

3 Demography and socioeconomic status

Introduction

Socioeconomic disadvantage is a unique determinant of inequalities in health: evidence for this is presented in Chapter 1.

A range of data variables from the 1996 Population Census is mapped in this chapter to indicate variations in socioeconomic disadvantage at the small area level. The results of the correlation analysis, shown in Chapter 8, provide a measure of the strength of the association at the small area level in the distribution of the population with similar characteristics. The correlation analysis also draws attention to associations between the measures being discussed (eg. high rates of premature deaths of males, or high rates of admissions to hospital for circulatory system diseases) and the indicators of socioeconomic disadvantage mapped in this and the following chapters.

The next section describes the growth and distribution of the population in the Australian Capital Territory (derived from Hugo 1991), discusses population projections and Indigenous population issues and raises some of the data issues that apply to the variables mapped and described in the remainder of the chapter.

Background

Population and distribution

The Australian Capital Territory was established in 1911 as the seat of the Australian government, a decision with important consequences for both the rate of population change and the demographic composition of its population. At the 1996 Census, the population of the Territory was 299,243, with virtually the entire population living within the Canberra Statistical Division (**Table 3.1**).

The major development of Canberra as the national capital did not commence until the late fifties. Nevertheless, in the period before then, population growth was steady. From a base of 1,714

in 1911, the population increased to 2,104 in 1917, and by 1933 had more than tripled to 7,325. In 1947, there were 16,905 people living in Canberra.

Despite this growth, Canberra remained essentially underdeveloped. Not all government departments were located in the national capital, and for those that were, accommodation was usually temporary. With the decision by the Australian Government in the late fifties to commit to the development of Canberra, the population increased substantially. In the five years to 1966, the population nearly doubled to 96,032, and in the next five years it increased by 50 per cent to 143,843. By 1976, the population had reached 207,740, and in the next 20 years to 1996 it increased by a further 44 per cent.

The demographic characteristics of the people who populated the Australian Capital Territory in its expansionary years have had a profound impact on the Territory's socioeconomic and demographic make-up in the ensuing years. For example, during the 1960s and 1970s a large proportion of the population increase comprised young clerical and professional people migrating from other areas of Australia. While this meant that Canberra has not exhibited the range of social inequalities characteristic of most cities, patterns of socioeconomic differentiation did develop, with important implications for health service utilisation and provision. These patterns of socioeconomic differentiation have become more marked in recent years.

Projected population

The population of the Australian Capital Territory is projected to increase by 11 per cent to 332,200 in 2006, and to 354,100 by 2016 (ABS 1998). The major influences on the actual growth will be the proportion of net overseas migration to Canberra and the magnitude of net interstate migration.

Table 3.1: Population and area, Australian Capital Territory, 1996

Section of State	Population:		Area:	
	No.	Per cent	km ²	Per cent
Canberra Statistical Division	298,847	99.9	808	34.4
Rest of Territory	396	0.1	1,544	65.6
Whole of Territory	299,243	100.0	2,352	100.0

Source: ABS special data services

Data issues

Data quality of Indigenous population counts

As noted in Chapter 2, *Methods*, the data describing the health status and utilisation of health services by Aboriginal people are generally of poor quality. It has become clear with the release of results from the 1996 Census that population data are also less than ideal. **Table 3.2** shows the population of Indigenous Australians as recorded at the three most recent Censuses, as well as changes over the ten-year period from 1986 to 1996.

The number of Indigenous people recorded has increased by 125,325 people, from 227,645 at the 1986 Census to 352,970 at

the 1996 Census (an increase of 55.1 per cent). Of the total increase, over half (69,051, or 55.1 per cent) occurred in the non-metropolitan areas, an increase for these areas of 44.4 per cent over ten years. The capital cities, with 26.6 per cent of the population of Indigenous Australians in 1986, showed an apparently stronger growth rate, of 79.0 per cent.

At the State/Territory level, the apparent rate of Indigenous population growth was highest in the Australian Capital Territory (137.6 per cent) and Tasmania (106.6 per cent), and lowest in the Northern Territory (33.2 per cent) and Western Australia

(34.4 per cent). Queensland moved from having the largest population of Indigenous Australians in 1986 (with 61,268) to second largest, with 95,518 (after New South Wales with 101,485) in 1996. Sydney remained the capital city with the largest population of Indigenous people over the ten years to 1996. The major urban centres of Geelong and Newcastle/Wollongong had the largest increases, of 359.7 per cent and 134.2 per cent, respectively.

Such increases are not explained by the relatively higher fertility rates among Indigenous people, nor are they explained by a decline in mortality of Indigenous Australians. Rather, it appears that Australian's have been increasingly prepared to identify themselves as Indigenous on the Census form. The question remains as to what per cent of the actual population of Indigenous Australians these current levels of identification represent.

Table 3.2: Population of Indigenous Australians, 1986 to 1996

Area	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
1986									
Capital City	18,589	6,173	11,257	5,825	10,087	2,136	5,536	1,056	60,659
Other Major Urban Centres	4,515	392	6,515	..	..	..	..	..	11,422
Rest of State/Territory	35,907	6,046	44,101	8,466	27,702	4,580	29,203	164	155,564
Whole State/Territory	59,011	12,611	61,268	14,291	37,789	6,716	34,739	1,220	227,645
1991									
Capital City	22,600	7,956	13,456	6,948	11,744	3,026	6,179	1,588	73,497
Other Major Urban Centres	6,641	625	7,462	..	..	..	..	..	14,728
Rest of State/Territory	40,778	8,154	49,977	9,284	30,035	5,859	33,731	187	177,234
Whole State/Territory	70,019	16,735	70,124	16,232	41,779	8,885	39,910	1,775	265,459
1996									
Capital City	34,438	10,725	21,887	9,387	17,198	4,705	7,368	2,896	108,604
Other Major Urban Centres	10,573	1,802	9,233	..	..	..	..	..	20,608
Rest of State/Territory	56,474	9,947	65,462	11,057	33,595	9,168	38,909	3	224,615
Whole State/Territory	101,485	22,474	95,518	20,444	50,793	13,873	46,277	2,899	352,970
percentage change									
Capital city									
1986 to 1991	21.6	28.9	19.5	19.3	16.4	41.7	11.6	50.4	21.2
1991 to 1996	52.4	34.8	62.7	35.1	46.4	55.5	19.2	82.4	47.8
1986 to 1996	85.3	73.7	94.4	61.2	70.5	120.3	33.1	174.2	79.0
Other major urban centre									
1986 to 1991	47.1	59.4	14.5	..	..	..	..	..	28.9
1991 to 1996	59.2	188.3	23.7	..	..	..	..	..	39.9
1986 to 1996	134.2	359.7	41.7	..	..	..	..	..	80.4
Rest of State/Territory									
1986 to 1991	13.6	34.9	13.3	9.7	8.4	27.9	15.5	..	13.9
1991 to 1996	38.5	22.0	31.0	19.1	11.9	56.5	15.4	..	26.7
1986 to 1996	57.3	64.5	48.4	30.6	21.3	100.2	33.2	..	44.4
Whole State/Territory									
1986 to 1991	18.7	32.7	14.5	13.6	10.6	32.3	14.9	45.5	16.6
1991 to 1996	44.9	64.3	36.2	25.9	21.6	56.1	16.0	63.3	33.0
1986 to 1996	72.0	78.2	55.9	43.1	34.4	106.6	33.2	137.6	55.1

Source: ABS special data services

ABS SEIFA Index of Relative Socio-Economic Disadvantage

At each Census since the 1986 Census, the ABS have produced a number of indexes which measure different aspects of the socioeconomic conditions of the populations of geographic areas (ABS 1998). These summary measures, the Socio-Economic Indexes for Areas (SEIFA), combine into one index a range of information relating to the social and economic characteristics of the populations in small areas.

One of these indexes, the Index of Relative Socio-Economic Disadvantage (IRSD), summarises the information available from variables related to education, occupation, income, family structure, race (the proportion of Indigenous people), ethnicity

(poor proficiency in use of the English language) and housing. The index reflects the extent of disadvantage represented by, for example, the proportion of low income families, of those with relatively low educational attainment and of high unemployment, in the area being examined. The variables are, therefore, similar to those presented in the remainder of this chapter. While the index number is a useful measure of socioeconomic disadvantage, users should realise its limitations. For example, while it represents the results of a particular set of statistical analyses on a set of variables from the 1996 Census, changing the variables could change the particular index values calculated (although the relativities between the areas for these variables are, in general, likely to remain). It also has a wide range of uses,

such as for the allocation of resources or as a shorthand description of populations living in an area, but is not a universal answer to all such needs.

The IRSD is calculated at the smallest geographic level for which data are available from population censuses – the Census Collection District – and was then calculated for the larger areas in the atlas (Statistical Local Areas (SLAs), postcode groups of SLAs, Statistical Subdivisions, Statistical Divisions and States and Territories) by weighting the scores for these smaller units by their population.

The IRSD is calculated to show the relativity of areas to the Australian average for the particular set of variables that comprise it. This average score is set at 1000. In this atlas, data mapped at the SLA level have been re-weighted so that the Australian Capital Territory is the average, with a Territory score of 1000. The text draws attention to the use of the two averages. Areas with relatively less disadvantaged populations (ie. those of higher socioeconomic status) have an index number of above 1000 and those with relatively greater disadvantage (ie. of lower socioeconomic status) have an index number of less than 1000. It is unfortunate that an IRSD uses high index scores to indicate advantage, when it would be intuitively expected that high index scores would indicate disadvantage, as implied by the name of the index. The text and maps for the IRSD are on pages 46 and 47.

In the discussion in the text, statistically significant *inverse correlations* between the IRSD and other variables indicate a positive association between the distributions of those variables and the disadvantaged population at the SLA level. Statistically significant *positive correlations* indicate an association between the particular variable(s) and areas comprising relatively advantaged populations. This is a difficult concept to grasp, so an example may assist. In the case of the variable for single parent families in Canberra (page 22), there is an inverse correlation (-0.64) with the IRSD. Thus, at the SLA level in Canberra there is a strong *negative* association between high proportions of single parent families and high SEIFA index scores. This can be restated as there being a strong *positive* association with socioeconomic disadvantage (ie. low index scores).

Age-sex standardisation

Age-sex standardisation was used to adjust the data mapped for the variable for early school leavers (**Map 3.8**).

It is straightforward to calculate from the Census the percentage of each SLAs adult population, leaving school at the age of 15 or less, but a significant part of the variation between SLAs in this measure is caused by age structure. A person aged 70 is less likely to have stayed at school past the age of 15 than a person aged 20, simply because of the changes over the past 55 years in the education system. Age-sex standardisation measures variations in educational participation in a way unaffected by age structure. For each SLA, a theoretical expected number of adult residents who left school at age 15 or less has been calculated, assuming that each 5 year age group in its population had the same educational participation record as that age group in the Australian Capital Territory population as a whole. This expected number is then compared with the actual number, to establish whether the number of people who did not continue at school beyond 15 is significantly greater or less than one would expect given the area's age structure. A similar analysis compares the level of participation for each State/Territory and capital city, using Australia as the standard.

Areas mapped

The area mapped is referred to as **Canberra-Queanbeyan**. Queanbeyan, which is located adjacent to **Canberra**, has been included in the **Canberra** data set because of its close links with, and use of services in, **Canberra**.

Unlike the situation across the majority of Australia, where SLAs are based on local government areas, SLAs in **Canberra** are based on suburbs. They are, therefore, relatively small (and much smaller on average than SLAs in most other large cities). SLAs in **Brisbane, Gold Coast, Townsville-Thuringowa** and **Darwin** are also suburb based. Small SLAs are likely to have smaller numbers of cases (whether of population, hospital admissions or of deaths) and these are likely to produce results which are less reliable than those for larger areas. To ensure that the majority of areas mapped for **Canberra** are of sufficient size to produce useful results, SLAs have been grouped to form larger areas. The groupings approximate (and are frequently the same as) individual postcode areas. **Table A1** in Appendix 1.2 shows the way in which the SLAs have been grouped, and lists the names used in the text.

Data definitions

The variables mapped in this chapter and details of the way in which they have been defined are shown in **Table 3.3**.

Table 3.3: Details of demographic and socioeconomic variables mapped

Topic and variable name	Numerator	Denominator
Age distribution		
children aged 0 to 4	All children aged from 0 to 4 years	Total population
people aged 65 and over	All people aged 65 years & over	Total population
Families		
single parent families	Single parent families with dependent children [under 15 yrs]	All families
low income families ¹	Families with income less than \$21,000 p.a. [\$400 per week]	All families with an income
high income families ²	Families with income of \$52,000 or more p.a. [\$1,000 per week]	All families with an income
Labour force		
unskilled and semi-skilled workers	Intermediate production & transport workers; labourers & related workers	Total employed labour force
high status occupations ²	Managers and administrators; & professionals	Total employed labour force
unemployed people	People with labour force status as unemployed	Total labour force
female labour force participation	All females aged 20 to 54 years in the labour force	All females aged 20 to 54 years
Educational participation and achievement		
early school leavers ³	People who left school at age 15 years or less, or did not go to school	Population aged 15 years & over
Aboriginal and Torres Strait Islander	Aboriginal and/or Torres Strait Islander people	Total population
People born in predominantly non-English speaking countries		
resident for five years or more	Number born in predominantly non-English speaking countries and resident for five years or more	Total population
resident for less than five years	Number born in predominantly non-English speaking countries and resident for less than five years	Total population
proficiency in English	People aged five years and over and born in predominantly non-English speaking countries who speak English 'not well' or 'not at all'	Population aged five years and over
Housing		
housing authority rented dwellings	Occupied private dwellings rented from the State/Territory housing authority	All occupied private dwellings
dwellings with no motor vehicle	Occupied private dwellings with no motor vehicle garaged or parked there on Census night	All occupied private dwellings

¹When interpreting the figures for low income families in the text in this chapter, it should be noted that the indicators of low income used in the comparisons (\$12,000 per annum or less in 1986 and less than \$21,000 per annum in 1996) do not equate to equivalent incomes and have thus not been adjusted based on changes to buying power. Rather, they are based on categories of income available from the Census and denote comparability of income in 1986, 1991 and 1996 based on the levels of incomes of recipients of the sole parents' allowance and unemployment allowances.

²These variables were not mapped but are included in the correlation analyses.

³This variable was adjusted using age-sex standardisation: a description of this process is in the text above.

Source: Compiled from project sources

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Children aged 0 to 4 years, 1996

Capital city comparison

Children are major users of health services, especially in the first years of life. Children living in families of lower socioeconomic status are more likely to have poorer health status and generally make more use of primary and secondary health services than those who are better off. Their distribution at a local area level is therefore an indicator of likely health service demand and the need for preventative programs.

Children aged from 0 to 4 years comprised 7.1 per cent of Australia's total population at the 1996 Census, and 6.9 per cent of the population of the capital cities (**Table 3.4**). In the last three Censuses, the proportion of young children in **Adelaide**, the capital city with the highest proportion of population at older ages and the lowest Total Fertility Rate (see **Chapter 5**), was the lowest of all these cities. The percentages for most of the other capitals equated to or were slightly above the average. In contrast **Darwin**, with 8.1 per cent, had a considerably higher proportion of children aged from 0 to 4 years.

The proportion of the total population aged from 0 to 4 years in Australia's capital cities decreased marginally in the ten years to 1996, from 7.3 per cent in 1986 to 7.2 per cent in 1991 and 6.9 per cent in 1996.

Table 3.4: Proportion of population aged 0 to 4 years, capital cities
Per cent

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra ¹	All capitals
1996	7.0	6.9	7.1	6.4	6.8	6.9	8.1	7.3	6.9
1986	7.3	7.0	7.5	6.9	7.6	7.8	9.0	8.3	7.3

¹Includes Queanbeyan (C)

Source: ABS special data services

Canberra-Queanbeyan

The proportion of children aged from 0 to 4 years in **Canberra-Queanbeyan** declined from 8.3 per cent of the total population in 1986 to 7.9 in 1991 and further to 7.3 per cent in 1996. However, over the ten years to 1996, the number of children increased, from 22,382 in 1986 to 23,797 in 1996. This represented an overall increase of 6.3 per cent in the number of children in this age group over this period.

Queanbeyan, which is located adjacent to **Canberra**, has been included in the **Canberra** data set because of its close links with, and use of services in, **Canberra**. In 1996, the 2,251 children aged from 0 to 4 years in Queanbeyan represented 8.2 per cent of its total population, just above that in **Canberra**.

Statistical Local Areas (SLAs)

The highest concentrations of young children were located in the outer suburbs, in particular those to the south of the city (**Map 3.1a**).

The highest proportions of young children were recorded in Banks (15.8 per cent), Conder (14.9 per cent) and Theodore (14.1 per cent). The northern suburbs of Amaroo, Palmerston, and Nicholls also had above average proportions of young children. There were low proportions of children aged from 0 to 4 years in the City of Canberra (2.6 per cent) and across the middle suburbs of Acton (0.6 per cent), Philip (2.7 per cent), and Bruce (2.9 per cent).

The largest numbers of children aged from 0 to 4 years were also recorded in the southern suburban SLAs. In Kambah, there were 1,214 children and Gordon and Calwell had 853 and 753 respectively.

There was a correlation of meaningful significance with the variable for early school leavers (0.60) and inverse correlations of meaningful significance with the variables for managers and administrators, and professionals (-0.59) and people aged 65 years and over (-0.51): a weaker inverse correlation was recorded with the variable for private dwellings without a motor vehicle (-0.49).

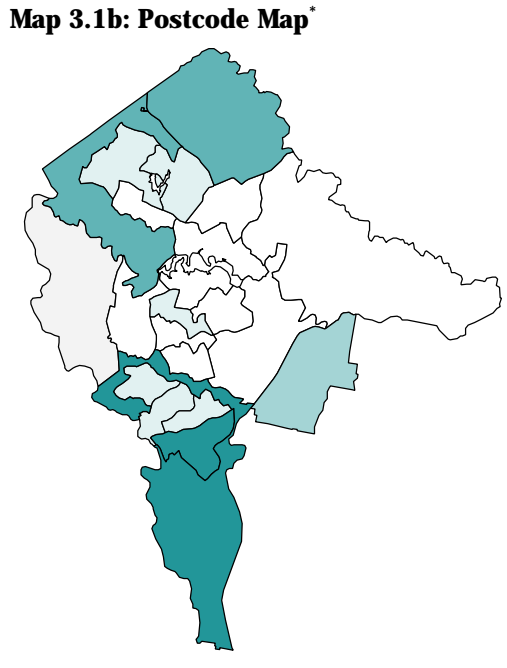
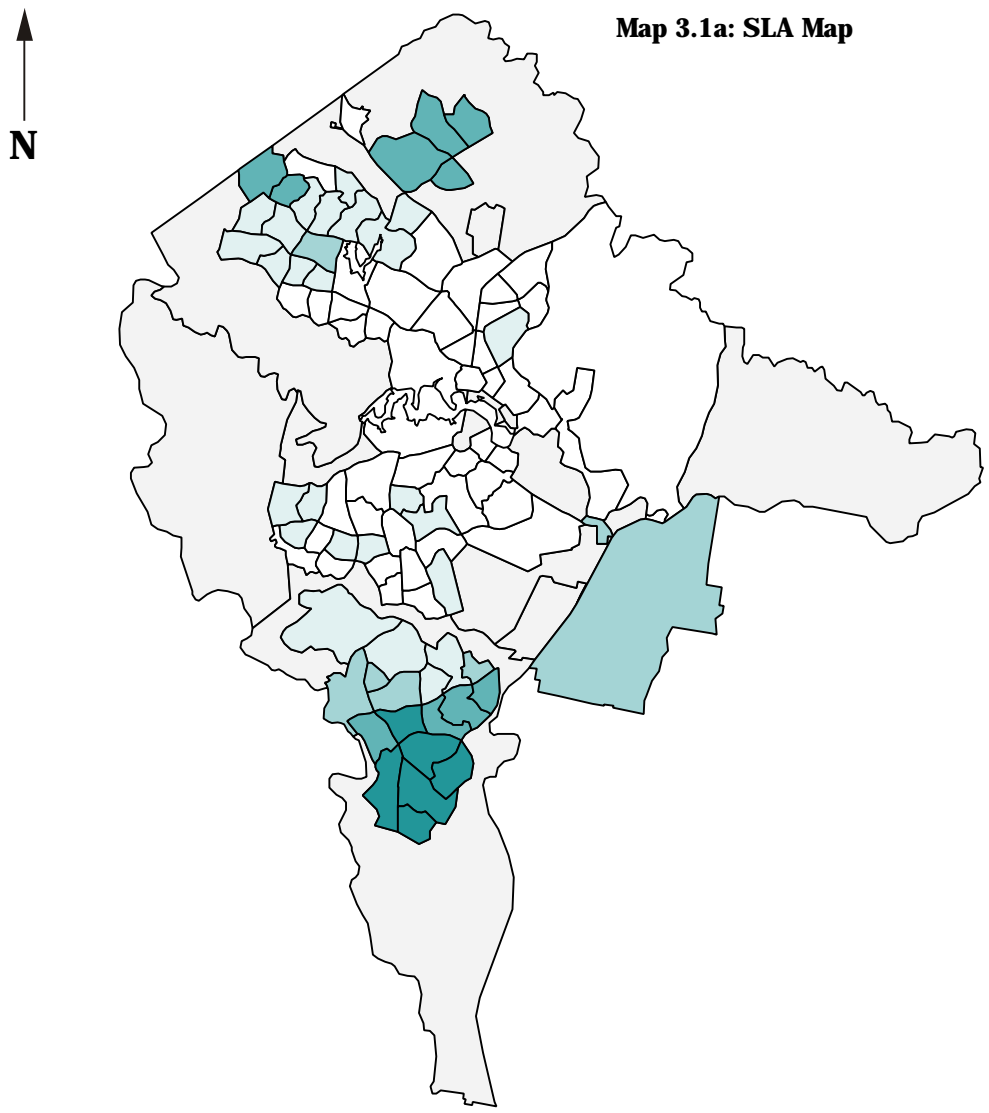
Postcode-based areas

The distribution of higher proportions of children aged from 0 to 4 years at the postcode level reflects the locations of the more recently established suburbs of **Canberra** (**Map 3.1b**). The highest proportions of young children were in the southern postcode areas of Tuggeranong South (14.2 per cent) and Tuggeranong South East (12.0 per cent and also having the highest number of 3,627 children). The postcode areas of Gungahlin-Hall (10.4 per cent) and Belconnen (Balance) (10.1 per cent) recorded proportions in the second highest range mapped.

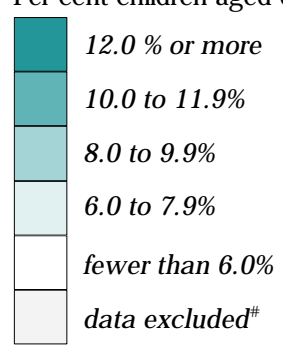
Low proportions of children aged from 0 to 4 years tended to be found across the central areas of **Canberra**, with postcode area Canberra Central having the lowest proportion of 4.2 per cent. Other low proportions were recorded in Eastern Fringe (4.4 per cent but accounting for just 64 young children) and Woden Central (4.7 per cent).

In 1996, there were 25 children aged from 0 to 4 years in the ACT-Balance Statistical Subdivision, 6.0 per cent of the population.

Map 3.1
Children aged 0 to 4 years, Canberra-Queanbeyan, 1996
 as a percentage of the total population in each area



Per cent children aged 0 to 4 years



*SLAs in the smaller map have been grouped to approximate postcode areas
[#]Data have been excluded when the population of the area is less than 100

Source: Calculated on data from ABS 1996 Census

**Details of map boundaries are in Appendix 1.2
 National Social Health Atlas Project, 1999**

People aged 65 years and over, 1996

Capital city comparison

Australia is an ageing society, brought about in part by reduced mortality rates at older ages, a trend that has become especially evident over the past two to three decades. Increased morbidity is often associated with reduced mortality, and the incidence of an older population is likely to indicate areas where increased health services will be required.

People aged 65 years and over comprised 12.1 per cent of the Australian population at the 1996 Census, with a slightly smaller proportion in the capital cities (11.6 per cent) (Table 3.5). This latter proportion compares to percentages of 10.9 per cent in 1991 and 10.4 per cent in 1986, reflecting the general ageing of the population, a trend expected to continue well into the next century (ABS, 1998). Importantly, this rising proportion of older people represents an increase of 275,655 people aged 65 years and over between 1986 and 1996.

At the 1996 Census, 11.8 per cent of the population of **Sydney** (442,053 people) was aged 65 years and over. **Adelaide** had by far the highest percentage of older people, with **Darwin** and **Canberra** recording proportions well below the national average for the capital cities.

Table 3.5: Proportion of population aged 65 years and over, capital cities
Per cent

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra ¹	All capitals
1996	11.8	11.5	11.0	14.1	10.8	12.5	5.0	7.1	11.6
1986	10.8	10.2	10.5	12.0	10.0	10.9	3.3	5.2	10.4

¹Includes Queanbeyan (C)

Source: ABS special data services

Canberra-Queanbeyan

The population aged 65 years and over increased by 67.0 per cent over the ten years from 1986 to 1996, growing from 14,098 in 1986 to 17,140 in 1991 and 23,402 in 1996.

Statistical Local Areas (SLAs)

The highest concentrations of older people were located in the middle suburbs (Map 3.2a), with the SLAs of Deakin, Red Hill and Campbell recording the highest proportions of 20.9, 18.8, and 17.3 per cent respectively.

The lowest proportions of people aged 65 years and over were recorded in the eastern outer SLAs of Duntroon (0.2 per cent), Harman (1.3 per cent) and Majura (1.4 per cent). Conder and Banks to the south, and Nicholls and Amaroo to the north, also recorded low levels of older people in their populations.

The largest numbers of people aged 65 years and over were recorded in Narrabundah, with 910 people, and in Ainslie, and Curtin, with 761 and 651 older people respectively.

In Queanbeyan, there were 2,235 people aged 65 years and over, representing 8.2 per cent of the population.

There was a correlation of meaningful significance with the variable for managers and administrators, and professionals (0.58) and an inverse correlation with the variable for children aged from 0 to 4 years (-0.51). There were weaker associations with the variables for private dwellings without a motor vehicle (0.39), low income families (0.33) and public rental housing (0.29).

Postcode-based areas

As can be seen from Map 3.2b, the highest proportions of people aged 65 and over were found in the inner central postcode areas of **Canberra**. The highest proportion (14.7 per cent) was recorded in the postcode area of Canberra South. Other high proportions were recorded in Woden North (13.4 per cent), Canberra North (13.1 per cent) and Canberra Central (12.0 per cent).

The lowest proportions of older people were recorded in the northern and southern suburbs. The fringe area of Kowen/Majura had the lowest proportion (1.4 per cent), but this accounted for just five people. Low proportions were also recorded in the postcode areas of Tuggeranong South (2.0 per cent) and Gungahlin-Hall (2.2 per cent).

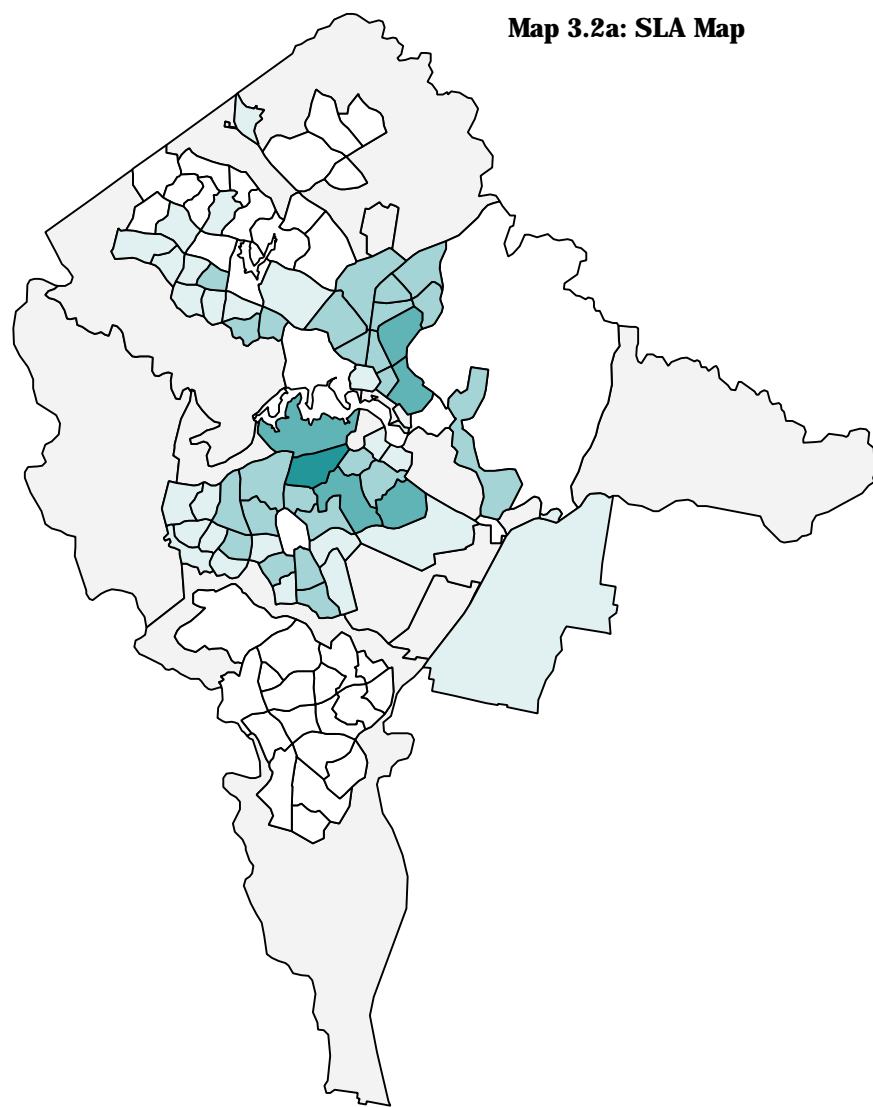
The largest numbers of older people resided in Canberra North (3,340 people), Canberra Central (2,386) and Canberra South (2,280).

There were 15 people aged 65 years and over in the ACT-Balance Statistical Subdivision, 3.6 per cent of the population in 1996.

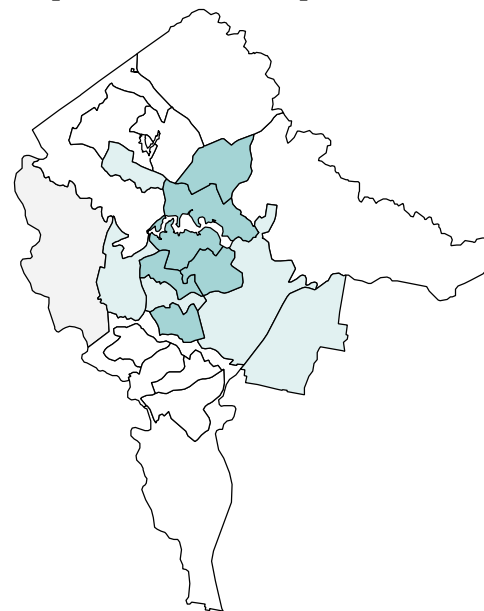
Map 3.2

People aged 65 years and over, Canberra-Queanbeyan, 1996

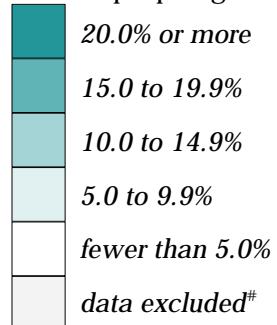
as a percentage of the total population in each area



Map 3.2b: Postcode Map*



Per cent people aged 65 years and over



*SLAs in the smaller map have been grouped to approximate postcode areas

[#]Data have been excluded when the population of the area is less than 100

Source: Calculated on data from ABS 1996 Census

**Details of map boundaries are in Appendix 1.2
National Social Health Atlas Project, 1999**

Single parent families, 1996

Capital city comparison

Single parent families are defined as all single parent families with dependent children aged less than 15 years; the proportion of single parent families is derived as the percentage of all families. Throughout Australia, the majority of single parent families are characterised by poverty and hardship, have poor health and are major users of public health services. Details of their location are, therefore, of importance to public policy makers and those providing health, education, welfare, housing and transport services. There are, however, differences in the circumstances of single parent families, and it is useful to note the differences between the data in **Table 3.6** for all single parent families and those in **Table 4.4** (page 56) for females receiving the Sole Parent Pension. Generally, proportions of sole parent pensioners are lower: Canberra-Queanbeyan is the exception, with an above average proportion of single parent families (**Table 3.6**) but a below average proportion of welfare dependent single mothers (**Table 4.4**). These differences indicate a higher proportion of female single parents in the workforce in Canberra-Queanbeyan.

At the 1996 Census, the proportion of single parent families in Australia's capital cities was 9.7 per cent (**Table 3.6**), varying from 9.1 per cent in **Melbourne**, to 13.8 per cent in **Darwin**. The increase in the number of single parent families has been one of the most important demographic trends in Australia in recent years. In the ten years from 1986, the proportion of single parent families in Australia as a whole and in each capital city increased substantially. The largest increase was recorded in **Hobart** and **Melbourne, Brisbane, Adelaide, Darwin** and **Canberra** all recorded increases of more than two percentage points in this ten year period. Whilst **Sydney** recorded a lower increase than the other major cities, it had the largest number of these families at both the 1986 and 1996 Censuses: the largest increase in the number of single parent families occurred in **Melbourne**.

Table 3.6: Single parent families, capital cities
Per cent

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra ¹	All capitals
1996	9.3	9.1	10.5	10.4	10.1	12.1	13.8	11.5	9.7
1986	7.8	6.9	8.3	8.0	9.1	9.3	11.1	9.2	7.9

¹Includes Queanbeyan (C)

Source: ABS special data services

Canberra-Queanbeyan

In 1996, there were 9,618 single parent families in **Canberra-Queanbeyan** (11.5 per cent) compared with 6,377 in 1986 (9.2 per cent). This was an increase of 50.8 per cent.

Statistical Local Areas (SLAs)

Suburbs with high concentrations of single parent families were primarily in two localities in 1996 (**Map 3.3a**), one located to the north of the city centre and the other on the southern fringe.

In Belconnen Town Centre, Kingston, Charnwood and Oaks Estate more than 20 per cent of all families were single parent families. Single parent families comprised 12 per cent or more of all families in just over 30 per cent of suburbs. The lowest proportions of single parent families were in the SLAs of Campbell (4.6 per cent), Forrest (4.3 per cent), O'Malley (4.0 per cent), Duntroon (3.8 per cent) and Bruce (3.2 per cent). A further 13 suburbs (12.1 per cent of all suburbs) had no single parent families in 1996.

The largest number of single parent families was in Kambah (655 single parent families), with a further 302 single parent families in Wanniasa and 251 in Narrabundah. Eleven other SLAs had

more than 150 single parent families. There were 801 single parent families in Queanbeyan, 11.4 per cent of all families.

There was a correlation of substantial significance at the SLA level with the variable for low income families (0.75) and of meaningful significance with public rental housing (0.69). These results, together with the inverse correlation of meaningful significance with the IRSD (-0.64), indicate the existence of an association at the SLA level between single parent families and socioeconomic disadvantage.

Postcode-based areas

The highest concentrations of single parent families at the postcode level in Canberra were in Kambah (14.3 per cent), Canberra North and Canberra South (both with 14.2 per cent) and Tuggeranong North West (13.1 per cent). The lowest concentrations of single parent families were recorded in Kowen/Majura (6.4 per cent) and Belconnen (Balance) (8.5 per cent).

There were three single parent families in the ACT-Balance Statistical Subdivision, 3.8 per cent of all families in 1996.

Table 3.7 Housing tenure by family type, Canberra, 1996
Per cent

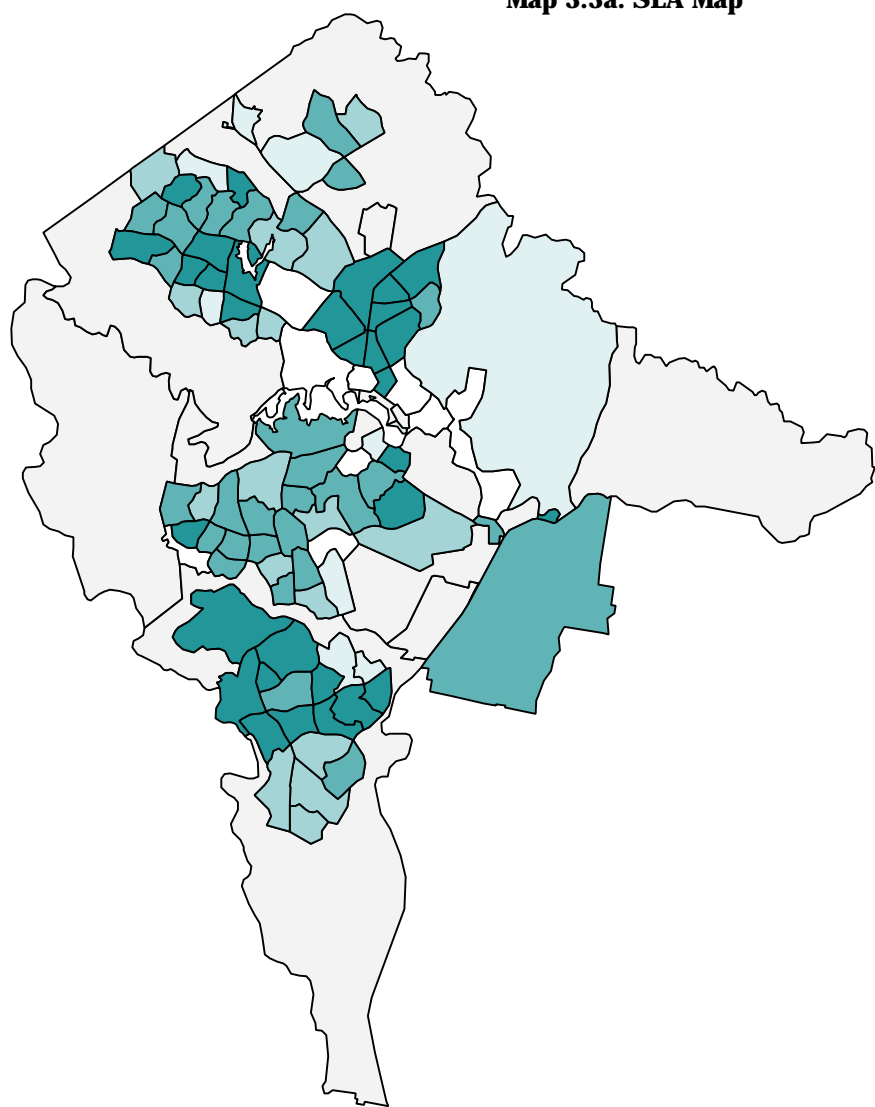
Family type	Owner/ Purchaser	Government Rental	Private Rental	Other	Total
Single parent family: with dependent children	44.9	32.8	21.3	1.0	100.0
Single parent family: with no dependent children	70.3	18.8	10.1	0.9	100.0
Couple family without children	76.0	4.9	17.8	1.3	100.0
Couple family with dependent children:	79.6	6.6	13.0	0.9	100.0
Couple family with no dependent children	88.0	6.0	5.2	0.7	100.0
Other families	47.7	7.6	41.3	3.4	100.0
Total	74.3	9.5	15.1	1.0	100.0

Source: ABS Census 1996 Basic Community Profile Table B25

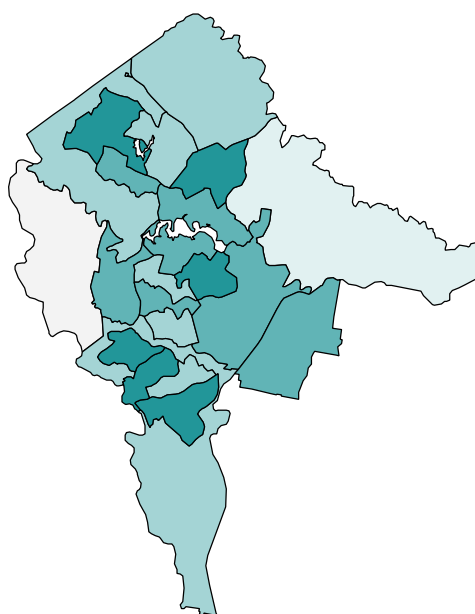
Map 3.3
Single parent families, Canberra-Queanbeyan, 1996
 as a percentage of the total population in each area



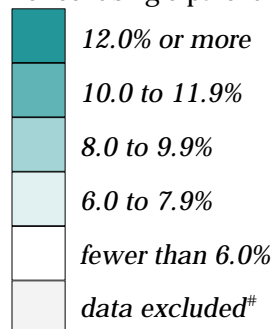
Map 3.3a: SLA Map



Map 3.3b: Postcode Map*



Per cent single parent families



*SLAs in the smaller map have been grouped to approximate postcode areas

[#]Data have been excluded when the population of the area is less than 100

Source: Calculated on data from ABS 1996 Census

Details of map boundaries are in Appendix 1.2
National Social Health Atlas Project, 1999

Low income families, 1996

Capital city comparison

Low income families, defined as families with annual family incomes of less than \$21,000 (less than \$400 per week), comprised 16.6 per cent of all families in **Sydney** for which income details were obtained at the 1996 Census (**Table 3.8**). The use of low income as a measure of poverty is compromised to an extent by the fact that income is influenced by differences in family size, age structure and housing tenure and costs. While the variable will normally capture most welfare dependent families, it will also include sizeable numbers of families for which low income is linked to their retirement status.

Adelaide had the highest (21.8) percentage of low income families, while **Darwin** (11.1 per cent) and **Canberra** (11.7 per cent) had much lower proportions, reflecting the younger age structures of these cities and the lower proportions of retired families in their populations. Overall, there has been an increase in the proportion of low income families in all capital cities in the ten years from 1986 to 1996. Refer to the footnote to **Table 3.3** on page 16 regarding the interpretation of these comparisons over time.

Table 3.8: Low income families, capital cities
Per cent

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra ¹	All capitals
1996	16.6	17.2	18.0	21.8	17.7	20.2	11.1	11.7	17.5
1986	15.7	14.3	16.9	19.2	17.4	17.3	10.6	8.8	15.8

¹Includes Queanbeyan (C)

Source: ABS special data services

Canberra-Queanbeyan

In 1996 there were 9,710 low income families in **Canberra-Queanbeyan**, an increase of 75.2 per cent on the 1986 figure of 5,542 families. Between 1986 and 1991, the proportion of low income families increased from 8.8 per cent of all families with an income to 9.5 per cent and then increased to 11.7 per cent in 1996.

Statistical Local Areas (SLAs)

The three SLAs with 25 per cent or more low income families in their population are widely separated from each other (**Map 3.4a**). Symonston (32.3 per cent) is some ten kilometres south-east of Civic (the city centre), Belconnen Town Centre (31.7 per cent) is a similar distance to the north-west, while Braddon (25.8 per cent) is located immediately to the north. In close proximity to Braddon is a cluster of six SLAs – Reid, Turner, Dickson, Ainslie, O'Connor and Downer – with between 20 and 25 per cent low income families. Nearby the SLAs of Lyneham and Watson had proportions of 18.7 and 18.6 per cent of low income families, respectively.

Each of the SLAs of Hall, Amaroo, Barton, Bruce and Macarthur had fewer than five per cent of their families categorised as low income families in 1996.

Kambah, in **Canberra's** south-west, with 538 low income families, headed the SLAs with high numbers of low income families. It had nearly twice the number in Narrabundah, with 297 low income families. Other SLAs with more than 200 low income families were Wanniasa (249 families), Ainslie (241), O'Connor (222) and Charnwood (200).

In Queanbeyan, there were 1,183 low income families, 16.9 per cent of all families in the SLA with an income.

There was a correlation of substantial significance with the variable for single parent families (0.75) and correlations of meaningful significance with the variables for public rental housing (0.67), unemployed people (0.56) and the Indigenous population (0.51). These results, together with the inverse correlation of substantial significance with the IRSD (-0.78), indicate the existence of an association at the SLA level between high proportions of low income families and socioeconomic disadvantage.

Postcode-based areas

All of the postcode areas in which more than 15.0 per cent of all families with an income were low income families were situated in the east of **Canberra** (**Map 3.4b**). The highest proportions of low income families were in the postcode areas of Eastern Fringe (19.6 per cent but accounting for just 43 families), Canberra North (19.1 per cent) and Canberra South (16.4 per cent).

The lowest concentrations of low income families were found in the postcode areas of Tuggeranong North East (7.0 per cent), Tuggeranong South (7.2 per cent) and Kowen/Majura (7.3 per cent).

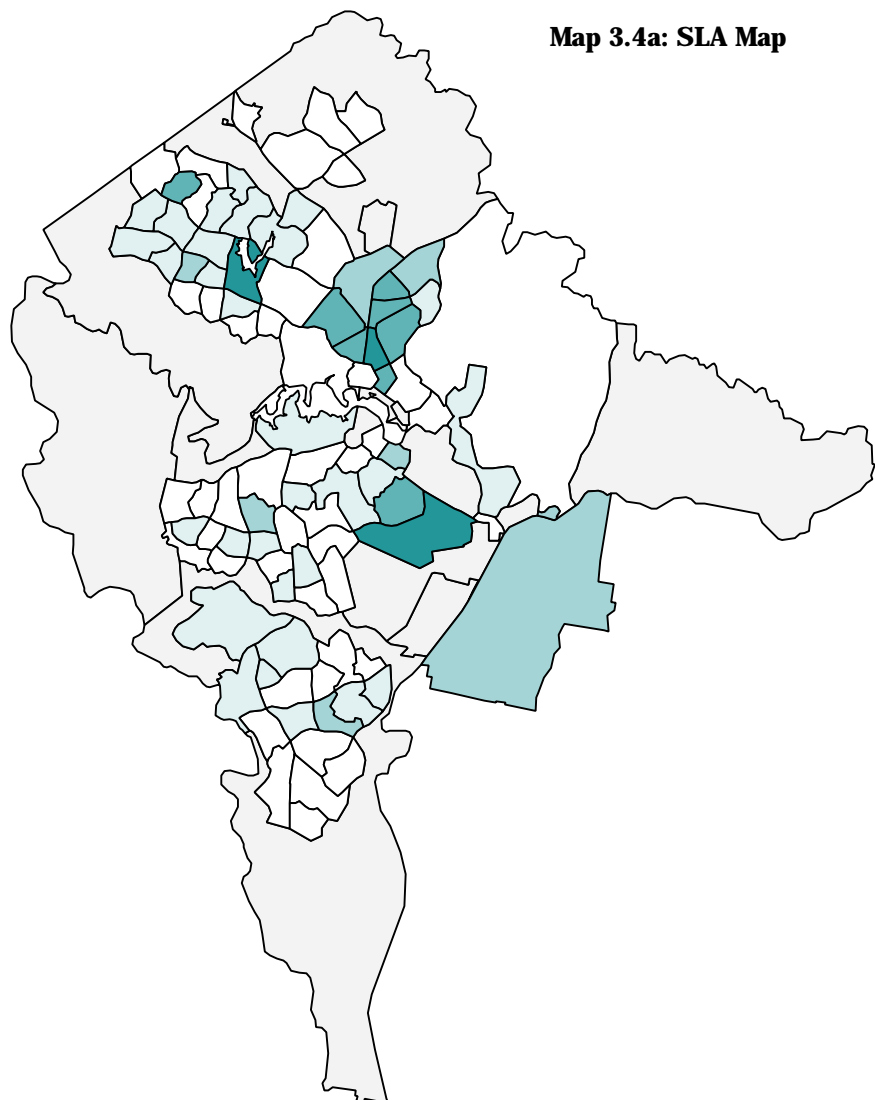
The largest numbers of low income families in **Canberra** were in Belconnen West (1,394 families), Canberra North (1,141) and Tuggeranong South East (830).

There were 12 low income families in the ACT-Balance Statistical Subdivision, 15.2 per cent of all families in 1996.

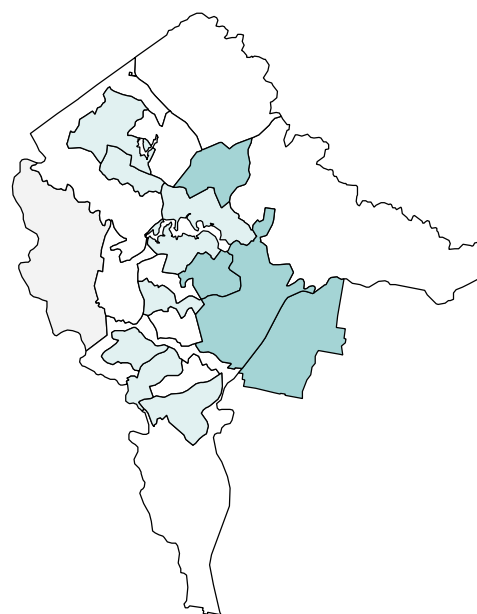
Map 3.4
Low income families* , Canberra-Queanbeyan, 1996
 as a percentage of the total population in each area



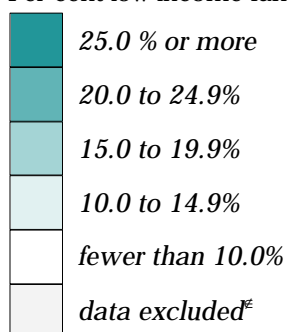
Map 3.4a: SLA Map



Map 3.4b: Postcode Map#



Per cent low income families



*Families with annual income of less than \$21,000 as a percentage of all families for which income data was obtained

#SLAs in the smaller map have been grouped to approximate postcode areas

€ Data have been excluded when the population of the area is less than 100

Source: Calculated on data from ABS 1996 Census

**Details of map boundaries are in Appendix 1.2
 National Social Health Atlas Project, 1999**

Unskilled and semi-skilled workers, 1996

Capital city comparison

Occupation remains the most important determinant of wealth, social standing and well-being for most people in Australian society. People employed in the Census defined occupations of labourers and related workers, and intermediate production and transport workers, are described generally in this analysis as unskilled and semi-skilled workers. These categories of occupation encompass most lower paid and less skilled, blue collar work and their prevalence therefore forms a useful general measure of low socioeconomic status. The percentages of workers employed in these occupations are calculated as a proportion of the total employed labour force.

The majority of capital cities had near average percentages for this variable, with the lower percentage in **Canberra** a reflection of low levels of manufacturing industry. The proportion in **Sydney** (14.9 per cent) was below that in the other large capital cities (**Table 3.9**).

The 1996 figures for this variable were considerably lower than those from 1986, including a fall from 20.7 per cent in **Sydney** in 1986 to 14.9 per cent in 1996, largely a reflection of the changing nature of employment in Australia's capital cities. The overall decline for Australia's capital cities was from 20.9 per cent of all people with an occupation in 1986, to 17.8 per cent in 1991 and 15.6 per cent in 1996, a net loss 110,506 from these occupations.

Table 3.9: Unskilled and semi-skilled workers, capital cities
Per cent

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra ¹	All capitals
1996	14.9	16.4	16.5	17.3	15.7	14.5	13.2	9.3	15.6
1986	20.7	22.1	21.6	21.6	20.3	19.4	15.1	12.3	20.9

¹Includes Queanbeyan (C)

Source: ABS special data services

Canberra-Queanbeyan

At the 1986 Population Census, 16,670 people in **Canberra-Queanbeyan** were categorised as being unskilled or semi-skilled, some 12.3 per cent of the employed labour force. Between 1986 and 1991, the number of unskilled and semi-skilled workers increased slightly to 13,894 but their relative presence in the workforce declined to 10.0 per cent. In the five years to 1996 both the number and proportion declined, to 14,551 and 9.3 per cent of the employed labour force, respectively.

Statistical Local Areas (SLAs)

Symonston had the highest percentage of unskilled or semi-skilled workers, with 25.4 per cent of its employed labour force in this occupation group. A further 27 SLAs had between 10 and 20 per cent of their workforce employed in unskilled and semi-skilled occupations. More significantly, these SLAs were spatially constrained to two discrete areas. One area extends along the south-western margin of **Canberra-Queanbeyan**, from Kambah in the west to suburbs such as Gordon, Condor and Banks in the south. Within this area, the highest proportions were in Richardson (15.1 per cent) and Banks (12.6 per cent). A second area with high concentrations was situated some 12 kilometres north-west of the city centre. Here, 11 SLAs centred around Florey and Latham had proportions of unskilled and semi-skilled workers ranging from 10.0 per cent in each of Latham, Higgins and Florey; to 12.2 per cent in McKellar; and 14.6 per cent in Charnwood.

Areas with very low proportions of these workers were Forrest (with 2.9 per cent), Griffith (2.6 per cent), Duntroon (1.8 per cent) and Canberra City (0.7 per cent).

Kambah had the largest number of unskilled and semi-skilled workers (857), while there were 411 in Kaleen, 410 in Wanniasa and 329 in Gordon.

The proportion of unskilled and semi-skilled workers in Queanbeyan was quite high relative to levels in **Canberra**, with

2,336 unskilled and semi-skilled workers comprising 18.4 per cent of the employed labour force.

There was a correlation of substantial significance at the SLA level with the variable for early school leavers (0.74) and weaker associations with the variables for the Indigenous population (0.42), unemployed people (0.40), and low income families (0.36). These results, together with the inverse correlation of meaningful significance with the IRSD (-0.59), indicate the existence of an association at the SLA level between high proportions of unskilled and semi-skilled workers and socioeconomic disadvantage.

Postcode-based areas

The highest proportions of unskilled and semi-skilled workers were located in the southern and fringe postcode areas of **Canberra**. The highest proportion was recorded in the Eastern Fringe (16.4 per cent). Belconnen (Balance) recorded the next highest proportion, 11.4 per cent, but this accounted for just 49 workers. The postcode areas of Tuggeranong South, Tuggeranong South East and Kambah recorded proportions of 10.8, 10.7 and 10.3 per cent, respectively.

The lowest proportions were recorded in Canberra Central (4.9 per cent), Canberra South (5.3 per cent) and Woden North (5.6 per cent).

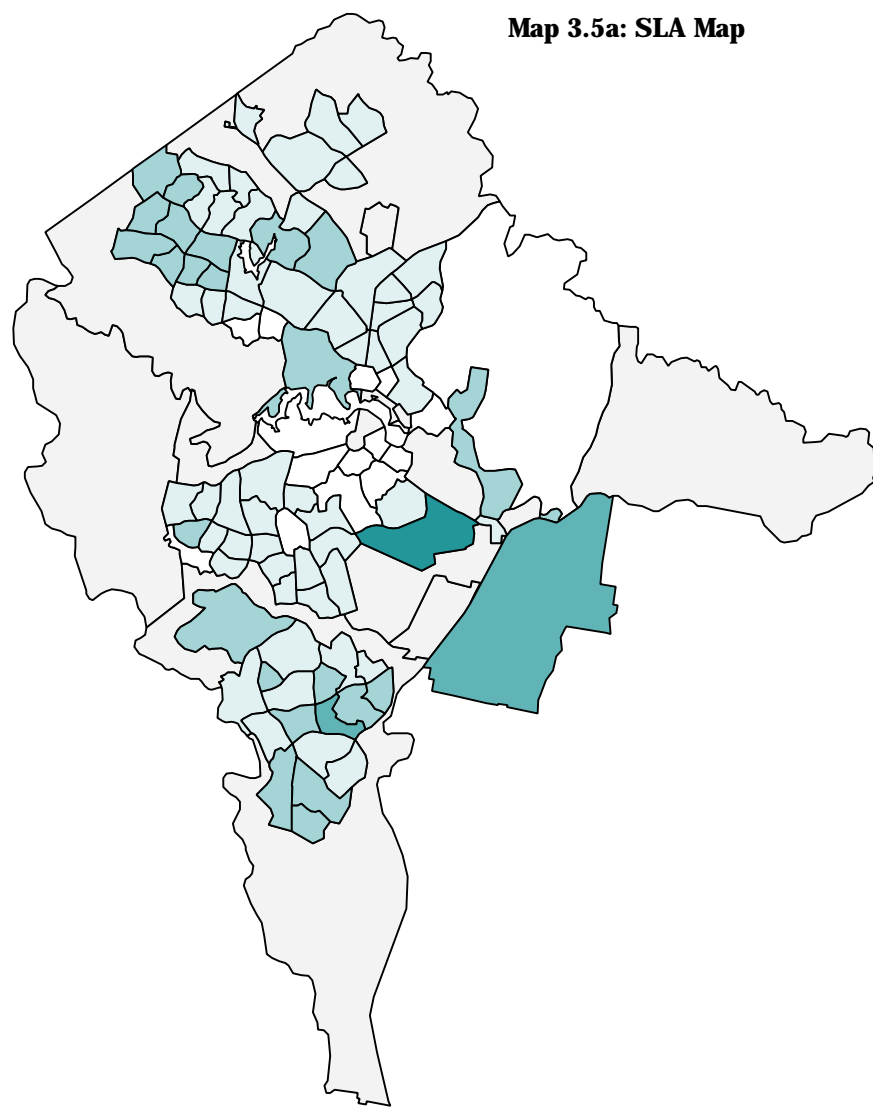
The largest numbers of unskilled and semi-skilled workers were located in Belconnen West (1,868 people), Tuggeranong South East (1,474) and Belconnen North (1092).

In 1996, 19.6 per cent of the employed labour force in ACT-Balance Statistical Subdivision was classified as being in unskilled and semi-skilled occupations, a total of 27 people.

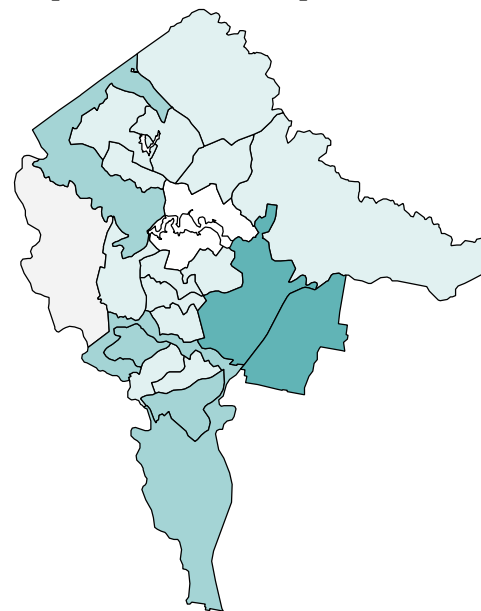
Map 3.5

Unskilled and semi-skilled workers*, Canberra-Queanbeyan, 1996

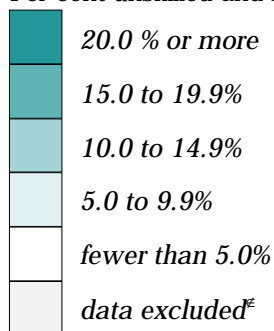
as a percentage of the total population in each area



Map 3.5b: Postcode Map#



Per cent unskilled and semi-skilled workers*



* Consists of ABS population groups 'intermediate production and transport workers' and 'labourers and related workers'

SLAs in the smaller map have been grouped to approximate postcode areas

€ Data have been excluded when the population of the area is less than 100

Source: Calculated on data from ABS 1996 Census

**Details of map boundaries are in Appendix 1.2
National Social Health Atlas Project, 1999**

Unemployed people, 1996

Capital city comparison

At the 1996 Census, 771,972 Australians reported being unemployed and looking for work, of whom 463,429 resided in Australia's capital cities. More than a quarter of the *All capitals* unemployed lived in **Sydney** (134,857 people), 7.4 per cent of **Sydney's** labour force. The unemployment rate in the other capital cities ranged from 7.5 per cent in **Canberra** (13,062 people, and a considerably higher rate than in 1986 when it was 4.8 per cent) to 10.6 per cent in **Adelaide** (51,662 people) (**Table 3.10**). The *All capitals* unemployment figure varied greatly over the ten years to 1996, rising considerably from 8.2 per cent in 1986, to 11.2 per cent in 1991, before declining to the 1996 rate of 8.5 per cent.

It is important to note that these figures can understate the true extent of unemployment because they do not report hidden unemployment and under-employment. Hidden unemployment results from people not recording themselves at the Census as unemployed, as they felt they did not fit the 'looking for work' requirement, often having been discouraged from doing so by the difficulty of obtaining employment. Hidden unemployment is less prevalent at the Census where people 'self-report' than in the official unemployment figures published by the ABS, which are based on data where the 'looking for work' and strict 'availability to work' definitions are applied more rigorously by personal interviewers in the monthly ABS Population Survey. Under-employment refers to those who have jobs but are working fewer hours than they would prefer. Women predominate in both of these categories, as do those who are socioeconomically disadvantaged.

Table 3.10: Unemployed people, capital cities
Per cent

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra ¹	All capitals
1996	7.4	9.1	8.8	10.6	8.3	9.7	7.7	7.5	8.5
1986	8.6	6.6	9.5	9.5	9.5	9.1	9.7	4.8	8.2

¹Includes Queanbeyan (C)

Source: ABS special data services

Canberra-Queanbeyan

The number of unemployed people in **Canberra-Queanbeyan** increased substantially, from 6,791 (4.8 per cent of the labour force) in 1986 to 13,062 unemployed people in 1996 (7.5 per cent).

Statistical Local Areas (SLAs)

Table 3.11 shows the considerable variation in unemployment rates between the sexes and different age groups within **Canberra**. There is both a sex bias to unemployment, with male unemployment rates higher than female rates in all age cohorts except the 35 to 44 years group, and an age bias, with higher unemployment levels in youthful age cohorts than among older people. Within the 55 to 64 cohort, males experienced unemployment levels twice the levels experienced by females.

The highest unemployment rates at the SLA level (**Map 3.6a**) were in Acton (24.6 per cent of the labour force) Oaks Estate (24.0 per cent), Symonston (17.5 per cent) and Turner (16.5 per cent).

In terms of health service use and needs, the distribution of the numbers of unemployed people is also important. Kambah had the largest number of unemployed people (684 people), more than double the 315 unemployed people in Wanniasa and the

291 in Kaleen. These three SLAs also had the largest numbers of unskilled and semi-skilled workers. Eleven other SLAs had more than 200 people unemployed at the 1996 Census.

There were 1,229 unemployed people resident in Queanbeyan, 8.6 per cent of the population.

There were correlations of meaningful significance with the variables for dwellings without a motor vehicle (0.66) and housing authority rented dwellings and low income families (both 0.56). These results, together with the inverse correlation of substantial significance with the IRSD (-0.71), indicate the existence of an association at the SLA level between high proportions of unemployed people and socioeconomic disadvantage.

Postcode-based areas

Eastern Fringe had the highest unemployment rate at the postcode level, 12.8 per cent, followed by Canberra North (9.9 per cent). Kowen/Majura (0.0 per cent) and Tuggeranong North East (5.2 per cent) had the lowest proportions.

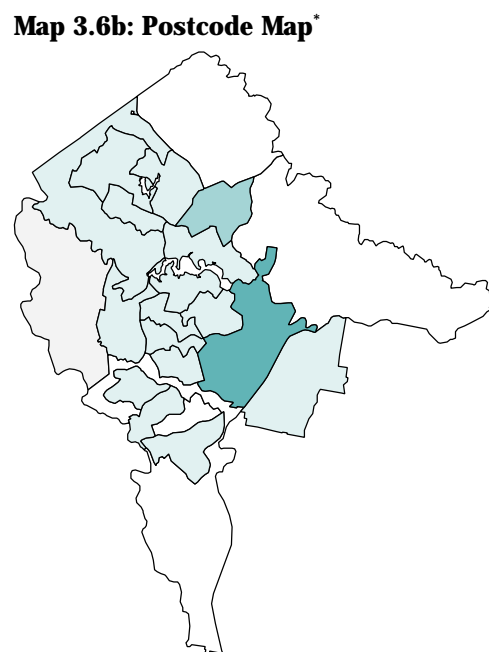
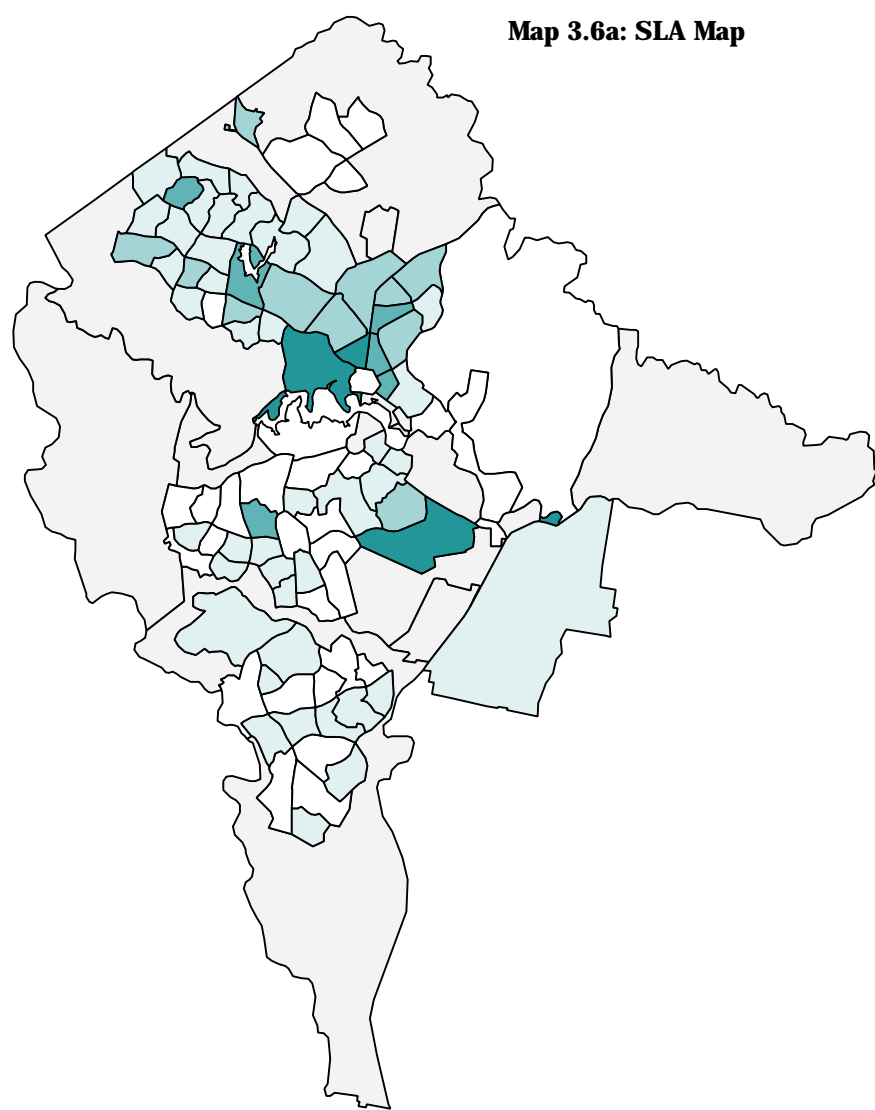
There were 15 people unemployed in the ACT-Balance Statistical Subdivision, 8.4 per cent of the labour force in 1996.

Table 3.11: Unemployment rates by age and sex, Canberra, 1996

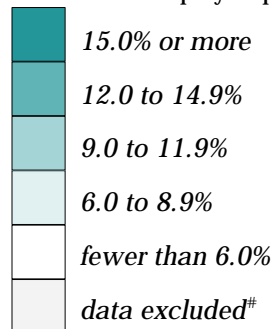
Age group (years)	Per cent male labour force unemployed	Per cent female labour force unemployed
15 to 19	20.0	16.6
20 to 24	14.7	10.0
25 to 34	7.8	5.9
35 to 44	4.7	4.8
45 to 54	4.6	3.7
55 to 64	8.0	4.0
65 & over	4.1	3.3
Total	8.1	6.5

Source: ABS Census 1996 Basic Community Profile Table B25

Map 3.6
Unemployed people, Canberra-Queanbeyan, 1996
 as a percentage of the total population in each area



Per cent unemployed people



*SLAs in the smaller map have been grouped to approximate postcode areas

[#]Data have been excluded when the population of the area is less than 100

Source: Calculated on data from ABS 1996 Census

**Details of map boundaries are in Appendix 1.2
 National Social Health Atlas Project, 1999**

Female labour force participation, 1996

Capital city comparison

The marked increase in women's participation in paid work has been one of the most significant trends in Australian society in recent years. Women are both remaining in the work force longer (partly by delaying childbirth), and re-entering the workforce after childbirth, because of changes in social perceptions of the role of women and increased economic pressures on families. Female labour force participation is calculated here as the number of females in the labour force (employed plus unemployed and looking for work) as a proportion of all females in the population aged 20 to 54 years. The denominator is limited to the 20 to 54 year age group, as the participation rate for women under the age of 20 years is affected by differences in educational participation rates and for women aged 55 years and over by retirement rates, which are particularly high from age 55 years.

As **Table 3.12** shows, most cities had participation rates close to the average. The highest rates were in **Canberra** (almost seven percentage points higher than the average) and **Darwin**. The participation of women in the labour force in all capital cities increased between 1986 and 1996, with the largest increase occurring in **Brisbane**.

Table 3.12: Female labour force participation, capital cities
Per cent

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra ¹	All capitals
1996	69.3	69.8	69.4	69.1	68.3	68.9	70.7	76.3	69.5
1986	64.5	64.8	61.0	64.3	62.2	62.6	68.5	72.4	64.1

¹Includes Queanbeyan (C)

Source: ABS special data services

Canberra-Queanbeyan

Canberra exemplifies the growth in female labour force participation more so than any other Australian city because of its central role in government and because a significant proportion of its population has migrated to **Canberra** specifically to enter the work force. The rate of women's participation in the workforce in **Canberra** has increased over the last ten years rising from 72.8 per cent recorded in 1986 to 76.5 per cent in 1991 and then to 76.6 in 1996. The participation rate for 1996, representing 64,400 females, was slightly higher than the **Canberra-Queanbeyan** average of 76.3 per cent.

Statistical Local Areas (SLAs)

The distribution of SLAs with 75 per cent or more females aged 20 to 54 years in the workforce is widespread (**Map 3.7a**). Indeed, in excess of two thirds of SLAs in **Canberra-Queanbeyan** fall into this category. Although based on small numbers, there were five SLAs with a female labour force participation rate of 100 per cent in 1996 and a further five had a rate greater than 85 per cent. Of SLAs with more than 1,000 females in the labour force, Ngunnawal (with a participation rate of 82.0 per cent) and Curtin (80.0 per cent) had the highest participation rates.

Quite low participation rates were recorded in Turner (61.6 per cent), Braddon (61.3 per cent) and Oaks Estate (60.9 per cent), but the very lowest female labour force participation rate was recorded in Acton, where only 36.9 per cent of women aged 20 to 54 were in the workforce.

There were 3,731 females in the labour force in Kambah (a participation rate of 76.4 per cent), more than twice the number resident in Wanniasa and Kaleen, with 1,837 (76.3 per cent) and 1,799 (79.0 per cent), respectively. These SLAs also the largest numbers of unemployed and unskilled and semi-skilled workers. In addition to these three SLAs, a further 11 contained more than 1,000 women who were in the labour force.

In Queanbeyan, the participation rate of 73.3 per cent was lower than the ACT rate and represented a total of 5,449 women.

There were inverse correlations at the SLA level with indicators of socioeconomic disadvantage including the variables for unemployed people (-0.72) and private dwellings without a motor vehicle (-0.54) and a weaker, positive correlation with the variable for high income families (0.25). These results, together with the positive correlation of meaningful significance with the IRSD (-0.56), indicate the existence of an association at the SLA level between high rates of female labour force participation and socioeconomic advantage.

Postcode-based areas

Although Belconnen (Balance) (89.6 per cent) and Kowen/Majura (82.3 per cent) had the highest labour force participation rates at the postcode level, these rates represented just 216 and 79 females respectively. High proportions were also recorded in Gungahlin-Hall (80.8 per cent), Weston Creek (79.9 per cent) and Woden Central and Tuggeranong North East (both with 79.8 per cent).

The lowest female labour force participation rates were recorded in the postcode areas of Eastern Fringe (67.5 per cent) and Canberra Central (70.2 per cent).

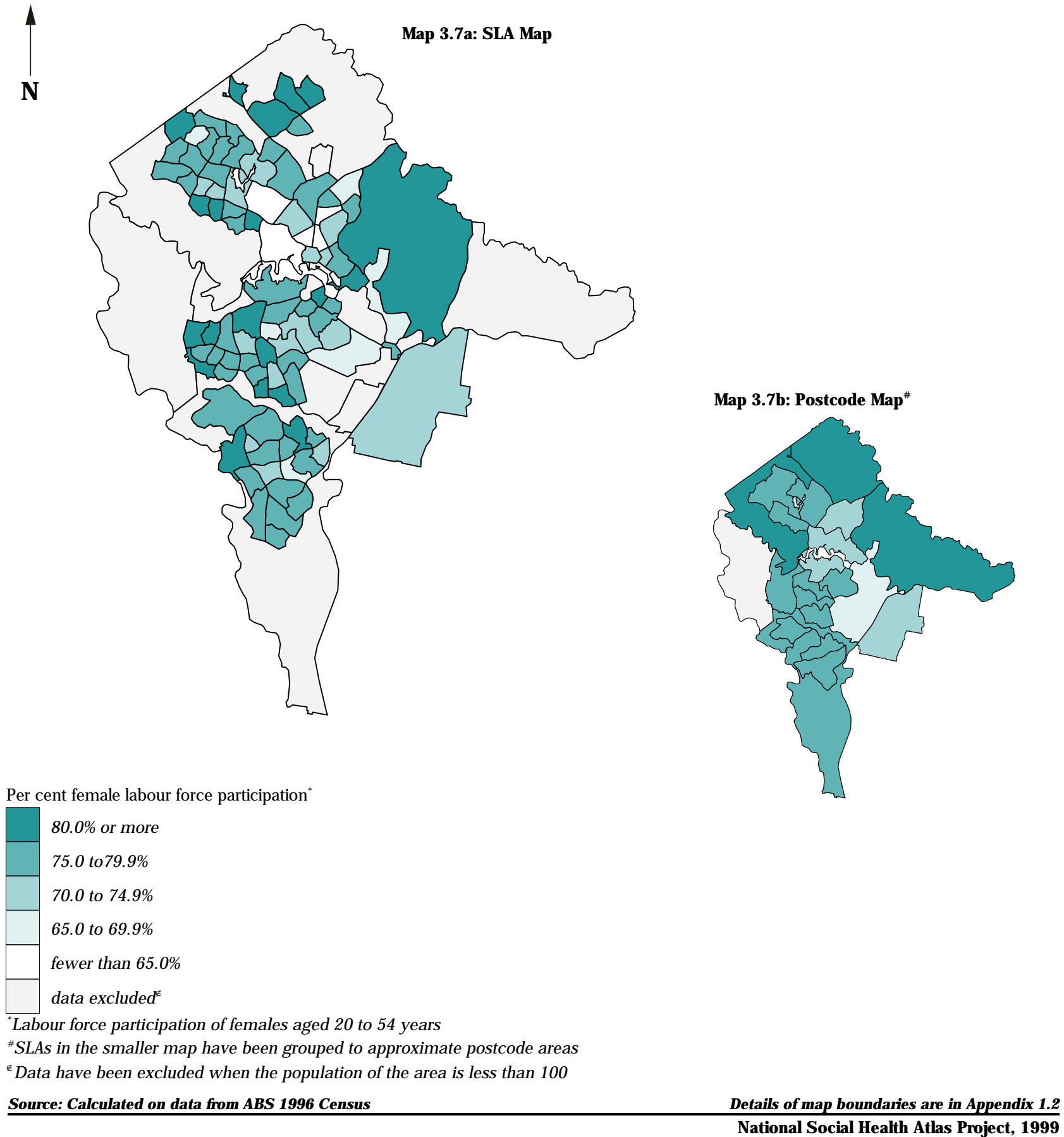
The largest numbers of females in the labour force resided in Belconnen West (8,667 females), Tuggeranong South East (6,513) and Weston Creek (5,323).

There were 64 females in the labour force in the ACT-Balance Statistical Subdivision at the time of the 1996 Census, a participation rate of 69.6 per cent.

Map 3.7

Female labour force participation*, Canberra-Queanbeyan, 1996

as a percentage of the total population in each area



People who left school at age 15 years or less, or did not go to school, 1996

Capital City Comparison (Australia as the Standard)

The age at which people cease their formal education does not determine absolutely how they will fare in life, but it does have a strong influence, not only on the ability to gain secure and rewarding employment but also on general life style. Differences in educational participation are examined in this analysis by comparing variations in the extent to which the population left school at age 15 or less, or did not go to school (jointly referred to as early school leavers). This variable has been age-sex standardised to remove differences in participation rates occurring between areas solely because of differences in the age and sex of the population in the areas being studied. A description of this process is on page 15. Among the capital cities, the highest standardised ratio (SR) of early school leavers was recorded in **Perth**, with 12 per cent more early school leavers than expected (an SR of 112**), and the lowest was recorded in **Canberra**, where the ratio of 68** indicated that there were 32 per cent fewer early school leavers than were expected from the Australian rates.

There was relatively little difference in the early school leaver ratios for 1986 and 1996 (**Table 3.13**), with some cities (**Sydney**, **Melbourne** and **Brisbane**) showing a small improvement (relative to the Australian rates) and others (eg. **Hobart** and **Darwin**) showing a relative decline as their rates moved closer to the Australian rates. The ratio for **Hobart** moved from below (in 1986) to above (1996) the *All capitals* ratio.

Table 3.13: People who left school at age 15 years or less, or did not go to school, capital cities
Age-sex standardised ratios

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra ¹	All capitals
1996	89**	82**	110**	98**	112**	98**	92**	68**	92**
1986	92**	85**	112**	98**	112**	92**	88**	69**	94**

¹Includes Queanbeyan (C)

Source: ABS special data services

Statistical significance: * significance at 5 per cent level; ** significance at 1 per cent level

Canberra (ACT as the Standard)

There were 51,464 early school leavers in **Canberra-Queanbeyan** in 1996, comprised of 23,324 males and 28,140 females.

Variations within **Canberra-Queanbeyan** in age-standardised educational participation ratios provide a striking illustration of the links between education, occupation, income and wellbeing.

Statistical Local Areas (SLAs)

There were two significant concentrations of early school leavers in **Canberra-Queanbeyan** (**Map 3.8a**). The first, situated to the south-east, included the SLAs of Symonston (with an SR of 194**, 94 per cent more than early school leavers than expected from the rates for the ACT), Harman (164**) and Queanbeyan (147**). A second concentration included the SLAs of Richardson (with an SR of 149**), Isabella Plains (145**), Banks (138**), Chisholm (134**) and Gordon (132**), located south of the city centre. In general, areas with higher than expected numbers of people who left school at age 15 or less were along the south western margin of **Canberra**, in suburbs extending from Charnwood and Dunlop south to Gordon, Condor and Banks.

In 1996, Queanbeyan had a total of 6,286 early school leavers, with a standardised ratio of 147**, which indicated that there were 47 per cent more early school leavers than were expected from the ACT rates.

The very lowest levels of early school leavers were located more centrally, in the SLAs of Acton (49**, 51 per cent fewer early school leavers than expected from the ACT rates), Aranda (52**), Forrest (53**) and Red Hill (57**).

There was a correlation of substantial significance with the variable for unskilled and semi-skilled workers (0.74). and weaker associations with the variables for Indigenous people (0.42), single parent families (0.36) and low income families (0.31).

The correlation analysis also showed there to be inverse associations with the variables for managers and administrators, and professionals (of substantial significance, -0.77) and high income families (of meaningful significance, -0.66). These results, together with the inverse correlation of meaningful significance with the IRSD (-0.52), indicate the existence of an association at the SLA level between high rates of early school leavers and socioeconomic disadvantage.

Postcode-based areas

The postcode area of Eastern Fringe had a ratio of 174**, 74 per cent more early school leavers than were expected from the ACT rates. This was considerably higher than the SRs recorded in the other postcode areas in the top range mapped. Tuggeranong South, Tuggeranong South East and Belconnen (Balance) recorded similar elevated ratios of 133**, 131** and 130**. A further five areas which had highly significant, although lower, ratios included Kambah (with an SR of 113**) and Belconnen North (106**).

The lowest ratio (an SR of 72**) was recorded in Canberra Central, where there were 28 per cent fewer early school leavers than were expected from the ACT rates. Other low ratios were recorded in Woden North (75**) and Kowen/Majura (76).

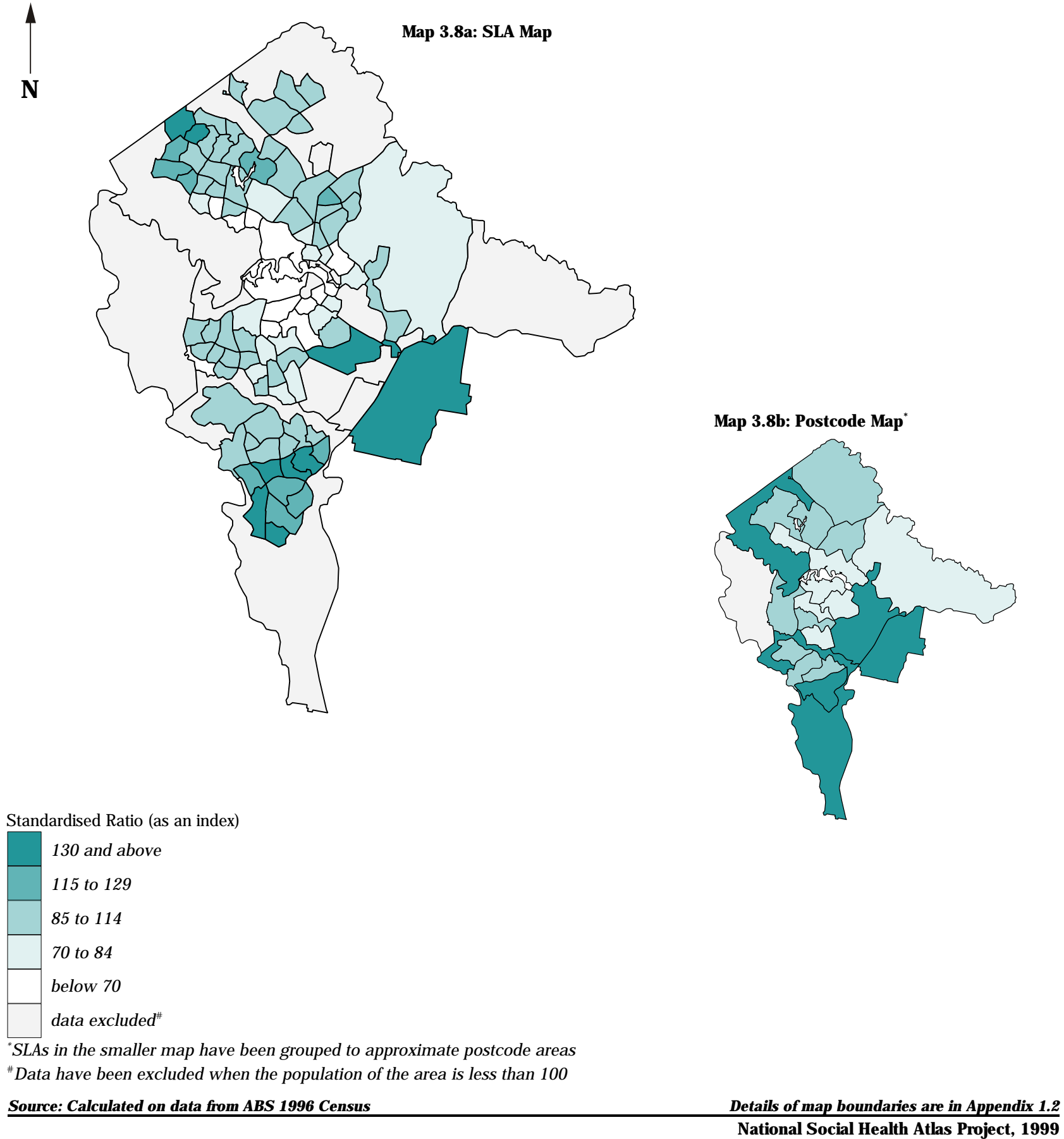
The largest numbers of early school leavers were residents of Belconnen West (6,326 people), Canberra North (4,629) and Tuggeranong South East (4,224).

A total of 69 people living in the ACT-Balance Statistical Subdivision left school at age 15 or earlier, 31 per cent more than expected from the ACT rates (an SR of 131*).

Map 3.8

People who left school at age 15 years or less, or did not go to school, Canberra-Queanbeyan, 1996

as a percentage of the total population in each area



Aboriginal and Torres Strait Islander people, 1996

Capital city comparison

The percentages of people identifying as Aboriginal and Torres Strait Islanders in the 1996 Census were low, with the *All capitals* average at 1.0 per cent (**Table 3.14**). The exceptions were **Hobart** and **Darwin**, where Indigenous people comprised 2.5 per cent and 8.6 per cent of the population, respectively. The lowest percentage was recorded in **Melbourne** (0.3 per cent), with **Sydney** and **Adelaide** the next lowest, both with 0.9 per cent. However, some 36.6 per cent of Australia's Indigenous people (108,557 people) lived in the capital cities at the 1996 Census, with the largest numbers in **Sydney** (34,432 Indigenous people).

The proportion of Indigenous people recorded in Australia's capital cities increased in the ten years from 1986, rising from 0.6 per cent in 1986, to 0.7 per cent in 1991 and to 1.0 per cent in the 1996 Census. The number of Indigenous Australians rose by 47,945 in the same period. This substantial increase largely reflects changes over time in the preparedness of people to identify themselves as Indigenous on the Census form. The increase was greatest in New South Wales, and particularly marked in the non-metropolitan areas of the State, with a population of 56,474 in 1996 compared with 35,907 in 1986. Additional information about these increases is provided on pages 13 and 14 (see *Data quality of Indigenous population counts*).

Table 3.14: Aboriginal and Torres Strait Islander people, capital cities
Per cent

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra ¹	All capitals
1996	0.9	0.3	1.5	0.9	1.4	2.5	8.6	1.1	1.0
1986	0.6	0.2	1.0	0.6	1.0	1.2	7.6	0.6	0.6

¹Includes Queanbeyan (C)

Source: ABS special data services

Canberra-Queanbeyan

In 1986 there were 1,495 Indigenous Australians resident in **Canberra-Queanbeyan**, some 0.6 per cent of the total population. Between the 1986 and 1991 Censuses, their numbers increased, although the proportion remained the same at 0.6 per cent of the total population. In the five years to the 1996 Census, their numbers increased substantially to 3,590, or 1.1 per cent of the total population. See the note above about the possible reasons for this large increase.

Statistical Local Areas (SLAs)

The SLAs with the highest proportions of Indigenous Australians form a group to the south-east of the city centre (**Map 3.9a**). In this group, high proportions were recorded in Symonston (3.2 per cent), Barton (2.8 per cent), Kingston (2.8 per cent) and Narrabundah (2.6 per cent). In nearby Queanbeyan, the proportion was 2.6 per cent. Other proportions of greater than two per cent were recorded in Lyons (2.1 per cent) and Charnwood (2.3 per cent).

Only Kambah (with 266) and Narrabundah (with 149) had more than 100 Indigenous people in their populations. The majority of the remaining SLAs had fewer than 50 Indigenous residents and 16 SLAs had none.

There were 701 Indigenous people in Queanbeyan at the 1996 Census, 2.6 per cent of the total population.

Correlations of meaningful significance were recorded with the variables for low income families and single parent families (both 0.51) and there were weaker associations with the variables for public rental housing (0.46), early school leavers (0.42), unskilled and semi-skilled workers (0.42) and unemployed people (0.38). These results, together with the inverse correlation of meaningful significance with the IRSD (-0.63), indicate the existence of an association at the SLA level between high proportions of Indigenous people and socioeconomic disadvantage.

Postcode-based areas

Eastern Fringe (2.4 per cent) and Queanbeyan (2.6 per cent) were the only areas at the postcode level in which Indigenous people comprised more than 2.0 per cent of the population. The next highest proportions were recorded in Canberra South and Kambah (both with 1.6 per cent) and Woden Central (1.4 per cent).

The lowest proportions of Indigenous people were recorded in Kowen/Majura (0.0 per cent) and Gungahlin-Hall and Belconnen South (both with 0.5 per cent).

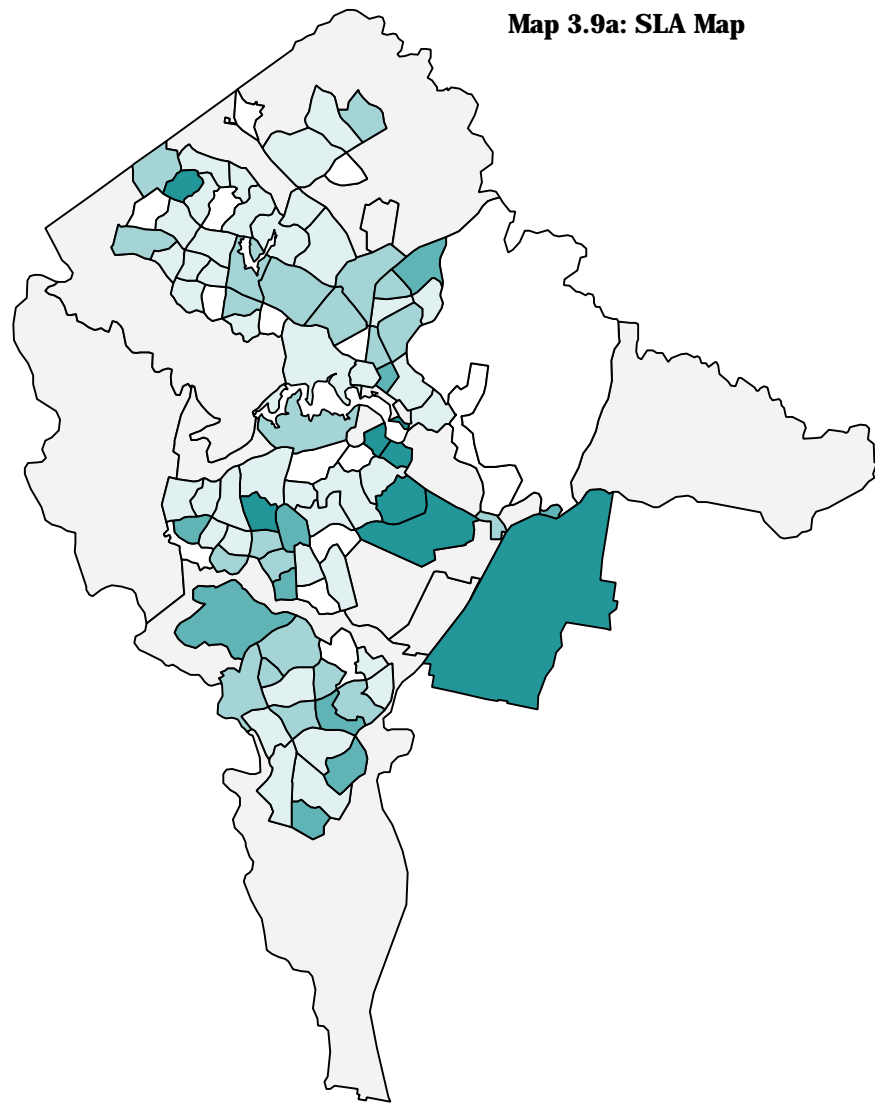
The largest numbers of Indigenous people at the postcode level were in Belconnen West (345 people), Tuggeranong South East (326) and Canberra North (304).

There were six people in the ACT-Balance Statistical Subdivision recorded as Aboriginal and Torres Strait Islander people, 1.5 per cent of the population in 1996.

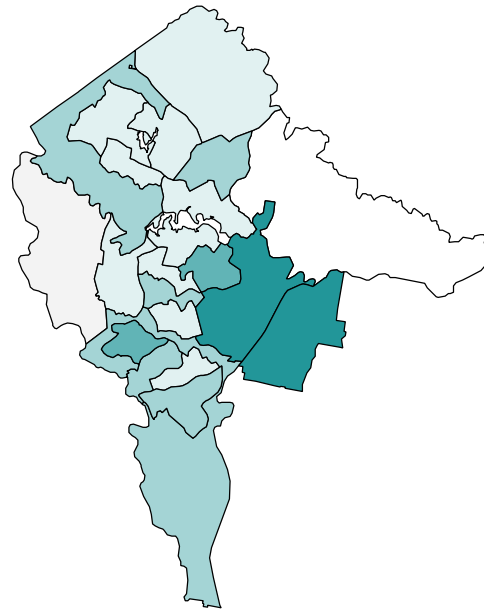
Map 3.9

Aboriginal and Torres Strait Islander people, Canberra-Queanbeyan, 1996

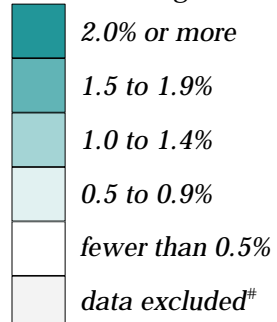
as a percentage of the total population in each area



Map 3.9b: Postcode Map*



Per cent Aboriginal and Torres Strait Islander people



*SLAs in the smaller map have been grouped to approximate postcode areas

[#]Data have been excluded when the population of the area is less than 100

Source: Calculated on data from ABS 1996 Census

**Details of map boundaries are in Appendix 1.2
National Social Health Atlas Project, 1999**

People born in predominantly non-English speaking countries and resident for five years or more, 1996

Capital city comparison

Migrants in this category arrived in Australia from predominantly non-English speaking countries in or before 1991. As a substantial proportion will have been resident in Australia for many years, their distribution is often widespread within urban areas, especially the capital cities. Of the Australian capital cities, **Sydney** has the second highest proportion of its population in this category (**Table 3.15**), while **Hobart** has the lowest (4.3 per cent). This characteristic, of a strong over representation of non-English speaking migrants, has been a feature of New South Wales' demography during the post-war period. There were 666,190 people in this category in **Sydney** in 1996 (17.8 per cent of the population), well above **Melbourne's** population of 568,565 people. This represents a major change from the situation in 1986, when **Melbourne** had 456,686, just 15,177 less than in **Sydney**.

Table 3.15: People born in predominantly non-English speaking countries and resident in Australia for five years or more, capital cities

	<i>Per cent</i>								
	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra ¹	All capitals
1996	17.8	18.1	7.5	11.1	11.7	4.3	10.7	11.4	14.8
1986	14.0	16.1	6.0	10.5	10.5	4.2	10.2	10.8	12.7

¹Includes Queanbeyan (C)

Source: ABS special data services

Canberra-Queanbeyan

In 1986, there were 29,237 people born in predominantly non-English speaking countries and resident in Australia for five years or more, comprising 10.8 per cent of the **Canberra-Queanbeyan** population. During the following ten years their numbers increased by 26.7 per cent to 37,041. The countries from which the majority of early migrants have come are the former Yugoslavia, Germany, Italy and Vietnam (**Table 3.16**).

Statistical Local Areas (SLAs)

This group of long term migrants have settled extensively throughout **Canberra-Queanbeyan** (**Map 3.10a**): of the 107 SLAs in **Canberra** only six had 15 per cent or more of their population in this category. The highest proportions were in O'Malley (28.2 per cent) and McKellar (19.2 per cent).

In Kambah there were 1,620 migrants who had been in Australia for five years or more, with 1,136 in Kaleen. Both Palmerston and Florey had 921, and 13 other SLAs had more than 500 people in this population group. These SLAs occupied two principal areas – one to the north-west, centred around the suburbs of Evatt and Florey, and the other to the south, around the suburbs of Isabella Plains, Monash and Wanniasa.

In Queanbeyan, there were 3,316 migrants born in predominantly non-English speaking countries who had been resident for five years or more, representing 12.1 per cent of the population.

There was a correlation of meaningful significance at the SLA level with the variable for people who reported poor proficiency in English (0.68).

Postcode-based areas

Map 3.10b shows the diffuse distribution of migrants born in predominantly non-English speaking countries who had been in Australia for five years or more. The highest concentrations of these people were in the postcode areas of Woden Central (14.9 per cent), Gungahlin-Hall (14.2 per cent), Belconnen North (13.6 per cent) and Woden South (13.4 per cent).

The two lowest concentrations of early migrants were in the eastern areas of Kowen/Majura (2.2 per cent) and Eastern Fringe (4.9 per cent). The next lowest proportion was a considerably higher 9.3 per cent in Tuggeranong South.

The largest numbers of migrants born in predominantly non-English speaking countries who had been in Australia for five years or more were in the postcode areas of Belconnen West (4,355 people), Tuggeranong South East (3,278) and Belconnen North (3,180).

There were 22 people living in the ACT-Balance Statistical Subdivision in 1996 who were born in predominantly non-English speaking countries and had been resident in Australia for five years or more, 5.3 per cent of the population.

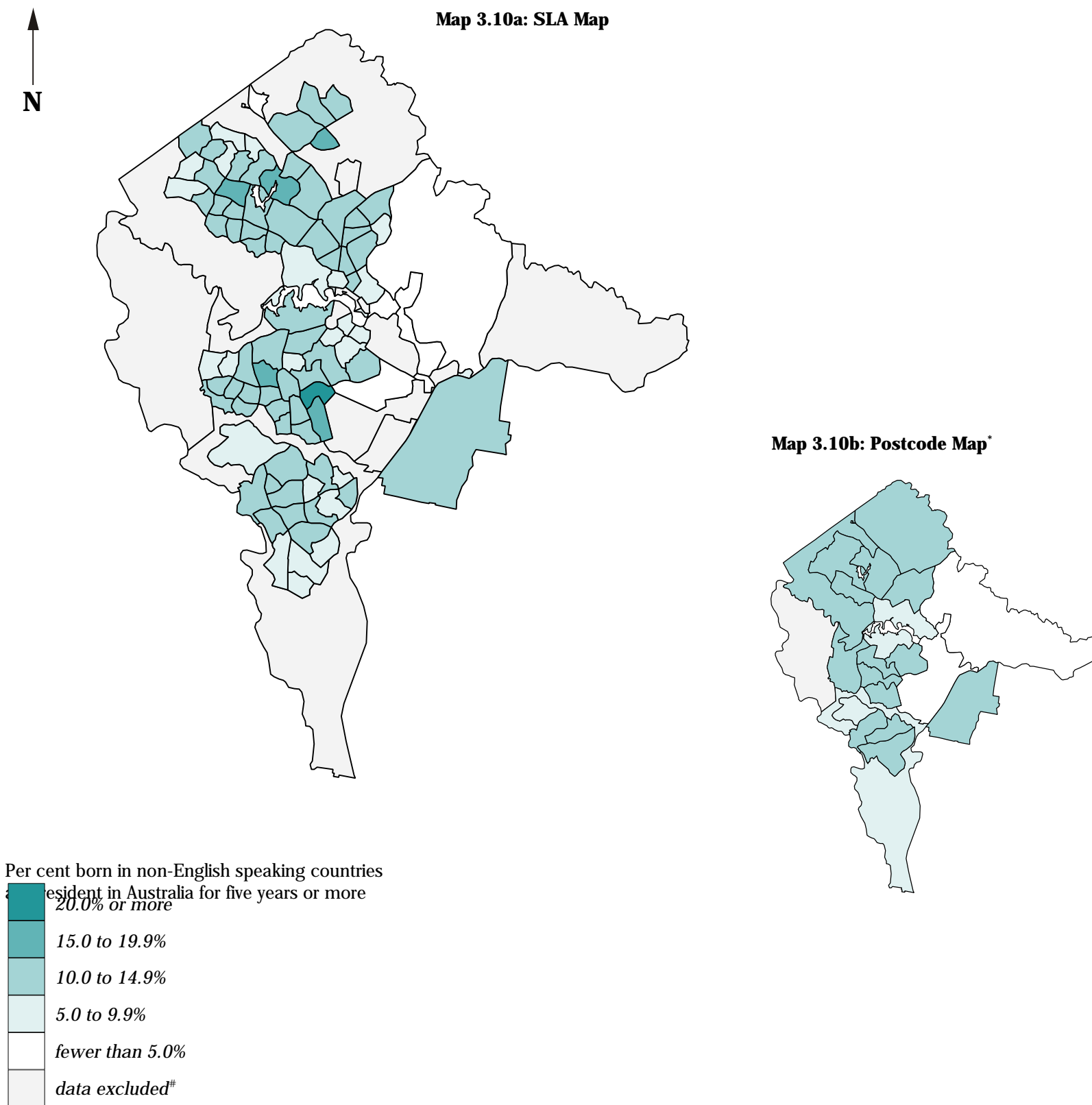
Table 3.16: Countries of origin of people born in non-English speaking countries, Canberra, 1996

Country of origin	No.	Per cent	Country of origin	No.	Per cent
China (excl. Taiwan)	1,656	4.1	Malta	344	0.8
Germany, Federal Republic	2,568	6.3	Netherlands	1,425	3.5
Greece	1,404	3.4	Philippines	1,223	3.0
Hong Kong	1,136	2.8	Poland	1,377	3.4
India	1,585	3.9	Sri Lanka	1,232	3.0
Indonesia	658	1.6	Vietnam	2,251	5.5
Italy	2,580	6.3	(Former) Yugoslavia	3,995	9.8
Lebanon	396	1.0	Other & not stated	15,460	37.9
Malaysia	1,506	3.7	Total	40,796	100.0

Map 3.10

People born in predominantly non-English speaking countries and resident in Australia for five years or more, Canberra-Queanbeyan, 1996

as a percentage of the total population in each area



*SLAs in the smaller map have been grouped to approximate postcode areas

#Data have been excluded when the population of the area is less than 100

Source: Calculated on data from ABS 1996 Census

Details of map boundaries are in Appendix 1.2
National Social Health Atlas Project, 1999

People born in predominantly non-English speaking countries and resident in Australia for less than five years, 1996

Capital city comparison

For migrants arriving from non-English speaking countries, the initial years of settlement are the most difficult. The settlement process is often further exacerbated by limited English proficiency. For these migrants, obtaining employment may be difficult, type of employment may be restricted, and income levels may be low. In this context, the largest capital cities hold wider prospects for employment and they also have the most culturally diverse populations. **Sydney** is the major initial destination for migrants from predominantly non-English speaking countries, with 138,009 people (3.7 per cent of its population) having arrived in Australia in the previous five years (Table 3.17). **Melbourne** was the second largest destination, attracting 88,673 people in this population group, 2.8 per cent of its population at the 1996 Census.

The proportion of recent immigrants in Australia's capital cities increased slightly from 2.5 per cent in 1986 to 2.7 per cent in 1996. This was largely due to the growth in numbers in **Brisbane**, **Sydney** and **Melbourne**. Although the proportion remained the same, there was an increase in absolute terms in **Perth** over the same period of time. **Darwin**, **Canberra** and **Adelaide** experienced a decline in both proportions and numbers in this population group.

Table 3.17: People born in predominantly non-English speaking countries and resident in Australia for less than five years, capital cities

	<i>Per cent</i>								
	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra¹	All capitals
1996	3.7	2.8	1.7	1.4	2.3	0.7	1.7	1.9	2.7
1986	3.1	2.6	1.4	1.6	2.3	0.7	3.1	2.2	2.5

¹Includes Queanbeyan (C)

Source: ABS special data services

Canberra-Queanbeyan

In 1986, there were 5,982 people born in predominantly non-English speaking countries and resident in Australia for less than five years living in **Canberra-Queanbeyan**, comprising 2.2 per cent of the population. Over the ten years to 1996 their numbers increased to 6,097, although their proportion in the population had declined to 1.9 per cent.

Statistical Local Areas (SLAs)

In **Canberra**, recently arrived migrants resided in the same areas as longer term migrants, but their spatial distribution was more confined, with the highest concentrations in the inner suburbs immediately to the north of the city centre (Map 3.11a). This phenomenon is a characteristic of many larger cities, as these areas offer the opportunity of relatively low housing costs in older housing, which is used by migrant families until they can accumulate sufficient resources to move to other areas. Four contiguous SLAs in this area had the highest proportions of this population group – Bruce (7.3 per cent), Belconnen Town Centre (9.8 per cent), Turner (10.6 per cent) and Acton (11.6 per cent). Hughes, to the south, had 8.6 per cent of its population comprised of migrants born in non-English Speaking countries who had been resident for less than five years.

In 1996, the five SLAs with the highest proportions of recently arrived migrants from predominantly non-English speaking countries also had the largest numbers of people with these characteristics. There were more than 200 people in this group in each of Acton (201 people), Hughes (254) and Belconnen Town Centre (265), with 196 in Turner and 185 in Bruce. In Queanbeyan, there were 254 recent migrants, 0.9 per cent of the total population.

There were correlations of meaningful significance at the SLA level with the variables for people reporting poor proficiency in English (0.58), private dwellings with no motor vehicles (0.60) and unemployed people (0.52). An inverse correlation of meaningful significance was recorded with the variable for female labour force participation (-0.58).

Postcode-based areas

The postcode areas with the highest concentrations of recent migrants were clustered around the central Canberra area in Canberra Central (4.3 per cent), and the adjacent areas of Canberra South (2.6 per cent) and Canberra North (2.5 per cent). Woden North (4.1 per cent) and Woden Central (3.5 per cent) had similar rates. The lowest proportions were found in Kowen/Majura (0 per cent) and Eastern Fringe and Kambah (both with 0.7 per cent). The largest numbers of recent migrants resided in Canberra Central (862 people), Belconnen West (762) and Canberra North (623).

Three people resident in the ACT-Balance Statistical Subdivision in 1996 were newly arrived Australian residents born in non-English speaking countries, representing 0.7 per cent of the population.

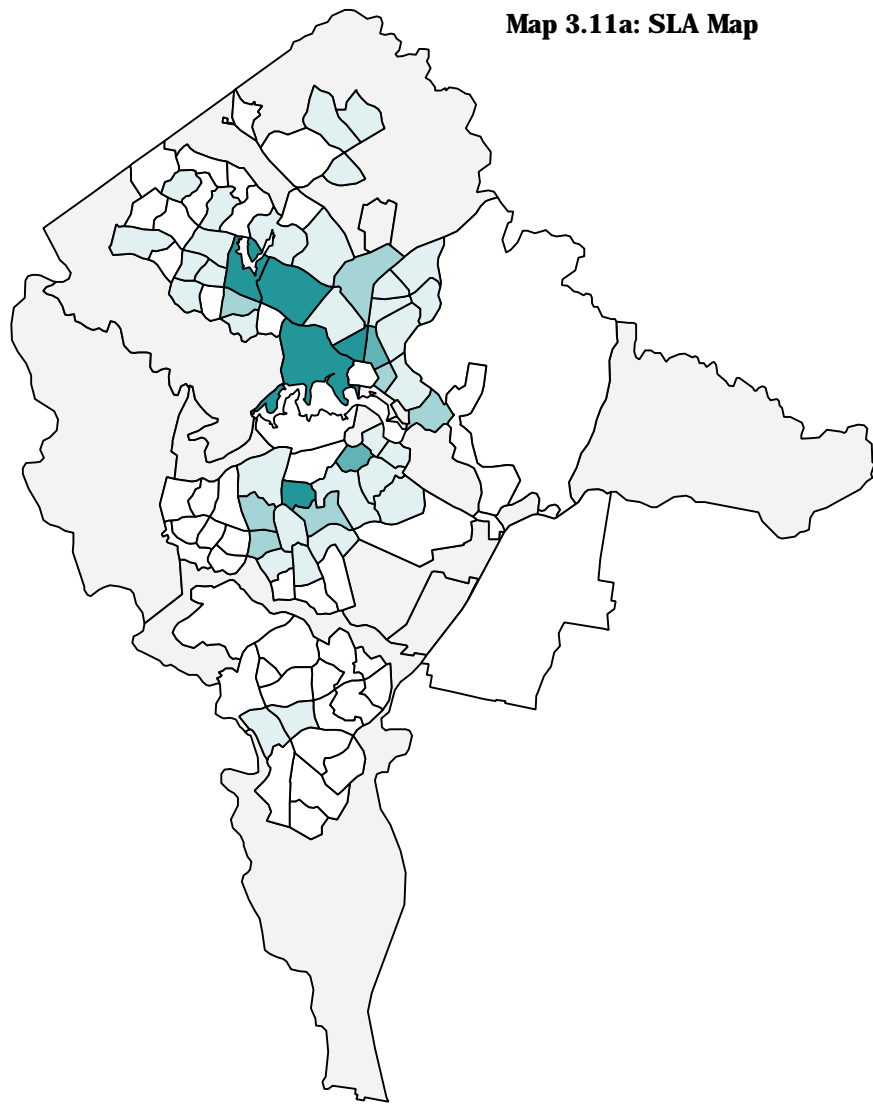
Map 3.11

People born in predominantly non-English speaking countries and resident in Australia for less than five years, Canberra-Queanbeyan, 1996

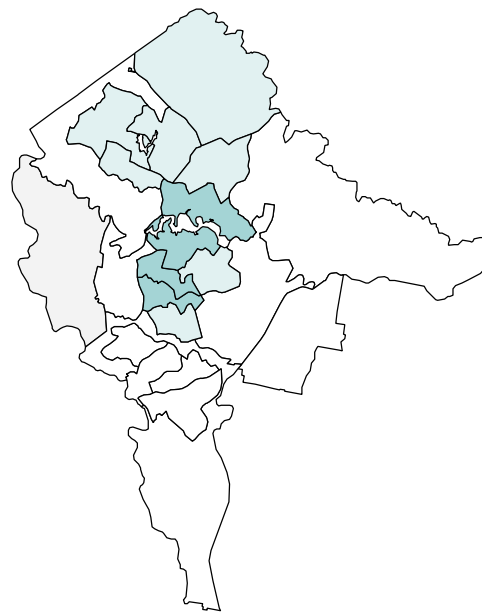
as a percentage of the total population in each area



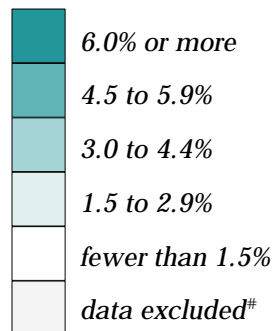
Map 3.11a: SLA Map



Map 3.11b: Postcode Map*



Per cent born in non-English speaking countries and resident for less than five years



*SLAs in the smaller map have been grouped to approximate postcode areas

#Data have been excluded when the population of the area is less than 100

Source: Calculated on data from ABS 1996 Census

Details of map boundaries are in Appendix 1.2
National Social Health Atlas Project, 1999

Capital city comparison

For migrants from non-English speaking countries, the rate at which they adapt to live in the host country is directly related to the rate at which they achieve proficiency in English. Their level of proficiency in English has profound implications for the ease with which they are able to access labour markets, develop social networks, become aware of and utilise services, and participate in many aspects of Australian society. From a health service provision viewpoint, the location of migrants with limited English proficiency may indicate areas within the city where different approaches might be taken to ensure that these residents are aware of the health services available. In the provision of health services for women and older people, these distributions are perhaps even more relevant, as many migrants from European countries who arrived in Australia in the 1950s and 1960s have not developed English language skills (especially females), or have returned to using the language of their birthplace as they have aged (both females and males).

Poor proficiency in English of people aged five years and over and born overseas in predominantly non-English speaking countries was determined when people within this category reported speaking English 'not well' or 'not at all' (**Table 3.18**). The percentages shown are calculated on the total population aged five years and over, not just those born overseas. **Melbourne** and **Sydney** have the highest proportions of migrants with poor proficiency in English at 5.0 and 4.9 per cent respectively. These high levels are due largely to the fact that **Melbourne** and **Sydney** have been the principal destinations for migrants from South-East Asia during the last two decades, following the major influx of people from European countries in the 1950s and 1960s. However, since the 1986 Census, there has been a trend across most Australian cities towards increasing numbers of people who are not fluent in English. While proportions may have fluctuated, numbers increased in most cities. **Darwin** was the only capital city to record a fall in both proportions and numbers.

Table 3.18: Poor proficiency in English of people aged five years and over and born in predominantly non-English speaking countries, capital cities

	<i>Per cent</i>								
	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra ¹	All capitals
1996	4.9	5.0	1.4	2.5	2.1	0.6	2.0	1.7	3.7
1986	4.0	4.8	1.2	2.7	2.1	0.6	2.6	1.9	3.4

¹Includes Queanbeyan (C)

Source: ABS special data services

Canberra-Queanbeyan

The number of people in **Canberra-Queanbeyan** born in predominantly non-English speaking countries who reported poor proficiency in English increased from 4,758 in 1986 to 5,223 in 1996. The distribution of this population group (**Map 3.12a**) closely mirrors the distribution of recently arrived migrants born in non-English speaking countries (**Map 3.11a**).

Statistical Local Areas (SLAs)

In Belconnen Town Centre, 4.9 per cent of the population reported poor English proficiency. Similar proportions were recorded in adjacent Florey (3.6 per cent) and in Reid (situated immediately to the east of the city centre) and in O'Malley (some eight kilometres south of the city centre), both with 3.5 per cent. In each of Lyons, Palmerston, Turner, McKellar, Bruce and Braddon, migrants born in predominantly non-English speaking countries and reporting poor proficiency in English comprised more than 3.0 per cent of the population aged five years and over.

The largest numbers of people in this category resided in Florey (179 people), while there were 153 in Palmerston and 150 in Kaleen. Other SLAs with more than 100 people reporting poor proficiency in English were Narrabundah (139 people), Belconnen Town Centre (127), Kambah (126), Lyneham (108) and Isabella Plains (104).

Queanbeyan had more people born in non-English speaking countries and reporting poor proficiency in English than any **Canberra** SLA, with 641 people, 2.6 per cent of the population aged five years and over.

There were correlations of meaningful significance at the SLA level with the variables for immigrants who had arrived before 1991 (0.68) and recently arrived immigrants (0.58); and weaker associations with the variables for low income families (0.49), public rental housing (0.44), unemployed people (0.44) and single parent families (0.42). These results, together with the inverse correlation with the IRSD (-0.42), indicate the existence of an association at the SLA level between high proportions of people poor proficiency in English and socioeconomic disadvantage.

Postcode-based areas

People reporting poor proficiency in English were largely concentrated (**Map 3.12b**) in the postcode areas of Woden Central (2.3 per cent), Gungahlin-Hall (2.2 per cent), Belconnen West (2.1 per cent) and Belconnen North (2.1 per cent). Slightly lower concentrations were found in Canberra North (2.0 per cent), and Belconnen South and Canberra South (both with 1.9 per cent). The lowest concentrations of people with poor English proficiency were in the eastern edge areas of Kowen/Majura (0 per cent) and Eastern Fringe (0.4 per cent).

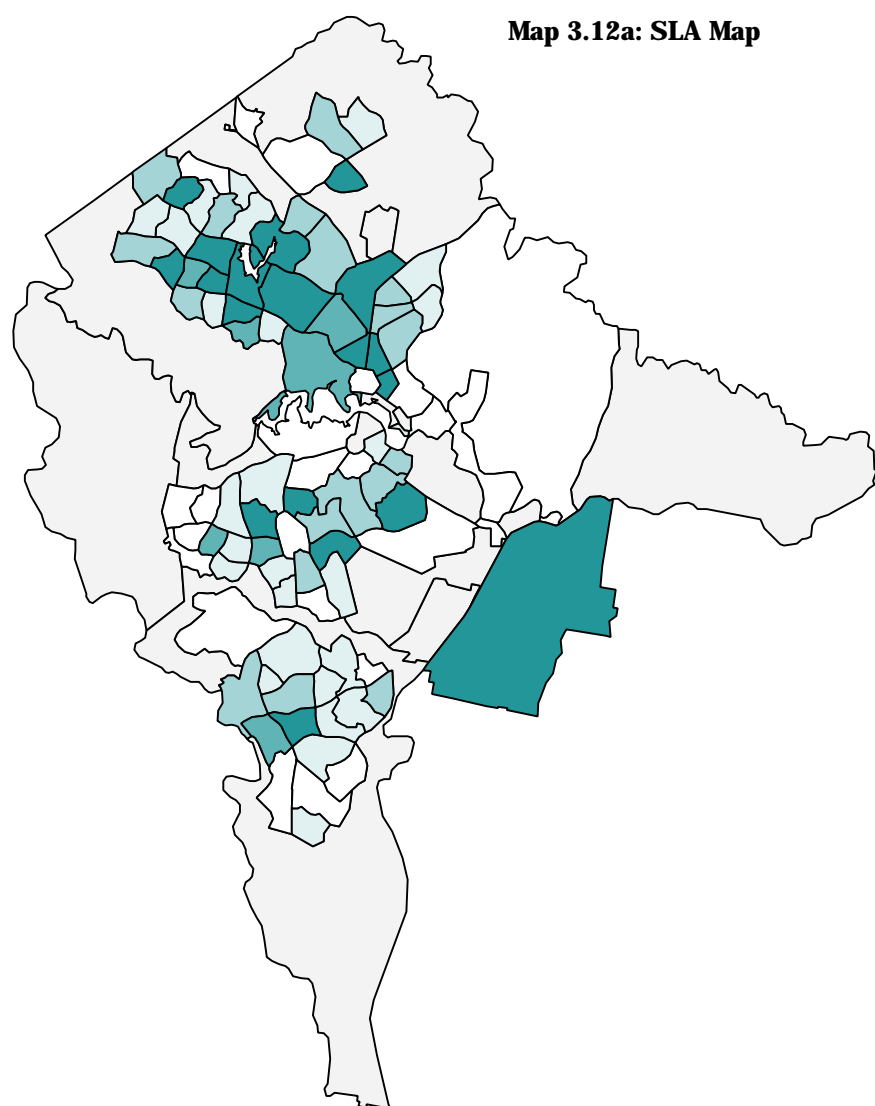
The largest numbers of these migrants were in Belconnen West (776 people) and Canberra North (473).

In 1996, there were no people in the ACT-Balance Statistical Subdivision aged five years and over and born in predominantly non-English speaking countries who reported poor proficiency in English.

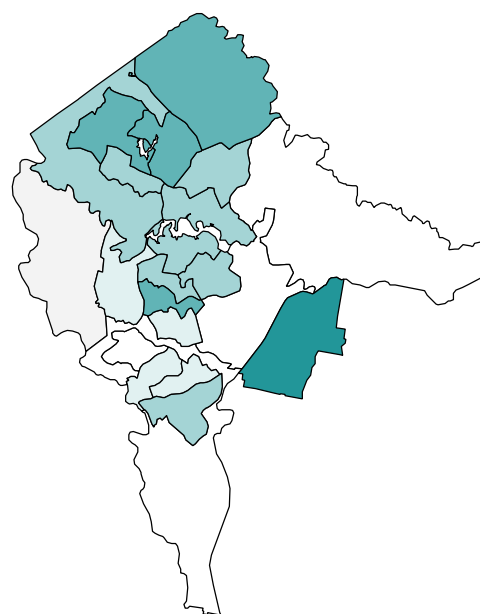
Map 3.12

Proficiency in English of people aged five years and over and born in a non-English speaking country, Canberra-Queanbeyan, 1996

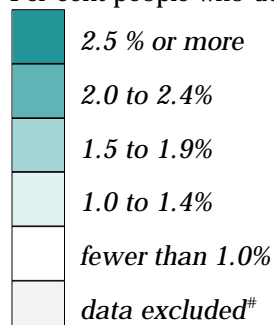
as a percentage of the total population in each area



Map 3.12b: Postcode Map*



Per cent people who do not speak English well, or at all



*SLAs in the smaller map have been grouped to approximate postcode areas

[#]Data have been excluded when the population of the area is less than 100

Source: Calculated on data from ABS 1996 Census

**Details of map boundaries are in Appendix 1.2
National Social Health Atlas Project, 1999**

Dwellings rented from the Territory housing authority, 1996

Capital city comparisons

The Census collects data on dwellings rented from the State or Territory housing authority (ACT Housing in the Australian Capital Territory): in this analysis, rented dwellings are expressed as a proportion of all occupied private dwellings. (Note: Private dwellings exclude special dwellings such as hotels and boarding houses.) The distribution of housing authority dwellings is an indicator of the distribution of single parents, unemployed, aged, disabled and Indigenous people, as these groups are given waiting list priority for public housing which has become increasingly scarce since the 1970s.

The proportion of the dwelling stock rented from the State housing authority is just above the national average for both **Sydney** and New South Wales (**Table 3.19**). In comparison, **Darwin**, **Adelaide** and **Canberra** have above average proportions of dwelling stock rented from State government housing authorities. Although the proportion of dwellings in this category increased only slightly, from 5.2 per cent (at the 1986 Census) to 5.5 per cent (at the 1996 Census) of all dwellings in **Sydney**, the 1996 figure represented an additional 13,766 dwellings. The largest relative increase in the number of State housing authority dwellings in the ten years from 1986 to 1996 was recorded in **Brisbane**, and the largest decreases were recorded in **Darwin** and **Canberra**.

Table 3.19: Dwellings rented from the Territory housing authority, capital cities
Per cent

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra ¹	All capitals
1996	5.5	2.9	4.8	9.7	4.6	8.3	15.8	9.7	5.3
1986	5.2	2.9	3.9	10.5	5.3	10.0	21.9	11.5	5.3

¹Includes Queanbeyan (C)

Source: ABS special data services

Canberra-Queanbeyan

Between 1986 and 1996 the number of publicly owned rental dwellings in **Canberra-Queanbeyan** increased by 13.8 per cent, from 9,965 to 11,340 dwellings.

Statistical Local Areas (SLAs)

The highest proportions of dwellings rented from the ACT housing authority were in Braddon (40.8 per cent), Reid (34.7), Oaks Estate (32.9 per cent), Ainslie (28.6) and Turner (27.6). Public rental dwellings represented more than one fifth of all dwellings in Charnwood (24.8 per cent), Lyons (24.7 per cent) Belconnen Town Centre (24.1 per cent), Narrabundah (21.3 per cent) and O'Connor (20.6 per cent).

In Queanbeyan, the proportion of public rental housing in the stock of occupied private dwellings was a relatively low 6.0 per cent (a total of 638 dwellings), reflecting a different approach to public housing provisions by the New South Wales government.

There were correlations of meaningful significance with the variables for single parent families (0.69), private dwellings without a motor vehicle (0.69), low income families (0.67) and unemployed people (0.56). Weaker associations were recorded with the variables for the Indigenous population (0.46) and public rental housing (0.44). A weak inverse correlation was recorded with the variable for high income families (-0.41). These results, together with the inverse correlation of meaningful significance with the IRSD (-0.65), indicate the existence of an association at the SLA level between high proportions of public rental housing and socioeconomic disadvantage.

Postcode-based areas

The postcode areas of Canberra Central (20.1 per cent), Canberra North (17.3 per cent) and Canberra South (17.1 per cent) had the largest concentrations of public rental housing in **Canberra** (**Map 3.13b**).

Ten postcode areas had fewer than 10 per cent of all occupied private dwellings rented from the ACT housing authority. The lowest of these were in Gungahlin-Hall (2.0 per cent) and Tuggeranong North East (2.8 per cent).

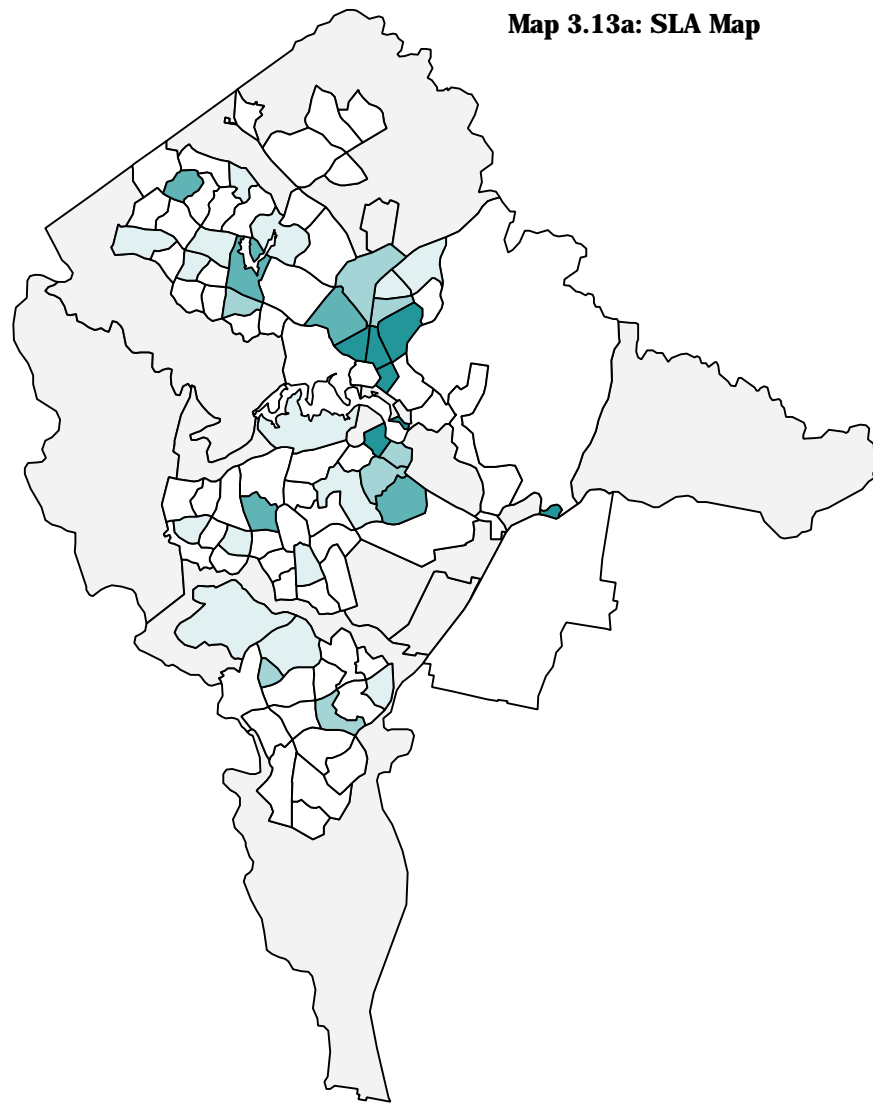
The postcode areas of Canberra North (1,781 dwellings), Belconnen West (1,720), Canberra Central (1,308) and Canberra South (1,025) all had more than 1,000 publicly owned rental dwellings. The remaining areas all had fewer than 700 dwellings in this category.

There were 41 dwellings rented from the Territory housing authority in the ACT-Balance Statistical Subdivision in 1996, 39.4 per cent of all occupied private dwellings.

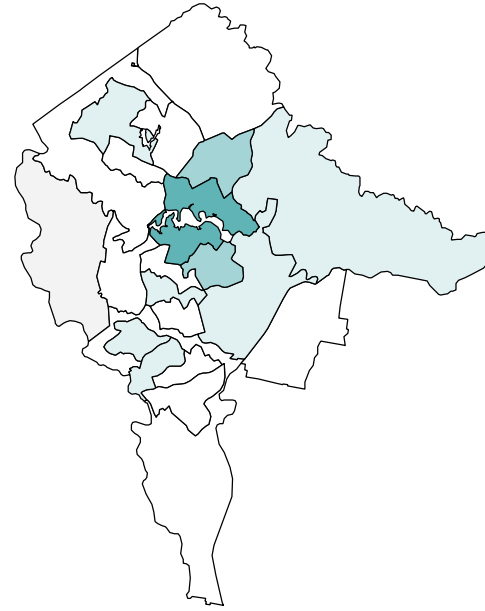
Map 3.13

Dwellings rented from the Territory housing authority, Canberra-Queanbeyan, 1996

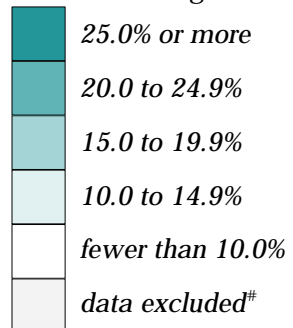
as a percentage of the total population in each area



Map 3.13b: Postcode Map*



Per cent housing authority rented dwellings



*SLAs in the smaller map have been grouped to approximate postcode areas

[#]Data have been excluded when the population of the area is less than 100

Source: Calculated on data from ABS 1996 Census

**Details of map boundaries are in Appendix 1.2
National Social Health Atlas Project, 1999**

Dwellings with no motor vehicle, 1996

Capital city comparison

People living in households without cars face many disadvantages in gaining access to jobs, services and recreation, especially if they are in low-density outer suburbia. In 1996, 15.4 per cent of all occupied private dwellings in **Sydney** had no motor vehicle parked or garaged overnight (**Table 3.20**), the highest percentage for the capital cities. The lowest percentage was in **Canberra**, with 8.8 per cent.

Comparisons with 1986 data show that, on average, there has been a decline in the proportion of dwellings without motor vehicles in the capital cities in the ten years to 1996. However, although the *All capitals* figure fell from 13.8 per cent in 1986 to 12.5 per cent in 1996, and a decrease was recorded for all capital cities except **Darwin** and **Canberra** (increases of 1.0 and 1.1 percentage points respectively), the absolute number of dwellings with no motor vehicle increased.

Table 3.20: Dwellings with no motor vehicle, capital cities

	<i>Per cent</i>								
	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra¹	All capitals
1996	15.4	11.2	11.6	12.5	9.5	12.2	10.2	8.8	12.5
1986	16.8	12.7	12.9	13.2	10.6	13.4	9.2	7.7	13.8

¹Includes Queanbeyan (C)

Source: ABS special data services

Canberra-Queanbeyan

Although the proportion of dwellings in **Canberra-Queanbeyan** without a motor vehicle is low by Australian standards, the number of car-less dwellings has increased during the decade to 1996. In 1986 there were 6,690 dwellings with no vehicles on the night of the Census: by 1996 this had increased (by 53.5 per cent) to 10,271 dwellings.

Statistical Local Areas (SLAs)

SLAs with the highest proportions of their dwellings with no motor vehicles are situated in relatively close proximity to both sides of Lake Burley Griffin and the Civic Centre, the ANU, the main bureaucracies and public institutions (**Map 3.14a**). Within this area there were 12 SLAs in which 20 per cent or more of dwellings had no motor vehicle in 1996. The highest percentages were in Acton (36.8 per cent of dwellings without a motor car), Braddon (34.5 per cent), Reid (31.9 per cent), City (29.5 per cent) and Barton and Turner (both 28.7 per cent).

Braddon (362 dwellings without a motor vehicle), Lyons (353), O'Connor (352), Ainslie (337), Narrabundah (311) and Kambah (302) each had more than 300 dwellings without a motor vehicle, while there were between 200 and 300 such dwellings in each of Lyneham, Belconnen Town Centre, Reid, Griffith and Turner.

In Queanbeyan, there were 1,188 dwellings without a motor vehicle, representing 11.2 per cent of all occupied private dwellings.

There were correlations of meaningful significance at the SLA level with the variables for public rental housing (0.69), unemployed people (0.66) and recently arrived immigrants (0.60). Weaker associations were recorded with the variables for low income families (0.45), people with poor English proficiency (0.38), people aged 65 years and over (0.39) and the Indigenous population (0.35). These results, together with the inverse correlation of meaningful significance with the IRSD (-0.51) indicate the existence of an association at the SLA level between high proportions of dwellings without a motor vehicle and socioeconomic disadvantage.

Postcode-based areas

The highest concentrations of dwellings without a motor vehicle were in the central and eastern section of **Canberra** (**Map 3.14b**).

The highest proportions were in the postcode areas of Canberra Central (20.0 per cent), Woden Central (17.4 per cent), Canberra North (15.6 per cent), Canberra South (14.0 per cent) and Eastern Fringe (13.7 per cent). All other areas had less than nine per cent of all dwellings without a motor vehicle.

Kowen/Majura did not have any dwellings without a motor vehicle, and Belconnen (Balance) had just seven such dwellings (2.5 per cent of all occupied private dwellings).

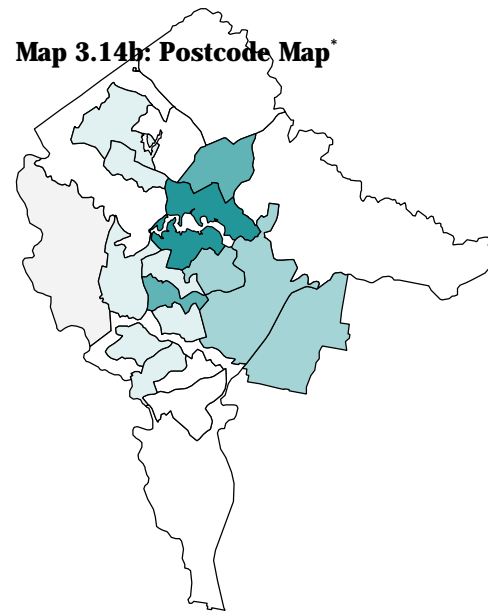
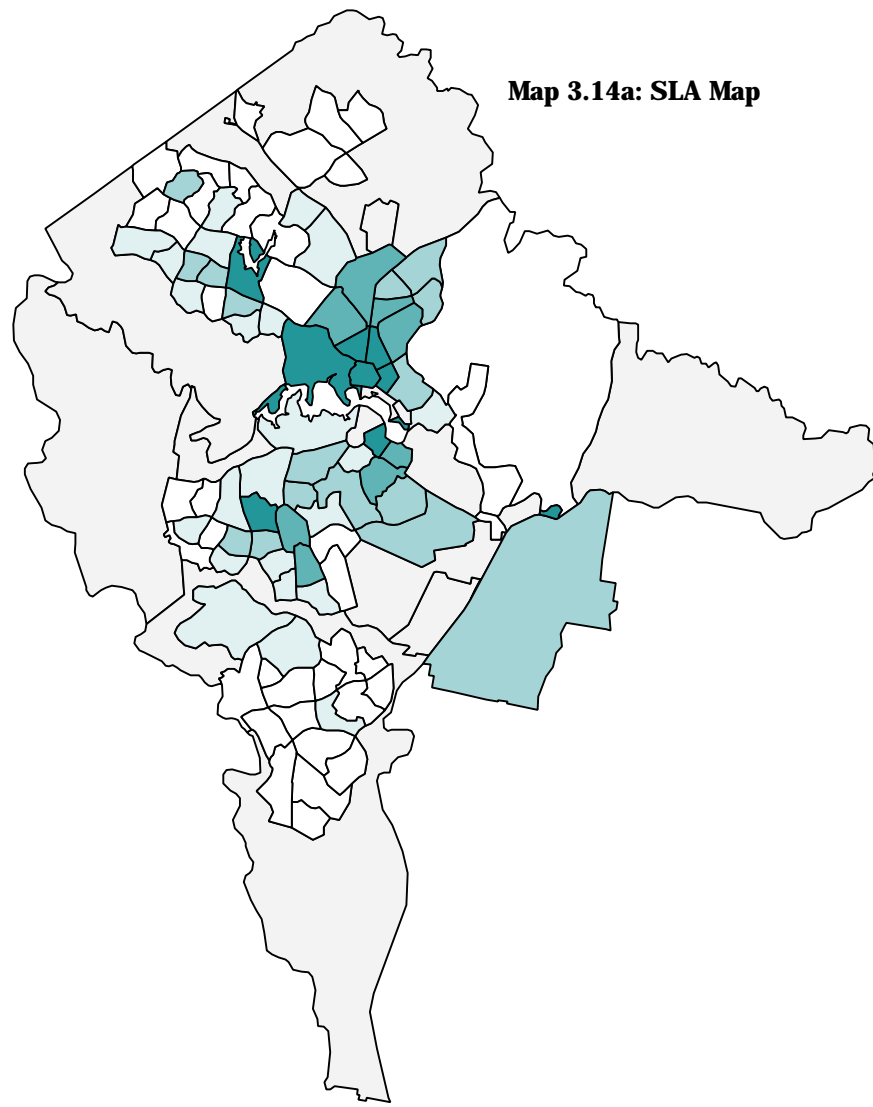
The largest numbers of dwellings without a vehicle were in Canberra North (1,605 dwellings), Canberra Central (1,301) and Belconnen West (1,013).

There were three dwellings without a motor vehicle in 1996 in the ACT-Balance Statistical Subdivision, 2.9 per cent of all occupied private dwellings.

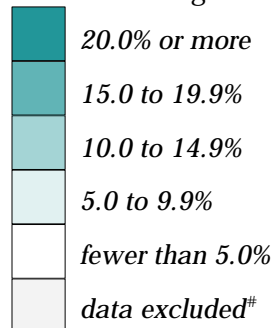
Map 3.14

Dwellings with no motor vehicle, Canberra-Queanbeyan, 1996

as a percentage of the total population in each area



Per cent dwellings with no vehicles



*SLAs in the smaller map have been grouped to approximate postcode areas

#Data have been excluded when the population of the area is less than 100

Source: Calculated on data from ABS 1996 Census

**Details of map boundaries are in Appendix 1.2
National Social Health Atlas Project, 1999**

SEIFA Index of Relative Socio-Economic Disadvantage, 1996

Capital city comparison (Australia equals 1000)

A description of the SEIFA Index of Relative Socio-Economic Disadvantage (IRSD), and comments as to its use in comparisons between Censuses, is provided on page 14. Briefly, the IRSD score measures the relative socioeconomic disadvantage of the population of an area in comparison with the average for Australia as a whole. High index scores indicate least disadvantage and low index scores indicate greater disadvantage. At the 1996 Census, **Canberra** had the highest IRSD score, of 1084, showing its population to have the least relative disadvantage, or highest socioeconomic status, and **Adelaide** the lowest, with 992, showing its population to have the most relative disadvantage, or lowest socioeconomic status (**Table 3.21**). Between 1986 and 1996, the IRSD scores in **Sydney**, **Perth** and **Darwin** all increased relative to the Australian score of 1000: scores for the other capital cities declined or remained relatively stable.

Table 3.21: SEIFA Index of Relative Socio-Economic Disadvantage, capital cities
Index values (Australia equals 1000)

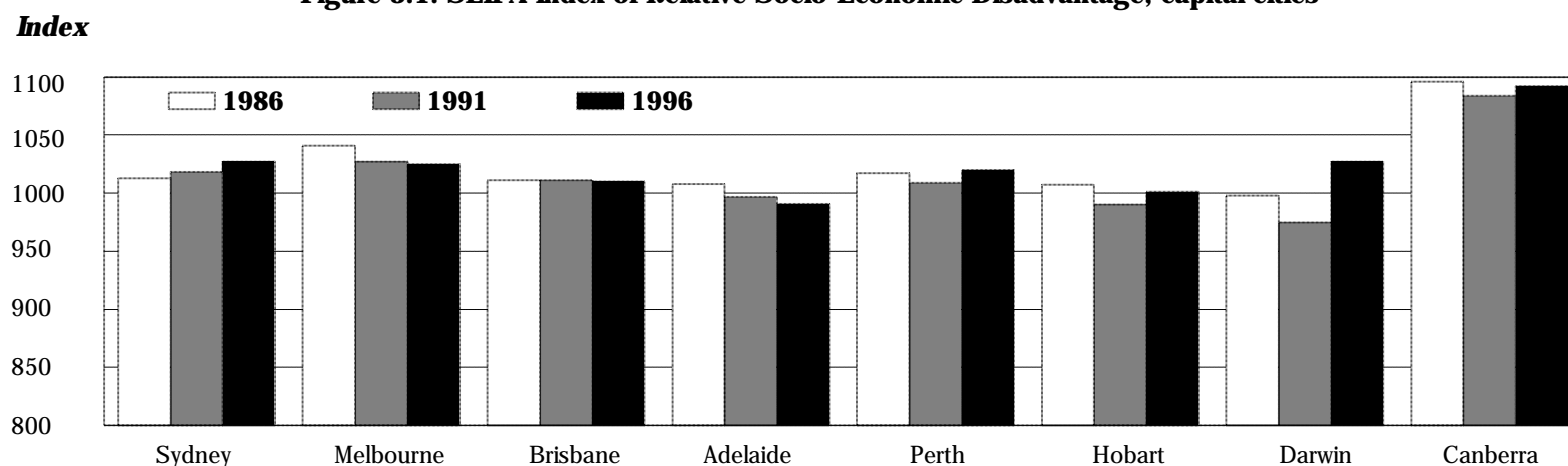
	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra ¹	All capitals
1996	1027	1025	1010	992	1020	1001	1027	1084	1021
1986	1013	1041	1011	1008	1017	1007	998	1089	1021

¹Includes Queanbeyan (C)

Source: ABS special data services

Figure 3.1 indicates the steady increase over each of the last three Censuses (1986, 1991, 1996) in the scores for **Sydney**; the steady decline for **Adelaide**; the stable situation in **Brisbane**; the slowing of the decline in **Melbourne**; and the turnaround experienced by the other capital cities, following a decline in index scores from 1986 to 1991. **Adelaide** had the lowest score of the capital cities for the first time in any of these three periods.

Figure 3.1: SEIFA Index of Relative Socio-Economic Disadvantage, capital cities



Source: ABS special data services

Canberra-Queanbeyan (Canberra-Queanbeyan equals 1000)

At the 1996 Census, the SEIFA Index of Relative Socio-Economic Disadvantage (IRSD) score calculated for **Canberra** was 1007 (when the index score for **Canberra-Queanbeyan** was 1000).

Statistical Local Areas (SLAs)

The majority of SLAs in **Canberra-Queanbeyan** recorded IRSD scores of above 1000. The highest scores (the least disadvantaged areas) were in Forrest (1103), Chapman (1089), Weetangera (1083), City (1082) and Fadden (1081).

The SLAs with the most disadvantaged populations were Symonston (with an IRSD score of 832), Oaks Estate (875), Braddon (888) and Belconnen Town Centre (897). Seven SLAs recorded IRSD scores of between 900 and 950.

The IRSD score of 930 in Queanbeyan was considerably below that for **Canberra-Queanbeyan**.

There were inverse correlations of significance with the variables for low income families (-0.78), unemployed people (-0.71), public rental housing (-0.65), single parent families (-0.64) and

the Indigenous population (-0.63). These relationships indicate a positive association at the SLA level between this aggregate measure of socioeconomic disadvantage and the individual indicators analysed.

Postcode-based areas

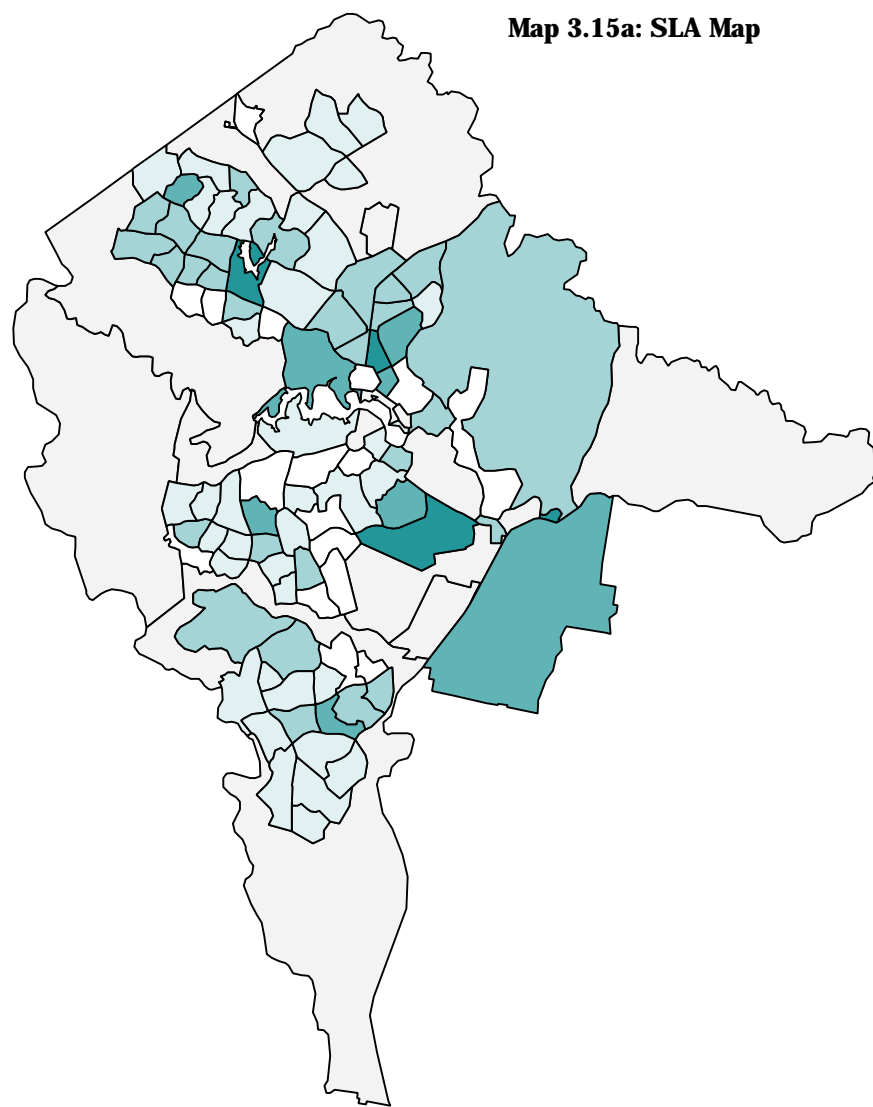
Just over half of **Canberra's** postcode areas recorded IRSD scores of 1000 and above. The highest score (1048) was recorded in the postcode area Woden North, followed by Tuggeranong North East (1043) and Woden South (1035).

The lowest IRSD score of 887, indicating a significant degree of social disadvantage, was calculated for the population in Eastern Fringe. The second lowest score, of 973, was recorded in Canberra North. The remaining areas had scores close to the **Canberra-Queanbeyan** mean, ranging from an IRSD score of 982 in Belconnen West to 999 in Canberra South.

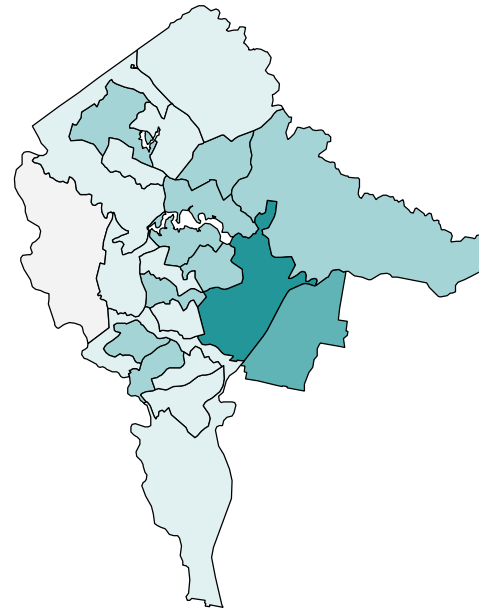
The IRSD score calculated for the ACT-Balance Statistical Subdivision was 1034.

Map 3.15
ABS Index of Relative Socio-Economic Disadvantage, Canberra-Queanbeyan,
1996

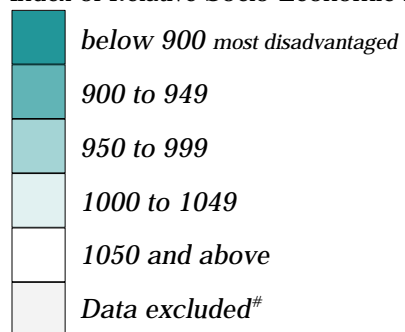
IRSD index number for each area



Map 3.15b: Postcode Map*



Index of Relative Socio-Economic Disadvantage



*SLAs have been grouped to approximate
 postcode areas

#Data have been excluded when the
 population of the SLA is less than 100

Source: Calculated on data from ABS 1996 Census

Details of map boundaries are in Appendix 1.2
National Social Health Atlas Project, 1999

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