

2.3 Community capacity

2.3.1 Demography

Summary of findings

In 2001, 66% of the population lived in Major Cities, and 21%, 10%, 2% and 1% lived in Inner Regional, Outer Regional, Remote and Very Remote areas, respectively.

Of the Major Cities population, 1% were Indigenous, and 2%, 5%, 13% and 44%, respectively, of the population in the other four areas were Indigenous.

Of the Indigenous population, 30% lived in Major Cities, whereas 20%, 23%, 9% and 17%, respectively, lived in Inner and Outer Regional, Remote and Very Remote areas.

Females slightly outnumbered males in Major Cities, and males outnumbered females in the other areas, substantially so in some age groups in remote areas.

There were substantial differences in the age structure of the populations in each area. Children were proportionally more numerous in regional and especially remote areas; people aged 25–44 years were less numerous in regional areas, but proportionally more numerous in remote areas; and people aged 65 years and over were slightly more numerous in regional areas, and substantially less numerous in remote areas.

Between 1996 and 2001, the population of Major Cities and Inner Regional areas grew by 7%, and the population of Outer Regional, Remote and Very Remote areas grew, respectively, by 3%, 2% and 4%.

Background

It is important for policy development to take into account the population profile in the rural/remote setting. Issues like population growth, ageing, changes in sex ratios and in the proportion who are Indigenous have implications for health status, policy and allocation of resources. This indicator (2.3.1 Demography) as well as 2.3.2 (Dependency), 2.3.3 (Internal migration) and 2.3.4 (Fertility) describe these issues.

The age and sex of the population as well as the proportion who are Indigenous are important issues, both in their own right and for the interpretation of many of the other indicators.

The counts and simple proportions presented here have been derived from ABS census estimates of the population in each area.

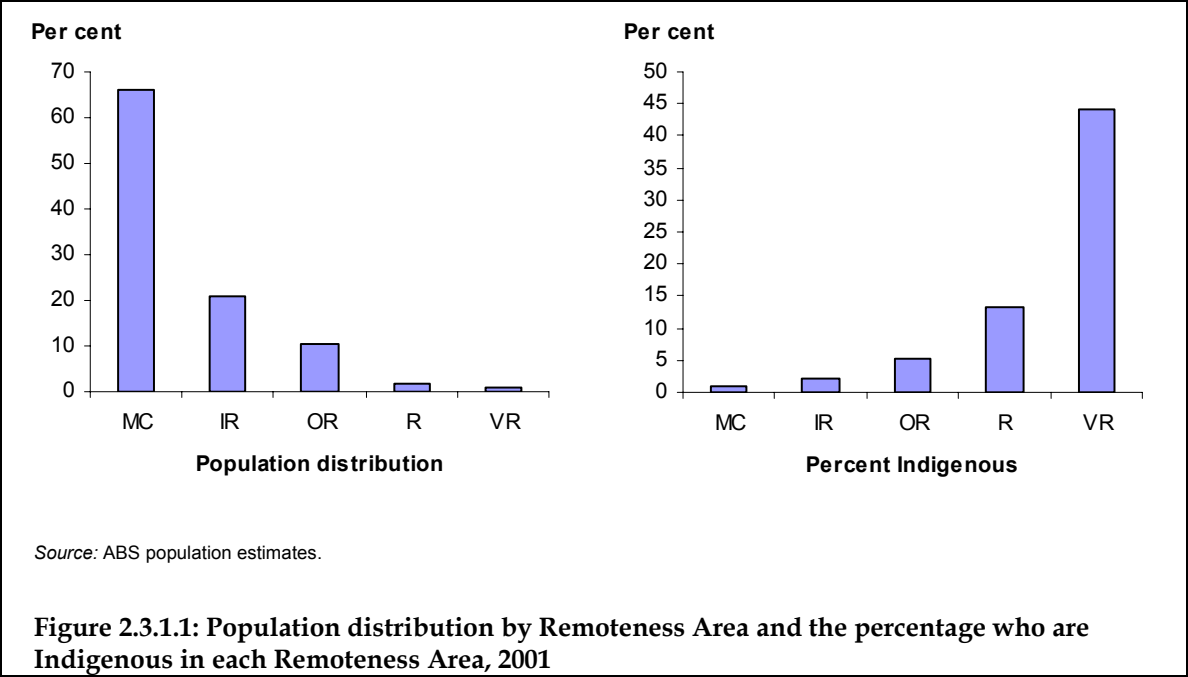
Detailed results

In 2001, 66% of the Australian population lived in Major Cities, making Australia one of the most urbanised populations in the world. A further 21% and 10% lived in Inner and Outer Regional areas, and 2% and 1% lived in Remote and Very Remote areas respectively (Table 2.3.1.2 and Figure 2.3.1.1).

In 2001, 2% of the Australian population were Indigenous. Indigenous people become proportionally more numerous as remoteness increases – although Indigenous people made up only 1% of the Major Cities population they constituted 2%, 5%, 13% and 44%,

respectively, of people living in Inner and Outer Regional, Remote and Very Remote areas (Table 2.3.1.2 and Figure 2.3.1.1).

This substantial representation in regional, and especially remote areas reflects the relatively smaller numbers of non-Indigenous people in these areas, and the more even distribution of the Indigenous population across the country (30%, 20%, 23%, 9% and 17% of the Indigenous population lived in Major Cities, Inner and Outer Regional, Remote and Very Remote areas) (Table 2.3.1.2 and Figure 2.3.1.1).



There are distinct differences in the ratio of males to females in each area. Males constituted about 49%, 50%, 51%, 53% and 53%, respectively, of the population in the five areas respectively in 2001. Between 55% and 60% of the population aged 40–64 in Very Remote areas were male (Figure 2.3.1.3).

There are also differences in the age distribution of the populations. Figure 2.3.1.2 and Table 2.3.1.1 describe differences in the age structure of populations in each of the areas in 2001:

- Regional area populations had proportionally more children aged 0–14 years (22% and 23%) than Major Cities (20%), fewer people aged 25–44 years (27% and 29% compared with 31% in Major Cities), and slightly more people 65 years and over.
- Remote area populations had proportionally more children (25% and 28%) than Major Cities and regional areas, more people aged 25–44 years (32% and 33%), and fewer people 65 years and over (9% and 5%).

Between 1996 and 2001, populations in Major Cities, Inner and Outer Regional, Remote and Very Remote areas increased by 7%, 7%, 3%, 2% and 4%, respectively (BTRE 2003). Garnaut et al. (2001) showed that in the previous 10 years, populations in capital cities grew by 14%, and those in other metropolitan areas, and coastal, inland and remote areas grew by 28%, 23%, 7% and 8%, respectively.

Table 2.3.1.1: Age structure for Indigenous and non-Indigenous populations, 2001

	MC	IR	OR	R	VR	Total
(Per cent in each age group)						
Indigenous						
0–14	39	42	40	37	36	39
15–24	19	18	18	17	19	18
25–44	29	26	28	29	29	28
45–64	12	11	12	13	12	12
65+	2	3	3	3	4	3
Total	100	100	100	100	100	100
Non-Indigenous						
0–14	19	21	22	23	21	20
15–24	14	13	12	11	12	14
25–44	31	27	29	33	36	30
45–64	23	24	25	24	24	23
65+	12	14	13	9	7	13
Total	100	100	100	100	100	100
Total population						
0–14	20	22	23	25	28	21
15–24	14	13	12	12	15	14
25–44	31	27	29	32	33	30
45–64	23	24	24	22	19	23
65+	12	14	13	9	5	13
Total	100	100	100	100	100	100

Source: ABS population estimates.

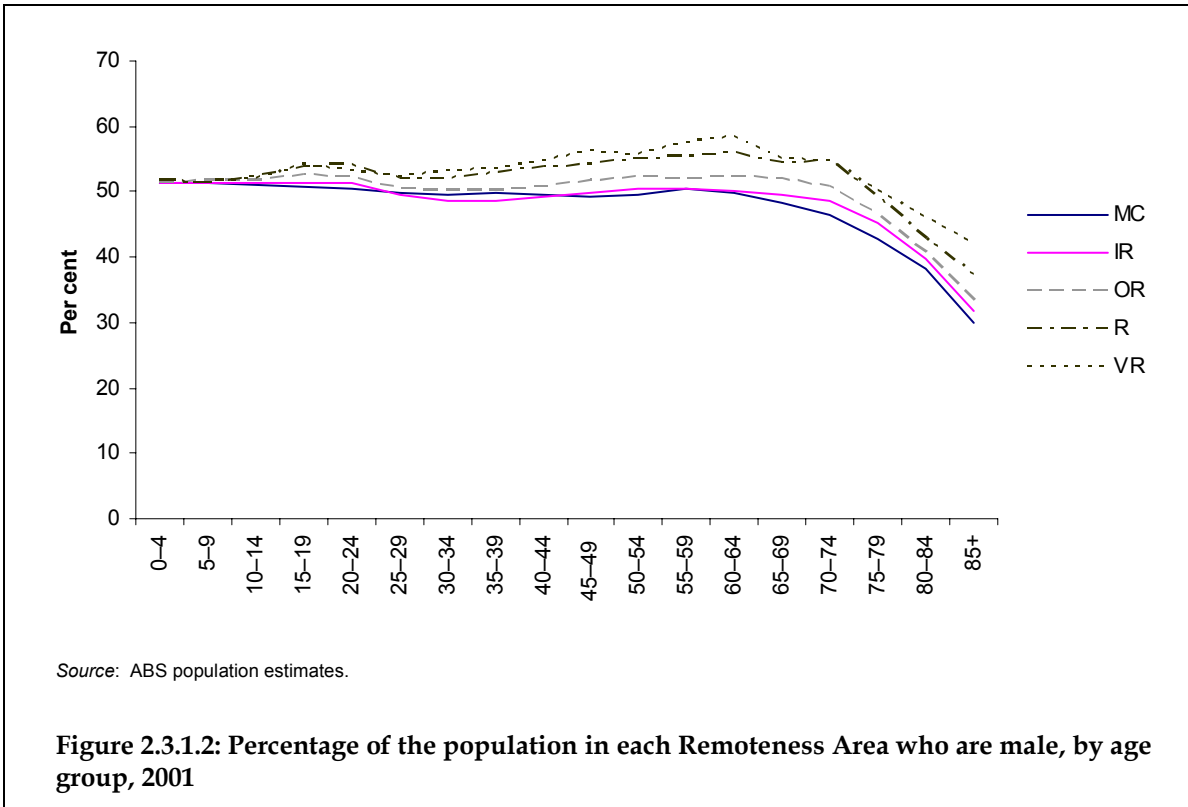
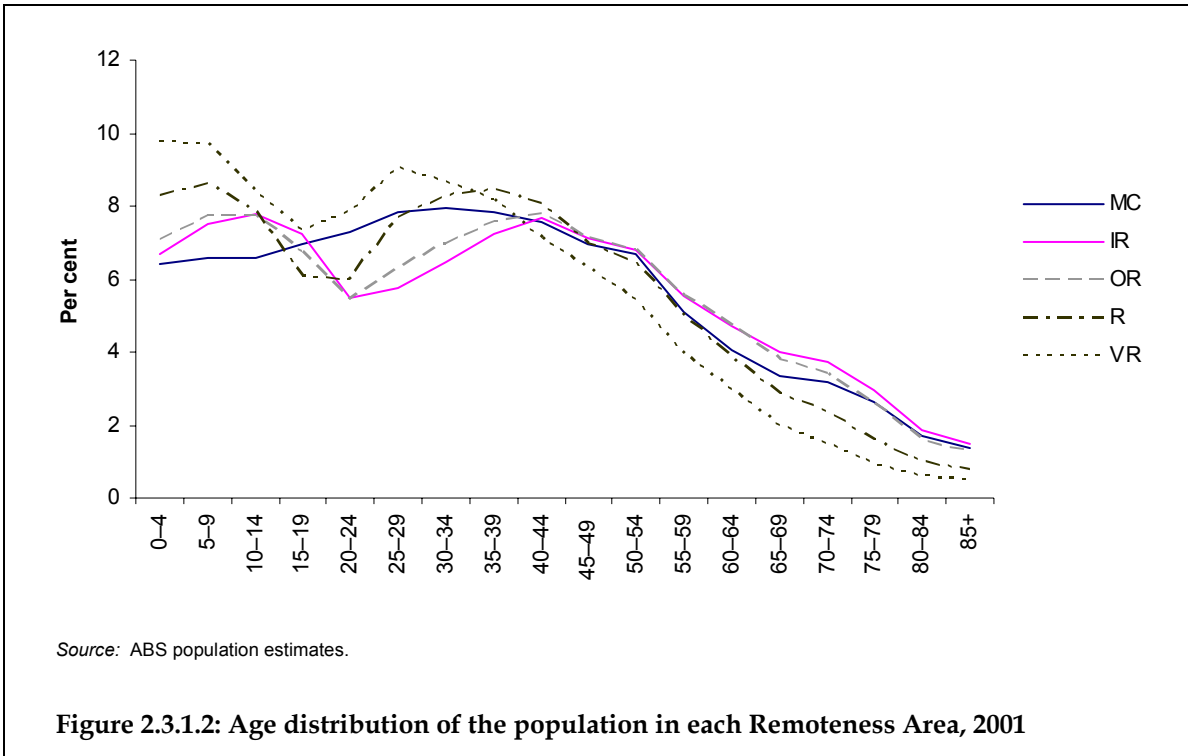


Table 2.3.1.2: Population distribution of Indigenous and Non-Indigenous persons by ASGC Remoteness Area, 2001

	MC	IR	OR	R	VR	Total
(Per cent of total Indigenous population in each area)						
0–14	30	22	24	9	16	100
15–24	31	20	22	9	18	100
25–44	31	19	23	10	18	100
45–64	30	20	24	10	17	100
65+	26	18	23	11	21	100
Total	30	20	23	9	17	100
(Per cent of population in each area who are Indigenous)						
0–14	2	4	9	20	57	4
15–24	1	3	8	19	56	3
25–44	1	2	5	12	39	2
45–64	1	1	3	8	28	1
65+	0	0	1	5	28	1
Total	1	2	5	13	44	2
(Number of people)						
0–14	2,520,842	883,436	453,253	80,083	49,585	3,987,198
15–24	1,834,243	510,157	244,593	39,055	27,108	2,655,157
25–44	4,010,213	1,094,487	576,344	105,251	58,862	5,845,157
45–64	2,926,336	972,579	485,905	72,130	33,245	4,490,194
65+	1,579,210	565,030	253,742	27,810	9,742	2,435,534
Total	12,870,843	4,025,689	2,013,837	324,329	178,542	19,413,240
(Per cent of total population in each area)						
Total	66	21	10	2	1	100

Source: ABS population estimates.

2.3.2 Dependency

Summary of findings

In 2001 the childhood dependency ratio was higher in regional and especially remote areas than it was in Major Cities, being 0.29, 0.34, 0.35, 0.37 and 0.42, respectively, in Major Cities, Inner and Outer Regional, Remote and Very Remote areas.

In 2001 the aged dependency ratio was higher in Inner Regional areas than in any of the other areas, and lower in Remote and especially Very Remote areas than it was in Major Cities, being 0.18, 0.22, 0.19, 0.13, 0.08, respectively, in Major Cities, Inner and Outer Regional, Remote and Very Remote areas.

In 2001 the total dependency ratio was higher outside Major Cities than inside, especially in Inner and Outer Regional areas. Total dependency ratios were 0.47, 0.56, 0.54, 0.50, 0.50, respectively, in Major Cities, Inner and Outer Regional, Remote and Very Remote areas.

Between 1991 and 2001, childhood dependency ratios decreased in all areas. In regional, Remote and Very Remote areas, the size of annual decreases was twice, three times and about 1.5 times what it was in Major Cities, the childhood dependency ratios tending to become more similar over time.

Between 1991 and 2001, aged dependency ratios increased in all areas. In regional and Remote areas, the annual increase was more than twice what it was in Major Cities, whereas increases in Very Remote areas were only slightly higher than in Major Cities. The tendency is for high aged dependency ratios for regional populations to become higher and diverge from those for Major Cities, and low ratios for remote populations tend to become higher and converge with those for Major Cities.

Decreasing childhood dependency ratios and increasing aged dependency ratios are not surprising in view of the ageing of the population.

Between 1991 and 2001, total dependency ratios for all areas have decreased slightly in Major Cities and regional areas, but at 3–4 times this amount in remote areas.

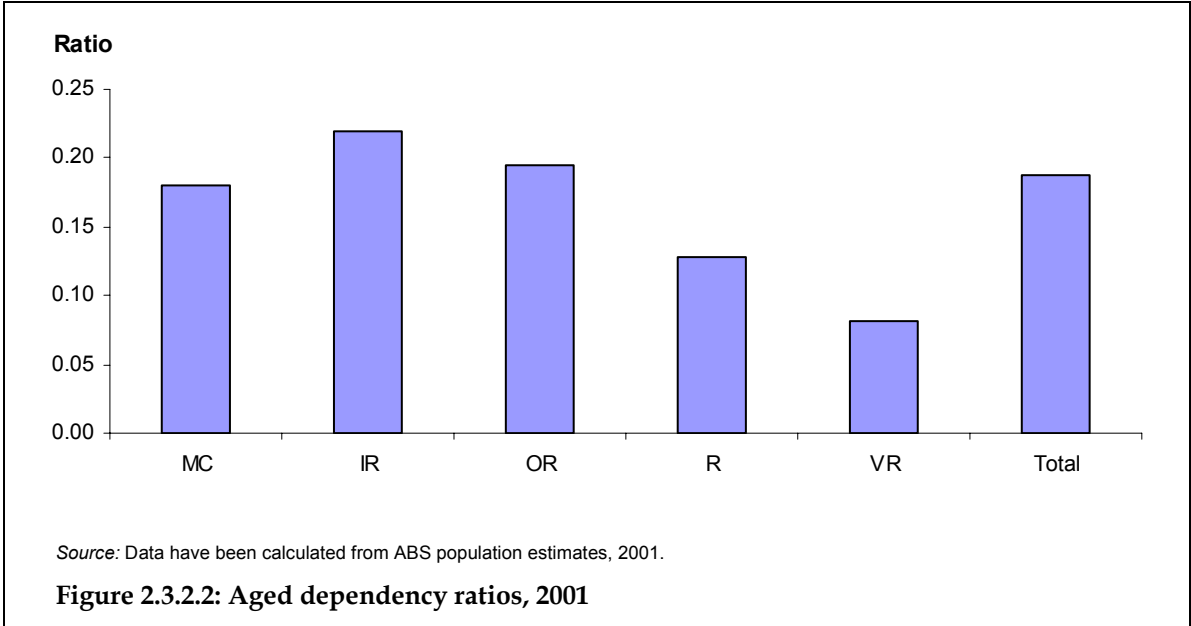
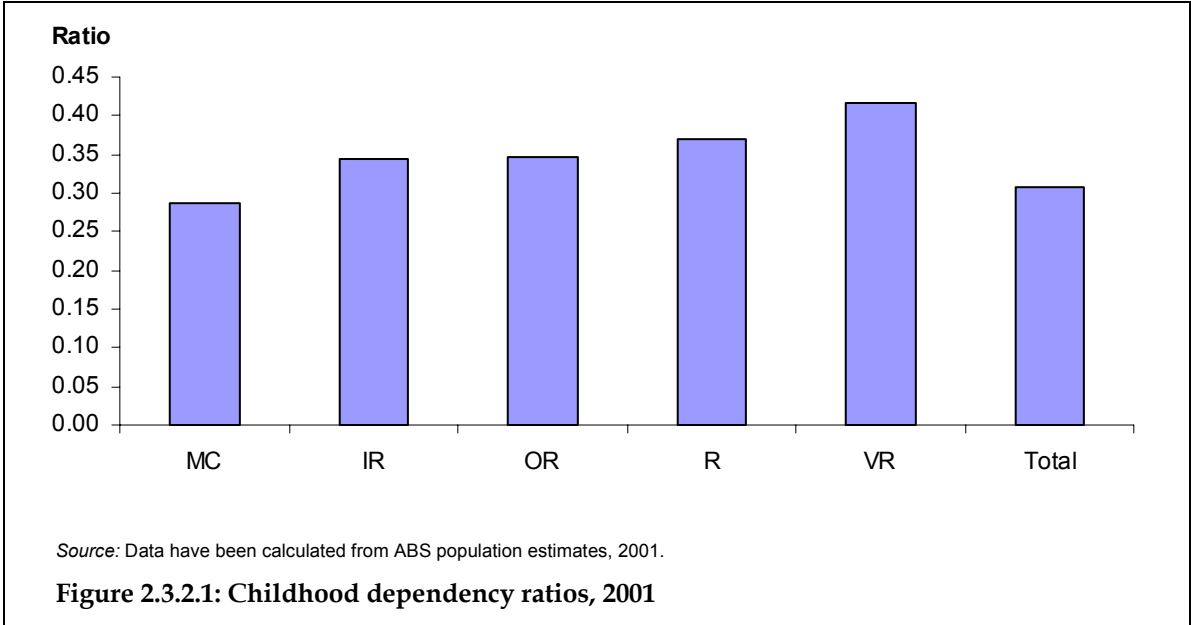
Background

A dependency ratio is the proportion of persons of a dependent age divided by the proportion of persons of working age. Dependency ratios are only an approximate guide to dependency levels in a particular area because not all persons of working age are in the labour force and some persons aged 65 years and over are still in the labour force. A childhood dependency ratio has been defined as the number of Australians aged under 15 divided by the number of those in the working-age population (persons aged 15–64 years). An aged dependency ratio has been formulated as the number of Australians aged 65 years and over divided by the number of those in the working-age population. A total dependency ratio is calculated as the sum of the two dependency ratios.

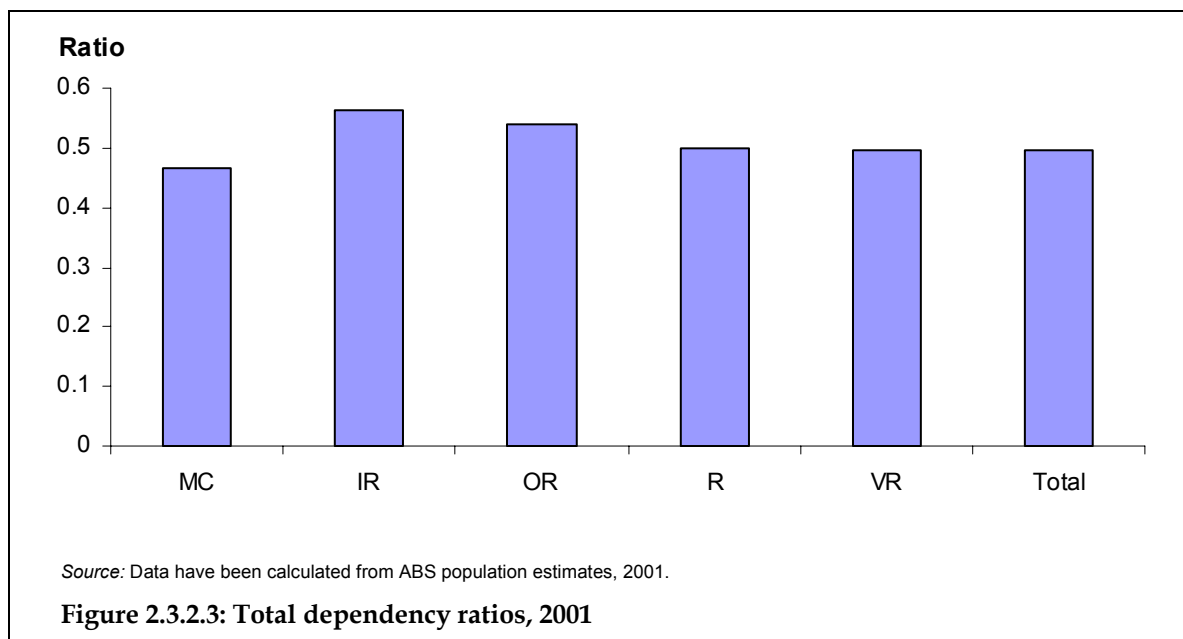
Detailed results

In 2001 the childhood dependency ratio was higher in regional and especially remote areas than it was in Major Cities, being 0.29, 0.34, 0.35, 0.37 and 0.42, respectively, in Major Cities, Inner and Outer Regional, Remote and Very Remote areas (Figure 2.3.2.1 and Table 2.3.2.1). This indicates that in Major Cities there were 29 children (aged 0–14 years) for every 100 people of working age (aged 15–64 years), whereas in Very Remote areas there were

42 children per 100 people of working age. Remote and Very Remote areas contain a larger proportion of Indigenous people than other areas; Indigenous people tend to be younger than non-Indigenous people due to higher fertility rates and lower life expectancy (see sections 1.4.1, Overall mortality, and 2.3.4, Fertility).



In 2001 the aged dependency ratio was higher in Inner Regional areas than in any of the other areas, and lower in Remote and especially Very Remote areas than it was in Major Cities, being 0.18, 0.22, 0.19, 0.13, 0.08, respectively, in Major Cities, Inner and Outer Regional, Remote and Very Remote areas (Figure 2.3.2.2 and Table 2.3.2.1). Inner Regional areas include coastal areas close to Major Cities. These are popular retirement areas, and tend to be better supplied with services than more remote areas.



In 2001 the total dependency ratio was higher outside Major Cities than inside, especially in Inner and Outer Regional areas (Figure 2.3.2.3 and Table 2.3.2.1). Total dependency ratios were 0.47, 0.56, 0.54, 0.50, 0.50, respectively, in Major Cities, Inner and Outer Regional, Remote and Very Remote areas.

Between 1991 and 2001, childhood dependency ratios decreased in all areas. In regional, Remote and Very Remote areas, the size of annual decreases was twice, three times and about 1.5 times what it was in Major Cities. Childhood dependency ratios tend to become more similar over time (Figure 2.3.2.4 and Table 2.3.2.2).

Between 1991 and 2001, aged dependency ratios increased in all areas. In regional and Remote areas, the annual increase was more than twice what it was in Major Cities, whereas increases in Very Remote areas were only slightly higher than in Major Cities. The tendency is for high aged dependency ratios for regional populations to become higher and diverge from those for Major Cities, and low ratios for remote populations tend to become higher and converge with those for Major Cities.

Between 1991 and 2001, total dependency ratios for all areas have decreased slightly in Major Cities and regional areas, but at 3–4 times the this amount in remote areas.

Table 2.3.2.1: Average annual change in dependency ratios, 1991 to 2001

	MC	IR	OR	R	VR	Total
Childhood dependency ratio	-0.0015	-0.0033	-0.0033	-0.0040	-0.0025	-0.0022
Aged dependency ratio	0.0013	0.0027	0.0029	0.0027	0.0016	0.0018
Total dependency ratio	-0.0003	-0.0006	-0.0004	-0.0013	-0.0009	-0.0004

Notes

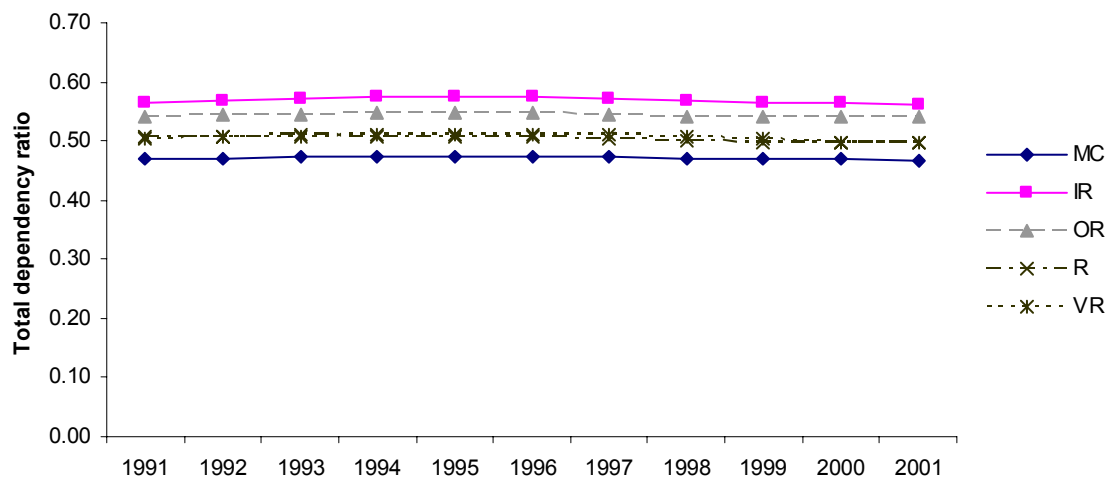
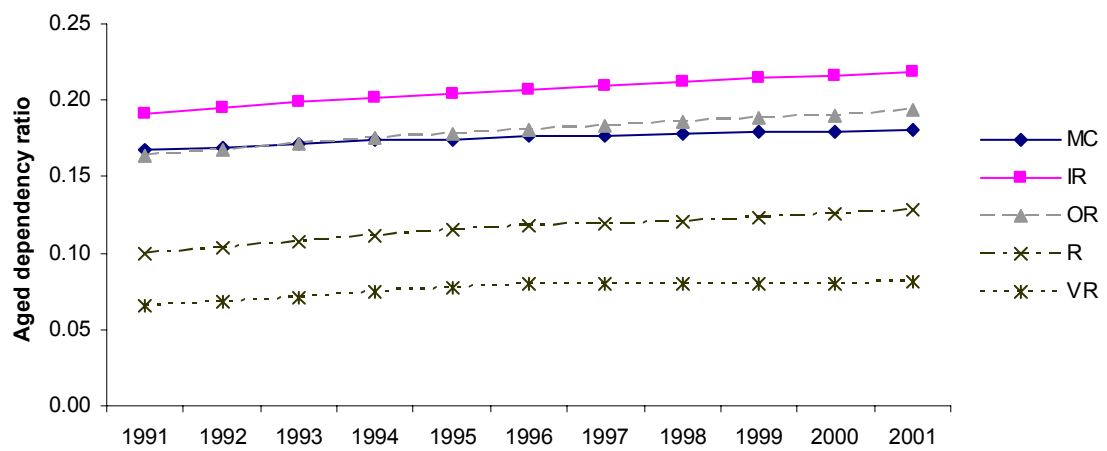
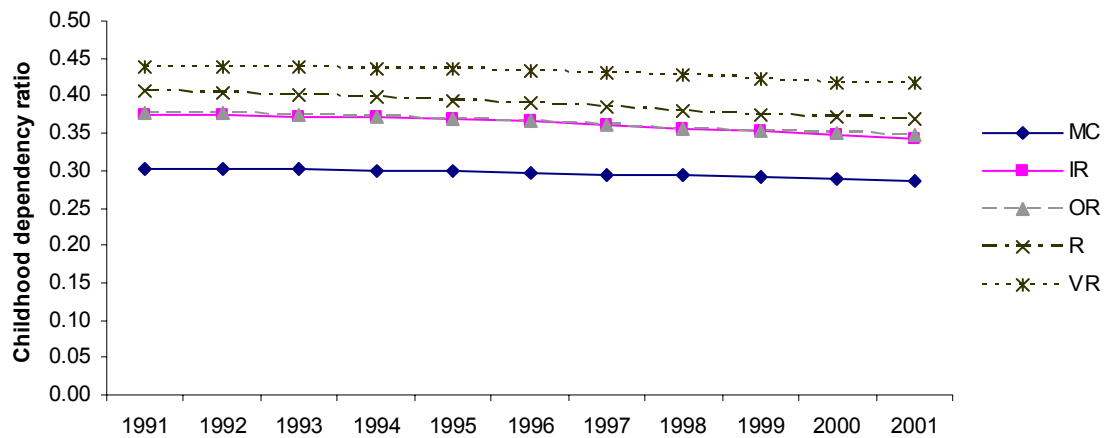
1. Negative change indicates a decrease in the dependency ratio, positive change indicates an increase.
2. The annual change in the Major Cities childhood dependency ratio of -0.0017 indicates that each year, the childhood dependency ratio decreases by 0.0017. If this rate of change continued, then the Major Cities childhood dependency ratio would decrease from 0.2874 in 2001, to 0.2857 in 2002, and to 0.2704 in 2011.

Source: Table 2.3.2.1.

Table 2.3.2.2: Dependency ratios, by ASGC Remoteness Area, 1991 to 2001

	MC	IR	OR	R	VR	Total
Childhood ratio						
1991	0.30	0.38	0.38	0.41	0.44	0.33
1992	0.30	0.37	0.38	0.40	0.44	0.33
1993	0.30	0.37	0.37	0.40	0.44	0.33
1994	0.30	0.37	0.37	0.40	0.44	0.32
1995	0.30	0.37	0.37	0.39	0.43	0.32
1996	0.30	0.37	0.37	0.39	0.43	0.32
1997	0.30	0.36	0.36	0.39	0.43	0.32
1998	0.29	0.36	0.36	0.38	0.43	0.32
1999	0.29	0.35	0.35	0.38	0.42	0.31
2000	0.29	0.35	0.35	0.37	0.42	0.31
2001	0.29	0.34	0.35	0.37	0.42	0.31
Aged ratio						
1991	0.17	0.19	0.16	0.10	0.06	0.17
1992	0.17	0.19	0.17	0.10	0.07	0.17
1993	0.17	0.20	0.17	0.11	0.07	0.17
1994	0.17	0.20	0.18	0.11	0.07	0.18
1995	0.17	0.20	0.18	0.11	0.08	0.18
1996	0.18	0.21	0.18	0.12	0.08	0.18
1997	0.18	0.21	0.18	0.12	0.08	0.18
1998	0.18	0.21	0.19	0.12	0.08	0.18
1999	0.18	0.21	0.19	0.12	0.08	0.18
2000	0.18	0.22	0.19	0.13	0.08	0.19
2001	0.18	0.22	0.19	0.13	0.08	0.19
Total dependency ratio						
1991	0.47	0.57	0.54	0.51	0.50	0.50
1992	0.47	0.57	0.54	0.51	0.51	0.50
1993	0.47	0.57	0.55	0.51	0.51	0.50
1994	0.47	0.57	0.55	0.51	0.51	0.50
1995	0.47	0.57	0.55	0.51	0.51	0.50
1996	0.47	0.57	0.55	0.51	0.51	0.50
1997	0.47	0.57	0.54	0.50	0.51	0.50
1998	0.47	0.57	0.54	0.50	0.51	0.50
1999	0.47	0.57	0.54	0.50	0.50	0.50
2000	0.47	0.56	0.54	0.50	0.50	0.50
2001	0.47	0.56	0.54	0.50	0.50	0.49

Source: Data have been calculated from ABS population estimates, 1991 to 2001.



Source: Table 2.3.2.2.

Figure 2.3.2.4: Dependency ratios by ASGC Remoteness Area, 1991 to 2001

2.3.3 Internal migration

Summary of findings

Migration has a substantial influence on some populations, especially those from Very Remote areas, the young and the elderly.

Based on 1996 census data, migration causes adult populations in Major Cities and Inner Regional areas to increase, respectively, by 0.1% and 0.2% each year, and those in Outer Regional, Remote and Very Remote areas to decrease, respectively, by 0.6%, 0.8% and 2.1% per year.

These losses and gains are described by age group and Indigenous status.

A lower percentage of the Indigenous populations in each area move than appears to be the case for non-Indigenous people. The overall trend appears to be towards less remote areas. Just under 2% of young (15–24 years) Indigenous people from remote areas moved to less remote areas in the year, a lower percentage moved from regional areas, and migration added 2% to Major Cities Indigenous populations. The pattern for Indigenous people aged 25 years and over is not so clear, with migration alternately bolstering some populations and reducing others, depending on age group.

There was very strong trend for non-Indigenous people aged 15–24 years to migrate towards Major Cities (similar to the trend for Indigenous young people, but stronger); net migration increased the number in this age group in Major Cities by 1.2%, whereas the populations of Inner and Outer Regional, Remote and Very Remote areas reduced by 2.6%, 3.5%, 1.4% and 0.4%.

Net migration in the other age groups was towards Inner Regional areas. There was net migration away from Major Cities and also away from Outer Regional, Remote and especially Very Remote areas. The percentage of the population moving out of Very Remote areas was 3.5%, 2.6%, 4.9% and 4.0% for those aged 25–44, 45–64, 65–74 and 75 years and over, respectively.

Background

Internal migration refers to migration of people from one area within Australia to another, e.g. from Inner Regional areas to Major Cities.

It is possible that migration masks important health differentials. People may move between Remoteness Areas in response to the opportunity for, and pressure to, access education, work or health services. Also, migration between Remoteness Areas may affect the interpretation of other indicators; for example, migration of older people in poorer health to less remote areas, leaving those who are in good health in these areas, may hide poor health outcomes in remote areas and overstate them in other areas.

This indicator uses data from the 1996 census (2001 data were not available when the analysis was conducted). Respondents were asked where they resided 12 months previously and also where they resided at the time of the last census (i.e. 1991). The description of migration provided here is based on where they lived in 1996, and 1 year previously in 1995.

The shorter 1-year period has been used in preference to the longer 5-year period, in order to capture the migration of older people. If older people in frail health do in fact move to less remote areas, many of them may die within the longer 5-year period, so the fact that they

recently moved from more remote areas cannot be recorded. Use of the 1-year period reduces the size of this effect.

Detailed results

Findings for Indigenous and non-Indigenous populations are described from page 177.

Migration of people aged 15 years and over

In the 12-month period 1995–96, migration from (mainly) less remote areas increased the populations of Major Cities and Inner Regional areas by 0.1% and 0.2%, respectively. There was a net movement out of Outer Regional, Remote and Very Remote areas, equivalent to 0.8%, 1.1% and 2.1% of their populations, respectively (Figure 2.3.3.1 and Table 2.3.3.1).

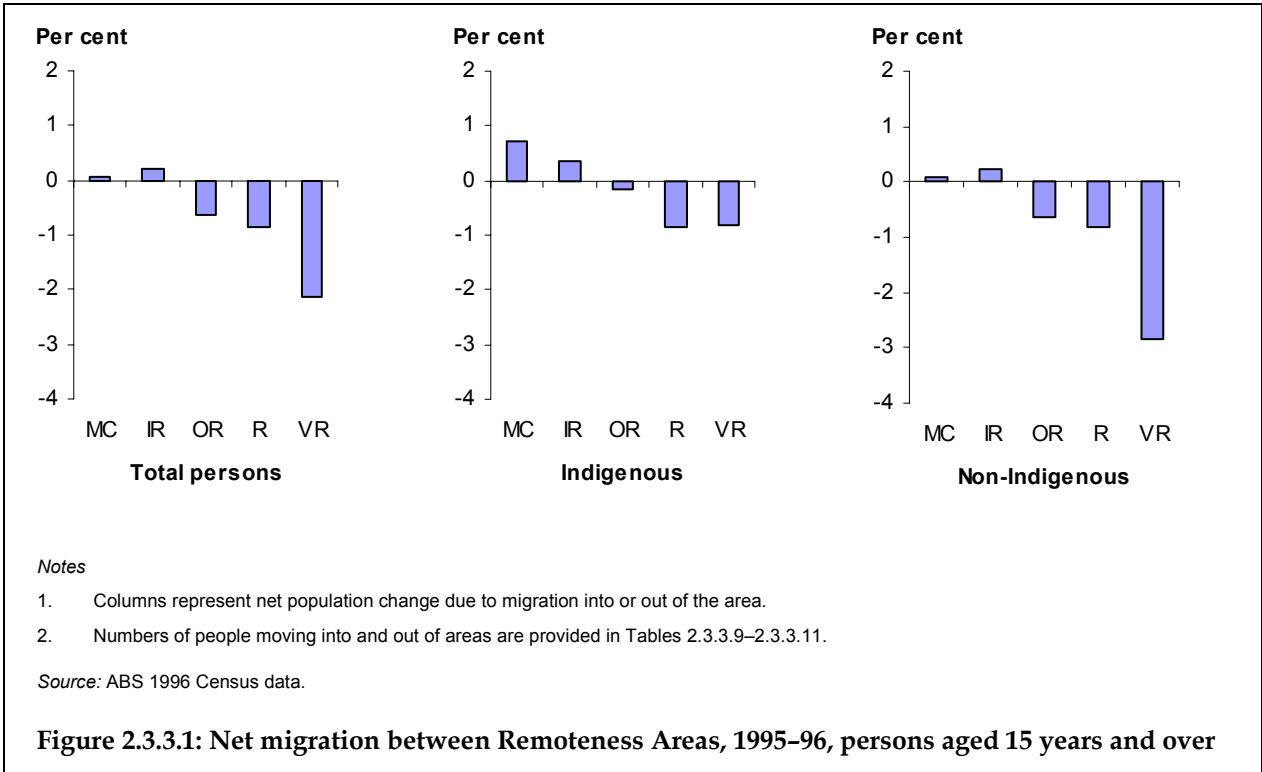


Table 2.3.3.1: Migration between Remoteness Areas, 1995–96, persons aged 15 years and over

	MC	IR	OR	R	VR
	(per cent)				
Net movement to/from less remote areas	0.0	0.0	-0.8	-1.1	-2.1
Net movement to/from more remote areas	0.1	0.3	0.2	0.2	0.0
Net gain to area due to internal migration	0.1	0.2	-0.6	-0.8	-2.1

Note: This table shows population change in the area during 1995–96 due to internal migration only. Other population change which occurred due to births, deaths and overseas migration during this period has not been included. A positive figure shows that internal migration has resulted in population growth. A negative figure shows that internal migration has resulted in population loss.

Source: ABS 1996 Census and Table 2.3.3.9.

Migration of people aged 15–24 years

In the 12-month period 1995–96, 15–24-year-olds tended to move from more remote areas towards less remote areas (Figure 2.3.3.2 and Table 2.3.3.2). Of the 15–24-year-olds who lived in Inner Regional areas, 3.1% moved to Major Cities, increasing the population there by 1.3%. Of the 15–24-year-olds who lived in Outer Regional areas, 3.5% moved to less remote areas in the same period, just over 60% of these people moving to Inner Regional areas and just under 40% to Major Cities.

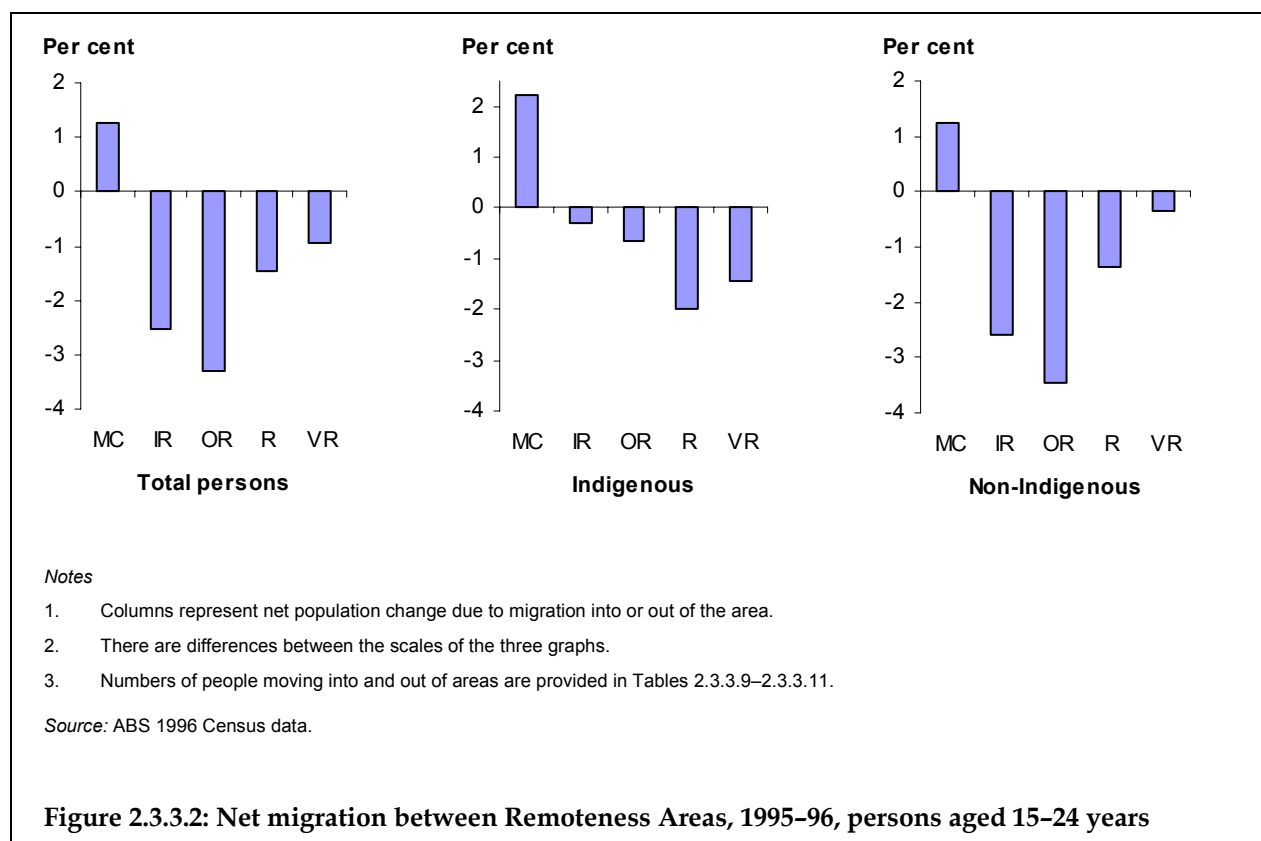


Table 2.3.3.2: Migration between Remoteness Areas, 1995–96, persons aged 15–24 years

	MC	IR	OR	R	VR
	(per cent)				
Net movement to/from less remote areas	0.0	-3.1	-3.5	-1.8	-0.9
Net movement to/from more remote areas	1.3	0.5	0.2	0.3	0.0
Net gain to area due to internal migration	1.3	-2.5	-3.3	-1.5	-0.9

Note: This table shows population change in the area during 1995–96 due to internal migration only. Other population change which occurred due to births, deaths and overseas migration during this period has not been included. A positive figure shows that internal migration has resulted in population growth. A negative figure shows that internal migration has resulted in population loss.

Source: ABS 1996 Census and Table 2.3.3.9.

Migration of people aged 25–44 years

In the 12-month period, migration increased the population of 25–44-year-olds in Inner Regional areas by 0.7% (Figure 2.3.3.3 and Table 2.3.3.3). Almost three-quarters of these people had moved from Major Cities. People of this age in Outer Regional, Remote and Very Remote areas, however, tended to migrate towards less remote (i.e. Major Cities and Inner Regional) areas.

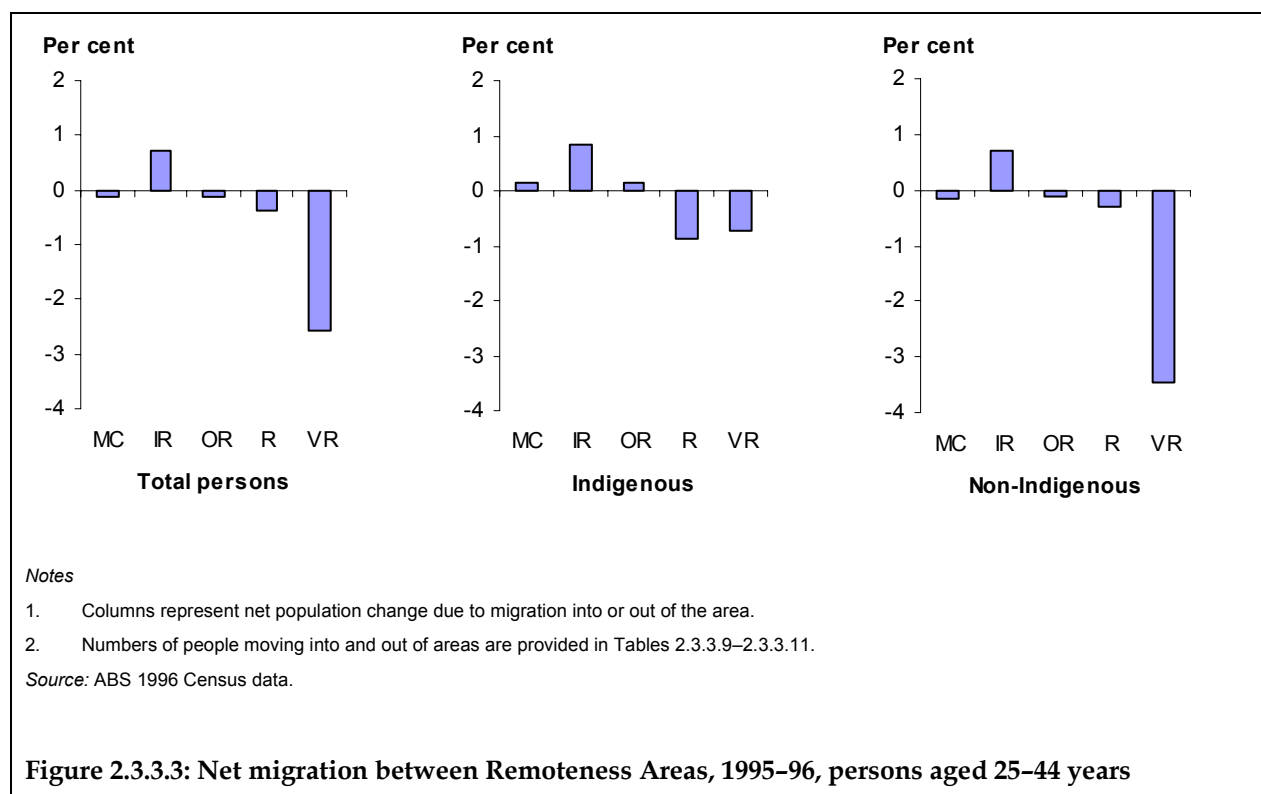


Table 2.3.3.3: Migration between Remoteness Areas, 1995–96, persons aged 25–44 years

	MC	IR	OR	R	VR
	(per cent)				
Net movement to/from less remote areas	0.0	0.5	-0.3	-0.6	-2.6
Net movement to/from more remote areas	-0.1	0.2	0.2	0.3	0.0
Net gain to area due to internal migration	-0.1	0.7	-0.1	-0.4	-2.6

Note: This table shows population change in the area during 1995–96 due to internal migration only. Other population change which occurred due to births, deaths and overseas migration during this period has not been included. A positive figure shows that internal migration has resulted in population growth. A negative figure shows that internal migration has resulted in population loss.

Source: ABS 1996 Census and Table 2.3.3.9.

Migration of people aged 45–64 years

In the 12-month period, migration of people aged 45–64 years added 1.1% to the population of Inner Regional areas (Figure 2.3.3.4 and Table 2.3.3.4). Almost 83% of these people came from Major Cities. Remote areas lost 0.9% of their 45–64-year-old population to less remote areas, with most (78%) moving to Outer Regional areas. Very Remote areas lost 1.9% of their 45–64-year-old population to less remote areas, with almost 60% of these people moving to Remote areas.

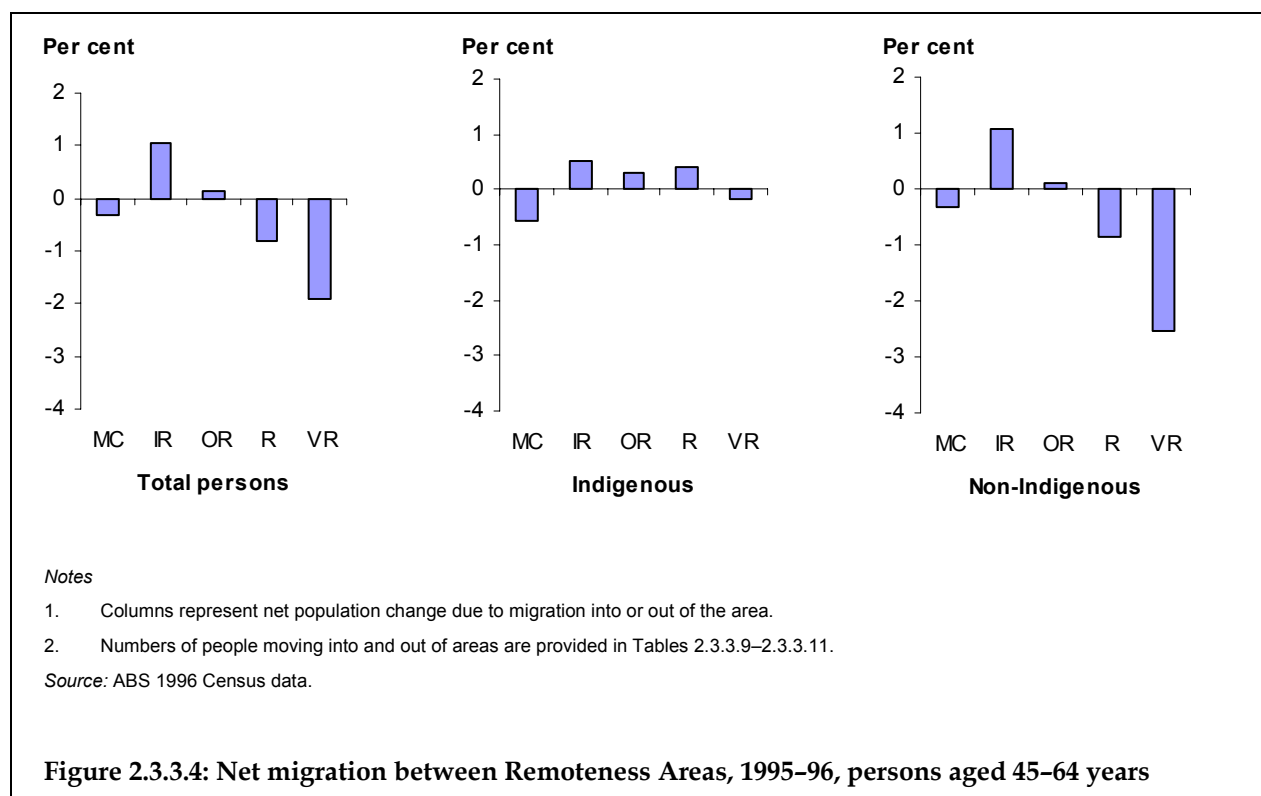


Table 2.3.3.4: Migration between Remoteness Areas, 1995–96, persons aged 45–64 years

	MC	IR	OR	R	VR
	(per cent)				
Net movement to/from less remote areas	0.0	0.9	0.0	-0.9	-1.9
Net movement to/from more remote areas	-0.3	0.2	0.1	0.1	0.0
Net gain to area due to internal migration	-0.3	1.1	0.1	-0.8	-1.9

Note: This table shows population change in the area during 1995–96 due to internal migration only. Other population change which occurred due to births, deaths and overseas migration during this period has not been included. A positive figure shows that internal migration has resulted in population growth. A negative figure shows that internal migration has resulted in population loss.

Source: ABS 1996 Census and Table 2.3.3.9.

Migration of people aged 65–74 years

Migration of 65–74-year-olds increased the population in that age group in Inner Regional areas by 0.7% in 1995–96. Almost 64% of these people came from Major Cities (Figure 2.3.3.5 and Table 2.3.3.5). Outer Regional areas lost 0.4% of their 65–74-year-old population to less remote areas, mainly to Inner Regional areas (90%). Remote areas lost 2.3% of their 65–74-year-old population to less remote areas, mainly to Outer Regional areas (81%). Very Remote areas lost 3.4% of their 65–74-year-old population to less remote areas, with almost 65% of these moving to Remote areas.

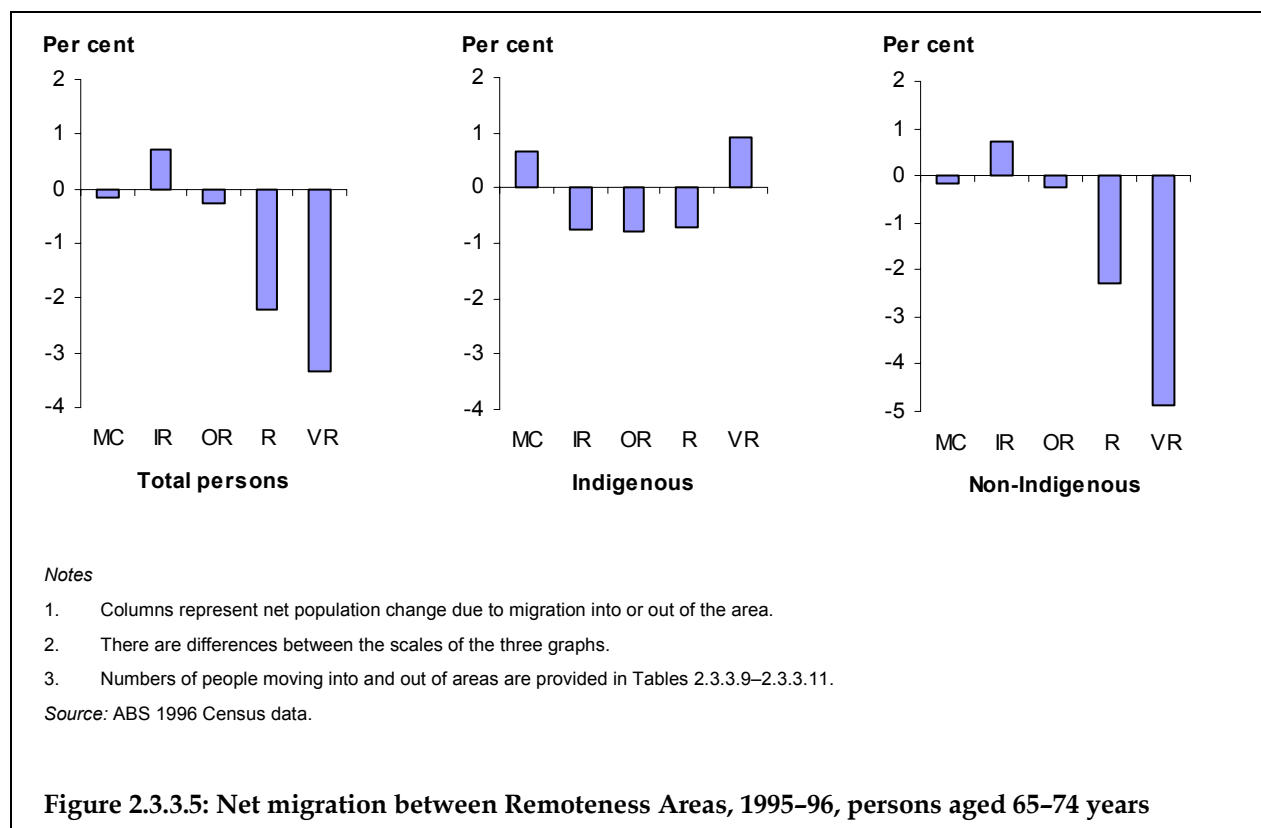


Table 2.3.3.5: Migration between Remoteness Areas, 1995–96, persons aged 65–74 years

	MC	IR	OR	R	VR
	(per cent)				
Net movement to/from less remote areas	0.0	0.5	-0.4	-2.3	-3.4
Net movement to/from more remote areas	-0.1	0.3	0.1	0.1	0.0
Net gain to area due to internal migration	-0.1	0.7	-0.3	-2.2	-3.4

Note: This table shows population change in the area during 1995–96 due to internal migration only. Other population change which occurred due to births, deaths and overseas migration during this period has not been included. A positive figure shows that internal migration has resulted in population growth. A negative figure shows that internal migration has resulted in population loss.

Source: ABS 1996 Census and Table 2.3.3.9.

Migration of people aged 75 years and over

The population of people aged 75 years and over in Inner Regional areas increased by 0.4% in 1995–96 through internal migration (Figure 2.3.3.6 and Table 2.3.3.6). Almost 57% of these people came from Major Cities. Outer Regional areas lost 0.4% of their population of this age to less remote areas, with most moving to Inner Regional areas (90%). Remote areas lost 1.7% of their population to less remote areas, mainly to Outer Regional areas (83%). Very Remote areas lost 3.4% of their population to less remote areas, with just over 68% moving to Remote areas.

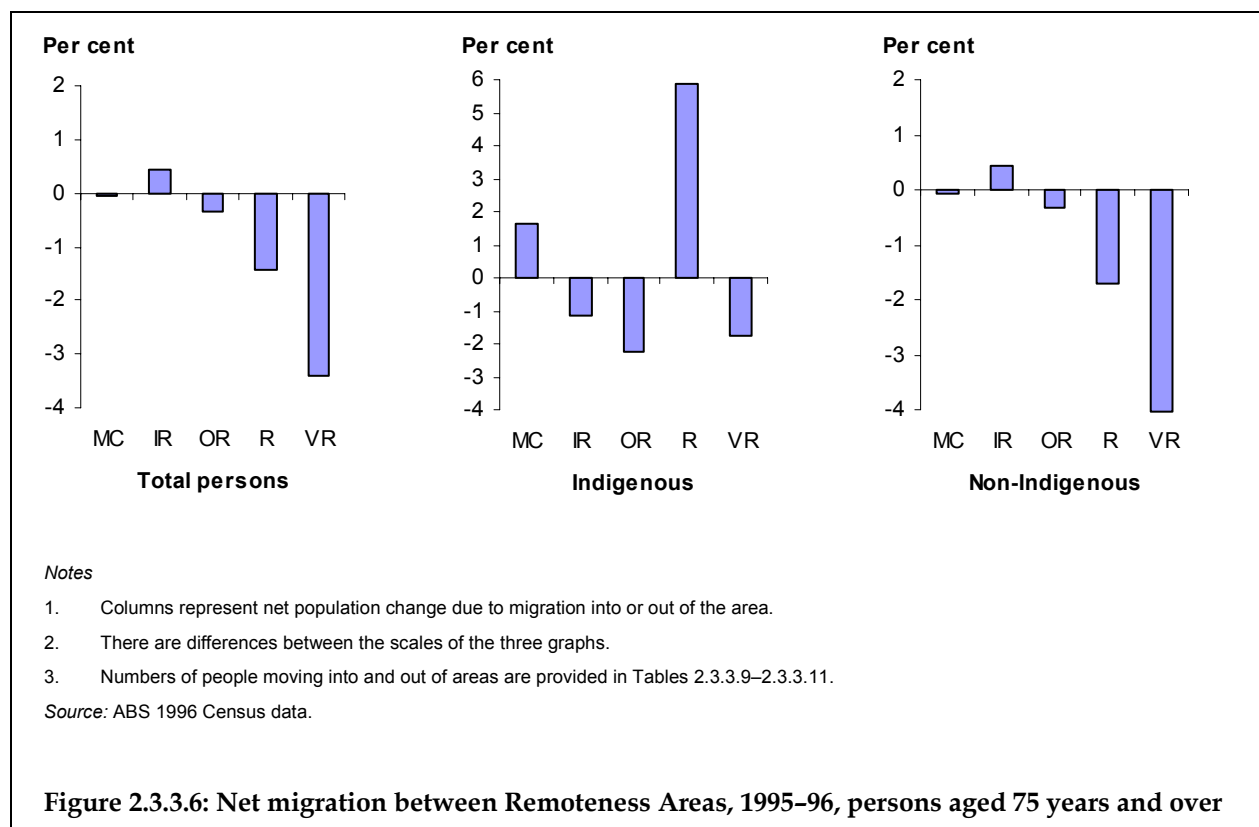


Table 2.3.3.6: Migration between Remoteness Areas, 1995–96, persons aged 75 years and over

	MC	IR	OR	R	VR
	(per cent)				
Net movement to/from less remote areas	0.0	0.2	-0.4	-1.7	-3.4
Net movement to/from more remote areas	-0.1	0.2	0.1	0.3	0.0
Net gain to area due to internal migration	-0.1	0.4	-0.3	-1.4	-3.4

Note: This table shows population change in the area during 1995–96 due to internal migration only. Other population change which occurred due to births, deaths and overseas migration during this period has not been included. A positive figure shows that internal migration has resulted in population growth. A negative figure shows that internal migration has resulted in population loss.

Source: ABS 1996 Census and Table 2.3.3.9.

Indigenous people

In 1995–96, internal migration in the Indigenous population aged 15 years and over tended to be from more remote areas to less remote areas (Table 2.3.3.7). However, the percentage of the population moving was smaller than for the non-Indigenous population, suggesting lower levels of mobility between Remoteness Areas (although this says nothing about mobility within Remoteness Areas).

For Indigenous people 15 years and over, Remote and Very Remote areas lost almost 1% of their Indigenous population to less remote areas by migration in the 12-month period. Migration into and out of Outer Regional areas resulted in a small net loss to less remote areas. The Indigenous populations of Major Cities and Inner Regional areas increased by 0.7% and 0.4% through migration mainly from more remote areas.

Migration of those aged 25–44 years resulted in Remote and Very Remote areas losing just under 1% of their population and Inner Regional areas increasing by slightly less than 1%.

Migration of those aged 45–64 years increased the populations of Inner and Outer Regional and Remote areas by less than 0.5% each, and decreased the populations in Major Cities and Very Remote areas by 0.6% and 0.2%.

Migration of those aged 65 years and over, reduced the populations of Inner and Outer Regional areas by about 1%, and increased those of Major Cities and to Remote areas.

Table 2.3.3.7: Migration between Remoteness Areas, 1995–96, Indigenous persons aged 15 years and over

Age group and migration pattern	MC	IR	OR	R	VR
15–24 years			(per cent)		
Net movement to/from less remote areas	0.0	–1.2	–1.7	–2.8	–1.4
Net movement to/from more remote areas	2.2	0.9	1.1	0.8	0.0
Net gain to area due to internal migration	2.2	–0.3	–0.6	–2.0	–1.4
25–44 years					
Net movement to/from less remote areas	0.0	–0.2	–0.4	–1.2	–0.7
Net movement to/from more remote areas	0.1	1.1	0.5	0.3	0.0
Net gain to area due to internal migration	0.1	0.9	0.1	–0.9	–0.7
45–64 years					
Net movement to/from less remote areas	0.0	0.5	0.1	0.5	–0.2
Net movement to/from more remote areas	–0.6	0.0	0.2	–0.1	0.0
Net gain to area due to internal migration	–0.6	0.5	0.3	0.4	–0.2
65 years and over					
Net movement to/from less remote areas	0.0	–1.0	–1.2	0.4	0.0
Net movement to/from more remote areas	1.0	0.2	0.0	1.2	0.0
Net gain to area due to internal migration	1.0	–0.9	–1.2	1.5	0.0
Total aged 15 years and over					
Net movement to/from less remote areas	0.0	–0.5	–0.7	–1.3	–0.8
Net movement to/from more remote areas	0.7	0.8	0.6	0.4	0.0
Net gain to area due to internal migration	0.7	0.4	–0.1	–0.9	–0.8

Note: This table shows population change in the area during 1995–96 due to internal migration only. Other population change which occurred due to births, deaths and overseas migration during this period has not been included. A positive figure shows that internal migration has resulted in population growth. A negative figure shows that internal migration has resulted in population loss.

Source: ABS 1996 Census and Table 2.3.3.10.

Non-Indigenous persons

Overall, in the 12-month period 1995–1996 there was a net movement of non-Indigenous people to Major Cities and Inner Regional areas, whose populations increased, respectively, by 0.1 and 0.2% (Table 2.3.3.8). These people came from Outer Regional, Remote and Very Remote areas whose populations decreased by, respectively, 0.6%, 0.8% and 2.8%, as a result of this migration.

Table 2.3.3.8: Migration between Remoteness Areas, 1995–96, non-Indigenous persons aged 15 years and over

Age group and migration pattern	MC	IR	OR	R	VR
15–24 years			(per cent)		
Net movement to/from less remote areas	0.0	–3.1	–3.6	–1.6	–0.4
Net movement to/from more remote areas	1.2	0.5	0.1	0.2	0.0
Net gain to area due to internal migration	1.2	–2.6	–3.5	–1.4	–0.4
25–44 years					
Net movement to/from less remote areas	0.0	0.5	–0.3	–0.6	–3.5
Net movement to/from more remote areas	–0.1	0.2	0.2	0.3	0.0
Net gain to area due to internal migration	–0.1	0.7	–0.1	–0.3	–3.5
45–64 years					
Net movement to/from less remote areas	0.0	0.9	0.0	–1.0	–2.6
Net movement to/from more remote areas	–0.3	0.2	0.1	0.1	0.0
Net gain to area due to internal migration	–0.3	1.1	0.1	–0.9	–2.6
65–74 years					
Net movement to/from less remote areas	0.0	0.5	–0.4	–2.4	–4.9
Net movement to/from more remote areas	–0.1	0.3	0.1	0.1	0.0
Net gain to area due to internal migration	–0.1	0.7	–0.3	–2.3	–4.9
75 years and over					
Net movement to/from less remote areas	0.0	0.3	–0.4	–1.8	–4.0
Net movement to/from more remote areas	–0.1	0.2	0.1	0.1	0.0
Net gain to area due to internal migration	–0.1	0.4	–0.3	–1.7	–4.0
Total aged 15 years and over					
Net movement to/from less remote areas	0.0	0.0	–0.8	–1.0	–2.8
Net movement to/from more remote areas	0.1	0.2	0.1	0.2	0.0
Net gain to area due to internal migration	0.1	0.2	–0.6	–0.8	–2.8

Note: This table shows population change in the area during 1995–96 due to internal migration only. Other population change which occurred due to births, deaths and overseas migration during this period has not been included. A positive figure shows that internal migration has resulted in population growth. A negative figure shows that internal migration has resulted in population loss.

Source: ABS 1996 Census and Table 2.3.3.11.

Migration of non-Indigenous 15–24-year-olds was towards Major Cities. In the 12-month period, the Major Cities population increased by 1.2% as a result of migration of people in this age group from Inner and Outer Regional, Remote and Very Remote areas, whose populations correspondingly decreased by 2.6%, 3.5%, 1.4% and 0.4%, respectively (Figure 2.3.3.9).

Movement of all other age groups was towards Inner Regional areas, the population of which increased by about 1% in the 12-month period for each age group except those aged 75 years and over (up 0.4%).

In most age groups in the 12-month period, there was a net movement of about 0.1% of the Major Cities population to more remote areas (0.3% for those aged 45–64 years).

The net effect of migration on the population of Outer Regional areas was small or negligible for those aged 25–64, and for those 65 years and over, it amounted to a loss of about 0.3%.

Remote areas lost 0.3% and 0.9% of their 25–44 and 45–64-year-olds, respectively, and about 2% of those 65 years and over.

Very Remote area populations in the age groups 25–44, 45–64, 65–74 and 75+ decreased by 3.5%, 2.6%, 4.9% and 4.0%, respectively, due to migration in the 12 months 1995–96 (Figure 2.3.3.10).

Comparison of Tables 2.3.3.7 and 2.3.3.8 is complicated by the fact that the age structures and regional distributions of the Indigenous and non-Indigenous populations are substantially different.

Table 2.3.3.9: Numbers of people migrating into and out of ASGC Remoteness Areas, 1995–96

		Migration from					
All ages 15+		MC	IR	OR	R	VR	Total
Migration to	MC	8,494,272	259,855	45,016	9,673	4,969	8,813,785
	IR	258,960	2,291,794	136,046	7,769	2,780	2,697,349
	OR	39,857	130,433	1,172,364	42,069	5,692	1,390,414
	R	9,275	6,933	40,966	150,639	12,641	220,454
	VR	4,510	2,382	4,674	12,162	84,353	108,082
	Total	8,806,874	2,691,398	1,399,066	222,312	110,435	13,230,085
15–24 years		MC	IR	OR	R	VR	Total
Migration to	MC	1,570,337	68,293	17,144	3,227	1,440	1,660,441
	IR	53,820	378,741	25,942	1,873	694	461,070
	OR	11,522	23,332	186,599	7,121	1,446	230,020
	R	2,812	1,851	6,894	22,991	2,399	36,947
	VR	1,421	777	1,276	2,285	17,540	23,299
	Total	1,639,912	472,994	237,855	37,497	23,519	2,411,777
25–44 years		MC	IR	OR	R	VR	Total
Migration to	MC	3,341,538	104,594	19,493	4,498	2,638	3,472,762
	IR	109,903	849,821	51,143	3,419	1,480	1,015,766
	OR	18,930	49,940	460,001	17,867	2,941	549,679
	R	4,738	3,073	17,355	68,689	6,030	99,884
	VR	2,389	1,192	2,372	5,774	39,780	51,507
	Total	3,477,498	1,008,620	550,364	100,246	52,868	5,189,597
45–64 years		MC	IR	OR	R	VR	Total
Migration to	MC	2,282,140	59,025	5,955	1,481	710	2,349,311
	IR	65,552	654,189	37,444	1,754	482	759,422
	OR	7,029	36,470	341,126	11,724	1,058	397,408
	R	1,397	1,475	11,532	42,698	3,139	60,241
	VR	622	357	844	3,069	20,559	25,451
	Total	2,356,740	751,516	396,902	60,727	25,948	3,591,833
65–74 years		MC	IR	OR	R	VR	Total
Migration to	MC	757,271	17,039	1,440	300	124	776,174
	IR	18,323	245,235	13,323	488	91	277,461
	OR	1,454	12,787	112,290	3,374	170	130,075
	R	210	340	3,259	10,328	710	14,847
	VR	64	39	117	695	4,280	5,194
	Total	777,323	275,440	130,430	15,184	5,375	1,203,751
75+ years		MC	IR	OR	R	VR	Total
Migration to	MC	542,985	10,904	984	167	58	555,097
	IR	11,360	163,809	8,193	235	33	183,630
	OR	922	7,904	72,347	1,983	77	83,234
	R	118	195	1,926	5,933	363	8,535
	VR	15	18	65	340	2,193	2,631
	Total	555,401	182,829	83,515	8,657	2,724	833,127

Note: Cells indicating migration towards less remote areas are shaded.
Source: ABS 1996 Census.

Table 2.3.3.10: Numbers of Indigenous people migrating into and out of ASGC Remoteness Areas, 1995–96

		Migration from					
All ages 15+		MC	IR	OR	R	VR	Total
Migration to	MC	54,639	3,056	1,319	459	295	59,768
	IR	2,893	29,321	2,908	368	164	35,654
	OR	1,168	2,710	40,376	2,132	821	47,206
	R	378	294	2,046	13,275	2,787	18,779
	VR	265	148	624	2,709	34,669	38,415
	Total	59,343	35,529	47,273	18,942	38,734	199,822
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15–24 years		MC	IR	OR	R	VR	Total
Migration to	MC	17,235	1,172	639	202	137	19,384
	IR	1,030	9,220	989	160	62	11,461
	OR	448	925	12,394	683	339	14,789
	R	151	116	621	3,798	908	5,593
	VR	96	63	243	864	11,001	12,267
	Total	18,960	11,495	14,886	5,706	12,447	63,494
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25–44 years		MC	IR	OR	R	VR	Total
Migration to	MC	25,719	1,410	544	220	134	28,027
	IR	1,374	13,606	1,364	164	84	16,591
	OR	595	1,235	18,658	997	362	21,847
	R	180	130	967	6,312	1,264	8,854
	VR	123	70	285	1,237	15,400	17,115
	Total	27,992	16,451	21,818	8,931	17,243	92,435
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45–64 years		MC	IR	OR	R	VR	Total
Migration to	MC	9,495	393	106	31	18	10,043
	IR	421	5,299	461	35	18	6,234
	OR	113	460	7,539	364	101	8,577
	R	35	39	373	2,475	473	3,394
	VR	37	11	74	476	6,284	6,882
	Total	10,101	6,203	8,552	3,381	6,894	35,130
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65–74 years		MC	IR	OR	R	VR	Total
Migration to	MC	1,483	55	19	6	3	1,566
	IR	49	843	68	7	0	966
	OR	8	66	1,276	63	13	1,426
	R	6	7	59	440	89	602
	VR	9	3	15	91	1,316	1,434
	Total	1,556	974	1,437	606	1,421	5,994
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75+ years		MC	IR	OR	R	VR	Total
Migration to	MC	707	26	11	1	2	747
	IR	18	354	27	2	0	401
	OR	4	23	510	25	6	567
	R	6	2	26	249	53	337
	VR	0	1	7	40	668	717
	Total	735	406	580	318	730	2,769

Note: Cells indicating migration towards less remote areas are shaded.
Source: ABS 1996 Census.

Table 2.3.3.11: Numbers of non-Indigenous people migrating into and out of ASGC Remoteness Areas, 1995–96

		Migration from					
All ages 15+		MC	IR	OR	R	VR	Total
Migration to	MC	8,439,633	256,799	43,697	9,214	4,674	8,754,018
	IR	256,067	2,262,473	133,138	7,401	2,616	2,661,695
	OR	38,689	127,723	1,131,987	39,937	4,871	1,343,208
	R	8,897	6,639	38,920	137,364	9,854	201,675
	VR	4,245	2,234	4,050	9,454	49,685	69,667
	Total	8,747,531	2,655,869	1,351,792	203,370	71,701	13,030,263
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15–24 years		MC	IR	OR	R	VR	Total
Migration to	MC	1,553,102	67,121	16,505	3,025	1,303	1,641,057
	IR	52,790	369,521	24,953	1,714	632	449,609
	OR	11,073	22,407	174,205	6,438	1,107	215,230
	R	2,662	1,735	6,273	19,193	1,491	31,354
	VR	1,325	714	1,033	1,420	6,540	11,032
	Total	1,620,953	461,498	222,969	31,791	11,072	2,348,283
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25–44 years		MC	IR	OR	R	VR	Total
Migration to	MC	3,315,819	103,185	18,949	4,278	2,504	3,444,735
	IR	108,529	836,216	49,779	3,254	1,396	999,174
	OR	18,335	48,704	441,344	16,870	2,579	527,832
	R	4,557	2,943	16,387	62,377	4,766	91,031
	VR	2,266	1,122	2,087	4,536	24,380	34,391
	Total	3,449,506	992,169	528,546	91,316	35,625	5,097,162
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45–64 years		MC	IR	OR	R	VR	Total
Migration to	MC	2,272,645	58,632	5,849	1,451	691	2,339,268
	IR	65,131	648,891	36,984	1,718	465	753,189
	OR	6,916	36,010	333,588	11,360	957	388,831
	R	1,362	1,435	11,160	40,224	2,666	56,847
	VR	585	345	770	2,593	14,276	18,569
	Total	2,346,639	745,313	388,350	57,346	19,055	3,556,703
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65–74 years		MC	IR	OR	R	VR	Total
Migration to	MC	755,789	16,984	1,421	294	121	774,608
	IR	18,274	244,392	13,255	481	91	276,494
	OR	1,446	12,721	111,014	3,311	157	128,649
	R	204	333	3,200	9,887	621	14,245
	VR	55	36	102	604	2,964	3,760
	Total	775,767	274,466	128,992	14,578	3,954	1,197,757
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75+ years		MC	IR	OR	R	VR	Total
Migration to	MC	542,278	10,878	973	166	55	554,350
	IR	11,342	163,454	8,167	233	33	183,229
	OR	919	7,881	71,837	1,958	71	82,666
	R	112	193	1,900	5,683	310	8,198
	VR	15	17	59	299	1,525	1,914
	Total	554,665	182,423	82,935	8,339	1,995	830,358

Note: Cells indicating migration towards less remote areas are shaded.
Source: ABS 1996 Census.

2.3.4 Fertility

Summary of findings

In the period 1999–2001, overall birth rates were higher for women in regional and remote areas than for those in Major Cities. Rates in Inner and Outer Regional, Remote and Very Remote areas were, respectively, 1.03, 1.14, 1.35 and 1.47 times those in Major Cities.

Higher regional and remote area birth rates were a consequence of substantially higher rates in young women, especially in remote areas, and slightly lower birth rates in older women.

Birth rates for 15–19-year-olds were up to twice as high in regional areas, and 3 and 7 times as high in Remote and Very Remote areas as in Major Cities. Rates for 20–29-year-old women in regional and remote areas were about 1.5 times those in Major Cities, and rates for women older than this were between 0.7 and 0.9 times those in Major Cities.

Nationally, most births (93%) were to women aged 20–39 years, with 5% to women under 20 years. However, the percentage of births to younger women increases with remoteness, and is particularly high in Very Remote areas, where 17% of all births were to women under 20 years.

Indigenous women had higher rates of fertility than non-Indigenous women, and were more likely to give birth when under 20 years. These observations help explain the results in remote areas, where Indigenous people constitute a large proportion of the population.

Background

Fertility impacts on health services and on poverty. Teenage fertility can have an adverse impact on life opportunities for parents and their children, and risks surrounding birth are greater for very young and older mothers.

Comparison of birth rates and access to obstetricians/gynaecologists may be pertinent to the health of mothers and babies, and access to birth control advice.

The accuracy of the Indigenous identifier prevents regional comparison of births for Indigenous and non-Indigenous women.

Detailed results

Table 2.3.4.1: Ratio of the number of observed births to the expected number if 1999–2001 Major Cities rates had occurred in each ASGC Remoteness Area, 1999–2001

Age of mother	MC	IR	OR	R	VR
15–19 ^(a)	1.00	1.59	2.12	3.30	7.05
20–29	1.00	1.44	1.56	1.67	1.59
30–39	1.00	0.88	0.88	0.94	0.80
40–44 ^(b)	1.00	0.73	0.72	0.87	0.86
Total	1.00	1.03	1.14	1.35	1.47

(a) The small number of births to mothers under 15 years have been included in this age group.

(b) The small number of births to mothers 45 years and over have been included in this age group.

Source: ABS births data, 1999–2001.

The total number of births presented here for the years 1999–2001 does not agree with the totals published by ABS (ABS 1999–2001). The difference (of around 550–700 births in each

year) is due to births to women whose place of usual residence was overseas or undefined (pers. comm. Genevieve Heard, ABS).

In the period 1999–2001, women in Inner Regional, Outer Regional, Remote and Very Remote areas were, respectively, 1.03, 1.14 times, 1.35 times and 1.47 times as likely to give birth as their counterparts in Major Cities.

Women aged 15–19 years in Inner and Outer Regional areas were, respectively, 1.59 and 2.12 times as likely to give birth as those in Major Cities. Women in this age group in Remote and Very Remote areas were much more likely (3.30 and 7.05 times as likely) to give birth than those in Major Cities.

Women aged 20–29 in regional and remote areas were about 1.5 times as likely to give birth in 1999–2001 as their counterparts in Major Cities, and those aged 30 years or over were between 0.7 and 0.9 times as likely as their counterparts in Major Cities.

Table 2.3.4.2: Average annual number of births, by age of mother, by ASGC Remoteness Area, 1999–2001

Age of mother	MC	IR	OR	R	VR	Australia
15–19 ^(a)	5,847	2,974	1,830	404	562	11,617
20–29	72,577	24,100	13,779	2,753	1,706	114,915
30–39	81,521	19,694	10,376	1,972	916	114,477
40–44 ^(b)	4,832	1,115	543	104	49	6,642
Total	164,776	47,883	26,527	5,233	3,232	247,652

(a) The small number of births to mothers under 15 years have been included in this age group.

(b) The small number of births to mothers 45 years and over have been included in this age group.

Source: ABS births data, 1999–2001.

Most births (93%) occur in women aged 20–39, with 5% in women younger than 20 years (Table 2.3.4.2). In Very Remote areas, 17% of all births are to women under 20 years.

Age-specific birth rates (Table 2.3.4.3) mirror the ratios for observed and expected numbers of births (Table 2.3.4.1), but they also express the absolute rate of birth for each age group in each area.

Table 2.3.4.3: Age-specific birth rate, by ASGC Remoteness Area, 1999–2001

Age of mother	MC	IR	OR	R	VR	Australia
Rate per 1,000 women						
15–19 ^(a)	14	21	29	45	95	18
20–29	74	106	117	128	118	84
30–39	81	69	70	76	65	77
40–44 ^(b)	10	7	7	9	9	9
Total (crude rate)	57	60	66	76	81	59

(a) The small number of births to mothers younger than 15 years have been included in this age group.

(b) The small number of births to mothers 45 years and over have been included in this age group.

Source: ABS births data, 1999–2001.

For the period 1998–2000, Indigenous fertility was estimated to be at least 2.14 babies per woman which compares with 1.73 babies for all Australian women. However, due to under-identification issues, the difference is likely to be greater (ABS & AIHW 2003).

During the period 1998–2000, 21.7% of Indigenous babies were born to women under 20 years, compared with 4.5% for non-Indigenous women (ABS & AIHW 2003). These previously published statistics help to explain the higher overall birth rates and higher proportions of babies born to younger women in remote (especially Very Remote) areas, where Indigenous people constitute a large proportion of the population.

2.3.5 Community safety

Summary of findings

The death rate due to interpersonal violence is used here as an indicator of the general level of violence in each area.

Annually in the period 1997–99, interpersonal violence was responsible for the deaths of 319 people (214 males and 105 females): 112 of these people had been living in areas outside Major Cities. Of these 319 deaths, 26 were of Indigenous people living in South Australia, Western Australia, the Northern Territory and Queensland.

Of the 6 average annual deaths of 0–4-year-olds from this cause outside Major Cities, 2 were of Indigenous children from South Australia, Western Australia, the Northern Territory and Queensland.

There were fewer (0.8 times as many deaths of males in Inner Regional areas) or similar numbers of deaths than expected due to interpersonal violence in regional areas. However, there were substantially more than expected (2.9 and 4–9 times as many) in Remote and Very Remote areas, although the actual numbers of deaths were relatively small.

There were about 6 and 11 times as many deaths of Indigenous males and females as expected from interpersonal violence.

For non-Indigenous people in most of the areas, death rates due to interpersonal violence were similar to the rate in Major Cities, but for males in Inner Regional areas the rate was 0.8 times the rate in Major Cities (that is, lower).

Annually, there were 9 ‘excess’ deaths due to interpersonal violence outside Major Cities (10 fewer and 0, 6 and 13 ‘excess’ deaths in the four areas). A substantial proportion of the ‘excess’ deaths were of Indigenous people.

Background

Homicide, including the deaths of young children, is an extreme indicator of community safety and function. This indicator is likely to be correlated to overall levels of violence and abuse within each community. High levels of violence also generate fear and reduce opportunities for social interaction, significantly reducing the quality of life.

National child protection data (which might otherwise provide a good overview of child physical abuse) suffers from a number of problems that are likely to invalidate comparison. These include different case definitions in each state, the unavailability of a geographical identifier in the national data set, a different probability of notification in more remote areas and issues relating to the identification of Indigenous children.

The use of rates of hospital separation due to neglect and injury from interpersonal violence has been considered as an alternative or supporting indicator. However, different admission policies between hospitals may affect the validity of analysis based on such data.

The ‘place of occurrence’ field would allow reporting for interpersonal violence at home and interpersonal violence in the community, but information on place of occurrence is available only for a proportion of records and so has not been used in this analysis.

The ICD-10 codes (X85–Y09, Y87.1, Y35–Y36, Y89.0 and Y89.1) used to define the data describe the killing of one person by another in an act of homicide (including situations in which the intent may have been to kill the person, and those where it may not).

Material in this indicator is largely taken from the 2003 AIHW report *Rural, Regional and Remote Health: A Study on Mortality* (AIHW 2003a).

Detailed results

Annually, there were 142, 33, 23, 7 and 9 deaths of males and 65, 18, 10, 5 and 7 deaths of females in Major Cities, Inner and Outer Regional, Remote and Very Remote areas (the five areas), respectively, as a result of interpersonal violence. Of these, 12, 3, 2, 1 and 1 were 0–4 years old.

There were fewer or similar numbers of deaths than expected due to interpersonal violence in regional areas, but substantially more than expected in Remote and Very Remote areas, although the actual numbers of deaths were relatively small (Table 2.3.5.1).

- There were 0.8 times as many deaths of males due to interpersonal violence as expected in Inner Regional areas, and similar numbers to that expected in Outer Regional areas. For females, there were about as many deaths as expected in these regional areas.
- In remote areas, there were more deaths than expected, with 4.1 times as many deaths of males in Very Remote areas, and 2.9 and 9.1 times as many deaths of females as expected in Remote and Very Remote areas, respectively.
- There were, respectively, about 6 and 11 times as many deaths as expected of Indigenous males and females due to interpersonal violence.
- In the period 1997–99, there were 0.7, 1.0, 1.4 and 3.5 times as many deaths of 0–4-year-old children as expected in the five areas, respectively, due to interpersonal violence. However, none of these ratios are significantly different from 1.0

In Major Cities, death rates for males and females tended to be relatively low, with rates highest for males between ages 25 and 44 years (3.5–4.5 per 100,000 per year). Rates were lower for females (maximum of 1.6 per 100,000 per year), the pattern roughly following that for males.

There were –8 (i.e. 8 fewer deaths than expected), 0, 3 and 7 ‘excess’ deaths of males annually from interpersonal violence, and –2, 0, 3 and 7 ‘excess’ deaths of females annually in the four areas outside Major Cities. Of the relatively small ‘excess’ that occurred in Remote and Very Remote areas, almost all were of people aged less than 50 years.

Indigenous population

In the period 1997–99, there were 26 deaths per year of Indigenous people (13 males and 13 females) as a result of interpersonal violence in South Australia, Western Australia, the Northern Territory and Queensland. There would also have been a number of deaths due to this cause in the other jurisdictions where identification is less reliable. Of these 26 deaths, there were 23 (11 males and 12 females) more than expected.

There were about 6 and 11 times as many deaths of Indigenous males and females as expected due to this cause (Table 2.3.5.2). For males, 55% of the ‘excess’ occurred among those aged 25–44 years, and about 20% each among those aged 15–24 and 45–64 years. For females, about 65% of the ‘excess’ was among those 25–44 years, about 20% among those aged 15–24 years and 10% among those aged 45–64 years. A little less than 10% of the ‘excess’ occurred in Indigenous children under 5 years. Overall, there were between 5 and 20 times as many deaths as expected of Indigenous males and females in individual age groups between 15 and 64 years.

Table 2.3.5.1: The ratio of observed deaths to those expected^(a) as a result of interpersonal violence, by sex, 1997–99

Age group (years)	Male					Female				
	MC rate	IR	OR	R	VR	MC rate	IR	OR	R	VR
		Standardised mortality ratio					Standardised mortality ratio			
0–4	2	0.81	0.35	0.30	2.24	1	0.49	2.06	3.17	5.42
5–14	1	0.33	0.29	0.00	2.63	<1	2.74	1.33	0.00	0.00
15–24	2	1.17	1.12	2.02	*6.05	2	0.81	0.64	3.18	4.31
25–44	4	*0.72	0.92	1.62	*3.42	1	1.01	1.03	*3.12	*15.07
45–64	2	0.77	1.21	2.56	*6.29	1	1.09	0.68	2.10	*8.11
65–74	1	1.09	1.88	0.62	0.00	1	0.32	0.84	6.66	0.00
75+	1	1.14	1.95	0.00	0.00	1	0.63	2.19	0.00	0.00
Total	..	*0.80	1.00	1.64	*4.06	..	0.91	1.02	*2.94	*9.13

* Significantly different from 1 (that is, rates are significantly different from those in Major Cities).

(a) Expected deaths were calculated on the basis that Major Cities rates applied to the population in each ASGC Remoteness Area.

Notes

1. Caution should be used when making inferences about ratios that are not significantly different from 1.
2. MC rates are expressed as deaths per 100,000 population per year. Total (crude) MC rate is largely meaningless and is not included.
3. Although the table allows comparison of deaths between areas for each sex, it does not allow comparison between the sexes or age groups.

Source: AIHW National Mortality Database.

Non-Indigenous population

There were 136, 31, 19, 4 and 3 deaths of non-Indigenous males per year and 64, 17, 6, 2 and 1 of non-Indigenous females in the five areas, respectively, as a result of interpersonal violence.

Death rates due to interpersonal violence were similar across most of the areas, but for males in Inner Regional areas the rate was 0.8 times the Major Cities rate (Table 2.3.5.2).

- For males there were 0.8 times as many deaths of non-Indigenous males as expected in Inner Regional areas, and about as many as expected in the other areas due to this cause.
- There were about as many deaths of non-Indigenous females as expected in each of the areas due to this cause.

Age-specific rates for non-Indigenous people living in Major Cities were similar to those for the total population living in Major Cities.

There were -8, -2, 1 and 2 'excess' deaths from interpersonal violence of non-Indigenous males annually, and -2, -3, 1 and 1 'excess' deaths of non-Indigenous females annually in the four areas outside Major Cities. There were fewer 'excess' deaths for most ages under 60 years in regional areas, with little or no 'excess' in the older age groups.

Table 2.3.5.2: The ratio of observed deaths to those expected^(a) as a result of interpersonal violence, Indigenous and non-Indigenous people, 1997–99

Age group (years)	Male						Female					
	MC rate	Non-Indigenous				Indigenous	MC rate	Non-Indigenous				Indigenous
		IR	OR	R	VR			IR	OR	R	VR	
		Standardised Mortality ratio						Standardised Mortality ratio				
0–4	2	0.74	0.18	0.00	0.00	3.7	1	0.50	1.78	0.47	7.83	5.3
5–14	1	0.38	0.35	0.00	6.48	1.5	<1	2.78	0.00	0.00	0.00	6.7
15–24	2	1.25	1.02	2.13	2.68	*5.4	2	0.77	0.22	0.01	0.00	*6.6
25–44	3	*0.68	0.79	0.68	1.94	*6.2	1	1.03	0.63	1.93	2.06	*20.0
45–64	2	0.74	1.17	2.67	2.24	*9.6	1	1.10	0.52	1.02	3.94	*11.1
65–74	1	1.10	1.90	0.64	0.00	0.0	1	0.32	0.85	6.95	0.00	0.0
75+	1	1.14	1.96	0.00	0.00	0.0	1	0.64	2.21	0.00	0.00	0.0
Total	..	*0.79	0.92	1.20	2.10	*5.6	..	0.91	0.71	1.39	2.40	*11.3
0–64	..	*0.76	0.86	1.23	2.18	*5.7	..	0.99	0.61	1.10	2.59	*11.6

* Significantly different from 1 (that is, rates are significantly different from those for non-Indigenous people in Major Cities).

(a) Expected deaths were calculated on the basis that Major Cities non-Indigenous rates applied to the non-Indigenous population in each ASGC Remoteness Area and to the Indigenous population.

Notes

1. Caution should be used when making inferences about ratios that are not significantly different from 1.
2. MC rates for non-Indigenous persons are expressed as deaths per 100,000 population per year. Total (crude) MC rate is largely meaningless and is not included.
3. Ratios for Indigenous people are for SA, WA, NT and Qld.
4. Although the table allows comparison of deaths between areas for each sex, it does not allow comparison between the sexes or age groups.
5. SMRs calculated for non-Indigenous persons from Remote and Very Remote areas should be treated with caution.

Source: AIHW National Mortality Database.

2.3.6 Risk taking

Summary of findings

Males in Inner and Outer Regional and remote (Remote and Very Remote) areas were, respectively, 1.04, 1.07 and 1.19 times as likely and females from these areas were, respectively, 0.83, 1.03 and 1.12 times as likely to report engaging in personally risky behaviour as their counterparts from Major Cities.

Males in Inner and Outer Regional, and remote (Remote and Very Remote) areas were, respectively, 1.29, 1.17 and 1.08 times as likely and females from these areas were, respectively, 1.36, 1.19 and 1.25 times as likely to report engaging in socially risky behaviour as their counterparts in Major Cities.

Personally risky behaviour is defined here as working, swimming, boating, driving or operating hazardous machinery in the past 12 months while intoxicated with alcohol or an illicit drug.

Socially risky behaviour is defined here as creating a public disturbance, damaging property, stealing or verbally or physically abusing someone in the past 12 months while intoxicated with alcohol or an illicit drug.

Background

Are people who live in regional and remote areas more likely to take health risks?

Risk-taking behaviour increases the likelihood of accident or of chronic disease.

Understanding inter-regional differences in the prevalence of risk taking behaviour could be useful in developing strategies to reduce rates of accident or chronic disease in non-metropolitan areas.

Data presented here are from the 2001 AIHW National Drug Strategy Household Survey (NDSHS), which is the most comprehensive survey concerning licit and illicit drug use ever undertaken in Australia. Almost 27,000 people aged 14 years and over provided information on their drug use patterns, attitudes and behaviours, including their risk-taking behaviour. This survey asked respondents whether they had engaged in certain behaviours in the previous 12 months while intoxicated with alcohol or an illicit drug.

Respondents self-reported working, swimming, boating, driving or operating hazardous machinery in the past 12 months while intoxicated with alcohol or an illicit drug – primarily a risk to the person concerned (personally risky) although others may also be harmed. They also self-reported creating a public disturbance, damaging property, stealing or verbally or physically abusing someone in the past 12 months, while intoxicated with alcohol or an illicit drug – primarily a risk to others (socially risky) although not without some personal risk.

The sample was based on households, therefore homeless and institutionalised persons were not included in the survey. Previous surveys conducted in 1985, 1988, 1991, 1993, 1995 and 1998 were much smaller. Details of Indigenous status were not available, and so analysis has been restricted to the total population only.

Standard errors were not provided with the data; consequently it is not possible to comment on the statistical significance of the results. In the absence of standard errors, the reliability of any of the estimates, particularly those for remote areas, is unclear. Moreover, the estimate for remote areas is based on smaller numbers than the estimates for either the Inner or Outer Regional areas, and is consequently less reliable than in these other areas.

Crude percentages are presented as descriptive statistics, and age-standardised percentages can be used to compare the probability of engaging in risky behaviour in each area. The rate ratios compare the age-standardised percentages in each area with those in Major Cities. Age standardisation is by the direct method (see Methods section – page 302).

Detailed results

Table 2.3.6.1: Proportion of the population aged 14 years and over who undertook personally risky behaviour^(a) while under the influence of alcohol or other drugs, 2001

	MC	IR	OR	R & VR	Total
	(per cent)				
Males					
14–19 years	21.0	21.5	20.1	28.8	21.5
20–29 years	43.6	48.3	46.6	56.5	45.7
30–39 years	31.7	35.2	39.4	36.7	33.4
40 years and over	16.8	15.4	16.1	17.2	16.5
Total	24.8	24.9	25.8	29.2	25.3
Age-standardised rate ^(b)	25.7	26.8	27.5	30.5	26.4
Rate ratio ^(c)	1.00	1.04	1.07	1.19	1.03
Females					
14–19 years	16.5	13.4	16.1	23.4	16.4
20–29 years	24.6	21.7	29.7	25.4	24.7
30–39 years	14.9	14.9	16.1	16.7	15.1
40 years and over	6.9	4.3	5.1	7.4	6.2
Total	12.5	9.6	11.8	14.7	12.0
Age-standardised rate ^(b)	13.2	11.0	13.6	14.8	12.9
Rate ratio ^(c)	1.00	0.83	1.03	1.12	0.98
Persons					
14–19 years	18.8	17.4	18.2	25.8	19.0
20–29 years	34.1	35.9	38.4	40.8	35.3
30–39 years	23.1	25.3	26.4	26.2	24.1
40 years and over	11.7	9.7	10.2	12.5	11.2
Total	18.6	17.2	18.5	21.9	18.5
Age-standardised rate ^(b)	19.4	19.1	20.1	22.6	19.6
Rate ratio ^(c)	1.00	0.98	1.04	1.16	1.01

(a) Personally risky behaviour includes one or more of the following behaviours in the past 12 months: went to work; went swimming; operated a boat; drove a motor vehicle; operated hazardous machinery.

(b) Rate has been directly age-standardised to the 1991 Australian population for the four age groups.

(c) Rate ratio in this table is the percentage in the area divided by the percentage in Major Cities.

Source: 2001 National Drug Strategy Household Survey.

In 2001, 25% of males and 12% of females aged 14 years and over had gone to work, gone swimming, operated a boat, driven a motor vehicle or operated hazardous machinery (referred to hereafter as 'personally risky behaviour') while under the influence of alcohol or other drugs during the previous 12 months.

Males in Inner and Outer Regional, and remote (Remote and Very Remote) areas were, respectively, 1.04, 1.07 and 1.19 times as likely and females from these areas were, respectively, 0.83, 1.03 and 1.12 times as likely to report engaging in personally risky behaviour as their counterparts from Major Cities. Standard errors for the data were not available, as noted previously, and it has not been possible to calculate the level of significance for these estimates.

Table 2.3.6.2: Proportion of the population aged 14 years and over who undertook socially risky behaviours^(a) while under the influence of alcohol or other drugs, 2001

	MC	IR	OR	R & VR	Total
	(per cent)				
Males					
14–19 years	26.2	24.8	25.1	25.7	25.8
20–29 years	19.1	29.4	24.8	24.1	21.8
30–39 years	8.2	10.5	10.4	11.1	9.0
40 years and over	3.3	4.6	3.8	1.9	3.5
Total	9.7	11.7	10.8	10.0	10.2
Age-standardised rate ^(b)	10.2	13.2	11.9	11.0	11.0
Rate ratio ^(c)	1.00	1.29	1.17	1.08	1.08
Females					
14–19 years	16.8	23.6	21.4	17.3	18.6
20–29 years	9.9	13.6	11.5	13.0	10.9
30–39 years	3.4	5.6	4.3	5.9	4.1
40 years and over	1.4	1.2	1.2	1.6	1.3
Total	4.9	6.1	5.1	6.6	5.3
Age-standardised rate ^(b)	5.3	7.2	6.3	6.6	5.9
Rate ratio ^(c)	1.00	1.36	1.19	1.25	1.11
Persons					
14–19 years	21.7	24.2	23.3	21.0	22.3
20–29 years	14.5	22.1	18.4	18.5	16.4
30–39 years	5.7	8.1	7.0	8.4	6.5
40 years and over	2.3	2.9	2.4	1.7	2.4
Total	7.3	8.9	7.8	8.3	7.7
Age-standardised rate ^(b)	7.8	10.3	9.0	8.7	8.4
Rate ratio ^(c)	1.00	1.32	1.15	1.12	1.08

(a) Socially risky behaviour includes one or more of the following behaviours in the past 12 months: created a public disturbance or nuisance; caused damage to property; stole money, goods or property, verbally abused someone, physically abused someone.

(b) Rate has been directly age-standardised to the 1991 Australian population for the four age groups.

(c) Rate ratio in this table is the percentage in the area divided by the percentage in Major Cities.

Source: 2001 National Drug Strategy Household Survey.

For males, the greatest inter-regional differences occurred in the 20–29-year age group, followed by the 30–39-year age group; for females, the greatest inter-regional differences were evident in the 20–29-year age group.

In 2001, 10% of males and 5% of females aged 14 years and over had engaged in socially risky behaviour (specifically creating a public disturbance or nuisance, caused damage to property, stealing money, goods or property, verbally or physically abusing someone) while under the influence of alcohol or other drugs during the previous 12 months.

Males in Inner and Outer Regional, and remote (Remote and Very Remote) areas were, respectively, 1.29, 1.17 and 1.08 times as likely and females from these areas were, respectively, 1.36, 1.19 and 1.25 times as likely to report engaging in socially risky behaviour as their counterparts in Major Cities. Standard errors for the data were not available, and it has not been possible to calculate the level of significance for these estimates.

Males from the youngest age group were the most likely to engage in socially risky behaviour, but the greatest inter-regional differences occurred in the 20–29-year age group, followed by the 30–39-year age group. Females from the youngest age group were the most likely to engage in socially risky behaviour, and it was this age group that exhibited the greatest inter-regional differences, with those from Inner and Outer Regional areas being, respectively, 1.4 and 1.3 times as likely to engage in such behaviour. There were also substantial inter-regional differences in the percentage of 20–29 and 30–39-year-old females engaging in this behaviour.

2.3.7 Tenure

Summary of findings

In 2001, households in regional and Remote areas (40–42%) were about as likely to own their dwellings as households in Major Cities (40%) and those in Very Remote areas (31%) were less likely to own them.

Households in Inner Regional areas (28%), were about as likely to be purchasing their dwellings as those in Major Cities (27%), but those in Outer Regional (23%), Remote (17%) and Very Remote (8%) areas were less likely to be purchasing theirs.

Households in Inner Regional areas (26%) were slightly less likely to be renting than those in Major Cities (28%), and those in Outer Regional (29%), Remote (34%) and Very Remote (44%) areas were more likely to be doing so.

Indigenous households were less likely to own or be purchasing their dwelling, and more likely to be renting than non-Indigenous households. The likelihood of Indigenous households owning or purchasing their dwelling was about 40% in Major Cities and regional areas, decreasing to 27% and 10% in Remote and Very Remote areas. Correspondingly, the percentage renting increased from about 50% in Major Cities and Inner Regional areas to 80% in Very Remote areas.

About 40% of non-Indigenous households in each Remoteness area owned their own dwelling, the percentage purchasing decreased with remoteness outside Inner Regional areas, whereas the percentage renting correspondingly increased slightly.

Some households, particularly those in remote areas, did not state their tenure. However, this is unlikely to substantially alter the pattern described here, although it does make comparisons between censuses less certain.

Background

Home ownership provides families with a greater sense of control over their own lives and a greater sense of permanency. Renting can be a practical and economic alternative to purchasing, especially in regional or remote areas, where a new job may require relocating to a distant town.

Data from the 1996 and 2001 ABS Censuses have been used to describe the percentage of households in each tenure category (those who own outright, those still purchasing, those who rent, and those in 'other' categories) in each area:

- 'purchasing' includes houses still under mortgage and dwellings being purchased under a rent/buyback scheme
- 'owning' includes dwellings owned outright and those being occupied under a life-tenure scheme
- 'renting' includes dwellings rented or being occupied rent-free
- 'other' includes other tenure types
- 'not stated/not applicable'.

In 2001, 4%, 4%, 5%, 7% and 12% of dwellings in Major Cities, Inner Regional, Outer Regional, Remote and Very Remote areas, respectively, were classified as having a tenure type of 'not stated or not applicable', and in 1996, 2%, 2%, 2%, 3% and 8% of dwellings in those areas were so recorded. This uneven distribution of unstateds may affect inter-regional

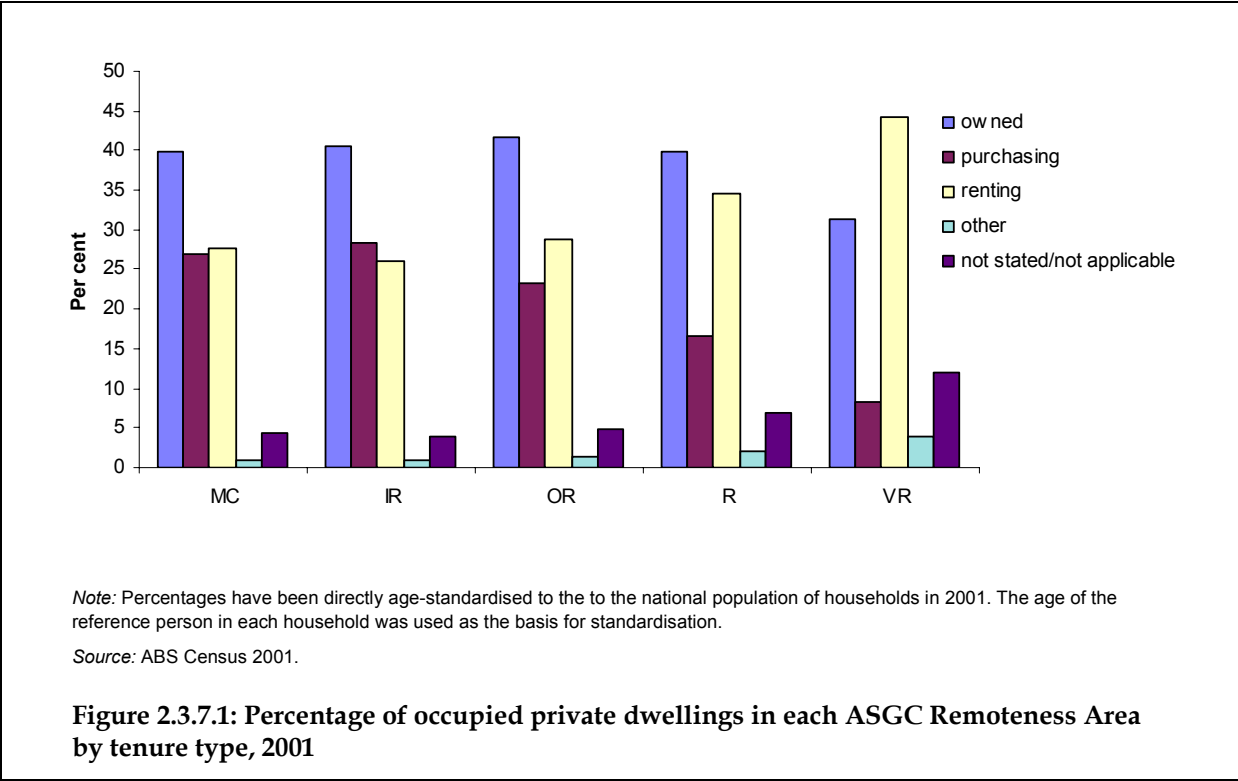
comparisons, especially those involving Very Remote areas. It is unclear whether the records 'not stated/not applicable' are evenly distributed between the three categories 'owned', 'being purchased' and 'rented'. These values have the potential to substantially affect the inter-regional or inter-census comparison of the percentage of dwellings owned, being purchased and rented, because the percentages of responses in this category are substantially higher in remote areas than in the other areas.

Between 1996 and 2001, the total number of dwellings increased by 7%, 8%, 6%, 13% and 24%, respectively, in Major Cities, Inner Regional, Outer Regional, Remote and Very Remote areas.

Because home ownership is strongly age-dependent (older people have had greater opportunity to purchase a dwelling), and to allow for the different age structures of the five Remoteness areas, percentages have been standardised by the age of the reference person in each dwelling using national age-specific percentages as the standard (direct age-standardisation – see statistical methods, page 302).

The crude percentage has also been calculated. The standardised percentage describes the probability of renting, owning and purchasing, and the crude percentage describes the actual percentage who are renting, owning and purchasing in an area.

Detailed results



Data from the 1991 Census have not been used due to differences between the nature of occupancy classification used in the 1991 Census and the tenure type classification used in the 1996 and 2001 Censuses.

Crude percentages

Compared with Major Cities, a higher percentage of dwellings in regional areas and a lower percentage in Very Remote areas were owned; a lower percentage were owned in Remote

areas (Table 2.3.7.1). Of dwellings in Major Cities, 41% were owned by the occupants, compared with 44% and 45% in Inner and Outer Regional areas, 36% in Remote areas and 26% in Very Remote areas.

A higher percentage of dwellings in remote areas were rented than in the other areas (29%, 26%, 30%, 41% and 52% of dwellings in the five areas).

Age-standardised percentages

Age-standardised percentages (Table 2.3.7.1 and Figure 2.3.7.1) show that households in regional and Remote areas (40–42%) were about as likely to own their dwellings as those in Major Cities (40%), and those in Very Remote areas (31%) were less likely to own them.

Households in Inner Regional areas (28%) were as likely as those in Major Cities (27%) to be purchasing their dwelling, whereas those in Outer Regional (23%), Remote (19%) and Very Remote (8%) areas were less likely.

Table 2.3.7.1: Number of occupied private dwellings in each ASGC Remoteness Area by tenure type, all persons, 2001

	MC	IR	OR	R	VR	Total
(number)						
Owned	1,825,677	630,034	320,564	45,898	16,801	2,838,974
Being purchased	1,272,319	401,917	171,023	21,265	5,054	1,871,578
Rented	1,297,669	368,415	214,304	44,394	26,912	1,951,694
Other	43,061	14,214	9,815	2,601	2,292	71,983
Not stated/not applicable	202,982	57,997	37,277	8,493	7,113	313,862
Total	4,438,726	1,414,580	715,706	114,158	51,059	6,734,229
(crude per cent)						
Owned	41	44	45	36	26	42
Being purchased	27	27	22	19	13	26
Rented	29	26	30	41	52	29
Other	1	1	1	1	2	1
Not stated/not applicable	2	2	2	3	8	2
Total	100	100	100	100	100	100
(age-standardised per cent)						
Owned	40	41	42	40	31	40
Being purchased	27	28	23	17	8	27
Rented	28	26	29	34	44	28
Other	1	1	1	2	4	1
Not stated/not applicable	4	4	5	7	12	4
Total	100	100	100	100	100	100

Note: Age-standardised percentages have been directly age-standardised to the national population of households in 2001. The age of the reference person in each household was used as the basis for standardisation.

Source: ABS Census 2001.

Table 2.3.7.2: Percentage of non-Indigenous and Indigenous households^(a) in each ASGC Remoteness Area by tenure type, 2001

	MC	IR	OR	R	VR	Total
	(per cent)					
Non-Indigenous						
Owned	40	41	43	42	38	41
Being purchased	27	29	24	17	10	27
Rented	27	25	28	32	34	27
Other	1	1	1	2	4	1
Not stated/not applicable	4	4	5	7	13	4
Total	100	100	100	100	100	100
Indigenous						
Owned	21	23	20	16	7	19
Being purchased	20	20	16	11	3	17
Rented	52	51	56	62	80	56
Other	1	1	1	2	3	1
Not stated/not applicable	6	5	7	9	8	6
Total	100	100	100	100	100	100

(a) An Indigenous household is a family household where any family in the household is defined as an Indigenous family or a lone-person household where the lone person is of Aboriginal and/or Torres Strait Islander origin. An Indigenous family is one where either the reference person and/or spouse/partner is of Aboriginal and/or Torres Strait Islander origin.

Note: Age-standardised percentages have been directly age-standardised to the national population of households in 2001. The age of the reference person in each household was used as the basis for standardisation.

Source: ABS Census 2001.

Age-standardised rates also show that households in Inner Regional areas (26%) were slightly less likely to be renting their dwelling as those in Major Cities (28%), and those in Outer Regional (29%), Remote (34%) and Very Remote (44%) areas were more likely to be doing so.

The percentages of households owned, being purchased and rented are likely to be greater than described here, particularly in Remote and Very Remote areas, where, respectively, 7% and 12% of households did not state their tenure.

Because the proportions of households in Major Cities, Inner Regional and Outer Regional areas having unstated tenure are similar (Table 2.3.7.3), comparisons between Major Cities and regional areas are unlikely to be affected. Even though the percentage of records with unstated tenure are greater in remote areas, it is clear that the percentages owning, purchasing and renting their dwelling were, respectively, lower, lower and higher in these areas than in Major Cities.

In 2001, Indigenous people were less likely to own (19%) or be purchasing (17%) their dwelling and are more likely to be renting (56%) than their non-Indigenous counterparts (41%, 27% and 27%, respectively) (Table 2.3.7.2).

Regional differences were apparent for Indigenous people. In 2001, slightly more than 40% of Indigenous households in Major Cities and Inner Regional areas owned or were purchasing their dwelling, and slightly more than 50% were renting. The percentage that owned or were purchasing their dwelling was lower in Outer Regional (36%) and especially Remote (27%) and Very Remote (10%) areas. Uncertainty about the cases in which tenure was not stated is unlikely to fundamentally alter this inter-regional pattern.

Inter-regional differences for non-Indigenous households were less apparent than for Indigenous households. Non-Indigenous households were about as likely in each area to own their dwelling (about 40%). Of non-Indigenous households in Major Cities and Inner Regional areas, 27% and 29% were purchasing their dwelling, decreasing to 24% in Outer Regional, and 17% and 10% in Remote and Very Remote areas, respectively. The percentage renting was similar in Inner (25%) and Outer (28%) Regional areas to that in Major Cities (27%), and slightly higher in Remote (32%) and Very Remote (34%) areas. Uncertainty about the cases in which tenure was not stated means there is greater opportunity to alter these inter-regional comparisons than for the Indigenous population of households, although the broad pattern is unlikely to be fundamentally altered.

Table 2.3.7.3 compares tenure in 1996 with that in 2001. However, because of the relatively small differences between the years and the relatively large numbers of dwellings for which tenure is not stated or not applicable, inferences about changes over time should be made with caution.

Table 2.3.7.3: Percentage of households in each ASGC Remoteness Area by housing tenure type, 1996 and 2001

	MC	IR	OR	R	VR	Total
	(per cent)					
Owned						
1996	43	45	46	42	32	43
2001	40	41	42	40	31	40
Being purchased						
1996	26	27	22	17	11	26
2001	27	28	23	17	8	27
Rented						
1996	28	26	29	37	47	28
2001	28	26	29	34	44	28
Other						
1996	1	1	1	1	2	1
2001	1	1	1	2	4	1
Not stated/not applicable						
1996	2	2	2	3	8	2
2001	4	4	5	7	12	4
Total						
1996	100	100	100	100	100	100
2001	100	100	100	100	100	100

Note: Age-standardised percentages have been directly age-standardised to the national population of households in 2001. The age of the reference person in each household was used as the basis for standardisation.

Source: ABS Census 1996, 2001.

2.3.8 Crowding

Summary of findings

In 2001, households in Very Remote areas were much more likely to be crowded than those in less remote areas: 3%, 2%, 2%, 3% and 14% of households were crowded, respectively, in Major Cities, Inner and Outer Regional, Remote and Very Remote areas. The higher level of crowding in Very Remote areas largely reflects the high levels of crowding in Indigenous households.

In 2001, 8%, 8%, 11%, 17% and 40% of Indigenous households were crowded in the five areas, respectively. This compares with 3%, 2%, 2%, 2% and 3% of non-Indigenous households, respectively.

The percentage of households that are crowded has decreased between 1996 and 2001 in most areas, although there has been a slight increase in Very Remote areas as a result of an increase in the number of Indigenous households.

Background

The greater the degree of crowding in households, the greater risk of communicable diseases, accidents and poor mental health (Gray 2001).

This indicator describes levels of household crowding in each of the Remoteness Areas, for Indigenous and non-Indigenous people, in 1996 and 2001.

The data have been sourced from the 1996 and 2001 ABS Censuses.

The Canadian National Occupancy Standard has been used to define crowding (Gray 2001). This standard assesses the number of bedrooms required on the basis that:

- there should be no more than two persons per bedroom
- children under 5 years of different sexes may reasonably share a bedroom
- children 5 years or over of opposite sex should not share a bedroom
- children under 18 years and of the same sex may reasonably share a bedroom
- household members 18 years or over should have a separate bedroom, as should parents or couples.

On this basis, the algorithm used to calculate the number of bedrooms required for each household was:

The number of bedrooms required = ceiling of $((1 \times \text{single adults}) + (1 \times \text{adult couples}) + (\text{children under } 5/2) + (\text{boys } 5-17/2) + (\text{girls } 5-17/2))$.

For each household, if the number of bedrooms was less than the number required, then the dwelling was defined as crowded.

The concept of crowding is complex, and may be influenced by time actually spent in the home, cultural differences and the condition of housing. Although data are presented using one single model across Australia, it can be argued that some groups may have different requirements or may use dwellings differently.

Detailed results

In 2001, about 2% of households in regional areas were crowded, compared with about 3% in Major Cities and Remote areas (Table 2.3.8.1 and Figure 2.3.8.1). This compares with 14% of households in Very Remote areas – almost entirely a consequence of crowding in Indigenous households.

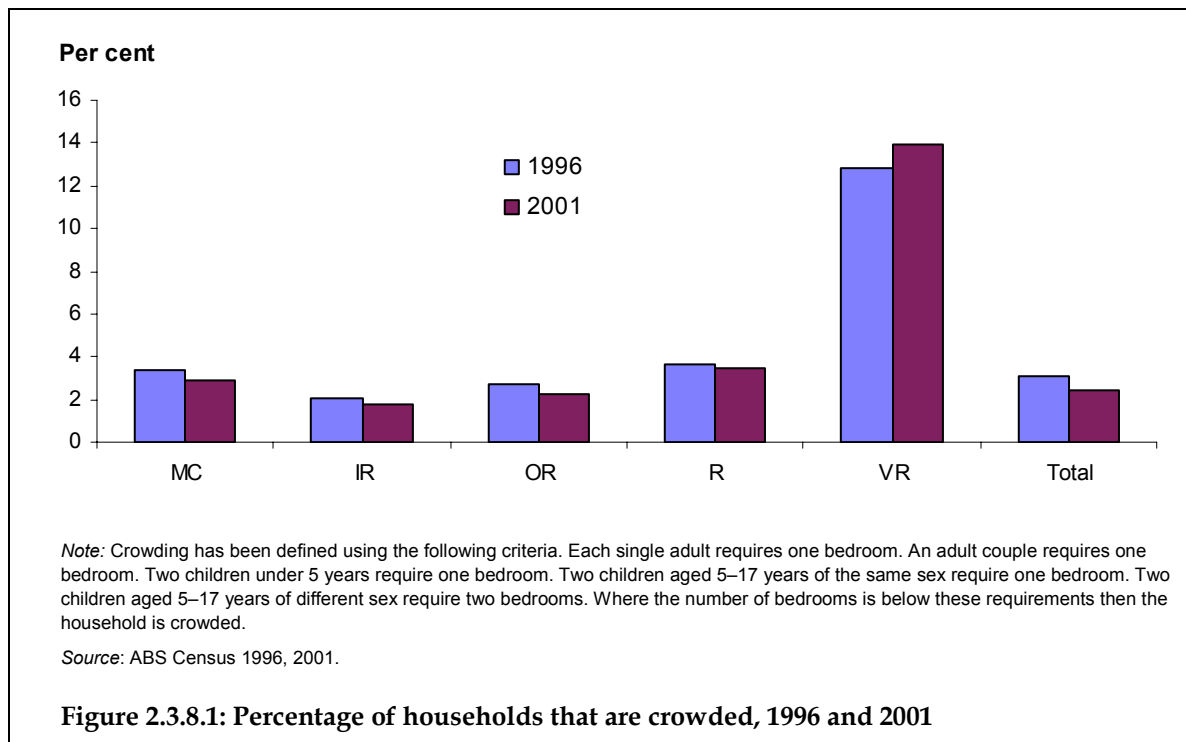
Table 2.3.8.1: Percentage of, Indigenous^(a), non-Indigenous and total households that are crowded, ASGC Remoteness Area, 1996 and 2001

	MC	IR	OR	R	VR	Total
2001			(per cent)			
Indigenous household						
Crowded ^(b)	8	8	11	17	40	12
Just right	30	28	29	30	24	29
Under-occupied ^(b)	62	64	59	53	36	59
Total	100	100	100	100	100	100
Non-Indigenous						
Crowded	3	2	2	2	3	2
Just right	20	15	16	17	20	18
Under-occupied	78	83	82	81	77	79
Total	100	100	100	100	100	100
Total						
Crowded	3	2	2	3	14	3
Just right	20	15	16	18	21	18
Under-occupied	77	83	81	78	65	79
Total	100	100	100	100	100	100
1996						
Indigenous household						
Crowded	9	9	14	19	44	14
Just right	33	31	32	32	24	32
Under-occupied	57	61	54	50	33	55
Total	100	100	100	100	100	100
Non-Indigenous						
Crowded	3	2	2	2	3	3
Just right	22	18	19	20	23	21
Under-occupied	75	80	79	78	75	76
Total	100	100	100	100	100	100
Total						
Crowded	3	2	3	4	13	3
Just right	22	18	19	21	23	21
Under-occupied	74	80	78	75	64	76
Total	100	100	100	100	100	100

(a) An Indigenous household is a household where a family within the household contains a reference person or spouse who is of Aboriginal/Torres Strait Islander origin, or a lone-person household where the lone person is of Aboriginal/Torres Strait Islander origin.

(b) Crowding and under-occupancy have been defined using the following criteria. Each single adult requires one bedroom. An adult couple requires one bedroom. Two children under 5 years require one bedroom. Two children aged 5–17 years of the same sex require one bedroom. Two children aged 5–17 years of different sex require two bedrooms. Where the number of bedrooms meet these requirements the household is just right. Where the number of bedrooms exceed these requirements the household is under-occupied. Where the number of bedrooms are below these requirements the dwelling is crowded.

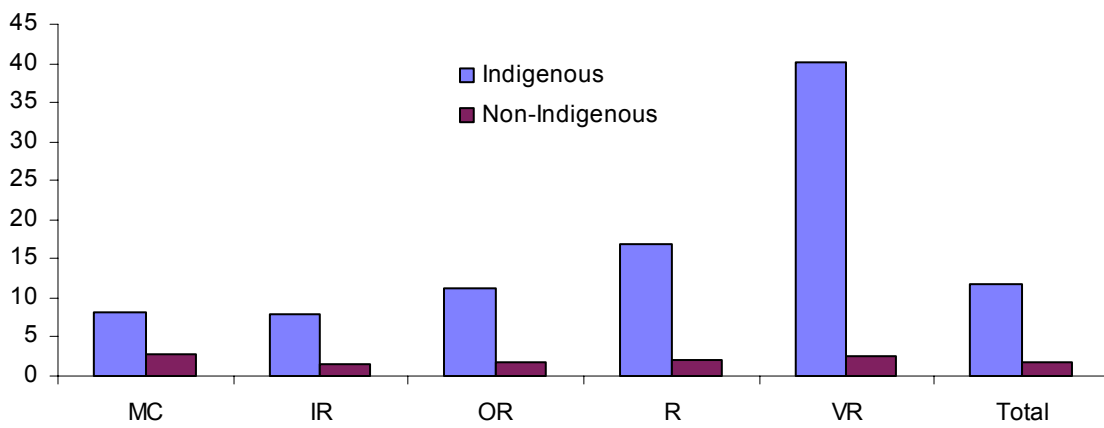
Source: ABS Census 1996, 2001.



Overall, Indigenous households (12%) were more likely to be crowded than non-Indigenous households (2.5%) (Table 2.3.8.1 and Figure 2.3.8.2). However, while there was little inter-regional difference in the percentage of non-Indigenous households that were crowded, there were substantial inter-regional differences for Indigenous households. In 2001, 8% of Indigenous households in Major Cities and Inner Regional areas were crowded, increasing with remoteness to 11%, 17% and 40%, respectively, in Outer Regional, Remote and Very Remote areas.

The percentage of houses that were crowded was lower in 2001 than in 1996 (Table 2.3.8.1 and Figure 2.3.8.1). Overall, the percentage crowded decreased from 3.1% in 1996 to 2.7% in 2001; decreases were observed in all areas, except in Very Remote areas. In Very Remote areas there was a decrease in the percentage of both Indigenous and non-Indigenous households that were crowded. However, when the increased number of Indigenous households between 1996 and 2001 is factored in, the result was a slight increase in the overall percentage that were crowded.

Per cent



Notes

1. Crowding has been defined using the following criteria. Each single adult requires one bedroom. An adult couple requires one bedroom. Two children under 5 years require one bedroom. Two children aged 5–17 years of the same sex require one bedroom. Two children aged 5–17 years of different sex require two bedrooms. Where the number of bedrooms is below these requirements then the household is crowded.
2. An Indigenous household is a household where a family within the household contains a reference person or spouse who is of Aboriginal/Torres Strait Islander origin, or a lone-person household where the lone-person is of Aboriginal/Torres Strait Islander origin.

Source: ABS Census 2001.

Figure 2.3.8.2: Percentage of Indigenous and non-Indigenous households that are crowded, 2001

2.3.9 Motor vehicles

Summary of findings

For non-Indigenous households in 2001, each motor vehicle, on average, was shared among 1.3 people of driving age. For Indigenous households there was less access: each motor vehicle was shared among 1.9 people.

For Indigenous households in Major Cities and regional areas, there were between 1.6 and 1.8 adults of driving age per motor vehicle; in Remote and Very Remote areas there were 2.2 and 4.7 adults of driving age per motor vehicle.

For non-Indigenous households in 2001, there were slightly fewer people sharing a motor vehicle in regional and remote areas than in Major Cities (i.e. access was better for those outside Major Cities than for those inside Major Cities).

Indigenous households overall (76%) were less likely to have a vehicle than non-Indigenous households (90%), and those in Remote (70%) and Very Remote (47%) areas were substantially less likely to have a vehicle than non-Indigenous households in any area.

Non-Indigenous households in regional (92%), Remote (93%) and Very Remote (90%) areas were more likely to have a vehicle than those in Major Cities (88%).

Access to private motor vehicles, as expressed both by the number of driving age adults sharing a motor vehicle and by the percentage of households having at least one car, has increased between 1991 and 2001, particularly for Indigenous people.

Background

For people who live in regional and remote areas, access to motor vehicles may be more important than for those who live in Major Cities. Public transport in regional and remote areas is either limited or non-existent, and access to work, goods, health care and other services may require people to travel large distances. For people in remote areas especially, poor access to a vehicle is likely to reduce their access to the wider range of job opportunities.

The basic data from which this indicator has been calculated are from the 1991, 1996 and 2001 ABS Censuses.

Access to motor vehicles has been examined in two ways in this indicator:

1. The ratio of the number of people of driving age and the number of motor vehicles in each household. This is a measure of mobility for individual adults.
2. The percentage of households with at least one vehicle. This is a measure of a basic level of access for people living in a household.

These measures of mobility do not take into account whether vehicles are operational.

Detailed results

For non-Indigenous households in 2001, each motor vehicle, on average, was shared among 1.3 people of driving age (Table 2.3.9.1). For Indigenous households there was less access: each motor vehicle was shared among 1.9 people.

For households in Inner Regional, Outer Regional and Remote areas, there were 1.2 adults of driving age sharing each motor vehicle, and in Very Remote areas there were 1.8 sharing each motor vehicle, compared with 1.4 in Major Cities.

This pattern is strongly influenced by levels of access in Indigenous and non-Indigenous households. For non-Indigenous households in regional and remote areas there were 1.1–1.2 adults of driving age sharing each vehicle, compared with 1.3 in Major Cities. For Indigenous households, there were 1.6–1.8 adults of driving age for each motor vehicle in Major Cities and regional areas, with 2.2 and 4.7 in Remote and Very remote areas, respectively.

These findings are similar to those for 1991 and 1996, although access has improved as ratios of adults to vehicles have tended to become lower over time.

Table 2.3.9.1: Ratio of persons aged 17 years and over in occupied private dwellings to vehicles, 1991, 1996 and 2001

	MC	IR	OR	R	VR	Total
2001						
Non-Indigenous households	1.3	1.2	1.1	1.1	1.2	1.3
Indigenous households	1.7	1.6	1.8	2.2	4.7	1.9
Total	1.4	1.2	1.2	1.2	1.8	1.3
1996						
Non-Indigenous households	1.4	1.2	1.2	1.2	1.3	1.3
Indigenous households	1.8	1.7	2.0	2.2	4.8	2.0
Total	1.4	1.3	1.2	1.2	1.7	1.3
1991						
Non-Indigenous households	1.4	1.3	1.3	1.2	1.3	1.4
Indigenous households	2.0	2.0	2.3	2.7	5.2	2.3
Total	1.4	1.3	1.3	1.3	1.7	1.4

Note: Indigenous households are households where a family within the household contains a reference person or spouse who is of Aboriginal/Torres Strait Islander origin, or a lone-person household where the lone person is of Aboriginal/Torres Strait Islander origin.

Source: ABS, 1991, 1996 and 2001 Census.

In 2001, 89% of households had at least one vehicle (88% in Major Cities, 91% in regional and Remote areas, and 79% in Very Remote areas) (Table 2.3.9.2).

Non-Indigenous households in regional (92%), Remote (93%) and Very Remote (90%) areas were more likely to have a vehicle than those in Major Cities (88%).

Indigenous households overall (76%), were less likely to have a vehicle than non-Indigenous households (90%). About 80% of Indigenous households in Major Cities and regional areas had a vehicle, whereas only 70% and 47% of Indigenous households in Remote and Very Remote areas, respectively, had a vehicle.

This is similar to the patterns in 1991 and 1996, although the percentage of households with a vehicle has increased each year, especially in Indigenous households. The percentage of non-

Indigenous households having a vehicle increased from 87% in 1991 to 90% in 2001, and that for Indigenous households increased from 67% to 76%.

Table 2.3.9.2: Proportion of households^(a) with at least one vehicle, 1991, 1996 and 2001

	MC	IR	OR	R	VR	Total
	(per cent)					
Non-Indigenous households						
2001	88	92	92	93	90	90
1996	87	90	91	92	90	88
1991	86	90	90	92	89	87
Indigenous households						
2001	80	80	77	70	47	76
1996	74	77	71	67	46	71
1991	72	74	68	63	43	67
Total						
2001	88	91	91	91	79	89
1996	87	90	90	90	79	88
1991	86	90	90	90	79	87

Note: Indigenous households are households where a family within the household contains a reference person or spouse who is of Aboriginal/Torres Strait Islander origin, or a lone-person household where the lone person is of Aboriginal/Torres Strait Islander origin.

(a) Households here include only those having at least one person aged 17 years or over.

Source: ABS, 1991, 1996 and 2001 Census.

2.3.10 Cost of living

Summary of findings

Food prices increased with remoteness – on average in 1990, they rose by 1.57% for each unit increase in the ARIA index. This means that, on average, food prices in Very Remote areas (ARIA scores between 9.08 and 12.0), were between 14% and 19% higher than in the Australian capital cities.

Fuel prices increased with remoteness. For each unit increase in the ARIA index, the cost of a litre of unleaded petrol rose by 0.95 cents on average in 2001, and for diesel the rise was 0.56 cents. On average in Very Remote areas, unleaded petrol prices were between 8.6 and 11.4 cents per litre higher than in the Australian capital cities, and diesel prices were between 5.1 and 6.7 cents per litre higher.

The cost of housing decreased with remoteness. In 2001, rents were 0.75, 0.7 and 0.6 times as high in regional, Remote and Very Remote areas as they were in Major Cities, and mortgages were 0.8 times as high in regional and Remote areas, and 0.7 times in Very Remote areas as they were in Major Cities in 2001.

Background

This indicator provides an indication of the day-to-day costs experienced by people living in regional and remote areas compared with those in Major Cities.

It is not possible to make inter-regional comparisons of the cost of living using the consumer price index (CPI), because it is based on changes in the eight capital cities, allowing comparison between the years only (not between regions).

In lieu of an overall cost-of-living statistic, this indicator compares the prices of three basic commodities:

- food
- petrol
- housing.

The last national comparison of regional food prices was conducted by the ABS in 1991 (ABS 1991). Interregional differences had been shown to be consistently similar to those reported in previous surveys, and the survey was discontinued in 1991. Some states have recently assessed regional food prices (Queensland Health 2000, Rae et al. 2001), and these are used in support of the older (1991) findings.

Retail fuel prices are monitored by Informed Sources Pty Ltd for the Australian Competition and Consumer Commission (ACCC). Aggregated data provided by Informed Sources Pty Ltd are used here to compare the inter-regional price of unleaded petrol and diesel.

The cost of housing is approximated by weekly expenditure on rent and monthly expenditure on mortgages, as reported in the ABS Census.

Food and fuel prices are reported for towns. ARIA scores (between 0 and 12) have been allocated on the basis of the average ARIA score of the SLA to which each town belongs. This method is not exact, but likely to be highly representative.

Cost-of-housing data has been 'bedroom standardised'. On the basis that the (rent or mortgage) cost of housing is related to the size of the dwelling, and on the basis that regional and remote households are, on average, larger than those in Major Cities, 'bedroom

standardising' reduces the opportunity for error associated with the larger requirements of regional and remote area housing.

Detailed results

Relative retail prices of food

This indicator compares average differences in price levels between Australian cities and towns for a common basket of basic food items, as reported in the ABS standard report *Indexes of relative retail prices of food, Australian cities and towns 1984 to 1990* (ABS 1991). The information is presented in the form of spatial price index numbers which represent the deviation from 100, the base weighted average of eight capital cities.

The index measures relative retail prices of food in the various cities and towns as at 15 May 1990. This is the last year for which data are available before the national survey was discontinued. The index numbers are compiled using actual prices of over-the-counter purchases, including any items that may have been 'on special' at that time. The retail outlets selected in each location include supermarkets, butchers, confectioners, cafes, and mixed businesses, and were chosen to be representative of the outlets from which households purchase food items.

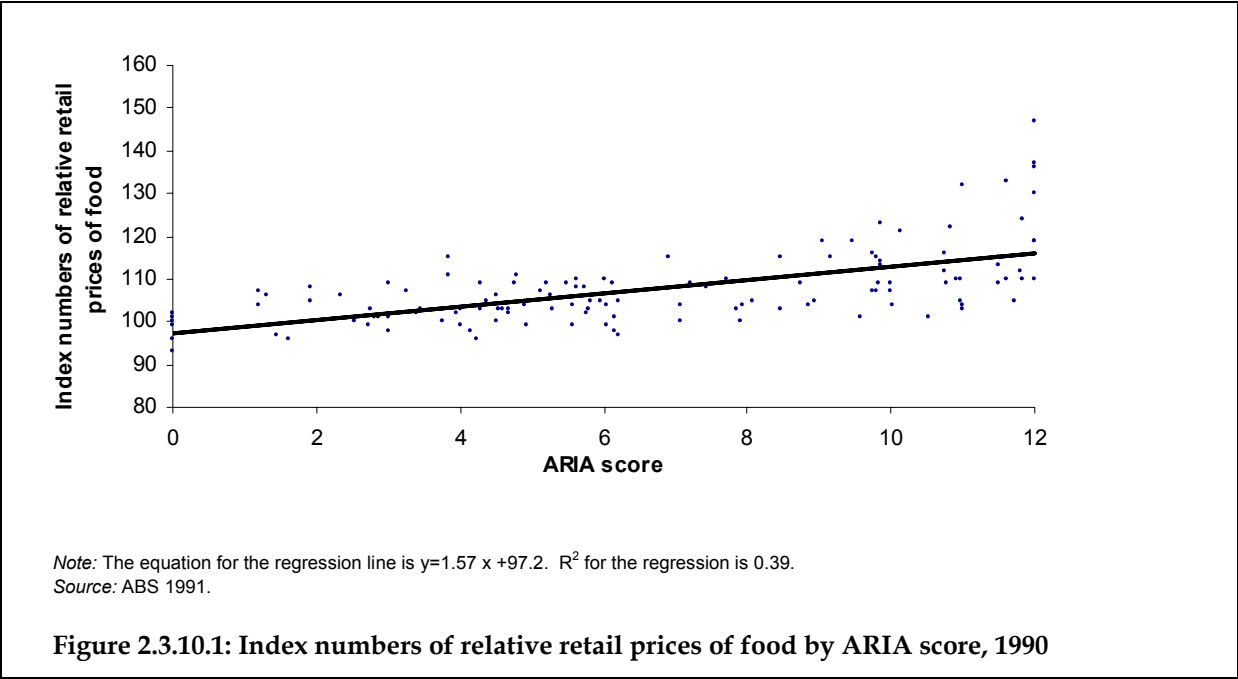


Figure 2.3.10.1: Index numbers of relative retail prices of food by ARIA score, 1990

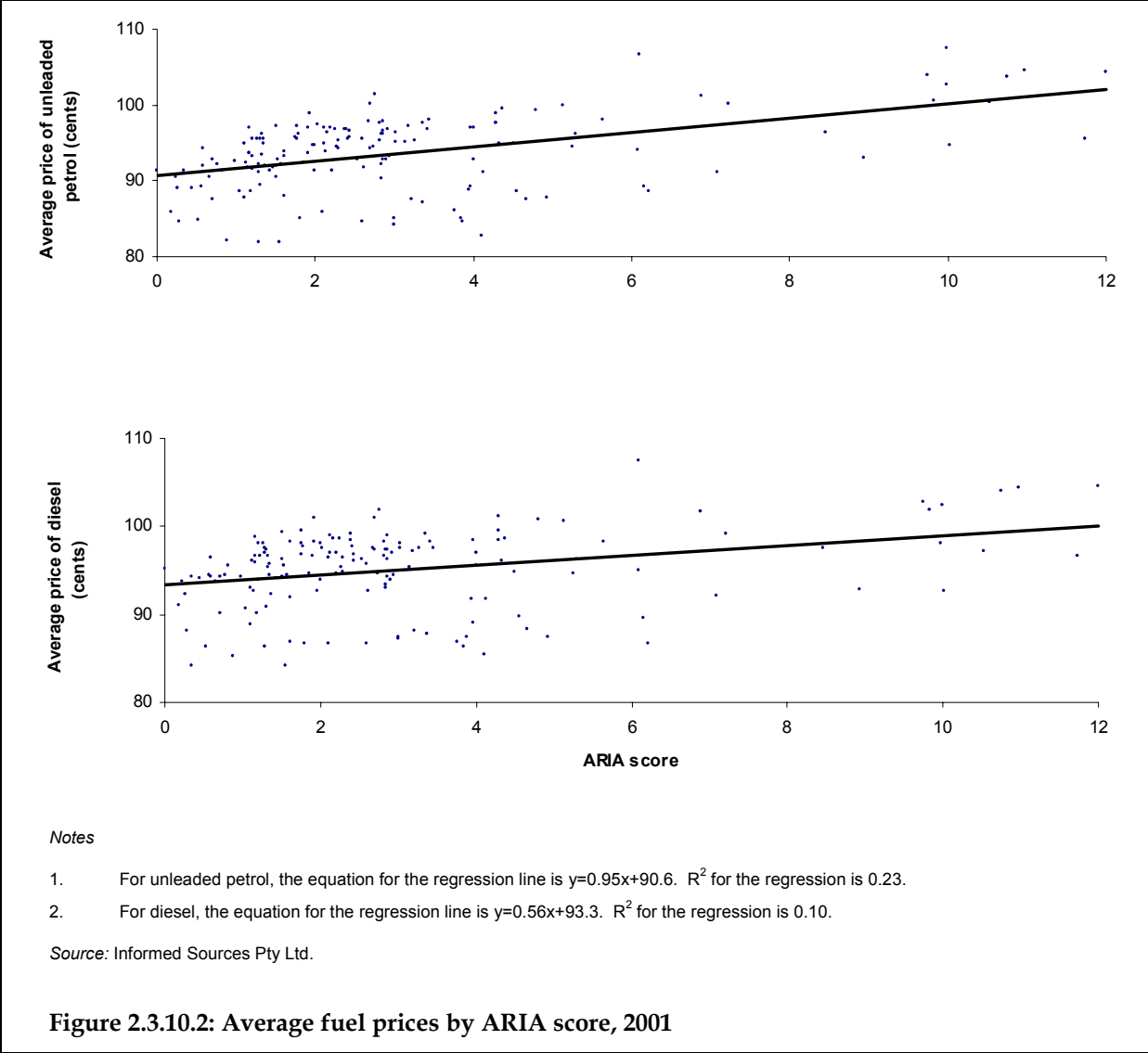
The surveyed items include dairy products, cereal products, meat and seafood, fruit and vegetables, soft drinks and confectionary and other foods such as coffee, eggs and baby food. The difference between price levels in a particular town and price levels for the weighted average of the eight capital cities, expressed in percentage terms, is given directly by subtracting 100 from the town's index number. For example, an index number of 120 indicates a price level of 20% above that for the capital cities, and an index of 96 indicates a level 4% below the capital city average.

The ARIA scores for a range of locations from 0 in capital cities to 12 for very remote areas were plotted against the relative retail price index for 126 towns (Figure 2.3.10.1). Price

indexes ranged from 93 in Adelaide to 147 on Lord Howe Island. ARIA remoteness score was found to account for 39% of the variance in food prices; other factors such as town size, relationship to main transport routes, competition and so on are also likely to affect prices.

Food prices rose by 1.57% for each unit increase in the ARIA index. This means that, on average, food prices in Very Remote areas (ARIA scores between 9.08 and 12.0) were between 14% and 19% higher than in the capital cities.

Fuel prices



The pattern across regions is in line with that found in recent studies conducted in Queensland and the Northern Territory. The 2000 Healthy Food Access Basket Survey (Queensland Health 2000) found that people in rural and remote areas in Queensland paid more for basic healthy food than those living in urban and metropolitan regions. Costs were much higher in Remote and Very Remote areas (31% higher in Very Remote areas of Queensland). In the Northern Territory survey, the cost of food was found to be much higher, particularly in remote Northern Territory communities, than in Southern Australian

cities (Rae et al. 2001). These studies also showed that the variety of food decreased with remoteness.

This indicator compares average fuel prices between Australian cities and towns in the period from 1 January to 31 December 2001. The ARIA scores for 157 locations were plotted against the average retail price for unleaded petrol and for diesel. Prices of unleaded petrol ranged from 81.8 cents per litre in Warwick, Queensland, to 107.4 cents per litre in Norseman, Western Australia. Diesel prices ranged from 84.1 cents per litre in Gympie and in Ipswich, Queensland, to 107.5 cents in Alice Springs.

Figure 2.3.10.2 shows an overall trend for petrol and diesel prices to increase with remoteness score. Diesel prices increased less sharply than unleaded petrol. Remoteness, as measured by ARIA, accounted for 23% and 10% of the variation in petrol and diesel prices, respectively.

For each unit increase in the ARIA index, the cost of a litre of unleaded petrol rose by 0.95 cents, and for diesel the rise was 0.56 cents. This means that, on average, unleaded petrol prices in Very Remote areas were between 8.6 and 11.4 cents per litre higher than in the capital cities. On average, diesel prices in Very Remote areas were between 5.1 and 6.7 cents per litre higher than in the capital cities.

Cost of housing

Table 2.3.10.1 compares crude mean weekly rent paid by tenants in each of the ASGC Remoteness Areas as reported in the censuses of 1991, 1996 and 2001.

Table 2.3.10.1: Crude mean weekly rent, 1991, 1996 and 2001

	MC	IR	OR	R	VR	Total
	(\$)					
2001						
Indigenous households ^(a)	173	145	141	138	96	148
Non-Indigenous households	207	156	155	151	147	191
Total	206	155	154	148	122	189
1996						
Indigenous households ^(a)	123	105	95	84	51	103
Non-Indigenous households	152	118	114	97	84	140
Total	151	118	112	95	71	138
1991						
Indigenous households ^(a)	106	83	75	68	47	83
Non-Indigenous households	130	97	89	75	63	118
Total	130	96	88	74	58	113

(a) Indigenous households are households where a family within the household contains a reference person or spouse who is of Aboriginal/Torres Strait Islander origin, or a lone-person household where the lone person is of Aboriginal/Torres Strait Islander origin.

Note: Dollar amounts have not been adjusted for inflation.

Source: ABS 1991, 1996 and 2001 Census.

There are three major points to be made from Table 2.3.10.1.

- Rents decreased with remoteness in all three years. In 2001, rents in regional, Remote and Very Remote areas, were 0.75, 0.7, and 0.6 times those in Major Cities.
- Rents increased over time. The overall increase between 1991 and 2001 was 1.6 times in Major Cities and Inner Regional areas, 1.75 in Outer Regional areas, and at least twice in remote areas.
- In 2001, rent by non-Indigenous people was about 1.2, 1.1, 1.1 and 1.5 times as high in Major Cities, regional, Remote and Very Remote areas as it was for Indigenous people in those areas.

Table 2.3.10.2 compares crude mean monthly mortgage payments made by households that were purchasing their dwelling in each of the ASGC Remoteness Areas as reported in the censuses of 1991, 1996 and 2001.

Table 2.3.10.2: Crude mean monthly housing loan repayments, 1991, 1996 and 2001

	MC	IR	OR	R	VR	Total
	(\$)					
2001						
Indigenous households ^(a)	918	762	728	752	614	823
Non-Indigenous households	986	814	777	788	604	927
Total	985	813	775	786	605	926
1996						
Indigenous households ^(a)	804	694	653	630	532	729
Non-Indigenous households	868	728	709	681	485	821
Total	867	728	707	678	489	820
1991						
Indigenous households ^(a)	576	506	464	493	423	528
Non-Indigenous households	673	565	548	535	430	640
Total	672	564	546	533	430	639

(a) Indigenous households are households where a family within the household contains a reference person or spouse who is of Aboriginal/Torres Strait Islander origin, or a lone-person household where the lone person is of Aboriginal/Torres Strait Islander origin.

Note: Dollar amounts have not been adjusted for inflation.

Source: ABS 1991, 1996 and 2001 Census.

There are two major points to be made from Table 2.3.10.2.

- Mortgage payments generally decreased with remoteness. In 2001, in regional, Remote and Very Remote areas, they were, respectively, 0.8, 0.8 and 0.6 times what they were in Major Cities. Inter-regional comparisons were broadly similar in 1991 and 1996.
- Between 1991 and 2001, mortgage payments increased over 1.4 times in all areas.