

**MOTOR VEHICLE CENSUS**

AUSTRALIA

EMBARGO: 11.30AM (CANBERRA TIME) TUES 17 NOV 2009

C O N T E N T S

	<i>page</i>
Notes	2
Summary of findings	3

LIST OF TABLES

HISTORICAL COMPARISONS - CENSUS YEARS

1 Motor vehicles on register, type of vehicle, state/territory	9
2 Motor vehicles on register per 1,000 resident population, type of vehicle, state/territory	10
3 Estimated average age of motor vehicles, type of vehicle, state/territory	11
4 Motor vehicles on register, type of fuel, type of vehicle	12
5 Motor vehicles on register, type of fuel, state/territory	13
6 Passenger vehicles on register, top thirty makes	14
7 Rigid trucks on register, gross vehicle mass, state/territory	15
8 Articulated trucks on register, gross combination mass, state/territory	16

YEAR OF MANUFACTURE

9 Motor vehicles on register, type of vehicle, state/territory	17
-----------------------------------------------------------------------------	----

ADDITIONAL INFORMATION

Explanatory Notes	19
Technical Note	23
Glossary	26

I N Q U I R I E S

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

NOTES

NOTE This publication (first released on 17 November 2009) has been reissued to correct 2008 year data in Tables 2 and 5. Other data in these two tables and all other tables have not changed.

ABOUT THIS PUBLICATION This publication presents statistics relating to vehicles which were registered at 31 March 2009 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, 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 Gross Vehicle Mass or Gross Combination Mass for trucks. The size of the motor vehicle fleet is also compared with the estimated resident population.

CHANGES IN THIS ISSUE Tables 2, 3, 4, 5, 7 and 8 now include data for the previous year as well as data for the current year and data from five years ago.



ABBREVIATIONS

- ABS Australian Bureau of Statistics
- ACT Australian Capital Territory
- Aust. Australia
- ERP estimated resident population
- GCM gross combination mass
- GVM gross vehicle mass
- LPG liquefied petroleum gas
- MVC Motor Vehicle Census
- 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

Brian Pink
Australian Statistician

SUMMARY OF FINDINGS

TOTAL NUMBER OF VEHICLES ON REGISTER

There were 15.7 million motor vehicles, including motor cycles, registered in Australia at 31 March 2009. This is 2.5% higher than the number of registrations from the 31 March 2008 Motor Vehicle Census (MVC), and an increase of 15.8% since the 2004 MVC snapshot, when there were 13.5 million vehicles registered in Australia. The average annual growth over this five year period was 3.0%.

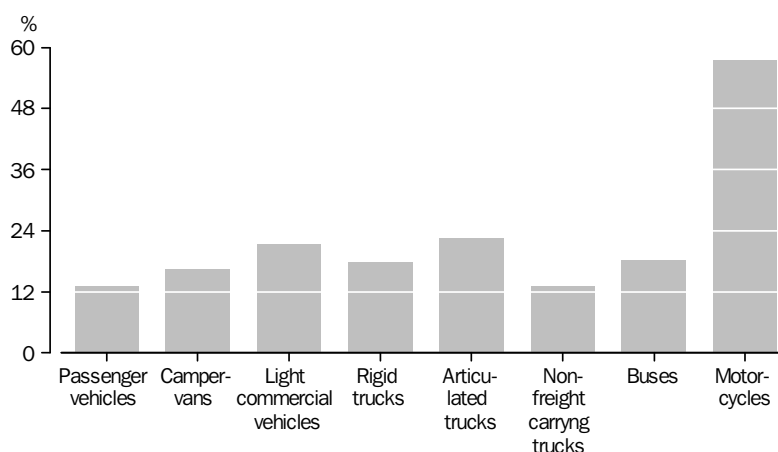
TYPE OF VEHICLE, Census years 2004, 2008 and 2009(a)

	2004	2008	2009	Change	Change	Average
	no.	no.	no.	04/09	08/09	annual growth 04/09
				%	%	%
Passenger vehicles	10 629 401	11 803 536	12 023 098	13.1	1.9	2.5
Campervans	39 947	44 790	46 535	16.5	3.9	3.1
Light commercial vehicles	1 952 486	2 288 216	2 371 082	21.4	3.6	4.0
Rigid trucks	357 617	410 910	421 702	17.9	2.6	3.4
Articulated trucks	66 300	79 132	81 217	22.5	2.6	4.1
Non-freight carrying trucks	19 697	21 808	22 299	13.2	2.3	2.5
Buses	71 314	80 581	84 413	18.4	4.8	3.4
Motor cycles	396 309	567 569	624 090	57.5	10.0	9.5
Total motor vehicles	13 533 071	15 296 542	15 674 436	15.8	2.5	3.0

(a) See Technical Notes regarding 2004 and 2008 data.

In the 5 years between 31 March 2004 and 31 March 2009, the passenger vehicle fleet has grown 13.1% from 10.6 million to 12.0 million. Motor cycles and articulated trucks were the vehicle types showing the largest growth over this time with increases of 57.5% and 22.5% respectively. Light commercial vehicles rose by 21.4%, buses rose by 18.4% and rigid trucks by 17.9%. Non-freight carrying trucks and passenger vehicles had the smallest growth over the same period, with increases of 13.2% and 13.1% respectively.

TYPE OF VEHICLE, Percent change—Between census years 2004 and 2009



STATES AND TERRITORIES

New South Wales had the largest share of the Australian fleet at 31 March 2009 with 4.6 million vehicles or 29.1% of all registered vehicles. Victoria had the second largest share with 4.0 million (25.6%) and Queensland had 3.3 million vehicles (20.9%). The Northern Territory had the smallest share with 0.1 million (0.8%) registered vehicles.

SUMMARY OF FINDINGS *continued*

STATES AND TERRITORIES *continued*

These shares are comparable with the distribution of the population across states and territories.

STATE OF REGISTRATION, Census years 2004, 2008 and 2009

	2004	2008	2009	Change 04/09	Change 08/09	Average annual growth 04/09
	no.	no.	no.	%	%	%
New South Wales(a)	4 063 640	4 519 963	4 567 386	12.4	1.0	2.4
Victoria	3 565 150	3 921 574	4 010 276	12.5	2.3	2.4
Queensland	2 656 044	3 173 447	3 283 243	23.6	3.5	4.3
South Australia	1 095 923	1 178 904	1 208 926	10.3	2.5	2.0
Western Australia	1 480 206	1 746 579	1 828 346	23.5	4.7	4.3
Tasmania	(b)350 403	(b)391 327	400 516	14.3	2.3	2.7
Northern Territory	106 016	122 986	128 758	21.5	4.7	4.0
Australian Capital Territory(c)	215 689	241 762	246 985	14.5	2.2	2.7
Australia(d)	13 533 071	15 296 542	15 674 436	15.8	2.5	3.0

(a) See Technical Note 1 (NSW) regarding 2008 data.

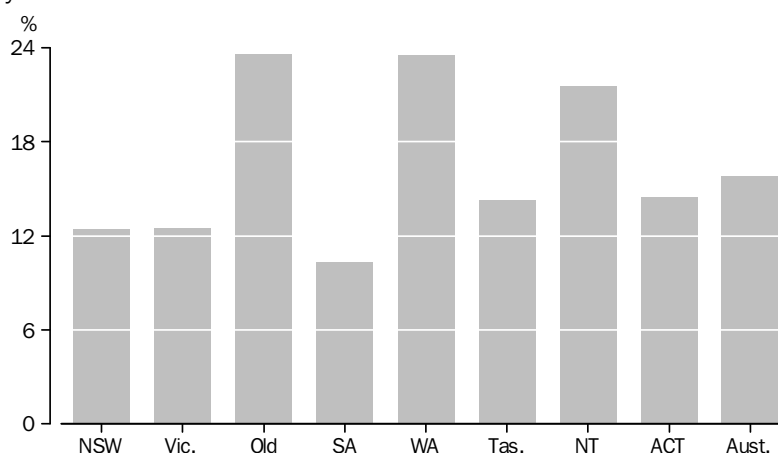
(b) Excludes vehicles with registration expiry date less than one month before the census date.

(c) See Technical Note 2 (ACT) regarding 2004 data.

(d) See Technical Notes regarding 2004 and 2008 data.

From 31 March 2004 to 31 March 2009, three states experienced growth above the national average of 15.8%. Registrations in Queensland at 31 March 2009 were 23.6% above those at 31 March 2004, an average annual growth rate of 4.3%. In the same five year period, registrations in Western Australia increased 23.5% (also an average annual growth rate of 4.3%) and Northern Territory registrations rose 21.5%, with an average annual increase of 4.0%. South Australia's growth in fleet size between 31 March 2004 and 31 March 2009 of 10.3% was the smallest. In this state, the average annual growth was 2.0%.

MOTOR VEHICLE REGISTRATIONS, Percent change—Between census years 2004 and 2009



VEHICLES AND RESIDENT POPULATION

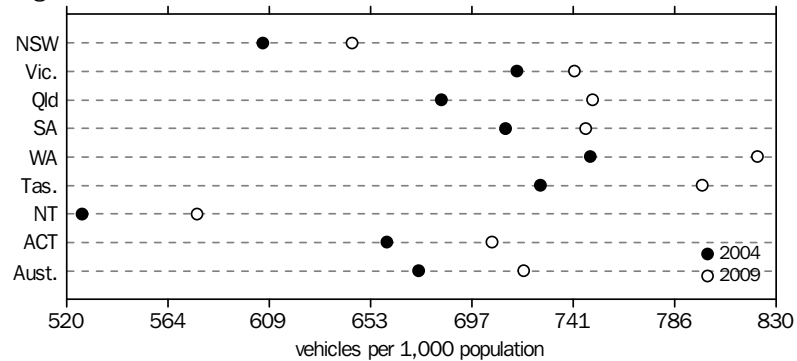
There were 720 motor vehicles per 1,000 resident population in Australia at 31 March 2009. This compares with 674 vehicles per 1,000 residents at the end of March 2004, an increase of 46 vehicles per 1,000 residents over this time.

SUMMARY OF FINDINGS *continued*

VEHICLES AND RESIDENT POPULATION *continued*

Western Australia had the highest rate of all states and territories with 822 vehicles per 1,000 residents at 31 March 2009, while the Northern Territory had the lowest rate with 577 vehicles per 1,000 residents. New South Wales, which had both the largest vehicle fleet and the largest population at 31 March 2009, averaged 645 vehicles per 1,000 residents, the second lowest of all states or territories.

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



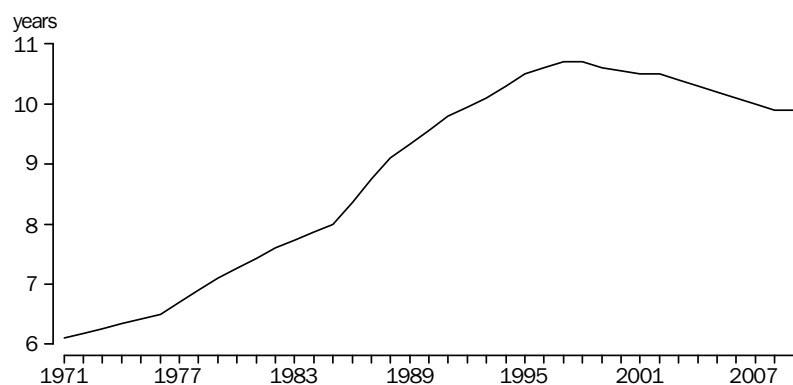
(a) Both Estimated Resident Population data and Motor Vehicle Census data are at 31 March.
Source: ABS Australian Demographic Statistics (cat. no. 3101.0)

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 gradually declined since then. There was no change recorded for average vehicle age comparing the 2009 snapshot to the 2008 snapshot.

At 31 March 2009, the average age of all vehicles registered in Australia was 9.9 years. This is younger than the 10.3 years recorded in the 2004 MVC. Over this five year period, all vehicle types except buses recorded a drop in the average age. Light rigid trucks and motorcycles showed the largest decreases in average age, both dropping 1.1 years, while buses increased 0.4 years over this five year period. Vehicles manufactured before 1994 (those more than 15 years old) comprised 20.7% of the total Australian fleet. This is slightly lower than the 21.2% 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.

SUMMARY OF FINDINGS *continued*

AVERAGE AGE OF THE FLEET *continued*

At 31 March 2009, campervans were the oldest vehicles registered with an average age of 18.1 years, while motor cycles were the youngest vehicle type with an average age of 8.7 years.

The average age of passenger vehicles has fallen from 10.0 years at 31 March 2004 to 9.7 years at 31 March 2009.

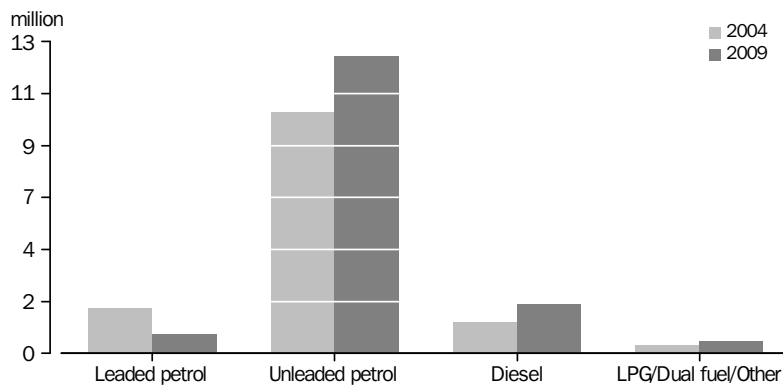
Tasmania had the oldest fleet with an average age of 11.9 years at 31 March 2009, with 30.3% of vehicles manufactured before 1994. This was followed by South Australia with an average age of 11.0 years and 25.6% manufactured before 1994. Northern Territory had the youngest fleet in Australia with an average age of 8.8 years and 16.7% of vehicles manufactured before 1994.

TYPE OF FUEL

At the 31 March 2009 MVC snapshot, 13.2 million vehicles in Australia (84.0% of the total vehicle fleet) were registered with a petrol fuel type. This compares with the 11.9 million vehicles registered at the 31 March 2004 snapshot 5 years earlier, when 87.9% of registrations fell into this category.

When comparing 31 March 2009 with 31 March 2004 snapshots, the number of vehicles registered with diesel fuel has increased by 53.1%. The number of vehicles registered with diesel fuel at 31 March 2009 accounted for 12.8% (or 2.0 million vehicles) of the total fleet. Five years earlier, 9.7% of vehicles were registered with diesel fuel.

MOTOR VEHICLE FLEET, Type of fuel(a)



(a) Relates to the type of fuel recorded by the motor vehicle registry.

Greater numbers of passenger vehicles and light commercial vehicles registered with diesel were the major contributors to this increase. Overall passenger vehicle registrations increased by 13.1% between the 2004 and 2009 MVC snapshots, yet the number of passenger vehicles registered with diesel fuel increased by 80.0%.

At 31 March 2009, there were 862,392 light commercial vehicles registered with diesel fuel. This is 42.8% of all vehicle registrations in the diesel category. For light commercial vehicles, the number of registrations with diesel fuel at 31 March 2009 was 60.3% higher than at 31 March 2004.

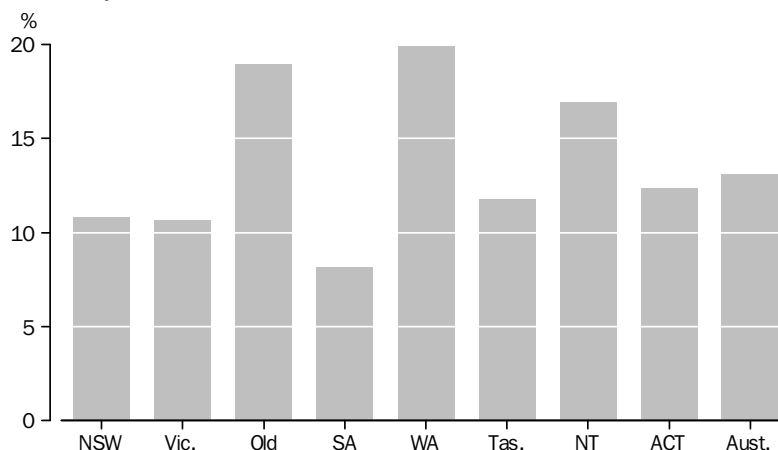
SUMMARY OF FINDINGS *continued*

CHARACTERISTICS OF THE FLEET

Passenger vehicles

Passenger vehicles accounted for 76.7% of all vehicles registered in Australia at 31 March 2009. Since 31 March 2004, all states and territories have recorded increases in registrations of this vehicle type, with Western Australia showing the largest percentage growth (19.9%) and South Australia the smallest (8.1%).

PASSENGER VEHICLE REGISTRATIONS, Percent change—Between census years 2004 and 2009



In the Australian Capital Territory, passenger vehicles accounted for 84.4% of all registrations. This was the highest proportion of any state/territory. The Northern Territory had the smallest proportion with 62.6%.

A total of 6.2 million passenger vehicles were either Toyota, Holden or Ford. These three makes accounted for 19.7%, 17.1% and 14.5% of the total passenger vehicle fleet registered at 31 March 2009.

Light commercial vehicles

Light commercial vehicles accounted for 15.1% of all vehicles registered in Australia at 31 March 2009, the second highest proportion behind passenger vehicles. Since 31 March 2004, all states and territories have recorded increases in registrations of this vehicle type, with Queensland showing the largest percentage growth (32.9%) and New South Wales the smallest (14.4%).

While Queensland accounted for the third highest number of vehicle registrations of all states, it had the second highest number of light commercial vehicles registered in Australia (26.0%) behind New South Wales (26.6%). Victoria had 25.6% of all vehicles registered in Australia (behind New South Wales, 29.1%) but only 22.2% of total light commercial vehicles.

Trucks

Rigid trucks accounted for 2.7% of the total number of vehicles registered at 31 March 2009. Registrations of rigid trucks with a gross vehicle mass (GVM) greater than 20 tonnes have increased by 32.7% since 31 March 2004, while registrations of rigid trucks with a GVM of 20 tonnes or less have increased by 14.9% over the same period.

At 31 March 2009, 81,217 articulated trucks were registered in Australia. While this is 22.5% 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 and

SUMMARY OF FINDINGS *continued*

Trucks continued

including 60 tonnes has dropped 0.7% and the number of articulated trucks with GCM over 60 tonnes has increased 62.2%. This has resulted in an articulated truck fleet where the proportion of registrations with GCM over 60 tonnes has increased from 36.9% at 31 March 2004 to 48.9% at 31 March 2009.

Victoria had the largest number of articulated trucks on register. It was also the state with the highest number of registrations with a GCM greater than 60 tonnes (12,373). This is 70.5% greater than the number of registrations in this category at 31 March 2004. In comparison, at 31 March 2009, 82.1% 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.

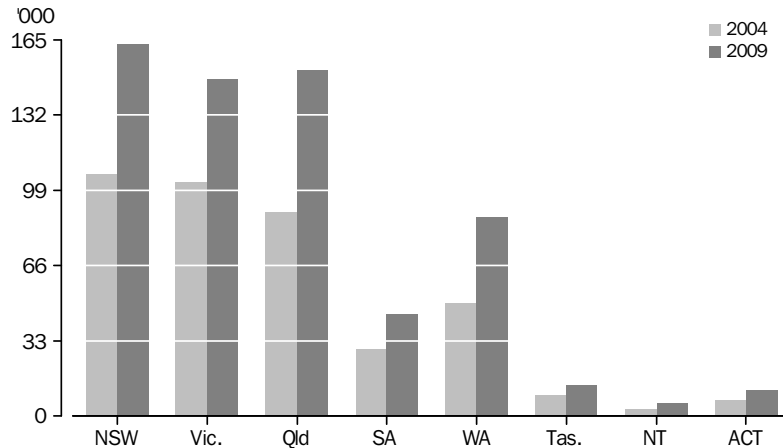
Motor cycles

Motor cycles accounted for 4.0% of all vehicles registered in Australia at 31 March 2009, up from 2.9% in 2004.

Between 31 March 2004 and 31 March 2009, motor cycle registrations increased by 57.5% and was the largest increase of any vehicle type.

Increases in registrations over this five year period have been observed in all states and territories, with Western Australia recording the largest percentage increase (75.9%), followed by the Northern Territory (70.2%). The smallest percentage increase was in Victoria where registrations of motor cycles at 31 March 2009 were 44.1% above those recorded 5 years earlier.

MOTOR CYCLE FLEET, State/territory of registration



MOTOR VEHICLES ON REGISTER, Type of vehicle—Census years

	New South Wales(a)	Victoria	Queensland	South Australia	Western Australia	Tasmania(b)	Northern Territory	Australian Capital Territory(c)	Australia(d)
	no.	no.	no.	no.	no.	no.	no.	no.	no.
PASSENGER VEHICLES									
2004	3 250 277	2 873 351	1 986 508	886 931	1 122 094	255 721	68 916	185 603	10 629 401
2008	3 581 416	3 120 048	2 302 407	940 791	1 295 136	280 856	77 683	205 199	11 803 536
2009	3 602 556	3 178 777	2 362 505	958 904	1 345 494	285 803	80 563	208 496	12 023 098
CAMPERVANS									
2004	8 164	8 701	7 677	4 306	7 135	3 295	162	507	39 947
2008	8 845	10 165	9 874	4 040	7 396	3 813	196	461	44 790
2009	9 288	10 526	10 550	4 035	7 535	3 940	197	464	46 535
LIGHT COMMERCIAL VEHICLES									
2004	551 759	452 190	464 319	137 252	233 343	68 413	26 334	18 876	1 952 486
2008	621 845	511 124	585 861	153 430	283 319	78 762	31 596	22 279	2 288 216
2009	630 947	526 193	617 171	159 285	299 638	81 524	33 442	22 882	2 371 082
LIGHT RIGID TRUCKS									
2004	30 574	17 331	19 562	4 382	7 974	2 227	533	629	83 212
2008	35 770	22 280	27 293	5 431	11 079	2 518	674	681	105 726
2009	36 810	23 355	28 930	5 747	11 984	2 538	686	713	110 763
HEAVY RIGID TRUCKS									
2004	77 705	69 310	55 599	21 557	38 332	7 299	2 874	1 729	274 405
2008	81 811	74 760	67 748	22 335	45 248	8 088	3 478	1 716	305 184
2009	82 056	75 588	69 804	22 595	47 340	8 171	3 687	1 698	310 939
ARTICULATED TRUCKS									
2004	15 302	20 241	14 130	6 224	8 027	1 451	689	236	66 300
2008	16 735	23 690	17 940	6 914	11 111	1 591	927	224	79 132
2009	16 893	24 069	18 420	7 047	11 944	1 679	949	216	81 217
NON-FREIGHT CARRYING TRUCKS									
2004	3 511	5 878	3 824	1 715	3 479	923	266	101	19 697
2008	3 575	6 090	4 821	1 777	4 182	998	285	80	21 808
2009	3 599	6 107	5 030	1 805	4 360	1 014	300	84	22 299
BUSES									
2004	20 061	15 685	15 093	4 174	10 334	2 038	3 013	916	71 314
2008	21 657	17 398	18 148	4 693	12 098	2 404	3 217	966	80 581
2009	22 401	18 061	19 127	4 916	13 007	2 422	3 439	1 040	84 413
MOTOR CYCLES									
2004	106 287	102 463	89 332	29 382	49 488	9 036	3 229	7 092	396 309
2008	148 309	136 019	139 355	39 493	77 010	12 297	4 930	10 156	567 569
2009	162 836	147 600	151 706	44 592	87 044	13 425	5 495	11 392	624 090
TOTAL MOTOR VEHICLES									
2004	4 063 640	3 565 150	2 656 044	1 095 923	1 480 206	350 403	106 016	215 689	13 533 071
2008	4 519 963	3 921 574	3 173 447	1 178 904	1 746 579	391 327	122 986	241 762	15 296 542
2009	4 567 386	4 010 276	3 283 243	1 208 926	1 828 346	400 516	128 758	246 985	15 674 436

(a) See Technical Note 1 (NSW) regarding 2008 data.

(c) See Technical Note 2 (ACT) regarding 2004 data.

(b) Prior to 2009, excludes vehicles with registration expiry date less than one month before the census date.

(d) See Technical Notes regarding 2004 and 2008 data.

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

	New South Wales(b)	Victoria	Queensland	South Australia	Western Australia	Tasmania(c)	Northern Territory	Australian Capital Territory(b)	Australia(b)
	no.	no.	no.	no.	no.	no.	no.	no.	no.
PASSENGER VEHICLES									
2004	485	578	512	576	568	530	343	568	529
2008	514	590	539	588	601	565	356	597	553
2009	509	588	539	593	605	570	361	596	552
CAMPERVANS									
2004	1	2	2	3	4	7	1	2	2
2008	1	2	2	3	3	8	1	1	2
2009	1	2	2	2	3	8	1	1	2
LIGHT COMMERCIAL VEHICLES									
2004	82	91	120	89	118	142	131	58	97
2008	89	97	137	96	131	159	145	65	107
2009	89	97	141	98	135	162	150	65	109
LIGHT RIGID TRUCKS									
2004	5	3	5	3	4	5	3	2	4
2008	5	4	6	3	5	5	3	2	5
2009	5	4	7	4	5	5	3	2	5
HEAVY RIGID TRUCKS									
2004	12	14	14	14	19	15	14	5	14
2008	12	14	16	14	21	16	16	5	14
2009	12	14	16	14	21	16	17	5	14
ARTICULATED TRUCKS									
2004	2	4	4	4	4	3	3	1	3
2008	2	4	4	4	5	3	4	1	4
2009	2	4	4	4	5	3	4	1	4
NON-FREIGHT CARRYING TRUCKS									
2004	1	1	1	1	2	2	1	—	1
2008	1	1	1	1	2	2	1	—	1
2009	1	1	1	1	2	2	1	—	1
BUSES									
2004	3	3	4	3	5	4	15	3	4
2008	3	3	4	3	6	5	15	3	4
2009	3	3	4	3	6	5	15	3	4
MOTOR CYCLES									
2004	16	21	23	19	25	19	16	22	20
2008	21	26	33	25	36	25	23	30	27
2009	23	27	35	28	39	27	25	33	29
TOTAL MOTOR VEHICLES									
2004	606	717	684	712	749	727	527	660	674
2008	649	741	744	737	810	788	564	703	717
2009	645	742	750	747	822	798	577	706	720

— nil or rounded to zero (including null cells)

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

(b) See Technical Notes regarding 2004 and 2008 data.

(c) Prior to 2009, excludes vehicles with registration expiry date less than one month before the census date.

ESTIMATED AVERAGE AGE OF MOTOR VEHICLES(a), Type of vehicle—Census years

	New South Wales(b)	Victoria	Queensland	South Australia(c)	Western Australia	Tasmania(d)	Northern Territory	Australian Capital Territory(b)	Australia(b)
	years	years	years	years	years	years	years	years	years
PASSENGER VEHICLES									
2004	9.0	10.3	10.0	11.4	10.4	11.7	8.9	9.6	10.0
2008	9.1	10.1	9.3	11.0	9.7	11.4	8.6	9.4	9.7
2009	9.2	10.1	9.3	10.9	9.7	11.5	8.6	9.4	9.7
CAMPERVANS									
2004	17.0	19.8	16.3	20.5	21.2	20.2	20.5	19.8	18.9
2008	17.0	18.4	15.2	21.6	21.3	20.3	19.9	19.7	18.4
2009	16.7	18.0	14.8	21.7	21.4	20.5	20.2	19.8	18.1
LIGHT COMMERCIAL VEHICLES									
2004	10.2	11.9	11.0	12.1	11.9	13.2	9.9	10.2	11.2
2008	10.0	11.3	9.9	11.3	10.6	12.7	9.1	9.6	10.5
2009	10.1	11.2	9.8	11.2	10.5	12.6	8.9	9.6	10.4
LIGHT RIGID TRUCKS									
2004	11.0	12.9	11.5	12.9	13.3	16.1	9.1	11.3	12.0
2008	10.8	11.4	10.3	11.7	11.5	15.3	9.6	10.7	11.0
2009	10.8	11.2	10.2	11.5	11.3	15.3	10.0	10.3	10.9
HEAVY RIGID TRUCKS									
2004	14.1	17.6	15.1	17.8	18.2	17.3	13.3	11.5	16.1
2008	13.9	17.2	13.9	17.1	17.3	16.9	13.0	11.0	15.5
2009	14.0	17.1	13.7	16.7	17.1	16.7	12.6	10.9	15.4
ARTICULATED TRUCKS									
2004	10.6	11.8	11.4	11.4	13.4	10.5	12.5	8.4	11.6
2008	9.9	11.1	10.2	10.9	11.8	9.5	12.4	7.8	10.7
2009	10.0	11.2	10.2	10.7	11.7	9.4	12.1	8.4	10.7
NON-FREIGHT CARRYING TRUCKS									
2004	12.6	15.0	11.4	14.9	16.8	16.9	13.1	12.0	14.2
2008	12.4	15.5	10.7	15.2	16.1	16.0	14.1	12.8	14.0
2009	12.5	15.6	10.6	15.0	15.8	15.8	13.9	13.0	13.9
BUSES									
2004	10.3	10.8	10.5	11.8	10.1	14.7	8.1	10.6	10.6
2008	11.4	11.3	10.3	11.9	11.1	15.3	8.6	11.6	11.1
2009	11.3	11.4	10.1	11.8	10.9	14.9	8.4	11.3	11.0
MOTOR CYCLES									
2004	9.0	9.5	10.2	(c)8.5	12.0	10.5	8.2	9.0	9.8
2008	8.5	9.1	8.3	(c)8.3	10.1	10.1	7.0	8.6	8.8
2009	8.4	9.0	8.2	(c)8.3	9.8	10.0	6.7	8.5	8.7
TOTAL MOTOR VEHICLES									
2004	9.3	10.7	10.3	11.6	11.0	12.3	9.3	9.7	10.3
2008	9.3	10.4	9.5	11.1	10.1	11.9	8.9	9.4	9.9
2009	9.4	10.4	9.5	11.0	10.1	11.9	8.8	9.4	9.9

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

(b) See Technical Notes regarding 2004 and 2008 data.

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

(d) Prior to 2009, excludes vehicles with registration expiry date less than one month before the census date.

MOTOR VEHICLES ON REGISTER, Type of fuel(a)(b)—Census years

PETROL

	<i>Petrol leaded</i>	<i>Petrol unleaded</i>	<i>Total petrol</i>	<i>Diesel</i>	<i>LPG/Dual fuel/Other</i>	<i>Total</i>
	no.	no.	no.	no.	no.	no.

PASSENGER VEHICLES

2004	1 388 158	8 696 186	10 084 344	322 058	222 999	10 629 401
2008	620 228	10 384 655	11 004 883	505 340	293 313	11 803 536
2009	524 059	10 575 704	11 099 763	579 688	343 647	12 023 098

CAMPERVANS

2004	14 104	6 144	20 248	17 529	2 170	39 947
2008	10 256	7 363	17 619	24 783	2 388	44 790
2009	9 595	7 900	17 495	26 557	2 483	46 535

LIGHT COMMERCIAL VEHICLES

2004	331 036	987 518	1 318 554	538 087	95 845	1 952 486
2008	187 402	1 199 381	1 386 783	777 764	123 669	2 288 216
2009	162 723	1 208 755	1 371 478	862 392	137 212	2 371 082

LIGHT RIGID TRUCKS

2004	10 570	4 480	15 050	66 351	1 811	83 212
2008	6 689	5 070	11 759	92 073	1 894	105 726
2009	5 946	4 903	10 849	97 974	1 940	110 763

HEAVY RIGID TRUCKS

2004	29 935	3 848	33 783	238 651	1 971	274 405
2008	20 728	5 008	25 736	277 820	1 628	305 184
2009	18 932	4 393	23 325	285 972	1 642	310 939

ARTICULATED TRUCKS

2004	782	892	1 674	64 589	37	66 300
2008	519	1 171	1 690	77 340	102	79 132
2009	461	1 165	1 626	79 477	114	81 217

NON-FREIGHT CARRYING TRUCKS

2004	3 284	2 029	5 313	13 743	641	19 697
2008	2 224	1 978	4 202	16 991	615	21 808
2009	2 034	1 946	3 980	17 721	598	22 299

BUSES

2004	2 385	12 866	15 251	54 344	1 719	71 314
2008	1 368	15 213	16 581	61 180	2 820	80 581
2009	1 210	15 753	16 963	64 053	3 397	84 413

MOTOR CYCLES

2004	76 236	320 070	396 306	3	—	396 309
2008	59 943	507 555	567 498	2	69	567 569
2009	58 303	565 633	623 936	3	151	624 090

TOTAL MOTOR VEHICLES

2004	1 856 490	10 034 033	11 890 523	1 315 355	327 193	13 533 071
2008	909 357	12 127 394	13 036 751	1 833 293	426 498	15 296 542
2009	783 263	12 386 152	13 169 415	2 013 837	491 184	15 674 436

— nil or rounded to zero (including null cells)

(a) Relates to the type of fuel recorded by the motor vehicle registry.

(b) See Technical Notes regarding 2004 and 2008 data.

MOTOR VEHICLES ON REGISTER, Type of fuel(a)—Census years

PETROL

	<i>Petrol leaded</i>	<i>Petrol unleaded</i>	<i>Total petrol</i>	<i>Diesel</i>	<i>LPG/Dual fuel/Other</i>	<i>Total</i>
	no.	no.	no.	no.	no.	no.
NEW SOUTH WALES (b)						
2004	407 502	3 239 760	3 647 262	364 778	51 600	4 063 640
2008	196 516	3 764 429	3 960 945	471 301	87 717	4 519 963
2009	164 932	3 783 241	3 948 173	507 566	111 647	4 567 386
VICTORIA						
2004	532 687	2 599 363	3 132 050	253 498	179 602	3 565 150
2008	264 580	3 076 660	3 341 240	371 707	208 627	3 921 574
2009	226 647	3 134 122	3 360 769	412 248	237 259	4 010 276
QUEENSLAND						
2004	368 079	1 907 467	2 275 546	340 434	40 064	2 656 044
2008	181 538	2 448 725	2 630 263	492 778	50 406	3 173 447
2009	156 101	2 528 772	2 684 873	543 821	54 549	3 283 243
SOUTH AUSTRALIA						
2004	210 946	795 547	1 006 493	79 772	9 658	1 095 923
2008	95 476	959 747	1 055 223	111 863	11 818	1 178 904
2009	84 988	988 620	1 073 608	123 374	11 944	1 208 926
WESTERN AUSTRALIA						
2004	223 915	1 016 528	1 240 443	202 795	36 968	1 480 206
2008	113 052	1 292 388	1 405 440	283 820	57 319	1 746 579
2009	100 832	1 348 885	1 449 717	314 436	64 193	1 828 346
TASMANIA (c)						
2004	76 324	230 888	307 212	39 953	3 238	350 403
2008	41 315	290 752	332 067	55 701	3 559	391 327
2009	35 720	300 183	335 903	60 584	4 029	400 516
NORTHERN TERRITORY						
2004	10 312	69 056	79 368	25 412	1 236	106 016
2008	4 684	84 190	88 874	32 945	1 167	122 986
2009	3 815	87 460	91 275	36 297	1 186	128 758
AUSTRALIAN CAPITAL TERRITORY (d)						
2004	26 725	175 424	202 149	8 713	4 827	215 689
2008	12 196	210 503	222 699	13 178	5 885	241 762
2009	10 228	214 869	225 097	15 511	6 377	246 985
AUSTRALIA (e)						
2004	1 856 490	10 034 033	11 890 523	1 315 355	327 193	13 533 071
2008	909 357	12 127 394	13 036 751	1 833 293	426 498	15 296 542
2009	783 263	12 386 152	13 169 415	2 013 837	491 184	15 674 436

(a) Relates to the type of fuel recorded by the motor vehicle registry.

(b) See Technical Note 1 (NSW) regarding 2008 data.

(c) Prior to 2009, excludes vehicles with registration expiry date less than one month before the census date.

(d) See Technical Note 2 (ACT) regarding 2004 data.

(e) See Technical Notes regarding 2004 and 2008 data.

PASSENGER VEHICLES ON REGISTER(a), Top 30 makes—Census years

	2004	2008	2009	Change 04/09	Change 08/09
	no.	no.	no.	%	%
Toyota	1 930 065	2 294 975	2 373 418	18.9	3.4
Holden	2 033 568	2 078 183	2 061 894	2.2	-0.8
Ford	1 933 822	1 795 371	1 743 355	-7.2	-2.9
Mitsubishi	1 001 575	965 240	948 469	-3.6	-1.7
Nissan	729 429	743 760	743 103	2.0	-0.1
Mazda	465 229	615 369	661 922	32.3	7.6
Hyundai	464 165	596 078	621 009	28.4	4.2
Honda	343 874	505 698	542 582	47.1	7.3
Subaru	272 985	390 512	419 614	43.1	7.5
BMW	150 605	209 652	223 286	39.2	6.5
Mercedes Benz	154 090	197 290	206 260	28.0	4.5
Suzuki	123 784	166 687	181 438	34.7	8.8
Volkswagen	88 399	149 187	170 124	68.8	14.0
Kia	66 425	141 445	158 239	112.9	11.9
Daewoo	131 998	121 143	114 186	-8.2	-5.7
Daihatsu	137 833	116 952	108 013	-15.1	-7.6
Peugeot	49 846	73 456	78 065	47.4	6.3
Volvo	81 900	76 087	75 242	-7.1	-1.1
Jeep	44 515	62 230	65 713	39.8	5.6
Land Rover	51 432	60 798	62 526	18.2	2.8
Audi	32 957	53 064	61 881	61.0	16.6
Lexus	23 513	49 804	55 614	111.8	11.7
Chrysler	49 563	44 911	44 978	-9.4	0.1
Saab	42 115	42 065	41 132	-0.1	-2.2
Jaguar	25 991	26 329	26 297	1.3	-0.1
Renault	15 994	21 799	23 084	36.3	5.9
Alfa Romeo	19 777	22 532	22 627	13.9	0.4
Citroen	8 932	18 649	20 396	108.8	9.4
Porsche	14 795	19 435	20 124	31.4	3.5
Proton	15 855	18 491	18 798	16.6	1.7
Other	124 370	126 344	129 709	1.6	2.7
Total all makes	10 629 401	11 803 536	12 023 098	11.0	1.9

(a) See Technical Notes regarding 2004 and 2008 data.

RIGID TRUCKS ON REGISTER, Gross vehicle mass (GVM)—Census years

GVM (TONNES)						
	4.5 and under	Over 4.5 to 8	Over 8 to 12	Over 12 to 20	Greater than 20	Total
	no.	no.	no.	no.	no.	no.
NEW SOUTH WALES (a)						
2004	30 574	22 264	22 613	15 338	17 490	108 279
2008	35 770	21 866	24 924	15 252	19 769	117 581
2009	36 810	21 537	25 259	15 085	20 175	118 866
VICTORIA						
2004	17 331	19 849	20 087	15 129	14 245	86 641
2008	22 280	18 671	22 280	15 534	18 275	97 040
2009	23 355	18 328	22 644	15 618	18 998	98 943
QUEENSLAND						
2004	19 562	12 929	14 958	14 478	13 234	75 161
2008	27 293	14 330	18 625	16 092	18 701	95 041
2009	28 930	14 535	19 220	16 219	19 830	98 734
SOUTH AUSTRALIA						
2004	4 382	5 338	6 929	4 637	4 653	25 939
2008	5 431	5 172	6 854	4 805	5 504	27 766
2009	5 747	5 109	6 876	4 788	5 822	28 342
WESTERN AUSTRALIA						
2004	7 974	9 457	9 492	10 233	9 150	46 306
2008	11 079	11 062	11 106	10 651	12 429	56 327
2009	11 984	11 505	11 613	10 927	13 295	59 324
TASMANIA (b)						
2004	2 227	2 447	1 694	1 453	1 705	9 526
2008	2 518	2 447	1 953	1 583	2 105	10 606
2009	2 538	2 459	1 967	1 601	2 144	10 709
NORTHERN TERRITORY						
2004	533	1 104	659	645	466	3 407
2008	674	1 255	834	733	656	4 152
2009	686	1 334	900	753	700	4 373
AUSTRALIAN CAPITAL TERRITORY (c)						
2004	629	513	492	309	415	2 358
2008	681	447	528	299	442	2 397
2009	713	437	531	300	430	2 411
AUSTRALIA (d)						
2004	83 212	73 901	76 924	62 222	61 358	357 617
2008	105 726	75 250	87 104	64 949	77 881	410 910
2009	110 763	75 244	89 010	65 291	81 394	421 702

(a) See Technical Note 1 (NSW) regarding 2008 data.
 (b) Prior to 2009, excludes vehicles with registration expiry date less than one month before the census date.
 (c) See Technical Note 2 (ACT) regarding 2004 data.
 (d) See Technical Notes regarding 2004 and 2008 data.

GCM (TONNES)						
	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 (a)						
2004	87	1 713	6 966	6 095	441	15 302
2008	56	1 199	5 931	8 996	553	16 735
2009	48	1 110	5 682	9 472	581	16 893
VICTORIA						
2004	437	3 831	8 716	7 248	9	20 241
2008	385	3 103	8 496	11 699	7	23 690
2009	388	2 968	8 340	12 366	7	24 069
QUEENSLAND						
2004	62	1 526	5 655	5 314	1 573	14 130
2008	52	1 285	5 473	8 618	2 512	17 940
2009	42	1 200	5 377	9 044	2 757	18 420
SOUTH AUSTRALIA						
2004	31	700	3 209	1 937	347	6 224
2008	28	564	3 200	2 689	433	6 914
2009	28	531	3 159	2 858	471	7 047
WESTERN AUSTRALIA						
2004	89	1 536	6 241	120	41	8 027
2008	74	1 221	9 644	136	36	11 111
2009	83	1 185	10 496	144	36	11 944
TASMANIA (b)						
2004	3	115	623	708	2	1 451
2008	1	89	514	985	2	1 591
2009	6	90	506	1 075	2	1 679
NORTHERN TERRITORY						
2004	2	46	76	148	417	689
2008	2	33	134	204	554	927
2009	2	39	129	198	581	949
AUSTRALIAN CAPITAL TERRITORY (c)						
2004	3	24	146	63	—	236
2008	—	13	109	101	1	224
2009	—	23	102	91	—	216
AUSTRALIA (d)						
2004	714	9 491	31 632	21 633	2 830	66 300
2008	598	7 507	33 501	33 428	4 098	79 132
2009	597	7 146	33 791	35 248	4 435	81 217

— nil or rounded to zero (including null cells)

(a) See Technical Note 1 (NSW) regarding 2008 data.

(b) Prior to 2009, excludes vehicles with registration expiry date less than one month before the census date.

(c) See Technical Note 2 (ACT) regarding 2004 data.

(d) See Technical Notes regarding 2004 and 2008 data.

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

Year of manufacture	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
	no.	no.	no.	no.	no.	no.	no.	no.	no.

PASSENGER VEHICLES

To 1993	587 850	655 660	431 823	238 560	259 048	79 791	12 193	37 030	2 301 955
1994 to 1998	757 573	656 332	461 959	209 949	272 322	61 103	15 635	42 466	2 477 339
1999 to 2003	1 031 962	871 276	619 386	248 314	340 429	68 485	21 485	60 051	3 261 388
2004 to 2008	1 196 290	968 324	821 317	257 903	463 233	74 840	30 764	67 606	3 880 277
2009(a)	28 879	26 975	17 261	4 156	10 462	1 572	486	1 343	91 134
Not stated	2	210	10 759	22	—	12	—	—	11 005
Total	3 602 556	3 178 777	2 362 505	958 904	1 345 494	285 803	80 563	208 496	12 023 098

CAMPERVANS

To 1993	4 739	5 835	4 697	2 930	5 055	2 658	129	282	26 325
1994 to 1998	1 283	580	1 004	337	627	389	19	62	4 301
1999 to 2003	1 672	1 124	1 628	430	1 064	452	39	67	6 476
2004 to 2008	1 576	2 904	2 926	337	787	439	10	53	9 032
2009(a)	18	78	67	1	2	2	—	—	168
Not stated	—	5	228	—	—	—	—	—	233
Total	9 288	10 526	10 550	4 035	7 535	3 940	197	464	46 535

LIGHT COMMERCIAL VEHICLES

To 1993	139 478	140 390	139 515	43 513	74 660	28 295	6 078	4 791	576 720
1994 to 1998	113 045	85 321	100 765	28 345	51 222	14 619	5 639	3 536	402 492
1999 to 2003	163 898	130 821	137 494	37 766	62 190	17 248	7 812	5 930	563 159
2004 to 2008	210 942	166 299	233 132	49 061	109 506	21 088	13 690	8 492	812 210
2009(a)	3 583	3 310	4 258	595	2 059	271	223	133	14 432
Not stated	1	52	2 007	5	1	3	—	—	2 069
Total	630 947	526 193	617 171	159 285	299 638	81 524	33 442	22 882	2 371 082

LIGHT RIGID TRUCKS

To 1993	10 578	6 933	7 367	1 804	3 692	1 163	148	184	31 869
1994 to 1998	5 163	2 332	3 378	613	1 420	296	162	82	13 446
1999 to 2003	8 893	5 000	6 537	1 255	2 358	537	166	172	24 918
2004 to 2008	11 999	8 951	11 237	2 046	4 473	539	210	272	39 727
2009(a)	177	133	107	26	41	3	—	3	490
Not stated	—	6	304	3	—	—	—	—	313
Total	36 810	23 355	28 930	5 747	11 984	2 538	686	713	110 763

HEAVY RIGID TRUCKS

To 1993	34 125	38 859	28 492	11 905	24 742	4 464	1 396	518	144 501
1994 to 1998	11 753	9 036	8 895	2 623	5 739	965	594	220	39 825
1999 to 2003	15 173	11 444	11 034	3 077	5 520	1 033	602	364	48 247
2004 to 2008	20 831	16 054	20 634	4 946	11 251	1 697	1 084	593	77 090
2009(a)	174	165	160	44	88	12	11	3	657
Not stated	—	30	589	—	—	—	—	—	619
Total	82 056	75 588	69 804	22 595	47 340	8 171	3 687	1 698	310 939

ARTICULATED TRUCKS

To 1993	3 732	6 599	4 327	1 821	3 549	346	301	33	20 708
1994 to 1998	2 860	3 669	2 809	1 229	1 962	261	178	38	13 006
1999 to 2003	3 694	4 615	3 722	1 423	2 322	371	179	51	16 377
2004 to 2008	6 493	9 011	7 406	2 551	4 063	697	290	94	30 605
2009(a)	114	170	80	23	48	4	1	—	440
Not stated	—	5	76	—	—	—	—	—	81
Total	16 893	24 069	18 420	7 047	11 944	1 679	949	216	81 217

— nil or rounded to zero (including null cells)

(a) Includes vehicles manufactured in the first three months of 2009.

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

Year of manufacture	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
	no.	no.	no.	no.	no.	no.	no.	no.	no.

NON-FREIGHT CARRYING TRUCKS

To 1993	1 219	2 824	1 269	832	1 908	462	123	32	8 669
1994 to 1998	415	870	668	285	606	159	52	4	3 059
1999 to 2003	817	1 137	1 190	280	770	149	52	23	4 418
2004 to 2008	1 135	1 255	1 827	406	1 063	243	73	25	6 027
2009(a)	13	16	40	—	13	—	—	—	82
Not stated	—	5	36	2	—	1	—	—	44
Total	3 599	6 107	5 030	1 805	4 360	1 014	300	84	22 299

BUSES

To 1993	6 776	5 319	4 757	1 593	3 781	1 180	572	400	24 378
1994 to 1998	4 915	3 730	3 784	1 010	2 454	408	638	177	17 116
1999 to 2003	4 783	4 091	4 070	976	2 909	364	812	131	18 136
2004 to 2008	5 737	4 726	6 319	1 289	3 761	450	1 393	327	24 002
2009(a)	190	195	153	48	102	20	24	5	737
Not stated	—	—	44	—	—	—	—	—	44
Total	22 401	18 061	19 127	4 916	13 007	2 422	3 439	1 040	84 413

MOTOR CYCLES

To 1993	25 726	26 763	23 890	6 126	18 934	2 960	609	1 895	106 903
1994 to 1998	21 545	19 043	17 478	5 209	9 713	1 978	549	1 488	77 003
1999 to 2003	37 154	36 105	30 728	8 630	14 287	2 853	1 002	2 566	133 325
2004 to 2008	77 378	63 614	76 484	21 065	43 149	5 552	3 281	5 375	295 898
2009(a)	1 033	1 888	757	273	961	82	54	68	5 116
Not stated	—	187	2 369	3 289	—	—	—	—	5 845
Total	162 836	147 600	151 706	44 592	87 044	13 425	5 495	11 392	624 090

TOTAL MOTOR VEHICLES

To 1993	814 223	889 182	646 137	309 084	395 369	121 319	21 549	45 165	3 242 028
1994 to 1998	918 552	780 913	600 740	249 600	346 065	80 178	23 466	48 073	3 047 587
1999 to 2003	1 268 046	1 065 613	815 789	302 151	431 849	91 492	32 149	69 355	4 076 444
2004 to 2008	1 532 381	1 241 138	1 181 282	339 604	641 286	105 545	50 795	82 837	5 174 868
2009(a)	34 181	32 930	22 883	5 166	13 776	1 966	799	1 555	113 256
Not stated	3	500	16 412	3 321	1	16	—	—	20 253
Total	4 567 386	4 010 276	3 283 243	1 208 926	1 828 346	400 516	128 758	246 985	15 674 436

— nil or rounded to zero (including null cells)

(a) Includes vehicles manufactured in the first three months of 2009.

EXPLANATORY NOTES

MOTOR VEHICLE CENSUS

1 This publication presents statistics relating to vehicles which were registered with a motor vehicle registration authority at 31 March 2009.

2 Motor Vehicle Censuses (MVC) have been conducted periodically from 1971 on each of the following dates:

2009, 31 March	1997, 31 October
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

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 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.

EXPLANATORY NOTES *continued*

SCOPE *continued*

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

	<i>Between 2004 and 2005</i>		<i>Between 2005 and 2006</i>		<i>Between 2006 and 2007</i>		<i>Between 2007 and 2008</i>		<i>Between 2008 and 2009</i>	
	no.	%	no.	%	no.	%	no.	%	no.	%
NSW	207 506.0	4.9	214 431.0	4.9	217 518.0	4.9	178 856.0	3.9	256 868.0	5.5
Vic.	173 120.0	4.7	171 489.0	4.5	179 505.0	4.6	178 750.0	4.5	176 676.0	4.4
Qld	102 952.0	3.7	98 452.0	3.4	97 337.0	3.2	107 629.0	3.4	105 556.0	3.3
SA	48 779.0	4.3	40 073.0	3.5	45 253.0	3.9	43 554.0	3.7	36 588.0	3.0
WA	46 716.0	3.1	38 310.0	2.4	46 866.0	2.8	61 171.0	3.5	38 675.0	2.2
Tas.	8 961.0	2.5	8 272.0	2.2	13 258.0	3.5	10 679.0	2.7	10 111.0	2.5
NT	5 390.0	4.8	5 925.0	5.1	5 649.0	4.7	5 983.0	4.8	4 761.0	3.7
ACT	11 207.0	4.9	10 799.0	4.7	10 227.0	4.3	10 554.0	4.4	11 073.0	4.5
Aust.	604 139.0	4.3	587 751.0	4.1	615 613.0	4.1	597 176.0	3.9	640 308.0	4.1

(a) These estimates exclude motorcycles. For more details on calculation of attrition rate refer to glossary.

METHODOLOGY

8 The 2009 Motor Vehicle Census is a count of all vehicles registered with a state or territory motor vehicle registration authority (MVR) at 31 March 2009. 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 bodycode to improve the number of matched records.

9 The un-matched records (new vehicle registrations) undergo editing of such items as bodycode, 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.

DATA QUALITY

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.

EXPLANATORY NOTES *continued*

DATA QUALITY *continued*

13 Each year, for new vehicle registrations, vehicle model description for each Registry 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'.

Data confrontation

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)

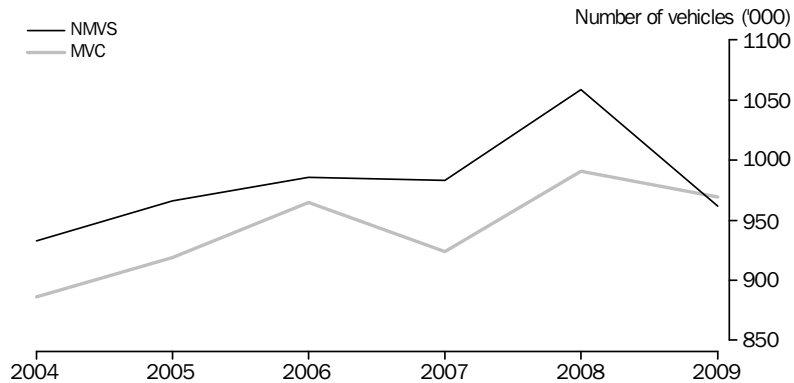
15 Sales of new motor vehicles can be compared with data from the MVC based upon the year of manufacture. The following assumptions have been made:

- 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 2008 (as reflected in 2009 MVC data) would most likely have been sold in the period between 1 April 2008 and 31 March 2009 (as captured by sales of new motor vehicles data). Similarly, vehicles manufactured in 2007 would have been sold between 1 April 2007 and 31 March 2008, 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.

TECHNICAL NOTE 1 NSW

INTRODUCTION

1 Analysis undertaken during the preparation of the 2009 Motor Vehicle Census identified an apparent inaccuracy of the published number of registered vehicles for NSW in 2008. This Technical Note gives a brief description of this issue and provides revised estimated vehicle counts.

DATA QUALITY

2 In 2008, the count of vehicles initially recorded in NSW was lower than expected. Analysis of the data revealed an issue with registration expiry dates. A second file was later obtained from the NSW Motor Vehicle Registry and new vehicle counts were produced from this file.

3 The new data for NSW indicated an increase in the number of vehicles of 3.6% from 2007 to 2008. However, when compared with the vehicle count for 2009, there was only a 1.0% increase. This led to a re-examination of both the 2008 and 2009 vehicle counts.

4 To assist with the analysis of 2008 and 2009 data, the NSW Roads and Traffic Authority provided counts of vehicle numbers taken on the same date as the MVC snapshot for the past 5 years. These were used to confront the published MVC vehicle counts. Counts of vehicles from the registry closely matched those from the MVC in all years except 2008.

5 Revised estimates of vehicle numbers by vehicle type can be made by concurring the vehicle type classifications used by the NSW Roads and Traffic Authority and the MVC. It is not possible to revise data at each classification level as unit record data cannot be recreated, hence tables 1 to 9 of this publication do not contain revised data.

ADJUSTED ESTIMATES

6 Revised estimates for 2008 NSW MVC data by vehicle type were created using the percentage difference between MVC and NSW Motor Vehicle Registry data over the past 5 years. A linear regression was calculated to describe the relationship between these data sets over the 5 year time period, and the expected difference for 2008 according to this regression was used to adjust the original MVC vehicle counts.

NSW REGISTRATIONS, Type of vehicle—Census years

Vehicle Type	2007	Original 2008	Revised 2008	2009
	'000	'000	'000	'000
Passenger vehicles	3 464	3 581	3 537	3 603
Light commercials	599	622	611	631
Light rigid trucks	34	36	35	37
Heavy rigid trucks	81	82	81	82
Articulated trucks	16	17	17	17
Non-freight vehicles	4	4	4	4
Campervans	9	9	9	9
Buses	21	22	22	22
Motorcycles	133	148	146	163
Total	4 361	4 520	4 461	4 567

TECHNICAL NOTE 1 NSW *continued*

ADJUSTED ESTIMATES
continued

PERCENTAGE CHANGE IN NUMBER OF REGISTERED MOTOR VEHICLES

<i>Vehicle type</i>	ORIGINAL		REVISED	
	
	<i>07 to 08</i>	<i>08 to 09</i>	<i>07 to 08</i>	<i>08 to 09</i>
	%	%	%	%
Passenger vehicles	3.4	0.6	2.1	1.9
Campervans	2.6	5.0	2.1	5.5
Light commercials	3.7	1.5	2.0	3.2
Light rigid trucks	4.3	2.9	2.5	4.7
Heavy rigid trucks	1.6	0.3	1.0	0.9
Articulated trucks	2.4	0.9	1.0	2.3
Non-freight trucks	-0.6	0.7	-0.6	0.7
Buses	4.3	3.4	4.0	3.7
Motor cycles	11.2	9.8	9.4	11.6
Total motor vehicles	3.6	1.0	2.3	2.4

TECHNICAL NOTE 2 ACT

INTRODUCTION

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.

ISSUE

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.

IMPACT

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

	2004	2005	2006	2007
<i>Vehicle type (a)</i>	no.	no.	no.	no.

ADDITIONAL REGISTRATIONS

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 VEHICLE REGISTRATIONS

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
Total motor vehicles	220 544	224 428	229 159	234 634

— nil or rounded to zero (including null cells)

(a) Estimates only. Based on motor vehicle registry broad vehicle descriptions.

GLOSSARY

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:

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

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:

$$\text{Vehicle age} = \text{Reference month} / 24$$

For vehicles manufactured in previous years:

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

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:

$$\left[\left(\frac{P_n}{P_0}\right)^{\frac{1}{n}} - 1\right] \times 100$$

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 (GCM) 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.

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

Heavy rigid trucks 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).
Passenger vehicles	Motor vehicles constructed primarily for the carriage of persons and containing up to 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: <ul style="list-style-type: none">■ 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

Our consultants can help you access the full range of information published by the ABS that is available free of charge from our website. Information tailored to your needs can also be requested as a 'user pays' service. Specialists are on hand to help you with analytical or methodological advice.

PHONE 1300 135 070

EMAIL client.services@abs.gov.au

FAX 1300 135 211

POST Client Services, ABS, GPO Box 796, Sydney NSW 2001

FREE ACCESS TO STATISTICS

All statistics on the ABS website can be downloaded free of charge.

WEB ADDRESS www.abs.gov.au