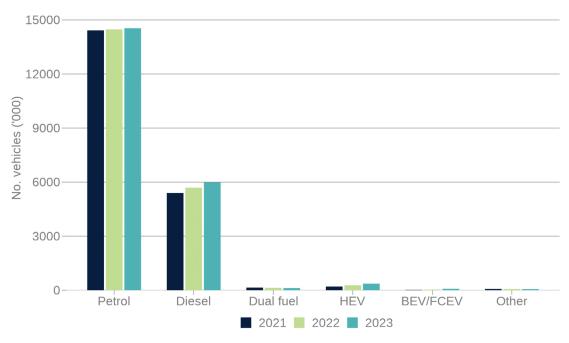


Figure 5 Total registered vehicles, by motive power type, 2021, 2022 and 2023

Table 4Registered motor vehicles, by motive power type and vehicle type,
2021, 2022 and 2023

Petrol	Diesel	Dual fuel	HEV	BEV/FCEV	Other	Total
(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles
Passenger vehicles						
12,451,354	2,033,930	98,055	204,513	15,701	37,411	14,840,964
12,507,092	2,111,010	87,974	276,453	33,777	34,222	15,050,528
12,577,849	2,200,911	80,040	362,798	72,231	31,510	15,325,339
Campervans						
37,435	46,807	991	71	3	131	85,438
38,977	50,433	945	90	4	124	90,573
39,808	53,900	884	101	5	113	94,811
Light commercial ve	ehicles					
986,466	2,570,940	43,484	80	229	31,235	3,632,434
960,958	2,754,094	39,573	270	291	29,766	3,784,952
940,411	2,925,511	36,094	821	434	28,198	3,931,469
Light rigid trucks						
4,101	169,813	464	32	11	49	174,470
4,086	180,845	449	37	13	47	185,477
4,312	200,122	418	54	21	47	204,974
Heavy rigid trucks						
11,442	354,973	868	74	32	368	367,757
10,946	364,763	855	88	51	331	377,034
10,410	375,582	808	139	89	275	387,303
Articulated trucks						
980	109,532	128	3	0	33	110,676
935	114,557	128	3	3	24	115,650
931	119,218	147	3	3	27	120,329
Non-freight-carryin	g vehicles					
2,282	33,013	197	13	53	149	35,707
2,350	33,630	208	14	66	191	36,459
2,437	34,681	207	14	73	199	37,611
Buses						
13,966	76,840	1,453	9	38	1,329	93,635
13,381	79,398	1,348	13	120	1,207	95,467
12,994	82,536	1,299	25	223	1,130	98,207
Motorcycles						
913,328	5	76	19	3,174	56	916,658
935,869	6	75	17	4,429	60	940,456
951,538	3	65	17	6,009	61	957,693
Total motor vehicle	s					
14,421,354	5,395,853	145,716	204,814	19,241	70,761	20,257,739
14,474,594	5,688,736	131,555	276,985	38,754	65,972	20,676,596
14,540,690	5,992,464	119,962	363,972	79,088	61,560	21,157,736

np -not published/suppressed. Some values have been perturbed to preserve confidentiality.
 Notes: HEV – Hybrid electric vehicles, BEV / FCEV– Battery-electric and Fuel-cell electric vehicles. Other includes LPG- and NG-only powered vehicles as well as vehicles where motive power was not specified.

Table 5Registered motor vehicles, by motive power type and state/territory of
registration, 2021, 2022 and 2023

Year	Petrol	Diesel	Dual fuel	HEV	BEV/FCEV	Other	Total
	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)
	New South Wales						
2021	4,355,954	1,487,903	18,607	72,370	6,160	13,403	5,954,397
2022	4,350,198	1,561,362	16,495	96,324	11,962	11,947	6,048,288
2023	4,342,258	1,636,471	14,795	125,605	24,868	10,786	6,154,783
	Victoria						
2021	3,745,074	1,259,813	78,415	47,886	4,936	38,860	5,174,984
2022	3,759,621	1,326,730	71,158	63,945	9,856	36,824	5,268,134
2023	3,785,212	1,394,553	65,246	84,140	20,228	34,798	5,384,177
	Queensland						
2021	2,950,977	1,324,714	20,084	39,274	3,671	4,563	4,343,283
2022	2,978,063	1,399,041	18,140	54,296	8,201	4,286	4,462,027
2023	3,007,636	1,479,436	16,421	72,752	16,737	3,965	4,596,947
	South Australia						
2021	1,101,547	357,521	5,133	15,002	988	5,160	1,485,351
2022	1,107,020	380,540	4,795	20,667	1,933	4,812	1,519,767
2023	1,112,977	402,051	4,567	26,975	3,875	4,512	1,554,957
	Western Australia						
2021	1,575,344	687,614	21,820	19,894	2,112	5,481	2,312,265
2022	1,583,862	729,018	19,495	27,579	4,191	5,085	2,369,230
2023	1,595,101	775,136	17,613	36,343	8,330	4,720	2,437,243
	Tasmania						
2021	351,183	148,134	169	3,149	474	2,473	505,582
2022	355,140	157,518	181	4,460	862	2,272	520,433
2023	356,591	165,779	187	5,884	1,620	2,096	532,157
	Northern Territory	/					
2021	93,901	67,765	404	1,326	85	46	163,527
2022	91,968	69,936	365	2,091	139	41	164,540
2023	90,557	72,020	320	2,895	227	40	166,059
	Australian Capital	Territory					
2021	247,374	62,389	1,084	5,913	815	775	318,350
2022	248,722	64,591	926	7,623	1,610	705	324,177
2023	250,358	67,018	813	9,378	3,203	643	331,413
	Australia						
2021	14,421,354	5,395,853	145,716	204,814	19,241	70,761	20,257,739
2022	14,474,594	5,688,736	131,555	276,985	38,754	65,972	20,676,596
2023	14,540,690	5,992,464	119,962	363,972	79,088	61,560	21,157,736

Notes: HEV – Hybrid electric vehicles, BEV/FCEV– Battery-electric and Fuel-cell electric vehicles. Other includes LPG- and NG-only powered vehicles as well as vehicles where motive power was not specified.

Age distribution by state/territory and vehicle type

Figure 6 shows the number of registered motor vehicles by age distribution on 31 January 2023. Table 6 lists the number of registered motor vehicles by age distribution, state and territory, and vehicle type on 31 January 2023.

- Across all registered motor vehicles:
 - Vehicles manufactured between 2018 and 2023 (0-5 years) comprised 25.2 per cent of the fleet.
 - Vehicles manufactured between 2013 and 2017 (5-10 years) comprised 27.1 per cent of the fleet.
 - Vehicle manufactured prior to 2002 (>20 years) comprised 11.4 per cent of the fleet.
- Across all registered passenger vehicles:
 - Vehicles manufactured between 2018 and 2023 (0-5 years) comprised 24.5 per cent of the fleet.
 - Vehicles manufactured between 2013 and 2017 (5-10 years) comprised 28.2 per cent of the fleet.
 - Vehicle manufactured prior to 2002 (>20 years) comprised 10.0 per cent of the fleet.

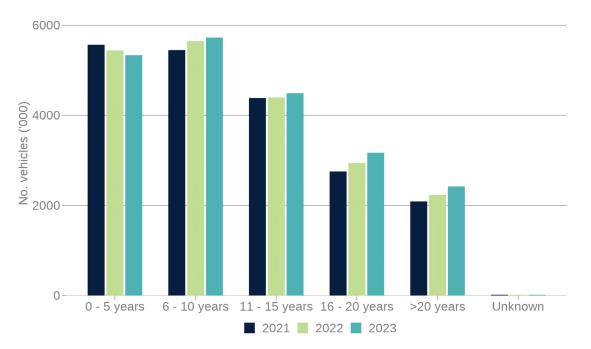


Figure 6 Registered motor vehicles, by age group, 2021, 2022 and 2023

Table 6 Registered motor vehicles, by type of vehicle, year of manufacture and state/territory of registration, 2023

	New							Australian	
Year of	South			South	Western		Northern	Capital	
Manufacture	Wales	Victoria	Queensland	Australia	Australia	Tasmania	Territory	Territory	Australia
	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)
	Passenger ve								
2018 – 2023	1,203,692	980,586	775,499	243,852	378,541	70,806	27,685	72,410	3,753,071
2013 – 2017	1,345,812	1,179,637	862,836	293,552	452,747	83,157	27,451	83,409	4,328,601
2008 – 2012	964,621	908,056	682,984	254,758	411,751	74,734	21,610	60,970	3,379,484
2003 – 2007	640,719	606,577	480,630	200,917	285,363	65,857	13,587	35,562	2,329,212
To 2002 ^a	382,356	393,930	318,034	171,760	179,550	57,521	8,210	19,834	1,531,195
Total	4,537,272	4,071,171	3,120,553	1,165,023	1,708,017	352,494	98,570	272,239	15,325,339
	Campervans								
2018 – 2023	4,494	3,836	3,770	382	18	518	12	82	13,112
2013 - 2017	4,318	2,973	3,409	516	88	546	17	117	11,984
2008 - 2012	5,885	3,872	3,769	496	198	712	15	155	15,102
2003 - 2007	9,071	7,253	6,682	1,125	796	1,031	42	246	26,246
To 2002 ^a	7,529	6,259	9,216	1,147	856	3,035	24	246	28,312
Total	31,297	24,222	26,848	3,673	1,958	5,857	110	846	94,811
	Light comme	rcial vehicles							
2018 – 2023	324,227	254,013	282,698	70,893	126,260	28,228	14,914	12,557	1,113,790
2013 – 2017	285,664	219,357	253,063	62,505	111,328	27,561	13,656	11,172	984,306
2008 – 2012	198,756	164,343	205,844	51,603	99,788	24,405	10,042	7,320	762,101
2003 – 2007	131,587	116,502	150,344	37,402	70,871	21,218	6,595	4,554	539,073
To 2002 ^a	123,555	118,096	138,975	42,687	69,037	29,654	5,101	3,668	530,773
Total	1,063,842	873,216	1,031,137	265,135	477,300	131,238	50,322	39,279	3,931,469
	Light rigid tru	icks							
2018 – 2023	24,136	18,602	15,903	3,923	6,226	1,289	579	807	71,465
2013 – 2017	16,631	12,315	9,437	2,504	4,256	868	341	455	46,807
2008 – 2012	10,005	7,827	6,839	1,831	3,511	666	331	235	31,245
2003 – 2007	8,260	6,313	7,407	1,674	3,398	709	320	194	28,275
To 2002 ^a	8,786	5,056	7,631	1,413	2,645	1,072	363	180	27,146
Total	67,820	50,136	47,219	11,347	20,037	4,609	1,935	1,871	204,974
	Heavy rigid tr	ucks							
2018 – 2023	22,611	18,680	17,505	5,005	9,543	1,681	859	477	76,361
2013 – 2017	20,333	15,722	14,166	3,926	7,857	1,505	853	406	64,768
2008 – 2012	17,540	14,421	13,192	3,809	11,180	1,443	1,014	314	62,913
2003 – 2007	19,532	15,597	14,966	4,119	9,956	1,791	940	311	67,212
To 2002 ^a	28,157	28,305	22,600	9,352	21,672	4,175	1,225	272	115,758
Total	108,213	92,895	82,463	26,219	60,221	10,615	4,897	1,780	387,303
	Articulated tr		• -			, -	,		
2018 – 2023	7,778	10,103	7,572	2,664	4,092	584	257	33	33,083
2013 – 2017	6,338	7,302	5,684	2,121	3,757	564	286	48	26,100
2008 – 2012	4,413	4,571	4,033	1,670	3,509	297	259	35	18,787
2003 – 2007	4,618	5,216	4,270	1,814	3,701	447	269	51	20,386
To 2002 ^a	4,478	6,560	4,487	2,043	3,709	376	249	24	21,926
Total	27,625	33,793	26,047	10,313	18,771	2,269	1,320	191	120,329
(continued)	1,025	30,.00	20,0 .7	_0,010	_0,1	_,_00	2,020		0,020

(continued)

Veeref	New	,	registratic		-		No white a wa	Australian	
Year of Manufacture	South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Capital Territory	Australia
manuacture	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)
	Non-freight-ca		· · · ·	(10	(101100)	(10110100)	(10.10100)	(10.1000)	(10110-00)
2018 – 2023	1,794	2,717	1,391	1,249	1,710	261	84	46	9,252
2013 – 2017	1,575	2,327	1,545	821	1,407	138	71	33	7,917
2008 – 2012	1,193	1,889	1,312	582	1,630	177	82	51	6,916
2003 – 2007	1,061	1,589	1,055	500	1,012	192	59	28	5,496
To 2002 ^a	1,227	2,707	1,155	736	1,714	320	93	14	7,966
Total	6,853	11,283	6,459	3,891	7,474	1,088	391	172	37,611
	Buses								
2018 - 2023	5,585	4,365	4,868	1,362	4,289	577	816	259	22,121
2013 - 2017	6,310	4,682	4,826	1,343	3,216	501	628	266	21,772
2008 - 2012	7,172	4,635	5,701	1,500	4,018	672	628	263	24,589
2003 - 2007	4,080	3,163	3,508	919	1,776	474	367	125	14,412
To 2002 ^a	3,719	3,632	3,044	1,259	2,398	832	262	131	15,277
Total	26,866	20,494	21,947	6,386	15,697	3,071	2,701	1,045	98,207
	Motorcycles								
2018 - 2023	86,896	51,548	57,014	14,666	22,835	4,083	2,040	3,799	242,881
2013 - 2017	76,070	48,023	57,555	14,369	28,002	4,997	1,545	3,647	234,208
2008 - 2012	54,194	39,241	46,172	12,412	29,767	4,601	1,052	2,768	190,207
2003 - 2007	35,902	30,098	35,958	9,297	20,753	3,647	600	1,830	138,085
To 2002 ^a	31,925	29,405	37,551	11,102	26,406	3,572	576	1,942	142,479
Total	284,995	206,967	234,274	62,970	127,768	20,916	5,813	13,990	957,693
	Total motor v	ehicles							
2018 - 2023	1,681,213	1,344,450	1,166,220	343,996	553,514	108,027	47,246	90,470	5,335,136
2013 - 2017	1,763,051	1,492,338	1,212,521	381,657	612,658	119,837	44,848	99,553	5,726,463
2008 - 2012	1,263,779	1,148,855	969,846	328,661	565,352	107,707	35,033	72,111	4,491,344
2003 - 2007	854,830	792,308	704,820	257,767	397,626	95,366	22,779	42,901	3,168,397
To 2002 ^a	591,732	593,950	542,693	241,499	307,987	100,557	16,103	26,311	2,420,832
Total	6,154,783	5,384,177	4,596,947	1,554,957	2,437,243	532,157	166,059	331,413	21,157,736

Table 6Registered motor vehicles, by type of vehicle, year of manufacture and
state/territory of registration, 2023 (continued)

a. Includes year of manufacture not stated.

Top passenger vehicle makes

Figure 7 shows the total number of passenger vehicles by vehicle make, for the top 30 registered passenger vehicle makes on 31 January 2023, and comparison with the number of registered passenger vehicles on 31 January 2022 and 31 January 2021. Table 7 lists the total number of passenger vehicles by make.

- Toyota remained the largest passenger vehicle make for the 18th consecutive year, with approximately 3.1 million registrations.
- Tesla and Haval vehicles experienced the largest proportionate increases among the top 30 makes, with approximately 23,250 and 17,800 additional passenger vehicles, respectively, on register on 31 January 2023 relative to the previous year. This represents a 104 and 101 per cent growth, respectively, relative to 31 January 2022.

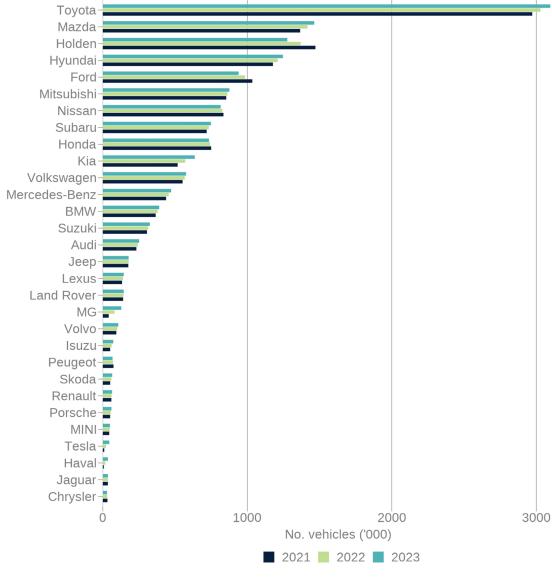


Figure 7 Registered passenger vehicles by make, top 30 makes, 2021, 2022 and 2023

Make	Rank	2023	2022	2021
	change		(vehicles)	
Toyota		3,097,326	3,029,092	2,972,319
Mazda		1,463,533	1,417,177	1,366,035
Holden		1,277,008	1,369,528	1,471,548
Hyundai		1,246,865	1,210,052	1,177,374
Ford		940,215	984,789	1,034,870
Mitsubishi		876,241	862,407	854,422
Nissan		815,860	827,654	835,222
Subaru	\uparrow	748,533	733,405	718,979
Honda	\checkmark	735,138	742,710	750,055
Kia		636,774	570,674	518,154
Volkswagen		576,412	567,013	552,313
Mercedes-Benz		472,691	456,339	438,020
BMW		390,267	379,304	366,048
Suzuki		325,594	313,103	305,819
Audi		251,755	242,346	232,402
Jeep	\uparrow	178,593	178,528	176,697
Lexus	\uparrow	145,154	140,149	133,255
Land Rover		144,801	143,926	140,790
MG	\uparrow	127,917	80,960	41,082
Volvo		107,235	99,497	93,723
Isuzu	\uparrow	72,300	61,672	50,963
Peugeot		67,316	71,046	74,072
Skoda	\uparrow	65,060	59,049	51,110
Renault		64,199	60,754	59,444
Porsche	\uparrow	59,885	54,722	50,826
MINI	\uparrow	49,750	47,339	44,545
Tesla	\uparrow	45,501	22,256	10,123
Haval	\uparrow	35,472	17,665	6,958
Jaguar	\downarrow	35,405	35,554	35,069
Chrysler	\downarrow	29,288	30,882	32,172
Other	\downarrow	243,251	240,936	246,55
Total		15,325,339	15,050,528	14,840,964

Table 7 Registered passenger vehicles by vehicle make, top 30 makes, 2021, 2022 and 2023

Electric vehicle makes

Figure 8 shows and Table 8 lists the number of registered BEVs and FCEVs by make, for the top 10 BEV and FCEV vehicle makes, on 31 January 2023, 31 January 2022 and 31 January 2021.

- There were approximately 72,230 registered BEVs and FCEVs on 31 January 2023, a 114 per cent increase over the number of registered BEVs and FCEVs on 31 January 2022.
- Tesla is the most popular BEV make with approximately 45,500 vehicles on register on 31 January 2023, up from around 22,260 vehicles on 31 January 2022.
- Hyundai is the second largest electric vehicle make, with approximately 5,260 registered vehicles as at 31 January 2023, up from around 2,940 vehicles on 31 January 2022.
- These estimates include approximately 57 registered FCEVs on 31 January 2023 (primarily Hyundai Nexo and Toyota Mirai), up from 46 vehicles on 31 January 2022.

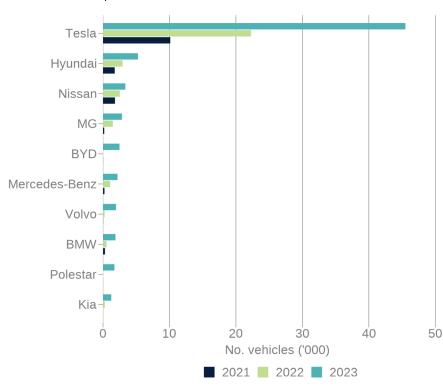


Figure 8 Registered passenger BEVs and FCEVs by make, top 10 makes, 2021, 2022 and 2023

Sources: BITRE estimates.

Make	Rank	2023	2022	2021
	change		(vehicles)	
Tesla		45,501	22,256	10,123
Hyundai		5,259	2,939	1,763
Nissan		3,358	2,516	1,802
MG	\uparrow	2,847	1,480	187
BYD	\uparrow	2,478	27	12
Mercedes-Benz		2,179	1,075	219
Volvo	\uparrow	1,959	238	19
BMW	\checkmark	1,871	534	299
Polestar	\uparrow	1,721	34	0
Kia	\checkmark	1,243	271	0
Other	\checkmark	3,815	2,407	1,277
Total		72,231	33,777	15,701

Table 8 Registered passenger BEVs and FCEVs by make, top 10 makes, 2021, 2022 and 2023

Rigid trucks by gross vehicle mass (GVM)

Figure 9 shows the number of registered rigid trucks by gross vehicle mass (GVM) ranges on 31 January 2023, 31 January 2022 and 31 January 2021. Table 9 shows registered rigid trucks by GVM and state/territory of registration on 31 January 2023, 31 January 2022 and 31 January 2021.

- There were approximately 592,300 registered rigid trucks on 31 January 2023 an increase of approximately 5.3 per cent on the number of registered rigid trucks at the end of January 2022.
 - Light rigid trucks comprised approximately 34.6 per cent of total registered rigid trucks on 31 January 2023.
 - Rigid trucks between 4.5 and 8 tonnes GVM comprised 12.0 per cent of rigid trucks.
 - $\circ~$ Rigid trucks between 8 and 12 tonnes GVM comprised 16.8 per cent of rigid trucks.
 - \circ $\;$ Rigid trucks between 12 and 20 tonnes GVM comprised 12.1 per cent of rigid trucks.
 - Rigid trucks between above 20 tonnes GVM comprised 21.2 per cent of rigid trucks.
- Light rigid trucks (i.e. between 3.5 and 4.5 tonnes gross vehicle mass) were the fastest growing vehicle type, increasing 10.5 per cent between January 2022 and January 2023.

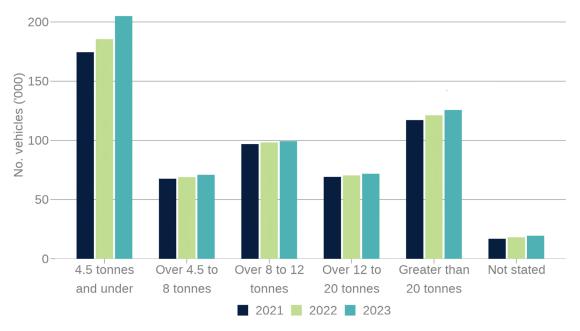


Figure 9 Registered rigid trucks by GVM, 2021, 2022 and 2023

			Gro	oss vehicle mass	i i		
	4.5 tonnes	Over 4.5	Over 8 to 12	Over 12 to	Above 20		
Year	and under	to 8 tonnes	tonnes	20 tonnes	tonnes	Not stated	Total
	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)
	New South Wale	s					
2021	58,915	22,579	29,832	18,715	32,130	589	162,760
2022	62,388	22,994	30,241	19,158	33,165	585	168,531
2023	67,820	23,664	30,405	19,640	33,941	563	176,033
	Victoria						
2021	42,770	16,713	24,577	15,625	29,316	2,418	131,419
2022	45,479	17,009	25,046	16,083	30,415	2,330	136,362
2023	50,136	17,435	25,386	16,363	31,498	2,213	143,031
	Queensland						
2021	39,530	14,340	20,739	16,779	24,556	463	116,407
2022	42,071	15,050	21,116	17,193	25,656	487	121,573
2023	47,219	15,933	21,456	17,543	27,036	495	129,682
	South Australia						
2021	9,402	4,805	7,273	5,301	7,806	148	34,735
2022	10,213	4,890	7,338	5,368	8,085	152	36,046
2023	11,348	4,998	7,354	5,441	8,293	132	37,566
	Western Australi	a					
2021	16,598	4,743	10,286	9,751	18,635	13,139	73,152
2022	17,667	4,470	10,245	9,570	18,953	14,475	75,380
2023	20,037	4,291	10,475	9,747	19,778	15,930	80,258
	Tasmania						
2021	3,974	2,589	2,527	1,859	2,958	90	13,997
2022	4,248	2,655	2,579	1,905	3,127	90	14,604
2023	4,609	2,720	2,608	1,942	3,255	90	15,224
	Northern Territo	ry					
2021	1,728	1,492	1,175	866	1,177	64	6,502
2022	1,744	1,509	1,202	855	1,216	65	6,591
2023	1,935	1,534	1,186	859	1,259	59	6,832
	Australian Capita	al Territory					
2021	1,555	365	469	279	568	19	3,255
2022	1,668	375	481	299	584	17	3,424
2023	1,871	377	476	307	601	19	3,651
	Australia		-				· -
2021	174,472	67,626	96,878	69,175	117,146	16,930	542,227
2022	185,478	68,952	98,248	70,431	121,201	18,201	562,511
2023	204,975	70,952	99,346	71,842	125,661	19,501	592,277

Table 9Registered rigid trucks, by GVM and state/territory of registration, 2021,
2022 and 2023

Articulated trucks by gross combination mass (GCM)

Figure 10 shows the number of registered articulated trucks by selected gross combination mass (GCM) ranges on 31 January 2023, 31 January 2022 and 31 January 2021. Table 10 shows registered articulated trucks by GCM and state/territory of registration on 31 January 2023, 31 January 2022 and 31 January 2021.

- There were approximately 120,300 registered articulated trucks on 31 January 2023 an increase of approximately 4.0 per cent on the number of registered articulated trucks at the end of January 2022.
 - Articulated trucks less than 40 tonnes GCM comprised approximately 3.5 per cent of all articulated trucks on 31 January 2023.
 - Articulated trucks between 40 and 60 tonnes GCM comprised 27.3 per cent of all articulated trucks.
 - Articulated trucks between 60 and 100 tonnes GCM comprised 53.7 per cent of all articulated trucks.
 - Articulated trucks greater than 100 tonnes GCM comprised 11.2 per cent of all articulated trucks.

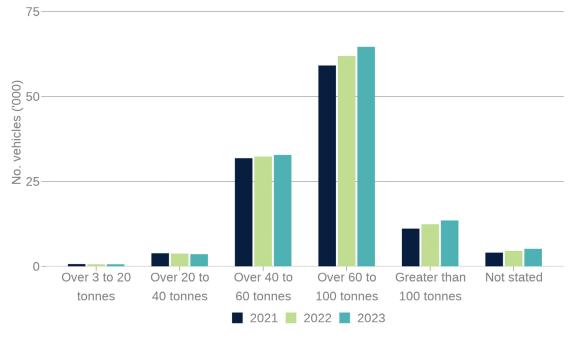


Figure 10 Registered articulated trucks by GCM, 2021, 2022 and 2023

		Gross	combination	mass		
Over 3 to 20	Over 20 to	Over 40 to	Over 60 to	Greater than		
tonnes	40 tonnes	60 tonnes	100 tonnes	100 tonnes	Not stated	Total
(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)
New South Wales						
93	684	5,190	17,419	2,099	97	25,582
92	660	5,147	18,408	2,384	103	26,794
104	608	5,057	19,229	2,547	80	27,625
Victoria						
470	1,539	7,149	21,349	460	376	31,343
421	1,507	7,172	22,374	793	368	32,635
411	1,459	7,188	23,238	1,142	355	33,793
Queensland						
46	742	3,931	13,159	6,013	36	23,927
46	722	4,055	13,812	6,393	39	25,067
43	686	4,106	14,461	6,714	37	26,047
South Australia						
9	327	2,164	5,392	1,642	7	9,541
8	320	2,135	5,496	1,851	7	9,817
7	295	2,131	5,780	2,090	10	10,313
Western Australia						
38	459	12,952	19	12	3,212	16,692
38	448	13,368	23	16	3,765	17,658
34	428	13,859	32	26	4,392	18,771
Tasmania						
9	72	328	1,411	66	297	2,183
9	72	325	1,446	68	285	2,205
12	73	342	1,488	76	278	2,269
Northern Territory	1					
8	17	99	264	814	0	1,202
4	18	104	262	894	3	1,285
6	19	93	281	921	0	1,320
Australian Capital	Territory					,
0	16	32	140	4	14	206
3	12	28	132	3	11	189
0	12	28	132	6	13	191
Australia						
673	3,856	31,845	59,153	11,110	4,039	110,676
621	3,759	32,334	61,953	12,402	4,581	115,650
617	3,580	32,804	64,641	13,522	5,165	120,329

Table 10Registered articulated trucks, by GCM and state/territory of registration,2021, 2022 and 2023

np - not published/suppressed. Some values have been perturbed to preserve confidentiality.

Caravans by tare weight

Figure 11 shows the number of registered caravans by selected tare weight groups on 31 January 2023, 31 January 2022 and 31 January 2021. Table 11 shows registered caravans by tare weight and state/territory of registration on 31 January 2023, 31 January 2022 and 31 January 2021.

- There were 765,150 registered caravans on 31 January 2023 an increase of approximately 5.3 per cent on the number of registered caravans at the end of January 2022.
 - Caravans less than 1000 kilograms tare weight, comprised approximately 25.1 per cent of all caravans on 31 January 2023, but total registrations declined 1.7 per cent on January 2022.
 - Caravans 1001-1500 kilograms tare weight, comprised 24.5 per cent of all caravans on 31 January 2023, and total registrations increased 2.1 per cent on January 2022.
 - Caravans 1501-2000 kilograms tare weight, comprised 18.1 per cent of all caravans on 31 January 2023, and total registrations increased 5.4 per cent on January 2022.
 - Caravans 2001-2500 kilograms tare weight, comprised 19.6 per cent of all caravans on 31 January 2023, and total registrations increased 14.7 per cent on January 2022.
 - Caravans above 2500 kilograms tare weight, comprised 9.6 per cent of all caravans on 31 January 2023, and total registrations increased 20.1 per cent on January 2022.

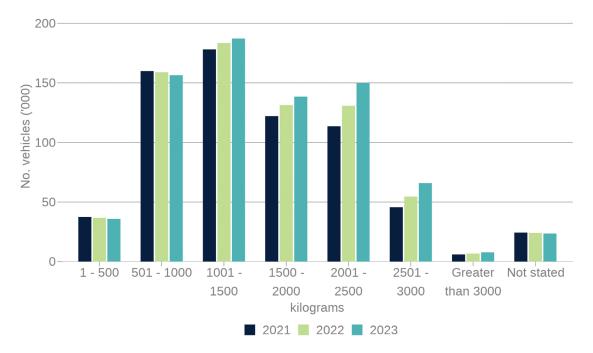


Figure 11 Registered caravans by tare weight, 2021, 2022 and 2023

Table 11 Registered caravans, by tare weight and state/territory of registration, 2021, 2022 and 2023

	Tare weight										
	1-500	501-1000	1001 1500	1500 2000	2001-2500	2501 2000	Greater than 3000				
	kilograms	kilograms	kilograms	kilograms	kilograms	kilograms		Not stated	Total		
	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)		
	New South W		. ,	. ,	. ,		. ,	. ,			
	7,970	38,915	42,105	28,839	26,761	9,362	843	139	154,934		
	7,865	38,301	43,299	30,987	31,294	11,593	1,019	124	164,482		
	7,691	37,219	44,066	32,608	36,239	14,352	1,212	120	173,507		
	Victoria										
	2,820	28,599	42,630	31,153	31,017	12,343	1,437	21,261	171,260		
	2,794	28,720	43,294	32,703	35,132	14,818	1,631	19,832	178,924		
	2,737	28,477	43,476	33,802	39,718	17,949	1,901	18,449	186,509		
	Queensland										
	16,510	42,905	43,339	33,064	29,787	12,754	1,707	2,936	183,002		
	16,032	42,412	44,607	36,096	34,071	14,846	1,847	4,102	194,013		
_	15,505	41,624	45,543	38,623	39,466	17,873	2,212	4,992	205,838		
	South Austral	lia									
	1,337	13,810	15,031	9,668	9,445	3,632	375	0	53,298		
	1,278	13,405	15,086	10,171	10,959	4,370	436	3	55,708		
_	1,207	12,785	14,974	10,574	12,402	5,162	467	0	57,571		
	Western Aust	tralia									
	6,649	26,794	26,108	17,022	14,429	6,799	1,440	3	99,244		
	6,616	26,992	27,439	18,765	16,723	7,997	1,570	0	106,102		
_	6,533	26,995	28,390	20,029	19,007	9,327	1,718	3	112,002		
	Tasmania										
	1,443	7,110	6,988	1,176	1,181	373	157	11	18,439		
	1,468	7,304	7,738	1,333	1,437	488	174	11	19,953		
_	1,501	7,447	8,652	1,437	1,721	642	211	11	21,622		
	Northern Ter	ritory									
	49	224	530	362	394	222	40	0	1,821		
	45	229	525	394	437	258	45	0	1,933		
-	39	218	546	463	553	314	46	0	2,179		
	Australian Ca	pital Territory	/								
	684	1,543	1,379	813	578	167	10	0	5,174		
	640	1,574	1,453	874	704	208	16	0	5,469		
	659	1,648	1,570	913	848	268	16	0	5,922		
	Australia				-						
	37,462	159,900	178,110	122,097	113,592	45,652	6,009	24,350	687,172		
	36,738	158,937	183,441	131,323	130,757	54,578	6,738	24,072	726,584		
	35,872	156,413	187,217	138,449	149,954	65,887	7,783	23,575	765,150		

np - not published/suppressed. Some values have been perturbed to preserve confidentiality. Sources: BITRE estimates.

Trailers by type

Figure 12 shows the number of registered trailers by trailer type on 31 January 2023, 31 January 2022 and 31 January 2021. Table 12 shows registered trailers by trailer type and state/territory of registration on 31 January 2023, 31 January 2022 and 31 January 2021.

- There were approximately 3.61 million registered trailers on 31 January 2023 an increase of approximately 1.8 per cent on the number of registered trailers at the end of January 2022.
 - Box trailers on register numbered around 2.16 million on 31 January 2023, and increased of approximately 1.6 per cent over cent on the number of registered trailers at the end of January 2022.
 - Boat trailers and horse floats together account for approximately 955,600, or 26.5 per cent of all registered trailers on 31 January 2023.
 - Semi-trailers on register numbered approximately 269,500 on 31 January 2023, an increase of 4.7 per cent on the number on register at end of January 2022.
 - Truck trailers on register numbered approximately 113,100 on 31 January 2023, an increase of 5.7 per cent on the number on register at end of January 2022.
 - Trailed machinery type trailers account for only 2.3 per cent (approximately 84,160) of all trailers on 31 January 2023, but numbers increased by 9.9 per cent on the number on register at end of January 2022.

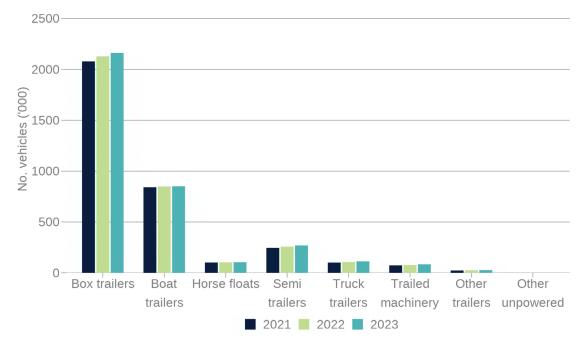


Figure 12 Registered trailers by type, 2021, 2022 and 2023

Table 12 Registered trailers , by trailer type and state/territory of registration, 2021, 2022 and 2023

		Trailer type										
Year	Box trailers	Boat trailers	Horse floats	Semi- trailers		Trailed machinery	Other trailers	Other unpowered	Total			
	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)			
	New South W			10.000	40.455		40.004		005 400			
2021	551,926	230,441	31,001	48,062	12,155	18,198	13,321	4	905,108			
2022	562,957	232,681	31,352	51,200	12,586	19,920	13,866	4	924,566			
023	566,992	232,100	31,330	52,849	12,885	23,893	14,573	3	934,625			
	Victoria							_				
021	440,731	176,190	28,390	57,451	13,357	31,446	2,405	5	749,975			
022	457,886	177,830	28,746	59,972	13,524	32,317	3,396	5	773,676			
023	469,557	178,966	29,035	62,625	13,617	33,279	4,410	4	791,493			
	Queensland											
021	461,401	246,806	23,089	61,983	66,745	6,813	2,723	103	869,663			
022	472,751	248,634	23,673	65,191	71,674	7,058	2,712	96	891,789			
023	482,124	250,022	24,074	68,346	76,933	7,365	2,780	90	911,734			
	South Austral	South Australia										
2021	234,353	51,623	4,713	21,024	4,478	3,740	557	3	320,491			
022	236,091	51,583	4,779	21,562	4,716	3,969	596	3	323,299			
023	234,902	49,321	4,881	22,592	4,952	4,187	627	3	321,465			
	Western Aust	ralia										
021	267,528	95,270	10,040	48,115	2,714	10,620	32	8	434,327			
022	273,723	97,320	10,255	50,390	2,882	10,163	32	8	444,773			
023	281,113	99,357	10,414	53,508	3,039	12,043	66	7	459,547			
	Tasmania											
021	74,035	28,330	3,508	4,154	1,054	2,109	3,194	0	116,384			
022	76,514	28,622	3,561	4,321	1,126	2,307	3,419	0	119,870			
023	78,747	28,900	3,603	4,431	1,143	2,501	3,595	0	122,920			
	Northern Terr	itory										
021	20,978	8,340	614	4,471	339	488	3	0	35,233			
022	21,180	8,238	611	4,567	346	480	0	0	35,422			
023	21,199	7,962	611	4,874	346	455	3	0	35,450			
	Australian Ca	oital Territory										
2021	27,805	4,744	475	314	185	369	1,140	0	35,032			
2022	27,601	4,663	476	292	186	391	1,157	0	34,766			
2023	27,472	4,537	496	308	179	440	1,206	0	34,638			
.025	Australia								54,050			
021		044 744	101 000	245 574	101 027	72 702	22 275	100	2 466 242			
021	2,078,757	841,744	101,830	245,574	101,027	73,783	23,375	123	3,466,213			
022	2,128,703	849,571	103,453	257,495	107,040	76,605	25,178	116	3,548,161			
2023	2,162,106	851,165	104,444	269,533	113,094	84,163	27,260	107	3,611,872			

np - not published/suppressed. Some values have been perturbed to preserve confidentiality. Sources: BITRE estimates.

Plant and equipment by tare weight

Figure 13 shows the number of registered plant and equipment type vehicles by tare weight classes on 31 January 2023, 31 January 2022 and 31 January 2021. Table 13 shows registered plant and equipment type vehicles by tare weight classes and state/territory of registration on 31 January 2023, 31 January 2022 and 31 January 2021.

- There were approximately 329,500 registered plant and equipment type vehicles on 31 January 2023 an increase of approximately 2.1 per cent on the number of equivalent vehicles at the end of January 2022.
- Differences in jurisdictions' registration practices and/or NEVDIS reporting for such vehicles are apparent, with significant variation in the number of such vehicles reported across jurisdictions.
- The plant and equipment type vehicle registrations are provided here for completeness. Extra care should be exercised in comparing numbers of such vehicles across jurisdictions.

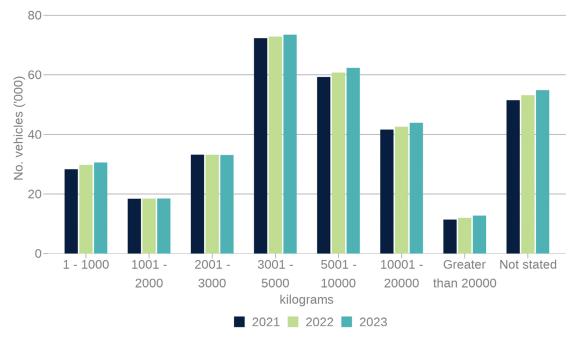


Figure 13 Registered plant and equipment by tare weight, 2021, 2022 and 2023

Table 13 Registered plant and equipment, by tare weight and state/territory of registration, 2021, 2022 and 2023

	Tare weight								
	1-1000	1001-2000	2001-3000	3000-5000	5001- 10000	10001- 20000	Greater than 20000		
Year	kilograms	kilograms	kilograms	kilograms	kilograms	kilograms	kilograms	Not stated	Total
	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)	(vehicles)
	New South V	Vales							
2021	92	230	289	611	734	1,024	601	3	3,584
2022	84	215	259	543	672	974	632	0	3,379
2023	86	193	227	497	591	899	653	3	3,149
	Victoria								
2021	15,515	6,091	11,666	23,617	19,431	8,822	1,209	13,427	99,778
2022	16,582	6,142	11,784	24,049	20,504	9,309	1,305	13,285	102,960
2023	16,845	6,103	11,907	24,310	21,386	9,582	1,438	12,985	104,556
	Queensland								
2021	7,717	4,614	7,901	21,244	14,399	11,031	5,919	24,000	96,825
2022	8,154	4,734	7,857	21,354	14,874	11,310	6,145	25,591	100,019
2023	8,521	4,848	7,837	21,529	15,354	11,816	6,472	27,384	103,761
	South Austra	lia							
2021	1,636	4,041	7,814	16,152	13,208	8,528	1,539	885	53,803
2022	1,659	4,007	7,795	16,202	13,211	8,491	1,544	788	53,697
2023	1,687	3,875	7,664	16,196	13,202	8,475	1,534	809	53,442
	Western Aus	tralia							
2021	2,838	3,268	5,434	10,604	11,380	12,072	2,096	216	47,908
2022	2,799	3,189	5,362	10,601	11,384	12,369	2,323	207	48,234
2023	2,964	3,317	5,359	10,864	11,686	13,007	2,602	200	49,999
	Tasmania								
2021	424	73	19	17	12	12	3	11,074	11,634
2022	401	70	21	17	16	12	3	11,374	11,914
2023	386	70	19	19	16	12	5	11,589	12,116
	Northern Ter	ritory							
2021	5	3	7	18	72	94	27	1,884	2,110
2022	5	4	7	19	63	82	27	1,911	2,118
2023	5	4	7	14	57	76	24	1,907	2,094
	Australian Ca	apital Territor	y						
2021	88	84	65	52	43	37	19	0	388
2022	82	87	82	49	41	37	18	3	399
2023	88	84	65	52	43	37	19	0	388
	Australia								
2021	28,315	18,404	33,195	72,315	59,279	41,620	11,413	51,489	316,030
2022	29,766	18,448	33,167	72,834	60,765	42,584	11,997	53,159	322,720
2023	30,572	18,487	33,094	73,480	62,337	43,904	12,749	54,877	329,500

np - not published/suppressed. Some values have been perturbed to preserve confidentiality.

Explanatory notes

This section provides more details about the scope, coverage and quality of the registered road vehicle data reported in this publication. Many of these details are similar to those reported by ABS (2021), but there are some minor differences in sources and methods.

The estimates presented here include all road vehicles that are registered with an Australian state or territory motor vehicle registry (MVR) for unrestricted use on public roads and reported by jurisdictions to the National Exchange of Vehicle and Driver Information System (NEVDIS), as at the 31 January 2023.

The scope of the estimates have been defined to accord as closely as possible with the previous ABS' Motor Vehicle Census (MVC) motor vehicle estimates, and hence exclude:

- recreational vehicles such as trail bikes, quad bikes, and sand dune buggies intended for off-road use;
- veteran and vintage vehicles registered for restricted use only;
- consular vehicles, and
- vehicles registered by the defence forces.

In particular, veteran and vintage vehicles registered for restricted use are not provided to NEVDIS by most jurisdictions and hence not included in BITRE's estimates. Consular and defence force vehicles also appear to be excluded from NEVDIS and hence not included in these estimates. Recreational and/or off-road vehicles are categorised as plant and equipment, using make and model, and not included in total registered motor vehicles. However, some trail bikes and quad bikes may still appear as motorcycles in the estimates.

NEVDIS data also includes road-registered caravans, trailers, and plant and equipment – which includes construction equipment, agricultural tractors and equipment, golf buggies, etc. These vehicle types are not included in the definition of registered *motor vehicles*, but are within scope of all road vehicles. Separate estimates are provided in this publication of total registered caravans, trailers and plant and equipment. More detailed estimates for are available via the BITRE website and data.gov.au.

BITRE has followed the previous ABS' MVC registration cut-off date, deeming all vehicles whose registration lapsed up to one month prior to the MVC snapshot date (i.e. after 31 December of the preceding year) to be in scope.

Data quality

Raw motor vehicle registry data requires significant cleaning and standardisation to produce nationally-consistent estimates. Variation in registration categories used across different jurisdictions, inconsistent allocation of vehicles to registration categories within jurisdictions, and the size of the registered vehicle fleet greatly complicates the process of consistently and accurately identifying and categorising vehicles.

The number of registered road vehicles (over 25 million vehicles in 2023) dictates that quality assurance of each record is not possible. For data made available at a detailed level, BITRE is unable to guarantee that it is necessarily sufficient for all purposes for which it may be used. There is also variation in vehicle registration categories and motive power codes

across different state and territory MVRs and care should be taken when comparing data across jurisdictions.

The data provided to and used by BITRE to produce estimates of registered road vehicles for any year may be revised or corrected in later years. BITRE will continue to refine and improve its data cleaning and standardisation processes, which may also result in estimates being revised or corrected in later years.

Statistical geography

Road Vehicles, Australia data is available for the following geographical areas:

- state/territory of vehicle registration
- postcode of vehicle registration
- postcode of vehicle garaging (i.e. vehicle garaging postcode where recorded and registered postcode where garaging postcode is not available).

In analysing registered vehicle counts at postcode level, please note:

- there are vehicles for which the postcode of the vehicle's owner is in a different jurisdiction to that in which the vehicle is registered. For example, the registered postcode of the vehicle could be in New South Wales, yet the vehicle is registered in Queensland;
- some official postcodes (PO boxes, large volume receivers and specialist delivery postcodes) do not correspond to residential areas; and
- a small proportion of registered postcodes could not be matched to official Australian postcodes (e.g. incomplete, invalid or overseas postcode). All invalid postcodes are encoded as 'UNKN' – Unknown.

Methodological changes

Year of manufacture

Vehicle year of manufacture is based on the NEVDIS-recorded year of manufacture for registered vehicles in all jurisdictions other than New South Wales. Year of manufacture for New South Wales' registered vehicles is based on the year of the vehicle compliance plate. (New South Wales provides compliance plate date (year-month) to NEVDIS, all other jurisdictions provide vehicle year of manufacture to NEVDIS.)

Based on records where both vehicle year of manufacture and compliance plate date are present, there appeared to be a high degree of consistency between the two fields. Note that New South Wales accounts for over 6 million registered motor vehicles, hence this change may impact a significant number of vehicle records.

Vehicle makes

There are significant changes to the range of vehicle makes reported here from that previously reported by ABS (2022). For example, Range Rover vehicles, previously reported by ABS as a separate make, are now reported as make: Land Rover and model: Range Rover. MINI branded vehicles are enumerated separately by BITRE.

Confidentialisation

Vehicle counts presented in this publication have been 'confidentialised' so as mitigate the risk that third parties could identify particular individuals, families, households, dwellings or businesses, from released vehicles counts.

BITRE's confidentialisation procedures involve a combination of suppressing the value of small-count cells (i.e. cells with fewer than 3 units), including any total cells, and perturbation or suppression of any secondary cells necessary to preserve confidentiality.

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 fields. Again, the majority of these definitions are identical to ABS (2021). Note the motive power type definition has changed with new motive power sources introduced: battery electric vehicles, fuel-cell electric vehicles and hybrid electric vehicles.

Articulated trucks	Motor vehicles constructed primarily for load carrying, consisting of a prime mover having no significant load carrying area, but with a turntable device which can be linked to one or more trailers.
Average age of vehicle	The estimated average age of registered motor vehicles in Australia. The age of a vehicle is defined as the number of years since it was first manufactured. This is calculated using the formulas below, which allow for the month of the year in which the registered vehicle fleet snapshot is taken. The formulas assume that vehicles are manufactured at a constant rate over the year.
	For vehicles manufactured in the current year:
	Vehicle age = (snapshot month)/24
	For vehicles manufactured in previous years:
	Vehicle age = (snapshot year) – (Year of manufacture) + (snapshot month - 6)/12
	The average age is then calculated as the sum of all vehicle ages divided by the total number of vehicles. Vehicles that have an unknown year of manufacture are excluded from calculations of average age.
Battery electric vehicles	Battery electric vehicles (BEV) are vehicles reported by the registering authority as having a single power source which is electricity sourced from an on-board battery.
Buses	Motor vehicles constructed for the carriage of passengers. This category includes all motor vehicles with 10 or more seats, including the driver's seat.
Caravan	Any enclosed trailer designed primarily for human occupation while stationary.
Campervans	Self-propelled motor vehicles containing an area primarily used for human occupation when stationary. This includes motor homes and powered caravans.

- Estimated Resident Population (ERP) The official measure of the population of Australia is based on the concept of residence. It refers to all people, regardless of nationality or citizenship, who usually live in Australia, with the exception of foreign diplomatic personnel and their families. It includes usual residents who are overseas for less than 12 months. It excludes overseas visitors who are in Australia less than 12 months. The ERP used to calculate average vehicle ownership is as at 31 December of the calendar prior to the date of the NEVDIS vehicle snapshot.
- Fuel-cell electricFuel-cell electric vehicles (FCEV) vehicles reported by the registering
authority as being powered by a fuel cell fuelled by hydrogen.
- Gross combinationTare weight (i.e. unladen weight) of the motor vehicle and attached
trailers, plus its maximum carrying and towing capacity. GCM is the
weight measurement used for vehicles such as articulated trucks used
for towing trailers.
- Gross vehicle massTare weight (i.e. unladen weight) of the motor vehicle, plus its maximum(GVM)carrying capacity excluding trailers.

Heavy rigid trucks Rigid trucks of GVM greater than 4.5 tonnes.

- Hybrid electricHybrid electric vehicles are based on vehicles reported by thevehiclesregistering authority as having more than one power source, one of
which is electricity drawn from an on-board battery.
- Light commercial Vehicles primarily constructed for the carriage of goods, and which are vehicles less than or equal to 3.5 tonnes GVM. This includes utilities, panel vans, cab-chassis and forward-control load carrying vehicles (whether four-wheel drive or not).
- *Light rigid trucks* Rigid trucks of GVM greater than 3.5 tonnes and less than or equal to 4.5 tonnes.
- *Make* The manufacturer-designated brand (or marque) of the vehicle.
- Motive power type Vehicle motive power type is based on that reported by the registering authority. Principal motive types (power source) include petrol, diesel, LPG, CNG and electricity and other (which includes hydrogen). Dual fuel vehicles and hybrid electric vehicles are based on vehicles reported by the registering authority as having more than one power source or vehicle model information, where that information identifies the vehicle motive power source(s).
- Motorcycles Two and three wheeled motor vehicles constructed primarily for the carriage of one or two persons. This category includes two and three wheeled mopeds, scooters, motor tricycles and motorcycles with sidecars.

Motor vehicles	Self-propelled road vehicles with an on-board power source.					
Non-freight carrying vehicles	Specialist motor vehicles or motor vehicles fitted with special purpose equipment, and having little or no-load carrying capacity (e.g. ambulances, fire trucks, tow trucks, hearses, etc.).					
Passenger vehicles	Motor vehicles constructed primarily for the carriage of persons and containing up to nine seats (including the driver's seat). This category includes cars, station wagons, four-wheel drive passenger vehicles and forward-control passenger vehicles. Campervans are excluded.					
Plant and equipment	Motor vehicles constructed primarily for off-road and/or special purpose use, and registered for occasional or infrequent road use.					
Rigid trucks	Motor vehicles of GVM greater than 3.5 tonnes, constructed with a load carrying area. This includes trucks with a tow bar, draw bar or other non-articulated coupling on the rear of the vehicle.					
	Rigid trucks are divided into two categories:					
	 Light rigid trucks of GVM greater than 3.5 tonnes and less than or equal to 4.5 tonnes. 					
	 Heavy rigid trucks of GVM greater than 4.5 tonnes. 					
Trailers	An unpowered vehicle constructed to be drawn behind a motor vehicle.					

35

References

Australian Bureau of Statistics (ABS) 2021, *Motor Vehicle Census, Australia*, ABS. URL: www.abs.gov.au/statistics/industry/tourism-and-transport/motor-vehicle-censusaustralia/latest-release.

ABS 2023, National, state and territory population, ABS. URL: www.abs.gov.au/statistics/people/population/national-state-and-territorypopulation/latest-release.

Vehicle Standard (Australian Design Rule – Definitions and Vehicle Categories) 2005. URL: https://www.legislation.gov.au/Details/F2023C01069, Accessed: 15 June 2023.