#### Introduction

This chapter contains information about population density, components of population increase, population projections and age distribution. Also included are vital statistics on births, deaths, life expectancy, marriages and divorces, as well as data on the Indigenous population.

Statistics in this chapter are derived from data compiled or collected by the ABS, including Estimated Resident Population (ERP), which is compiled according to place of usual residence of the population. Data on overseas arrivals and departures are compiled from information supplied by the Department of Immigration and Multicultural Affairs. Interstate migration data are estimated on the basis of changes to Medicare registration information. Births, deaths, and marriages statistics are compiled by the ABS from data supplied by the Victorian Registrar of Births, Deaths and Marriages, and divorce statistics are compiled from statistical reports completed by the Family Court of Australia.

Population statistics underpin discussions pertaining to a wide range of issues including immigration, cultural and linguistic diversity, ageing, and population sustainability. The changing size and distribution of Victoria's population has implications for service provision and delivery in areas such as health, education, housing and the labour market.

The ABS publishes two types of data on resident population in Australia: counts from the five-yearly Census of Population and Housing and annual intercensal estimates of population. ERP is an official estimate of resident population for a given area. It adjusts the census count (by place of usual residence) for census undercount, interstate and overseas migration, births and deaths.

#### **Population**

At June 2000, the population of Victoria was over 4.7 million (table 4.1). The Victorian population accounted for 24.9% of the Australian total, which was over 19 million. The rate of population increase in Victoria between June 1999 and June 2000 was 1.2%, which was similar to that for Australia. Victoria is the most densely populated State, averaging 21.0 persons per square kilometre, compared with the Australian average of 2.5 persons per square kilometre.

An estimated 3,413,894 persons lived in the Melbourne Statistical Division at June 1999, representing 72.5% of the Victorian population.

4.1 AREA. ESTIMATED RESIDENT POPULATION AND POPULATI	TION DENSIT	POPULAT	ATION A	RESIDENT POPUL	1 ARFA	4
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	Unit	Victoria	Australia
Area	km²	227 416	7 692 024
Estimated resident population at 30 June			
1995	'000	4 517.4	18 071.8
1999	'000	4 707.6	18 937.2
2000	'000	4 765.9	19 157.0
Increase in population from 1999 to 2000	%	1.2	1.1
Persons per square kilometre, 30 June 2000	no.	21.0	2.5
Victorian population as a proportion of Australian population, 30 June 2000	0/	24.0	
Australian population, 30 June 2000	%%	24.9	n.a.

Source: AUSLIG, 100K Coastline Database; Australian Demographic Statistics (Cat. no. 3101.0).

### Population increase

Population increases are comprised of two main components; natural increase (number by which live births exceed deaths in State of usual residence), and net migration (from interstate and overseas). In recent years, the rate of natural increase in Victoria has been falling steadily and fell by a further 1% for the year ending June 2000 (table 4.2). Annual net migration loss from Victoria was 2,725 people for the year ended June 1995. Since this time, the decline has reversed to a net annual migration gain, reaching 31,465 for the year ended June 2000. This reversal first occurred in 1998, and is the first positive net interstate migration since 1971.

#### 4.2 COMPONENTS OF POPULATION INCREASE

		Net migration			
	Natural increase	Overseas(a)	Interstate	Total	Total population increase
1994–95	31 346	19 295	-22 020	-2 725	29 817
1995-96	28 497	25 692	-12 800	12 892	42 768
1996-97	28 662	21 080	-4 687	16 393	45 055
1997-98	27 720	20 801	1 206	22 007	49 727
1998-99	27 076	21 602	3 975	25 577	52 653
1999-2000	26 801	24 752	6 713	31 465	58 266

(a) Comprises permanent and long-term migration, plus an adjustment for the net effect of category jumping.

Source: Australian Demographic Statistics (Cat. no. 3101.0).

Interstate departures from Victoria exceeded arrivals in every year between 1972 and 1997. However, the level of interstate departures from Victoria must be seen in the context of overseas migration patterns, because of Melbourne's importance as a point of entry. Outward movement from Victoria is most often to New South Wales and Queensland.

In the year to 30 June 1999, Victoria had an overall net interstate migration gain of 3,975 persons, with about 36% of arrivals from New South Wales and 27% from Queensland (table 4.3). The net interstate migration loss from Victoria was primarily to Queensland.

4.3	INTE	RSTA	TF M	IGRA <sup>T</sup>	<b>LIUN</b>

			12 ו	months ended
		June 1998		June 1999
	Arrivals to Victoria	Departures from Victoria	Arrivals to Victoria	Departures from Victoria
New South Wales	24 487	22 932	24 322	22 384
Queensland	18 279	21 025	18 098	19 232
South Australia	9 212	7 615	8 925	7 462
Western Australia	7 136	7 880	7 488	7 258
Tasmania	4 231	2 913	4 410	3 085
Northern Territory	2 381	2 715	2 353	2 379
Australian Capital Territory	2 716	2 156	2 488	2 309
Total	68 442	67 236	68 084	64 109

Source: Migration, Australia (Cat. no. 3412.0).

#### **Arrivals from** overseas

In 1999–2000, 19,110 of permanent arrivals to Australia intended to settle in Victoria (table 4.4). This comprises persons who state an intention to settle permanently, as well as returning Australian residents who have lived overseas for more than 12 months. These arrivals represented an increase of 10.5% on the 1998-99 figure of 17,290. Overall, 20.9% of permanent settler arrivals to Australia in 1999-2000 intended to live in Victoria.

4.4 PERMANENT SETTLER ARRIVALS, State of Intended Residence Victoria(a)

			Victoria	Australia
	1997–98	1998–99	1999–2000	1999–2000
Country of origin	no.	no.	no.	no.
New Zealand	2 840	3 800	5 700	31 750
China	900	1 340	1 280	4 980
United Kingdom	1 220	1 040	1 060	7 560
India	730	520	990	3 220
South Africa	480	430	650	5 620
Indonesia	340	500	640	2 900
Malaysia	260	450	630	2 010
Viet Nam	790	820	540	1 330
Phillippines	520	510	530	2 870
Former Yugoslav Republic of Serbia				
and Montenegro	630	480	430	1 500
Singapore	220	410	430	1 730
Germany	290	550	390	1 340
Hong Kong	640	420	320	1 910
Other(b)	6 370	6 020	5 520	22 680
Total permanent arrivals	16 230	17 290	19 110	91 400

<sup>(</sup>a) Graduated random rounding has been used on all cells in this table. (b) Comprises less significant contributions from a large

Source: Unpublished data, Overseas Arrivals and Departures.

#### **Departures from Victoria**

The number of permanent departures from Victoria to other countries has increased over the past three years (table 4.5). In 1999–2000, 7,840 persons previously resident in Victoria left Australia on a permanent basis. This represents a 14% increase on the 1998–99 figure of 6,880. In 1999–2000, Victorian residents comprised 19.1% of Australians departing permanently.

#### 4.5 PERMANENT DEPARTURES, Previous State of Residence Victoria(a)

			Victoria	Australia
	1997–98	1998-99	1999–2000	1999–2000
Country of destination	no.	no.	no.	no.
New Zealand	1 430	1 260	1 480	8 960
United Kingdom	1 130	1 230	1 320	7 470
United States of America	610	980	1 140	5 080
Hong Kong	420	520	570	3 180
Singapore	160	290	330	1 560
China	200	200	270	1 680
Canada	140	180	190	950
Other(b)	2 180	2 220	2 540	12 200
Total permanent departures	6 270	6 880	7 840	41 080

<sup>(</sup>a) Graduated random rounding has been used on all cells in this table. (b) Comprises less significant contributions from a large number of countries.

Source: Unpublished data, Overseas Arrivals and Departures.

# Population projections

There are a variety of assumptions used when calculating population projections, allowing for different levels of births, deaths and migration. The ABS produces three main series of projections, based on differing levels of these variables.

The projections which follow are based on a model that assumes a fertility rate only slightly lower than the current rate, a lower overseas migration gain and medium interstate migration losses. Using these assumptions, the Victorian population is expected to reach 5.0 million by 2011, and grow to 5.2 million by 2021, at which time the population of the Melbourne Statistical Division is expected to reach 3.9 million. By comparison, Australia's population is expected to be 21.3 million in 2011, and reach 23.1 million in 2021.

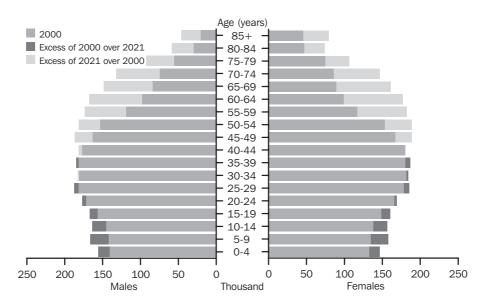
#### **Age distribution**

In 2000, 19.9% of Victorians were aged under 15 years, and 12.8% were 65 years or over (graph 4.6 and table 4.7).

Using the model assumed for population projections, in 2021 these proportions are expected to be 15.4% and 19.3% respectively. In numerical terms, the growth in the population aged 65 years and over is expected to be substantial. In 2000, there were 608,805 persons in this age group, but by 2021 they are expected to number around 1,044,700.

By 2051, the ageing of the population is expected to be more pronounced based on the model. The proportion of the population aged under 15 years is expected to be 13.5% compared to 27.8% for those aged 65 years and over.

#### 4.6 ESTIMATED RESIDENT POPULATION, 2000 AND PROJECTED POPULATION 2021



Source: Australian Demographic Statistics (Cat. no. 3101.0); Population Projections (Cat. no. 3222.0)-

4.7 ESTIMATED RESIDENT POPULATION, By Age — 30 June 2000p

			Females	es Persons		
Age group (years)	no.	%	no.	%	no.	%
0–4	156 027	6.6	146 704	6.1	302 731	6.4
5–9	166 259	7.0	157 688	6.6	323 947	6.8
10–14	163 942	6.9	156 604	6.5	320 546	6.7
15–19	166 534	7.1	160 266	6.7	326 800	6.9
20–24	176 790	7.5	169 084	7.0	345 874	7.3
25–29	187 923	8.0	185 659	7.7	373 582	7.8
30–34	180 907	7.7	183 803	7.6	364 710	7.7
35–39	184 884	7.8	186 868	7.8	371 752	7.8
40–44	177 393	7.5	179 784	7.5	357 177	7.5
45–49	163 166	6.9	167 095	6.9	330 261	6.9
50–54	153 237	6.5	153 231	6.4	306 468	6.4
55–59	118 919	5.0	117 426	4.9	236 345	5.0
60–64	97 629	4.1	99 229	4.1	196 858	4.1
65–69	84 084	3.6	89 378	3.7	173 462	3.6
70–74	75 182	3.2	85 998	3.6	161 180	3.4
75–79	55 605	2.4	74 713	3.1	130 318	2.7
80–84	29 650	1.3	47 669	2.0	77 319	1.6
85 and over	20 753	0.9	45 773	1.9	66 526	1.4
Total	2 358 884	100.0	2 406 972	100.0	4 765 856	100.0

Source: Australian Demographic Statistics (Cat. no. 3101.0).

### Vital statistics

In 1999, there was a lower birth rate in Victoria than in Australia (table 4.8). The marriage and divorce rates in Australia were higher than those in Victoria.

4.8 SUMMARY OF VITAL STATISTICS — 1999

	Victoria	Australia
Live births		
Males	30 101	127 357
Females	28 774	121 513
Persons		
Number	58 875	248 870
Rate(a)	12.5	13.1
Deaths		
Males	16 433	67 227
Females	15 485	60 875
Persons		
Number	31 918	128 102
Rate(a)	6.8	6.8
Infant deaths	328	1 402
Perinatal deaths(b)		
Number	543	2 133
Rate(c)	9.2	8.5
Marriages		
Number	27 252	114 316
Rate(a)	5.8	6.0
Divorces		
Number	12 742	52 566
Rate(a)	2.7	2.8

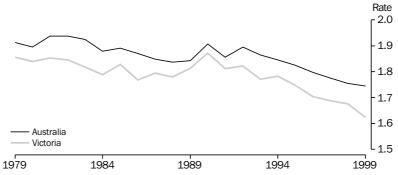
<sup>(</sup>a) Number per 1,000 of the 30 June 1999 estimated resident population. (b) Perinatal deaths comprise neonatal and fetal deaths. (c) The number of perinatal deaths per 1,000 live and still births.

Source: Demography, Victoria (Cat. no. 3311.2); Births, Australia (Cat. no. 3301.0); Deaths, Australia (Cat. no. 3302.0).

#### **Births**

There were 58,875 live births registered to women resident in Victoria during 1999, a 2.7% decrease on 1998 registrations (graph 4.9 and table 4.10). Due to changes in administrative processes at the Registry of Births, Deaths and Marriages, the number of registered births in 1999 for Victoria is understated to some extent. The Victorian figure represented 24% of total Australian births.

#### 4.9 TOTAL FERTILITY RATE(a)



(a) The number of live births per 1,000 of the female resident population at 30 June.

Source: Births, Australia (Cat. no. 3301.0).

The proportion of ex-nuptial births has increased slightly each year since 1994, with 23.4% of births classified as ex-nuptial in 1999, compared to 20.5% recorded in 1994 (table 4.10). The median age of mothers giving birth (all confinements) was 30.4 years, this is an increase of almost a year on the median age in 1994. The median marriage duration of 2.7 years before first confinement has remained the same since 1994.

#### 4.10 SUMMARY OF BIRTHS AND CONFINEMENTS

	Unit	1994	1995	1996	1997	1998	1999
Live births							
Males	no.	32 904	32 108	31 587	31 248	31 303	30 101
Females	no.	31 070	30 483	29 556	29 484	29 189	28 774
Persons	no.	63 974	62 591	61 143	60 732	60 492	58 875
Sex ratio(a)	ratio	105.9	105.3	106.9	106.0	107.2	104.6
Birth rate(b)	rate	14.3	13.9	13.5	13.2	13.0	12.5
Nuptial births	no.	50 860	48 962	47 933	47 191	46 391	45 106
Ex-nuptial births	no.	13 114	13 629	13 210	13 541	14 101	13 769
Ex-nuptial births as proportion of total live births	%	20.5	21.8	21.6	22.3	23.3	23.4
Confinements	no.	63 085	61 685	60 294	59 804	59 531	57 891
Median age of mother for all confinements	years	29.5	29.7	29.9	30.0	30.2	30.4
Median duration of marriage for nuptial first confinements	years	2.7	2.7	2.7	2.7	2.7	2.7

<sup>(</sup>a) Number of male live births per 100 female live births. (b) Number of live births registered during calendar year per 1,000 of the 30 June 1998 mean estimated resident population.

Source: Demography, Victoria (Cat. no. 3311.2).

#### **Deaths**

There were 31,918 deaths of Victorian residents registered in 1999, of which 16,433 were male and 15,485 were female. This represented a slight decrease in the total number of deaths in 1998 (table 4.11 and graph 4.12). The 1999 crude death rate was 6.8 deaths per 1,000 of the estimated resident population, the lowest rate over the last six years. The median age at death was 75.2 years for males and 81.8 years for females. The infant mortality rate was 5.6 deaths per 1,000 live births, an increase on the rate of 4.7 recorded in 1998 and the highest rate recorded since 1992.

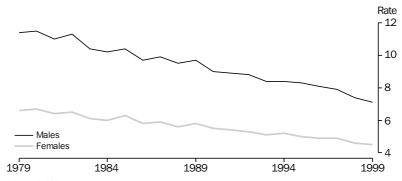
4.11 SUMMARY OF DEATHS

	4.11	SUMMARY O	F DEATHS				
		1994	1995	1996	1997	1998	1999
Deaths							
Males		16 765	16 960	17 009	17 122	16 407	16 433
Females		15 588	15 465	15 717	16 139	15 600	15 485
Persons		32 353	32 425	32 726	33 261	32 007	31 918
Sex ratio(a)		107.6	109.7	108.2	106.1	105.2	106.1
Standardised death rate(b)							
Males		8.4	8.3	8.1	7.9	7.4	7.1
Females		5.2	5.0	4.9	4.9	4.6	4.5
Persons		6.6	6.4	6.3	6.2	5.8	5.7
Crude death rate(c)							
Males		7.6	7.6	7.6	7.5	7.1	7.1
Females		6.9	6.8	6.9	7.0	6.6	6.5
Persons		7.2	7.2	7.2	7.3	6.9	6.8
Infant deaths							
Males		189	161	179	158	152	186
Females		138	147	129	142	131	142
Persons		327	308	308	300	283	328
Infant mortality rate(d)		5.1	4.9	5.0	4.9	4.7	5.6
Perinatal deaths(e)							
Males		361	331	312	287	244	299
Females		240	251	230	235	226	244
Persons		601	582	542	522	470	543
Perinatal death rate(f)		9.3	9.2	8.8	8.6	7.7	9.2
Median age at death (years)							
Males		74.0	73.9	74.7	74.7	75.0	75.2
Females		80.6	80.9	81.3	81.4	81.7	81.8

(a) Number of male deaths per 100 female deaths. (b) The overall death rate that would have prevailed in the standard population if it had experienced at each age the death rates of the population under study. The current standard population is all persons in the 1991 Australian population. (c) Number of deaths registered per 1,000 for the 30 June 1999 estimated resident population. (d) Deaths of children under one year of age per 1,000 live births. (e) Prior to 1997, perinatal deaths data have been based upon the World Health Organisation definition. This definition included all fetuses and infants delivered weighing at least 500 grams or of gestational age 22 weeks. From 1997, the ABS has increased the coverage of perinatal deaths by including fetal and neonatal deaths with a birthweight of at least 400 grams or having a gestational age of 20 weeks. Perinatal deaths data prior to 1998 have been revised according to this new definition. (f) Still births (fetal) and neonatal deaths (within 28 days of birth) per 1,000 live births plus still births combined.

Source: Demography, Victoria (Cat. no. 3311.2).

4.12 STANDARDISED DEATH RATES(a)



(a) Per 1,000 of the standard population.

Source: Deaths, Australia (Cat. no. 3302.0).

#### Life expectancy

Life expectancy refers to the average number of years in addition to their current age, a person of given age and sex might expect to live, if the age-specific death rates of the given year were to continue throughout his or her lifetime. A child born during 1997-99 to a mother resident in Victoria has a life expectancy of 82.0 years if female and 76.7 years if male (table 4.13). A woman aged 40 in 1997-99 has a life expectancy of a further 43.1 years, and a man of the same age, 38.7 years.

4.13	LIFE	<b>EXPECTANCY</b>	- 1997-99(a)

	Males	Females
Age (years)	years	years
0	76.7	82.0
5	72.2	77.4
10	67.3	72.5
15	62.3	67.5
20	57.5	62.6
25	52.8	57.7
30	48.2	52.9
35	43.4	48.0
40	38.7	43.1
45	34.0	38.4
50	29.4	33.7
55	24.9	29.0
60	20.7	24.6
65	16.8	20.3
70	13.2	16.2
75	10.2	12.5
80	7.6	9.2
85	5.6	6.6
90	4.2	4.6
95	3.5	3.5

<sup>(</sup>a) Life tables are based on three years worth of data in order to reduce the impact of year-to-year

Source: Demography, Victoria (Cat. no. 3311.2).

#### **Marriages**

In 1999, there were 27,252 marriages registered in Victoria, a 3% increase on 1998 (table 4.14). This continues the recent turnaround in the number of marriages registered per year which peaked in 1988 and then declined each year until 1997. This increase in numbers is also reflected in the crude marriage rate which has increased from 5.7 marriages per 1,000 population in 1998 to 5.8 in 1999. Of total marriages, 69% were first marriages for both partners, 18% the first for one partner, and 13% a second marriage for both partners.

4.14 SUMMARY OF MARRIAGES

	Unit	1994	1995	1996	1997	1998	1999
First marriage both partners	no.	19 078	18 752	18 026	17 666	18 221	18 847
First marriage one partner	no.	4 443	4 458	4 546	4 485	4 573	4 878
Remarriage both partners	no.	3 453	3 397	3 502	3 305	3 578	3 527
Total marriages	no.	26 974	26 607	26 074	25 456	26 372	27 252
Crude marriage(a)	rate	6.0	5.9	5.7	5.5	5.7	5.8
Performed by ministers of religion							
Marriages	no.	16 153	n.a.	14 415	14 004	13 803	13 725
Proportion of all marriages	%	59.9	n.a.	55.3	55.0	52.3	50.4

<sup>(</sup>a) Number of marriages per 1,000 of the 30 June 1999 estimated resident population.

Source: Demography, Victoria (Cat. no. 3311.2).

#### **Divorces**

There were 12,742 divorces granted in Victoria during 1999, an increase of 3.5% on the number granted in 1998 (table 4.15). There were 2.7 divorces per 1,000 population, with a median interval of 8.1 years between marriage and separation. The median duration of marriages was 11.5 years. Divorces involving children decreased by 5.7% from 1997 to 1998, and represented 51% of total divorces granted in 1998.

#### 4.15 SUMMARY OF DIVORCES

	Unit	1994	1995(a)	1996	1997	1998	1999
Divorces granted	no.	11 320	11 838	12 491	12 463	12 307	12 742
Crude divorce rate(b)	rate	2.5	2.6	2.8	2.7	2.6	2.7
Median duration of marriage(c)	years	10.9	10.9	10.8	11.0	10.9	11.5
Median interval between marriage and separation	years	7.7	7.6	7.6	7.7	7.8	8.1
Divorces of persons involving children							
Divorces	no.	6 075	n.a.	6 482	6 661	6 280	6 871
Total divorces	%	53.7	n.a.	51.9	53.4	51.0	53.9
Average children	no.	1.8	n.a.	1.9	1.9	1.9	1.9

(a) A number of data items, including details of children aged under 18 years, were not processed in 1995. (b) Number of divorces per 1,000 of the 30 June 1999 estimated resident population. (c) The interval measured in completed years between the date of marriage and the date of divorce.

Source: Demography, Victoria (Cat. no. 3311.2).

# Indigenous population

Indigenous population data have been collected in every census since Federation, but prior to the 1967 repeal of section 127 of the Constitution, only those deemed to be of less than half Aboriginal origin were included in official population figures for States and Territories. Since then, the ABS has made considerable efforts to collect data on the Aboriginal and Torres Strait Islander population, through the Census of Population and Housing, and a range of surveys.

As at 30 June 1996, the estimated resident Aboriginal and Torres Strait Islander population in Victoria was 22,598 (table 4.16). Indigenous people comprised 0.5% of Victoria's total population, the lowest proportion of any State or Territory.

The age structure of the Indigenous population differs markedly from that of the total population. At 30 June 1996, 38.7% of Victoria's Indigenous population were aged under 15 years and 3.2% were aged over 65 years. This compared with 20.8% and 12.5% respectively for the total Victorian population. These figures reflect the relatively high fertility and, to a lesser extent, the high mortality of the Indigenous population.

The median age of the Indigenous population was 21.3 years which was much younger than that of the total population, which was 34.3 years.

4.16 E	ESTIMATED	RESIDENT	POPULATION(a)	— 30 June 1996
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	Indigeno	us population	Total population		
	no.	%	no.	%	
0–14 years	8 735	38.7	947 358	20.8	
15–24 years	4 129	18.3	662 381	14.5	
25-44 years	6 513	28.8	1 418 984	31.1	
45–64 years	2 502	11.1	961 966	21.1	
65 years and over	719	3.2	569 466	12.5	
Total	22 598	100.0	4 560 155	100.0	

<sup>(</sup>a) Experimental estimates.

Source: Census of Population and Housing: Aboriginal and Torres Strait Islander People, Victoria (Cat. no. 2034.2).

### **Bibliography**

#### **ABS** sources

Census of Population and Housing: Aboriginal and Torres Strait Islander People, Victoria (Cat. no. 2034.2).

Australian Demographic Statistics (Cat. no. 3101.0).

Population Projections (Cat. no. 3222.0).

Births, Australia (Cat. no. 3301.0).

Deaths, Australia (Cat. no. 3302.0).

Demography, Victoria (Cat. no. 3311.2).

Migration, Australia (Cat. no. 3412.0).

Overseas Arrivals and Departures Survey, unpublished data.

Non-ABS sources AUSLIG, 100K Coastline Database, 1993.

