#### 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 are 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 South Australia (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

South Australia is the fifth most populous State in Australia and the fourth largest in area. In common with the other States, much of the population is resident in the capital city. Over the last fifty years, the proportion of the State's population located in the capital Adelaide has steadily increased, from 59 per cent in 1947 to 73 per cent in 1996 (**Table 3.1**). With the exception of the Australian Capital Territory, South Australia has more of its population resident in its capital city statistical division than any other State. Principally, this is a response to South Australia's physical environment, with much of its land area suited only to pastoral and mixed farming activities.

Adelaide was founded in 1836 on a site selected for its fresh water provision from the River Torrens. This location developed into the commercial centre of the State, whilst the port facilities were located at Port Adelaide, 12 kilometres to the north-west of the city. The two locations were linked by road and rail, which encouraged industrial development in the vicinity of this axis.

Adelaide's urbanisation was influenced by the early location of industry north-west of the commercial centre, so that this area tended to house the working population, whereas the more affluent sectors of the community sought out locations to the east, where the land was higher, and more suited to agriculture. This early development established the pattern of social differentiation in Adelaide, where the lower socioeconomic groups tended to locate in the north-western suburbs and the higher socioeconomic groups occupied the eastern and south-eastern suburbs.

South Australia's population in 1851 was 63,700, of which 29,730, or 46.6 per cent, lived in Adelaide and its vicinity. During the next 15 years the State's population grew at an average rate of 10.5 per cent annually, so that at the Census of 1866 there were 164,928 persons living in South Australia, of which 52,231 (31.7 per cent) lived in Adelaide. Between 1866 and 1891, the average annual rate of population growth declined to 3.7 per cent. By the turn of the century, the population had reached 325,000, but the population growth rate had declined even further.

Prior to the First World War, Adelaide remained a relatively small city, with its population of about 250,000 essentially confined to a ring extending no more than five kilometres from the city centre, and to a narrow corridor linking the commercial centre with Port Adelaide. During the inter-war years, the population increased from 485,160 in 1921 to 646,073 in 1947. In **Adelaide** this additional population occupied areas on either side of the corridor and expanded the north-east and south-west sectors on the established ring.

Between 1947 and 1971 Australia experienced a "long boom" of economic development, and Adelaide's population more than doubled, increasing from 382,000 to 843,000. Much of this population growth was fuelled by the policies of post-war reconstruction and the development of a manufacturing and industrial base to the Australian economy. The South Australian government was particularly successful in attracting industrial activity to the State in this period, much of which was located in the new area of Elizabeth, to the north of the City of Adelaide.

However, industrial expansion also occurred in the north-west corridor, and to the south-west of the city. Immigration played a significant role in this manufacturing expansion, especially skilled immigrants from the United Kingdom and Ireland, Netherlands and Germany, and unskilled migrants from Italy, Greece and Eastern bloc countries. These two characteristics, and the activity of the South Australian Housing Trust, which undertook a large proportion of the construction needed to house the growing workforce, were the main features of this period

The rapid population growth during these two decades created the basic shape of Adelaide, and contributed to the development of Adelaide's patterns of social differentiation and demography.

Table 3.1: Population and area, South Australia, 1996

Section of State	Popul	ation:	Area:			
	No.	Per cent	km <sup>2</sup>	Per cent		
Adelaide Statistical Division	1,045,854	73.2	1,925	0.2		
Rest of State	382,082	26.8	982,160	98.8		
Whole of State	1,427,936	100.0	984,085	100.0		

Source: ABS special data services

The rapid urbanisation during this period was encouraged by the relative cheapness of motor vehicles, which enabled a separation of residence from workplace, thereby contributing to the low population density. Between 1954 and 1971, South Australia's population grew at an average annual rate of 2.8 per cent. However, from 1971 the rate of population growth slowed, so that the average annual growth rate between 1971 and 1976 was 1.7 per cent and between 1976 and 1981 it was 0.7 per cent. The reason was due, principally, to substantial restructuring in the local manufacturing sector, necessitated by the increasing internationalisation of capital. As a result, significant components of industry which had moved into the Adelaide region during the "long boom" either withdrew activity to another State, or shifted off-shore. Consequently, between 1971 and 1986, Adelaide's population grew by less than half the amount it had grown between 1954 and 1971.

Low levels of population growth have continued through to the present. In the period between 1986 and 1991 the annual growth rate was 0.8 per cent: by the 1996 Census South Australia had 1,427,936 residents, an annual growth rate of less than half a per cent.

#### Projected population

Between 1996 and 2006, Adelaide's population is projected to increase by 6.9 per cent to 1,117,800 persons, and to 1,139,900 by 2016. At the same time, the population in rural South Australia is projected to increase by 6.2 per cent to 405,700 by 2006, and then to decline to 405,300 by 2016. These predictions are based on relatively high fertility levels, and would not be achieved if total fertility prevailed at levels of less than 1.58. Of the Australian capital cities, only Hobart is projected to grow at a lower rate than that predicted for Adelaide (ABS 1998).

Table 3.2: Population of Indigenous	Australians, 1986 to 1996	6
-------------------------------------	---------------------------	---

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
				perce	ntage char	ıge			
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: Calculated from unpublished data supplied by 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 and Torres Strait Islander 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 the 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 growth 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 highest 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.

# 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 in 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 was 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, 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 which comprise it. This average score is set at 1000. In this atlas, data mapped at the SLA level have been re-weighted so that South Australia is the average, with a State 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 74 to 77.

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 Adelaide (page 28), there is an inverse correlation (-0.86) with the IRSD. Thus, at the SLA level in Adelaide 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 (**Maps 3.20** and **3.21**).

It is straight forward 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 same age group in the South Australian 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, with Australia as the standard.

#### Data definitions

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

Table 3.3: Details of demographic a	nd 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 <sup>1</sup>	Families with income less than \$21,000 p.a. [\$400 per week]	All families with an income
high income families <sup>2</sup>	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 <sup>2</sup>	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 achievem	ent	
early school leavers <sup>3</sup>	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-Engl	ish speaking countries	
resident for 5 years or more	Number born in predominantly non-English speaking countries and resident for 5 years or more	Total population
resident for less than 5 years	Number born in predominantly non-English speaking countries and resident for less than 5 years	Total population
proficiency in English	People aged 5 years and over born in predominantly non- English speaking countries who speak English 'not well' or 'not at all'	Population aged 5 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 vehicles garaged or parked there on Census night	

<sup>1</sup>When 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.

<sup>2</sup>These variables were not mapped but are included in the correlation analyses.

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

Source: Compiled from project sources

Page intentionally left blank

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: P	roportion a	of populatio	n aged (	) to 4 year	s, capital (	cities					
	Per cent												
	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra <sup>1</sup>	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				
<sup>1</sup> Includes	Queanbeva	n (C)											

Source: ABS special data services

#### Adelaide

The number of children aged less than five years old in **Adelaide** has been relatively stable over the past 10 years, varying from 67,229 in 1986 to 68,279 in 1991 and 67,378 in 1996. In relative terms, these figures represent an overall and consistent (although small) reduction in the proportion of the population in this age group, from 6.9 per cent in 1986 to 6.4 per cent in 1996. Both the low percentage of 0 to 4 year old children and their declining importance are indicative of the comparatively older age structure and low fertility within **Adelaide**.

As expected, the outer suburbs have the highest percentages of young children with eight per cent or more of the population in Munno Para, Elizabeth and Salisbury to the north and Noarlunga and Willunga to the south aged from 0 to 4 years (**Map 3.1**). The older, more established inner and middle areas of **Adelaide** such as Walkerville, Unley and Campbelltown were, in comparison, typically characterised by below average percentages of children aged 0-4 years. The SLA of Adelaide had the lowest value of 3.0 per cent. These general trends contrast markedly with the distribution of people aged 65 and over (**Map 3.3**), where higher proportions of elderly residents tended to occur within the middle and inner suburbs.

It is worth noting that, although the inner and middle suburbs had similar proportions of young children in both 1986 and 1996 (of around 5.0 per cent and 5.5 per cent respectively), there was a concurrent slight decrease in the proportions within the outer suburbs (from 9.3 per cent to 7.8 per cent).

The largest numbers of 0 to 4 year old children also occurred in outer suburban SLAs. In Salisbury, there were 9,141 children, and Noarlunga and Tea Tree Gully had 7,118 and 6,260 respectively. Although numbers in most inner and middle suburban SLAs were relatively low, Hindmarsh had 4,874, and Marion and Mitcham had 4,528 and 3,001 respectively. The largest gains and losses across **Adelaide** were generally experienced in the outer suburbs. For example, gains were recorded in the developing northern and southern SLAs of Munno Para (264), Salisbury (350), Willunga (267) and Noarlunga (636). Elizabeth and Happy Valley, however, experienced decreases of 563 and 611 respectively between 1986 and 1996. The experience of the middle suburban SLA of Mitcham was also striking, with 441 fewer young children recorded in 1996 than there were in 1986.

There were correlations of substantial significance at the SLA level with the variables for unskilled and semi-skilled workers (0.76) and early school leavers (0.79). Inverse correlations were recorded with the variables for managers and administrators, and professionals (-0.72), people aged 65 years and over (-0.69), high income families (-0.65) and female labour force participation (-0.64), indicating that these population groups are less likely to be found in high proportions in areas with high proportions of young children.

# Map 3.1 **Children aged 0 to 4 years, Adelaide, 1996** as a percent of the total population in each Statistical Local Area



Per cent children aged 0 to 4 years

8.0% or more 6.0 to 7.9% 4.0 to 5.9% 2.0 to 3.9% fewer than 2.0% data excluded\*

Ν

<sup>\*</sup>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

#### State/Territory comparison

The proportions of children aged from 0 to 4 years in the non-metropolitan areas of Australia (the areas designated *Rest of State/Territory* in the table) were higher than in the capital cities. The average nationwide proportion for the *Rest of State/Territory* areas was 7.5 per cent, with a similar proportion in South Australia (**Table 3.5**). At the *Whole of State/Territory* level, South Australia had the lowest proportion (6.7 per cent) and the Northern Territory had the highest (8.6 per cent), with the other States having percentages near the average.

Comparisons between the 1986, 1991 and 1996 Censuses indicate a consistent reduction in the proportions of children aged from 0 to 4 years during the past decade. This trend of declining numbers of children over time is apparent across all of the States and Territories, and is particularly significant in the *Rest of State/Territory* areas, where the average declined from 8.4 per cent to 7.5 per cent between 1986 and 1996.

Per cent												
	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	<b>Total</b> <sup>1</sup>			
1996												
Capital city	7.0	6.9	7.1	6.4	6.8	6.9	8.1	$7.3^{2}$	6.9			
Other major urban centres <sup>3</sup>	7.2	6.9	6.4						6.8			
Rest of State/Territory	7.4	7.5	7.4	7.4	8.0	7.6	9.0	_4	7.5			
Whole of State/Territory	7.1	7.0	7.1	6.7	7.2	7.3	8.6	7.2	7.1			
1986												
Rest of State/Territory	8.2	8.2	8.4	8.3	9.2	8.3	10.2	_4	8.4			

Table 3.5: Proportion of population aged 0 to 4 years, State/Territory

<sup>1</sup>Total for *Whole of State/Territory* includes 'Other Territories' (Jervis Bay, Christmas Island and Cocos Islands) <sup>2</sup>Includes Queanbeyan (C)

<sup>3</sup>Includes Newcastle and Wollongong (NSW); Geelong (Vic); and Gold Coast-Tweed Heads and Townsville-Thuringowa (Qld) <sup>4</sup>Data included with ACT total

Source: ABS special data services

#### Rest of State

In 1986 there were 30,392 children aged 0 to 4 in rural areas of South Australia, representing 8.3 per cent of the total population. By 1991, the number had fallen to 29,729 (7.9 per cent) and declined further to 28,281 (7.4 per cent) in 1996. Despite these steep declines, in 1996 children within this age group still comprised a notably higher proportion of the population in the non-metropolitan areas of South Australia than in **Adelaide**.

There was no notable pattern in the spatial distribution of 0 to 4 year old children across the State (**Map 3.2**). Proportions in individual rural SLAs varied from 5.0 per cent in the predominantly retirement centre of Victor Harbor to 12.5 per cent in the mining town of Roxby Downs. Throughout most of the rural parts of the State, between 6 and 9 per cent of the population were children aged 0 to 4. Areas on the Yorke Peninsula, Fleurieu Peninsula and Kangaroo Island tended to record below-average values, with the highest percentages in the far north, in parts of the Eyre Peninsula and in the south-east.

The largest numbers of children were in the SLAs of Whyalla (1,949), Mount Gambier (1,749), Mount Barker (1,627), Murray Bridge (1,272), Port Augusta (1,161) and Port Pirie (1,022). Significant numbers of families with young children were therefore located in the larger cities and towns. However, large numbers of young children within this age group also lived in the more sparsely-settled rural areas.

There was no consistent evidence in the correlation analysis of an association at the SLA level between high proportions of young children and socioeconomic status.

## Map 3.2 Children aged 0 to 4 years, South Australia, 1996

as a percentage of the total population in each Statistical Local Area



#### Accessibility/Remoteness Index of Australia



The highest proportions of young children live in the most remote areas (7.9 per cent of the population in the Very Remote and Remote ARIA categories), with slightly lower proportions in the Accessible (7.6 per cent) and Moderately Accessible (7.3 per cent) categories. The lowest proportion was in the Very Accessible areas, where they comprised 6.5 per cent of the population. The numbers of children are largest in the most highly populated areas, and drop off markedly at each level of increasing remoteness.

Source: Calculated on ARIA classification, DHAC National Social Health Atlas Project, 1999

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 3.6**). 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 all three Censuses, **Adelaide** recorded the highest percentage of elderly people across the nation's capitals, with **Darwin** and **Canberra** recording proportions well below the national average for the capital cities.

Table 3.6: Proportion of population aged 65 years and over, capital cities
Per cent

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra <sup>1</sup>	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

<sup>1</sup>Includes Queanbeyan (C)

Source: ABS special data services

#### Adelaide

In 1996 there were 147,334 people in **Adelaide** aged 65 years and over, representing 14.1 per cent of the population. In comparison, there were 117,075 (12.0 per cent) at the 1986 Population Census and 133,105 (13.0 per cent) in 1991. These increases corresponded with growth rates in the population of older people of 13.7 per cent between 1986 and 1991, and of 10.7 per cent between 1991 and 1996. The overall increase during the ten year period was 25.8 per cent (**Table 3.7**: comments on this table are on page 26), compared with an increase of 7.0 per cent for the total population of **Adelaide**.

For many years, the main concentrations of older people in **Adelaide** were in the inner suburbs and in retirement areas along the metropolitan coastline. The pattern still remains, but the concentrations of older people within these areas have diminished (**Map 3.3**). The highest percentages of people aged 65 or over were still found in the coastal SLAs of Brighton (26.3 per cent) and Glenelg (24.3 per cent). However, proportions in many inner suburbs, though still above the metropolitan average, have declined with gentrification, and are now lower than in some of the middle suburbs. For example, the inner SLAs of Adelaide (14.4 per cent) and Prospect (15.1 per cent) had lower percentages than middle suburban SLAs such as Payneham (23.2 per cent) and West Torrens (20.6 per cent).

Overall, between 1986 and 1996, the numbers of older people declined by about 7 per cent within the inner suburbs and increased by 18 per cent in the middle suburbs. The most striking change occurred in the outer suburbs, where there was an 83 per cent increase in the numbers of people at older ages. The ageing of **Adelaide's** middle and outer suburbs becomes even more striking when absolute numbers are considered. In the middle suburbs, 15,654 persons aged 65 or over now live in Hindmarsh and Woodville, 10,291 in Mitcham, 12,680 in Marion, 8,703 in West Torrens and 8,310 in the eastern part of Enfield [Part A]. In outer SLAs, 8,444 people were counted in Noarlunga, 8,189 in Salisbury and 7,314 in Tea Tree Gully.

There was no consistent evidence in the correlation analysis of an association at the SLA level between high proportions of young children and socioeconomic status. A positive correlation of meaningful significance was recorded with the variable for dwellings with no motor vehicle (0.60) and an inverse correlation with children aged from 0 to 4 years (-0.69).

		-		Per cent					
Age group		People aged 65	years and ov	/er	<b>Increase</b>	1986 to 1996	Proportion of females, 1996		
(years)	1	1986	1	996					
	Adelaide	<b>Rest of State</b>	Adelaide	<b>Rest of State</b>	Adelaide	<b>Rest of State</b>	Adelaide	<b>Rest of State</b>	
65 to 69	32.8	35.5	28.9	32.3	11.0	18.6	52.9	48.4	
70 to 74	28.1	28.7	27.3	27.1	22.3	23.0	55.7	52.5	
75 to 79	19.4	19.0	20.0	19.3	29.6	32.6	59.0	56.0	
80 to 84	11.2	10.0	13.7	12.5	53.6	61.9	63.7	60.5	
85 +	8.5	6.8	10.0	8.7	49.6	67.7	72.4	67.6	
Total 65+	100.0	100.0	100.0	100.0	25.8	30.2	58.3	54.2	

Source: ABS 1986 Census 21 page format Table CO7; 1996 Census Basic Community Profile Table B03

## **Map 3.3 People aged 65 years and over, Adelaide, 1996** as a percentage of the total population in each Statistical Local Area

Ν

20.0% or more

15.0 to 19.9% 10.0 to 14.9%

5.0 to 9.9%

fewer than 5.0%

data excluded\*



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

#### State/Territory comparison

South Australia has the oldest population in Australia, although both New South Wales and Victoria have higher proportions of people aged 65 years and over living in the non-metropolitan areas (**Table 3.8**). Despite the attraction of Queensland as a retirement destination for older people, it has lower than the average proportion of people in this age group in all but the *Other major urban centres* category, the latter reflecting the high proportion of older people in the population of **Gold Coast-Tweed Heads**.

The ageing of the South Australian population becomes particularly evident when comparisons of 1986 and 1996 Census data are made. This comparison reveals an increase in the proportions of the older population which is consistent across the whole State (from 11.6 per cent in 1986 to 13.8 per cent in 1996), in **Adelaide** (12.0 to 14.1 per cent) and in the rest of the State (10.5 to 13.2 per cent). Nation-wide, the most significant increase in the numbers of elderly people occurred in the *Rest of State/Territory* areas, with an increase of 36.6 per cent between 1986 and 1996.

Per cent												
	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	<b>Total</b> <sup>1</sup>			
1996												
Capital city	11.8	11.5	11.0	14.1	10.8	12.5	5.0	$7.1^{2}$	11.6			
Other major urban centres <sup>3</sup>	13.6	13.6	15.9						14.5			
Rest of State/Territory	14.4	13.3	12.2	13.2	9.7	12.2	4.9	_4	12.8			
Whole of State/Territory	12.7	12.0	12.0	13.8	10.5	12.3	4.9	7.1	12.1			
1986												
Rest of State/Territory	11.6	11.2	10.3	10.5	7.7	10.5	4.1	_4	10.5			

Table 3.8: Pro	nortion of	nonulation	aged 65	vears and	over.	State/Territory
Table 5.0. 110	portion or p	population	ageu oo	ycans and	UVCI,	State I chinory

<sup>1</sup>Total for *Whole of State/Territory* includes 'Other Territories' (Jervis Bay, Christmas Island and Cocos Islands) <sup>2</sup>Includes Queanbeyan (C)

<sup>3</sup>Includes Newcastle and Wollongong (NSW); Geelong (Vic); and Gold Coast-Tweed Heads and Townsville-Thuringowa (Qld) <sup>4</sup>Data included with ACT total

Source: ABS special data services

#### Rest of State

The population in the non-metropolitan areas of South Australia was slightly younger than that in **Adelaide** in 1996 (13.2 per cent aged 65 years and over (50,347 people) compared with 14.1 per cent (147,334 people) in the city).

**Table 3.7** (page 24) shows the strong growth (up by 30.2 per cent from 1986 to 1996) in the number of people in the rural population aged 65 years and over. This was considerably higher than the growth rate in **Adelaide**, of 25.8 per cent. In comparison, the total population of rural South Australia rose by only 3.8 per cent over the same period. The large increase in the proportion of older people was particularly evident at the oldest ages. The greater representation of older females in the metropolitan as opposed to rural areas of South Australia is also apparent from the table.

The distribution at the SLA level of people aged 65 years and over (**Map 3.4**) is largely the reverse of that for children aged from 0 to 4 years old. For example, the long-established retirement centre of Victor Harbor had only 5 per cent children in 1996 - the lowest percentage of all the State's SLAs. In contrast, it also had the highest percentage (28.5 per cent) of people aged 65 or over. The SLAs of Port Broughton (24.5 per cent), Wallaroo (24.4 per cent) and Minlaton (22.9 per cent) also contained high proportions of older people.

The lowest proportions of older people were located in the far north, where Indigenous people with their much younger age structure (**Map 3.17**) make up a significant proportion of the population. For example, in Unincorporated Far North, just 4.8 per cent of the population was in the 65 year and over age group. Roxby Downs had a very low 1.2 per cent in this age group, attributed to its relatively young working population. Below average percentages were also recorded in **Adelaide's** rural-urban fringes, on the Eyre Peninsula and in the lower south-east.

There was no consistent evidence in the correlation analysis of an association at the SLA level between high proportions of young children and socioeconomic status. There was, however, a correlation of meaningful significance with the variable for low income families (0.59), and an inverse correlation of meaningful significance with high income families (-0.50).

#### Structure of the population 65 years and over (Table 3.7)

The 65 years and over age group is very broad and includes the 'young aged' (65 to 74 years), who are usually independent and in good health, as well as the 'older aged' (75 years and over), who are more likely to be in need of a range of health care services.

Whilst the higher percentages are in the 'young aged' categories, it is important to note that in the ten years from 1986, the 'older aged' groups increased at a greater rate than the 'young aged' in both **Adelaide** and the *Rest of State*. This higher growth rate of people aged 75 and over has important implications for health related policy.

Also, reflecting the fact that they live longer than men, women make up a higher proportion of the population with increasing age, as is evident for both **Adelaide** and *Rest of State*.

## Map 3.4 People aged 65 years and over, South Australia, 1996

as a percentage of the total population in each Statistical Local Area



#### Accessibility/Remoteness Index of Australia



The highest proportions of older people live in the areas categorised as 'accessible', comprising 14.6 per cent of the population in the Moderately Accessible, 14.0 per cent in the Very Accessible and 12.9 per cent in the Accessible areas, with a lower proportion (11.7 per cent) in the Remote areas. The Very Remote areas had the lowest proportion (7.9 per cent). These results indicate the value that older Australians place on access to health, welfare and other services, which are largely located in the more accessible areas.

Source: Calculated on ARIA classification, DHAC

National Social Health Atlas Project, 1999

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.

At the 1996 Census, the proportion of single parent families in Australia's capital cities was 9.7 per cent (**Table 3.9**), 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 proportions of single parent families in Australia as a whole and in each capital city increased substantially. For Australia, the increase was from 324,171 in 1996 (7.8 per cent of all families) to 460,331 single parent families (9.9 per cent of all families in 1996). The largest increase was recorded in **Hobart**, where proportions for this variable increased from 9.3 per cent in 1986, to 12.1 per cent in 1996. **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 3.9: Single parent families, capital cities

	Per cent									
	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra <sup>1</sup>	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	
1- 1 1	<b>a</b> 1									

<sup>1</sup>Includes Queanbeyan (C) Source: ABS special data services

#### Adelaide

In 1996, 29,481 families in **Adelaide** were classified as being single parent, 10.4 per cent of all families. In comparison, there were 21,640 single parent families (8.0 per cent) in 1986 and 25,720 (9.4 per cent) in 1991. This is an increase of 7,841 single parent families between 1986 and 1996, an overall increase of 36.2 per cent.

Generally speaking, **Map 3.5** identifies a band of SLAs with higher proportions of single parent families in the outer northern area of metropolitan **Adelaide** as well as in the south, in Noarlunga with 12.5 per cent. The highest percentage was in the northern SLA of Elizabeth (18.1 per cent), and, in the south, the highest was in Noarlunga (12.5 per cent). Munno Para and Salisbury, also located in the north, had high proportions of single parent families, with 12.5 and 12.3 per cent respectively.

Although the outer suburbs had the overall highest percentages, the middle SLAs of Enfield [Part A] and Enfield [Part B] also had high rates, with 13.6 and 16.2 per cent respectively; and the inner SLA of Kensington and Norwood had 14.5 per cent.

On the other hand some outer suburbs had notably low percentages, in particular the higher socioeconomic status eastern SLAs of Stirling (7.8 per cent) and East Torrens (5.7 per cent). The inner suburbs generally had the lowest percentages with Walkerville (six per cent) and the City of Adelaide (7.1 per cent) prime examples.

The majority of the increase in the number of single parent families was due to an increase in the outer suburbs, where numbers increased from 8,753 in 1986 to 13,987 in 1996. The middle suburbs also experienced a significant increase, from 10,856 in 1986 to 13,477 in 1996 despite the fact that there was an overall fall in the total number of families in these SLAs.

The inner suburbs experienced a slight fall in numbers of single parent families, from 2,034 to 2,017 between 1986 and 1996.

Salisbury and Noarlunga had the largest numbers of single parent families. These outer areas in the north and south respectively are traditionally less expensive for people seeking permanent accommodation and as a result were the only SLAs to attract more than 3,000 single parent families. The inner SLA of Walkerville and the outer East Torrens had the least number of single parent families with 100 and 102 respectively.

There were correlations of substantial significance at the SLA level with the variables for unemployed people (0.88), low income families (0.84), unskilled and semi-skilled workers (0.82), and dwellings rented from the State housing authority (0.82). Inverse correlations of substantial significance were recorded with the variables for female labour force participation (-0.77) and high income families (-0.79). These results, together with the inverse correlation of substantial significance with the IRSD (-0.86), indicate the existence of an association at the SLA level between high proportions of single parent families and socioeconomic disadvantage.

## Map 3.5 Single parent families, Adelaide, 1996

as a percentage of all families in each Statistical Local Area



Per cent children aged 0 to 4 years

12.0% or more
10.0 to 11.9%
8.0 to 9.9%
6.0 to 7.9%
fewer than 6.0%
data excluded\*

Ν

\*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

#### State/Territory comparison

In 1996, 8.4 per cent of all families in the non-metropolitan areas of South Australia were single parent families (defined here as single parent families with dependent children under 15 years of age). This figure is less than the average of 10.0 per cent across the non-metropolitan areas of Australia (the *Rest of State/Territory* category in **Table 3.10**) and the 10.4 per cent in **Adelaide**. For most States and the Northern Territory, variations between the *Capital city* and *Rest of State/Territory* totals are minimal, with the largest differences in South Australia and Tasmania. There has been a steady increase in the proportions of single parent families in all States and Territories since 1986.

Table 3.10: Single parent families, State/Territory

			Per cent	t					
	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	<b>Total</b> <sup>1</sup>
1996									
Capital city	9.3	9.1	10.5	10.4	10.1	12.1	13.8	$11.5^{2}$	9.7
Other major urban centres <sup>3</sup>	10.4	10.7	11.2						10.7
Rest of State/Territory	10.6	9.5	10.1	8.4	9.5	9.6	14.6	_4	10.0
Whole of State/Territory	9.8	9.2	10.4	9.9	10.0	10.6	14.2	11.6	9.9
1986									
Rest of State/Territory	8.0	6.7	7.7	6.5	8.3	7.6	12.1	_4	7.6

<sup>1</sup>Total for *Whole of State/Territory* includes 'Other Territories' (Jervis Bay, Christmas Island and Cocos Islands) <sup>2</sup>Includes Queanbeyan (C)

<sup>3</sup>Includes Newcastle and Wollongong (NSW); Geelong (Vic); and Gold Coast-Tweed Heads and Townsville-Thuringowa (Qld) <sup>4</sup>Data included with ACT total

Source: ABS special data services

#### **Rest of State**

There were 8,806 families (8.4 per cent of all families in the nonmetropolitan areas of South Australia) classified as single parent families in 1996. In comparison, in 1986 there were 6,591 single parent families and in 1991 there were 7,700, representing 6.5 and 7.6 per cent of all families in these areas respectively.

Despite the relatively low overall percentage, significant concentrations of single parent families were to be found in the larger country towns. The largest of these were in the towns of Whyalla, with 786 families (12.4 per cent of all families); Mount Gambier, with 668 families (11.3 per cent); Murray Bridge, with 493 families (11.3 per cent); Port Augusta, with 458 families (12.5 per cent); Port Pirie, with 446 families (11.3 per cent); and Port Lincoln, with 396 families (12.1 per cent). The highest percentages of single parent families were in the unincorporated SLAs of West Coast, Whyalla and Riverland, with 18.9, 20.0 and 25.8 per cent, respectively, although the numbers are comparatively small with just 23, 16 and 8 families (**Map 3.6**).

There were low proportions of single parent families in Elliston (3.5 per cent) and Tumby Bay (4.0 per cent) on Eyre Peninsula;

Hawker (3.0 per cent) and Mount Remarkable (4.6 per cent) in the north; and Mount Gambier (3.2 per cent) and Naracoorte (3.3 per cent) in the south-east of the State.

There were correlations of meaningful significance with the variables for Indigenous Australians (0.62) and dwellings with no motor vehicle (0.69). The inverse correlation with the IRSD (-0.68) also indicates a positive association at the SLA level between single parent families and socioeconomic disadvantage.

#### Housing tenure by family type

Throughout Australia, single parent families are characterised by poverty and hardship because their one parent is typically unemployed and the families have low income levels. Consequently, single parent families often experience difficulty in obtaining housing and are heavily concentrated into rental accommodation, more so into private rental than public rental, as shown in **Table 3.11**.

## Table 3.11: Housing tenure by family type, Adelaide, 1996Per cent

I CI CCM				
<b>Owner/Purchaser</b>	<b>Government Rental</b>	<b>Private Rental</b>	Other	Total
43.3	25.2	30.3	1.1	100.0
72.4	17.1	9.5	1.0	100.0
82.0	6.1	9.8	2.1	100.0
84.3	4.8	9.9	1.0	100.0
90.9	4.6	3.9	0.6	100.0
51.0	8.0	37.6	3.5	100.0
78.8	8.0	11.8	1.4	100.0
	Owner/Purchaser 43.3 72.4 82.0 84.3 90.9 51.0	Owner/PurchaserGovernment Rental43.325.272.417.182.06.184.34.890.94.651.08.0	Owner/PurchaserGovernment RentalPrivate Rental43.325.230.372.417.19.582.06.19.884.34.89.990.94.63.951.08.037.6	Owner/PurchaserGovernment RentalPrivate RentalOther43.325.230.31.172.417.19.51.082.06.19.82.184.34.89.91.090.94.63.90.651.08.037.63.5

Source: ABS Census 1996 Basic Community Profile Table B25

## Map 3.6 Single parent families, South Australia, 1996

as a percentage of all families in each Statistical Local Area



#### Accessibility/Remoteness Index of Australia



The most accessible and the most remote areas had the highest proportion of single parent families (10.2 per cent in the Very Accessible category and 9.6 per cent in the Very Remote category), with the lowest proportions in the Moderately Accessible (7.0 per cent) and Remote (7.4 per cent) categories. The number of families again drops off rapidly with increasing remoteness.

Source: Calculated on ARIA classification, DHAC National Social Health Atlas Project, 1999

Low income families, defined as families with annual incomes of less than \$21,000 (less than \$400 per week), comprised 21.8 per cent of all families in **Adelaide** for which income details were obtained at the 1996 Census. The use of low income as a measure of poverty is compromised to an extent by the fact that it 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 incomes is linked to their retirement status.

Adelaide had the highest percentage of low income families, while **Canberra** (11.7 per cent) and **Darwin** (11.1 per cent) had much lower proportions, largely a reflection of the younger age structures and low proportions of retired families in their populations. The other State capitals had proportions ranging from 16.6 per cent in **Sydney** to 20.2 per cent in **Hobart**, with an average percentage across all capitals of 17.5 per cent. Adelaide's high percentage illustrates the degree to which the city has been particularly affected in recent years by a combination of economic and demographic change. Refer to the footnote to **Table 3.3** on page 18 regarding the interpretation of these comparisons over time.

Table 3.12: Low income families, capital cities

	Per cent									
	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra <sup>1</sup>	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	

<sup>1</sup>Includes Queanbeyan (C) Source: ABS special data services

#### Adelaide

There were 61,732 low income families in **Adelaid**e in 1996, 21.8 per cent of all families for which income details were obtained. In comparison, there were 46,667 (19.2 per cent) low income families in 1986 and 47,733 (17.4 per cent) in 1991. These changes represented an increase of 2.3 per cent in the number of low income families between 1986 and 1991, and a subsequent increase of 29.3 per cent<sup>1</sup> between 1991 and 1996.

Higher proportions of low income families generally occurred in western, outer northern and southern suburban SLAs such as Elizabeth (37.8 per cent), Willunga (26.5 per cent) and Gawler (26.0 per cent) (**Map 3.7**). Relatively high proportions (of above 25 per cent) also occurred in the inner SLAs of Thebarton, Port Adelaide, Hindmarsh and Woodville and, in particular, in both the eastern and western parts of Enfield. Most other metropolitan SLAs had percentages of between 15 and 25 per cent. However, SLAs located to the east of the city generally had lower proportions of low income families, with St Peters recording 14.4 per cent, Burnside 12.9 per cent and East Torrens 12.2 per cent. Stirling (10.9 per cent) had the lowest proportion in **Adelaide**.

The large, outer northern and southern SLAs of Salisbury, Tea Tree Gully and Noarlunga, as well as Marion in the middle south, had the largest numbers of families with annual income of less than \$21,000. The inner SLA of Hindmarsh and Woodville also had a large number (6,060) of these families. Walkerville, East Torrens, the City of Adelaide and St Peters had the lowest numbers in **Adelaide**, with fewer than three hundred low income families.

Although the overall percentage of low income families in **Adelaide** remained similar over the ten years to 1996, the number of low income families increased by a considerable 32.3 per cent. The majority of this change was due to a substantial

increase in the numbers of low income families in the outer suburbs, where numbers expanded from 15,588 families in 1986 to 26,709 families in 1996, an increase of 71.0 per cent. In comparison, the proportion of low income families remained similar in the inner and middle suburbs between 1986 and 1996, increasing by only about six per cent.

There were correlations of substantial significance at the SLA level with the variables for unemployed people (0.94), unskilled and semi-skilled workers (0.89), single parent families (0.84), Indigenous people (0.83), early school leavers (0.82) and dwellings rented from the State housing authority (0.82). Inverse correlations of substantial significance were recorded with the variables for high income families (-0.93), managers and administrators, and professionals (-0.81) and female labour force participation (-0.81). These results, together with the inverse correlation of substantial significance with the IRSD (-0.97), indicate the existence of an association at the SLA level between high proportions of low income families and socioeconomic disadvantage.

<sup>&</sup>lt;sup>1</sup>See footnote to Table 3.3, page 18 regarding these comparisons.

## Map 3.7 Low income families<sup>\*</sup>, Adelaide, 1996

as a percentage of all families in each Statistical Local Area



#### Per cent low income families<sup>\*</sup>

30.0% or more 25.0 to 29.9% 20.0 to 24.9% 15.0 to 19.9% fewer than 15.0% data excluded<sup>#</sup>

Ν

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

<sup>#</sup>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

## Low income families, 1996

#### State/Territory comparison

The proportion of low income families (families with annual family incomes of less than \$21,000) living in South Australia outside of **Adelaide** is, at 26.2 per cent, above the Australian average (**Table 3.13**) and second only to that in New South Wales. The highest proportions of low income families in all States and the Northern Territory were in the areas outside the capital cities and other major urban centres.

Over the tens years from 1986 to 1996, low income families have increased only slightly as a proportion of all families for which income details were obtained in the non-metropolitan areas of South Australia, from 25.9 per cent to 26.2 per cent. For the whole of South Australia, the change has been from 21.0 per cent to 22.9 per cent, in line with the increase for Australia as a whole, from 18.7 per cent to 20.0 per cent of all families. Refer to the footnote to **Table 3.3** on page 18 regarding the interpretation of these comparisons over time.

Table 3.13: Low income families, State/Territory									
Per cent									
	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	<b>Total</b> <sup>1</sup>
1996									
Capital city	16.6	17.2	18.0	21.8	17.7	20.2	11.1	$11.2^{2}$	17.5
Other major urban centres <sup>3</sup>	23.6	22.6	22.4					••	23.0
Rest of State/Territory	26.5	24.2	23.6	26.2	20.6	25.7	21.6	_4	24.6
Whole of State/Territory	20.0	19.1	20.8	22.9	18.5	23.5	16.6	11.2	20.0
1986									
Rest of State/Territory	26.7	21.9	25.0	25.9	22.1	22.3	20.5	_4	24.8

<sup>1</sup>Total for *Whole of State/Territory* includes 'Other Territories' (Jervis Bay, Christmas Island and Cocos Islands) <sup>2</sup>Includes Queanbeyan (C)

<sup>3</sup>Includes Newcastle and Wollongong (NSW); Geelong (Vic); and Gold Coast-Tweed Heads and Townsville-Thuringowa (Qld) <sup>4</sup>Data included with ACT total

Source: ABS special data services

#### **Rest of State**

There were 27,221 families (26.2 per cent of all families for which income details were obtained) in the non-metropolitan areas of South Australia classified as low income families in 1996. This compared with 22,995 low income families in 1986 and 20,074 such families in 1991, representing 25.9 per cent and 24.9 per cent respectively. As was the case for **Adelaide**, these changes represented a decline in the proportion of low income families between 1986 and 1991, and a subsequent increase between 1991 and 1996. As mentioned on the previous text page, caution must be taken when interpreting these figures over time.

Relatively high proportions of low income families were evident particularly throughout the State's agricultural areas on the Yorke and Eyre Peninsulas, the far west coast and east of the Fleurieu Peninsula (**Map 3.8**). The highest percentages were in the SLAs of Wallaroo (42.9 per cent), Peterborough (41.5 per cent), Warooka (38.7 per cent) and Yorketown (38 per cent). The majority of remaining SLAs across the State had levels of between 20 and 35 per cent. The lowest percentages tended to occur in the south-east, the areas fringing **Adelaide** to the east and north, and the far north. The lowest level, of 1.5 per cent, was recorded for families in the mining centre of Roxby Downs.

The larger towns had the largest numbers of low income families across the State, with more than 1,000 low income families in Whyalla (1,644 families), Murray Bridge (1,313), Mount Gambier (1,274) and Port Pirie (1,273).

There were correlations of meaningful significance with the variables for unemployed people (0.63) and people aged 65 years and over (0.59), and an inverse correlation of substantial significance with the variable for high income families (-0.83).

These results, together with the inverse correlation of meaningful significance with the IRSD (-0.58), suggest the existence of an association at the SLA level between high proportions of low income families and socioeconomic disadvantage.

## Map 3.8 Low income families<sup>\*</sup>, South Australia, 1996

as a percentage of all families in each Statistical Local Area



#### Accessibility/Remoteness Index of Australia



The lowest proportion of low income families was in the Very Accessible areas (22.1 per cent), with around 26 per cent in each of the other ARIA categories.

Source: Calculated on ARIA classification, DHAC National Social Health Atlas Project, 1999

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.

In 1996, 17.3 per cent of **Adelaide's** employed labour force was categorised as being in unskilled or semi-skilled occupations, the highest proportion recorded for any of the capital cities. 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.

There has been a consistent decline in both the numbers and proportions of unskilled and semi-skilled workers nation-wide in the decade since 1986. 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 3.14: Unskilled and semi-skilled workers, capital cities

				Per	cent				
	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra <sup>1</sup>	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
17 1 1	<u> </u>	( <b>0</b> )							

<sup>1</sup>Includes Queanbeyan (C)

Source: ABS special data services

#### Adelaide<sup>2</sup>

At the 1986 Census, 89,511 people in **Adelaide** were classified as working in unskilled or semi-skilled occupations, 21.6 per cent of the employed labour force. Since then, both the number and proportion of people working in unskilled and semi-skilled occupations has declined, to 83,176 people (18.8 per cent) in 1991 and further to 75,667 people (17.3 per cent) in 1996. The overall reduction in the numbers of unskilled and semi-skilled workers during this ten year period represented a decline of 15.5 per cent.

The pattern of variation in the percentage of workers in these categories clearly reflects the long-established contrast between **Adelaide's** working class northern, western and southern suburbs and the middle and upper class suburbs to the east and south-east of the city (**Map 3.9**). Values of less than ten per cent of unskilled and semi-skilled workers characterised an extensive area encompassing the SLAs of Mitcham, Stirling, East Torrens and Burnside, as well as the old, established high status area of Walkerville. The remaining eastern SLAs also had below-average values.

In contrast, above average values for this variable occurred in suburbs characterised by the location of manufacturing industry and Housing Trust housing, throughout Elizabeth, Munno Para, Salisbury, Port Adelaide, Noarlunga and both the eastern and western parts of Enfield [Part A and B]. By far the largest numbers of unskilled and semi-skilled workers were in Salisbury (12,176), Noarlunga (8,565), Tea Tree Gully (6,578) and Hindmarsh and Woodville (6,286). The discrepancies between the percentages of unskilled and semi-skilled workers in the inner (9.0 per cent), middle (16.2 per cent) and outer suburbs (21.6 per cent) were marked. It is also worth noting the significant changes which occurred in the numbers of unskilled and semi-skilled workers between 1986 and 1996. Whereas numbers remained similar in the outer suburbs, there were large increases, of 38.9 per cent and 27.3 per cent respectively, in the inner and middle suburbs.

There were correlations of substantial significance with the variables for early school leavers (0.93), low income families (0.89), unemployed people (0.89), Indigenous people (0.83), dwellings rented from the State housing authority (0.83), single parent families (0.82) and high rates of children aged from 0 to 4 years (0.76). Inverse correlations of substantial significance were recorded with the variables for high income families (-0.93), female labour force participation (-0.92) and managers and administrators, and professionals (-0.91). These results, together with the inverse correlation of substantial significance with the IRSD (-0.95), indicate the existence of an association at the SLA level between high proportions of unskilled and semi-skilled workers and socioeconomic disadvantage.

<sup>&</sup>lt;sup>2</sup>Because these categories do not appropriately reflect the occupational status of country residents, this variable has not been mapped for areas outside of the major urban centres.

## Map 3.9 Unskilled and semi-skilled workers<sup>\*</sup>, Adelaide, 1996

as a percentage of the total employed labour force in each Statistical Local Area



Per cent unskilled and semi-skilled workers  $\ensuremath{^*}$ 

40.0% or more 30.0 to 39.9% 20.0 to 29.9% 10.0 to 19.9% fewer than 10.0%

Ν

data excluded#

\*Consists of ABS occupation groups 'intermediate production and transport workers' and 'labourers & related workers'

<sup>\*</sup>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

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 3.15). 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 3.15: Unemp	loyed	people,	capital	cities
-------------------	-------	---------	---------	--------

				Per	c <b>ent</b>				
	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra <sup>1</sup>	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
1		(							

<sup>1</sup>Includes Queanbeyan (C) Source: ABS special data services

#### Adelaide

There were 43,706 unemployed people (9.5 per cent of the labour force) in Adelaide in 1986. This number increased by a substantial 33.6 per cent in 1991, when 58,382 people (11.7 per cent) were classified as unemployed, before declining to 51,662 (10.6 per cent) in 1996.

Table 3.17 (overleaf) illustrates the considerable variation in unemployment rates between both the different sexes and age groups within Adelaide. Male unemployment rates were higher than those of females in all except the 65 years and over age group. The overall rate of female unemployment in 1996 was 8.9 per cent, compared with 11.9 per cent for males. Males comprised almost two thirds (62.5 per cent) of the unemployed. For both sexes, the younger age groups, particularly youths 15 to 19 years old, experienced the highest unemployment rates, a tendency that was especially evident for males.

The overall pattern of distribution of unemployed people within Adelaide is of higher proportions in the outer northern and southern suburban SLAs (Map 3.10). Examples are Elizabeth (23.4 per cent of the labour force), Munno Para (14.1 per cent) and Salisbury (12.9 per cent) in the north; and Noarlunga and Willunga (both 12.7 per cent) in the south. However, some middle suburban SLAs also experienced relatively high unemployment levels, particularly the western part of Enfield [Part B], where 24.3 per cent of the labour force were unemployed, and Thebarton, with 14.7 per cent.

The SLAs with high unemployment rates also generally contained higher numbers of unemployed people, with 6,512 in Salisbury, 5,319 in Noarlunga and 4,316 in Hindmarsh and Woodville. Tea Tree Gully and Marion were exceptions to this, both having below average unemployment but large numbers of unemployed (7.9 and 9.3 per cent respectively). The lowest percentages were located in the SLAs of East Torrens (5.8 percent), Walkerville and

Burnside (both 5.9 per cent), Happy Valley (6.2 per cent) and Stirling (6.5 per cent).

The patterns of youth unemployment (unemployed people aged from 15 to 19 years) generally mirrored those of the general populace as described above, although the rates are generally twice those across the whole population. Elizabeth was conspicuous for its high rate of youth unemployment, with 43.2 per cent of 15 to 19 year olds in the labour force being unemployed. This figure was one third higher than that of the next highest rate, of 33.7 per cent in Enfield [Part B], and was almost double the metropolitan average of 22.3 per cent.

Whereas the distribution of the proportions of unemployed was similar in 1986 between the inner (10.1 per cent) middle (9.5 per cent) and outer (9.4 per cent) suburbs, in 1996 this distribution had polarised somewhat, so that fewer unemployed were found in the inner suburbs (8.9 per cent) relative to the middle (10.4 per cent) and outer (11.2 per cent) suburbs. The outer suburbs experienced the largest change in the number of unemployed people, with numbers increasing by 42.6 per cent between 1986 and 1996. These changes have occurred in the context of stable numbers of unemployed people over the ten years from 1986 to 1996.

There were correlations of substantial significance at the SLA level with the variables for low income families (0.94), dwellings rented from the State housing authority (0.90), unskilled and semi-skilled workers (0.89), single parent families (0.88), Indigenous people (0.86) and early school leavers (0.76). These results, together with the inverse correlation of substantial significance with the IRSD (-0.96), indicate the existence of an association at the SLA level between unemployment and socioeconomic disadvantage.

## Map 3.10 Unemployed people, Adelaide, 1996

as a percentage of the total labour force in each Statistical Local Area



#### Per cent unemployed people

15.0% or more
12.0 to 14.9%
9.0 to 11.9%
6.0 to 8.9%
fewer than 6.0%
data excluded\*

Ν

<sup>\*</sup>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

#### State/Territory comparison

In 1996, unemployment rates in the *Other major urban centres* category in **Table 3.16** were considerably higher than those recorded for the capital cities and, in New South Wales, higher than the average for the *Rest of State /Territory* areas. Victoria, Queensland and Tasmania also had higher levels of unemployment in the *Rest of State /Territory* areas than in the capital cities, in contrast to the situation in South Australia and Western Australia. Although the unemployment rate in the *Rest of State /Territory* areas was lower in 1996 (10.1 per cent) than in 1986 (10.8 per cent), the relativities between the States and Territories varied, with the largest declines in the Northern Territory and New South Wales, and the largest increase in Victoria.

Table 3.16: Unemployed people, State/Territory

			Per ce	ent					
	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	<b>Total</b> <sup>1</sup>
1996									
Capital city	7.4	9.1	8.8	10.6	8.3	9.7	7.7	$7.5^{2}$	8.5
Other major urban centres <sup>3</sup>	11.6	12.0	11.9						11.7
Rest of State/Territory	11.2	10.1	10.0	9.8	7.5	11.9	7.0	_4	10.1
Whole of State/Territory	8.8	9.4	9.6	10.4	8.1	11.0	7.4	7.3	9.2
1986									
Rest of State/Territory	12.6	8.0	12.2	9.6	9.2	10.6	12.0	_4	10.8

<sup>1</sup>Total for Whole of State/Territory includes 'Other Territories' (Jervis Bay, Christmas Island and Cocos Islands)

<sup>2</sup>Includes Queanbeyan (C)

<sup>3</sup>Includes Newcastle and Wollongong (NSW); Geelong (Vic); and Gold Coast-Tweed Heads and Townsville-Thuringowa (Qld) <sup>4</sup>Data included with ACT total

Source: ABS special data services

#### Rest of State

There were 16,870 unemployed people (9.8 per cent of the labour force) in the non-metropolitan areas of South Australia in 1996. As can be seen from **Table 3.17**, this overall figure represented a higher unemployment rate for males (10.6 per cent) than for females (8.7 per cent). Unemployment rates were also generally higher across all age groups in **Adelaide** than in rural South Australia. The differences between the rural South Australian unemployment rates in 1986 (9.6 per cent) and 1996 (9.8 per cent) were negligible, although, there had been a considerably higher unemployment rate (11.8 per cent) in 1991.

Unemployment rates varied considerably across the State (**Map 3.11**). Parts of the far north and south-east were typified by areas of below average unemployment, for example Orroroo (2.2 per cent) and Hawker (2.6 per cent) in the far north, and Naracoorte (2.2 per cent) and Lucindale (2.7 per cent) in the south-east. On the other hand, the Fleurieu and, in particular, Yorke Peninsulas were generally characterised by above average unemployment rates. On the Fleurieu Peninsula, 15.6 per cent of the labour force in Port Elliot and Goolwa were unemployed, with 12.7 per cent in Victor Harbor.

Wallaroo (21.6 per cent), Warooka (18.9 per cent) and Port Pirie (18.7 per cent) recorded the highest unemployment rates on Yorke Peninsula. The SLAs with the largest numbers of unemployed people were Whyalla (1,469 people), Port Pirie (1,101) and Port Augusta (882).

The general pattern of youth unemployment (people aged 15 to 19 years) was similar to the distribution of overall unemployment, but the rate was considerably higher, at 22.0 per cent. Warooka, Hallett, Karoonda-East Murray and Spalding all had youth unemployment rates of more than 40 per cent, an average of nearly four times higher than the 'all ages' unemployment rate for the equivalent areas.

There was a correlation of meaningful significance at the SLA level between high levels of unemployment and the variable for low income families (0.63). The inverse correlation with the IRSD (-0.66) also indicates a positive association at the SLA level between unemployed people and socioeconomic disadvantage. An inverse correlation was also recorded with the variable for females in the labour force (-0.64).

Table 3.17: Unemployment rates by age and sex, South Australia,	1996
per cent	

Age group	Per cent male labou	Ir force unemployed	Per cent female labo	our force unemployed
(years)	Adelaide	<b>Rest of State</b>	Adelaide	<b>Rest of State</b>
15 to 19	24.2	22.2	20.6	21.8
20 to 24	19.1	16.1	13.3	14.1
25 to 34	12.2	11.7	8.4	9.4
35 to 44	8.6	8.1	6.5	6.3
45 to 54	7.9	7.6	5.8	5.8
55 to 64	12.7	11.6	6.6	6.0
65 & over	4.3	1.3	6.5	1.8
Total	11.9	10.6	8.9	8.7

Source: ABS Census 1996 Basic Community Profile Table B25

## Map 3.11 Unemployed people, South Australia, 1996

as a percentage of the total labour force in each Statistical Local Area



#### Accessibility/Remoteness Index of Australia



The distribution of unemployment by ARIA category is unusual, in that the lowest rate is in the Moderately Accessible category (7.2 per cent) with the next lowest rate in the Very Remote (8.4 per cent) areas. The Accessible (11.5 per cent), Remote (11.0 per cent) and Very Accessible (10.4 per cent) ARIA categories had the highest proportions.

Source: Calculated on ARIA classification, DHAC

National Social Health Atlas Project, 1999

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 3.18** 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**.

cent
cen

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra <sup>1</sup>	All capitals
1996	69.3	69.8	69.4	69.1	<b>68</b> .3	68.9	<b>70.7</b>	76.3	69.5
1986	64.5	64.8	61.0	64.3	62.2	62.6	<b>68</b> .5	72.4	64.1

<sup>1</sup>Includes Queanbeyan (C)

Source: ABS special data services

#### Adelaide

In **Adelaide**, female labour force participation grew from 64.3 per cent at the 1986 Census to 70.2 per cent in 1991, before declining marginally to 69.1 per cent in 1996. This represented increases in the number of women in the labour force of 18.9 per cent between 1986 and 1991, and a smaller 1.6 per cent between 1991 and 1996.

Participation rates vary considerably across **Adelaide** (**Map 3.12**), with the outer northern suburbs generally experiencing lower participation relative both to the inner suburbs and to the areas fringing the coast to the west and the Adelaide Hills to the east. Participation rates varied from 48.9 per cent in Elizabeth to 79.3 per cent in the SLA of Kensington and Norwood, with most SLAs recording rates of between 65 and 75 per cent. Other SLAs with participation rates of more than 77 per cent were Unley, Henley and Grange and Glenelg. The lowest values tended to occur in areas where Housing Trust dwellings were prevalent. For example, Elizabeth, the eastern and western SLAs of Enfield [Part A and B], Munno Para and Noarlunga all had rates of 65 per cent or less. Here, low participation rates were associated with single parent families dependent on welfare benefits and rent rebates.

Before the mid-1970s, female participation rates were highest in the inner areas of Australian cities, associated with non-nuclear families, cosmopolitan lifestyles and low percentages of small children. Outer suburbs, rich or poor, had lower rates. Apart from the City of Adelaide with a rate of 66.4 per cent, the inner city area still had rates considerably higher than the average for the whole of **Adelaide** in 1996. However, changing attitudes towards the role of women in society, and the growth in two income households, have also seen a massive increase in participation rates in middle class suburbia. In **Adelaide** and illustrative of this trend, the female labour force participation rate increased from 65.5 per cent in the middle suburbs in 1986 to 70.5 per cent in 1996. The outer suburbs also saw a large increase, from 64.3 per cent in 1986 to 69.1 per cent at the 1996 Census. In contrast, there was a relatively minor increase apparent in the inner suburbs, with a rise from 72.8 per cent to 74.8 per cent over the same period.

The number of females in the labour force also increased within the inner, middle and outer suburbs between 1986 and 1996. Whereas the increase was only about 12 per cent for the inner and middle suburbs, there was a large increase (of 34.8 per cent) in the outer suburbs, from 57,815 in 1986 to 77,935 in 1996. The largest increases, of 5,678 and 4,999, occurred in Tea Tree Gully and Noarlunga respectively. Elizabeth, however, was notable for being the only SLA in **Adelaide** for which there was a decline in the number of females in the labour force, from 3,445 in 1986 to 2,860 in 1996.

Correlations of substantial significance were recorded with the variables for high income families (0.79) and managers and administrators, and professionals (0.75). There were also inverse correlations of substantial significance with the variables for unskilled and semi-skilled workers (-0.92), unemployed people (-0.88), Indigenous people (-0.86), dwellings rented from the State housing authority (-0.86), early school leavers (-0.81), low income families (-0.81) and single parent families (-0.77). These results, together with the positive correlation of substantial significance with the IRSD (0.89), indicate that high rates of female labour force participation at the small area level are strongly associated with high socioeconomic status.

## Map 3.12 Female labour force participation<sup>\*</sup>, Adelaide, 1996

as a percentage of all females aged 20 to 54 years in each Statistical Local Area



Per cent female labour force participation

75.0% or more
70.0 to 74.9%
65.0 to 69.9%
60.0 to 64.9%
fewer than 60.0%

Ν

data excluded#

\*Labour force participation of females aged 20 to 54 years \*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

#### State/Territory comparison

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 from 20 to 54 years.

The female labour force participation rate for Australia was 68.0 per cent in 1996, with most States and Territories having near average participation rates, ranging from 64.1 per cent in the Northern Territory, to 76.6 per cent in the Australian Capital Territory (**Table 3.19**). Within all of the States and Territories, female labour force participation rates were lower in the non-metropolitan areas than in the capital cities. This differential was particularly evident in the Northern Territory. The participation of women in the labour force increased substantially between 1986 and 1996, with the Australian participation rate increasing from 61.8 per cent in 1986 to 68.0 per cent in 1996. This increase was evident in every State and Territory.

Per cent										
NSW	Vic	Qld	SA	WA	Tas	NT	ACT	<b>Total</b> <sup>1</sup>		
69.3	69.8	69.4	69.1	68.3	68.9	70.7	$76.3^{2}$	69.5		
64.7	66.8	67.9						66.1		
65.4	66.5	63.8	66.2	64.6	62.2	58.3	_4	64.8		
67.8	69.0	67.0	68.4	67.3	65.1	64.1	76.6	68.0		
58.0	60.1	55.3	60.7	56.8	55.4	56.6	_4	57.7		
	69.3 64.7 65.4 67.8	$\begin{array}{cccc} 69.3 & 69.8 \\ 64.7 & 66.8 \\ 65.4 & 66.5 \\ 67.8 & 69.0 \end{array}$	NSW         Vic         Qld           69.3         69.8         69.4           64.7         66.8         67.9           65.4         66.5         63.8           67.8         69.0         67.0	NSW         Vic         Qld         SA           69.3         69.8         69.4         69.1           64.7         66.8         67.9            65.4         66.5         63.8         66.2           67.8         69.0         67.0         68.4	NSW         Vic         Qld         SA         WA           69.3         69.8         69.4         69.1         68.3           64.7         66.8         67.9             65.4         66.5         63.8         66.2         64.6           67.8         69.0         67.0         68.4         67.3	NSW         Vic         Qld         SA         WA         Tas           69.3         69.8         69.4         69.1         68.3         68.9           64.7         66.8         67.9              65.4         66.5         63.8         66.2         64.6         62.2           67.8         69.0         67.0         68.4         67.3         65.1	NSW         Vic         Qld         SA         WA         Tas         NT           69.3         69.8         69.4         69.1         68.3         68.9         70.7           64.7         66.8         67.9                65.4         66.5         63.8         66.2         64.6         62.2         58.3           67.8         69.0         67.0         68.4         67.3         65.1         64.1	NSW         Vic         Qld         SA         WA         Tas         NT         ACT $69.3$ $69.8$ $69.4$ $69.1$ $68.3$ $68.9$ $70.7$ $76.3^2$ $64.7$ $66.8$ $67.9$ $65.4$ $66.5$ $63.8$ $66.2$ $64.6$ $62.2$ $58.3$ $-4$ $67.8$ $69.0$ $67.0$ $68.4$ $67.3$ $65.1$ $64.1$ $76.6$		

Table 3.19: Female labour force participation, State/Territory

<sup>1</sup>Total for *Whole of State/Territory* includes 'Other Territories' (Jervis Bay, Christmas Island and Cocos Islands) <sup>2</sup>Includes Queanbeyan (C)

<sup>3</sup>Includes Newcastle and Wollongong (NSW); Geelong (Vic); and Gold Coast-Tweed Heads and Townsville-Thuringowa (Qld) <sup>4</sup>Data included with ACT total

Source: ABS special data services

#### **Rest of State**

The female labour force participation rate in the nonmetropolitan areas of South Australia was 66.2 per cent in 1996, representing 59,441 females. This figure is very similar to the 59,730 females recorded at the 1991 Census (a participation rate of 67.4 per cent), but represents a 17 per cent increase on the 50,714 females recorded in 1986 (a participation rate of 60.7 per cent).

The complex pattern of variation for this variable at the SLA level is shown on Map 3.13. Female labour force participation exceeds 65 per cent throughout much of the upper south-east, the Murray Mallee and the Riverland, and in parts of Eyre Peninsula. The largest proportions, of more than 75 per cent, were in Lucindale, Tanunda, Penola, Mount Gambier, Naracoorte (DC), Kimba and Carrieton. A belt of high values also lies immediately to the east of Adelaide, including the SLAs of Gumeracha, Strathalbyn and Mount Barker. Lower rates occur in the mid north, Yorke Peninsula, the northern Eyre Peninsula and parts of the lower south-east, as well as in the industrial cities of Whyalla, Port Augusta and Port Pirie. Although recording below average participation rates, these three towns had among the largest numbers of women in the labour force of all the rural areas of the State. Mount Gambier, Mount Barker and Murray Bridge also had similarly high numbers of females in the labour force, in excess of 2,000.

The only positive correlation of meaningful significance was with the IRSD (0.66), indicating a positive association at the small area level between high female labour force participation rates and areas comprising the most advantaged populations. There was also an inverse correlation of meaningful significance with unemployment (-0.64), and inverse correlations of lesser significance with the other indicators of socioeconomic disadvantage.

## Map 3.13 Female labour force participation<sup>\*</sup>, South Australia, 1996

as a percentage of all females aged 20 to 54 years in each Statistical Local Area



#### Accessibility/Remoteness Index of Australia



There are relatively high levels of female labour force participation across all of the ARIA categories, with the highest in the Very Accessible (69.0 per cent), Moderately Accessible (68.8 per cent) and Remote (67.1 per cent) areas. Participation rates were lowest in the Very Remote (59.8 per cent) and Accessible (64.3 per cent) categories.

Source: Calculated on ARIA classification, DHAC National Social Health Atlas Project, 1999

#### 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 pages 17 and 18. 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<sup>\*\*</sup>), and the lowest was recorded in **Canberra**, where the ratio of 68<sup>\*\*</sup> indicated that there were 32 per cent fewer early school leavers in than were expected from the Australian rates.

There was relatively little difference in the early school leaver ratios for 1986 and 1996 (**Table 3.20**), 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 3.20: People who left school at age 15 years or less, or did not go to school, capital cities
Age-sex standardised participation ratios

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

<sup>1</sup>Includes Queanbeyan (C)

Source: ABS special data services

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

#### Adelaide (South Australia as the Standard)

Over the past decade, the areas with low participation in education have remained basically the same. Education data show that children growing up in these areas continue to have low rates of participation in schooling beyond the age of compulsion, and low rates of continuation to higher education. Education bodies have attempted to address this problem through participation and equity programs, but there is a danger that the pattern of inequality of opportunity expressed in this map will perpetuate itself, with a wide range of social health implications.

Variations within **Adelaide** in educational participation provide a striking illustration of the links between education, occupation, income and well-being (**Map 3.14**). Throughout the higher status eastern and south-eastern suburbs, the number of people who had left school at the age of 15 years or less was well below the number expected from the State rates. Standardised ratios were more than 30 per cent below those expected in the SLAs of Burnside, Stirling, Walkerville, Adelaide, Kensington and Norwood, Unley, St Peters, Mitcham and East Torrens.

Ratios of between 16 and 30 per cent below those expected were recorded in the coastal suburbs of Brighton, Glenelg, and Henley and Grange. Prospect, located in the inner suburbs, and Happy Valley, situated in the south, were also mapped within this range. The highest ratios were recorded for the population of the northern SLAs of Munno Para (an SR of  $135^{**}$ ), Elizabeth ( $134^{**}$ ), Salisbury ( $123^{**}$ ) and Enfield [Part B] ( $120^{**}$ ) – and the southern SLA of Noarlunga, with a ratio of  $116^{**}$ .

In **Adelaide**, there were 285,869 people who left school at age 15 years or less, with the largest numbers being in Salisbury (32,380), Hindmarsh and Woodville (27,525), and Noarlunga (25,874). In the vast majority of SLAs, the number of female early school leavers exceeded the number of males: the exceptions were the SLAs of Willunga, East Torrens and Adelaide.

There were correlations of substantial significance at the SLA area level with the variables for unskilled and semi-skilled workers (0.93), low income families (0.82), children aged from 0 to 4 years (0.79), unemployed people (0.76), single parent families (0.73) and Indigenous people (0.73). There were also inverse correlations with the variables for managers and administrators, and professionals (-0.96), high income families (-0.93) and female labour force participation (-0.81). These results, together with the inverse correlation of substantial significance with the IRSD (-0.87), indicate an association at the SLA level between high rates of early school leavers and socioeconomic disadvantage.

## Map 3.14 People who left school at age 15 years or less, or did not go to school, Adelaide, 1996

Standardised Ratio: number of people in each Statistical Local Area compared with the number expected<sup>\*</sup>



Standardised Ratio (as an index)

130 and above
115 to 129
85 to 114
70 to 84
below 70
data excluded<sup>#</sup>

Ν

\*Expected numbers were derived by indirect age-sex standardisation, based on South Australian totals

<sup>#</sup>Data have been excluded when the population of the SLA is less than 100

Source: Calculated on data from ABS 1996 Census

<u>Details of map boundaries are in Appendix 1.2</u> National Social Health Atlas Project, 1999

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

#### State/Territory comparison (Australia as the Standard)

A description of the process of age-sex standardisation, used in producing the standardised ratios (SRs) mapped, is provided on pages 17 and 18. The overall number of early school leavers (people who left school aged 15 years or less, or did not go to school), was 13 per cent higher than expected in the non-metropolitan areas of Australia, compared with eight per cent lower in the capital cities. This relationship was evident in all of the Australian States, with the biggest difference between capital city and non-metropolitan ratios occurring in the Northern Territory. Western Australia (with an SR of 133<sup>\*\*</sup>) and Queensland (127<sup>\*\*</sup>) had the highest *Rest of State/Territory* ratios.

There were notably larger differentials (from the Australian rates) in the ratios recorded for the non-metropolitan areas of the Northern Territory, Tasmania and Western Australia in 1996, when compared with the ratios for 1986 (**Table 3.21**). The higher ratios suggest a decline in educational participation, relative to the Australian experience, over this ten year period.

Table 3.21: People who left school at age 15 years or less, or did not go to school, State/Territory
Age-sex standardised participation ratios

Age-sex standardised participation ratios										
	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total <sup>1</sup>	
1996										
Capital city	$89^{**}$	$82^{**}$	110**	$98^{**}$	$112^{**}$	$98^{**}$	$92^{**}$	$68^{2^{**}}$	92**	
Other major urban centres	$114^{**}$	$95^{**}$	$106^{**}$						109**	
Rest of State/Territory	$106^{**}$	$97^{**}$	$127^{**}$	$114^{**}$	$133^{**}$	$120^{**}$	121**	_4	$113^{**}$	
Whole of State/Territory	<b>96</b> <sup>**</sup>	$86^{**}$	$116^{**}$	$102^{**}$	$118^{**}$	$111^{**}$	$108^{**}$	$64^{**}$	$100^{**}$	
1986										
Rest of State/Territory	104**	<b>98</b> <sup>**</sup>	$125^{**}$	$112^{**}$	$123^{**}$	$111^{**}$	$104^{**}$	_4	110**	

<sup>1</sup>Total for Whole of State/Territory includes 'Other Territories' (Jervis Bay, Christmas Island and Cocos Islands)

<sup>3</sup>Includes Newcastle and Wollongong (NSW); Geelong (Vic); and Gold Coast-Tweed Heads and Townsville-Thuringowa (Qld) <sup>4</sup>Data included with ACT total

Source: ABS special data services

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

#### Rest of State (South Australia as the Standard)

There were 12 per cent more early school leavers in the nonmetropolitan areas of South Australia than were expected from the State rates, an SR of 112<sup>\*\*</sup>. This emphasises the degree to which both opportunities for further education and jobs requiring educational qualifications are concentrated in **Adelaide**. Of the 119,988 people who left school aged 15 years or less (or did not go to school), 61,266 were males and 58,722 were females. This represents a decline of 13.7 per cent in the number of early school leavers over the last decade, down from 138,984 in 1986.

More than half of the SLAs had standardised ratios in the middle range of 15 per cent above or below the level expected. No area had a ratio below 85 per cent and, in total, there were only 11 areas with fewer early school leavers then expected (**Map 3.15**).

Residents of Naracoorte (DC) and Lucindale in the prosperous south-east had the lowest ratio (an SR of 87), indicating that there were 13 per cent fewer early school leavers than expected from the State rates. Coober Pedy and Clare, both with a ratio of 93<sup>\*</sup>, and Mount Barker to the east of **Adelaide** but well within the metropolitan commuting zone, with a ratio of 96<sup>\*\*</sup>, also had fewer early school leavers than expected from the State rates.

The Unincorporated areas of Riverland and Whyalla had the highest SRs for this variable, with ratios of 168<sup>\*\*</sup> and 136<sup>\*\*</sup>, respectively. Whyalla also had the largest number of early school leavers, with 6,929 people. Karoonda East Murray, Port MacDonnell, and Robertstown also had rates in the highest range mapped.

There were weak correlations with the indicators of socioeconomic disadvantage and weak inverse correlations with the indicators of high socioeconomic status. These results, together with the inverse correlation of meaningful significance with the IRSD (-0.62), suggest the existence of an association at the SLA level between high rates of early school leavers and socioeconomic disadvantage.

<sup>&</sup>lt;sup>2</sup>Includes Queanbeyan (C)

#### **Map 3.15**

# People who left school at age 15 or less, or did not go to school, South Australia, 1996

Standardised Ratio: number of people in each Statistical Local Area compared with the number expected\*



#### Accessibility/Remoteness Index of Australia



People living in the areas classified within ARIA as Very Accessible had the highest rates of educational participation (the lowest rates of people who left school at age 15 or earlier, or did not go to school, an SR of 97). The lowest rates of educational participation were in the areas in the Accessible category (an SR of 115), with slightly fewer early school leavers in each of the three remaining ARIA categories.

Source: Calculated on ARIA classification, DHAC

National Social Health Atlas Project, 1999 49

The percentages of people identifying as Aboriginal and Torres Strait Islanders in the 1996 Census were low, with the *All capitals* average was 1.0 per cent (**Table 3.22**). 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 living 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 16 and 17 (see *Data quality of Indigenous population counts*).

Table 3.22: Aboriginal and Torre	s Strait Islander people, capital cities
----------------------------------	--

	Per cent										
	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra <sup>1</sup>	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		
-											

<sup>1</sup>Includes Queanbeyan (C)

Source: ABS special data services

#### Adelaide

Indigenous people made up 0.6 per cent of the population of **Adelaide** in 1986, compared with 0.7 per cent in 1991 and 0.9 per cent in 1996. The substantial increase in numbers of Indigenous people between 1986 (5,825 people) and 1996 (9,387 people), a growth of 61.2 per cent, is discussed on pages 16 and 17.

Indigenous people represented comparatively higher proportions of the population in the western and northern areas of **Adelaide** (**Map 3.16**). Particularly noticeable was a band of SLAs with relatively high proportions (at least 1.4 per cent) and encompassing the SLAs of Enfield [Part A and B], Port Adelaide and Salisbury. Elizabeth had the highest proportion (2.4 per cent) of Indigenous people within **Adelaide**. In contrast, very few Indigenous people lived in the higher status eastern and southeastern suburbs, with the lowest proportions, of 0.3 per cent or less, recorded in the eastern and south-eastern SLAs of Burnside, Stirling, Happy Valley, Mitcham and St Peters.

The largest number of Indigenous people was in Salisbury (1,531 people). Hindmarsh and Woodville, Enfield [Part A], Port Adelaide and Noarlunga also had more than 700 Indigenous people.

The substantial rise of 61.2 per cent in the numbers of Indigenous people reported in **Adelaide** between 1986 and 1996 was due particularly to a substantial increase in this population group in the outer suburbs. In these suburbs, their population increased from 2,105 to 4,282, an increase of 103 per cent from 1986 to 1996. The middle and inner suburbs also saw increases in the proportions of Indigenous people in the population, but at 40 per cent and 19 per cent respectively, these were nowhere near as spectacular as those in the outer suburbs.

There were correlations of substantial significance at the SLA level with the variables for unemployed people (0.86), dwellings rented from the State housing authority (0.85), unskilled and semi-skilled workers (0.83), low income families (0.83) and single parent families (0.76). There was also an inverse correlation of substantial significance with the variable for female labour force participation (-0.86). These results, together with the inverse correlation of substantial significance with the IRSD (-0.88), suggest the existence of an association at the SLA level between Indigenous people and socioeconomic disadvantage.
# Map 3.16 Aboriginal and Torres Strait Islander people, Adelaide, 1996

as a percentage of the total population in each Statistical Local Area



Per cent Aboriginal and Torres Strait Islander people

2.0% or more 1.5 to 1.9% 1.0 to x.9% 0.5 to 0.9% fewer than 0.5%

Ν

data excluded<sup>\*</sup>

\*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

#### State/Territory comparison

At the 1996 Census, some two thirds of those who identified themselves at the Census as being Aboriginal and/or Torres Strait (Indigenous) Islander people lived in inland and remote areas of Australia, away from major urban centres and other highly populated areas. There were wide variations between States and Territories, from a high of 23.7 per cent in the Northern Territory to a low of 0.5 per cent in Victoria; similar variations occurred in the non-metropolitan areas (**Table 3.23**). While Indigenous people accounted for just 3.5 per cent of the population in the non-metropolitan areas of New South Wales, compared with 35.6 per cent in the non-metropolitan areas of Northern Territory, the population was much larger (56,648 Indigenous people, compared to 38,893 people, respectively).

The number of Indigenous people recorded in New South Wales as a whole increased from 59,011 in 1986 to 101,652 in 1996. These changes represent an increase of 72.0 per cent, presumably because of changes over time in the preparedness of people to identify themselves on the Census form. Additional information about these increases is on pages 16 and 17.

	Per cent										
	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total <sup>1</sup>		
1996											
Capital city	0.9	0.3	1.5	0.9	1.4	2.5	8.6	$1.1^{2}$	1.0		
Other major urban centres <sup>3</sup>	1.5	0.5	1.9						1.5		
Rest of State/Territory	3.5	0.9	4.6	2.9	7.0	3.4	35.6	_4	4.2		
Whole of State/Territory	1.7	0.5	2.8	1.4	2.9	3.0	23.7	1.0	2.0		
<b>1986</b>											
Rest of State/Territory	2.6	0.6	3.7	2.3	6.7	1.8	35.7	_4	3.3		

Table 3.23: Aboriginal	and Torres Strait Islander	people, State/Territory

<sup>1</sup>Total for *Whole of State/Territory* includes 'Other Territories' (Jervis Bay, Christmas Island and Cocos Islands) <sup>2</sup>Includes Queanbeyan (C)

<sup>3</sup>Includes Newcastle and Wollongong (NSW); Geelong (Vic); and Gold Coast-Tweed Heads and Townsville-Thuringowa (Qld) <sup>4</sup>Data included with ACT total

Source: ABS special data services

#### **Rest of State**

Both the number and proportion of Indigenous people have increased during the past decade. The number of Indigenous people enumerated in the non-metropolitan areas of South Australia at the 1986 Census was 8,466, increasing to 9,284 in 1991 and to 11,059 in 1996. These figures represented proportions of 2.3 per cent, 2.5 per cent and 2.9 per cent respectively of the total non-metropolitan population.

From **Map 3.17**, it can be seen that Indigenous people were highly represented in the far north, the west coast and within the SLA of Unincorporated Riverland. Indigenous Australians comprised more than 20 per cent of the population in each of these areas. Above average percentages were also recorded in other relatively remote areas, such as Port Augusta (13.5 per cent), Coober Pedy (13.1 per cent) and the Unincorporated Flinders Ranges (10.9 per cent). Most other SLAs within the rest of the State recorded percentages of between 0.5 and 2.5 per cent.

There were between 5 and 100 Indigenous people in the majority of SLAs. Numbers of more than 100 were located in all of the major rural towns, in the Riverland (the SLAs of Barmera, Renmark, Unincorporated Riverland and Berri all had between about 100 and 150 Indigenous people) and in other SLAs predominantly in the west and north of the State. The largest numbers of Indigenous people were found in the Unincorporated Far North SLA (2,284 people) and Port Augusta (1,917 people). Relatively high numbers, of between 500 and 1,000 Indigenous people, were also recorded in the SLAs of Whyalla, Port Lincoln, Murray Bridge and Ceduna. There was a weak association evident in the correlation analysis at the SLA level, with the correlations of meaningful significance with the variables for dwellings with no motor vehicle (0.69) and single parent families (0.62). These results, together with the inverse correlation with the IRSD (-0.44), suggest the existence of an association at the SLA level between Indigenous people and socioeconomic disadvantage.

## Map 3.17 Aboriginal and Torres Strait Islander people, South Australia, 1996

as a percentage of the total population in each in each Statistical Local Area



#### Accessibility/Remoteness Index of Australia



The distribution of the Indigenous population under ARIA is quite striking. The graph shows the relatively low proportions of the population in the first four ARIA categories, from 0.9 per cent in the Very Accessible category, to 3.0 per cent in the Remote category, as well as the high 24.1 per cent in the Very Remote category. The numbers associated with the graph highlight the distribution of Indigenous people throughout the State, including in the most remote areas, with the second largest population of Indigenous people.

Source: Calculated on ARIA classification, DHAC

National Social Health Atlas Project, 1999

## People born in predominantly non-English speaking countries and resident in Australia 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. Within **Adelaide**, 11.1 per cent of the population at the 1996 Census had been born in a predominantly non-English speaking country and resident for five years or more. There are significant variations between the capital cities, with proportions ranging from 4.3 per cent in **Hobart** and 7.5 per cent in **Brisbane** to 17.8 and 18.1 per cent in **Sydney** and **Melbourne**, respectively (**Table 3.24**).

Overall the proportion of the population born in predominantly non-English speaking countries has remained reasonably constant. In 1986 the average across all capitals was 12.7 per cent of the population, increasing to 14.8 in 1996. This phenomenon was consistent for the individual capital cities as well for **Adelaide** in particular, with an increase from 10.5 per cent in 1986 to 11.1 per cent in 1996. The largest increase was in **Sydney**, from 14.0 per cent in 1986 to 17.8 per cent in 1996.

 Table 3.24: People born in predominantly non-English speaking countries and resident in Australia for 5 years or more, capital cities

	Per cent										
	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra <sup>1</sup>	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		
1											

<sup>1</sup>Includes Queanbeyan (C)

Source: ABS special data services

#### Adelaide

In **Adelaide** the percentage of people born in predominantly non-English speaking countries and resident in Australia for five years or more increased slightly, from 10.5 per cent in 1986 to 11.1 per cent in 1996, an increase from 103,071 to 116,180 people.

**Table 3.26** on page 56 shows the main countries of origin of this population group. In **Adelaide**, the highest proportions of people born overseas in a predominantly non-English speaking country were from Italy (18.7 per cent), with the next highest proportions from Greece (8.4 per cent), Germany (7.9 per cent) and Vietnam (7.8 per cent).

Within **Adelaide**, the middle suburbs had the highest percentage of long term residents born in non-English speaking countries. Of these the western part of Enfield [Part B] (28.8), Campbelltown (20.5), Hindmarsh and Woodville (18.6) and Payneham (18.5) had the highest percentages. **Map 3.18** clearly shows this distribution and also reveals that in 1996 there was a high percentage in the inner SLA of Thebarton, where 22.5 per cent of the population was born in predominantly non-English speaking countries and had been resident for over five years.

The lowest proportions of people in this population group were located in the outer suburbs. Gawler, the SLA furthest north, had the lowest percentage, with 4.5 per cent. Willunga, the most southerly SLA, also recorded a low figure with 5.1 per cent, as did the outer eastern SLA of Stirling, with 5.8 per cent. While the middle suburbs had the highest overall percentage, it is interesting to note that within this area there were some particularly low figures, in particular in the coastal regions. Of note are Brighton and Glenelg, with 5.4 per cent and 5.5 per cent respectively. Of the recorded 116,180 people born in non-English speaking countries and resident in **Adelaide**, 67,866 were located in the middle suburbs. The majority of this population group was located in Hindmarsh and Woodville (15,872), although Salisbury (13,379) and Campbelltown (9,040) also had comparatively high numbers.

Walkerville identified 606 people and had the lowest number of this population group in the metropolitan area. Other SLAs to record low numbers included Glenelg (718), Willunga (725), Gawler (756) and East Torrens (797).

There were weak correlations with the indicators of socioeconomic disadvantage and weak inverse correlations with the indicators of high socioeconomic status. These results, together with the weak inverse correlation with the IRSD (-0.40), suggest the existence of an association at the SLA level between people from predominantly non-English speaking countries and resident for five years or more and socioeconomic disadvantage.

## Map 3.18 People born in predominantly non- English speaking countries and resident in Australia for five years or more, Adelaide, 1996

as a percentage of the total population in each Statistical Local Area



Per cent born in non-English speaking <u>countries</u> and resident for five years or more

20.0% or more 15.0 to 29.9%

Ν

10.0 to 14.9%

5.0 to 9.9%

fewer than 5.0%

data excluded\*

\*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

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

### State/Territory comparison

The proportion of migrants born in predominantly non-English speaking countries, who arrived in Australia in or before 1991 and resided in the non-metropolitan areas at the 1996 Census, was highest in Victoria and Western Australia. However, as is shown in **Table 3.25**, the proportion of migrants in this category located in the non-metropolitan areas of the States is low relative to capital city rates. An important social process is suggested when **Tables 3.25** and **3.28** (of more recently arrived migrants) are compared. As migrants born in predominantly non-English speaking countries become more proficient in English, and adapted to the host country's economic and social systems, they are more prepared to leave the capital cities to access opportunities available in the more rural areas.

Between 1986 and 1996, there was an increase in the proportions of people born in non-English speaking countries and resident for five years or more in all States and Territories except the Northern Territory, where there was a small decline. The Australian average increased from 9.5 per cent in 1986 to 10.9 per cent in 1996. The proportion across the *Rest of State/Territory* areas was 3.5 per cent at both Censuses.

Per cent											
	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total <sup>1</sup>		
1996											
Capital city	17.8	18.1	7.5	11.1	11.7	4.3	10.7	$11.4^{2}$	14.8		
Other major urban centres <sup>2</sup>	7.0	10.0	6.1	••	••			••	7.0		
Rest of State/Territory	3.1	3.9	3.7	3.8	3.9	2.6	3.2	_4	3.5		
Whole of State/Territory	12.7	14.3	5.7	9.2	9.5	3.3	6.5	11.3	10.9		
1986											
Rest of State/Territory	2.8	4.1	3.6	4.1	4.6	2.4	3.8	_4	3.5		

 Table 3.25: People born in predominantly non-English speaking countries and resident in Australia for 5 years or more, State/Territory

<sup>1</sup>Total for *Whole of State/Territory* includes 'Other Territories' (Jervis Bay, Christmas Island and Cocos Islands) <sup>2</sup>Includes Queanbeyan (C)

<sup>3</sup>Includes Newcastle and Wollongong (NSW); Geelong (Vic); and Gold Coast-Tweed Heads and Townsville-Thuringowa (Qld) <sup>4</sup>Data included with ACT total

Source: ABS special data services

#### Rest of State

There were 14,675 people in the non-metropolitan areas of South Australia who were born in predominantly non-English speaking countries and had been resident in Australia for five years or more (3.8 per cent of the rural population) in 1996. This represented a decline in both the number and proportion over the previous ten years, from 15,252 people (4.1 per cent) in 1986. Germany, the Netherlands and Italy were the major countries of origin of people in the non-metropolitan areas of South Australia.

Although the overall proportion was low, some SLAs had relatively high percentages. The highest was in Coober Pedy in the State's far north, where 22.3 per cent of the population were from predominantly non-English speaking countries (711 people). High proportions were also recorded in Renmark, Barmera and Berri with 9.3 per cent (729 people), 7.6 per cent (326 people) and 7.5 per cent (506 people) respectively. Whyalla (1,602 people) and Mt Gambier (1,102 people) had the largest number of people in this population group, while six SLAs recorded none. **Map 3.19** clearly highlights the large area of rural South Australia that had very low proportions of population in this category in 1996.

There was no consistent evidence in the correlation analysis of an association between people from predominantly non-English speaking countries and resident for five years or more and socioeconomic status.

	1 / 1		<b>·</b> · .	• •	1 1	• •	.1• 1	1.		South Australia,	1000
Tanie 3 ZK. Ne	horton	countries	of ong	m of ner	nie nom	n m non_Hn	anch c	neakma	COUNTRIAG	Nouth Australia	ТЧЧК
	Juliu -	countries	UI UIIg	ш от рсс			guon o	puaning	countries,	South Austrana,	1000

Country of origin	Adela	ide	Rest of State		
	No.	Per cent	No.	Per cent	
Former Yugoslavia	8,629	6.4	1,299	8.2	
Germany, Federal Republic	10,604	7.9	2,637	16.6	
Greece	11,308	8.4	1,299	8.2	
Italy	25,133	18.7	2,086	13.2	
Malaysia	3,994	3.0	175	1.1	
Netherlands	6,603	4.9	2,312	14.6	
Philippines	3,397	2.5	581	3.7	
Poland	7,545	5.6	490	3.1	
Vietnam	10,459	7.8	208	1.3	
Other and not stated	46,900	35.0	4,776	30.2	
Total	134,572	100.0	15,793	100.0	

Source: ABS 1996 Census Basic Community Profile Table B05

### Map 3.19 People born in predominantly non-English speaking countries and resident in Australia for five years or more, South Australia, 1996

as a percentage of the total population in each Statistical Local Area



#### Accessibility/Remoteness Index of Australia



The highest proportion of the population born in predominantly non-English speaking countries and resident in Australia for five years or more is in areas in the Very Accessible category (10.4 per cent of the population) and the lowest in the Remote category (2.9 per cent). There is a relatively higher proportion in the Very Remote category (7.1 per cent, which includes Coober Pedy), a pattern repeated only in Western Australia and Tasmania.

Source: Calculated on ARIA classification, DHAC

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 3.25**). **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 3.27: People born in predominantly non-English speaking countries and
resident in Australia for less than 5 years, capital cities	resident in Australia for less than 5 years, capital cities

				Per	<b>cent</b>				
	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra <sup>1</sup>	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
-									

<sup>1</sup>Includes Queanbeyan (C) Source: ABS special data services

#### Adelaide

In 1996, 14,189 people born in predominantly non-English speaking countries had been resident in Australia for less than five years, representing 1.4 per cent of the population of **Adelaide**.

Most people in this category living in **Adelaide** were located in middle suburban areas, although inner SLAs had the highest proportions (**Map 3.20**). The western part of Enfield [Part B] had the highest proportion of all SLAs with 6.7 per cent, while the SLAs of Adelaide and Thebarton, with 4.1 per cent and 2.9 per cent, also had comparatively high proportions. The SLAs of Hindmarsh and Woodville and Salisbury had the highest numbers of people in this population group, with 1,702 and 1,251 respectively.

With an overall average of just 1.4 per cent across **Adelaide**, percentages of people born in predominantly non-English speaking countries and resident for less than five years were generally very low, with the lowest proportions in the outer SLAs of Gawler (0.2 per cent), Willunga (0.2 per cent) and Stirling (0.4 per cent).

There were weak correlations with the indicators of socioeconomic disadvantage and weak inverse correlations with the indicators of high socioeconomic status. These results, together with the weak inverse correlation with the IRSD (-0.31), suggest the existence of an association at the SLA level between people born in predominantly non-English speaking countries and socioeconomic disadvantage. A correlation of meaningful significance was also recorded with the variable for dwellings with no motor vehicle (0.66).

### Map 3.20

Ν

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

as a percentage of the total population in each Statistical Local Area



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

2.0% and above 1.5 to 1.9% 1.0 to 1.4% 0.5 to 0.9% fewer than 0.5% data excluded<sup>\*</sup>

\*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

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

### State/Territory comparison

Recently arrived migrants from predominantly non-English speaking countries have a strong preference for capital city residence, as is clear from **Table 3.28** (see comments on previous text page). The proportion of the population in the non-metropolitan areas of all of the States and the Northern Territory has declined between the periods shown.

The slight increase in the proportion of people born in predominantly non-English speaking countries, from 1.7 to 1.9 per cent of the population of Australia between 1986 and 1996, was due mainly to increases in New South Wales, Victoria and Queensland. South Australia and the Northern Territory experienced a decline in both numbers and proportions over this ten year period.

	Per cent											
	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	<b>Total</b> <sup>1</sup>			
1996												
Capital city	3.7	2.8	1.7	1.4	2.3	0.7	1.7	$1.9^{2}$	2.7			
Other major urban centres <sup>3</sup>	0.9	1.0	1.2						1.0			
Rest of State/Territory	0.3	0.3	0.5	0.2	0.4	0.4	0.5	_4	0.4			
Whole of State/Territory	2.5	2.1	1.2	1.0	1.8	0.5	1.0	2.0	1.9			
<b>1986</b>												
Rest of State/Territory	0.4	0.4	0.6	0.4	0.8	0.4	1.0	_4	0.5			
					~1 · · ·	- 1 1	1.0					

#### Table 3.28: People born in predominantly non-English speaking countries and resident in Australia for less than 5 years, State/Territory

<sup>1</sup>Total for *Whole of State/Territory* includes 'Other Territories' (Jervis Bay, Christmas Island and Cocos Islands) <sup>2</sup>Includes Queanbeyan (C)

<sup>3</sup>Includes Newcastle and Wollongong (NSW); Geelong (Vic); and Gold Coast-Tweed Heads and Townsville-Thuringowa (Qld) <sup>4</sup>Data included with ACT total

Source: ABS special data services

### Rest of State

The 1996 Population Census recorded just 746 people in the non-metropolitan areas of South Australia who were born in predominantly non-English speaking countries and had been resident in Australia for less than five years. This figure was equivalent to 0.2 per cent of the population, marginally the lowest of all the non-metropolitan areas in Australia.

Coober Pedy, in the far north of the State, had 1.4 per cent of its population in this population group (46 people), and was the only SLA with more than 1.0 per cent. Whyalla had the largest number of people in this population group, with 93 (0.4 per cent) (**Map 3.21**).

There was no consistent evidence in the correlation analysis of an association at the small area level between people from predominantly non-English speaking countries and resident for five years or more and socioeconomic status.

### Map 3.21 People born in predominantly non-English speaking countries and resident in Australia for less than five years, South Australia, 1996

as a percentage of the total population in each Statistical Local Area

Very Accessible: 1

Moderately Accessible: 3

Accessible: 2

Remote: 4

0.0

Very Remote: 5



14,373

244

176

40

99

0.2 0.4 0.6 0.8 1.0 1.2 1.4

NESB, Resident less than 5 yrs (per cent)

People

The proportion of the population born in predominantly non-English speaking countries and resident in Australia for fewer than five years is highest in the Very Accessible areas (1.2 per cent) and drops away rapidly to much lower proportions in the next three ARIA categories. There is a higher proportion, of 0.6 per cent, in the Very Remote areas. Both percentages and numbers are very small.

Source: Calculated on ARIA classification, DHAC

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 5 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 3.29**). The percentages shown are calculated on the total population aged 5 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 3.29: Poor proficiency in English of people aged 5 years and over and born in predominantly non-English speaking countries, capital cities

Per	<i>cent</i>

				= = = :					
	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra <sup>1</sup>	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
1									

<sup>1</sup>Includes Queanbeyan (C) Source: ABS special data services

#### Adelaide

In 1996, 24,682 people in **Adelaide** reported poor proficiency in English, representing 2.5 per cent of the population aged 5 years and over. This number has remained relatively stable over the past ten years with 24,488 people in this category in 1986 (2.7 per cent) and 25,886 in 1991 (2.7 per cent).

People reporting poor English proficiency were mainly located in the inner and middle suburbs, in particular to the west, northwest and east of **Adelaide** (**Map 3.22**). The middle suburb of Enfield [Part B] and the inner suburb of Thebarton had 14.5 and 11.0 per cent respectively and had the highest proportions of this population group in **Adelaide**. It was in the outer SLAs that the lowest percentages were generally found, the lowest being in Stirling (0.1 per cent) and Willunga (0.4 per cent).

The middle suburbs provided the major source of people who were not proficient in English. Hindmarsh and Woodville (4,622), the western part of Enfield [Part B] (2,110) and Campbelltown (1,941) were the main contributors. However the large, outer SLA of Salisbury (3,229) is also worthy of note as it had the second largest population of people in this category in **Adelaide**. Conversely, Stirling, East Torrens and Willunga all had few people who reported poor proficiency in English, reporting 20, 50 and 49 people respectively.

There were correlations of meaningful significance at the SLA level with the variables for dwellings with no motor vehicle (0.58), unemployed people (0.56), low income families (0.54) and dwellings rented from the State housing authority (0.53).

These results, together with the inverse correlation of meaningful significance with the IRSD (-0.54), suggest the existence of an association at the small area level between people reporting poor proficiency in English and socioeconomic disadvantage.

# Map 3.22 Proficiency in English of people aged five years and over and born in a non-English speaking country, Adelaide, 1996

as a percentage of the total population aged five years and over in each Statistical Local Area



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

4.0% and above 3.0 to 3.9% 2.0 to 2.9% 1.0 to 1.9%

Ν

fewer than 1.0%

data excluded\*

\*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

### State/Territory comparison

Poor proficiency in English of people aged 5 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'. Migration research has consistently demonstrated a propensity for migrants to locate in the major cities of the States and Territories, especially the capital cities. **Table 3.30** shows that this tendency is evident, possibly more so, for migrants reporting a poor proficiency in English. Outside of **Adelaide**, the incidence of migrants with poor English speaking skills is very low, a characteristic shared by each of the States. For these migrants to move away from the capital city and seek employment and residence elsewhere requires an ability to interact with the wider community. Poor proficiency in English restricts this capacity. Consequently, until English proficiency improves, they generally remain restricted to areas where they have the security of their language community, including longer term resident migrants with better English skills who can represent them in their interactions with the labour market, schools, health services and government authorities.

There has been an increase (at the whole of Australia level) in both the proportions and numbers of people reporting poor proficiency in English in the ten years from 1986 (when 2.4 per cent of Australia's population aged over 5 years did not speak English fluently) to 1996 (2.6 per cent). This increase took place in the capital cities as there was a slight decline in the *Rest of State/Territory* areas.

Per cent											
	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	<b>Total</b> <sup>1</sup>		
1996											
Capital city	4.9	5.0	1.4	2.5	2.1	0.6	2.0	$1.7^{2}$	3.7		
Other major urban centres <sup>3</sup>	1.4	2.1	0.8						1.2		
Rest of State/Territory	0.3	0.4	0.4	0.4	0.3	0.2	0.2	_4	0.4		
Whole of State/Territory	3.3	3.7	0.9	2.0	1.6	0.3	1.0	1.7	2.6		
<b>1986</b>											
Rest of State/Territory	0.4	0.6	0.5	0.6	0.7	0.2	0.4	_4	0.5		
<sup>1</sup> Total for Whole of State/Territo	ry includes '	Other Ter	ritorios' ( I	orvis Rav	Christma	s Island a	nd Cocos	Islands)	J		

 Table 3.30: Poor proficiency in English of people aged 5 years and over and born in predominantly non-English speaking countries, State/Territory

<sup>1</sup>Total for *Whole of State/Territory* includes 'Other Territories' (Jervis Bay, Christmas Island and Cocos Islands) <sup>2</sup>Includes Queanbevan (C)

<sup>3</sup>Includes Newcastle and Wollongong (NSW); Geelong (Vic); and Gold Coast-Tweed Heads and Townsville-Thuringowa (Qld) <sup>4</sup>Data included with ACT total

Source: ABS special data services

#### Rest of State

There were only 1,496 (0.4 per cent) of the 353,829 people aged 5 years and over in the non-metropolitan areas of South Australia in 1996, who were born in a predominantly non-English speaking country and reported poor proficiency in English. In comparison, 2.5 per cent of the population of **Adelaide** was in this category. At the time of the 1986 Census there were 1,955 people in the non-metropolitan areas of the State in this category, 0.6 per cent of the population.

The highest proportions of people in this category were in the SLAs of Barmera (2.2 per cent), Renmark (3.1 per cent) and Coober Pedy (5.4 per cent). The four non-metropolitan SLAs with over 100 people who reported poor proficiency in English were Mount Gambier, with 111 people (0.6 per cent); Whyalla, with 150 people (0.7 per cent); Coober Pedy, with 162 people (5.4 per cent); and Renmark with 223 people (3.1 per cent). There were 40 SLAs that had no people in this population group (**Map 3.23**).

There were correlations of statistical significance with the variables for people who were born in non-English speaking countries: the correlation coefficient for those who had been resident for less than five years was 0.90 and for those who had been resident for five years or more, it was 0.72.

## **Map 3.23** Proficiency in English of people aged five years and over and born in a non-English speaking country, South Australia, 1996

as a percentage of the total population aged five years and over in each Statistical Local Area



24,934

482

513

57

189

People

Very Accessible: 1

Moderately Accessible: 3

Accessible: 2

Remote: 4

0.0

0.5

1.0

Proficiency in English (per cent)

1.5

2.0

2.5

Very Remote: 5

Not surprisingly, the proficiency in English of the population has a distribution that is similar to that for people born in predominantly non-English speaking countries and now resident in Australia. The highest proportions are in the Very Accessible (2.3 per cent of the population) and Very Remote (1.3 per cent) categories. Both the percentages and numbers are very small.

Source: Calculated on ARIA classification, DHAC

National Social Health Atlas Project, 1999

65

#### Capital city comparison

The Census collects data on dwellings rented from the South Australian Housing Trust: 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.) In Australia, 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.

In 1986, 10.5 per cent of all occupied private dwellings in **Adelaide** were rented from the State housing authority, increasing to 11.0 per cent in 1991 (**Table 3.31**). Despite declining to 9.7 per cent in 1996, this proportion was almost double the average across all capital cities (5.3 per cent) and similar to the proportion in **Canberra**. In contrast, **Sydney, Melbourne, Brisbane** and **Perth** all recorded proportions of between 2 and 6 per cent. **Darwin**, on the other hand, had 15.8 per cent of its dwelling stock available as rental dwellings from the State housing authority. 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 3.31: Dwellings rented from the State housing authority, capital cities	Table 3.31: D	wellings rented	from the Sta	ate housing a	uthority, car	oital cities
---	---------------	-----------------	--------------	---------------	---------------	--------------

				Per	cent				
	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra <sup>1</sup>	All capitals
1996	5.5	2.9	4.8	9.7	4.6	8.3	15.8	9.7	5.3
<b>1986</b>	5.2	2.9	3.9	10.5	5.3	10.0	21.9	11.5	5.3
-									

<sup>1</sup>Includes Queanbeyan (C) Source: ABS special data services

#### Adelaide

Public rental housing forms one of the most distinctive features of **Adelaide's** social geography. In 1996, 39,914 of the occupied private dwellings in **Adelaide** were reported to be rented from the South Australian Housing Trust. This figure was marginally lower than the 41,482 dwellings recorded in 1991 (11.0 per cent of all occupied private dwellings). There was a similar percentage, representing 36,734 Housing Trust dwellings, in 1986.

The Housing Trust, founded in 1936, was fundamental in shaping **Adelaide's** geography during the so-called Long Boom period of the 1950s and 1960s. Large estates of rental housing, mainly semi-detached family dwellings, were built near factory developments in Woodville, Enfield, Port Adelaide, Marion and later, in Salisbury and Noarlunga. Thousands of dwellings – not shown on this map – were also built for sale. In some years the Trust built over one third of the new houses in the metropolitan area. The most spectacular single development during this period was the then satellite city of Elizabeth, commenced in 1955 as a comprehensively planned new city in conjunction with a new General Motors-Holden automobile manufacturing plant.

Since the end of the Long Boom in the early 1970s, the Trust has continued to build suburban low density housing but has also been increasingly involved in constructing medium-density dwellings and rehabilitating old housing in the inner suburbs of **Adelaide**. However, the nature and location of the public housing stock today is strongly shaped by the past. Accordingly, the SLAs of Salisbury, Hindmarsh and Woodville, Marion, Enfield [Part A and B], Elizabeth, Noarlunga and Port Adelaide record both the highest numbers and proportions of housing authority rented dwellings (**Map 3.24**). The numbers of Housing Trust dwellings within these SLAs varied from 1,934 in Port Adelaide to 3,655 in Noarlunga and 4,517 in Salisbury. Percentages varied from 11.0 per cent in Noarlunga to 43.3 per cent in the western

SLA of Enfield [Part B]. Munno Para also had both high proportions (17.1 per cent) and numbers (2,218) of Housing Trust dwellings.

Lower percentages of public rental dwellings were generally located in older, well established SLAs such as St Peters (4.8 per cent), Willunga (0.5 per cent) and Glenelg (1.5 per cent). The eastern suburbs fringing the Adelaide Hills were also characterised by low proportions of Housing Trust rental dwellings. The SLAs of Tea Tree Gully (4.4 per cent), East Torrens and Stirling were indicative of this, with the latter two SLAs recording proportions of 0.0 per cent.

Both the numbers and proportions of Housing Trust rental dwellings remained similar within the middle suburbs between 1986 and 1996, with about 20,000 dwellings representing just over 10 per cent of all occupied private dwellings. However, proportions in the outer suburbs declined (from 13.2 per cent to 10.3 per cent) and there was a corresponding slight increase in the inner suburbs (from 4.5 per cent to 5.4 per cent). The increase in both numbers and proportions in the inner suburbs is a reflection of the relatively recent push to build more Housing Trust rental dwellings in these near-city areas.

There were correlations of substantial significance with the variable for unemployed people (0.90), Indigenous people (0.85), low income families (0.83) and single parent families (0.82). Inverse correlations of substantial significance were recorded with the variables for female labour force participation (-0.86) and high income families (-0.71). These results, together with the inverse correlation of substantial significance with the IRSD (-0.89), indicate the existence of an association at the SLA level between Housing Trust rental dwellings and socioeconomic disadvantage.

# Map 3.24 Dwellings rented from the State housing authority, Adelaide, 1996

as a percentage of all occupied private dwellings<sup>\*</sup> in each Statistical Local Area



Source: Calculated on data from ABS 1996 Census

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

#### State/Territory comparison

The Census collects data on dwellings rented from the South Australian Housing Trust: in this analysis, rented dwellings are expressed as a proportion of all occupied private dwellings. (Note: Private dwellings exclude special dwellings such as hotels or boarding houses.) In 1996, the Northern Territory had the highest proportion of housing authority rental dwellings outside the capital cities (**Table 3.32**). The lowest levels were recorded in the non-metropolitan areas of Queensland and Victoria. With the exception of Queensland, these rental dwellings declined as a proportion of all occupied private dwellings in all the non-metropolitan areas between 1986 and 1996.

In all three of the most recent Census years, the proportion of dwellings in the non-metropolitan areas of South Australia rented from the State housing authority was among the highest across all States and Territories: the Northern Territory had the only higher non-metropolitan percentage, of 10.5 per cent, in 1996.

			Per ce	ent					
	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	<b>Total</b> <sup>1</sup>
1996									
Capital city	5.5	2.9	4.8	9.7	4.6	8.3	15.8	$9.7^{2}$	5.3
Other major urban centres <sup>3</sup>	7.3	5.0	3.3						5.5
Rest of State/Territory	4.3	3.9	2.9	9.0	5.7	6.2	10.5	_4	4.6
Whole of State/Territory	5.4	3.2	3.8	9.5	4.9	7.1	13.0	10.1	5.1
1986									
Rest of State/Territory	4.9	4.5	1.7	12.4	7.5	6.9	13.4	_4	5.1

Table 3.32: Dwellin	gs rented from t	he State housing	authority, S	tate/Territory
	0	8	<i>J</i> ′	J

<sup>1</sup>Total for *Whole of State/Territory* includes 'Other Territories' (Jervis Bay, Christmas Island and Cocos Islands) <sup>2</sup>Includes Queanbeyan (C)

<sup>a</sup>Includes Newcastle and Wollongong (NSW); Geelong (Vic); and Gold Coast-Tweed Heads and Townsville-Thuringowa (Qld) <sup>4</sup>Data included with ACT total

Source: ABS special data services

#### **Rest of State**

In 1986, 15,565 dwellings in the non-metropolitan areas of South Australia were rented from the South Australian Housing Trust, 12.4 per cent of all occupied private dwellings. The proportion declined to 12.0 per cent in 1991 and further, to 9.0 per cent, in 1996. At the same time the number of dwellings increased to 16,104 in 1991, before declining to 13,112 dwellings in 1996.

The Housing Trust made an important contribution to the development of the non-metropolitan areas of South Australia during the post war period. The Trust's commitment to the provision of housing for workers as a means of encouraging new manufacturing investment during the Long Boom of the 1950s and 1960s resulted in major public housing developments in many country towns and cities. In Whyalla in particular, 35.8 per cent of the housing stock of 9,357 dwellings were rented from the Housing Trust in 1996 (**Map 3.25**). Public rental dwellings also made up a quarter (1,327 dwellings) of the housing stock in Port Augusta, 18.9 per cent (1,052) in Port Pirie, 17.8 per cent (853) in Port Lincoln, 15.7 per cent (1,332) in Mount Gambier and 14.7 per cent (907) in Murray Bridge. Other significant proportions were in the SLAs of Unincorporated Whyalla (14.8 per cent), Berri (12.4 per cent) and Renmark (11.1 per cent).

The majority of non-metropolitan SLAs across the State, however, contained below average proportions of Housing Trust rental dwellings, with more than half of the SLAs containing 3 per cent or less. For example, both Port MacDonnell and Naracoorte had no Housing Trust dwellings, Mallala and Barossa less than 1 per cent, and Victor Harbor and Port Elliot and Goolwa less than 2 per cent. As noted, the larger towns all had more than one thousand dwellings rented from the Housing Trust. Murray Bridge (907), Port Lincoln (853), Mount Barker (441) and Renmark (326) also had significant numbers. However, the majority of rural SLAs had thirty or fewer of these dwellings.

There was a weak association evident in the correlation analysis at the SLA level with most of the indicators of socioeconomic disadvantage. An inverse correlation of meaningful significance was also recorded with the variable for managers and administrators, and professionals (-0.51). These results, together with the weak inverse correlation with the IRSD (-0.42), suggest the existence of an association at the SLA level between Housing Trust rental dwellings and socioeconomic disadvantage.

### Map 3.25 Dwellings rented from the State housing authority, South Australia, 1996

as a percentage of all occupied private dwellings<sup>\*</sup> in each Statistical Local Area



#### Accessibility/Remoteness Index of Australia



The majority (79.2 per cent) of dwellings rented from the State housing authority are in the Very Accessible category. However, the highest proportion is in the Accessible category, where they represent 14.7 per cent of all occupied private dwellings. The Very Accessible and Remote categories had proportions of 9.2 per cent and 8.1 per cent, respectively. The lowest proportion is in the Very Remote ARIA category (3.8 per cent).

Source: Calculated on ARIA classification, DHAC

National Social Health Atlas Project, 1999

#### 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, 12.5 per cent of occupied private dwellings in **Adelaide** had no motor vehicles parked or garaged overnight (**Table 3.33**). This figure was the same as the average across all capital cities, with percentages for most capital cities varying between 10 and 13 per cent. However, **Sydney** was notable for the considerably high proportion (15.4 per cent) and **Canberra** for its low proportion (8.8 per cent) relative to the other cities.

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 vehicle increased.

		Table 0		Per of		vennene, ca			
	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra <sup>1</sup>	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

Table 3.33: Dwellings with no motor vehicle, capital cities
---

<sup>1</sup>Includes Queanbeyan (C)

Source: ABS special data services

#### Adelaide

**Adelaide**, like all Australian cities, is highly dependent upon the automobile. In 1996, only 12.5 per cent of occupied private dwellings did not have a motor vehicle, owned or used by a member of the household, garaged or parked there on Census night. The proportion was similar to those recorded both for the 1986 and 1991 Census. However, the number of such dwellings increased by 9.9 per cent, from 46,146 to 50,735 between 1986 and 1991. Numbers remained essentially static thereafter to 1996.

Variations in car-ownership levels within **Adelaide** are influenced by socioeconomic status, age structure, dwelling type and distance from the city centre. Accordingly, the proportions of car ownership varied between the inner, middle and outer suburbs (**Map 3.26**).

All the inner suburban areas had above average percentages of dwellings with no motor vehicle, particularly the SLAs of Adelaide (24.9 per cent) and Kensington and Norwood (21.8 per cent). Although still above the average for the whole of **Adelaide**, the percentage of dwellings without a motor vehicle in the inner suburbs declined between 1986 and 1996, due almost inevitably to the influx of households with two cars or more, a trend which accompanies gentrification. The middle SLAs were also dominated by areas high in dwellings without a motor vehicle, areas such as the western part of Enfield (24.6 per cent), Thebarton (24.0 per cent) and Payneham (18.8 per cent). As in the inner suburbs, the proportion of dwellings without a motor vehicle in the middle suburbs declined between 1986 and 1996.

In contrast, the proportions within most of the outer suburbs increased over this same period. The exceptions were the SLAs of East Torrens, Gawler and Stirling, where proportions of dwellings without a motor vehicle declined. In the outer suburbs, car ownership rates were generally very high. Fewer than 2.5 per cent of the dwellings in East Torrens had no car, and percentages were almost as low in Happy Valley, Stirling, Willunga and Tea Tree Gully. The largest numbers of dwellings with no motor vehicle were in Hindmarsh and Woodville (5,250), Marion (4,091), Salisbury (3,582) and the eastern part of Enfield [Part A] (3,482). Most other areas had between 800 and 3,000 dwellings with no motor vehicle. The lowest numbers were recorded in Willunga (264), Stirling (200) and East Torrens (51).

There were correlations of meaningful significance with the variables for people born in non-English speaking countries and resident for less than five years (0.66), unemployed people (0.56), dwellings rented from the State housing authority (0.53) and low income families (0.52). These results, together with the inverse correlation with the IRSD (-0.48), suggest the existence of an association at the small area level between dwellings without a motor vehicle and socioeconomic disadvantage.

# Map 3.26 Dwellings with no motor vehicle, Adelaide, 1996

as a percentage of all occupied private dwellings<sup>\*</sup> in each Statistical Local Area



Per cent children aged 0 to 4 years

20.0% and above
15.0 to 19.9%
10.0 to 14.9%
5.0 to 9.9%
fewer than 5.0%
data excluded<sup>#</sup>

Ν

\*Includes all privately owned, occupied, dwellings and private rented dwellings. Excludes institutions, motels, guest houses etc and caravans in parks

<sup>#</sup>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

#### State/Territory comparison

The phenomenon of higher car ownership in non-metropolitan relative to urban areas was apparent within all the States and Territories other than the Northern Territory. Rates varied considerably across the nation, from 8.2 per cent of occupied private dwellings with no motor vehicle in South Australia to 18.3 per cent in the Northern Territory, with most States and Territories recording between 8 and 10 per cent (**Table 3.34**). The Northern Territory had the highest percentages for both the *Rest of State* and *Whole of State/Territory* categories, ahead of New South Wales.

The average across all Rest of State/Territory areas was 9.6 per cent at both the 1986 and 1996 Censuses.

Table 3.34: Dwellings with no motor vehicle, State/Territory

NSW	Vic		~ 1					
		Qld	SA	WA	Tas	NT	ACT	Total <sup>1</sup>
15.4	11.2	11.6	12.5	9.5	12.2	10.2	$8.8^{2}$	12.5
13.8	11.7	10.8						12.4
10.7	8.3	9.8	8.2	7.8	9.5	18.3	_4	9.6
14.0	10.5	10.7	11.4	9.0	10.7	14.4	8.5	11.6
10.6	8.6	9.7	8.1	8.1	10.2	19.8	_4	9.6
	13.8 10.7 14.0 10.6	13.811.710.78.314.010.510.68.6	13.811.710.810.78.39.814.010.510.710.68.69.7	13.8       11.7       10.8          10.7       8.3       9.8       8.2         14.0       10.5       10.7       11.4         10.6       8.6       9.7       8.1	13.811.710.810.78.39.88.27.814.010.510.711.49.0	13.8       11.7       10.8            10.7       8.3       9.8       8.2       7.8       9.5         14.0       10.5       10.7       11.4       9.0       10.7         10.6       8.6       9.7       8.1       8.1       10.2	13.8       11.7       10.8              10.7       8.3       9.8       8.2       7.8       9.5       18.3         14.0       10.5       10.7       11.4       9.0       10.7       14.4         10.6       8.6       9.7       8.1       8.1       10.2       19.8	13.8       11.7       10.8  <

<sup>1</sup>Total for *Whole of State/Territory* includes 'Other Territories' (Jervis Bay, Christmas Island and Cocos Islands) <sup>2</sup>Includes Queanbeyan (C)

<sup>3</sup>Includes Newcastle and Wollongong (NSW); Geelong (Vic); and Gold Coast-Tweed Heads and Townsville-Thuringowa (Qld) <sup>4</sup>Data included with ACT total

Source: ABS special data services

#### Rest of State

Both the proportions (8.2 per cent) and numbers (11,883) of dwellings with no motor vehicle in 1996 were similar to those in 1986, when there were 10,169 dwellings without a motor vehicle, which represented 8.1 per cent of all dwellings. There was a slight increase in both the number and proportion in 1991, to 11,745 dwellings with no motor vehicles, 8.8 per cent of occupied private dwellings.

Very high levels of car ownership are to be expected, given the low population densities typical of rural South Australia and the long distances many people must travel for social interaction, to gain access to services and facilities, and in connection with employment. Throughout most of the agricultural areas, fewer than 6 per cent of households were without cars (Map 3.27). Percentages in excess of 10 per cent tended to occur only in the larger towns (Murray Bridge, Mount Gambier, Port Lincoln, Port Pirie, Port Augusta and Whyalla) and in remote areas with significant Indigenous populations. This was particularly evident in the SLA of Unincorporated Riverland SLA which, at 33.3 per cent, had the lowest levels of car ownership State-wide. The south-eastern area of the State was particularly characterised by high levels of car ownership. Peake, Naracoorte, Lucindale and Coonalpyn Downs all had fewer than 2.5 per cent dwellings without a motor vehicle. These areas also tended to have relatively small numbers of such dwellings.

Most SLAs across the State had fewer than 50 dwellings without a motor vehicle, but there were high numbers in the larger towns, which also had relatively high proportions. Port Lincoln had 569 dwellings with no motor vehicle; Murray Bridge, 647; Port Augusta, 807; Port Pirie, 815; Mount Gambier, 888; and Whyalla had a considerable 1,532 dwellings without a vehicle, representing 16.4 per cent of all occupied private dwellings. There were correlations of meaningful significance with the variables for single parent families and Indigenous people (both 0.69). These results, together with the inverse correlation of meaningful significance with the IRSD (-0.66), suggest the existence of an association at the small area level between dwellings without a motor vehicle and socioeconomic disadvantage.

### Map 3.27 Dwellings with no motor vehicle, South Australia, 1996

as a percentage of all occupied private dwellings<sup>\*</sup> in each Statistical Local Area



#### Accessibility/Domotoposs Index of Australi



The highest proportions of dwellings without a motor vehicle are in the Very Accessible (11.9 per cent) and Very Remote (10.8 per cent) areas, with the lowest proportions in the Moderately Accessible (7.1 per cent) and Remote (7.3 per cent) areas. The distribution of the Indigenous population is likely to have influenced the high proportion in the Very Remote areas.

Source: Calculated on ARIA classification, DHAC

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 17. 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 3.35). 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 3.35: SEIFA Index of Relative Socio-Economic Disadvantage, ca	apital cities
Index volues (Australia equals 1000)	

			muex va	iues (Ausu	апа ечи	ais 1000)			
	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra <sup>1</sup>	All capitals
1996	1027	1025	1010	992	1020	1001	1027	1084	1021
1986	1013	1041	1011	1008	1017	1007	<b>998</b>	1089	1021

<sup>1</sup>Includes 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

#### Adelaide (South Australia equals 1000)

At the 1996 Census, the IRSD score calculated for Adelaide was 1010 (when the index score for South Australia was 1000).

The overall pattern of distribution within Adelaide indicated that the least disadvantaged areas in 1996 were situated to the east and south of the city, while the most disadvantaged areas were found to the north-west and north (Map 3.28).

As expected, the eastern SLAs of **Adelaide** had the highest index scores (least disadvantaged). Accordingly, SLAs with scores of greater than 1100 were in Stirling (1147), Burnside (1144), East Torrens (1140), Walkerville (1130), Unley (1106) and St. Peters (1103). To the south of Adelaide, Happy Valley and Mitcham were also mapped in this range, recording IRSD scores of 1112 and 1111 respectively. Relatively low scores, indicating the most disadvantaged areas, were recorded in the north-western SLAs of Enfield [Part B] (with the lowest score of 755), Port Adelaide (944), Thebarton (953) and Hindmarsh and Woodville (968). Many northern SLAs also had low scores, including Elizabeth,

with an index of 801, Munno Para (924), Salisbury (951) and Gawler (986).

The IRSD, understandably, was highly correlated with many of the individual variables mapped. The strongest inverse correlations were with the variables for low income families (-0.97), unemployed people (-0.96) and unskilled and semiskilled workers (-0.95). These inverse correlations indicate a positive association at the SLA level between this aggregate measure of socioeconomic disadvantage and the individual indicators analysed.

# Map 3.28 ABS Index of Relative Socio-Economic Disadvantage, Adelaide, 1996

IRSD index number for each Statistical Local Area



Index of Relative Socio-Economic Disadvantage

Ν

below 800 most disadvantaged
800 to 899
900 to 999
1000 to 1099
1100 and above

data excluded\*\*

<sup>\*</sup>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

# SEIFA Index of Relative Socio-Economic Disadvantage, 1996

#### State/Territory 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 17. The Whole of State/Territory index scores ranged from a low of 962 in the Northern Territory to a high of 1091 in the Australian Capital Territory. Between 1986 and 1996 index scores for the non-metropolitan areas of Australia declined for each State and the Northern Territory (Table 3.36), although the score in Western Australia was almost stable..

#### Table 3.36: SEIFA Index of Relative Socio-Economic Disadvantage, State/Territory Inday valuas (Australia aquals 1000

	шисл ус	aues (Aus	папа суп					
NSW	Vic	Qld	SA	WA	Tas	NT	ACT	<b>Total</b> <sup>1</sup>
1027	1025	1010	992	1020	1001	1027	1084	1021
973	980	985						978
973	995	965	963	970	955	909	_4	972
1007	1016	989	984	1006	974	962	1091	1000
981	1026	972	986	971	988	917	_4	999
	1027 973 973 1007	NSWVic1027102597398097399510071016	NSWVicQld10271025101097398098597399596510071016989	NSW         Vic         Qld         SA           1027         1025         1010         992           973         980         985            973         995         965         963           1007         1016         989         984	1027       1025       1010       992       1020         973       980       985           973       995       965       963       970         1007       1016       989       984       1006	NSW         Vic         Qld         SA         WA         Tas           1027         1025         1010         992         1020         1001           973         980         985               973         995         965         963         970         955           1007         1016         989         984         1006         974	NSW         Vic         Qld         SA         WA         Tas         NT           1027         1025         1010         992         1020         1001         1027           973         980         985                973         995         965         963         970         955         909           1007         1016         989         984         1006         974         962	NSW         Vic         Qld         SA         WA         Tas         NT         ACT           1027         1025         1010         992         1020         1001         1027         1084           973         980         985

<sup>1</sup>Total for Whole of State/Territory includes 'Other Territories' (Jervis Bay, Christmas Island and Cocos Islands) <sup>2</sup>Includes Queanbeyan (C)

<sup>3</sup>Includes Newcastle and Wollongong (NSW); Geelong (Vic); and Gold Coast-Tweed Heads and Townsville-Thuringowa (Qld) <sup>4</sup>Data included with ACT total

Source: ABS special data services

Figure 3.2 indicates the steady decline over the last three Censuses (1986, 1991, 1996) in the scores for the non-metropolitan areas of Victoria, South Australia and Tasmania and the marked increase in the Northern Territory (although remaining as the lowest score); and the small decline experienced by the non-metropolitan areas of New South Wales, Queensland and Western Australia, following the increase from 1986 to 1991.



Index 1100 🗆 1986 1991 **1996** 1050 1000 950 900 850 800 VIC QLD SA WA TAS NT NSW Source: ABS SEIFA86, SEIFA91, SEIFA96

#### Rest of State (South Australia equals 1000)

At the 1996 Census, the non-metropolitan areas of South Australia had an IRSD score of 980 (when the index score for South Australia was 1000). This was considerably lower than the score recorded in Adelaide (of 1010), indicating a greater degree of disadvantage relative to South Australia as a whole.

Outside of Adelaide, the most disadvantaged areas were located in the north of the State (Map 3.29), with the lowest score of 820, recorded for the small population in Unincorporated Whyalla. IRSD scores of below 900 were also recorded in Unincorporated Riverland (an index of 852), Wallaroo (860), Peterborough (871) and Port Pirie (897).

The highest socioeconomic status SLA was the mining centre of Roxby Downs, where the population had an IRSD score of 1103.

Gumeracha (1087), Carrieton (1065), Naracoorte (1059), Lameroo (1058), Barossa (1057) and Kimba (1056) all recorded relatively high scores.

There was a weak association in the correlation analysis at the SLA level with a number of the indicators of socioeconomic disadvantage. The strongest inverse correlations were with the variables for single parent families (-0.68) and unemployed people (-0.66). These inverse correlations indicate a positive association at the SLA level between this aggregate measure of socioeconomic disadvantage and the individual indicators analysed.

## Map 3.29 ABS Index of Relative Socio-Economic Disadvantage, South Australia, 1996

IRSD index number for each Statistical Local Area



#### Accessibility/Remoteness Index of Australia



The graph of the ABS Index of Relative Socio-Economic Disadvantage shows the highest index score (indicating the most advantaged areas) is in the Very Accessible ARIA category (1009) and the lowest score is in the Very Remote category (938). The index scores in the other categories increase, from 959 in the Moderately Accessible areas to 995 in the Remote category areas.

Source: Calculated on ARIA classification, DHAC National Social Health Atlas Project, 1999

This page intentionally left blank