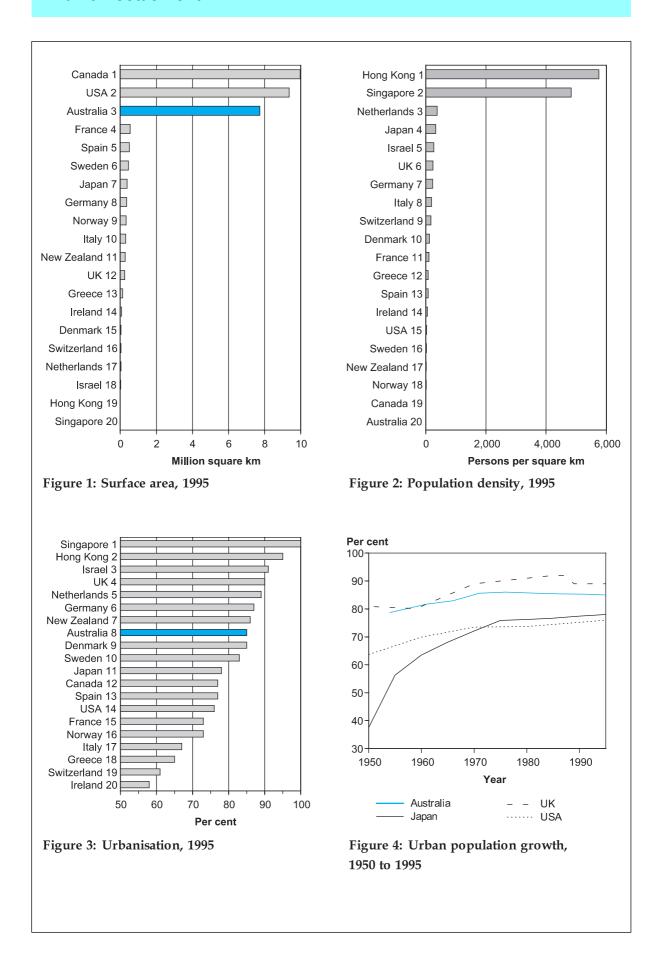
# 2 Population

- Human settlement
- Population growth
- Dependency ratios
- Population projections

#### Human settlement



#### Human settlement

Surface area, population density and urbanisation, 1995	Surface area, p	population den	isity and urbar	nisation, 1995
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-	Surface area	Population estimate	Population density	Urban population <sup>(a)</sup>
Country	(km <sup>2</sup> )	('000 persons)	(persons/km <sup>2</sup> )	(per cent)
Australia	7,741,220	18,063	2	85
Canada	9,970,610	29,606	3	77
Denmark	43,094	5,228	121	85
France	551,500	58,143	105	73
Germany	356,733	81,642	229	87
Greece	131,957	10,458	79	65
Hong Kong	1,075	6,190	5,758	95
Ireland	70,284	3,582	51	58
Israel	21,056	5,545	263	91
Italy	301,268	57,187	190	67
Japan	377,801	125,197	331	78
Netherlands	40,844	15,451	378	89
New Zealand	270,534	3,542	13	86
Norway	323,877	4,360	13	73
Singapore	618	2,987	4,833	100
Spain	505,992	39,210	77	77
Sweden	449,964	8,831	20	83
Switzerland	41,284	7,040	171	61
UK	244,100	58,258	239	90
USA	9,363,520	263,034	28	76

(a) The definition of 'urbanisation' may vary from country to country.

Source: United Nations 1997.

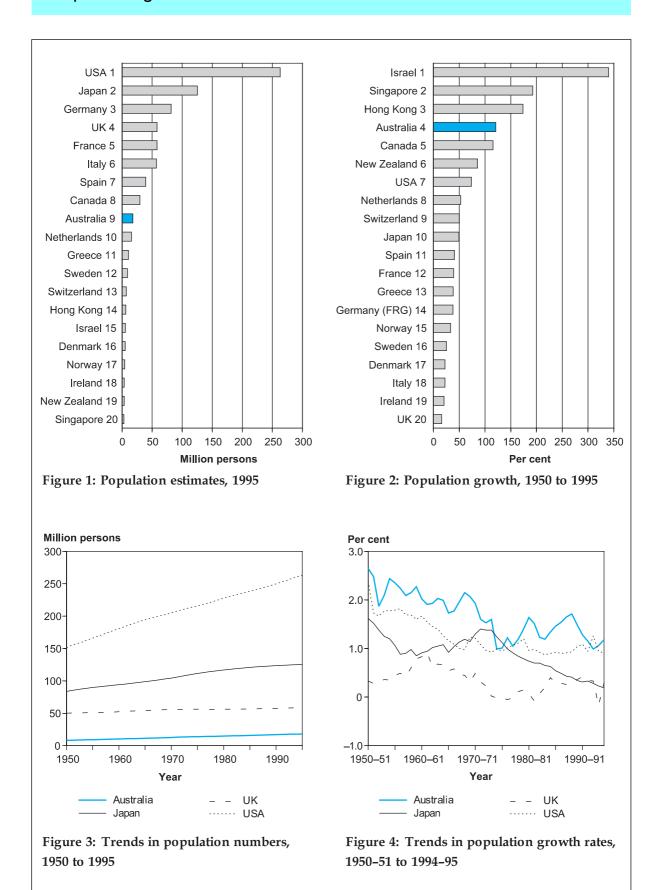
- Australia is one of the world's largest countries, with an area of some 7.7 million square kilometres. It is more than 14 times larger than France, 20 times larger than Japan and 32 times larger than the United Kingdom. Victoria, one of Australia's smaller states, is approximately three times the size of the Netherlands. Among developed countries, Australia's surface area is exceeded only by Canada and the United States (Figure 1).
- In terms of overall population numbers, Australia is much smaller than many developed countries. In 1995, Australia's estimated resident mid-year population was 18,063,256 persons—ranking ninth behind Canada. It has the lowest net population density among all developed countries—2 persons per square kilometre—followed closely by Canada. In comparison, Singapore and Hong Kong have small surface areas and high population densities (Figure 2).
- Australia is, however, highly urbanised with most of Australia's population living in the south-east seaboard region and in particular the major capital cities. The inhospitable interior has led to only sparse settlement away from the coastal regions. It is estimated that in 1995, 85 per cent of Australians lived in settlements with a population of 10,000 persons or more (Figure 3).

- Urban density in Australian capital cities is low if compared to other international cities. Only certain parts of Sydney, Australia's largest city, approach the densities found in some of the cities overseas (State of the Environment Advisory Council 1996).
- The proportion of Australians living in urban settlements has been steady for the past two decades, and is similar in proportion to the United Kingdom (Figure 4). Japan experienced rapid urbanisation between 1950 and 1970. Since then, Japan's growth in urbanisation has paralleled the United States. However, both Japan and the United States are less urbanised than Australia.

#### For more information, see:

United Nations 1997. 1995 demographic yearbook. New York: United Nations.

## Population growth



## Population growth

<b>Estimates of</b>	mid-year	population	('000 persons)

Country	1950	1960	1970	1980	1993	1994	1995	% change 1950 to 1995
Country			1970			1994		
Australia	8,179	10,275	12,507	14,695	17,662	17,847	18,063	120.8
Canada	13,740	17,909	21,324	24,043	28,941	29,248	29,606	115.5
Denmark	4,270	4,581	4,929	5,123	5,189	5,205	5,228	22.4
France	41,740	45,684	50,772	53,880	57,667	57,747	58,143	39.3
Germany (FRG) <sup>(a)</sup>	47,850	53,220	60,710	61,561	81,187	81,410	81,642	37.9
Greece	7,570	8,327	8,793	9,643	10,380	10,426	10,458	38.2
Hong Kong	2,260	3,060	3,960	5,063	5,919	6,061	6,190	173.9
Ireland	2,970	2,834	2,940	3,401	3,563	3,571	3,582	20.6
Israel	1,260	2,110	2,970	3,878	5,261	5,399	5,545	340.1
Italy	46,770	49,640	53,661	56,434	57,057	57,193	57,187	22.3
Japan	83,805	93,220	103,400	116,807	124,670	124,961	125,197	49.4
Netherlands	10,110	11,480	13,030	14,144	15,290	15,382	15,451	52.8
New Zealand	1,910	2,370	2,810	3,113	3,451	3,493	3,542	85.4
Norway	3,270	3,585	3,879	4,086	4,312	4,325	4,360	33.3
Singapore	1,020	1,630	2,070	2,414	2,874	2,930	2,987	192.8
Spain	27,870	30,649	33,876	37,542	39,083	39,143	39,210	40.7
Sweden	7,050	7,480	8,043	8,310	8,719	8,780	8,831	25.3
Switzerland	4,690	5,360	6,190	6,319	6,938	6,994	7,040	50.1
UK	50,330	52,373	55,420	56,330	58,191	58,091	58,258	15.8
USA	151,326	179,323	203,302	227,757	258,233	260,651	263,034	73.8

(a) The estimated population of the former Federal Republic of Germany in 1992 was 64.86 million persons.

Sources: United Nations 1971, 1980, 1990, 1997.

- The size of a nation's population, along with the rate of population growth and the age-sex composition of the population has a bearing on perceived quality of life, sustainable growth and the allocation and use of health care resources.
- In the post-war years, Australia exhibited one of the largest proportional increases in population numbers among developed countries-over 120% between 1950 and 1995-an average growth rate of 2.7% per year. Only Israel, Singapore and Hong Kong have shown larger increases. Canada, starting with a similar population base, has had a growth rate parallel to that for Australia. In contrast, only two European countries, the Netherlands and Switzerland, had population growth exceeding 50% between 1950 and 1995. Four countries-Denmark, Italy, Ireland and the United Kingdom-had less than 25% growth in population numbers during the same time period (Figure 2).
- Immigration has been a major contributor to population growth in Australia, and currently contributes between one-third and one-half of annual population growth. Immigration has also been responsible for a large proportion of population growth in a number of other developed countries, such as Canada.

- Population growth in Australia was high in the decade between 1950 and 1960, at 2.6% per annum. Israel, Singapore, Hong Kong and Canada also had high growth rates during this period. Growth in Australia's population continued through the ensuing decades 2.2% per annum during 1960–70 (fourth behind Israel, Hong Kong and Singapore), 1.8% in 1970–80 (third behind Israel and Hong Kong) and 1.5% in 1980–95 (behind Israel).
- Annual population growth rates in Australia had a downward trend until the mid-1970s, then a levelling off to approximately 1.5% per annum. The trend was similar to that seen in the United States, except that there it began to level off in the late 1960s. The United Kingdom recorded a negative growth for several years between the mid-1970s and early 1980s. The annual growth rate for Japan's population peaked in the early 1970s and has been in decline since then (Figure 4).

#### For more information, see:

United Nations 1997. 1995 demographic yearbook. New York: United Nations.

# Dependency ratios

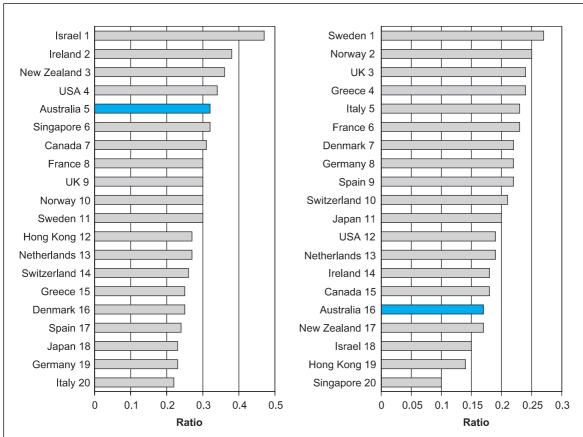


Figure 1: Child dependency ratios, 1995

Figure 2: Aged dependency ratios, 1995

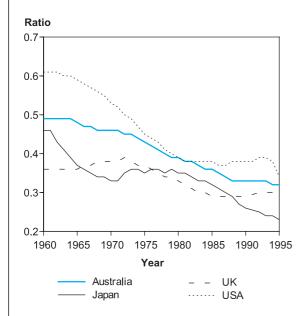


Figure 3: Trends in child dependency ratios, 1960 to 1995

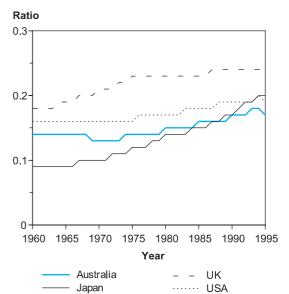


Figure 4: Trends in aged dependency ratios, 1960 to 1995

## Dependency ratios

Age	distributions	and de	pendency	ratios, 1995

Country	Population	% aged	% aged	% aged	Dependency
Country	('000)	less than 15 years	15 to 64 years	65 years and over	ratio
Australia	18,063	21.5	66.8	11.6	0.50
Canada	29,606	20.8	67.3	11.8	0.48
Denmark	5,228	17.2	67.6	15.2	0.48
France	58,143	19.6	65.5	14.9	0.53
Germany	81,642	16.1	68.7	15.2	0.46
Greece	10,458	16.7	67.4	15.9	0.48
Hong Kong	6,190	19.1	70.7	10.2	0.41
Ireland	3,582	24.5	64.3	11.3	0.56
Israel	5,545	29.1	61.4	9.5	0.63
Italy	57,187	15.1	68.9	16.0	0.45
Japan	125,197	16.2	69.6	14.1	0.44
Netherlands	15,451	18.4	68.4	13.2	0.46
New Zealand	3,542	23.4	65.3	11.3	0.53
Norway	4,360	19.5	64.7	15.9	0.55
Singapore	2,987	22.7	70.5	6.7	0.42
Spain	39,210	16.5	68.6	14.9	0.46
Sweden	8,831	19.0	63.7	17.3	0.57
Switzerland	7,040	17.7	68.1	14.2	0.47
UK	58,258	19.6	65.0	15.5	0.54
USA	263,034	22.0	65.3	12.6	0.53

Sources: United Nations 1997; WHO 1996d.

- The number of non-working-age persons in a community dependent on working-age persons can be expressed as a 'dependency ratio'—the number of persons aged less than 15 years and 65 years and over divided by the number of persons aged 15 to 64 years. It gives some indication of the burden falling on working-age persons in order to provide for non-working-age persons.
- In 1995, Australia ranked ninth for the overall dependency ratio among developed countries, with a value of 0.50. Israel has the highest ratio (0.63) due mainly to a large proportion of children aged less than 15 years, and Hong Kong the lowest (0.41) due mainly to a small proportion of aged persons. Australia's dependency ratio has fallen steadily since 1960, although it appears to have stabilised since the early 1990s, on account of the ageing of the population.
- The ratio can be further separated into two components, namely the child dependency ratio (children aged 0–14 divided by persons aged 15–64), and the aged dependency ratio (persons aged 65 and over divided by persons aged 15–64).
- Compared to other developed countries, Australia has a relatively large number of young persons, and hence a high child dependency ratio. In 1995, Australia ranked fifth for this aspect of the ratio (with a value of 0.32), behind Israel, Ireland, New Zealand and

- the United States (Figure 1). Even though the Australian child dependency ratio is high among developed countries, the proportion of the Australian population aged 0-14 has been declining steadily since 1960. Child dependency ratios have also been declining steadily in Japan and the United States, although the decline in the United States has stabilised since the early 1980s (Figure 3).
- In contrast, Australia's aged dependency ratio is low, at 0.17 in 1995. Sweden, Norway, the United Kingdom and Greece have higher ratios. Singapore, in comparison, has a very low ratio, with only 6.7% of its population aged 65 years and over (Figure 2). The aged dependency ratio has increased slowly in Australia since 1960, although this is expected to accelerate in the coming decades with an increased proportion of aged persons. The United States and the United Kingdom have also demonstrated slow increases in the ratio, whereas the increase in Japan has been more rapid (Figure 4).

#### For more information, see:

United Nations 1997. 1995 demographic yearbook. New York: United Nations.

## Population projections

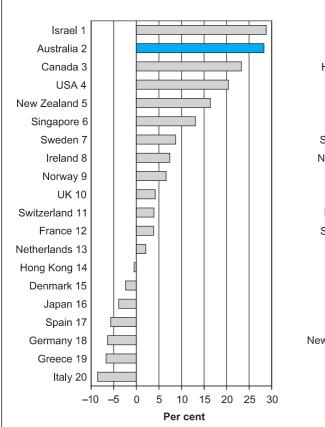


Figure 1: Projected changes in population numbers, 2000 to 2025

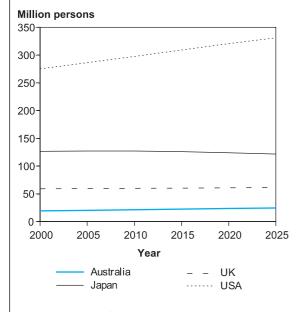


Figure 3: Population projections, 2000 to 2025

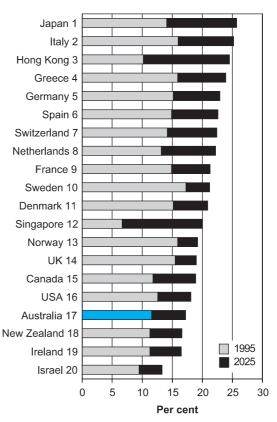


Figure 2: Proportion of population aged 65 years and over, 1995 and projections for 2025

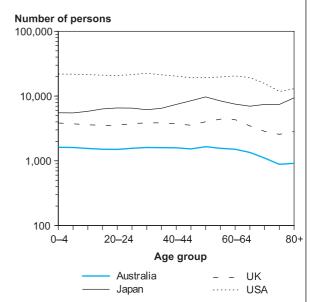


Figure 4: Projected age-specific population distributions, 2025

## Population projections

Projected	population,	2000 to 2025	( <b>'000</b> <sub>1</sub>	persons)	)
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Country	2000	2005	2010	2015	2020	2025	% change 2000 to 2025
Australia	19,222	20,296	21,367	22,466	23,586	24,667	28.3
Canada	31,029	32,504	33,946	35,425	36,887	38,266	23.3
Denmark	5,207	5,202	5,173	5,140	5,113	5,081	-2.4
France	59,024	59,684	60,130	60,535	60,920	61,247	3.8
Germany	81,700	81,285	80,466	79,331	77,936	76,442	-6.4
Greece	10,573	10,577	10,458	10,284	10,080	9,868	-6.7
Hong Kong	5,968	6,016	6,039	6,039	6,007	5,936	-0.5
Ireland	3,616	3,694	3,777	3,842	3,876	3,882	7.4
Israel	6,062	6,481	6,833	7,159	7,488	7,808	28.8
Italy	57,254	56,819	55,985	54,905	53,649	52,324	-8.6
Japan	126,472	127,265	127,152	125,946	123,973	121,594	-3.9
Netherlands	15,934	16,167	16,239	16,267	16,286	16,276	2.1
New Zealand	3,759	3,912	4,034	4,153	4,269	4,376	16.4
Norway	4,427	4,500	4,556	4,611	4,670	4,719	6.6
Singapore	2,967	3,061	3,144	3,221	3,295	3,355	13.1
Spain	39,848	39,806	39,514	39,002	38,348	37,571	-5.7
Sweden	8,972	9,124	9,266	9,420	9,592	9,751	8.7
Switzerland	7,494	7,666	7,717	7,747	7,774	7,786	3.9
UK	59,022	59,513	59,919	60,398	60,935	61,476	4.2
USA	275,119	286,256	297,486	309,128	320,551	331,152	20.4

Source: United Nations 1994.

- Population projections are estimates of future populations based on assumptions about demographic trends, and in particular three main components—fertility, mortality and overseas migration. Projections of Australia's population are calculated by both the ABS and United Nations.
- Australia's population has increased from around 4 million at the turn of the century to over 18 million now. The United Nations projects an Australian population of almost 25 million by the year 2025, somewhat higher than the 23 million projected by ABS (ABS 1998a).
- No developed country is expected to show an increase in population numbers above 30% between 2000 and 2025. Australia is projected to show an increase of 28% during the first quarter of the twenty-first century, compared with 70% growth between 1950 and 1975, and a projected 38% growth between 1975 and 2000. Israel, Canada and the United States are also likely to add more than 20% to their numbers during the same period (Figure 1).
- No developed European country is projected to show an increase greater than 10% between 2000 and 2025. Several countries, including Italy, Greece, Germany and Spain are likely to experience net decreases in numbers (Figure 1).
- A major issue for many developed countries is the projected increase in the proportion of aged persons over the next several decades. This has

- significant implications for health care resources and social expenditure, and implies a growing dependency of the aged population on a smaller proportion of working-age persons. In 1995, 11.6% of the Australian population was aged 65 years and over. This proportion is projected to rise to 17.2% in 2025. However, some of the increase in the dependency ratio contributed by an ageing population may be offset by declines in the child dependency ratio.
- In comparison with other developed countries, Australia is projected to have a low proportion of elderly persons by 2025, with only Israel, Ireland and New Zealand likely to have lower proportions. Japan, Italy, Hong Kong and Greece are projected to have proportions of older persons in excess of 23%. Several Asian countries including Japan, Hong Kong and Singapore are projected to have increases of 10% or more in the proportion of their populations aged 65 years and over between 1995 and 2025 (Figure 2).

#### For more information, see:

United Nations 1994. The sex and age distribution of the world populations: the 1994 revision. New York: United Nations. Australian Bureau of Statistics 1998. Population projections, 1997 to 2051. ABS Cat. No. 3222.0. Canberra: ABS.