

Test Trak

Australian Roads Vehicles and Vehicle Use Summary

Australia's Geographic Features

Annual Road Travel

Australian Vehicle Fleet Summary

Number of Passenger Vehicles

Major Australian Car Makes

Fuel Consumption

Australian Road Length by Road Type

Australian Road Lengths by Surface Type

Average kilometres Travelled

Vehicle Area of Operation

International Comparisons

Australia's Geographic Features

Australia is a large country in the southern hemisphere that has a relatively small population, which resides mainly in 7 large capital cities. It stretches across three time zones, from the Indian Ocean in the west to the Pacific Ocean in the east. It is similar in size to the continental United States and at its widest point is about the same distance east to west as Madrid to Moscow. Japan could fit within Australia's borders 20 times; the United Kingdom could fit 32 times, and New Zealand 28 times.

The northern tip of Australia is only 1,000 km south of the equator. The same distance separates Macquarie Island (Australia's most southerly jurisdiction) and Antarctica. Rainforests, deserts, snowcapped mountains and open grasslands are all part of the Australian landscape. Climatic and geographic factors create a variety of road building conditions and influence the rates at which roads deteriorate.

There are about 19 million Australians—the only single nation of people to occupy an entire continent.

There are less than three people for every square kilometre.

Australia maintains one of the most extensive road networks, per capita, in the world.

Country	Persons per kilometre of road
Australia	23
Canada	30
New Zealand	41
United States	42
Japan	110
United Kingdom	154
China	1123

Contrary to its outback image, Australia is one of the most urbanised societies in the world with 85% of the population living in urban areas. The majority of people live in centres at the edge of the landmass. Seventy-two per cent of the population lives in the State/Territory capital cities with 39% of people living in just two cities, Sydney and Melbourne.

The larger Australian cities are generally decentralised, typically evolving by the gradual expansion of outer residential areas. This type of development, which frequently places large distances between residential and work locations, has been linked with considerable dependence on private cars for urban commuting and limited reliance on public transit systems.

Annual Road Travel

Road travel in Australia, expressed as vehicle-kilometres traveled per capita, was higher than in many other countries, but not as high as in the USA. Australia experienced a 39% increase in road travel between 1970 (then at 6,513 km/head) and 1996. The increase in the USA during the same period was 60%.

International travel comparisons

	Australia	New Zealand	USA	UK	France	Sweden	Japan
Vehicle-km per capita ('000)	10,200	8,327	14,595	7,345	7,983	7,303	5,468

Source: IRF (1996), ABS Catalogue nos. 3201.0, 9202.0

Australian Vehicle Fleet Summary

Vehicle	Number
Passenger Vehicles	9,723,699
Motor Cycles	328,207
Light Commercial Vehicles	167,578
Rigid Trucks	341,484
Articulated Trucks	59,989
Non freight carrying trucks	19,868
Busses	55,400

Source: ABS Motor Vehicle Census 31 March 2001

Number of Passenger Vehicles

	Number	Percentage
New South Wales	2,997,241	30.8%
Victoria	2,643,109	27.1%
Queensland	1,751,895	18.0%
South Australia	845,257	8.6%
Western Australia	1,002,232	10.3%
Tasmania	246,684	2.5%
Northern Territory	68,793	0.7%
Australian Capital Territory	168,488	1.7%
Australia	9,723,699	

Source: ABS Motor Vehicle Census 31 March 2001

Major Australian Car Makes

Car Manufacturer	Total registered vehicles	Share (%)
Ford	2,011,740	20.4
Holden	1,905,284	19.4
Toyota	1,705,375	17.3
Mitsubishi	969,243	9.9
Nissan	709,269	7.2
Mazda	418,278	4.3
Honda	290,566	3.0
Subaru	203,092	2.1
Daihatsu	134,742	1.4
Mercedes-Benz	120,568	1.2
BMW	114,642	1.2
Suzuki	113,170	1.2
TOTAL	9,835,884	

Source: ABS Motor Vehicle Census 31 March 2001

Fuel Consumption

Vehicle	Total (million Litres)	Average per vehicle
Passenger Vehicles	16,190	11.7
Motor Cycles	70	6.0
Light Commercial Vehicles	3,604	13.3
Rigid Trucks	1,750	27.3
Articulated Trucks	2,790	52.3
Non freight carrying trucks	66	25.9
Busses	457	26.0

Source: ABS Survey of Motor Vehicle Use, 31 October, 2000

Australian Road Length by Road Type

In 1998, the total length of public road in Australia exceeded 800,000 km. Of this length, 319,000 km (or 40%) had a bituminous or concrete sealed surface.

The following table presents information on the Australian road system covering road length, and travel for the major road categories.

Road length and travel by road type - Australia - 1999

Road type	Length		Travel	
	(km)	%	(million vehicle km)	%
National highway	18,619	2.3	24,206	14.2
Rural arterial	94,793	11.6	36,925	21.6
Urban arterial	12,441	1.5	67,534	39.6
Rural local	600,914	74.1	10,825	6.3
Urban local	84 834	10.5	31,194	18.3
All road types	8,11 603	100.0	170,684	100.0

Source: AustRoads

Most sealed pavements consist of an unbound (structural) granular layer only about 150 - 200 mm thick, covered by a thin bituminous surfacing. On most of the network this surfacing is a sprayed seal (chip seal). Asphalt is used in urban areas and on heavily trafficked routes, although sprayed seal technology allows seals to be used on quite heavily trafficked roads.

Australian Road Lengths by Surface Type

Surface type	Total (km)	Percent
Bitumen or concrete	319,282	39.8%
Gravel crushed stone or other improved surface	311,453	38.8%
Formed only	131,671	16.4%
Cleared only	40,415	5.0%
Total	802,821	100.0%

1998 - Source: ABS, Australian Road Research Board

Average kilometres Travelled

About 52% of the total distance travelled by passenger vehicles was for private use, 24% was for travel to and from work and 22% was for business use or charged against business expenses.

Vehicle	Annual Average Kilometres travelled	Business use Annual Average	Private use	Travel to and from work
Passenger Vehicles	14,300	10,200	8,500	7,100
Motor Cycles	3,600	2,600	3,100	4,600
Light Commercial Vehicles	16,200	17,600	6,100	7,500
Rigid Trucks	18,800	22,300	2,700	4,400
Articulated Trucks	88,900	96,500	1,300	2,900
Non freight carrying trucks	12,800	13,900	1,800	3,200
Busses	31,700	34,200	9,400	4,300

Source: ABS Survey of Motor Vehicle Use, 31 October, 2000

Men typically drive a vehicle more than women; as demonstrated in the following table.

Age (years)	Male (km per annum)	Female (km per annum)
15-24	9 900	9 400
25-54	10 500	10 000
Over 55	9 500	6 400
Total	10 200	9 200

Source: ABS Survey of Motor Vehicle Use, 31 October, 2000

Vehicle Area of Operation

An estimated 95% of the total distance travelled by all vehicles is within the State / Territory of registration of the vehicle.

Area	Percentage use
Capital City	55.5%
Other Urban areas	13.3%
Country	25.8%
Interstate	5.4%

Source: ABS Survey of Motor Vehicle Use, 31 October, 2000

Capital City areas are based on the capital city statistical divisions. For example Sydney is the area bounded by Gosford and Wyong; Hawkesbury and Blue Mountains; Campbelltown, Wollondilly and the Sutherland Local Government Areas. Melbourne is the area bounded by Werribee, Melton, Sunbury, Craigieburn, Whittlesea, Healesville, Warburton, Berwick, Pakenham and the whole of the Mornington Peninsula.

Other Urban areas are based on the Australian Standard Geographical Classification (ASCG) 1996 as being statistical districts with a population greater than 40,000. For example New South Wales includes: Newcastle, Wollongong, Bathurst-Orange, Maitland, Albury, Wagga Wagga, Tweed Heads, Queanbeyan, Lismore, Coffs Harbour, Greater Taree, Shellharbour, Cessnock, Nelson Bay, Port Macquarie and Nowra. Victoria includes Geelong, Ballarat, Bendigo, Wodonga, Shepparton and Mildura.

International Comparisons

	Aust.	NZ	USA	Canada	UK	France	Sweden	Sth Africa	Japan	Indonesia	Malaysia
Population 1997 ('000)	18,964	3,807	267,200	30,300	59,500	58,500	8,910	47,000	126,200	204,000	20,370
Area ('000 sq km)	7,688	286	9,809	9,970	230,	551	450	1,123	378	2,027	330
Passenger cars ('000)	8,879	1,762	138,203	13,183	21,092	25,500	3,662	4,004	47,000	2,204	2,697
Vehicles per population 1000 population	605	591	765	550	393	526	447	121	550	21	153
Persons per vehicle	1.7	1.7	1.3	1.7	2.4	1.9	2.2	8.3	1.8	47.6	6.5
Total road length - 1996 (km)	802,821	92,075	6,420,000	912,200	372,000	892,500	138,000	331,265	1,160,000	393,000	94,500
Persons per km of road	23.6	41.3	41.6	33.2	159.9	65.5	64.6	141.8	108.8	519.1	215.6
Vehicles per km of road length	13.7	23.2	31.7	18.3	62.9	34.2	28.9	17.1	59.7	11.1	33.1
Road density (km/sq km)	0.10	0.35	0.65	0.09	1.62	1.62	0.31	0.29	3.07	0.19	0.29

(1996 or as shown) Sources: IRF (1998); ABS Catalogue nos. 1301.0, 3201.0, 9208.0 and 9309.0.