

# **MOTOR VEHICLE CENSUS**

AUSTRALIA

EMBARGO: 11.30AM (CANBERRA TIME) WED 14 JAN 2009

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## INQUIRIES

For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070.

## NOTES

#### ABOUT THIS PUBLICATION

This publication presents statistics relating to vehicles which were registered at 31 March 2008 with a motor vehicle registration authority. Motor vehicle registration statistics are compiled from data made available by various state and territory motor vehicle registration authorities and reflect the information as recorded in registration documents.

Estimates of the size and composition of the vehicle fleet were first published in 1921. However, it is only since 1971 that a Motor Vehicle Census (MVC) has been conducted on a more regular basis. The MVC has not been conducted in each and every year since 1971 and the census dates have varied over those years. Therefore, care should be taken when attempting to compare movements over the years.

Statistics are provided on vehicle types comprising passenger vehicles, campervans, light commercial vehicles, all types of trucks, buses and motorcycles.

Vehicle characteristic information includes make of vehicle, year of manufacture, type of fuel that the vehicle was registered as using; and for trucks, Gross Vehicle Mass or Gross Combination Mass. The size of the motor vehicle fleet is also compared with the estimated resident population.

CHANGES IN THIS ISSUE

Data for the geographic regions of Statistical Divisions have been removed from this issue. The data items previously contained in those tables are available by postcode and state and territory in the data cubes released on the website with this publication.

Brian Pink Australian Statistician

### SUMMARY OF FINDINGS

TOTAL NUMBER OF VEHICLES ON REGISTER

There were 15.3 million motor vehicles, including motor cycles, registered in Australia at 31 March 2008. This is 3.5% higher than the number of registrations from the 31 March 2007 Motor Vehicle Census (MVC), and an increase of 16.2% since the 2003 MVC snapshot, when there were 13.2 million vehicles registered in Australia. The average annual growth over this five year period was 3.0%.

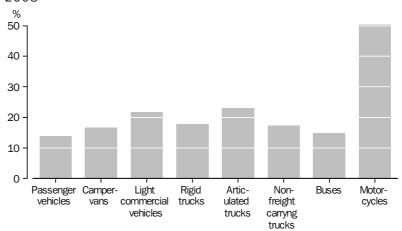
TYPE OF VEHICLE, Census years 2003, 2007 and 2008

	2003	2007	2008	Change 03/08	Change 07/08	Average annual growth 03/08
	no.	no.	no.	%	%	%
Passenger vehicles	10 365 941	r11 466 560	11 803 536	13.9	2.9	2.6
Campervans	38 337	r43 287	44 790	16.8	3.5	3.2
Light commercial vehicles	1 879 755	r2 190 131	2 288 216	21.7	4.5	4.0
Rigid trucks	348 673	r394 542	410 910	17.8	4.1	3.3
Articulated trucks	64 261	r74 452	79 132	23.1	6.3	4.3
Non-freight carrying trucks	18 599	r21 248	21 808	17.3	2.6	3.2
Buses	70 122	r77 562	80 581	14.9	3.9	2.8
Motor cycles	377 271	r512 428	567 569	50.4	10.8	8.5
Total motor vehicles	13 162 959	r <b>14 780 210</b>	15 296 542	16.2	3.5	3.0

revised

In the 5 years between 31 March 2003 and 31 March 2008, the passenger vehicle fleet has grown 13.9% from 10.4 million to 11.8 million. Motor cycles and articulated trucks were the vehicle types showing the largest growth over this time with increases of 50.4% and 23.1% respectively. Light commercial vehicles rose by 21.7%, rigid trucks rose by 17.8% and non-freight carrying trucks rose by 17.3%. Buses and passenger vehicles had the smallest growth over the same period, with increases of 14.9% and 13.9% respectively.

TYPE OF VEHICLE, Percent change—Between census years 2003 and 2008  $\,$ 



STATES AND TERRITORIES

New South Wales had the largest share of the Australian fleet with 4.5 million vehicles or 29.5% of all registered vehicles, followed by Victoria with 3.9 million (25.6%) and Queensland with 3.2 million (20.7%). The Northern Territory had the smallest share with 0.1 million (0.8%) registered vehicles. These shares are comparable with the distribution of the population across states and territories.

STATES AND TERRITORIES continued

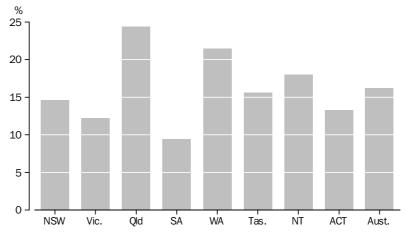
### STATE OF REGISTRATION, Census years 2003, 2007 and 2008

	2003	2007	2008	Change 03/08	Change 07/08	Average annual growth 03/08
	no.	no.	no.	%	%	%
New South Wales	3 944 850	4 361 237	4 519 963	14.6	3.6	2.8
Victoria	3 494 314	3 818 062	3 921 574	12.2	2.7	2.3
Queensland	2 552 061	3 033 417	3 173 447	24.3	4.6	4.5
South Australia	1 077 154	1 156 961	1 178 904	9.4	1.9	1.8
Western Australia	1 438 441	1 676 495	1 746 579	21.4	4.2	4.0
Tasmania	338 484	381 226	391 327	15.6	2.6	2.9
Northern Territory	104 259	118 178	122 986	18.0	4.1	3.4
Australian Capital Territory	213 396	r234 634	241 762	13.3	3.0	2.5
Australia	13 162 959	r <b>14 780 210</b>	15 296 542	16.2	3.5	3.0

r revised

From 31 March 2003 to 31 March 2008, three states experienced growth above the national average of 16.2%. The growth in the Queensland motor vehicle fleet exceeded that of other states. Registrations in Queensland at 31 March 2008 were 24.3% above those at 31 March 2003, an average annual growth rate of 4.5%. In the same five year period, registrations in Western Australia increased 21.4%, an average annual growth rate of 4.0% and Northern Territory registrations rose 18.0%, with an average annual increase of 3.4%. South Australia's growth in fleet size between 31 March 2003 and 31 March 2008 of 9.4% was the smallest. In this state, the average annual growth was 1.8%.

# MOTOR VEHICLE REGISTRATIONS, Percent change—Between census years 2003 and 2008



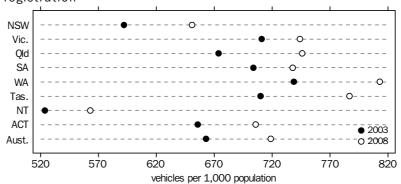
VEHICLES AND RESIDENT POPULATION

There were 719 motor vehicles per 1,000 resident population in Australia at 31 March 2008. This compares with 663 vehicles per 1,000 residents at the end of March 2003, an increase of 56 vehicles per 1,000 residents over this time.

Western Australia had the highest rate of all states and territories with 813 vehicles per 1,000 residents at 31 March 2008, while the Northern Territory had the lowest rate with 563 vehicles per 1,000 residents. New South Wales, which had both the largest vehicle fleet and the largest population at 31 March 2008, averaged 651 vehicles per 1,000 residents, the second lowest of all states or territories.

VEHICLES AND RESIDENT POPULATION continued

# MOTOR VEHICLE FLEET BY POPULATION(a), State/territory of registration



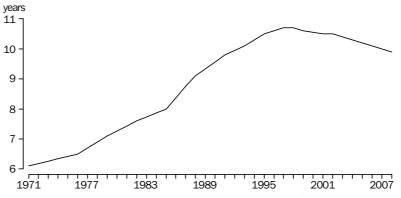
(a) Both Estimated Resident Population data and Motor Vehicle Census data are at 31 March. Source: ABS Australian Demographic Statistics (cat. no. 3101.0)

AVERAGE AGE OF THE FLEET

The average age of all registered vehicles rose from 6.1 years in the 1971 MVC snapshot to 10.7 years in 1997 snapshot, but has been gradually declining since then.

At 31 March 2008, the average age of all vehicles registered in Australia was 9.9 years. This is younger than the 10.4 years recorded in the 2003 MVC. Over this five year period, a drop in the average age was observed in all vehicle types except buses. Vehicles manufactured before 1993 (those more than 15 years old) comprised 21.2% of the total Australian fleet. This is slightly lower than the 21.9% of registrations recorded 12 months earlier.

## ESTIMATED AVERAGE VEHICLE AGE(a) OF VEHICLE FLEET(b)



- (a) For more details on the calculation of average vehicle age refer to the Glossary.
- (b) See Explanatory Notes for Motor Vehicle Census dates.

At 31 March 2008, campervans were the oldest vehicles registered with an average age of 18.4 years, while motor cycles were the youngest vehicle type with an average age of 8.8 years.

The average age of passenger vehicles has fallen from 10.1 years at 31 March 2003 to 9.7 years at 31 March 2008.

## SUMMARY OF FINDINGS continued

AVERAGE AGE OF THE FLEET continued

Tasmania had the oldest fleet with an average age of 11.9 years at 31 March 2008, with 30.8% of vehicles manufactured before 1993. This was followed by South Australia with an average age of 11.1 years and 26.5% manufactured before 1993. Northern Territory had the youngest fleet in Australia with an average age of 8.9 years and 17.3% of vehicles manufactured before 1993.

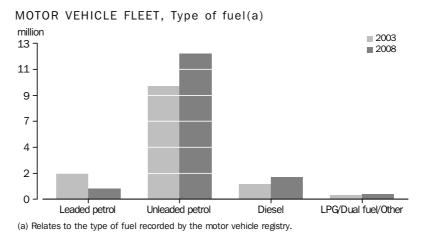
TYPE OF FUEL

At the 31 March 2008 MVC snapshot, 13.0 million vehicles in Australia (85.2% of the total vehicle fleet) were registered with a petrol fuel type. This compares with the 11.6 million vehicles registered at the 31 March 2003 snapshot 5 years earlier, when 88.2% of registrations fell into this category.

In the 5 years between 31 March 2003 and 31 March 2008, the proportion of total vehicles registered with petrol has declined as the proportion of vehicles registered with diesel fuel has increased. The number of vehicles registered with diesel fuel at 31 March 2008 accounted for 12.0% (or 1.8 million vehicles) of the total fleet. Five years earlier, 9.3% of vehicles were registered with diesel fuel.

Higher proportions of passenger vehicles, light commercial vehicles and light rigid trucks registered with diesel were the major contributors to this increase. Overall passenger vehicle registrations increased by 13.9% between the 2003 and 2008 MVC snapshots, yet the number of passenger vehicles registered with diesel fuel increased by 70.9%.

At 31 March 2008, 777,764 light commercial vehicles were registered with diesel fuel. This is 42.4% of all vehicle registrations in the diesel category. For this vehicle type, the number of registrations with diesel fuel at 31 March 2008 was 56.1% higher than at 31 March 2003. The proportion of light rigid trucks registered with diesel also increased in this period, from 77.1% of registrations of this vehicle type at 31 March 2003 to 87.1% 5 years later.



CHARACTERISTICS OF THE FLEET

Passenger vehicles

Passenger vehicles accounted for 77.2% of all vehicles registered in Australia at 31 March 2008. Since 31 March 2003, all states and territories have recorded increases in registrations of this vehicle type, with Queensland showing the largest growth (20.2%) and South Australia the smallest (7.7%).

### SUMMARY OF FINDINGS continued

Passenger vehicles continued

In the Australian Capital Territory, passenger vehicles accounted for 84.9% of all registrations. This was the highest proportion of any state/territory. The Northern Territory had the smallest proportion with 63.2%.

A total of 6.2 million passenger vehicles were either Toyota, Holden or Ford. These three makes accounted for 19.4%, 17.6% and 15.2% of the total passenger vehicle fleet registered at 31 March 2008.

Trucks

Rigid trucks accounted for 2.7% of the total number of vehicles registered at 31 March 2008. Registrations of the heaviest rigid trucks (those with a gross vehicle mass (GVM) greater than 20 tonnes) have increased by 35.2% since 31 March 2003, while registrations of rigid trucks with a GVM of less than 20 tonnes have increased by 14.4% over the same period.

At 31 March 2008, 79,132 articulated trucks were registered in Australia. While this is 23.1% higher than the number of registrations five years earlier, the growth has been exclusively in articulated trucks in the larger gross combination mass (GCM) categories. Over this period, the number of registrations of articulated trucks with a GCM up to 60 tonnes has dropped 2.1% and the number of articulated trucks with GCM over 60 tonnes has increased 72.4%. This has resulted in an articulated truck fleet where the proportion of registrations with GCM over 60 tonnes has increased from 33.9% at 31 March 2003 to 47.4% at 31 March 2008.

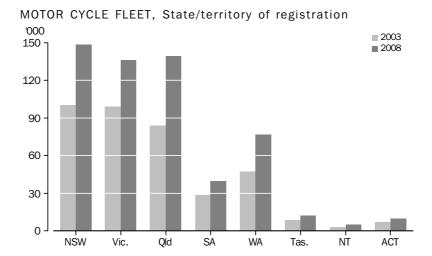
Victoria had the largest number of articulated trucks. It was also the state with the highest number of registrations with a GCM greater than 60 tonnes (11,706). This is 91.7% greater than the number of registrations in this category at 31 March 2003, but vehicles of this size still only make up just under half (49.4%) of all articulated registrations in the state. In comparison, at 31 March 2008, 81.8% of Northern Territory articulated trucks had a GCM greater than 60 tonnes. Western Australia has the lowest proportion of articulated trucks with a GCM greater than 60 tonnes, with only 1.5% of vehicles in this class.

Motor cycles

Motor cycles accounted for 3.7% of all vehicles registered in Australia at 31 March 2008, up from 2.9% in 2003.

Between 31 March 2003 and 31 March 2008, the proportional increase in motor cycle registrations was the largest of any vehicle type. Increases in registrations have been observed in all states and territories with Queensland recording the largest increase of 66.3%, followed by Western Australia with 63.6%. The smallest increase was in Victoria where registrations of motor cycles at 31 March 2008 were 37.3% above those recorded 5 years earlier.

Motor cycles continued





# ${\tt MOTOR\ VEHICLES\ ON\ REGISTER,\ Type\ of\ vehicle} - {\tt Census\ years}$

Australia	Australian Capital Territory(b)	Northern Territory	Tasmania(a)	Western Australia	South Australia	Queensland	Victoria	New South Wales	
no.	no.	no.	no.	no.	no.	no.	no.	no.	
• • • • • • • • •	• • • • • • • • •	• • • • • • • •	= 0	R VEHICLI	PASSENG	• • • • • • • • •	• • • • • • • • •	• • • • • • • •	• • • • •
10.005.044	400 740	00.075				4 045 007	0.000.004	0.400.000	0000
10 365 941 r11 466 560 11 803 536	183 719 r200 015 205 199	68 275 75 618 77 683	247 492 275 146 280 856	1 091 973 1 254 426 1 295 136	873 449 927 313 940 791	1 915 327 2 220 568 2 302 407	2 822 384 3 049 224 3 120 048	3 163 322 3 464 250 3 581 416	2003 2007 2008
• • • • • • • • •	• • • • • • • • •	• • • • • • • •	• • • • • • • • • •		• • • • • • • •	• • • • • • • • •	• • • • • • • • • •	• • • • • • • • •	• • • • •
				ERVANS	CAMP				
38 337	529	153	3 163	7 049	4 393	6 818	8 445	7 787	2003
r43 287 44 790	r480 461	183 196	3 683 3 813	7 370 7 396	4 164 4 040	9 119 9 874	9 668 10 165	8 620 8 845	2007 2008
• • • • • • • •	• • • • • • • • •	• • • • • • • •	• • • • • • • • •		• • • • • • • •	• • • • • • • • • •	• • • • • • • • •	• • • • • • • •	• • • • •
			ICLES	RCIAL VEH	GHT COMME	LIG			
1 879 755	18 498	25 753	65 453	226 123	132 754	441 358	438 047	531 769	2003
r2 190 131 2 288 216	r21 347 22 279	29 960 31 596	76 052 78 762	268 330 283 319	148 920 153 430	550 453 585 861	495 649 511 124	599 420 621 845	2007 2008
	• • • • • • • • •		• • • • • • • • • •		• • • • • • • • •	• • • • • • • • •	• • • • • • • • • •	• • • • • • • • •	• • • • •
			S	GID TRUCK	LIGHT RI				
78 479	607	500	2 151	7 431	4 155	18 026	16 493	29 116	2003
r99 620 105 726	r651 681	633 674	2 472 2 518	10 136 11 079	5 011 5 431	25 326 27 293	21 100 22 280	34 291 35 770	2007 2008
100 .20		• • • • • • •			0 .01	2. 200			2000
			(S	GID TRUCK	HEAVY RI				
270 194	1 738	2 885	7 131	37 728	21 467	53 708	69 714	75 823	2003
r294 922	r1 724	3 218	7 917	42 538	21 938	63 709	73 339	80 539	2007
305 184	1 716	3 478	8 088	45 248	22 335	67 748	74 760	81 811	2008
• • • • • • • • •	• • • • • • • • •	• • • • • • • •	(S	TED TRUCK	ARTICULA	• • • • • • • • • •	• • • • • • • • • •		• • • • •
64 261	250	697	1 382	7 653	6 436	13 823	19 254	14 766	2003
r74 452	r233	832	1 491	9 985	6 446	16 734	22 389	16 342	2007
79 132	224	927	1 591	11 111	6 914	17 940	23 690	16 735	2008
• • • • • • • • •	• • • • • • • •	• • • • • • •	TRUCKS	CARRYING	-FREIGHT (	NON	• • • • • • • • • •	• • • • • • • • •	• • • • •
18 599	84	259	936	3 374	1 761	3 754	5 018	3 413	2003
r21 248	r89	275	976	4 006		4 578	6 000		2007
21 808	80	285	998	4 182	1 777	4 821	6 090	3 575	2008
• • • • • • • • • •	• • • • • • • • •	• • • • • • • •	• • • • • • • • • •	JSES		• • • • • • • • •	• • • • • • • • • •	• • • • • • • • •	• • • • •
	957				4 285		15 887		2003
r77 562	r948	3 094	2 308	11 673	4 544	17 336 18 148	16 887	20 772	2007
80 581		3 217							2008
• • • • • • • • • •	• • • • • • • • •	• • • • • • • •	• • • • • • • • • •	CYCLES		• • • • • • • • • •	• • • • • • • • • •	• • • • • • • • • •	• • • • •
377 271	7 014	3 244	8 582	47 066	28 454	83 790			2003
r512 428 567 569	r9 147 10 156	4 365 4 930	11 181 12 297	68 031 77 010	36 898 39 493	125 594 139 355	123 806 136 019	133 406 148 309	2007 2008
			• • • • • • • • • •						• • • • •
					TOTAL MOT				
	213 396	104 259	338 484	1 438 441	1 077 154	2 552 061	3 494 314	3 944 850	2003
			381 226 391 327	1 676 495 1 746 579	1 156 961 1 178 904	3 033 417 3 173 447		4 361 237 4 519 963	2007 2008
10 200 042	271 102	122 300	001 021	11-0313	1 110 304	0 110 441	0 021 014	+ 010 900	2000
377 271 r512 428 567 569 13 162 959	7 014 r9 147 10 156	3 244 4 365 4 930 104 259 118 178	11 181 12 297 ES 338 484 381 226	47 066 68 031 77 010 OR VEHICL 1 438 441 1 676 495	28 454 36 898 39 493 ************************************	83 790 125 594 139 355	99 072 123 806 136 019 3 494 314 3 818 062	00 049 33 406 48 309 44 850 61 237	1. 1. 1. 3 9. 4 3.

(b) See Technical Note

<sup>(</sup>a) Excludes vehicles with registration expiry date less than one month before the census date.



# MOTOR VEHICLES ON REGISTER PER 1000 POPULATION(a)—Census years

	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania(b)	Northern Territory	Australian Capital Territory	Australia
	no.	no.	no.	no.	no.	no.	no.	no.	no.
• • • • •	• • • • • •	• • • • • • •	• • • • • • • • • •	PASSEN	GER VEHI	CLES	• • • • • • • •	• • • • • • • •	• • • • • • •
2003	474	574	506	571	561	519	343	565	522
2008	516	592	541	589	603	565	356	599	555
• • • • •	• • • • • • •	• • • • • • •	• • • • • • • • • • •	CAN	1PERVANS		• • • • • • • • •	• • • • • • • • •	
2003	1	2	2	3	4	7	1	2	2
2008	1	2	2	3	3	8	1	1	2
• • • • •	• • • • • • •	• • • • • • •	LI	GHT COMM	IERCIAL \	/EHICLES	• • • • • • • • •	• • • • • • • •	• • • • • • •
2003	80	89	117	87	116	137	129	57	95
2008	90	97	138	96	132	158	145	65	108
	• • • • • • •	• • • • • • •	• • • • • • • • • •	LIGHT F	RIGID TRU	CKS	• • • • • • • • •	• • • • • • • • •	• • • • • •
2003	4	3	5	3	4	5	3	2	4
2008	5	4	6	3	5	5	3	2	5
• • • • •	• • • • • •	• • • • • • •	• • • • • • • • • •	HEAVY I	RIGID TRU	JCKS	• • • • • • • •	• • • • • • • • •	• • • • • • •
2003	11	14	14	14	19	15	14	5	14
2008	12	14	16	14	21	16	16	5	14
• • • • •	• • • • • •	• • • • • • •	• • • • • • • • • •	ARTICUL	ATED TRU	JCKS	• • • • • • • • •	• • • • • • • •	• • • • • • •
2003	2	4	4	4	4	3	4	1	3
2008	2	4	4	4	5	3	4	1	4
• • • • •	• • • • • • •	• • • • • • •	NOI	N-FREIGHT	CARRYIN	IG TRUCKS	• • • • • • • • •	• • • • • • • • •	• • • • • • •
2003	1	1	1	1	2	2	1	_	1
2008	1	1	1	1	2	2	1	_	1
	• • • • • • •	• • • • • • •	• • • • • • • • • •	• • • • • • • •	BUSES	• • • • • • • • •	• • • • • • • • •	• • • • • • • • •	• • • • • • •
2003	3	3	4	3	5	5	13	3	4
2008	3	3	4	3	6	5	15	3	4
• • • • •	• • • • • •	• • • • • • •	• • • • • • • • • •	МОТ	OR CYCLE	S	• • • • • • • • •	• • • • • • • • •	• • • • • • •
2003	15	20	22	19	24	18	16	22	19
2008	21	26	33	25	36	25	23	30	27
• • • • •	• • • • • •	• • • • • • •		TOTAL MO		ICLES	• • • • • • • • •	• • • • • • • • •	• • • • • • •
2003	592	711	674	704	739	710	524	656	663
2008	651	744	746	738	813	787	563	706	719

nil or rounded to zero (including null cells)

Source: ABS Australian Demographic Statistics (cat. no. 3101.0)

<sup>(</sup>a) Both Motor Vehicle Census and Estimated Resident Population data are as at 31 March.

<sup>(</sup>b) Based on Motor Vehicle Census counts which exclude vehicles with registration expiry date less than one month before the census date.





	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania(b)	Northern Territory	Australian Capital Territory	Australia
	no.	no.	no.	no.	no.	no.	no.	no.	no.
• • • • •	• • • • • • •		• • • • • • • • • •	PASSENG	GER VEHIO	CLES	• • • • • • • •		• • • • • • •
2003	9.1 9.1	10.4	10.1	11.6	10.5	11.9 11.4	8.9	9.8	10.1 9.7
2008	9.1	10.1	9.3	11.0	9.7	11.4	8.6	9.4	9.1
				CAM	PERVANS				
2003	17.0	19.7	16.4	20.2	21.2	19.9	19.0	19.4	18.9
2008	17.0	18.4	15.2	21.6	21.3	20.3	19.9	19.7	18.4
• • • • •			LI(	ЭНТ СОММ	ERCIAL V	EHICLES	• • • • • • • • •		• • • • • • •
2003	10.3	12.1	11.2	12.4	12.0	13.4	9.9	10.6	11.4
2008	10.0	11.3	9.9	11.3	10.6	12.7	9.1	9.6	10.5
• • • • •	• • • • • • •	• • • • • •	• • • • • • • • • •		IGID TRU	CKS	• • • • • • • •	• • • • • • • •	• • • • • • •
2003	11.1	13.4	12.0	13.4	13.6	16.5	8.7	11.7	12.3
2008	10.8	11.4	10.3	11.7	11.5	15.3	9.6	10.7	11.0
• • • • •	• • • • • • •	• • • • • •	• • • • • • • • • • •	HEAVY F	RIGID TRU	CKS	• • • • • • • • •	• • • • • • • • •	• • • • • •
2003	14.0	17.4	15.1	17.8	18.1	17.3	13.0	11.5	16.0
2008	13.9	17.2	13.9	17.1	17.3	16.9	13.0	11.0	15.5
• • • • •	• • • • • • •	• • • • • • •	• • • • • • • • • •	ARTICUL	ATED TRU	ICKS	• • • • • • • •		• • • • • • •
2003	10.7	12.0	11.6	11.1	13.5	10.9	12.6	8.1	11.7
2008	9.9	11.1	10.2	10.9	11.8	9.5	12.4	7.8	10.7
• • • • •	• • • • • • •	• • • • • • •	NON	I-FREIGHT	CARRYIN	G TRUCKS	• • • • • • • •	• • • • • • • • •	• • • • • • •
2003	13.5	15.3	11.2	14.5	16.9	16.9	12.8	14.6	14.4
2008	12.4	15.5	10.7	15.2	16.1	16.0	14.1	12.8	14.0
• • • • •	• • • • • • •		• • • • • • • • • •	E	BUSES	• • • • • • • • • •	• • • • • • • • •		• • • • • • •
2003	9.9	10.6	10.6	11.6	9.6	14.4	8.9	10.7	10.4
2008	11.4	11.3	10.3	11.9	11.1	15.3	8.6	11.6	11.1
• • • • •	• • • • • • •		• • • • • • • • • • •	МОТС	R CYCLE	S	• • • • • • • • •		• • • • • • •
2003		9.5	10.5	(c)9.4			8.3	9.4	9.9
2008	8.5	9.1	8.3	(c)8.3	10.1	10.1	7.0	8.6	8.8
• • • • •			• • • • • • • • • • •	TOTAL MO		ICLES	• • • • • • • • •		• • • • • • •
2003	9.4	10.8	10.5	11.8	11.1	12.4	9.3	9.9	10.4
2008	9.3	10.4	9.5	11.1	10.1	11.9	8.9	9.4	9.9

<sup>(</sup>a) For more details on the calculation of average age refer to the Glossary.

<sup>(</sup>b) Excludes vehicles with registration expiry date less than one month before the census date.

<sup>(</sup>c) The year of manufacture for motor cycles in South Australia is not well reported.

	PETROL					
	Leaded	Unleaded	Total	Diesel	LPG/Dual fuel/Other	Total
	no.	no.	no.	no.	no.	no.
		PAS	SSENGER	VEHICLES		
2003		8 177 794				10 365 941
2008	620 228	10 384 655	11 004 883	505 340	293 313	11 803 536
• • • • •	• • • • • • • •	• • • • • • • •	CAMPER	VANS	• • • • • • •	• • • • • • • •
2003	14 999	5 593	20 592	15 595	2 150	38 337
2008		7 363		24 783		44 790
• • • • •	• • • • • • • •	LIGHT	COMMEDCI	IAL VEHICLES		• • • • • • • •
0000	.==					
2003 2008		913 181 1 199 381			95 334 123 669	1 879 755 2 288 216
		LIC	GHT RIGID	TRUCKS		
		4 240		60 485		
2008		5 070				105 726
• • • • •	• • • • • • • •	HE	AVY RIGID	TRUCKS	• • • • • • •	• • • • • • • •
		3 772				
2008				277 820		305 184
• • • • •	• • • • • • • •	AR	TICULATED	TRUCKS	• • • • • •	• • • • • • • •
2003						64 261
2008	519	1 171	1 690	77 340	102	79 132
• • • • •	• • • • • • •			RYING TRUCK		• • • • • • • •
2003	3 572	2 144	5 716	12 219	664	18 599
2008	2 224	1 978	4 202	16 991	615	21 808
• • • • •	• • • • • • • •	• • • • • • • • •			• • • • • • •	• • • • • • • •
			BUSE	S		
2003	2 706	12 974				70 122
2008	1 368	15 213	16 581	61 180	2 820	80 581
• • • • •	• • • • • • • •	• • • • • • • • •	MOTOR C	YCLES	• • • • • • •	• • • • • • • •
2003	83 511	293 753	377 264	7	_	377 271
2008	59 943	507 555	567 498	2	69	567 569
• • • • •	• • • • • • • •			VEHICLES	• • • • • • •	• • • • • • • •
2003	2 189 773	9 414 336	11 604 109	1 229 258	329 592	13 162 959
2008	909 357	12 127 394	13 036 751	1 833 293	426 498	15 296 542

nil or rounded to zero (including null cells)

<sup>(</sup>a) Relates to the type of fuel recorded by the motor vehicle registry.

	PETROL	•••••				
	Leaded	Unleaded	Total	Diesel	LPG/Dual fuel/Other	Total
• • • • •	• • • • • • • •	N E	EW SOUTH WA	ALES	• • • • • • •	• • • • • • • •
2003 2008	437 328 196 516		3 500 670 3 960 945	344 531 471 301		3 944 850 4 519 963
• • • • •		• • • • • • • • • • • •	VICTORIA	• • • • • • • • • • •	• • • • • • •	• • • • • • • •
2003 2008	627 040 264 580	2 446 613 3 076 660	3 073 653 3 341 240	234 069 371 707		3 494 314 3 921 574
• • • • • •		• • • • • • • • • • • •	QUEENSLAN	D	• • • • • • •	
2003 2008	432 153 181 538	1 763 483 2 448 725	2 195 636 2 630 263	317 259 492 778	39 166 50 406	2 552 061 3 173 447
• • • • •		S	OUTH AUSTRA		• • • • • • •	• • • • • • • •
2003 2008	250 325 95 476	743 987 959 747		73 696 111 863		1 077 154 1 178 904
• • • • •		WE	STERN AUSTI	RALIA	• • • • • • •	• • • • • • • •
2003 2008	260 470 113 052	952 367 1 292 388	1 212 837 1 405 440		35 621 57 319	1 438 441 1 746 579
• • • • •		• • • • • • • • • • •	TASMANIA (b	))	• • • • • • •	• • • • • • •
2003 2008	86 635 41 315	211 863 290 752	298 498 332 067			338 484 391 327
• • • • •		NOF	RTHERN TERR	ITORY	• • • • • • •	• • • • • • • •
2003 2008	12 163 4 684	66 185 84 190	78 348 88 874	24 639 32 945	1 272 1 167	104 259 122 986
• • • • •		AUSTRAL	IAN CAPITAL	TERRITORY	• • • • • • •	• • • • • • • •
2003 2008	33 659 12 196	166 496 210 503	200 155 222 699	8 194 13 178	5 047 5 885	213 396 241 762
• • • • •	• • • • • • • •	• • • • • • • • • • •	AUSTRALIA	• • • • • • • • • •	• • • • • • •	• • • • • • • •
2003 2008	2 189 773 909 357	9 414 336 12 127 394	11 604 109 13 036 751	1 229 258 1 833 293	122 925 426 498	13 162 959 15 296 542

<sup>(</sup>a) Relates to the type of fuel recorded by the motor vehicle registry.

<sup>(</sup>b) Excludes vehicles with registration expiry date less than one month before the census date.

	2003	2007	2008	Change 03/08	Change 07/08
	no.	no.	no.	%	%
• • • • • • • • • • • •	• • • • • • • • •	• • • • • • • • •	• • • • • • • • •	• • • • • • •	• • • • • •
Toyota	1 845 805	2 189 889	2 294 975	24.3	4.8
Holden	2 004 650	2 071 363	2 078 183	3.7	0.3
Ford	1 961 195	1 837 094	1 795 371	-8.5	-2.3
Mitsubishi	998 111	970 490	965 240	-3.3	-0.5
Nissan	721 607	740 457	743 760	3.1	0.4
Mazda	441 413	568 253	615 369	39.4	8.3
Hyundai	437 805	564 949	596 078	36.2	5.5
Honda	321 156	456 930	505 698	57.5	10.7
Subaru	248 588	359 314	390 512	57.1	8.7
BMW	138 144	192 666	209 652	51.8	8.8
Mercedes Benz	142 287	185 110	197 290	38.7	6.6
Suzuki	120 649	150 331	166 687	38.2	10.9
Volkswagen	81 468	126 378	149 187	83.1	18.0
Kia	51 517	122 717	141 445	174.6	15.3
Daewoo	124 951	126 381	121 143	-3.0	-4.1
Daihatsu	138 553	124 910	116 952	-15.6	-6.4
Volvo	84 583	75 924	76 087	-10.0	0.2
Peugeot	44 802	66 869	73 456	64.0	9.9
Jeep	40 277	57 335	62 230	54.5	8.5
Land Rover	48 971	58 420	60 798	24.2	4.1
Audi	29 276	46 334	53 064	81.3	14.5
Lexus	18 783	41 879	49 804	165.2	18.9
Chrysler	54 545	44 478	44 911	-17.7	1.0
Saab	41 167	42 296	42 065	2.2	-0.5
Jaguar	26 593	26 353	26 329	-1.0	-0.1
Alfa Romeo	19 179	21 665	22 532	17.5	4.0
Renault	14 083	20 516	21 799	54.8	6.3
Porsche	13 437	18 014	19 435	44.6	7.9
Citroen	7 152	15 791	18 649	160.8	18.1
Proton	15 507	17 741	18 491	19.2	4.2
Other	129 687	r(a) 125 713	126 344	-2.6	0.5
Total all makes	10 365 941	r <b>11 466 560</b>	11 803 536	13.9	2.9

<sup>(</sup>a) Includes ACT vehicles with March expiry dates for which make is not available. See Technical Note



	GVM (TONN	IES)	•••••			
	4.5 and	Over 4.5 to 8	Over 8 to 12	Over 12 to 20	Greater	Total
		no.		no.		no.
• • • • •	• • • • • • •	• • • • • • •	• • • • • •		• • • • • • •	• • • • • •
		NEW	SOUTH	WALES		
2003 2008	29 116 35 770	22 340 21 866	21 969 24 924	15 136 15 252	16 378 19 769	104 939 117 581
	• • • • • • •					
			VICTORI	A		
2003 2008	16 493 22 280	20 445 18 671		15 231 15 534	13 536 18 275	86 207 97 040
• • • • •	• • • • • • •		• • • • • •			• • • • • •
		•	JEENSLA			
2003 2008	18 026 27 293	12 861 14 330	14 482 18 625	14 230 16 092	12 135 18 701	71 734 95 041
• • • • •	• • • • • • •		• • • • • •			• • • • • •
			TH AUST			
2003 2008	4 155 5 431	5 369 5 172		4 642 4 805	4 444 5 504	25 622 27 766
• • • • •	• • • • • • •	• • • • • • •	• • • • • •			• • • • • •
			ERN AUS			
2003 2008	7 431 11 079	9 296 11 062		10 281 10 651		45 159 56 327
• • • • •	• • • • • • •				• • • • • • •	• • • • • •
			ASMANIA	(-)		
2003 2008	2 151 2 518	2 443 2 447		1 442 1 583		9 282 10 606
• • • • •			• • • • • •			• • • • • •
			ERN TEF			
2003 2008	500 674	1 135 1 255	654 834	635 733	461 656	3 385 4 152
• • • • •	• • • • • • •		• • • • • • •		• • • • • • •	• • • • • •
				L TERRIT		
2003 2008	607 681	536 447	493 528	329 299	380 442	2 345 2 397
• • • • •	• • • • • • •				• • • • • • •	• • • • • •
0000	<b>70</b>		USTRAL			0.40
2003	78 479 105 726				57 621 77 881	348 673 410 910
			• • • • • •			• • • • • •

<sup>(</sup>a) Excludes vehicles with registration expiry date less than one month before the  $\,$ census date.



	GCM (T	ONNES)				
	Over 3 to 20	Over 20 to 40	Over 40 to 60	Over 60 to 100	Greater than 100	Total
	no.	no.	no.	no.	no.	no.
• • • • •	• • • • •	NEW	/ SOUTH	WALES	• • • • • • •	• • • • • •
			7 105 5 931			
• • • • • •	• • • • • •	• • • • • • •	VICTOR		• • • • • • •	• • • • • •
2008	385		8 496			
• • • • •	• • • • •		QUEENSL		• • • • • • •	• • • • • •
2003 2008	72 52		5 894 5 473		1 415 2 512	13 823 17 940
• • • • •	• • • • •		JTH AUS		• • • • • • •	• • • • • •
2003 2008	29 28	779 564	3 348 3 200	1 966 2 689	314 433	6 436 6 914
• • • • •	• • • • •		TERN AU:			• • • • • •
2003 2008	88 74		5 787 9 644	117 136		7 653 11 111
• • • • • •	• • • • •		TASMANI		• • • • • • •	• • • • • •
2003 2008	5 1	122 89	645 514	608 985		1 382 1 591
• • • • • •	• • • • •		HERN TE			• • • • • •
2003 2008	3 2	50 33	78 134	133 204		697 927
• • • • •	AL		N CAPITA			• • • • • •
2003 2008	3		167 109		_	250 224
• • • • • •	• • • • •		AUSTRAI		• • • • • • •	• • • • • •
			31 678 33 501			
• • • • • •	• • • • • •	• • • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •

nil or rounded to zero (including null cells)

<sup>(</sup>a) Excludes vehicles with registration expiry date less than one month before the census date.



# MOTOR VEHICLES ON REGISTER, Type of vehicle—Year of manufacture

	New							Australian	
	South			South	Western		Northern	Capital	
	Wales	Victoria	Queensland	Australia	Australia	Tasmania(a)	Territory	Territory	Australia
Year of									
manufacture	no.	no.	no.	no.	no.	no.	no.	no.	no.
• • • • • • • • • • •	• • • • • • • •	• • • • • • • • • •	• • • • • • • • • •	• • • • • • • • •	• • • • • • • • •	• • • • • • • • • •	• • • • • • • •	• • • • • • • • •	• • • • • • • • •
			PA	SSENGER	VEHICLES				
To 1992	591 404	661 342	431 593	241 665	253 418	79 110	11 923	37 130	2 307 585
1993-1997	707 656	610 522	433 861	196 663	253 755	57 302	14 104	39 834	2 313 697
1998 to 2002	1 031 921	858 631	595 950	243 498	329 285	67 913	21 463	59 037	3 207 698
2003 to 2007	1 210 964	953 660	806 831	253 643	444 215	74 668	29 061	67 614	3 840 656
2008(b)	39 469	35 661	24 789	5 305	14 463	1 849	1 132	1 584	124 252
Not stated	2	232	9 383	17	_	14	_	_	9 648
Total	3 581 416	3 120 048	2 302 407	940 791	1 295 136	280 856	77 683	205 199	11 803 536
• • • • • • • • • •			• • • • • • • • • •	• • • • • • • • •		• • • • • • • • •		• • • • • • • • •	• • • • • • • • •
				CAMPER	VANS				
To 1992	4 792	5 923	4 667	2 987	5 083	2 608	134	285	26 479
1993–1997	1 068	549	878	321	497	359	15	60	3 747
1998 to 2002	1 496	918	1 452	407	969	426	32	69	5 769
2003 to 2007	1 472	2 683	2 637	322	847	416	15	47	8 439
2008(b)	17	87	37	3	_	3	_	_	147
Not stated	_	5	203	_	_	1	_	_	209
Total	8 845	10 165	9 874	4 040	7 396	3 813	196	461	44 790
• • • • • • • • • •		• • • • • • • • •	• • • • • • • • • •	• • • • • • • • •		• • • • • • • • • •	• • • • • • • •	• • • • • • • • •	• • • • • • • • •
			LIGHT	COMMERC	IAL VEHICI	_ES			
To 1992	140 381	142 185	136 852	44 082	73 340	28 068	6 051	4 817	575 776
1993-1997	106 507	79 959	95 643	26 252	49 516	13 872	5 358	3 365	380 472
1998 to 2002	158 160	122 021	127 795	35 681	56 940	16 248	7 383	5 338	529 566
2003 to 2007	209 975	161 276	217 143	46 268	100 077	19 990	12 407	8 504	775 640
2008(b)	6 821	5 628	6 555	1 142	3 445	578	397	255	24 821
Not stated	1	55	1 873	5	1	6	_	_	1 941
Total	621 845	511 124	585 861	153 430	283 319	78 762	31 596	22 279	2 288 216
• • • • • • • • • • •	• • • • • • • •	• • • • • • • • •	• • • • • • • • •	• • • • • • • • •	• • • • • • • •	• • • • • • • • •	• • • • • • • •	• • • • • • • • •	• • • • • • • • •
			LI	IGHT RIGID	TRUCKS				
To 1992	10 568	7 013	7 309	1 824	3 673	1 185	136	195	31 903
1993-1997	5 042	2 120	3 277	577	1 368	274	143	80	12 881
1998 to 2002	8 701	4 379	5 789	1 196	2 015	494	199	145	22 918
2003 to 2007	11 213	8 562	10 443	1 789	3 955	561	192	257	36 972
2008(b)	246	199	187	44	68	4	4	4	756
Not stated	_	7	288	1	_	_	_	_	296
Total	35 770	22 280	27 293	5 431	11 079	2 518	674	681	105 726
• • • • • • • • • • •	• • • • • • • • •	• • • • • • • • • •	• • • • • • • • • •			• • • • • • • • • •	• • • • • • • •	• • • • • • • • •	• • • • • • • • •
			HI	EAVY RIGID	TRUCKS				
To 1992	34 789	39 654	28 516	12 459	24 579	4 637	1 416	546	146 596
1993–1997	11 056	8 508	8 489	2 500	5 504	907	543	232	37 739
1998 to 2002	15 387	11 105	10 806	2 961	5 406	983	621	375	47 644
2003 to 2007	20 371	15 123	19 143	4 352	9 671	1 550	878	556	71 644
	200.1								
2008(b)	208	338	184	63	88	11	20	7	919
2008(b) Not stated		338 32	184 610	63 —	88 —	11 —	20 —	7 —	919 642

nil or rounded to zero (including null cells)

<sup>(</sup>b) Includes motor vehicles manufactured in the first three months of 2008.

<sup>(</sup>a) Excludes vehicles with registration expiry date less than one month before the



# MOTOR VEHICLES ON REGISTER, Type of vehicle—Year of manufacture continued

	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania(a)	Northern Territory	Australian Capital Territory	Australia	
Year of manufacture	no.	no.	no.	no.	no.	no.	no.	no.	no.	
manaractare	110.	110.	110.	110.	110.	110.	110.	110.	110.	
• • • • • • • • •	ARTICULATED TRUCKS									
			,,		rittootto					
To 1992	3 682	6 514	4 323	1 918	3 493	351	319	29	20 629	
1993–1997	2 684	3 523	2 583	1 143	1 641	232	164	32	12 002	
1998 to 2002	3 586	4 483	3 556	1 436	2 159	347 656	163	57 106	15 787	
2003 to 2007 2008(b)	6 739 44	8 954 212	7 346 58	2 392 25	3 788 30	4	278 3	106	30 259 376	
Not stated	_	4	74	_	_	1	_	_	79	
Total	16 735	23 690	17 940	6 914	11 111	1 591	927	224	79 132	
NON-FREIGHT CARRYING TRUCKS										
To 1992	1 213	2 862	1 265	831	1 923	474	119	29	8 716	
1993–1997	452	2 862 879	646	330	553	474 155	44	29 6	3 065	
1998 to 2002	733	1 155	1 187	274	763	147	64	20	4 343	
2003 to 2007	1 155	1 162	1 681	337	940	221	58	25	5 579	
2008(b)	22	26	8	3	3	_	_	_	62	
Not stated	_	6	34	2	_	1	_	_	43	
Total	3 575	6 090	4 821	1 777	4 182	998	285	80	21 808	
	• • • • • • • •						• • • • • • • •	• • • • • • • • •		
				BUSE	S					
To 1992	6 433	5 098	4 599	1 571	3 448	1 215	512	379	23 255	
1993–1997	4 700	3 531	3 660	972	2 639	419	622	169	16 712	
1998 to 2002	5 237	4 236	4 106	977	2 792	340	873	153	18 714	
2003 to 2007	5 084	4 322	5 510	1 144	3 104	418	1 135	257	20 974	
2008(b) Not stated	203	211	238 35	29 —	115	12	75 —	8 —	891 35	
	04.057									
Total	21 657	17 398	18 148	4 693	12 098	2 404	3 217	966	80 581	
• • • • • • • • • •	• • • • • • • • •	• • • • • • • • • •	• • • • • • • • • •	MOTOR C	VCI E	• • • • • • • • • •	• • • • • • • •	• • • • • • • • •	• • • • • • • • •	
To 1992	24 514	26 154	23 292	5 380	18 070	2 775	619	1 796	102 600	
1993–1997	18 814	16 589	15 490	4 558	8 536	1 791	488	1 281	67 547	
1998 to 2002 2003 to 2007	36 059 67 683	34 906 55 803	28 703 68 828	8 315 17 701	13 652 35 777	2 843 4 787	1 045 2 724	2 406 4 602	127 929 257 905	
2008(b)	1 239	2 381	1 038	316	975	101	54	71	6 175	
Not stated	_	186	2 004	3 223	_	_	_	_	5 413	
Total	148 309	136 019	139 355	39 493	77 010	12 297	4 930	10 156	567 569	
TOTAL MOTOR VEHICLES										
To 1992	817 776	896 745	642 416	312 717	387 027	120 423	21 229	45 206	3 243 539	
1993–1997	857 979	726 180	564 527	233 316	324 009	75 311	21 481	45 059	2 847 862	
1998 to 2002	1 261 280	1 041 834	779 344	294 745	413 981	89 741	31 843	67 600	3 980 368	
2003 to 2007	1 534 656	1 211 545	1 139 562	327 948	602 374	103 267	46 748	81 968	5 048 068	
2008(b)	48 269	44 743	33 094	6 930	19 187	2 562	1 685	1 929	158 399	
Not stated	3	527	14 504	3 248	1	23	_	_	18 306	
Total	4 519 963	3 921 574	3 173 447	1 178 904	1 746 579	391 327	122 986	241 762	15 296 542	

nil or rounded to zero (including null cells)

<sup>(</sup>b) Includes motor vehicles manufactured in the first three months of 2008.

<sup>(</sup>a) Excludes vehicles with registration expiry date less than one month before the

MOTOR VEHICLE CENSUS

- **1** This publication presents statistics relating to vehicles which were registered with a motor vehicle registration authority at 31 March 2008.
- **2** Motor Vehicle Censuses (MVC) have been conducted periodically from 1971 on each of the following dates:

2008, 31 March	1996, 31 October
2007, 31 March	1995, 30 May
2006, 31 March	1993, 30 June
2005, 31 March	1991, 30 September
2004, 31 March	1988, 30 September
2003, 31 March	1985, 30 September
2002, 31 March	1982, 30 September
2001, 31 March	1979, 30 September
1999, 31 October	1976, 30 September
1998, 31 October	1971, 30 September
1997, 31 October	

SCOPE

- **3** The Motor Vehicle Census includes all vehicles registered with a state, territory or other government motor vehicle registry for unrestricted use on public roads with the following exceptions:
  - recreational vehicles such as trail bikes and sand dune buggies intended for off-road
    use in most states and territories (in Victoria and Queensland these vehicles must be
    registered and are thus included in the statistics);
  - consular vehicles; and
  - vehicles registered by the defence forces.
- **4** Vehicles on register are defined as those vehicles registered at the date of the census, or had registration expire less than one month before that date.
- **5** Motor vehicle registration statistics are derived from data made available by various state and territory motor vehicle registration authorities and reflect the information as recorded in registration documents.
- **6** Vintage and veteran vehicles are excluded from vehicle counts in the published data, but are available for consultancy data requests. These vehicles are identified using a unique insurance code, with the following exceptions:
  - in New South Wales this insurance code is not provided and therefore it is not possible to separately identify these vehicles. Therefore veteran and vintage vehicles are included in the number of registered vehicles for New South Wales.
  - while Victoria does provide an insurance code for these vehicles, this insurance code also applies to tractors, motorcycles and self propelled farm machinery owned by primary producers and used solely in connection with the business of a primary producer. These records are deemed out of scope. (Note: tractors and motor cycles not used solely in connection with the business of a primary producer have a different insurance code which deems them in scope.) Therefore, the number of veteran and vintage vehicles cannot be obtained for Victoria.
- **7** The estimated proportion of motor vehicles, excluding motor cycles, taken off the register since the previous MVC is referred to as the attrition rate. The attrition rates in the following table have been calculated using new motor vehicle sales data.

SCOPE continued

#### ESTIMATED ATTRITION(a), State/territory—Census years

	Between 2003 and 2004		Between 2004 and 2005		Between 2005 and 2006		Between 2006 and 2007		Between 2007 and 2008	
	no.	%	no.	%	no.	%	no.	%	no.	%
NSW	196 609	4.7	207 506	4.9	214 431	4.9	217 518	4.9	178 856	3.9
Vic.	179 738	4.9	173 120	4.7	171 489	4.5	179 505	4.6	178 750	4.5
Qld	88 012	3.3	102 952	3.7	98 452	3.4	97 337	3.2	107 629	3.4
SA	44 813	4.0	48 779	4.3	40 073	3.5	45 253	3.9	43 554	3.7
WA	46 330	3.1	46 716	3.1	38 310	2.4	46 866	2.8	61 171	3.5
Tas.	6 768	1.9	8 961	2.5	8 272	2.2	13 258	3.5	10 679	2.7
NT	6 320	5.8	5 390	4.8	5 925	5.1	5 649	4.7	5 983	4.8
ACT	r8 346	r3.8	r11 207	r4.9	r10 799	r4.7	r10 227	r4.3	10 554	4.4
Aust.	r <b>576 936</b>	4.2	r <b>604 139</b>	4.3	r <b>587 751</b>	4.1	r <b>615 613</b>	4.1	597 176	3.9

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METHODOLOGY

- **8** The 2008 Motor Vehicle Census is a count of all vehicles registered with a state or territory motor vehicle registration authority (MVR) at 31 March 2008. The snapshot date has consistently been 31 March since 2001. The Australian Bureau of Statistics (ABS) receives the data from the MVRs. At this stage all records are compared to the previous MVC data for vehicles that match (on-going registrations) and relevant details are updated. The matching is based primarily on a unique identifier given by the registries to each record. After the primary match is done, a secondary match is run based on the Vehicle Identification Number (VIN), engine number, chassis number, year of manufacture and body to improve the number of matched records.
- **9** The un-matched records (new vehicle registrations) undergo comprehensive editing. This editing checks such items as body, make, model, year of manufacture, weight, heavy vehicle code, postcode and fuel.
- **10** The editing of on-going registrations is limited as these records have been edited in past years. Finally, aggregate data is checked across time, states and vehicle types to ensure coherency.
- **11** The size of the registered motor vehicle fleet (over 15 million vehicles) dictates that quality assurance of each record is not possible. Considerable effort is made, both by motor vehicle registration authorities and the ABS, to improve data quality. This has been done through the introduction of improved processing and classification systems and the incorporation of additional internal checking to ensure the vehicle counts track consistently in a time series when compared to previous MVCs. While these have improved data accuracy, there remains some variation in the reporting from different state and territory registries and hence care should still be taken when comparing data across jurisdictions. The ABS recognises the importance of motor vehicle statistics to a large variety of statistical users. While the data are made available at a detailed level, the quality of this detailed data is less certain, therefore the ABS is unable to guarantee that it is necessarily sufficient for all purposes for which it is used.
- **12** For vehicles manufactured during or after 1990, the statistics in this publication are based on procedures using the VIN, adopted by state and territory motor vehicle registration authorities. The VIN system allows accurate identification of the make and model of a vehicle, which can then be used to better identify the vehicle type. Vehicles manufactured earlier than 1990 generally do not have a VIN. For these earlier vehicles, standard ABS makes and models were produced from registry make and model data using information such as engine number and chassis number.

DATA QUALITY

<sup>(</sup>a) These estimates exclude motorcycles. For more details on the calculation of attrition rate refer to glossary.

DATA QUALITY continued

Data confrontation

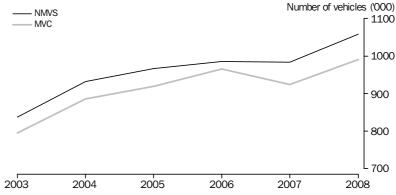
**13** Each year, for new vehicle registrations, the Registry's vehicle model description is converted to a standard ABS model. This is necessary as model descriptions can vary between Registries. Resource constraints affect the amount of model conversion that can be carried out, resulting in some vehicles being left with a blank model which is then coded to 'model unknown'.

**14** While there are no data sources available in which to directly assess the quality of MVC data, new motor vehicle sales data and population data provide an indication of data quality as they give some context to the size of the motor vehicle fleet. Assessing the quality of data by comparison against other datasets is known as data confrontation. The ABS has been using sales of new motor vehicles data and estimated resident population (ERP) data to 'confront' MVC data for several years.

#### NEW MOTOR VEHICLE SALES (NMVS)

- **15** Sales of new motor vehicles can be compared with data from the MVC based upon the year of manufacture. The following assumptions have been made:
  - vehicles manufactured in one year are not available for sale until after 31 March of that year;
  - vehicles manufactured in one year are sold as new vehicles until at least 31 March of the following year;
- vehicles sold over recent years will remain on the MVC year after year.
- 16 Therefore, it can be assumed that vehicles manufactured in 2007 (as reflected in 2008 MVC data) would most likely have been sold in the period between 1 April 2007 and 31 March 2008 (as captured by sales of new motor vehicles data). Similarly, vehicles manufactured in 2006 would have been sold between 1 April 2006 and 31 March 2007, and so on.
- **17** The graph below shows the relationship between sales of new motor vehicles and MVC registrations of vehicles manufactured in the year preceding the snapshot date.

#### NMVS(a) COMPARED WITH MVC(b), Australia



- (a) NMVS figures have been sourced from Sales of New Motor Vehicles, Australia (9314.0).
- (b) Excluding motor cycles.

#### ESTIMATED RESIDENT POPULATION (ERP)

18 The table below shows a comparison of growth on a state/territory basis for both the MVC and ERP. Over the past few years, strong motor vehicle sales have meant that the growth in motor vehicle registrations has been higher than the growth in ERP. However, growth in MVC and ERP has tended to be in the same direction.

STATISTICAL GEOGRAPHY

- **19** The only geographic data available from the MVC are postcode of owner and state or territory of registration.
- **20** If analysing regional data based on postcodes, the following considerations need to be taken into account:

### **EXPLANATORY NOTES** continued

# STATISTICAL GEOGRAPHY continued

- there are some instances where the postcode of the vehicle's owner is in a different state or territory from that in which the vehicle was registered. For example, the postcode of the owner of the vehicle could be in Sydney, yet the vehicle could be registered in Qld.
- some official postcodes (P.O. boxes, competition postcodes) do not correspond to residential areas
- some postcodes could be invalid.

# RELATED PUBLICATIONS AND PRODUCTS

- **21** Users may also wish to refer to the following publications and products which contain information relating to motor vehicles in Australia:
  - Sales of New Motor Vehicles, Australia, (Electronic Publication) cat. no. 9314.0 (issued monthly)
  - Survey of Motor Vehicle Use, Australia cat. no. 9208.0 (issued annually since 1998) or 9210.0.55.001 (issued annually)

# ABS DATA AVAILABLE ON REQUEST

**22** As well as the statistics included in this publication, the ABS has other relevant data available on request. Inquiries should be made to the National Information and Referral Service on 1300 135 070.

#### ABBREVIATIONS

ABS Australian Bureau of Statistics

ACT Australian Capital Territory

Aust. Australia

cat. no. Catalogue number

ERP estimated resident population

GCM gross combination mass

GVM gross vehicle mass

LPG liquefied petroleum gas

MVC Motor Vehicle Census

no. number

NMVS new motor vehicle sales

NSW New South Wales

NT Northern Territory

Qld Queensland

SA South Australia

Tas. Tasmania

Vic. Victoria

VIN vehicle identification number

WA Western Australia

### TECHNICAL NOTE

INTRODUCTION

ISSUE

IMPACT

- **1** A system improvement was implemented for the 2008 Motor Vehicle Census (MVC). During this process, a minor error in the calculation of registered motor vehicles for the Australian Capital Territory was identified for previous years. This Technical Note outlines the problem and the likely impact on vehicle registration numbers in ACT for MVCs conducted from 31 March 2004 to 31 March 2007.
- **2** Vehicles on register are defined as those vehicles registered at the date of the census, or had registration expire less than one month before that date. For ACT however, vehicles for which registration expired prior to 31 March were incorrectly removed by processing systems used before MVC 2008.
- **3** Implementation of the new processing system has rectified this error.
- **4** For each MVC conducted from 2004 to 2007, approximately 2% of ACT registrations had been omitted. The error has had little impact on ACT annual fleet growth rates.
- **5** The impact of processing previous ACT data in accordance with MVC 2008 procedures has been estimated in the following table.

## ACT REGISTRATIONS, Type of vehicle—Census years

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	2004	2005	2006	2007				
Vehicle type(a)	no.	no.	no.	no.				
ADDITION	IAI DEC	ICTDATI	ONS	• • • • • • •				
ADDITIO	IAL NEG	ISTRATI	ONS					
Passenger vehicles	3 893	3 864	3 988	4 160				
Campervans	19	13	22	21				
Light commercial vehicles	523	502	567	572				
Light rigid trucks	13	18	16	16				
Heavy rigid trucks	34	42	31	35				
Articulated trucks	5	4	4	8				
Non-freight carrying trucks	1	4	_	1				
Buses	15	6	11	14				
Motor cycles	352	423	444	462				
Total motor vehicles	4 855	4 876	5 083	5 289				
REVISED MOTOR	R VEHIC	LE REGI	STRATIO	NS				
Passenger vehicles	189 496	192 505	195 751	200 015				
Campervans	526	518	496	480				
Light commercial vehicles	19 399	19 974	20 755	21 347				
Light rigid trucks	642	627	643	651				
Heavy rigid trucks	1 763	1 729	1 755	1 724				
Articulated trucks	241	242	239	233				
Non-freight carrying trucks	102	96	97	89				
Buses	931	929	957	948				
Motor cycles	7 444	7 808	8 466	9 147				

nil or rounded to zero (including null cells)

Total motor vehicles

220 544 224 428 229 159 234 634

<sup>(</sup>a) Estimates only. Based on motor vehicle registry broad vehicle descriptions.

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.

Attrition rate

The estimated proportion of motor vehicles taken off the register since the previous MVC. The attrition rate is also referred to as the motor vehicle retirement or scrappage rate. The number of registration lapses is calculated by adding the total registrations at the earlier MVC to the number of new motor vehicle sales between the MVCs, and subtracting the total registrations at the later MVC. The attrition rate measures the number of registration lapses as a percentage of the total potential vehicle fleet, where the potential vehicle fleet is the number of registrations at the first MVC date plus the number of new motor vehicle sales between the two MVCs. To calculate the annualised attrition rate as a percentage apply the following formula:

$$[1 - \{T_2/(T_1 + N_1)\}^{12/M}] \times 100$$

where  $T_1$  is the number of registrations at the first time point,  $N_1$  is the number of new sales between the first and second time points,  $T_2$  is the number of registrations at the second time point and M is the number of months between the two time points.

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. The formulae below allow for the census being conducted on different months of the year. They also assume that vehicles are manufactured at a constant rate over the year, or three month period for the current year.

For vehicles manufactured in the current year:

Vehicle age = Reference month/24

For vehicles manufactured in previous years:

 $\label{eq:Vehicle age = Current year - Year of manufacture + (Reference month - 6)/12} \\$ 

The average age is then calculated as the sum of all vehicle ages divided by the total number of vehicles. Vehicles that have a year of manufacture unknown are excluded from calculations of average age.

Average annual growth rate

The average annual growth rate is calculated as a percentage using the following formula:

$$\left[ \left( \frac{P_n}{P_o} \right)^{\frac{1}{n}} - 1 \right] \times 100$$

where  $P_0$  is the population at the start of the period,  $P_n$  is the population at the end of the period and n is the length of the period between  $P_n$  and  $P_0$  in years.

Buses

Motor vehicles constructed for the carriage of passengers. Included are all motor vehicles with 10 or more seats, including the driver's seat.

Campervans

Self-propelled motor vehicles containing an area primarily used for accommodation. Included are motor homes and powered caravans.

Estimated Resident Population (ERP)

The official ABS estimate of the Australian population. Based on results from the Census of Population and Housing, it is updated annually between censuses using demographic statistics. To obtain ERP figures, the census count is adjusted for under enumeration and for Australian residents temporarily overseas on census night.

**Gross Combination Mass** 

Tare 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 trailer towing vehicles such as articulated trucks.

(GCM)

Tare weight (i.e. unladen weight) of the motor vehicle, plus its maximum carrying capacity excluding trailers.

Heavy rigid trucks

Gross Vehicle Mass (GVM)

Rigid trucks of GVM greater than 4.5 tonnes.

## **GLOSSARY** continued

**Light commercial vehicles** Vehicles primarily constructed for the carriage of goods, and which are less than or equal

to 3.5 tonnes GVM. Included are 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 of the motor vehicle (e.g. Ford, Holden, Mitsubishi, Toyota).

Motorcycles Two and three wheeled motor vehicles constructed primarily for the carriage of one or

two persons. Included are two and three wheeled mopeds, scooters, motor tricycles and

motorcycles with sidecars.

Non-freight carrying trucks Specialist motor vehicles or motor vehicles fitted with special purpose equipment, and

having little or no goods carrying capacity (e.g. ambulances, cherry pickers, fire trucks

and tow trucks).

nine seats (including the driver's seat). Included are cars, station wagons, four-wheel drive passenger vehicles and forward-control passenger vehicles. Excluded are

campervans.

**Rigid trucks** Motor vehicles of GVM greater than 3.5 tonnes, constructed with a load carrying area.

Included are normal rigid 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.

**State/territory** The state or territory of the motor registry at which a vehicle is registered.

## FOR MORE INFORMATION

INTERNET

**www.abs.gov.au** the ABS website is the best place for data from our publications and information about the ABS.

## INFORMATION AND REFERRAL SERVICE

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