12 MONTHS ENDED 31 OCTOBER 2007 9208.0

SURVEY OF MOTOR VEHICLE USE

AUSTRALIA

EMBARGO: 11.30AM (CANBERRA TIME) THURS 28 AUG 2008

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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 estimates from the 2007 Survey of Motor Vehicle Use (SMVU). It contains statistics on passenger vehicle, motor cycle, truck and bus use for characteristics such as distance travelled, tonne-kilometres and fuel consumption.

The data were collected in four quarterly sample surveys conducted by the Australian Bureau of Statistics (ABS) over the period 1 November 2006 to 31 October 2007.

COMPARISONS WITH PREVIOUS SURVEY RESULTS

This survey has been designed to provide a measure of total distance travelled and tonne-kilometres for each state/territory of registration by type of vehicle. While comparisons are made between 2007 survey results and earlier iterations of the SMVU, the survey has not been designed to provide accurate estimates of change.

Care should be taken in drawing inferences from changes in data over time as movements may be subject to high relative standard errors and the resulting estimates of movements may not be considered statistically significant. See Explanatory Notes paragraph 14.

Additional information about the reliability of the level and movement estimates is given in the Technical Note.

Brian Pink
Australian Statistician

ABBREVIATIONS

'000	thousand
ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
ASGC	Australian Standard Geographical Classification
ATFCC	Australian Transport Freight Commodity Classification
Aust.	Australia
CNG	compressed natural gas
GCM	gross combination mass
GVM	gross vehicle mass
km	kilometre
LPG	liquefied petroleum gas
mill.	million
no.	number
NSW	New South Wales
NT	Northern Territory
Qld	Queensland
RSE	relative standard error
SA	South Australia
SE	standard error
Tas.	Tasmania
Vic.	Victoria
WA	Western Australia

SUMMARY OF FINDINGS

NUMBER OF VEHICLES

In the 12 months ended 31 October 2007 there were an estimated 14.8 million vehicles registered in Australia.

Passenger vehicles (78.0%) made up the largest group of registered vehicles in 2007, followed by freight vehicles (18.0%). The remainder (4.0%) comprised buses, motor cycles and non-freight carrying trucks. Of the freight vehicles, 82.4% were light commercial vehicles, 14.8% were rigid trucks and 2.8% were articulated trucks.

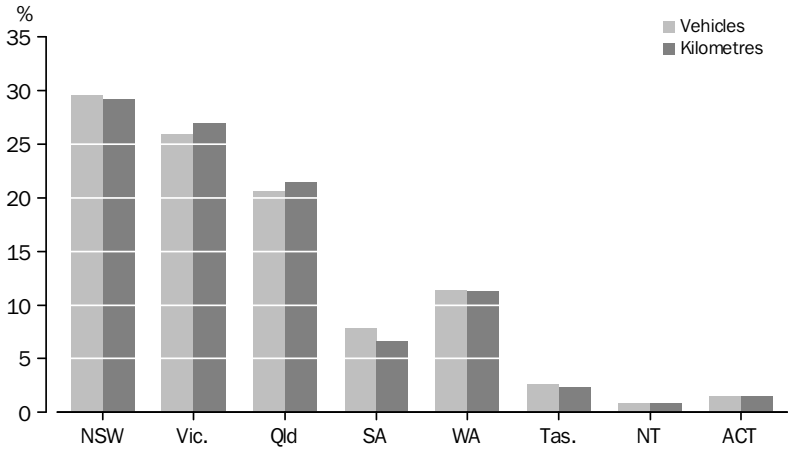
The 14.8 million vehicles represented an increase of 1.6 million vehicles (12.1%) compared with the 12 months ended 31 October 2003.

KILOMETRES TRAVELLED

Motor vehicles in Australia travelled an estimated 215,171 million kilometres in the 12 months ended 31 October 2007. While the number of vehicles increased by 12.1% compared with the 12 months ended 31 October 2003, the distance travelled by these vehicles only increased by 6.8% over this time.

The state/territory proportion of total kilometres travelled is closely related to the number of registered vehicles in each state/territory. New South Wales had the largest share of total kilometres travelled (29.2%) and the largest number of registered vehicles.

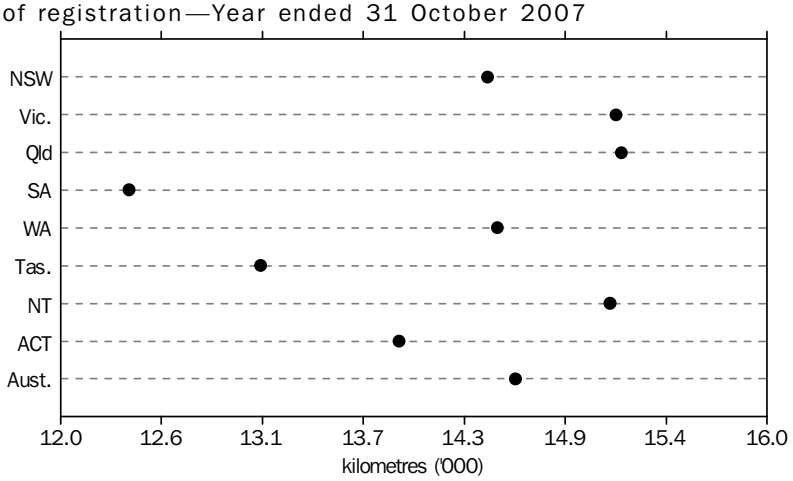
PROPORTION OF VEHICLES AND TOTAL KILOMETRES TRAVELLED, State/territory of registration—Year ended 31 October 2007



Motor vehicles registered in Australia travelled an average of 14,600 kilometres per vehicle in the 12 months ended 31 October 2007. Queensland (15,200 kilometres), the Northern Territory (15,100 kilometres) and Victoria (15,100 kilometres) were above the national average, while vehicles registered in South Australia travelled the least number of average kilometres (12,400). Of all vehicle types, articulated trucks had the highest average kilometres (93,200).

KILOMETRES TRAVELLED *continued*

AVERAGE KILOMETRES TRAVELLED, Motor vehicles by state/territory of registration—Year ended 31 October 2007



Passenger vehicles accounted for 73.4% of the total distance travelled in the 12 months ended 31 October 2007. This represents a slight decrease compared with the proportion travelled by passenger vehicles in the 12 months ended 31 October 2003 (75.3%).

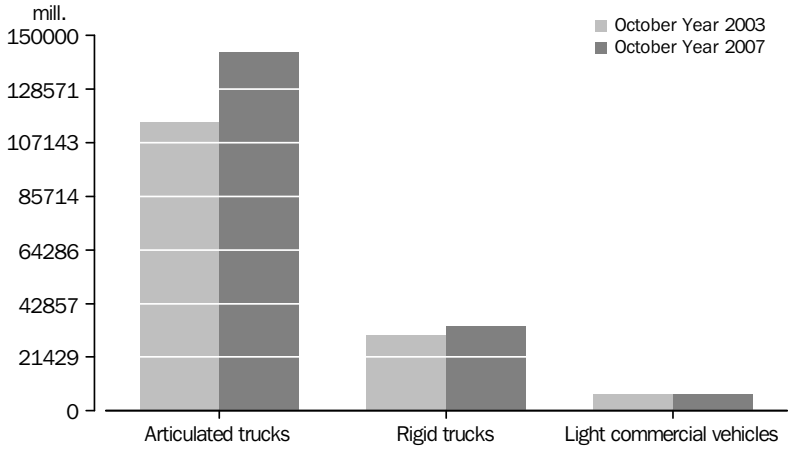
Personal and other use accounted for 51.1% of the total kilometres travelled by passenger vehicles in Australia during the 12 months ended 31 October 2007. Travel to and from work (28.7%) and business use (20.2%) accounted for the remaining kilometres travelled by passenger vehicles.

Freight carrying vehicles travelled 52,958 million kilometres (24.6%) in the 12 months ended 31 October 2007. Of this, light commercial vehicles accounted for 70.6% of the kilometres travelled, rigid trucks 16.3%, and articulated trucks 13.1%.

TONNE-KILOMETRES

Freight vehicles in Australia travelled an estimated 184,072 million tonne-kilometres in the 12 months ended 31 October 2007. This is an increase of 31,295 million tonne-kilometres (20.5%) since the 12 months ended 31 October 2003. Over this period, articulated trucks increased 24.2% and rigid trucks 11.4%.

TOTAL TONNES-KILOMETRES TRAVELLED, TYPE OF VEHICLE, YEARS ENDED 31 OCTOBER 2003 AND 31 OCTOBER 2007



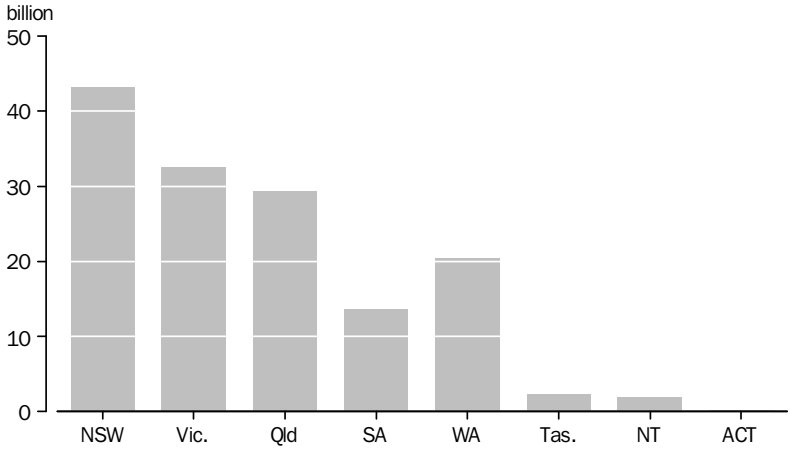
Articulated trucks accounted for 78.0% of the total freight vehicle tonne-kilometres travelled in the 12 months ended 31 October 2007, with rigid trucks accounting for 18.4% and light commercial vehicles for 3.6%.

Articulated trucks each travelled an average of 2.1 million tonne-kilometres. In comparison, rigid trucks and light commercial vehicles travelled an average of 101,900 and 5,500 tonne-kilometres, respectively, in the 12 months ended 31 October 2007.

There were 143,601 tonne-kilometres travelled by articulated trucks in the 12 months ended 31 October 2007. Of those, articulated trucks of a Gross Combination Mass (GCM) over 40 tonnes travelled 137,172 million tonne-kilometres (or 95.5%) of the total tonne-kilometres travelled by all articulated trucks.

The most tonne-kilometres were travelled in New South Wales (43,201 million), followed by Victoria with 32,629 million tonne-kilometres.

TOTAL TONNE-KILOMETRES TRAVELLED BY ARTICULATED TRUCKS, State of operation—Year ended 31 October 2007



FUEL CONSUMPTION

Registered motor vehicles in Australia consumed 30,047 million litres of fuel in the 12 months ended 31 October 2007. Of the total fuel consumed by motor vehicles in this period, 62.8% was petrol and 31.2% was diesel.

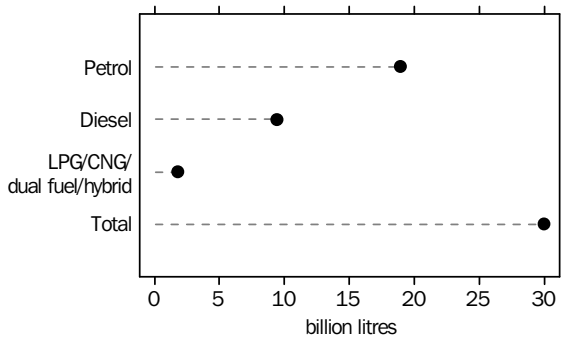
Passenger vehicles used 15,910 million litres of petrol in the 12 months ended 31 October 2007. This was 87.9% of all fuel used by passenger vehicles.

A total of 6,206 million litres of diesel was used by articulated and rigid trucks. This was 66.2% of all diesel used. Light commercial vehicles used 1,687 million litres which was 18.0% of all diesel.

FUEL CONSUMPTION

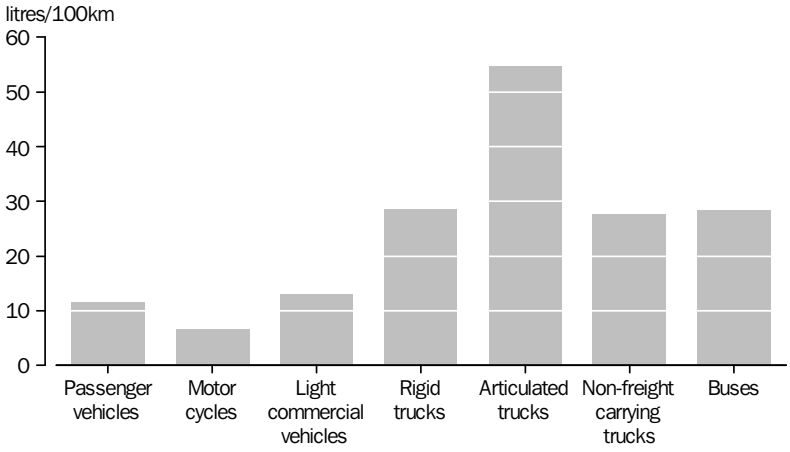
continued

TOTAL FUEL CONSUMPTION, Type of fuel—Year ended 31 October 2007



The average rate of fuel consumption for all motor vehicles in the 12 months ended 31 October 2007 was 14.0 litres per 100 kilometres. Articulated trucks had the highest average fuel consumption with 54.6 litres per 100 kilometres.

AVERAGE FUEL CONSUMPTION, Type of vehicle—Year ended 31 October 2007



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1 SUMMARY OF MOTOR VEHICLE USE, Type of vehicle

	2003	2004	2005	2006	2007
TOTAL KILOMETRES TRAVELLED *(million)*					
Passenger vehicles	151 743	147 728	155 068	156 184	157 928
Motor cycles	1 376	1 478	1 429	1 641	1 905
Light commercial vehicles	32 671	34 007	33 764	35 210	37 385
Rigid trucks	7 768	7 639	7 671	8 040	8 644
Articulated trucks	5 841	6 013	6 308	6 151	6 929
Non-freight carrying trucks	203	221	^ 286	^ 261	^ 283
Buses	1 893	1 968	1 856	1 917	2 097
Total	**201 497**	**199 055**	**206 383**	**209 405**	**215 171**
NUMBER OF VEHICLES(a) *(no.)*					
Passenger vehicles	10 415 165	10 654 328	11 010 506	11 273 219	11 519 214
Motor cycles	378 475	392 648	421 549	458 169	508 626
Light commercial vehicles	1 893 122	1 940 180	1 996 269	2 081 738	2 183 449
Rigid trucks	346 538	358 704	366 875	386 626	392 837
Articulated trucks	62 982	66 197	68 509	69 696	74 343
Non-freight carrying trucks	17 912	17 616	20 304	19 971	20 024
Buses	60 033	61 728	62 350	63 177	66 330
Total	**13 174 227**	**13 491 401**	**13 946 362**	**14 352 595**	**14 764 823**
AVERAGE KILOMETRES TRAVELLED(b) *('000)*					
Passenger vehicles	14.6	13.9	14.1	13.9	13.7
Motor cycles	3.6	3.8	3.4	3.6	3.7
Light commercial vehicles	17.3	17.5	16.9	16.9	17.1
Rigid trucks	22.4	21.3	20.9	20.8	22.0
Articulated trucks	92.7	90.8	92.1	88.3	93.2
Non-freight carrying trucks	11.4	12.5	14.1	13.1	^ 14.2
Buses	31.5	31.9	29.8	30.3	31.6
Total	**15.3**	**14.8**	**14.8**	**14.6**	**14.6**
TOTAL FUEL CONSUMPTION *(million litres)*					
Passenger vehicles	17 282	16 937	18 144	17 831	18 094
Motor cycles	83	^ 92	83	^ 105	^ 124
Light commercial vehicles	4 275	4 471	4 484	4 580	4 909
Rigid trucks	2 185	2 123	2 234	2 382	2 463
Articulated trucks	3 164	3 305	3 452	3 417	3 785
Non-freight carrying trucks	52	53	65	^ 69	^ 78
Buses	523	524	506	514	595
Total	**27 564**	**27 505**	**28 967**	**28 898**	**30 047**
AVERAGE RATE OF FUEL CONSUMPTION(c) *(litres per 100 kilometres)*					
Passenger vehicles	11.4	11.5	11.7	11.4	11.5
Motor cycles	6.0	6.3	5.8	6.4	6.5
Light commercial vehicles	13.1	13.1	13.3	13.0	13.1
Rigid trucks	28.1	27.8	29.1	29.6	28.5
Articulated trucks	54.2	55.0	54.7	55.6	54.6
Non-freight carrying trucks	25.7	24.0	22.7	26.4	27.6
Buses	27.6	26.6	27.3	26.8	28.3
Total	**13.7**	**13.8**	**14.0**	**13.8**	**14.0**

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

(a) The average number of vehicles registered for the 12 months. Includes registered vehicles that did not travel during the reference period.

(b) Calculated using average number of registered vehicles. Includes registered vehicles that did not travel during the reference period.

(c) Calculated using the total fuel consumption divided by the total kilometres travelled.

2 SUMMARY OF FREIGHT VEHICLE USE, Type of vehicle

	2003	2004	2005	2006	2007
TOTAL LADEN BUSINESS KILOMETRES TRAVELLED *(million)*					
Light commercial vehicles	15 346	15 844	15 537	16 276	17 400
Rigid trucks	5 425	5 322	5 169	5 596	5 816
Articulated trucks	4 399	4 367	4 777	4 604	5 122
Total freight vehicles	**25 171**	**25 533**	**25 483**	**26 477**	**28 338**
AVERAGE LADEN BUSINESS KILOMETRES TRAVELLED(a) *('000)*					
Light commercial vehicles	14.9	14.4	13.5	14.1	14.4
Rigid trucks	17.6	16.8	16.8	16.9	17.5
Articulated trucks	75.9	71.4	75.9	71.9	73.8
Total freight vehicles	**18.0**	**17.2**	**16.8**	**17.1**	**17.6**
TOTAL TONNE-KILOMETRES TRAVELLED *(million)*					
Light commercial vehicles	6 710	6 634	7 308	7 914	6 597
Rigid trucks	30 411	29 752	30 160	31 006	33 873
Articulated trucks	115 656	121 282	126 926	129 014	143 601
Total freight vehicles	**152 777**	**157 668**	**164 394**	**167 935**	**184 072**
AVERAGE TONNE-KILOMETRES TRAVELLED(b) *('000)*					
Light commercial vehicles	6.5	6.0	6.4	6.8	5.5
Rigid trucks	98.9	93.7	98.0	93.7	101.9
Articulated trucks	1 996.7	1 983.3	2 015.9	2 014.9	2 068.7
Total freight vehicles	**109.2**	**106.4**	**108.2**	**108.2**	**114.5**
TOTAL TONNES CARRIED *(million)*					
Light commercial vehicles	121	120	136	151	166
Rigid trucks	707	807	938	881	1 035
Articulated trucks	725	769	682	812	946
Total freight vehicles	**1 553**	**1 696**	**1 756**	**1 844**	**2 146**
AVERAGE LOAD CARRIED PER TRIP(c) *(kilograms)*					
Light commercial vehicles	400	362	423	460	357
Rigid trucks	5 773	6 068	6 415	5 624	6 374
Articulated trucks	24 685	23 921	23 872	24 112	24 746
Total freight vehicles	**3 411**	**3 421**	**3 543**	**3 555**	**3 229**

(a) Calculated using the total laden business kilometres travelled divided by the number of vehicles that travelled laden business kilometres.

(b) Calculated using the total tonne-kilometres travelled divided by the number of vehicles that travelled tonne-killometres.

(c) Calculated using the total load carried divided by the total number of laden trips.

3 SUMMARY OF MOTOR VEHICLE USE, State/territory of registration

	2003	*2004*	*2005*	*2006*	*2007*
TOTAL KILOMETRES TRAVELLED *(million)*					
New South Wales	62 125	58 875	63 717	61 400	62 732
Victoria	55 107	52 583	51 952	54 698	57 930
Queensland	39 082	41 643	44 526	45 431	46 071
South Australia	14 963	15 241	14 533	15 535	14 212
Western Australia	20 810	21 324	21 647	22 616	24 289
Tasmania	4 639	4 561	5 302	5 065	4 992
Northern Territory	1 573	1 594	1 603	1 647	1 785
Australian Capital Territory	3 199	3 234	3 104	3 014	3 160
Australia	**201 497**	**199 055**	**206 383**	**209 405**	**215 171**
NUMBER OF VEHICLES(a) *(no.)*					
New South Wales	3 954 303	4 059 983	4 193 362	4 261 321	4 351 910
Victoria	3 502 517	3 538 822	3 650 826	3 740 570	3 825 633
Queensland	2 543 696	2 665 200	2 764 824	2 903 610	3 036 175
South Australia	1 075 855	1 082 691	1 107 910	1 139 681	1 147 367
Western Australia	1 445 390	1 471 497	1 542 199	1 600 823	1 678 470
Tasmania	336 651	350 976	360 238	373 797	380 105
Northern Territory	103 743	106 651	109 968	111 967	118 132
Australian Capital Territory	212 072	215 581	217 036	220 827	227 031
Australia	**13 174 227**	**13 491 401**	**13 946 362**	**14 352 595**	**14 764 823**
AVERAGE KILOMETRES TRAVELLED(b) *('000)*					
New South Wales	15.7	14.5	15.2	14.4	14.4
Victoria	15.7	14.9	14.2	14.6	15.1
Queensland	15.4	15.6	16.1	15.6	15.2
South Australia	13.9	14.1	13.1	13.6	12.4
Western Australia	14.4	14.5	14.0	14.1	14.5
Tasmania	13.8	13.0	14.7	13.5	13.1
Northern Territory	15.2	14.9	14.6	14.7	15.1
Australian Capital Territory	15.1	15.0	14.3	13.6	13.9
Australia	**15.3**	**14.8**	**14.8**	**14.6**	**14.6**

(a) The average number of vehicles registered for the 12 months. Includes registered vehicles that did not travel during the reference period.

(b) Calculated using the total kilometres travelled divided by the average number of registered vehicles. Includes registered vehicles that did not travel during the reference period.

4 MOTOR VEHICLE USE, State/territory of registration—Type of vehicle

	Passenger vehicles	*Motor cycles*	*Light commercial vehicles*	*Rigid trucks*	*Articulated trucks*	*Non-freight carrying trucks*	*Buses*	*Total*
				TOTAL KILOMETRES TRAVELLED *(million)*				
New South Wales	47 771	^ 582	9 709	2 655	1 419	*50	547	62 732
Victoria	44 037	^ 382	8 712	1 979	2 267	*101	452	57 930
Queensland	30 954	*550	10 199	2 119	1 692	^ 70	488	46 071
South Australia	10 684	^ 106	2 230	476	575	*14	127	14 212
Western Australia	17 448	^ 195	4 441	1 076	751	^ 36	^ 341	24 289
Tasmania	3 356	*39	1 207	^ 204	135	^ 8	43	4 992
Northern Territory	1 043	^ 18	524	72	61	*4	63	1 785
Australian Capital Territory	2 635	^ 31	^ 363	63	31	^ 1	36	3 160
Australia	**157 928**	**1 905**	**37 385**	**8 644**	**6 929**	**^ 283**	**2 097**	**215 171**
				NUMBER OF VEHICLES(a) *(no.)*				
New South Wales	3 470 965	132 787	595 718	114 340	16 257	^ 4 439	17 403	4 351 910
Victoria	3 077 139	122 825	490 513	93 131	22 254	^ 5 297	14 474	3 825 633
Queensland	2 237 720	124 518	549 026	89 053	16 825	3 617	15 417	3 036 175
South Australia	925 709	36 264	147 001	26 253	6 401	1 684	4 054	1 147 367
Western Australia	1 256 998	68 223	277 313	52 974	9 991	^ 3 615	9 355	1 678 470
Tasmania	279 524	10 969	74 484	10 588	1 533	987	2 021	380 105
Northern Territory	76 111	4 408	29 632	4 217	840	303	2 621	118 132
Australian Capital Territory	195 048	8 632	19 761	2 281	241	82	984	227 031
Australia	**11 519 214**	**508 626**	**2 183 449**	**392 837**	**74 343**	**20 024**	**66 330**	**14 764 823**
				AVERAGE KILOMETRES TRAVELLED(b) *('000)*				
New South Wales	13.8	^ 4.4	16.3	23.2	87.3	^ 11.3	31.4	14.4
Victoria	14.3	^ 3.1	17.8	21.2	101.9	^ 19.1	31.2	15.1
Queensland	13.8	*4.4	18.6	23.8	100.5	^ 19.3	31.6	15.2
South Australia	11.5	^ 2.9	15.2	18.1	89.8	*8.2	31.3	12.4
Western Australia	13.9	^ 2.9	16.0	20.3	75.1	^ 10.0	^ 36.5	14.5
Tasmania	12.0	*3.6	16.2	^ 19.3	87.9	^ 7.6	21.4	13.1
Northern Territory	13.7	^ 4.1	17.7	17.1	72.2	^ 13.4	24.0	15.1
Australian Capital Territory	13.5	^ 3.6	^ 18.4	27.8	127.4	^ 12.4	36.5	13.9
Australia	**13.7**	**3.7**	**17.1**	**22.0**	**93.2**	**^ 14.2**	**31.6**	**14.6**

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

* estimate has a relative standard error of 25% to 50% and should be used with caution

(a) The average number of vehicles registered for the 12 months. Includes registered vehicles that did not travel during the reference period.

(b) Calculated using the total kilometres travelled divided by the average number of registered vehicles. Includes registered vehicles that did not travel during the reference period.

5 FUEL CONSUMPTION, Type of fuel—Type of vehicle

	Passenger vehicles	*Motor cycles*	*Light commercial vehicles*	*Rigid trucks*	*Articulated trucks*	*Non-freight carrying trucks*	*Buses*	*Total*
TOTAL FUEL CONSUMPTION *(million litres)*								
Petrol	15 910	^ 124	2 780	^ 25	—	*5	^ 32	18 876
Diesel	^ 888	—	1 687	2 425	3 781	^ 72	519	9 372
LPG/CNG/dual fuel/hybrid	^ 1 296	—	^ 442	*12	**4	**1	*43	^ 1 799
Total	**18 094**	**^ 124**	**4 909**	**2 463**	**3 785**	**^ 78**	**595**	**30 047**
AVERAGE RATE OF FUEL CONSUMPTION (a) *(litres per 100 kilometres)*								
Petrol	11.1	6.5	13.2	21.9	—	^ 22.1	14.5	11.4
Diesel	12.3	—	12.5	28.6	54.6	28.0	29.2	24.5
LPG/CNG/dual fuel/hybrid	16.6	—	16.0	^ 26.9	^ 64.4	*30.9	^ 44.0	16.7
Total	**11.5**	**6.5**	**13.1**	**28.5**	**54.6**	**27.6**	**28.3**	**14.0**

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

* estimate has a relative standard error of 25% to 50% and should be used with caution

** estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

(a) Calculated using the total fuel consumption divided by the total kilometres travelled.

WITHIN STATE/TERRITORY OF REGISTRATION

	Capital city	*Other urban areas*	*Other areas*	*Total intrastate*	*Interstate*	*Australia*
			TOTAL KILOMETRES TRAVELLED *(million)*			
Passenger vehicles	94 976	30 799	26 476	152 250	^ 5 677	157 928
Motor cycles	^ 830	^ 481	^ 520	1 831	*74	1 905
Light commercial vehicles	18 067	6 803	10 959	35 829	^ 1 556	37 385
Rigid trucks	4 383	1 328	2 472	8 183	^ 461	8 644
Articulated trucks	1 302	557	3 275	5 135	1 795	6 929
Non-freight carrying trucks	^ 139	^ 37	^ 82	^ 258	**25	^ 283
Buses	1 029	^ 396	574	1 999	*98	2 097
Total	**120 727**	**40 400**	**44 358**	**205 485**	**9 686**	**215 171**
			AVERAGE KILOMETRES TRAVELLED (a) *('000)*			
Passenger vehicles	11.8	7.8	8.1	13.8	^ 6.4	14.3
Motor cycles	3.7	^ 4.0	^ 3.7	4.8	^ 3.5	5.0
Light commercial vehicles	15.5	8.7	12.6	17.6	^ 10.1	18.1
Rigid trucks	23.2	11.8	15.7	23.2	^ 20.6	24.3
Articulated trucks	30.0	18.8	65.2	74.4	85.3	98.1
Non-freight carrying trucks	^ 17.7	^ 8.8	^ 9.5	14.2	**27.6	^ 15.2
Buses	29.3	21.9	22.4	31.2	^ 21.9	32.4
Total	**12.4**	**8.0**	**9.8**	**14.7**	**8.7**	**15.3**

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

* estimate has a relative standard error of 25% to 50% and should be used with caution

** estimate has a relative standard error greater than 50% and is considered too unreliable for general use

(a) Average distance travelled for registered vehicles which were used. Excludes registered vehicles that did not travel during the reference period.

AREA OF OPERATION, State/territory of registration

	WITHIN STATE/TERRITORY OF REGISTRATION					
	Capital city	*Other urban areas*	*Other areas*	*Total intrastate*	*Interstate*	*Australia*
	TOTAL KILOMETRES TRAVELLED *(million)*					
New South Wales	35 581	^ 11 778	^ 12 506	59 864	^ 2 867	62 732
Victoria	36 900	^ 8 326	9 804	55 030	^ 2 900	57 930
Queensland	17 379	16 336	^ 10 195	43 909	^ 2 162	46 071
South Australia	9 233	—	4 282	13 515	^ 697	14 212
Western Australia	16 161	^ 2 435	5 551	24 147	*141	24 289
Tasmania	2 031	1 526	1 256	4 814	*179	4 992
Northern Territory	873	—	764	1 637	^ 148	1 785
Australian Capital Territory	2 569	—	—	2 569	^ 591	3 160
Australia	**120 727**	**40 400**	**44 358**	**205 485**	**9 686**	**215 171**
	AVERAGE KILOMETRES TRAVELLED (a) *('000)*					
New South Wales	12.2	7.4	9.8	14.5	^ 6.4	15.0
Victoria	13.7	6.4	8.4	15.1	^ 10.7	15.8
Queensland	11.3	10.1	10.9	15.5	^ 9.6	16.2
South Australia	10.4	—	9.5	12.5	^ 12.0	13.0
Western Australia	13.4	^ 7.2	11.3	15.6	*21.8	15.7
Tasmania	10.1	8.5	8.3	13.6	*16.6	14.0
Northern Territory	11.6	—	13.3	14.7	^ 19.3	15.8
Australian Capital Territory	12.0	—	—	12.0	7.2	14.6
Australia	**12.4**	**8.0**	**9.8**	**14.7**	**8.7**	**15.3**

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

* estimate has a relative standard error of 25% to 50% and should be used with caution

— nil or rounded to zero (including null cells)

(a) Average distance travelled for registered vehicles which were used. Excludes registered vehicles that did not travel during the reference period.

	BUSINESS					
	Laden	*Unladen*	*All business use*(a)	*To and from work*	*Personal and other*	*Total*
TOTAL KILOMETRES TRAVELLED *(million)*						
Passenger vehicles	—	—	31 902	45 257	80 769	157 928
Motor cycles	—	—	^ 206	^ 444	^ 1 254	1 905
Light commercial vehicles	17 400	6 491	23 891	6 742	6 752	37 385
Rigid trucks	5 816	2 526	8 342	^ 136	^ 166	8 644
Articulated trucks	5 122	1 798	6 920	^ 7	*2	6 929
Non-freight carrying trucks	—	—	^ 283	**—	**—	^ 283
Buses	—	—	2 003	^ 22	^ 73	2 097
Total	**28 338**	**10 816**	**73 548**	**52 607**	**89 016**	**215 171**
AVERAGE KILOMETRES TRAVELLED(b) ***('000)***						
Passenger vehicles	—	—	8.9	7.6	8.3	14.3
Motor cycles	—	—	^ 2.9	^ 3.3	^ 3.9	5.0
Light commercial vehicles	14.4	8.5	18.7	8.4	5.9	18.1
Rigid trucks	17.5	9.8	24.8	^ 4.3	^ 4.7	24.3
Articulated trucks	73.8	30.2	98.8	^ 3.7	*2.2	98.1
Non-freight carrying trucks	—	—	^ 15.3	**0.8	**0.3	^ 15.2
Buses	—	—	33.4	^ 4.6	^ 9.3	32.4
Total	**17.6**	**10.0**	**13.6**	**7.6**	**7.9**	**15.3**

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

* estimate has a relative standard error of 25% to 50% and should be used with caution

** estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

(a) Including the business travel of non-freight carrying vehicles.

(b) Average distance travelled for registered vehicles which were used. Excludes registered vehicles that did not travel during the reference period.

BUSINESS AND PRIVATE USE OF VEHICLES, State/territory of registration

	BUSINESS					
	Laden	*Unladen*	*All business use*(a)	*To and from work*	*Personal and other*	*Total*
			TOTAL KILOMETRES TRAVELLED *(million)*			
New South Wales	7 375	2 708	20 032	15 747	26 953	62 732
Victoria	7 407	2 472	18 828	13 908	25 194	57 930
Queensland	8 067	^ 2 832	19 126	10 351	16 594	46 071
South Australia	1 559	786	4 457	3 447	6 309	14 212
Western Australia	2 815	1 481	8 118	6 936	9 235	24 289
Tasmania	572	^ 338	1 542	^ 913	2 537	4 992
Northern Territory	272	122	717	389	679	1 785
Australian Capital Territory	^ 272	^ 77	729	916	1 515	3 160
Australia	**28 338**	**10 816**	**73 548**	**52 607**	**89 016**	**215 171**
			AVERAGE KILOMETRES TRAVELLED(b) *('000)*			
New South Wales	16.4	9.9	12.6	7.2	8.0	15.0
Victoria	19.6	10.2	12.8	7.7	8.5	15.8
Queensland	19.5	10.1	17.1	7.9	7.6	16.2
South Australia	14.8	9.2	11.1	6.5	6.9	13.0
Western Australia	14.9	10.2	13.6	8.8	7.5	15.7
Tasmania	14.8	10.6	13.4	6.4	8.5	14.0
Northern Territory	13.7	8.5	13.6	6.7	8.3	15.8
Australian Capital Territory	^ 21.3	^ 10.1	^ 9.7	7.3	8.0	14.6
Australia	**17.6**	**10.0**	**13.6**	**7.6**	**7.9**	**15.3**

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

(a) Including the business travel of non-freight carrying vehicles.

(b) Average distance travelled for registered vehicles which were used. Excludes registered vehicles that did not travel during the reference period.

10 BUSINESS KILOMETRES, State/territory of registration—Type of vehicle

	Passenger vehicles	*Motor cycles*	*Light commercial vehicles*	*Rigid trucks*	*Articulated trucks*	*Non-freight carrying trucks*	*Buses*	*Total*
				TOTAL BUSINESS KILOMETRES TRAVELLED *(million)*				
New South Wales	^ 9 307	*59	6 111	2 556	1 416	*50	^ 533	20 032
Victoria	^ 8 343	*72	5 695	1 920	2 264	*101	434	18 828
Queensland	^ 7 672	*28	^ 7 162	2 046	1 691	^ 70	457	19 126
South Australia	^ 1 972	**5	1 311	458	574	*14	121	4 457
Western Australia	^ 3 431	*29	2 504	1 043	749	^ 36	^ 325	8 118
Tasmania	^ 580	*4	^ 585	^ 191	135	^ 8	40	1 542
Northern Territory	^ 260	*2	^ 266	67	61	*4	57	717
Australian Capital Territory	^ 337	*7	^ 257	62	31	^ 1	35	729
Australia	**31 902**	**^ 206**	**23 891**	**8 342**	**6 920**	**^ 283**	**2 003**	**73 548**
				AVERAGE BUSINESS KILOMETRES TRAVELLED (a) *('000)*				
New South Wales	^ 8.6	*3.1	17.5	25.7	91.6	^ 13.1	32.2	12.6
Victoria	^ 8.1	*3.8	19.4	24.6	107.4	^ 19.1	32.6	12.8
Queensland	^ 11.8	*1.5	21.3	25.7	105.7	^ 20.1	33.1	17.1
South Australia	^ 7.1	**1.6	15.4	19.7	96.9	*8.8	32.9	11.1
Western Australia	^ 9.1	*3.3	16.4	24.9	82.0	^ 11.7	^ 41.3	13.6
Tasmania	^ 8.6	**3.0	17.5	22.8	92.7	^ 8.2	22.6	13.4
Northern Territory	^ 9.3	*2.1	15.5	18.7	79.0	^ 15.8	27.8	13.6
Australian Capital Territory	^ 5.7	*5.2	^ 22.2	28.9	132.4	^ 15.9	37.7	^ 9.7
Australia	**8.9**	**^ 2.9**	**18.7**	**24.8**	**98.8**	**^ 15.3**	**33.4**	**13.6**

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** estimate has a relative standard error greater than 50% and is considered too unreliable for general use

(a) Average distance travelled for registered vehicles which were used. Excludes registered vehicles that did not travel during the reference period.

11 BUSINESS KILOMETRES TRAVELLED BY FREIGHT VEHICLES, State/territory of registration

	Light commercial vehicles	*Rigid trucks*	*Articulated trucks*	*Total*
TOTAL LADEN BUSINESS KILOMETRES TRAVELLED *(million)*				
New South Wales	4 584	1 776	1 014	7 375
Victoria	4 286	1 351	1 770	7 407
Queensland	^ 5 390	1 438	1 238	8 067
South Australia	^ 791	315	453	1 559
Western Australia	^ 1 586	730	498	2 815
Tasmania	^ 370	118	85	572
Northern Territory	^ 189	44	^ 39	272
Australian Capital Territory	^ 204	43	25	^ 272
Australia	**17 400**	**5 816**	**5 122**	**28 338**
AVERAGE LADEN BUSINESS KILOMETRES TRAVELLED (a) *('000)*				
New South Wales	13.6	18.1	66.1	16.4
Victoria	15.3	17.6	84.5	19.6
Queensland	^ 16.9	18.2	78.8	19.5
South Australia	10.3	13.7	76.9	14.8
Western Australia	11.4	17.7	54.9	14.9
Tasmania	^ 12.7	14.3	58.5	14.8
Northern Territory	^ 12.1	12.2	^ 51.9	13.7
Australian Capital Territory	^ 19.5	20.7	107.1	^ 21.3
Australia	**14.4**	**17.5**	**73.8**	**17.6**

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

(a) Calculated using the total laden business kilometres travelled divided by the number of vehicles that travelled laden business kilometres.

12 TONNE-KILOMETRES TRAVELLED BY FREIGHT VEHICLES, State/territory of registration

	Light commercial vehicles	*Rigid trucks*	*Articulated trucks*	*Total*
TOTAL TONNE-KILOMETRES TRAVELLED *(million)*				
New South Wales	^ 1 726	^ 11 021	24 046	36 793
Victoria	^ 1 719	6 637	46 185	54 542
Queensland	^ 1 887	^ 8 582	34 056	44 525
South Australia	^ 299	^ 1 963	13 446	15 707
Western Australia	^ 648	^ 4 406	21 092	26 146
Tasmania	*205	^ 841	2 345	3 392
Northern Territory	^ 47	^ 181	^ 1 812	^ 2 040
Australian Capital Territory	^ 65	^ 242	620	928
Australia	**6 597**	**33 873**	**143 601**	**184 072**
AVERAGE TONNE-KILOMETRES TRAVELLED(a) *('000)*				
New South Wales	^ 5.1	^ 112.1	1 566.1	81.8
Victoria	^ 6.1	86.4	2 206.1	144.3
Queensland	^ 5.9	^ 108.4	2 166.7	107.7
South Australia	^ 3.9	^ 85.6	2 284.3	148.7
Western Australia	^ 4.7	^ 107.1	2 322.2	138.1
Tasmania	*7.1	^ 102.2	1 620.4	87.7
Northern Territory	^ 3.0	^ 50.3	^ 2 383.8	^ 102.4
Australian Capital Territory	^ 6.3	^ 115.1	^ 2 676.9	^ 72.6
Australia	**5.5**	**101.9**	**2 068.7**	**114.5**

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

* estimate has a relative standard error of 25% to 50% and should be used with caution

(a) Calculated using the total tonne-kilometres travelled divided by the number of vehicles that travelled tonne-kilometres.

13 TONNE-KILOMETRES TRAVELLED BY FREIGHT VEHICLES, State/territory of operation

	Light commercial vehicles	*Rigid trucks*	*Articulated trucks*	*Total*
TOTAL TONNE-KILOMETRES TRAVELLED *(million)*				
New South Wales	^ 1 780	^ 10 898	43 201	55 880
Victoria	^ 1 632	^ 6 938	32 629	41 200
Queensland	^ 1 917	^ 8 214	29 367	39 497
South Australia	^ 303	^ 1 921	13 609	15 832
Western Australia	^ 640	^ 4 537	20 446	25 623
Tasmania	*207	^ 929	2 331	3 467
Northern Territory	^ 51	^ 177	^ 1 825	^ 2 052
Australian Capital Territory	^ 69	*259	^ 194	^ 521
Australia	**6 597**	**33 873**	**143 601**	**184 072**
AVERAGE TONNE-KILOMETRES TRAVELLED(a) *('000)*				
New South Wales	^ 4.7	^ 99.5	1 514.0	108.7
Victoria	^ 5.8	^ 89.5	1 262.8	106.8
Queensland	^ 5.7	^ 99.6	1 314.9	89.0
South Australia	^ 3.6	^ 76.5	1 167.3	130.6
Western Australia	^ 4.6	^ 106.9	2 079.5	133.0
Tasmania	*6.7	^ 109.9	1 564.6	84.6
Northern Territory	^ 2.8	^ 43.3	^ 1 346.9	^ 87.3
Australian Capital Territory	*3.2	*50.3	^ 160.5	*18.9
Australia	**5.5**	**101.9**	**2 068.7**	**114.5**

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* estimate has a relative standard error of 25% to 50% and should be used with caution

(a) Calculated using the total tonne-kilometres travelled divided by the number of vehicles that travelled tonne-kilometres.

	8 tonnes and under	*Over 8 tonnes to 20 tonnes*	*Over 20 tonnes*	*Total*
TOTAL TONNE-KILOMETRES TRAVELLED *(million)*				
2 axles	2 349	7 056	*2 200	11 605
3 axles	**3	**339	^ 19 306	^ 19 649
4 or more axles	**—	—	^ 2 619	^ 2 619
Total	**2 352**	**7 395**	**24 125**	**33 873**
AVERAGE TONNE-KILOMETRES TRAVELLED(b) *('000)*				
2 axles	16.5	58.4	^ 379.9	43.2
3 axles	**10.3	**113.9	368.1	352.7
4 or more axles	**1.3	—	^ 339.1	^ 337.4
Total	**16.5**	**59.8**	**365.7**	**101.9**

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* estimate has a relative standard error of 25% to 50% and should be used with caution

** estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

(a) Gross Vehicle Mass/Gross Combination Mass

(b) Calculated using the total tonne-kilometres travelled divided by the number of vehicles that travelled tonne-kilometres.

15 ARTICULATED TRUCK USE, Trailer configuration—GCM(a)

	30 tonnes and under	*Over 30 tonnes to 40 tonnes*	*Over 40 tonnes*	*Total*
TOTAL TONNE-KILOMETRES TRAVELLED *(million)*				
Single axle trailer	**251	**42	**9	*302
Tandem axle trailer	*173	^ 3 496	^ 549	^ 4 217
Triaxle trailer	**7	^ 2 446	49 566	52 019
B-Double	—	**1	59 116	59 116
Road train	—	—	24 080	24 080
Other	—	**14	^ 3 852	^ 3 867
Total	***431**	**5 999**	**137 172**	**143 601**
AVERAGE TONNE-KILOMETRES TRAVELLED(b) *('000)*				
Single axle trailer	**257.2	**382.5	**148.6	*263.7
Tandem axle trailer	*162.9	483.0	^ 442.8	442.1
Triaxle trailer	**66.0	^ 664.5	1 398.7	1 326.3
B-Double	—	**61.9	4 784.1	4 778.8
Road train	—	—	4 544.6	4 544.6
Other	—	**247.0	^ 2 158.7	^ 2 098.7
Total	***201.2**	**540.5**	**2 441.9**	**2 068.7**

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* estimate has a relative standard error of 25% to 50% and should be used with caution

** estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

(a) Gross Combination Mass.

(b) Calculated using the total tonne-kilometres travelled divided by the number of vehicles that travelled tonne-kilometres.

16 FREIGHT VEHICLE USE, State/territory of registration—Type of vehicle

	Light commercial vehicles	*Rigid trucks*	*Articulated trucks*	*Total*
TOTAL LOAD CARRIED *(million tonnes)*				
New South Wales	^ 47	^ 348	203	597
Victoria	^ 43	^ 204	258	505
Queensland	^ 40	^ 241	208	488
South Australia	^ 9	^ 62	63	134
Western Australia	^ 22	^ 139	^ 177	338
Tasmania	^ 3	27	26	57
Northern Territory	^ 1	^ 6	^ 9	^ 17
Australian Capital Territory	^ 1	^ 8	^ 3	12
Australia	**166**	**1 035**	**946**	**2 146**
AVERAGE LOAD CARRIED PER TRIP(a) *(kilograms)*				
New South Wales	353	6 489	22 265	3 063
Victoria	377	6 067	22 599	3 169
Queensland	^ 312	^ 6 243	26 180	^ 2 815
South Australia	^ 424	^ 6 048	22 575	^ 3 969
Western Australia	429	^ 7 055	32 118	^ 4 479
Tasmania	^ 340	7 320	25 088	^ 3 882
Northern Territory	218	3 831	28 447	^ 2 118
Australian Capital Territory	^ 315	6 060	21 054	^ 2 124
Australia	**357**	**6 374**	**24 746**	**3 229**

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

(a) Calculated using the total load carried divided by the total number of laden trips.

17 FREIGHT VEHICLE USE, Commodity—Total tonnes carried (million)

	Light commercial vehicles	*Rigid trucks*	*Articulated trucks*	*Total*
Food and live animals	^ 9	^ 72	205	286
Beverages and tobacco	** 2	* 7	^ 19	^ 28
Crude materials, inedible, except fuels	^ 5	^ 535	269	808
Mineral fuels, lubricants and related materials	* 3	* 33	^ 85	^ 121
Animal and vegetable oils, fats and waxes	**—	** 3	* 8	* 11
Chemicals and related products, not elsewhere specified	^ 6	^ 13	^ 29	^ 47
Manufactured goods	^ 18	^ 153	^ 133	304
Machinery, transport equipment	^ 10	^ 53	^ 60	123
Miscellaneous manufactured articles	* 4	^ 17	* 12	^ 33
Tools of trade	86	^ 38	^ 5	128
Other commodities, not elsewhere specified	^ 18	^ 88	92	199
Unspecified(a)	^ 5	* 22	* 31	^ 58
Total	**166**	**1 035**	**946**	**2 146**

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— nil or rounded to zero (including null cells)

(a) Represents loads carried where type of commodity could not be obtained.

18 BUS USE(a), Type of bus—Type of service

	Route service	*Dedicated school bus service*	*Charter service*	*Tour service*	*Other*	*Not specified*(b)	*Total*
TOTAL KILOMETRES TRAVELLED *(million)*							
Buses with fewer than 20 seats	*36	*50	*117	*73	^268	**7	^552
Buses with 20 or more seats	752	292	^200	*101	*135	**—	1 480
Total	**788**	**342**	**^316**	**^175**	**^403**	****8**	**2 032**
AVERAGE KILOMETRES TRAVELLED(c) *('000)*							
Buses with fewer than 20 seats	*21.4	^21.2	^30.5	^34.4	16.8	^26.2	24.2
Buses with 20 or more seats	57.4	18.4	^18.0	^42.0	*18.4	**86.5	39.8
Total	**53.4**	**18.8**	**^21.2**	**^38.5**	**^17.3**	**^27.0**	**33.9**

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** estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

(a) Excluding distance travelled by buses used exclusively for private purposes.

(b) Represents travel by buses where type of service could not be obtained.

(c) Average distance travelled for registered vehicles which were used. Excludes registered vehicles that did not travel during the reference period.

19 BUS USE(a), State/territory of registration—Type of service

	Route service	*Dedicated school bus service*	*Charter service*	*Other*(b)	*Not specified*(c)	*Total*
			TOTAL KILOMETRES TRAVELLED *(million)*			
New South Wales	^193	^126	*91	^123	**3	^537
Victoria	^157	^74	*83	^126	**—	441
Queensland	^181	^60	*82	^143	—	466
South Australia	^74	^20	*18	*10	**2	123
Western Australia	*136	*37	*27	*128	**—	^329
Tasmania	^13	^17	*4	*7	**1	42
Northern Territory	^13	*5	^8	^32	**1	58
Australian Capital Territory	^22	^4	*2	*8	—	35
Australia	**788**	**342**	**^316**	**^577**	****8**	**2 032**
			AVERAGE KILOMETRES TRAVELLED(d) *('000)*			
New South Wales	^42.0	^18.7	^16.5	^18.6	**25.3	32.4
Victoria	^55.5	^23.3	^25.7	^18.5	**86.5	33.2
Queensland	^61.1	15.5	^25.3	^20.9	—	33.8
South Australia	^52.8	^17.8	*19.6	*9.7	**36.5	33.3
Western Australia	^72.0	^22.3	*23.6	^32.9	**22.4	^41.8
Tasmania	38.4	15.5	*9.6	^13.7	**45.3	23.4
Northern Territory	^42.1	^18.5	^25.6	^24.2	**14.1	28.4
Australian Capital Territory	48.2	^11.1	*22.5	^20.2	—	37.8
Australia	**53.4**	**18.8**	**^21.2**	**21.1**	**^27.0**	**33.9**

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* estimate has a relative standard error of 25% to 50% and should be used with caution

** estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

(a) Excluding distance travelled by buses used exclusively for private purposes.

(b) Includes tour service operations.

(c) Represents travel by buses where type of service could not be obtained.

(d) Average distance travelled for registered vehicles which were used. Excludes registered vehicles that did not travel during the reference period.

EXPLANATORY NOTES

INTRODUCTION

1 This publication presents estimates from the 2007 Survey of Motor Vehicle Use (SMVU). The data were collected in four quarterly sample surveys conducted by the Australian Bureau of Statistics (ABS) over the period 1 November 2006 to 31 October 2007.

SCOPE AND FRAME

2 The scope of the survey comprises all vehicles that were registered with a motor vehicle authority for road use at some stage during the 12 months ended 31 October 2007. Not included are caravans, trailers, tractors, plant and equipment, vehicles belonging to the defence services and vehicles with diplomatic or consular plates. Where they were registered as such, vintage and veteran cars were also excluded from the survey. Unregistered vehicles are out of scope.

3 The population was identified on 31 March 2006 using information obtained from the state and territory motor vehicle registration authorities, as part of the annual ABS Motor Vehicle Census (MVC) (Cat No. 9309.0). There were 14.4 million vehicles identified at this time, an increase of 3.2% on the number registered at the same time the previous year. The population information identified is referred to as the survey frame.

METHODOLOGY

4 For the 2007 SMVU, a stratified sample of 16,000 vehicles was selected to report on vehicle use over a three-month period within the reference year 1 November 2006 to 31 October 2007. Of these, 24.2% were passenger vehicles and motor cycles, 61.6% were freight vehicles, 11.0% were buses and 3.2% were non-freight carrying vehicles. The sample size was chosen to give a suitable level of precision for estimates of total distance travelled and tonne-kilometres for each state/territory of registration by type of vehicle category.

5 The survey methodology is described as pre-advice, where owners of vehicles selected in the survey received early advice about their inclusion to encourage record keeping and minimise reliance on recall. These owners were asked to complete two mail questionnaires tailored to their vehicle type. The first, at the beginning of each quarterly survey period, asked for selected vehicle characteristics and the vehicle odometer reading. Owners were also advised that they would receive a follow up questionnaire at the end of the quarter seeking details about the use of the vehicle over the quarter and a second odometer reading. Examples of the main items requested in the second questionnaire were included with the first questionnaire. (Sample questionnaires can be found under the on-line version of the Survey's Explanatory Notes, at the ABS website).

6 When questionnaires were returned to the ABS they were checked for completeness and accuracy and, where possible, follow-up contact was made with owners to resolve reporting problems. Where contact with providers could not be made, missing items on incomplete questionnaires were filled by imputing average data from like vehicles for which data were obtained.

7 Where the selected vehicle owner had not owned the vehicle for the whole quarterly survey period, the details provided for the period of ownership were adjusted to give a three-month equivalent. Where the vehicle was deregistered during the quarterly survey period, only the use up to the date of deregistration was included.

8 In addition, adjustments were made in the estimation process to account for the use of new motor vehicles registered after the survey population was identified, as well as the re-registration of other vehicles during this time. For the 2007 SMVU, the population frame was created on 31 March 2006. More information about these adjustments is provided in paragraph 24 of the Technical Note.

9 Estimates from information reported in each quarterly collection period were produced and these were then aggregated into annual estimates relating to the use of vehicles during the period 1 November 2006 to 31 October 2007. The size of the sample is insufficient to produce reliable quarterly results.

RELIABILITY OF ESTIMATES

10 When interpreting the results of a survey it is important to take into account factors that may affect the reliability of estimates. Such factors can be classified as either survey methodology, sampling error or non-sampling error. Information on these factors is provided in the Technical Note.

COMPARISON WITH MOTOR VEHICLE CENSUS DATA

11 Survey estimates of the numbers of vehicles, by vehicle type, are not fully comparable with ABS Motor Vehicle Census data (see *Motor Vehicle Census, Australia* (cat. no. 9309.0)). The main differences are:

- survey estimates of the numbers of vehicles relate to the average number of vehicles registered for road use during the period 1 November 2006 to 31 October 2007, not to the number of vehicles registered at a specific date, as is the case for the Motor Vehicle Census.
- the characteristics of the type of vehicle identified from the survey information may differ from those recorded by the motor registries.

CONCEPT OF AVERAGES

12 Most tables in this publication include statistics presented as averages. Tables 1, 3 and 4 are summary tables and present average kilometres travelled per vehicle for all registered vehicles in scope of the survey. This includes those vehicles that travelled zero kilometres during the reference period (also known as nil use vehicles). See paragraph 27 of the Technical Note for more details on nil use vehicles. Other tables present more detailed information on actual vehicle use where the denominator used in calculating the average is limited to the estimated number of vehicles that contribute to the particular cell. In some cases a vehicle may contribute to more than one cell in a table (e.g. a bus used for route service and charter purposes) but will only be counted once in the denominator for the total.

13 As the denominators used to calculate each average are different it should be noted that the averages along a table row cannot be used to derive the total column entry for that row.

HISTORICAL COMPARISONS

14 This publication includes estimates of vehicle use for earlier years. However, it should be noted that the survey methodology was designed to produce reliable level estimates of key data items at the state by vehicle type level. The survey was not designed to produce reliable estimates of annual movements. Changes in data over time may be subject to high RSEs and hence the changes may not be statistically significant. While the analysis in this publication does make comparisons over time, the limitations as outlined above should be taken into account and care should be taken in drawing inferences from these comparisons. See paragraphs 9, 10, 11 and 12 of the Technical Note.

BILLION

15 The term 'billion' means 'thousand million' in line with Australian standards.

RELATED PUBLICATIONS AND PRODUCTS

16 Users may also wish to refer to the following publications and products which contain information relating to motor vehicles in Australia:

Motor Vehicle Census, Australia (cat. no. 9309.0) — issued annually
Sales of New Motor Vehicles, Australia (cat. no. 9314.0) — issued monthly
Sales of New Motor Vehicles, Electronic delivery (cat. no. 9314.0.55.001) — final issue May 2007

ABS DATA AVAILABLE ON REQUEST

17 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.

DATA QUALITY

1 When interpreting the results of a survey it is important to take into account factors that may affect the reliability of estimates. The survey methodology procedures as well as sampling and non-sampling errors should be considered. Examination of the following quality indicators will assist users in determining fitness for purpose of the Survey of Motor Vehicle Use (SMVU).

SAMPLING ERROR

2 Estimates in this publication are based on information collected for a sample of registered motor vehicles, rather than a full enumeration, and are therefore subject to sampling error. They may differ from the data that would have been produced if the information had been obtained for all registered motor vehicles. Examples of the sampling error for this publication are included in this Technical Note.

3 The sampling error associated with an estimate can be estimated from the sample results. One measure of sampling error is given by the standard error, which indicates the extent to which an estimate might have varied by chance because only a sample of vehicles was included. There are about two chances in three that a sample estimate will differ by less than one standard error from the data that would have been obtained if all vehicles had been included, and about 19 chances in 20 that the difference will be less than two standard errors.

4 Another measure of sampling variability is the relative standard error (RSE) which is obtained by expressing the standard error as a percentage of the estimate to which it refers. The RSE is a useful measure in that it provides an immediate indication of the percentage error likely to have occurred due to sampling. In this publication, estimates that have an estimated relative standard error between 10% and 25% are annotated with the symbol '^' . These estimates should be used with caution as they are subject to sampling variability too high for some purposes. Estimates with an RSE between 25% and 50% are annotated with the symbol '*', indicating that the estimate should be used with caution as it is subject to sampling variability too high for most practical purposes. Estimates with an RSE greater than 50% are annotated with the symbol '**' indicating that the sampling variability causes the estimates to be considered too unreliable for general use.

5 The RSEs relating to 2007 estimates contained in Table 4 of this publication are shown in the following table.

RSE OF MOTOR VEHICLE USE(a), State/territory of registration—Type of vehicle

	Passenger vehicles	*Motor cycles*	*Light commercial vehicles*	*Rigid trucks*	*Articulated trucks*	*Non-freight carrying trucks*	*Buses*	*Total*
	%	%	%	%	%	%	%	%
TOTAL KILOMETRES TRAVELLED								
New South Wales	4.9	15.2	4.9	5.8	4.8	27.9	9.9	3.8
Victoria	4.5	16.7	5.8	6.1	4.1	25.6	7.1	3.5
Queensland	4.3	25.4	7.0	6.7	4.7	20.4	8.5	3.3
South Australia	5.2	22.6	6.1	6.2	4.8	29.1	8.8	4.0
Western Australia	4.9	17.4	7.6	6.0	4.1	20.0	13.2	3.8
Tasmania	5.5	27.6	7.7	13.9	4.7	23.6	7.2	4.1
Northern Territory	5.3	19.9	7.1	8.8	9.4	26.1	8.0	3.8
Australian Capital Territory	4.7	13.4	10.9	7.2	7.8	22.7	8.7	4.1
Australia	**2.2**	**9.5**	**2.9**	**2.8**	**2.1**	**11.8**	**4.2**	**1.7**
NUMBER OF VEHICLES								
New South Wales	1.9	4.7	2.1	1.4	2.1	18.0	3.9	1.5
Victoria	1.8	2.7	1.6	1.6	1.9	12.8	3.7	1.5
Queensland	2.2	3.2	2.4	1.5	2.5	9.7	3.0	1.7
South Australia	1.6	3.5	1.6	1.7	1.3	9.2	4.1	1.3
Western Australia	1.7	2.3	3.4	1.5	2.1	10.2	4.6	1.2
Tasmania	1.8	5.3	2.1	2.6	3.6	7.8	3.8	1.3
Northern Territory	2.2	4.8	1.9	6.4	3.6	9.7	7.6	1.4
Australian Capital Territory	1.9	7.9	3.2	1.5	5.1	8.7	7.3	1.6
Australia	**0.9**	**1.6**	**1.0**	**0.7**	**1.0**	**5.9**	**1.6**	**0.7**
AVERAGE KILOMETRES TRAVELLED								
New South Wales	4.7	14.6	4.8	5.8	4.3	24.6	9.3	3.6
Victoria	4.3	16.9	5.6	6.0	3.8	23.5	6.7	3.4
Queensland	4.2	25.5	6.9	6.5	4.5	20.0	7.8	3.1
South Australia	5.0	22.6	6.0	6.1	4.9	26.4	8.5	3.8
Western Australia	4.8	17.2	6.9	5.9	4.2	18.6	12.9	3.7
Tasmania	5.3	27.9	7.6	11.8	4.9	22.6	6.8	4.0
Northern Territory	5.0	18.9	6.9	6.9	9.5	22.9	7.7	3.7
Australian Capital Territory	4.4	13.6	11.0	7.0	7.5	22.7	9.7	3.9
Australia	**2.1**	**9.5**	**2.9**	**2.8**	**2.0**	**10.9**	**3.9**	**1.6**

(a) These RSEs relate to the estimates in Table 4.

SAMPLING ERROR *continued*

6 As an example of the use of an RSE, the 2007 estimate for total kilometres travelled by all passenger vehicles registered in Australia is 157,928 million kilometres (Table 4 of the publication). The rounded RSE for this estimate is 2.2%, as shown above. Therefore, the standard error for the 2007 kilometres travelled by passenger vehicles estimate is 3,474 million kilometres (2.2% of 157,928 million kilometres). There are about two chances in three that the figure obtained if all vehicles had been included, would have been in the range 154,454 million kilometres to 161,402 million kilometres (a range of one standard error above and below the survey estimate). There are about 19 chances in 20 that the figure would have been in the range 150,980 million kilometres to 164,876 million kilometres (a range of two standard errors above and below the survey estimate).

7 It is important to note that estimates at more detailed levels than the above are subject to higher RSEs and therefore are less reliable.

8 RSEs for other key variables are shown in the following tables. The RSEs of further detailed variables can be made available on request.

RSE OF FUEL CONSUMPTION(a), Type of fuel—Type of vehicle

	Passenger vehicles	*Motor cycles*	*Light commercial vehicles*	*Rigid trucks*	*Articulated trucks*	*Non-freight carrying trucks*	*Buses*	*Total*
	%	%	%	%	%	%	%	%
TOTAL FUEL CONSUMPTION								
Petrol	2.6	10.3	4.8	17.3	—	42.3	19.1	2.3
Diesel	15.9	—	6.5	3.5	2.2	17.1	5.0	2.4
LPG/CNG/dual fuel	19.8	—	15.5	41.6	75.2	67.4	33.6	14.9
Total	**2.5**	**10.3**	**3.0**	**3.4**	**2.2**	**15.7**	**4.5**	**1.6**
AVERAGE RATE OF FUEL CONSUMPTION								
Petrol	0.9	3.4	1.5	8.5	—	24.2	6.1	0.8
Diesel	3.9	—	1.7	1.6	0.7	7.3	2.2	1.9
LPG/CNG/dual fuel	5.2	—	4.4	14.7	20.2	25.5	11.7	3.8
Total	**1.0**	**3.4**	**1.1**	**1.6**	**0.7**	**6.9**	**2.4**	**0.7**

— nil or rounded to zero (including null cells)

(a) These RSEs relate to the estimates in Table 5.

RSE OF FREIGHT VEHICLES(a), State/territory of operation

	Light commercial vehicles	*Rigid trucks*	*Articulated trucks*	*Total*
	%	%	%	%
TOTAL TONNE-KILOMETRES				
New South Wales	11.2	10.3	4.9	4.2
Victoria	11.2	14.4	5.5	4.9
Queensland	12.8	16.6	5.9	5.5
South Australia	11.9	14.3	7.7	6.8
Western Australia	13.7	13.0	6.4	5.6
Tasmania	28.7	14.6	7.0	6.1
Northern Territory	18.5	11.2	14.2	12.6
Australian Capital Territory	21.5	34.6	21.2	19.3
Australia	**5.8**	**6.2**	**2.7**	**2.4**

(a) These RSEs relate to the estimates in Table 13.

SAMPLING ERROR *continued*

9 Summary tables in this publication contain estimates for earlier years. Because of cost and provider load constraints, the SMVU cannot be designed to provide accurate measures of the movements between reference periods. Care should be taken in drawing inferences from changes in data over these years.

10 The standard error for the movement can be calculated using:

$$SE(M_t) = \sqrt{(RSE(Y_{2t}) * Y_{2t}/100)^2 + (RSE(Y_{1t}) * Y_{1t}/100)^2}$$

where

Y_{1t} is an estimate of total of the variable of interest, obtained from the 1st time point

Y_{2t} is an estimate of total of the same variable of interest, obtained from the 2nd time point

M_t is an estimate of movement of the total of the variable of interest from the 1st time point to the 2nd time point, ie $M_t = Y_{2t} - Y_{1t}$

11 For total kilometres travelled by type of vehicle from the 2003 and 2007 SMVUs, the standard errors of the movements and the estimates from which they are derived are shown in the following table.

SE OF THE MOVEMENT OF TOTAL KILOMETRES TRAVELLED

	LEVEL ESTIMATES				MOVEMENT ESTIMATES	
	2003	*RSE (2003)*	*2007*	*RSE (2007)*	*Movement*	*SE (Movement)*(a)
Type of vehicle	mill.	%	mill.	%	mill.	mill.
Passenger vehicles	151 743	3	157 928	2	6 184	5 457
Motor cycles	1 376	9	1 905	9	528	216
Light commercial vehicles	32 671	3	37 385	3	4 713	1 515
Rigid trucks	7 768	3	8 644	3	876	360
Articulated trucks	5 841	3	6 929	2	1 088	219
Non-freight trucks	203	8	283	12	80	38
Buses	1 893	3	2 097	4	204	107
Total	**201 497**	**2**	**215 171**	**2**	**13 674**	**5 611**

(a) Calculated on unrounded RSE estimates

12 As indicated in the table above, the estimates of movement are subject to significant sampling error and caution should be used in analysing the movements in the estimates. For example, the estimate of movement for passenger vehicles is an increase of 6,184 million kilometres and the standard error is 5,457 million kilometres, which means there are 19 chances in 20 that the true movement estimate is between a decrease of 4,730 million kilometres and an increase of 17,098 million kilometres.

NON-SAMPLING ERROR

13 Non-sampling error covers the range of errors that are not caused by sampling and can occur in any statistical collection whether it is based on full enumeration or a sample. For example, non-sampling error can occur because of non-response to the statistical collection, errors or omissions in reporting by providers, definition or classification difficulties, errors in transcribing and processing data and under-coverage of the frame from which the sample was selected. If these errors are systematic (not random) then the survey results will be distorted in one direction and therefore will be unrepresentative of the target population. Systematic errors result in bias.

Response and non-response

14 An important factor that affects non-sampling error is the response rate achieved. The ABS makes all reasonable efforts to maximise response rates. Where appropriate, mail reminders and telephone follow-up are used to attempt to contact non-responding vehicle owners. Responses were received from 83% of all of the selections for 2007.

After removing those vehicles that had been found to be deregistered or out of scope, the live response rate for the 2007 SMVU was 82%.

RESPONSE AND NON-RESPONSE BY CATEGORY

	Percentage of selections 2007
	%
Response received	
Registered vehicle	78
Unregistered vehicle(a)	5
Non-response	
Untraceable - mailing address unknown	5
Other(b)	11
Total selections	**100**

(a) Includes deregistration, out of scope and duplicates.
(b) Includes: responses that were unusable because of unresolved queries or where the vehicle was sold during the reference quarter and the reproted data covered less than 14 days; non-response where no listing could be found to enable contact by telephone; and owner contacted by telephone but response still not secured.

15 Live response rates for each state and territory, and for each vehicle type, are shown in the following tables:

LIVE RESPONSE RATES, State/Territory

	Response rate
	%
New South Wales	84
Victoria	82
Queensland	84
South Australia	87
Western Australia	85
Tasmania	85
Northern Territory	73
Australian Capital Territory	78
Australia	**82**

LIVE RESPONSE RATES, Type of vehicle

	Response rate
	%
Passenger vehicle	82
Motor cycles	81
Light commercial vehicles	80
Rigid trucks	83
Articulated trucks	84
Non-freight carrying trucks	86
Buses	83
Total	**82**

Response and non-response continued

16 A large non-response increases the potential magnitude of non-response bias, which occurs if the usage patterns of the non-responding vehicles differ from those of the responding vehicles. For the SMVU, it is assumed that the characteristics of non-responding vehicles including the proportion of deregistered, out of scope and nil use vehicles are the same as for responding vehicles.

Frame quality

17 The scope of the survey comprises all vehicles that were registered with a motor vehicle authority for road use at some stage during the 12 months ended 31 October 2007 (excluding caravans, trailers, tractors, plant and equipment, defence services vehicles, diplomatic or consular-plated vehicles and vintage or veteran registered vehicles). A population or survey frame of 14.4 million vehicles was identified on 31 March 2006 using information obtained from the state and territory motor vehicle registration authorities, as part of the annual ABS Motor Vehicle Census (MVC) (Cat No. 9309.0). From this frame a stratified sample of 16,000 vehicles was selected for reporting on vehicle use.

18 The responses received in the SMVU provide an indication of the quality of the frame. In 2007, the effects of duplicate vehicle registrations, vehicle de-registrations prior to frame extract, and out-of-scope vehicles on the frame was estimated to be approximately 0.2% of the total frame. This indicates the frame was reliable in terms of providing an accurate number of registered vehicles in Australia.

19 Vehicle classification anomalies arise when respondents indicate an alteration has been made to the vehicle body, resulting in a different vehicle type to that recorded on the frame. These changes can happen during the time-lag between finalising the frame and collection of SMVU data (between 7 and 19 months). Vehicle classification anomalies can also result from data supplied by state and territory vehicle registration authorities. An assessment of vehicle classification anomalies from 2007 data shows that while there was no bias towards specific states or territories, there were marked discrepancies for some vehicle types. For vehicles on the frame that were listed as non-freight carrying trucks, 23.9% were found to be other vehicle types, 15.5% of vehicles listed as buses were found to be other vehicle types and 2.1% of vehicles listed as articulated trucks were found to be other vehicle types. This issue was not significant for other vehicle types on the frame.

Imputation

20 Imputation is the process whereby a value is generated for missing data items, based on the responses for similar vehicles which were operating for the reference period. As for previous surveys, the need for imputation of unanswered items on the returned questionnaires remained quite high. This is called partial imputation.

21 Total fuel consumption can be difficult to collect, being derived from the product of total distance travelled and the average fuel consumption rate. The average fuel consumption rate can be reported directly by the respondent or derived from the respondent reporting an amount of fuel consumed and the distance travelled on that fuel (for all or part of the period). If records have not been kept during the reference period, it can be difficult for the provider to provide or reasonably estimate fuel consumption. If this is the case the fuel consumption rate is imputed from the average of 'like' responding providers.

22 Additional imputation is needed due to questionnaire non-response and is called full imputation. The tables below show the percentage contribution to the estimates from both partial and full imputation.

Imputation continued

CONTRIBUTION TO ESTIMATES FROM IMPUTATION(a), State/territory of registration

	Percentage of total kilometres travelled	*Percentage of total tonne-kilometres travelled*	*Percentage of fuel consumption*
	%	%	%
New South Wales	14	31	42
Victoria	16	34	45
Queensland	19	26	44
South Australia	15	21	36
Western Australia	16	27	43
Tasmania	15	38	46
Northern Territory	28	51	55
Australian Capital Territory	15	32	44
Australia	**16**	**29**	**43**

(a) Includes both partial and full imputation

CONTRIBUTION TO ESTIMATES FROM IMPUTATION(a), Type of vehicle

	Percentage of total kilometres travelled	*Percentage of total tonne-kilometres travelled*	*Percentage of fuel consumption*
	%	%	%
Passenger vehicles	16	. .	46
Motor cycles	16	. .	45
Light commercial vehicles	18	48	45
Rigid trucks	16	28	38
Articulated trucks	16	29	32
Non-freight carrying vehicles	14	. .	50
Buses	15	. .	27
Total	**16**	**29**	**43**

. . not applicable
(a) Includes both partial and full imputation

SURVEY PROCEDURES

23 The survey is comprised of four independent samples, with a different one used for each 3 month quarter in the overall 12 month survey period. Estimates from each of these samples are aggregated and adjusted for new motor vehicles and re-registrations of vehicles to produce an annual estimate.

Adjustments

24 The SMVU measures the use of all vehicles registered during the reference year. Because selections are taken from vehicles registered some time before the beginning of each collection period, adjustments are made to account for the change in size of the registered motor vehicle fleet since the population frame was created. For the 2007 SMVU, the frame was created on 31 March 2006. These adjustments involved two categories:

- re-registrations - older vehicles that are returning to the registered vehicle fleet after a period of de-registration, and
- new motor vehicles - vehicles which have not been previously registered.

Adjustments continued

CONTRIBUTION OF ADJUSTMENTS FOR RE-REGISTRATIONS, Australia

	PERCENTAGE OF TOTAL KILOMETRES TRAVELLED				
	SMVU 2003	*SMVU 2004*	*SMVU 2005*	*SMVU 2006*	*SMVU 2007*
	%	%	%	%	%
Type of Vehicle					
Passenger vehicles	2	1	3	1	3
Motor cycles	6	6	4	7	7
Light commercial vehicles	2	2	1	3	2
Rigid trucks	2	4	2	4	2
Articulated trucks	4	4	4	2	4
Non-freight carrying vehicles	2	6	1	3	2
Buses	–1	—	–2	—	–2
Total	**2**	**2**	**3**	**2**	**3**

— nil or rounded to zero (including null cells)

CONTRIBUTION OF NEW VEHICLES REGISTERED AFTER 31 MARCH

	PERCENTAGE OF TOTAL KILOMETRES TRAVELLED				
	2003	*2004*	*2005*	*2006*	*2007*
	%	%	%	%	%
Type of vehicle					
Passenger vehicles	10	10	11	11	10
Motor cycles	15	15	16	16	15
Light commercial vehicles	14	14	14	14	14
Rigid trucks	10	13	12	12	12
Articulated trucks	17	18	19	20	17
Non-freight carrying trucks	13	13	14	14	9
Buses	14	12	15	15	16
Total	**11**	**11**	**12**	**12**	**11**

25 These activities occur continuously and the adjustments are made to account for the registrations that are estimated to have been added to or removed from the registered vehicle fleet between the population frame date and the end of the reference period. The adjustment process also accounts for de-registrations. This means it is possible for the re-registration factor to be negative.

Pre-advice methodology

26 The quality of survey responses is improved by employing a pre-advice methodology. This involves vehicle owners receiving early advice about their inclusion in the survey and encourages a higher degree of record keeping. In addition, the reporting of odometer readings taken at the start and end of the survey periods (approximately three months apart) provide reliable estimates of total distance travelled without a recall bias.

Nil use

27 Some providers may report nil use for the 3 month reference period in which they were selected. Nil use vehicles are live registered vehicles that reported travelling zero kilometres during that specific reference period only. Nil use vehicles are included in the survey as their reported nil use is representative of other vehicles in the population. Vehicles may have nil use due to factors such as seasonal usage, mechanical faults or economic conditions. Where a provider gives a nil use response, a follow-up phone call is used to check the veracity of the response.

Nil use continued

NIL USE, Vehicle type

	2003	*2004*	*2005*	*2006*	*2007*
NUMBER OF REGISTERED VEHICLES WITH NIL USE					
Passenger vehicles	345 789	406 865	393 971	409 471	456 884
Motor cycles	76 212	92 953	73 570	100 725	125 547
Light commercial vehicles	77 282	93 220	103 683	115 841	114 241
Rigid trucks	21 725	24 214	32 944	36 263	36 660
Articulated trucks	4 187	3 967	4 105	4 340	3 680
Non-freight carrying trucks	1 270	1 547	1 518	1 448	1 418
Buses	1 679	1 319	1 303	1 343	1 510
Total	*528 144*	*624 085*	*611 094*	*669 430*	*739 940*
PROPORTION OF REGISTERED VEHICLES WITH NIL USE (%)					
Passenger vehicles	3	4	4	4	4
Motor cycles	20	24	17	22	25
Light commercial vehicles	4	5	5	6	5
Rigid trucks	6	7	9	9	9
Articulated trucks	7	6	6	6	5
Non-freight carrying trucks	7	9	7	7	7
Buses	3	2	2	2	2
Total	*4*	*5*	*4*	*5*	*5*

DISTRIBUTIONS

28 The following tables provide values for total kilometres travelled and total tonne-kilometres travelled for selected percentiles. These percentiles have been calculated from all values reported in each quarter of the reference period. Percentiles provide some indication of the distribution of vehicle use across the survey population. For example, one-fifth of New South Wales passenger vehicles reported a distance travelled of 1,297 kilometres or less for the quarter they were selected in the survey. Note that the minimum value for every combination of state/territory by type of vehicle for both tables is zero.

29 Users should contact the ABS if they have any queries on the quality and reliability of estimates for particular purposes.

SELECTED PERCENTILES(a), State/territory of registration—Type of vehicle

	20th Percentile	*40th Percentile*	*50th Percentile*	*60th Percentile*	*80th Percentile*	*95th Percentile*	*99th Percentile*
	TOTAL KILOMETRES TRAVELLED						
Passenger vehicles							
New South Wales	1 297	2 349	2 798	3 507	5 359	8 564	11 393
Victoria	1 364	2 274	2 887	3 453	5 650	8 370	13 961
Queensland	1 473	2 587	2 942	3 642	5 347	7 860	9 888
South Australia	871	1 868	2 273	2 750	4 410	7 496	11 946
Western Australia	1 161	2 365	2 841	3 617	5 259	7 885	16 166
Tasmania	811	1 934	2 327	2 863	4 594	9 063	12 578
Northern Territory	1 055	1 929	2 659	3 276	5 074	9 596	14 740
Australian Capital Territory	1 335	2 468	3 094	3 503	5 202	7 735	10 057
Australia	*1 260*	*2 282*	*2 823*	*3 448*	*5 334*	*8 140*	*11 645*
Motorcycles							
New South Wales	46	312	583	794	2 349	4 153	5 600
Victoria	—	132	340	485	1 158	3 472	8 137
Queensland	—	182	409	515	2 135	3 992	12 243
South Australia	—	179	356	473	837	3 751	6 877
Western Australia	—	133	237	389	1 257	3 277	4 085
Tasmania	—	303	358	407	1 036	4 065	10 811
Northern Territory	—	182	443	647	1 849	4 550	5 015
Australian Capital Territory	—	296	358	826	1 593	3 310	5 163
Australia	—	*194*	*358*	*540*	*1 569*	*3 955*	*7 459*
Light commercial vehicles							
New South Wales	1 233	2 400	3 368	4 153	6 233	10 932	16 924
Victoria	946	2 540	3 450	4 397	6 902	12 956	17 679
Queensland	1 324	2 281	3 144	3 724	7 248	14 534	22 115
South Australia	829	2 441	2 920	3 636	6 127	11 365	16 051
Western Australia	652	2 267	3 161	3 917	6 616	11 441	18 188
Tasmania	668	2 456	3 086	3 886	6 494	10 324	22 445
Northern Territory	1 585	2 807	3 636	4 349	6 037	11 193	26 778
Australian Capital Territory	951	2 814	3 593	4 541	6 928	12 996	18 598
Australia	*1 093*	*2 463*	*3 269*	*4 043*	*6 640*	*12 402*	*19 306*
Rigid trucks							
New South Wales	643	2 406	3 415	4 700	8 814	18 856	44 929
Victoria	224	1 444	2 731	4 145	9 018	18 200	35 598
Queensland	700	2 406	3 663	4 931	8 827	21 016	34 243
South Australia	361	1 406	2 406	3 605	6 908	15 873	32 882
Western Australia	98	1 106	2 166	4 029	9 215	18 580	31 989
Tasmania	338	1 129	1 782	3 101	7 017	22 266	32 919
Northern Territory	537	2 037	2 504	3 338	6 282	13 819	38 443
Australian Capital Territory	1 564	3 433	4 328	5 673	9 544	23 908	50 737
Australia	*383*	*1 813*	*3 002*	*4 390*	*8 798*	*18 844*	*36 207*
Articulated trucks							
New South Wales	3 184	11 237	16 774	22 735	39 041	58 008	72 046
Victoria	3 530	13 174	20 475	28 193	46 560	63 719	88 112
Queensland	3 822	13 262	19 542	25 770	47 865	68 670	89 323
South Australia	1 783	8 624	12 800	19 958	45 012	65 924	98 821
Western Australia	1 514	7 411	11 436	16 931	32 414	59 926	89 051
Tasmania	4 614	13 984	21 573	25 929	34 728	54 818	70 710
Northern Territory	1 721	6 104	10 327	12 887	35 307	63 159	74 473
Australian Capital Territory	7 308	22 916	35 115	38 593	53 918	65 140	79 638
Australia	*2 950*	*11 125*	*17 335*	*24 030*	*42 557*	*64 181*	*88 275*

— nil or rounded to zero (including null cells)

(a) Based on distance travelled in a quarter.

SELECTED PERCENTILES(a), State/territory of registration—Type of vehicle *continued*

	20th Percentile	*40th Percentile*	*50th Percentile*	*60th Percentile*	*80th Percentile*	*95th Percentile*	*99th Percentile*
	TOTAL KILOMETRES TRAVELLED						
Non-freight carrying trucks							
New South Wales	186	1 095	1 676	1 690	4 381	10 952	12 718
Victoria	522	1 891	2 984	3 979	7 279	18 007	26 540
Queensland	670	1 316	3 200	4 203	7 218	22 977	25 140
South Australia	147	363	492	926	3 092	9 356	18 145
Western Australia	184	919	1 670	2 081	4 988	7 498	18 295
Tasmania	113	113	635	1 113	2 203	8 591	14 567
Northern Territory	45	406	1 250	1 675	7 609	11 540	19 566
Australian Capital Territory	—	686	1 014	2 216	6 245	11 998	13 886
Australia	*311*	*1 095*	*1 676*	*2 698*	*5 990*	*13 274*	*25 140*
Buses							
New South Wales	2 155	4 682	6 406	7 076	12 614	23 096	36 991
Victoria	2 420	4 686	5 440	6 879	11 195	24 303	48 938
Queensland	2 347	3 955	4 710	5 840	12 667	24 561	36 655
South Australia	2 272	4 631	5 434	7 575	12 132	23 162	35 298
Western Australia	2 070	4 315	6 189	7 606	14 501	26 708	49 855
Tasmania	1 603	3 374	4 180	5 134	9 045	14 840	20 790
Northern Territory	1 403	2 626	3 507	4 666	8 882	20 006	35 706
Australian Capital Territory	3 097	5 341	6 112	8 583	14 972	23 500	28 853
Australia	*2 155*	*4 207*	*5 413*	*6 763*	*11 775*	*23 904*	*38 644*
Total							
New South Wales	1 044	2 265	2 772	3 528	5 449	8 785	13 036
Victoria	1 161	2 252	2 852	3 495	5 792	9 749	16 866
Queensland	1 298	2 395	2 922	3 609	5 652	9 667	19 306
South Australia	793	1 846	2 277	2 864	4 603	8 194	15 343
Western Australia	871	2 273	2 811	3 545	5 573	8 865	19 016
Tasmania	647	1 927	2 389	2 926	4 949	10 136	17 274
Northern Territory	1 035	2 099	2 776	3 496	5 443	10 030	17 716
Australian Capital Territory	1 298	2 321	3 033	3 503	5 209	8 142	10 991
Australia	*1 059*	*2 245*	*2 785*	*3 481*	*5 535*	*9 114*	*16 717*

— nil or rounded to zero (including null cells)

(a) Based on distance travelled in a quarter.

SELECTED PERCENTILES(a), State/territory of registration—Type of freight vehicle

	20th Percentile	*40th Percentile*	*50th Percentile*	*60th Percentile*	*80th Percentile*	*95th Percentile*	*99th Percentile*
	TOTAL TONNE-KILOMETRES TRAVELLED						
Light commercial vehicles							
New South Wales	—	—	50	292	1 115	3 553	6 190
Victoria	—	—	72	280	1 585	4 728	7 256
Queensland	—	—	69	307	1 291	4 514	6 682
South Australia	—	—	4	117	917	1 927	5 544
Western Australia	—	—	2	98	1 018	2 582	6 682
Tasmania	—	—	—	—	500	3 305	10 451
Northern Territory	—	—	4	79	619	1 527	4 340
Australian Capital Territory	—	—	28	255	1 579	3 901	7 056
Australia	—	—	*35*	*239*	*1 169*	*3 623*	*6 682*
Rigid trucks							
New South Wales	299	1 578	3 297	5 775	19 548	85 539	439 866
Victoria	44	990	2 409	4 151	17 984	85 019	300 608
Queensland	506	2 133	4 026	7 319	23 446	110 915	379 680
South Australia	281	1 703	2 687	4 379	15 136	67 500	267 282
Western Australia	—	1 244	2 513	5 552	20 032	75 580	328 390
Tasmania	—	1 024	1 960	3 527	13 693	96 687	336 739
Northern Territory	129	1 203	2 183	3 515	11 374	47 861	153 773
Australian Capital Territory	621	3 014	4 961	7 968	21 936	121 966	372 819
Australia	*155*	*1 545*	*2 939*	*5 595*	*19 548*	*88 895*	*379 555*
Articulated trucks							
New South Wales	28 794	129 397	194 362	287 825	632 064	1 293 155	1 890 636
Victoria	31 350	169 384	261 078	424 618	949 084	1 870 047	2 564 269
Queensland	33 694	157 500	257 330	402 288	911 518	1 894 163	2 763 161
South Australia	14 986	91 670	162 045	269 328	1 050 543	2 109 965	3 063 455
Western Australia	12 145	89 691	156 479	245 551	682 603	2 508 334	4 389 828
Tasmania	53 065	167 846	260 498	357 555	580 995	1 328 441	2 218 159
Northern Territory	11 293	83 382	111 437	191 034	1 141 140	2 223 312	3 773 262
Australian Capital Territory	62 117	381 189	537 636	714 414	1 116 743	1 993 284	2 383 802
Australia	*26 629*	*137 463*	*218 805*	*353 237*	*857 160*	*1 797 873*	*3 053 819*

— nil or rounded to zero (including null cells)

(a) Based on distance travelled in a quarter

GLOSSARY

Articulated trucks Motor vehicles constructed primarily for load carrying, consisting of a prime mover which has no significant load carrying area, but with a turntable device which is linked to a semitrailer.

Average load carried Average load carried is calculated by dividing the total weight carried by the number of trips made while carrying a load.

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

Business kilometres Distance travelled for hire and reward, or charged to a business expense, or for which an allowance was received. All distances travelled for business purposes, irrespective of actual use, and irrespective of vehicle type, are included in total business kilometres. The laden-unladen dissection of distance travelled for business purposes relates only to freight vehicles, i.e. light commercial vehicles, rigid trucks and articulated trucks.

Business use Use of vehicle for business, professional, farm or government purposes. It includes use for hire or reward, use which is chargeable to business expense and use for which an allowance was received. Travel to and from work is not included.

Capital city These areas are based on capital city Statistical Divisions as defined in the *Australian Standard Geographical Classification (ASGC) 2004*.

Sydney — this includes the area bounded by Gosford and Wyong; Hawkesbury and Blue Mountains; Campbelltown, Wollondilly and the Sutherland Local Government Areas.

Melbourne — this includes the area bounded by Werribee, Melton, Sunbury, Craigieburn, Whittlesea, Healesville, Warburton, Berwick, Pakenham and the whole of Mornington Peninsula.

Brisbane — this includes the area bounded by Caboolture, the eastern part of the Pine Rivers Shire, Redcliffe City, Redland Shire, Beenleigh, Logan City and the City of Ipswich.

Adelaide — this includes the area bounded by the Gulf of St. Vincent, the Gawler River and the Mount Lofty Ranges from Gawler to Bridgewater through Kangarilla and Willunga to Sellicks Beach.

Perth — this includes the area bounded by Yanchep and Bullsbrook; Warnbro, Keysbrook and Wooroloo.

Hobart — this includes the area bounded by New Norfolk; Sorell and Carlton Creek; Brighton and Snug.

Darwin — this includes Darwin and suburbs, Palmerston and other areas north of the Howard Springs turn-off.

Canberra — this includes all of the Australian Capital Territory.

Commodity carried The publication of commodities carried is based on the 10 sectional groupings of the *Australian Transport Freight Commodity Classification (ATFCC)*, with the addition of Tools of Trade.

Freight vehicles Consists of light commercial vehicles, rigid trucks and articulated trucks.

Fuel consumption Fuel consumption is calculated by aggregating the total kilometres travelled multiplied by reported average rate of fuel consumption for each vehicle.

Fuel consumption (average) The average rate of fuel consumption is calculated by dividing the total fuel consumption by total kilometres travelled for each type of vehicle.

Gross Combination Mass (GCM) Tare weight (i.e. unladen weight) of the motor vehicle and attached trailers, plus their maximum carrying capacity. In the survey, this was obtained for vehicles operated in combination (e.g. a prime mover/semitrailer combination, or a rigid truck/trailer combination).

Gross Vehicle Mass (GVM) Tare weight (i.e. unladen weight) of the motor vehicle, plus its maximum carrying capacity. In the survey, this was obtained for buses and rigid trucks not usually towing trailers.

Interstate This refers to any travel by vehicles outside their state or territory of registration.

Laden distance Distance travelled by light commercial vehicles, rigid trucks and articulated trucks from one destination to another when carrying freight.

Light commercial vehicles Motor vehicles 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 goods carrying vans (whether four-wheel drive or not).

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.

Other Urban Areas These are based on the *Australian Standard Geographical Classification (ASGC) 2004* as being either Statistical Districts with a population greater than 40,000 or clusters of collection districts and other urban areas with a population greater than 40,000, based on the 2001 Population Census.

New South Wales — within the areas of Newcastle, Lake Macquarie, Port Stephens, Wollongong, Kiama, Bathurst-Orange, Maitland, Albury (excluding Wodonga), Hume, Wagga Wagga, Tweed Heads (excluding Gold Coast), Queanbeyan (excluding Canberra ACT), Lismore, Coffs Harbour, Greater Taree, Tamworth, Shellharbour, Cessnock, Nelson Bay, Port Macquarie and Nowra.

Victoria — within the areas of Geelong, Ballarat, Bendigo, Wodonga (excluding Albury), Shepparton, La Trobe Valley and Mildura.

Queensland — within the areas of the Sunshine Coast, Bundaberg, Hervey Bay, Rockhampton, Mackay, Townsville, Cairns, Gold Coast (excluding Tweed Heads), and Toowoomba.

Western Australia — within the areas of Mandurah and Bunbury.

Tasmania — within the areas of Launceston, Burnie, Devonport, Penguin, Ulverston, Wynyard and Latrobe.

This category is not applicable in South Australia, the Northern Territory and the Australian Capital Territory.

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, passenger vans or mini buses with fewer than 10 seats and campervans.

Private use Travel which is not for business purposes. Travel to and from work is included.

Rigid trucks Motor vehicles exceeding 3.5 tonnes GVM, 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.

Relative standard error (RSE) The standard error expressed as a percentage of the estimate to which it refers.

Standard error (SE) Indicates the extent to which an estimate might have varied by chance because only a sample of vehicles was included.

Stratification Stratification is the process where a population is divided into homogeneous groups called strata that are non-overlapping, and together comprise the whole population. This technique uses auxiliary information to increase the efficiency of a sample design and units are selected independently within each stratum.

Tonne-kilometres Total tonne-kilometres is the aggregation of the number of tonnes moved multiplied by the distance travelled in kilometres for each individual vehicle carrying freight. Note that it is not the aggregation of the total number of tonnes moved by total kilometres travelled by all vehicles carrying freight.

Tonnes carried Total tonnes carried is the total weight of goods and freight carried during the survey period. The estimate of total tonnes carried relates to goods and freight uplifted by vehicles and therefore will overstate the actual physical quantity of goods and freight moved during the survey period to the extent that transhipment occurs (i.e. the transfer of goods and freight from one vehicle to another).

Travel to and from work The travel between place of residence and place of work at the beginning and end of all working days, including travel to and from public transport stations.

Unladen distance Distance travelled by light commercial vehicles, rigid trucks and articulated trucks from one destination to another when not carrying freight.

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