

3 Demography and socioeconomic status

Introduction

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

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

The next section describes the growth and distribution of the population in Tasmania (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

Tasmania is the smallest Australian State, in both area and population terms. At the 1996 Census Tasmania had a population of 459,659 (**Table 3.1**), and its area was 1,730,311 square kilometres. The steep physical topography of Hobart, together with its small population, means that the population density within the Hobart Statistical Division is very low.

In contrast with the other Australian states, the bulk of Tasmania's population is not located in the capital city. In large part this is due to the location of Hobart, the role of Launceston, and industrial development situated at a number of locations throughout the northern end of the island. The proportion of the State's population resident in Hobart has increased steadily since 1947, when it was 29.8 per cent, although during the nineties it has stabilised around 41 per cent.

Hobart is Australia's second oldest State capital, having been founded in 1803 as a penal settlement on the eastern banks of the Derwent River. However, soon after European settlement, commercial activity shifted to the western side of the river around the current city centre. Until the abolition of transportation of people from Britain in the 1860s, Tasmania's population expanded quite rapidly. However, during the second half of the 1800s, the rate of growth slowed. Whereas there had been a 4.8 per cent annual growth rate between 1840 and 1860, this was reduced to 2.5 per cent for the 1880-1900 period. The growth of

Hobart has been quite slow from the outset. In 1907 there were 40,326 people living in Hobart. The number dipped to 38,329 in 1911, before rising to 40,352 in 1917. By 1947 its population had increased by a further 36,182.

The urban development of Hobart has been constrained by its location on the Derwent River. A steep topography either side of the river means that the city has developed linearly, extending some 25 kilometres in a north-west south-east orientation, and significant urban expansion to the west and east has been prevented by a terrain ranging from hilly to mountainous. Most of the older suburbs are located on the western shores of the Derwent River. However, after 1946, urban expansion on the eastern shores of the Derwent was encouraged by the construction of a floating bridge. It was superseded by the Tasman Bridge in 1964.

Between 1947 and 1971, Australia experienced a "long boom" of economic development. For the mainland states this period represented a time of unprecedented industrialisation, employment, population expansion through increased fertility and immigration, home ownership and urbanisation. However, the boom did not have the same impacts in Tasmania. In the first half of the fifties the rate of population increase in Tasmania exceeded that of the eastern states, but not of South Australia and Western Australia. Between 1954 and 1961, growth in Tasmania was comparable with New South Wales, Queensland and Western Australia, but less than for Victoria and South Australia. However, from 1961 onwards, Tasmania's rate of growth was considerably less than that recorded by each of the mainland states. Tasmania's development hinged principally on resources and industries based around cheap hydro-electricity, and manufacturing industry expansion was retarded by severe locational disadvantage. Consequently, Tasmania had a population of 257,058 in 1947, which increased by 51.7 per cent to 389,874 in 1971. During the decade to 1981, the population increased by 10.3 per cent, and in the following decade the increase was 6.0 per cent.

Population growth in Hobart has followed similar patterns, albeit at higher levels, to that for the State as a whole. Between 1947 and 1971 population growth in Hobart was substantially greater than that recorded at the state level. In 1947 Hobart had a population of 76,534, which had doubled to 153,024 by 1971. In the following ten years the capital city population increased by 11.8 per cent and in the following decade an increase of 8.4 per cent occurred, bringing the city's population to 185,552. By 1996, the population of Hobart was 189,944.

Table 3.1: Population and area, Tasmania, 1996

Section of State	Population:		Area:	
	No.	Per cent	km ²	Per cent
Hobart Statistical Division	189,944	41.3	1,360	2.0
Rest of State	269,715	58.7	66,604	98.0
Whole State	459,659	100.0	67,964	100.0

Source: ABS special data services

Unlike other State capitals, Hobart has no urban rail system to influence the direction of urbanisation. However, it has been influenced by the construction of an arterial road network. Further, the character of urbanisation has been affected by substantial public housing activity, particularly from 1945 to 1980. Public housing policies were implemented as an incentive to industry and manufacturing to locate in the region. As a result, there are large areas of public housing located in Bridgewater and Gagebrook, on the north-west margin of the city, and in Warrane, Mornington, Rokeby and Clarendon on the eastern side of the city. Post war urbanisation has created an almost contiguous built up area on both sides of the river - from Taroona to Austins Ferry on the west bank, and from Tranmere to Bridgewater on the east bank. In this time, the urbanisation process has spread to embrace a number of previously isolated outlying communities such as New Town, Moonah and Glenorchy.

In common with all large cities, Hobart's population has developed strong patterns of socioeconomic differentiation, with significant implications for health service utilisation and provision. Generally speaking, the highest socioeconomic suburbs are located to the south of the city's commercial centre in suburbs

centred on Sandy Bay, Mount Nelson, Taroona and Kingston. Other suburbs with relatively high socioeconomic status are situated in newer areas on the eastern side of the river, represented by Tranmere, Otago and Old Beach.

Projected population

Between 1996 and 2006, the population of Hobart is projected to increase by less than 1 per cent, to 191,700 (ABS 1998). In the following 10 years population decline is anticipated, so that the population of Hobart in 2016 is projected to be 184,200. Although the rural areas of Tasmania are projected to experience growth of 1.8 per cent between 1996 and 2006, decline is expected during the period 2006 to 2016. However, the actual levels of future population which prevail in both Hobart and Tasmania will be dependent on levels of fertility and the magnitude of net interstate migration.

Data issues

Data quality of Indigenous population counts

As noted in Chapter 2, *Methods*, the data describing the health status and utilisation of health services by Aboriginal people are generally of poor quality.

Table 3.2: Population of Indigenous Australians, 1986 to 1996

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

Source: ABS special data services

It has become clear with the release of results from the 1996 Census that population data are also less than ideal. **Table 3.2** shows the population of Indigenous Australians as recorded at the three most recent Censuses, as well as changes over the ten-year period from 1986 to 1996.

The number of Indigenous people recorded has increased by 125,325 people, from 227,645 at the 1986 Census to 352,970 at the 1996 Census (an increase of 55.1 per cent). Of the total increase, over half (69,051, or 55.1 per cent) occurred in the non-metropolitan areas, an increase for these areas of 44.4 per cent over ten years. The capital cities, with 26.6 per cent of the population of Indigenous Australians in 1986, showed an apparently stronger growth rate, of 79.0 per cent.

At the State/Territory level, the apparent rate of Indigenous population growth was highest in the Australian Capital Territory (137.6 per cent) and Tasmania (106.6 per cent), and lowest in the Northern Territory (33.2 per cent) and Western Australia (34.4 per cent). Queensland moved from having the largest population of Indigenous Australians in 1986 (with 61,268) to second largest, with 95,518 (after New South Wales with 101,485) in 1986. Sydney remained the capital city with the largest population of Indigenous people over the ten years to 1996. The major urban centres of Geelong and Newcastle/Wollongong had the largest increases, of 359.7 per cent and 134.2 per cent, respectively.

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

ABS SEIFA Index of Relative Socio-Economic Disadvantage

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

One of these indexes, the Index of Relative Socio-Economic Disadvantage (IRSD), summarises the information available from variables related to education, occupation, income, family structure, race (the proportion of Indigenous people), ethnicity (poor proficiency in use of the English language) and housing. The index reflects the extent of disadvantage represented by, for example, the proportion of low income families, of those with relatively low educational attainment and of high unemployment, in the area being examined. The variables are, therefore, similar to those presented in the remainder of this chapter. While the index number is a useful measure of socioeconomic disadvantage, users should realise its limitations. For example, while it represents the results of a particular set of statistical analyses on a set of variables from the 1996 Census, changing the variables could change the particular index values calculated

(although the relativities between the areas for these variables are, in general, likely to remain). It also has a wide range of uses, such as for the allocation of resources or as a shorthand description of populations living in an area, but is not a universal answer to all such needs.

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

The IRSD is calculated to show the relativity of areas to the Australian average for the particular set of variables that comprise it. This average score is set at 1000. In this atlas, data mapped at the SLA level have been re-weighted so that Tasmania 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 (i.e. those of higher socioeconomic status) have an index number of above 1000 and those with relatively greater disadvantage (i.e. 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 SEIFA index 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 Hobart (page 28), there is an inverse correlation of (-0.83) with the IRSD. Thus, at the SLA level in Hobart 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 SEIFA index scores).

Age-sex standardisation

Age-sex standardisation was used to adjust the data mapped for the variable for early school leavers (**Maps 3.14** and **3.15**).

It is straightforward to calculate from the Census the percentage of each SLAs adult population, leaving school at the age of 15 or less, but a significant part of the variation between SLAs in this measure is caused by age structure. A person aged 70 is less likely to have stayed at school past the age of 15 than a person aged 20, simply because of the changes over the past 55 years in the education system. Age-sex standardisation measures variations in educational participation in a way unaffected by age structure. For each SLA, a theoretical expected number of adult residents who left school at age 15 or less has been calculated, assuming that each 5 year age group in its population had the same educational participation record as that age group in the New South Wales population as a whole. This expected number is then compared with the actual number, to establish whether

the number of people who did not continue at school beyond 15 is significantly greater or less than one would expect given the area's age structure. A similar analysis compares the level of participation for each State/Territory and capital city, using Australia as the standard.

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 and socioeconomic variables mapped

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

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

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

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

Source: Compiled from project sources

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Children aged 0 to 4 years, 1996

Capital city comparison

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

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

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

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

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

¹Includes Queanbeyan (C)

Source: ABS special data services

Hobart

In 1986, there were 13,739 children aged from 0 to 4 years in **Hobart**. Ten years later, in 1996, this number had decreased marginally to 13,021 children. Whilst the actual numbers recorded remained virtually the same, their proportion of the total population in **Hobart** decreased from 7.8 per cent in 1986 to 6.9 per cent in 1996.

The distribution of children aged from 0 to 4 years varied considerably at the SLA level, ranging from 5.0 per cent in the City of Hobart, to 11.4 per cent in Brighton (**Map 3.1**). Sorell [Part A], Kingborough [Part A], and Derwent Valley [Part A] all recorded above-average rates for this variable, with those in Clarence and Hobart both being below-average. Glenorchy, to the north-west of the city centre, had 6.9 per cent of its population in this age group, equal to the **Hobart** average.

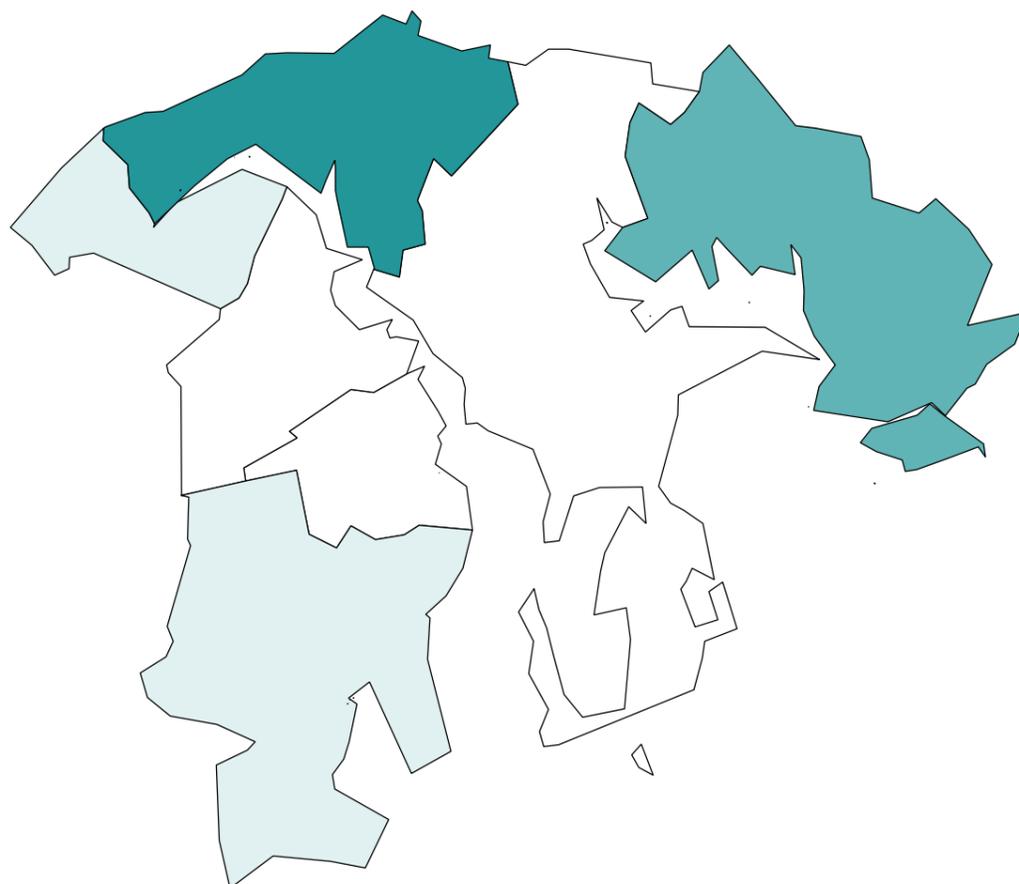
The number of children aged from 0 to 4 years also varied considerably between SLAs. The largest numbers were found in Clarence, where 3,149 children fell into this age category. Glenorchy and the City of Hobart also recorded high absolute numbers, with 2,984 and 2,317 respectively. The lowest numbers were in Derwent Valley [Part A] with 485 and Sorell [Part A] with 828 children aged from 0 to 4 years.

Correlations of substantial significance were recorded with the variables for the Indigenous population (0.86), unemployed people (0.82), early school leavers (0.79), low income families (0.75) and single parent families, semi-skilled and unskilled workers and public rental housing (all with coefficients of 0.73). Correlations with indicators of high socioeconomic status were inverse and significant. These results, together with the inverse correlation of substantial significance with the IRSD (-0.78), indicate the existence of an association at the SLA level between high rates of young children and socioeconomic disadvantage.

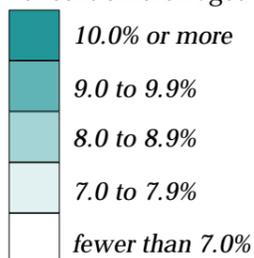
Map 3.1

Children aged 0 to 4 years, Hobart, 1996

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



Per cent children aged 0 to 4 years



Source: See Data sources, Appendix 1.3

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

Children aged 0 to 4 years, 1996

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 nation-wide percentage for the *Rest of State/Territory* areas was 7.5 per cent, with a similar percentage in New South Wales (**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.

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

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total ¹
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 ³	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

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

²Includes Queanbeyan (C)

³Includes Newcastle and Wollongong (NSW); Geelong (Vic); and Gold Coast-Tweed Heads and Townsville-Thuringowa (Qld)

⁴Data included with ACT total

Source: ABS special data services

Rest of State

In 1996, 7.6 per cent of the population of non-metropolitan Tasmania was aged from 0 to 4 years.

High proportions of young children were recorded in West Coast, Meander Valley [Part A], Sorell [Part B] and George Town [Part A], where percentages were at or above nine per cent (**Map 3.2**). However, of these four SLAs, the largest number of resident children aged from 0 to 4 years was the 676 children in Meander Valley [Part A].

The largest number of young children was in Launceston (the aggregate of the SLAs of Launceston-Inner and Launceston [Part B]), with 4,135 children. Other large numbers of children aged from 0 to 4 years were resident in the SLAs of Devonport (1,698 children), Burnie [Part A] (1,331), West Tamar [Part A] (1,247) and Central Coast [Part A] (1,219).

Interestingly, neither the SLAs with high proportions, nor those with high numbers of children aged from 0 to 4 years, shared significant common spatial positioning. Although it is often the case that certain rates will be characteristic of particular areas, this was not evident in Tasmania. However, the spatial characteristic that was common to these SLA was that they were all water side locations, positioned either near the coast, or along the Tamar River.

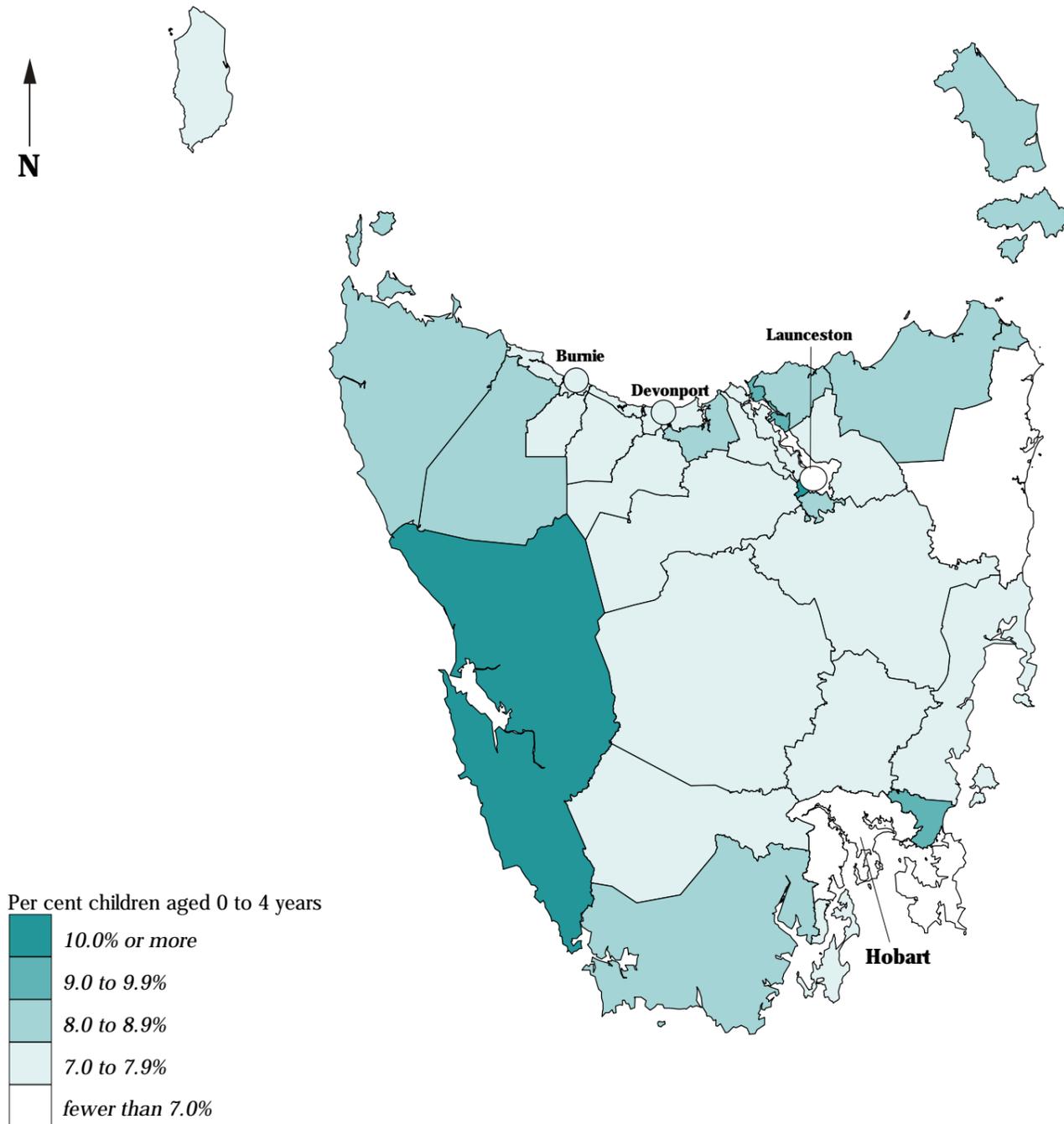
The lowest proportions of children aged from 0 to 4 years were in Break O'Day and Tasman (both with 6.9 per cent), Glamorgan/Spring Bay and Launceston (both 7.0 per cent) and Central Coast [Part A] and Devonport (both 7.1 per cent).

The results of the correlation analysis showed no particular association with socioeconomic status.

Map 3.2

Children aged 0 to 4 years, Tasmania, 1996

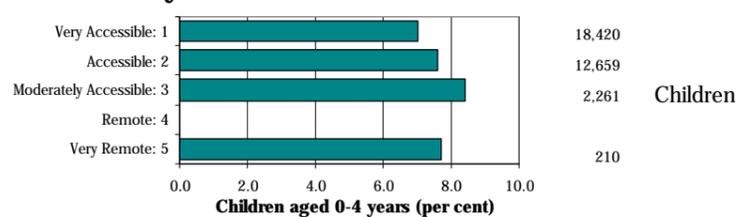
as a percentage of the total population in each Statistical Local Area



Source: See Data sources, Appendix 1.3

Details of map boundaries are in Appendix 1.2

Accessibility/Remoteness Index of Australia



The proportion of young children aged from 0 to 4 years increases with increasing remoteness, from the lowest proportion of 7.0 per cent of the population in the Very Accessible ARIA category, to the highest proportion of 8.4 per cent in the Moderately Accessible areas. There is a lower proportion in the Very Remote areas, of 7.7 per cent of the population, with a very small number of children.

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

People aged 65 years and over, 1996

Capital city comparison

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

People aged 65 years and over comprised 12.1 per cent of the Australian population at the 1996 Census, with a slightly smaller proportion in the capital cities (11.6 per cent) (Table 3.6). 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 the 1996 Census, 11.8 per cent of the population of **Sydney** (442,053 people) was aged 65 years and over. **Adelaide** had by far the highest percentage of older people, with **Darwin** and **Canberra** recording proportions well below the national average for the capital cities.

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

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

¹Includes Queanbeyan (C)

Source: ABS special data services

Hobart

In 1986, 10.9 per cent of **Hobart's** population was aged 65 years or over. By 1991, this figure had increased to 11.7 per cent, and by 1996 it had reached 12.5 per cent. This represented an increase of 24.8 per cent over the ten years, an increase of 4,724 people. The 65 years and over age group is very broad (compared to the 0 to 4 year age group for example) 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 proportions were in the 'young aged' categories, it is important to note that in the ten years from 1986, the strongest growth was in the 'older aged' groups (Table 3.7). The higher growth rate of people aged 75 and over has important implications for health related policy making. Women make up a higher proportion of the population in all of the age groups, with the largest share in **Hobart**.

Map 3.3 shows that the SLAs to the west of the Derwent River all had proportions of people aged 65 years and over of above 10.0 per cent, with one SLAs falling into the 15 to 20 per cent category. The highest percentage, 15.0 per cent, was recorded in the SLA of Glenorchy.

Four SLAs had proportions in the middle range mapped. The City of Hobart (14.1 per cent) and Clarence (12.6 per cent) recorded proportions above the **Hobart** average of 12.5 per cent, while below-average values were recorded in Derwent Valley Pt A (12.2 per cent) and Kingborough Pt A (10.3 per cent).

Brighton, to the north, had the lowest proportion in **Hobart**, with just 4.7 per cent of its population aged 65 years and over at the 1996 Census. This was consistent with its high proportion of single parent families and young children. Sorell [Part A], to the east, had the second lowest proportion, with 9.6 per cent.

The largest number of people in this age group in Hobart (was 6,600 people), with 6,450 in Glenorchy and 5,966 in Clarence.

The correlation of meaningful significance with the IRSD (0.57) indicates a positive association between high proportions of people age 65 years and over and high socioeconomic status. The only positive correlation with an indicator of socioeconomic disadvantage was with the variable for private dwellings without a motor vehicle (0.45).

Table 3.7: Structure of population aged 65 years or more, Tasmania, 1986 and 1996

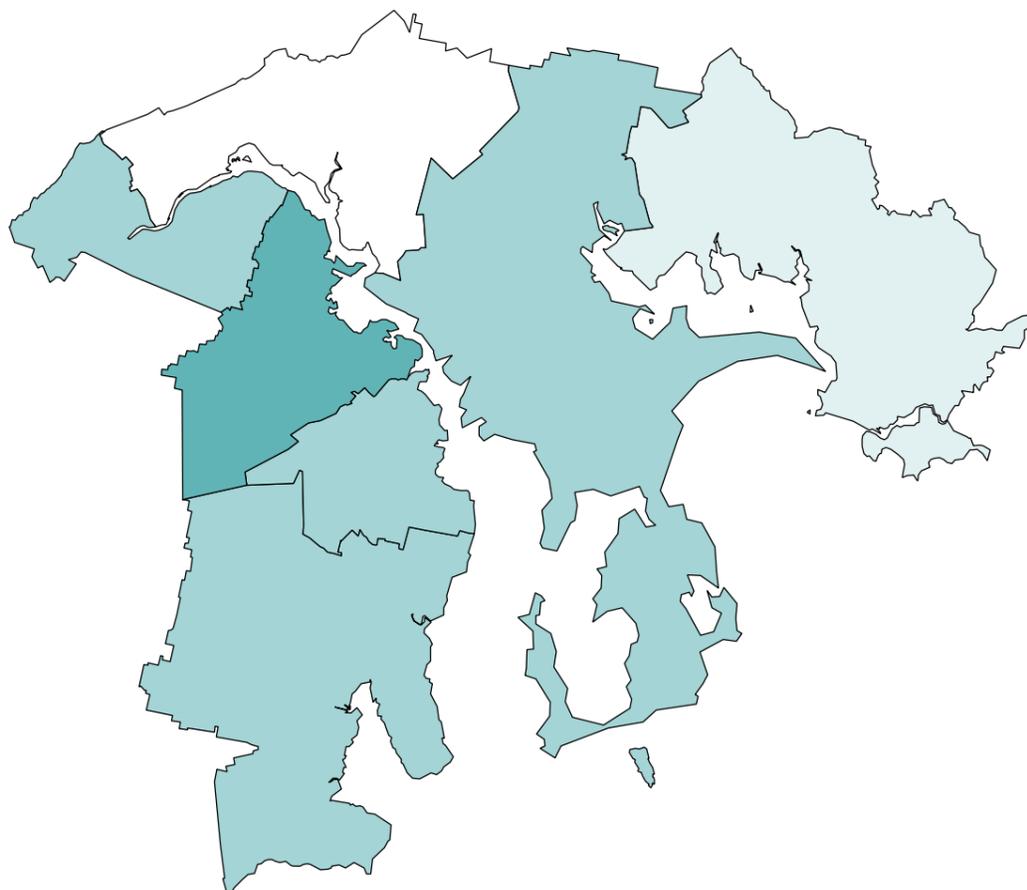
Age group (years)	<i>Per cent</i>				Increase 1986 to 1996		Proportion of females, 1996	
	People aged 65 years or more 1986		1996		Hobart	Rest of State	Hobart	Rest of State
	Hobart	Rest of State	Hobart	Rest of State				
65 to 69	32.9	33.9	29.0	30.9	9.9	9.6	52.6	50.1
70 to 74	28.1	28.6	26.9	27.1	19.5	13.8	55.6	54.1
75 to 79	19.5	19.6	20.3	19.7	30.0	20.9	59.5	57.7
80 to 84	11.2	10.7	14.0	13.4	56.0	49.8	63.4	63.0
85 +	8.2	7.2	9.8	9.0	47.7	50.8	71.6	69.5
Total 65+	100.0	100.0	100.0	100.0	24.8	20.2	58.2	56.1

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

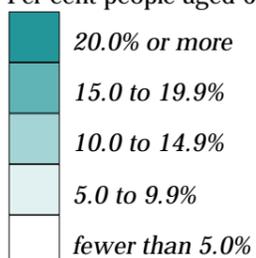
Map 3.3

People aged 65 years and over, Hobart, 1996

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



Per cent people aged 65 years and over



Source: See Data sources, Appendix 1.3

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

People aged 65 years and over, 1996

State/Territory comparison

New South Wales has the highest proportion of people aged 65 years and over located in areas outside of the capital and other major urban centres. As shown in **Table 3.8**, it has almost three times the level recorded in the Northern Territory, where high fertility levels and high rates of net in-migration of youthful populations work to reduce the proportion of older people in the total population. 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**. Nation-wide, the most significant increase in the numbers of older people was in the *Rest of State/Territory* areas, with an increase of 36.6 per cent between 1986 and 1996.

Table 3.8: Proportion of population aged 65 years and over, State/Territory

	<i>Per cent</i>								
	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total ¹
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 ³	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

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

²Includes Queanbeyan (C)

³Includes Newcastle and Wollongong (NSW); Geelong (Vic); and Gold Coast-Tweed Heads and Townsville-Thuringowa (Qld)

⁴Data included with ACT total

Source: ABS special data services

Rest of State

Both the proportions and numbers of people aged 65 years and over in the non-metropolitan areas of Tasmania increased between 1986 and 1996. At the 1986 Census, 10.5 per cent of the non-metropolitan population was aged 65 years and over, some 27,379 people. By 1991, the proportion and number had increased to 11.3 per cent and 30,580 people, respectively, and increased further to 12.2 per cent and 32,914 people by 1996.

Map 3.4 shows that older people in non-metropolitan Tasmania preferred to settle in urban areas along the northern coast and along the Tamar River, as well as in the eastern areas of Tasmania. The highest proportions of people aged 65 years and over were in the eastern coastal SLAs of Glamorgan/Spring Bay (15.2 per cent) and Break O'Day (14.8 per cent). With the exception of Dorset (13.8 per cent), in the north-eastern corner of Tasmania, all other percentages above the *Rest of State* average of 12.2 per cent were found along the more populous north coast and Tamar Valley SLAs.

The lowest proportions of older people were found in West Tamar [Part B] (5.4 per cent), Waratah/Wynyard [Part B] (5.6 per cent) and Derwent Valley [Part B] and West Coast (both with 6.2 per cent).

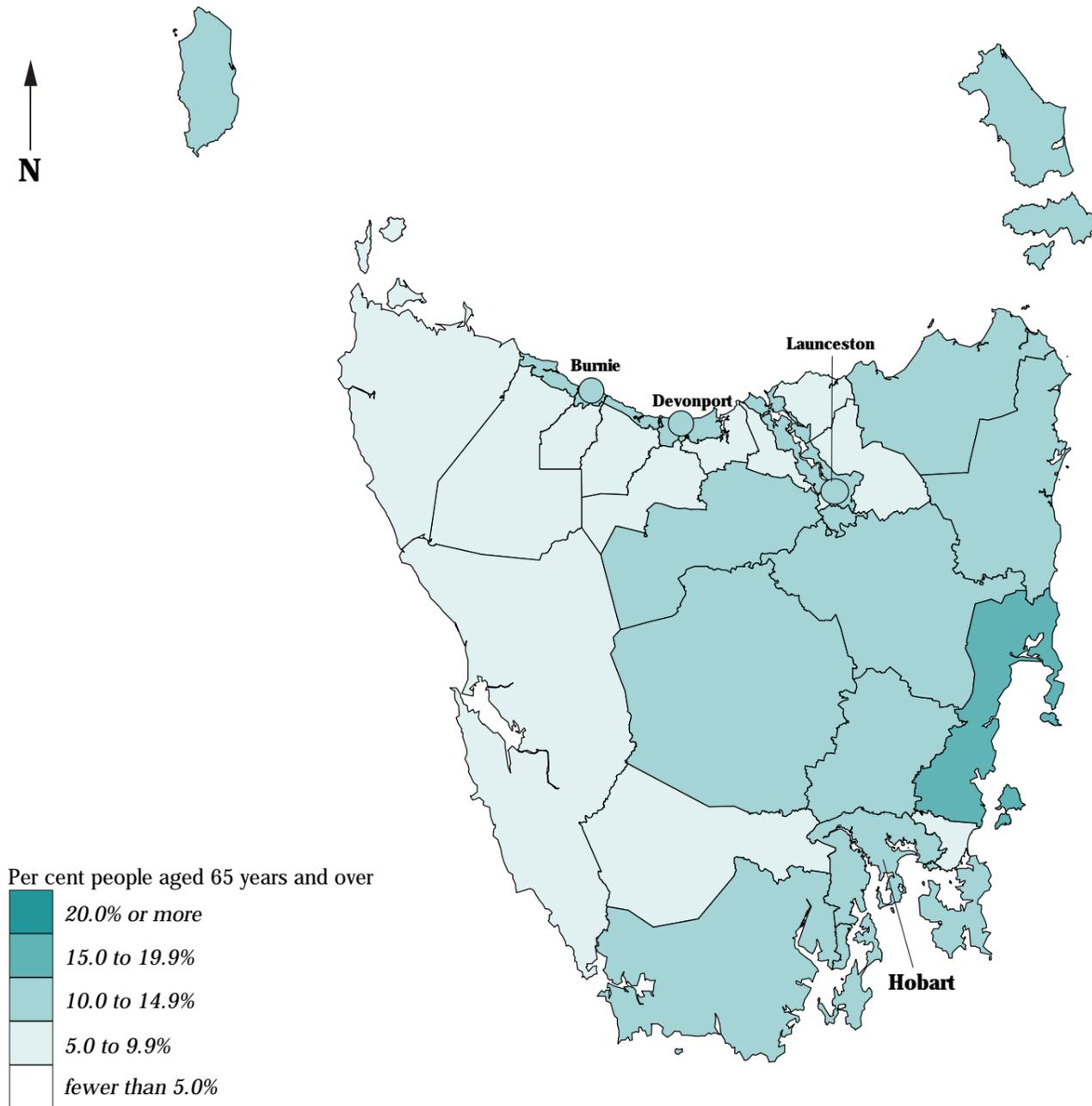
The largest population of older people was in Launceston (8,468 people), with smaller numbers in Devonport (3,224 people) and Central Coast [Part A] (2,452 people).

The strongest correlation was with the variable for private dwellings with no motor vehicle (0.56). The weak inverse correlation with the IRSD (-0.40) also indicates the existence at the SLA level of an association between high proportions of older people and socioeconomic disadvantage.

Map 3.4

People aged 65 years and over, Tasmania, 1996

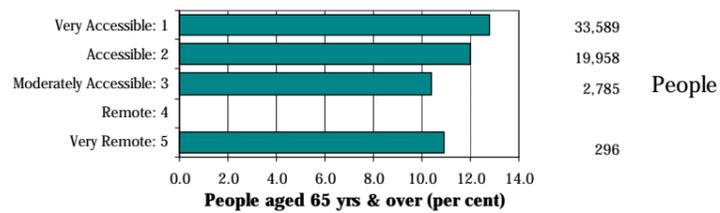
as a percentage of the total population in each Statistical Local Area



Source: See Data sources, Appendix 1.3

Details of map boundaries are in Appendix 1.2

Accessibility/Remoteness Index of Australia



In contrast to the distribution of young children, the proportion of the population aged 65 years and over declines with increasing remoteness. The proportion declines from 12.8 per cent of the population in the Very Accessible areas to 12.0 per cent in the Accessible areas and to 10.4 per cent in the Moderately Accessible areas. There is a similar proportion (10.9 per cent, but with very few older people) in the Very Remote areas. 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, 1996

Capital city comparison

Single parent families are defined as all single parent families with dependent children aged less than 15 years; the proportion of single parent families is derived as the percentage of all families. Throughout Australia, the majority of single parent families are characterised by poverty and hardship, have poor health and are major users of public health services. Details of their location are, therefore, of importance to public policy makers and those providing health, education, welfare, housing and transport services.

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 proportion 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 1986 (7.8 per cent of all families) to 460,618 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 ¹	All capitals
1996	9.3	9.1	10.5	10.4	10.1	12.1	13.8	11.5	9.7
1986	7.8	6.9	8.3	8.0	9.1	9.3	11.1	9.2	7.9

¹Includes Queanbeyan (C)
Source: ABS special data services

Hobart

At the 1996 Census, 12.1 per cent of all families in **Hobart** were classified as single parent families. This figure was considerably higher than the 9.3 per cent recorded in 1986, and reflected an increase in the number of single parent families from 4,384 in 1986 to 5,330 in 1991, and to 6,026 in 1996, an increase of 37.5 per cent over the ten years.

The SLA of Brighton had the highest proportion of single parent families (19.1 per cent) in **Hobart** (**Map 3.5**). Brighton also had the highest concentrations of low income families, unemployed people, unskilled/semi-skilled workers, children aged from 0 to 4 years, Indigenous population and, in particular, public rental housing in **Hobart**. The only other SLA with above-average proportions was Glenorchy, with 13.0 per cent.

Hobart, Derwent Valley Pt A, Sorell Pt A and Clarence had similar proportions, of between 11.0 and 11.7 per cent. Kingborough had the lowest proportion of single parent families, with 10.0 per cent.

The SLAs with the largest numbers of single parent families were Glenorchy (1,533 families), Clarence (1,451) and Hobart (1,226).

The correlation analysis showed there to be a strong positive association between high proportions of single parent families and socioeconomic disadvantage. The strongest correlations were with the variables for public rental housing (0.95), unemployed people (0.94), the Indigenous population (0.92) and low income families (0.76). These results, together with the inverse correlation of substantial significance with the IRSD (-83), indicate the existence of an association at the SLA level between high proportions of single parent families and socioeconomic disadvantage.

Housing tenure by family type (Table 3.10, refers)

Throughout Australia single parent families are characterised by poverty and hardship because these families typically are unemployed or under-employed and have low income levels.

Consequently, single parent families often experience difficulty in obtaining housing and are heavily concentrated into rental accommodation, as shown in **Table 3.10**.

Table 3.10: Housing tenure by family type, Hobart, 1996
Per cent

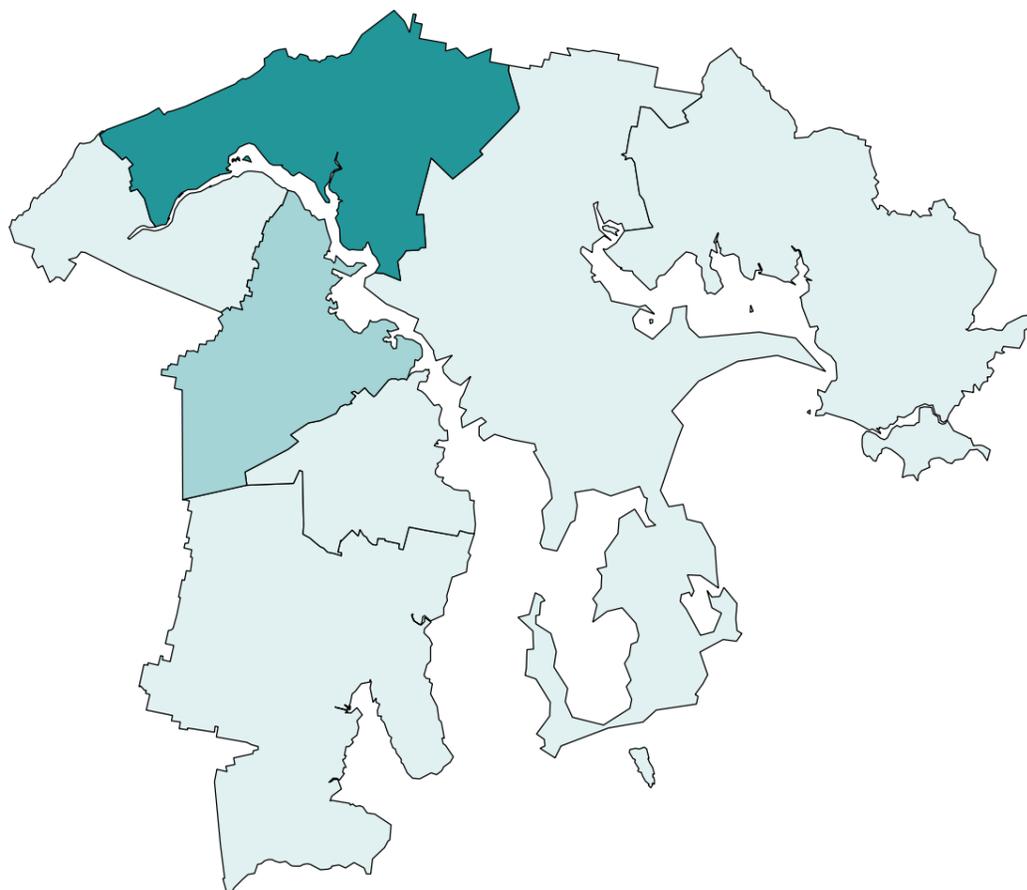
Family type	Owner/ Purchaser	Government Rental	Private Rental	Other	Total
Single parent family: with dependent children	45.1	26.1	27.7	1.1	100.0
Single parent family: with no dependent children	72.9	13.6	11.1	2.4	100.0
Couple family without children	84.4	3.2	11.3	1.2	100.0
Couple family with dependent children	82.2	6.2	10.4	1.2	100.0
Couple family with no dependent children	90.9	4.1	4.3	0.7	100.0
Other families	54.7	8.1	34.2	3.1	100.0
Total	78.5	7.7	12.6	1.2	100.0

Source: ABS Census 1996 Basic Community Profile Table B25

Map 3.5

Single parent families, Hobart, 1996

as a percentage of all families in each Statistical Local Area



Per cent single parent families



Source: See Data sources, Appendix 1.3

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

Single parent families, 1996

State/Territory comparison

In 1996, 10.6 per cent of all families in the non-metropolitan areas of New South Wales were single parent families (defined here as single parent families with dependent children under 15 years of age), compared with 9.3 per cent in **Sydney**. This figure is just above the average of 10.0 per cent across the non-metropolitan areas of Australia (the *Rest of State/Territory* category in **Table 3.11**) and the second highest after the Northern Territory. For most States and the Northern Territory, variations between the *Capital city* and *Rest of State/Territory* totals were minimal, with the largest differences being 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 3.11: Single parent families, State/Territory
Per cent

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total ¹
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 ³	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

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

²Includes Queanbeyan (C)

³Includes Newcastle and Wollongong (NSW); Geelong (Vic); and Gold Coast-Tweed Heads and Townsville-Thuringowa (Qld)

⁴Data included with ACT total

Source: ABS special data services

Rest of State

As in **Hobart**, the non-metropolitan areas of Tasmania have experienced a steady increase in single parent families since 1986. At the 1986 Census, 7.6 per cent (5,432 families) of all families in non-metropolitan Tasmania were single parent families. By 1991, both the proportion and number had increased to 8.6 per cent and 6,227 families respectively. Further increases brought the figures to 9.6 per cent and 7,125 families by 1996.

Map 3.6 shows that the highest concentrations of single parent families outside of **Hobart** were in the northern coastal towns of Launceston (12.7 per cent), Burnie [Part A] (12.6 per cent) and Devonport (11.9 per cent). These SLAs also had high levels of public rental housing. To the south, there were moderate levels of single parent families in Huon Valley (9.8 per cent), West Coast (9.4 per cent), Derwent Valley (9.1 per cent) and Tasman (9.0 per cent).

The lowest proportions of single parent families were in the less densely populated rural areas of Latrobe [Part B] (1.5 per cent; 3 families), Burnie [Part B] (3.2 per cent; 19 families), Waratah/Wynyard [Part B] (3.6 per cent; 26 families) and Central Coast (3.8 per cent; 33 families).

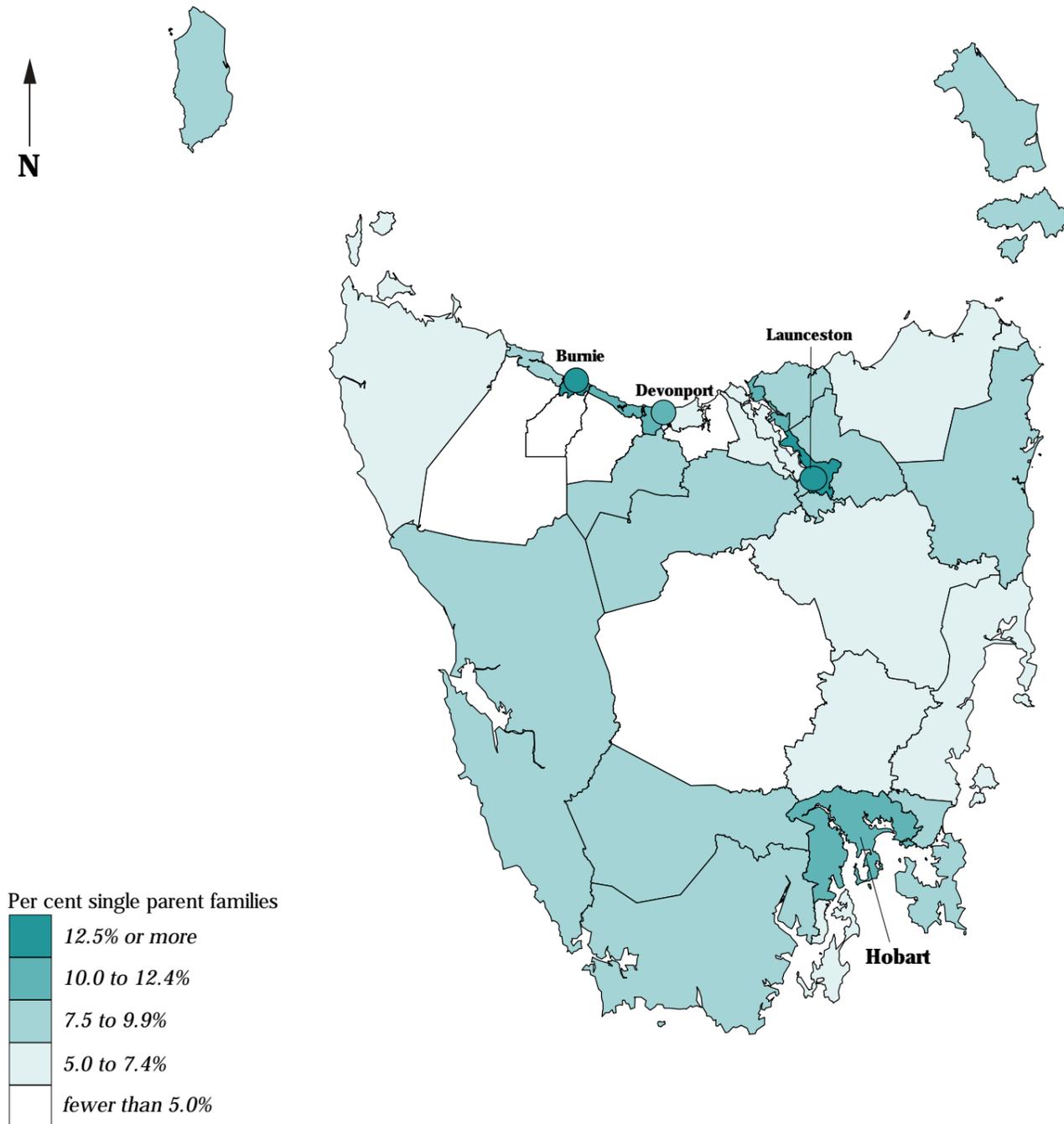
There was some association between SLAs with the highest proportions of single parent families and those with the largest numbers. The largest number, by far, was the 1,949 single parent families resident in Launceston. There were an additional 794 single parent families in Devonport, 592 in Burnie [Part A] and 493 in Central Coast [Part A].

The strongest correlations were with the variables for private dwellings with no motor vehicle (0.73) and public rental housing (0.68). There was an inverse correlation with the high status occupations of managers and administrators, and professionals (-0.61). These results, together with the inverse correlation of substantial significance with the IRSD (-0.45), indicate the existence of an association at the SLA level between high rates of single parent families and socioeconomic disadvantage.

Map 3.6

Single parent families, Tasmania, 1996

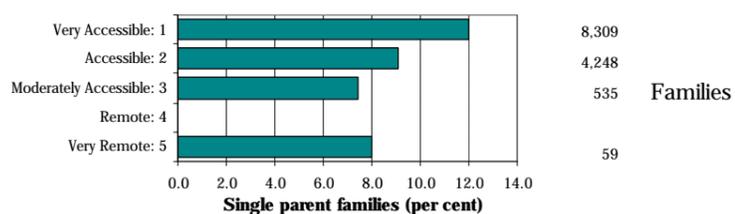
as a percentage of all families in each Statistical Local Area



Source: See Data sources, Appendix 1.3

Details of map boundaries are in Appendix 1.2

Accessibility/Remoteness Index of Australia



The proportion of single parent families decreases markedly with increasing remoteness, from 12.0 per cent of all families in the Very Accessible ARIA category, to 9.1 per cent in the Accessible areas and 7.4 per cent in the Moderately Accessible areas. The very small number of single parent families in the Very Remote areas had a slightly higher proportion, of 8.0 per cent.

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

Low income families, 1996

Capital city comparison

Low income families, defined as families with annual family incomes of less than \$21,000 (less than \$400 per week), comprised 16.6 per cent of all families in **Sydney** for which income details were obtained at the 1996 Census (**Table 3.12**). The use of low income as a measure of poverty is compromised to an extent by the fact that income is influenced by differences in family size, age structure and housing tenure and costs. While the variable will normally capture most welfare dependent families, it will also include sizeable numbers of families for which low income is linked to their retirement status.

Adelaide had the highest (21.8) percentage of low income families, while **Darwin** (11.1 per cent) and **Canberra** (11.7 per cent) had much lower proportions, reflecting the younger age structures of these cities and the lower proportions of retired families in their populations. Overall, there has been an increase in the proportion of low income families in all capital cities in the ten years from 1986 to 1996. Refer to the footnote to **Table 3.3** on page 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	Canberra¹	All capitals
1996	16.6	17.2	18.0	21.8	17.7	20.2	11.1	11.7	17.5
1986	15.7	14.3	16.9	19.2	17.4	17.3	10.6	8.8	15.8

¹Includes Queanbeyan (C)

Source: ABS special data services

Hobart

The majority of welfare dependent families have low incomes, and variations in their distribution between SLAs form a useful relative indication of wealth. However, in making comparisons between the 1986, 1991 and 1996 Censuses, the data should be interpreted with caution (see above). At the 1986 Census, there were 7,305 low income families in **Hobart** (17.3 per cent). Although the proportion had fallen slightly (to 17.2 per cent) by 1991, the number of low income families increased to 8,215. By 1996, both the proportion and number had increased, to 20.2 per cent and 10,095 families, respectively.

The SLA of Brighton had the highest proportion of low income families (30.1 per cent) in **Hobart** (**Map 3.7**). This SLA also had the highest proportions of single parent families, unemployed people and semi-skilled and unskilled workers. Other high proportions of low income families were recorded in Derwent Valley [Part A] (25.9 per cent), Glenorchy (24.2 per cent) and Sorell [Part A] (22.9 per cent).

The lowest proportions of low income families were located in the lower western SLAs of **Hobart**, in Kingborough [Part A] (15.2 per cent) and Hobart (15.4 per cent). On the other side of the Derwent River, Clarence had 19.1 per cent of its families on low incomes.

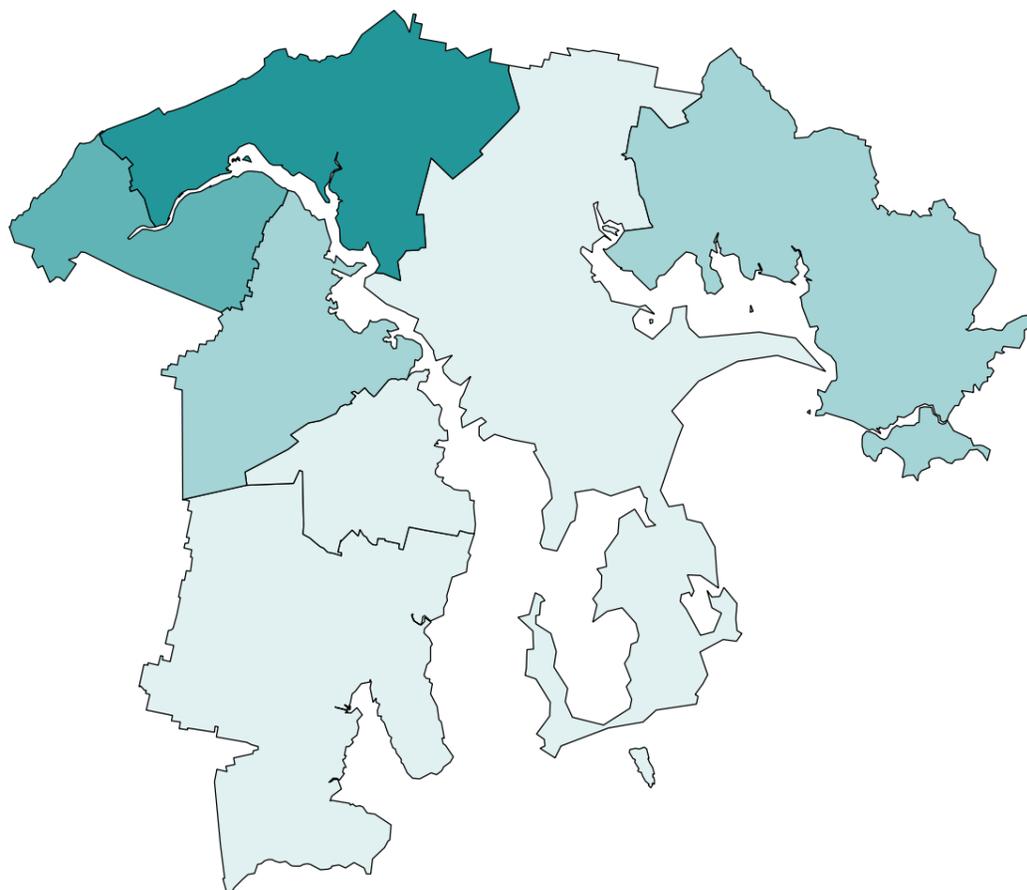
The largest numbers of low income families were the 2,853 families in Glenorchy, with a further 2,526 families in Clarence and 1,618 families in Hobart.

There were correlations of substantial significance with the variables for semi-skilled and unskilled workers (0.97), early school leavers (0.96), unemployed people (0.88) and the Indigenous population (0.80). There were also inverse correlations of substantial significance with indicators of high socioeconomic status. These results, together with the inverse correlation of substantial significance with the IRSD (-0.99), indicate the existence of an association at the SLA level between high proportions of low income families and socioeconomic disadvantage.

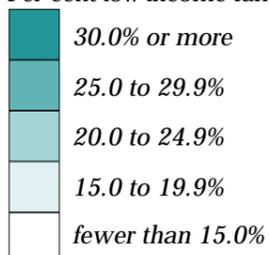
Map 3.7

Low income families*, Hobart, 1996

as a percentage of all families in each Statistical Local Area



Per cent low income families*



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

Source: See Data sources, Appendix 1.3

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 outside of the capital cities and other major urban centres in New South Wales is, at 26.5 per cent, the highest in Australia (**Table 3.13**). 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 ten years from 1986 to 1996, the proportion of low income families has remained relatively stable as a proportion of all families in New South Wales for each of the categories in the table (the largest variation being the small increase in **Sydney**). This is in contrast to 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	Total ¹
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 ³	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

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

²Includes Queanbeyan (C)

³Includes Newcastle and Wollongong (NSW); Geelong (Vic); and Gold Coast-Tweed Heads and Townsville-Thuringowa (Qld)

⁴Data included with ACT total

Source: ABS special data services

Rest of State

In non-metropolitan Tasmania, 18,969 families (25.7 per cent of all families with an income) reported gross incomes of less than \$21,000 per annum in 1996. This represented an increase of 37.0 per cent on the 13,843 low income families in 1986 (22.3 per cent of all families). In 1991, the proportion was lower, at 21.8 per cent, but the number of families had increased, to 15,792. As mentioned on the previous text page, caution must be taken when interpreting these comparisons over time.

Eighteen SLAs in Tasmania were recorded as having between 25 per cent and 30 per cent of their families in the low income bracket. This represents over half of all non-metropolitan SLAs in Tasmania. Three SLAs had even higher proportions, and were mapped (**Map 3.8**) in the highest range, of 30 per cent or more. These SLAs were Sorell [Part B] (31.0 per cent), Break O'Day (36.4 per cent) and Tasman (36.9 per cent). Thirteen SLAs in non-metropolitan Tasmania recorded proportions of below 25 per cent.

The largest numbers of low income families were recorded in Launceston (3,852 low income families), Devonport (1,827 families), Central Coast [Part A] (1,318 families) and Burnie [Part A] (1,275 families).

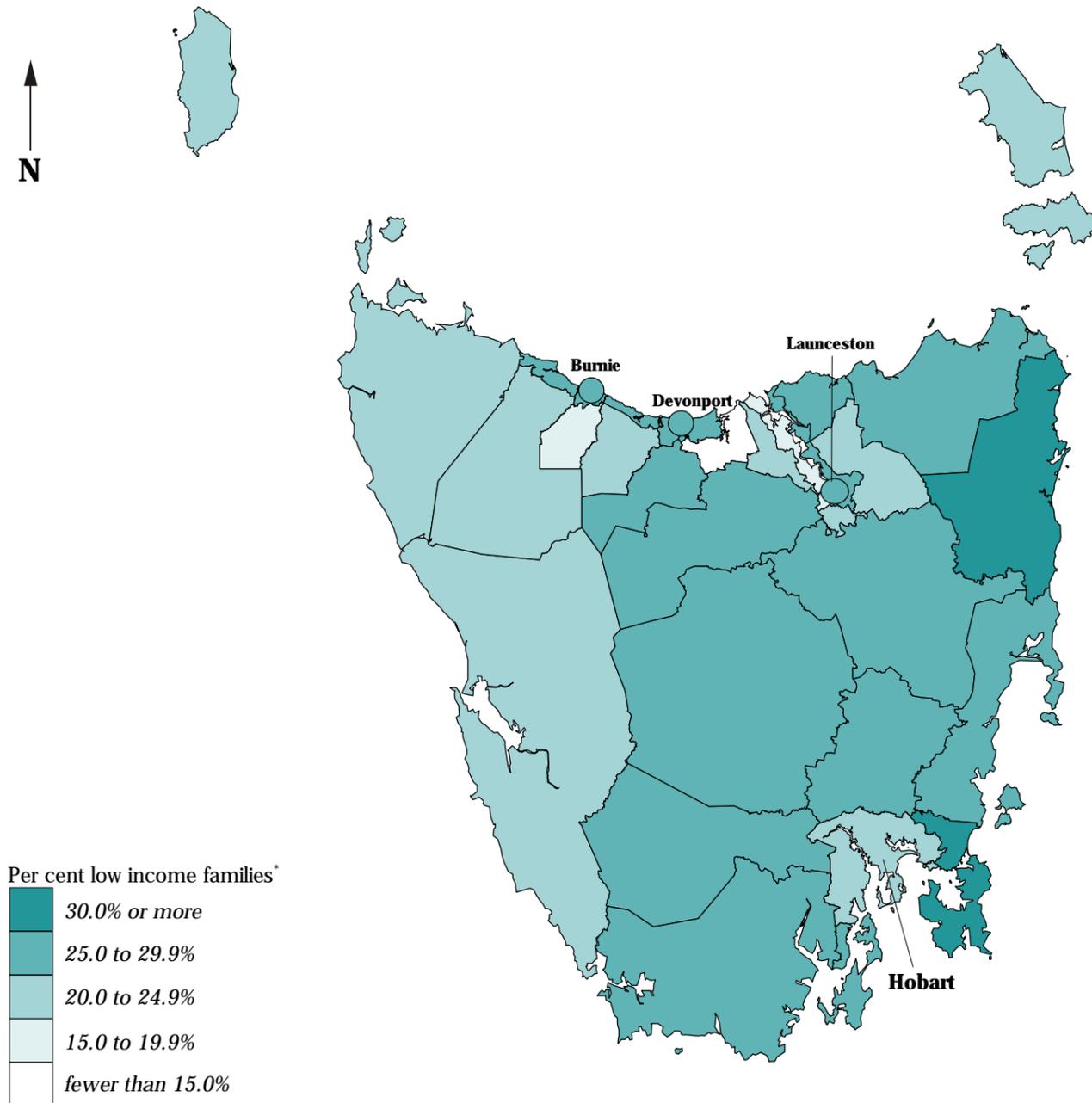
The lowest proportions, and some of the lowest numbers, were recorded in Latrobe [Part B] (10.3 per cent, 19 low income families), Burnie [Part B] (16.1 per cent, 94 families) and Meander Valley [Part A] (16.7 per cent, 319 families).

The strongest correlation was with the variable for unemployed people (0.73) and there was an inverse correlation with the variable for high income families (-0.62). The inverse correlation with the IRSD (-0.78) also indicates an association at the SLA level between high proportions of low income families and socioeconomic disadvantage.

Map 3.8

Low income families*, Tasmania, 1996

as a percentage of all families in each Statistical Local Area

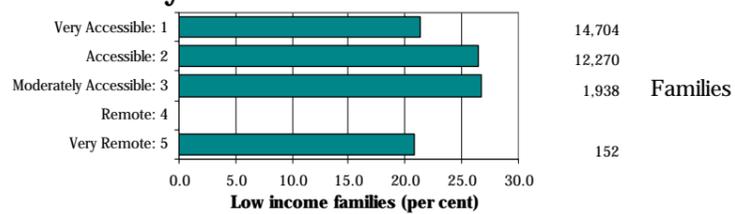


*Families with annual income of less than \$21,000 as a percentage of all families for which income data was obtained

Source: See Data sources, Appendix 1.3

Details of map boundaries are in Appendix 1.2

Accessibility/Remoteness Index of Australia



There are two levels evident in the proportions of low income families across the ARIA categories in Tasmania, with the lowest in the Very Accessible (21.3 per cent of all families with an income) and Very Remote (20.8 per cent, although with by far the smallest numbers) ARIA categories and the highest in the Moderately Accessible areas (26.7 per cent) and the Accessible areas (26.4 per cent).

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

Unskilled and semi-skilled workers, 1996

Capital city comparison

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

The majority of capital cities, including **Hobart** with 14.5 per cent, had near average percentages for this variable (**Table 3.14**). **Adelaide** had the highest proportion with 17.3 per cent. The lower percentages in **Darwin** (13.2) and **Canberra** (9.4) were a result of low levels of manufacturing industry.

The 1996 figures for this variable were considerably lower than those in 1986, with **Hobart's** proportion of unskilled and semi-skilled workers falling from 19.4 per cent, **Melbourne's** from 22.1 per cent and **Canberra's** from 15.1 per cent, largely a reflection of the changing nature of employment in the capital cities. The *All capitals* average fell from 20.9 per cent in 1986 to 15.6 per cent in 1996.

Table 3.14: Unskilled and semi-skilled workers, capital cities

	<i>Per cent</i>								
	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra¹	All capitals
1996	14.9	16.4	16.5	17.3	15.7	14.5	13.2	9.3	15.6
1986	20.7	22.1	21.6	21.6	20.3	19.4	15.1	12.3	20.9

¹Includes Queanbeyan (C)

Source: ABS special data services

Hobart¹

As noted above, there has been a steady decline in the numbers of unskilled and semi-skilled workers since 1986, when there were 13,973 people (19.4 per cent of the employed labour force) in this category. The number fell to 12,365 people (16.7 per cent) in 1991 and to 11,390 people (14.5 per cent) in 1996.

Map 3.9 shows the highest spatial concentrations of unskilled and semi-skilled workers in 1996 was grouped in the north-eastern SLAs of **Hobart**.

The SLAs of Brighton and Derwent Valley [Part A] had by far the highest proportions of unskilled and semi-skilled workers in 1996, with 29.0 per cent and 27.6 per cent respectively. These SLAs also recorded the highest proportions of early school leavers, low income families and public rental housing in **Hobart**. Proportions above the average for **Hobart** (of 14.9 per cent) were also recorded in Glenorchy (21.2 per cent) and Sorell [Part A] (19.9 per cent).

The lower, western SLAs had well below average proportions of unskilled and semi-skilled workers, with 8.0 per cent in Hobart and 11.6 per cent in Kingborough. Clarence had 13.6 per cent.

The largest numbers of unskilled and semi-skilled workers were in Glenorchy (3,473 people), Clarence (2,607 people) and Hobart (1,668 people).

There were correlations of substantial significance with the variables for low income families (0.97), early school leavers (0.96), unemployed people (0.78) and the Indigenous population (0.74). Inverse correlations of substantial significance were recorded with indicators of high socioeconomic status.

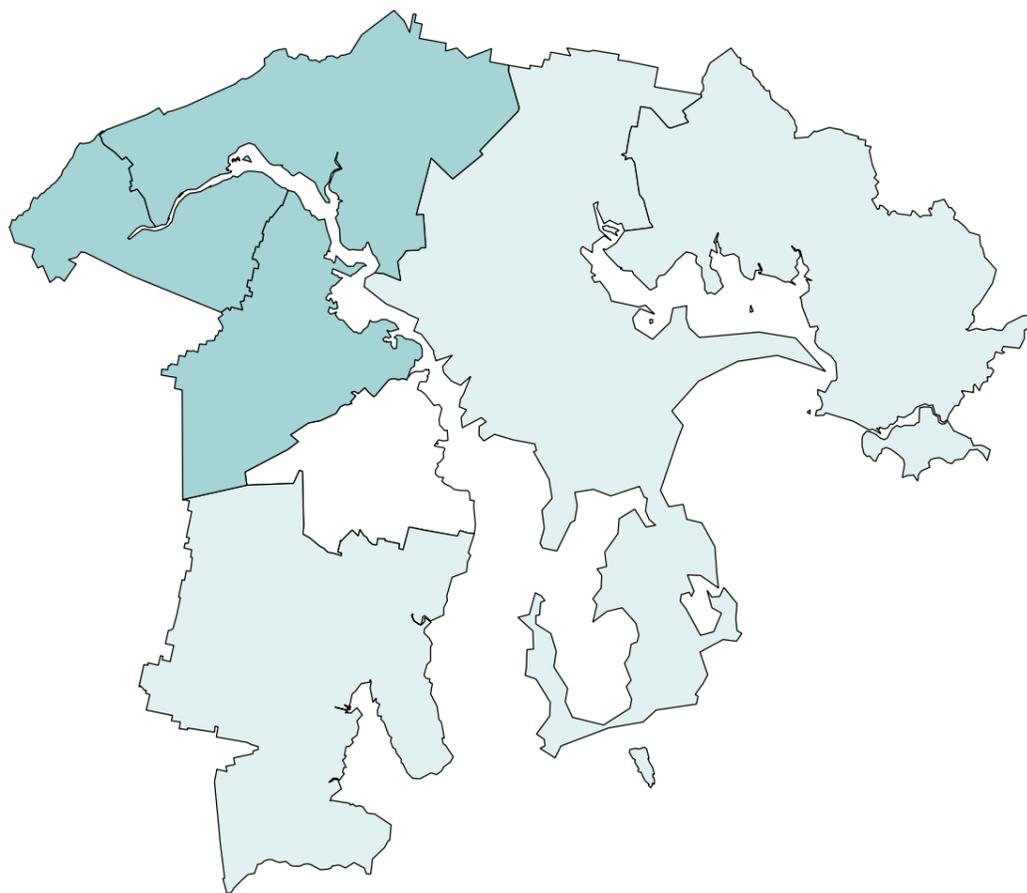
¹Because these categories do not appropriately reflect the occupational status of country residents, this variable has not been mapped for areas outside of the major urban centres.

These results, together with the inverse correlation of substantial significance with the IRSD (-0.94), indicate the existence of an association at the SLA level between high proportions of semi-skilled and unskilled workers and socioeconomic disadvantage.

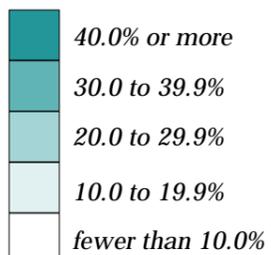
Map 3.9

Unskilled and semi-skilled workers*, Hobart, 1996

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



Per cent unskilled and semi-skilled workers*



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

Source: See Data sources, Appendix 1.3

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

Unemployed people, 1996

Capital city comparison

At the 1996 Census, 771,972 Australians reported being unemployed and looking for work, of whom 463,429 resided in Australia's capital cities. More than a quarter of the *All capitals* unemployed lived in **Sydney** (134,857 people), 7.4 per cent of **Sydney's** labour force. The unemployment rate in the other capital cities ranged from 7.5 per cent in **Canberra** (13,062 people, and a considerably higher rate than in 1986 when it was 4.8 per cent) to 10.6 per cent in **Adelaide** (51,662 people) (**Table 3.15**). 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: Unemployed people, capital cities
Per cent

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

¹Includes Queanbeyan (C)

Source: ABS special data services

Hobart

At the 1996 Census, 8,478 people in **Hobart** reported themselves as being unemployed and looking for work, 9.7 per cent of the labour force. This was the second highest capital city rate.

The majority of SLAs in **Hobart** had rates of unemployed people near the capital city average, with the only major deviations being the particularly low rate in Kingborough [Part A] (6.5 per cent) and the well above average rate recorded in Brighton (18.9 per cent) (**Map 3.10**). Brighton also had the highest rates of early school leavers, low income families, public rental housing and semi-skilled and unskilled workers. Slightly above-average proportions were recorded in Derwent Valley [Part A], Glenorchy and Sorell [Part A], with 10.9 per cent, 11.0 per cent and 11.7 per cent respectively.

In addition to Kingborough [Part A], below average proportions were recorded in Clarence (8.7 per cent) and Hobart (8.9 per cent).

The largest numbers of unemployed people were recorded in Glenorchy (2,093 people), The City of Hobart (2,069) and Clarence (1,891). Brighton, with the highest proportion for this variable, had 915 unemployed people, and Kingborough [Part A] had the lowest, with 741 unemployed residents.

Just as the unemployment rate for the total labour force in **Hobart** was one of the highest among Australia's capital cities, so was the unemployment rate for 15 to 19 year olds. At the 1996 Census, 22.7 per cent of 15 to 19 year olds in **Hobart** were unemployed. Youth unemployment ranged from 15.8 per cent in Kingborough [Part A] to 37.0 per cent in Brighton. Males fared worse than females, with 25.2 per cent of 15 to 19 year old males being unemployed compared to 20.2 per cent of females of the same age group (**Table 3.17**, page 40). Generally, **Table 3.17** shows a decline in unemployment rates with increasing age.

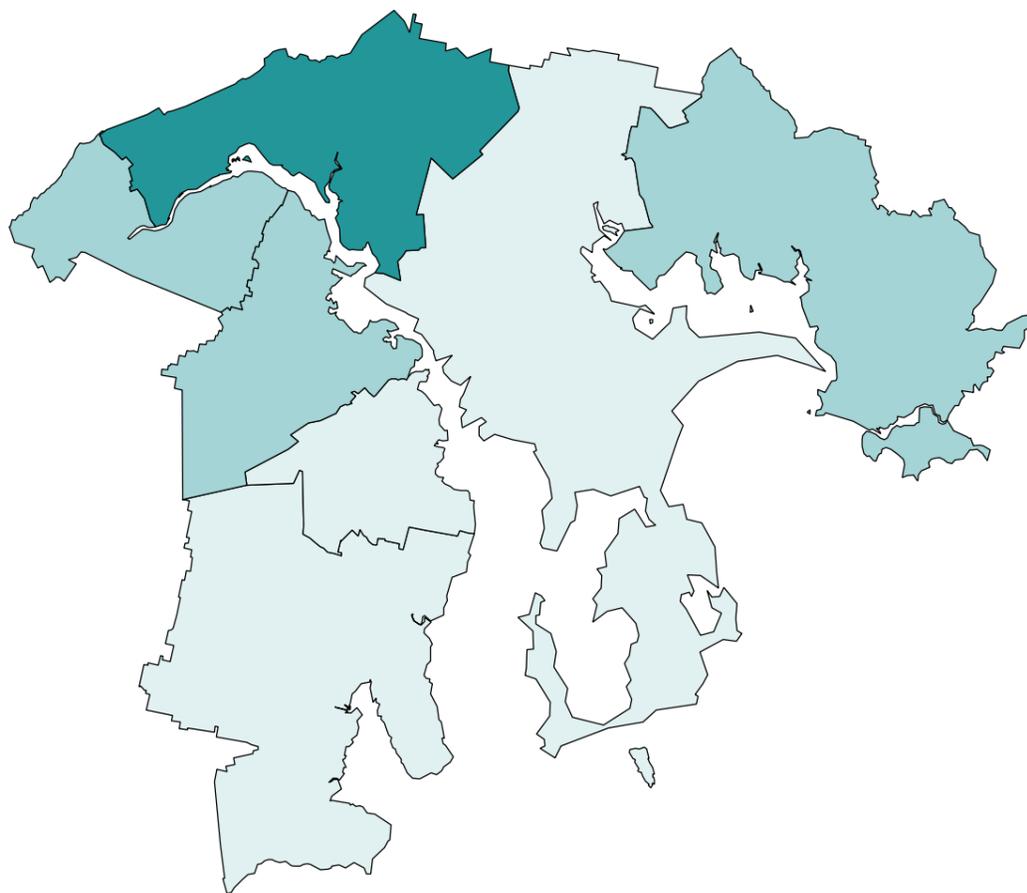
This pattern was broken by males in the 55 to 64 year old age group, who experienced the third highest unemployment levels in **Hobart**.

There were correlations of substantial significance with the variables for single parent families (0.94), low income families (0.88), the Indigenous population (0.88) and children aged from 0 to 4 years (0.82). Inverse correlations of substantial significance were recorded with indicators of high socioeconomic status. These results, together with the inverse correlation of substantial significance with the IRSD (-0.91), indicate the existence of an association at the SLA level between high rates of unemployment and socioeconomic disadvantage.

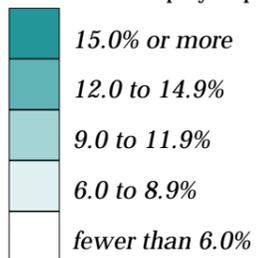
Map 3.10

Unemployed people, Hobart, 1996

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



Per cent unemployed people



Source: See Data sources, Appendix 1.3

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

Unemployed people, 1996

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 occurring in the Northern Territory, Queensland and New South Wales, and the largest increase in Victoria.

Table 3.16: Unemployed people, State/Territory
Per cent

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total ¹
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 ³	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

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

²Includes Queanbeyan (C)

³Includes Newcastle and Wollongong (NSW); Geelong (Vic); and Gold Coast-Tweed Heads and Townsville-Thuringowa (Qld)

⁴Data included with ACT total

Source: ABS special data services

Rest of State

Non-metropolitan Tasmania had higher levels of unemployment than did **Hobart**. This was evident in every age bracket for both males and females, except for males aged from 15 to 19 years, and those aged 65 years and over (**Table 3.17**). A higher percentage of males than females was unemployed in Tasmania in 1996, in both metropolitan and non-metropolitan regions. Unemployment rates were also higher for males in every age category other than that for males aged 65 years and over. Whilst it was evident that unemployment rates declined with age, there was an increase in male unemployment once the 55 to 64 year age bracket was reached, reflecting the difficulties experienced by people in this age group in obtaining employment, usually after losing previous work.

Table 3.17 also indicates the severity of youth unemployment in rural areas, with high percentages evident for people under the age of 25 years, in particular for those aged from 15 to 19 years. Males aged from 15 to 19 years fared slightly better in non-metropolitan areas than in **Hobart**. Females from all age groups

recorded higher unemployment levels in the non-metropolitan areas than in **Hobart**.

Map 3.11 shows that high levels of unemployment were recorded for SLAs located along the east coast, in Break O'Day (20.5 per cent); in Derwent Valley [Part B], in the south (15.0 per cent); and in Kentish (16.6 per cent) and George Town [Part A] (17.5 per cent), in the north. Large areas through the centre of the State and along the west coast had lower levels of unemployment, with Central Highlands, West Coast, Circular Head, Meander Valley [Part A] and Northern Midlands [Part A] all recording percentages well below the State average.

The strongest correlation was with the variable for low income families (0.73) and the strongest inverse correlation was with the variable for female labour force participation (-0.63). These results, together with the inverse correlation of substantial significance with the IRSD (-0.67), indicate the existence of an association at the SLA level between high rates of unemployment and socioeconomic disadvantage.

Table 3.17: Unemployment rates by age and sex, Tasmania, 1996

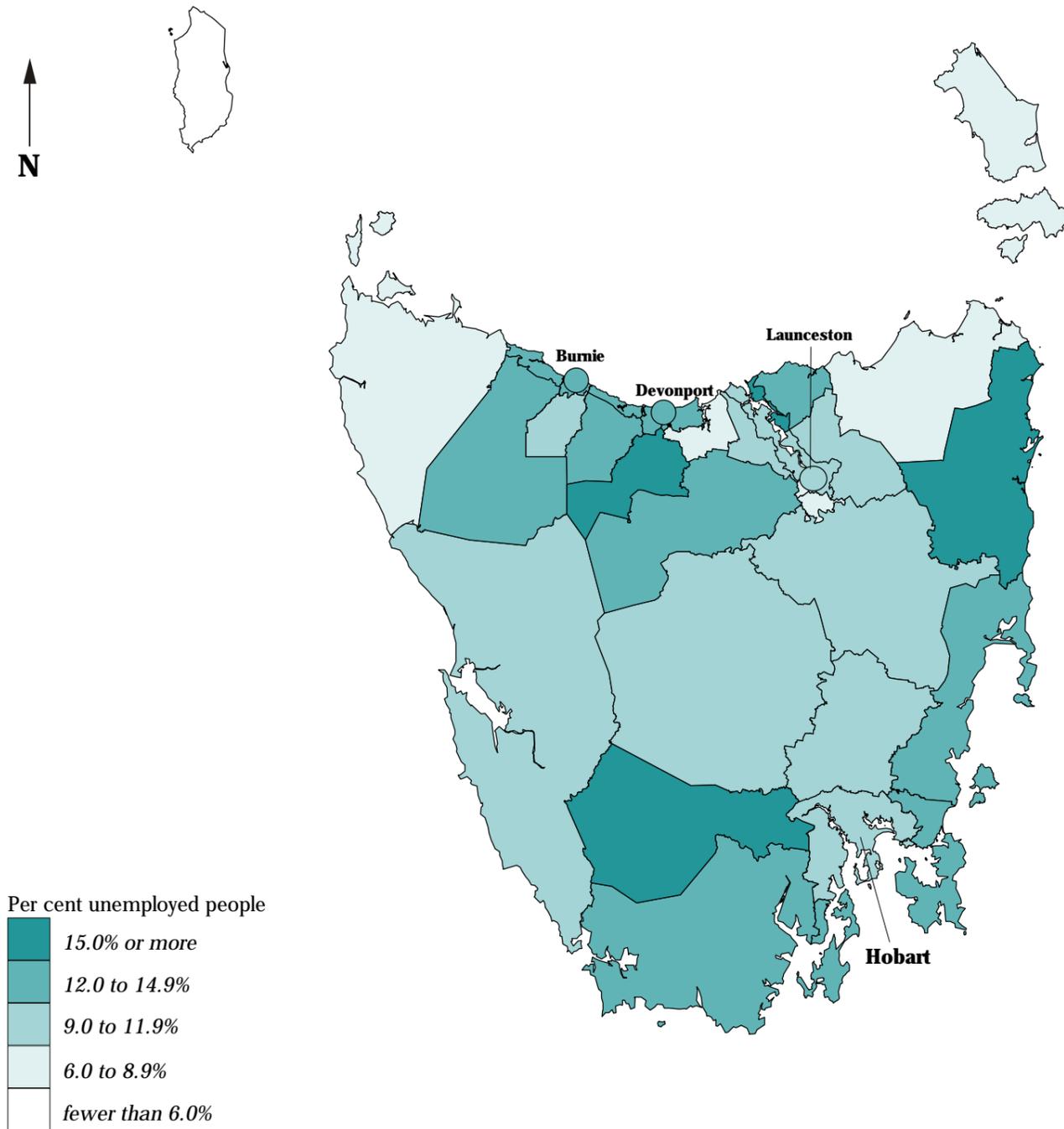
Age group (years)	Per cent male labour force unemployed		Per cent female labour force unemployed	
	Hobart	Rest of State	Hobart	Rest of State
15 to 19	25.2	24.6	20.2	22.7
20 to 24	19.4	19.9	12.3	15.3
25 to 34	11.5	13.3	7.3	10.2
35 to 44	7.3	10.0	5.5	7.4
45 to 54	6.4	9.7	5.3	7.3
55 to 64	12.6	13.6	4.5	7.1
65 & over	4.1	2.7	4.1	4.3
Total	11.2	13.0	7.9	10.3

Source: ABS Census 1996 Basic Community Profile Table B25

Map 3.11

Unemployed people, Tasmania, 1996

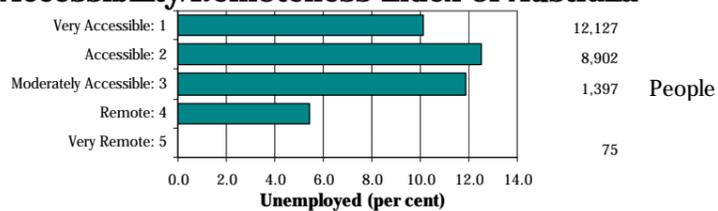
as a percentage of the total labour force in each Statistical Local Area



Source: See Data sources, Appendix 1.3

Details of map boundaries are in Appendix 1.2

Accessibility/Remoteness Index of Australia



Unemployment rates are highest in the areas in the Accessible ARIA category (12.5 per cent) and Moderately Accessible areas (11.9 per cent) and lower in the Very Accessible areas (10.1 per cent). The lowest proportion (5.4 per cent) and smallest number (75) of unemployed people is in the Very Remote ARIA category, no doubt reflecting that the reason people live in these isolated areas is the employment available.

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

Female labour force participation, 1996

Capital city comparison

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

As **Table 3.18** 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**.

Table 3.18: Female labour force participation, capital cities
Per cent

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

¹Includes Queanbeyan (C)

Source: ABS special data services

Hobart

In **Hobart**, female labour force participation increased from 62.6 per cent at the 1986 Census to 68.9 per cent in 1996.

Overall, participation rates varied over a relatively narrow range and, even in areas with below average participation rates, high rates are evident (**Map 3.12**). Only one SLA in **Hobart** recorded a participation rate below 60 per cent (Brighton with 50.9 per cent).

At the 1996 Census, the highest female labour force participation rates in **Hobart** were in the higher status, western SLAs of Hobart (74.6 per cent) and Kingborough [Part A] (72.9 per cent). The only other SLA to record a proportion above the **Hobart** average of 68.9 per cent was Clarence (69.4 per cent).

The lowest participation rates were in Brighton (50.9 per cent) and Derwent Valley [Part A] (61.5 per cent). Sorell and Glenorchy also recorded below average proportions of 65.1 per cent and 66.8 per cent respectively.

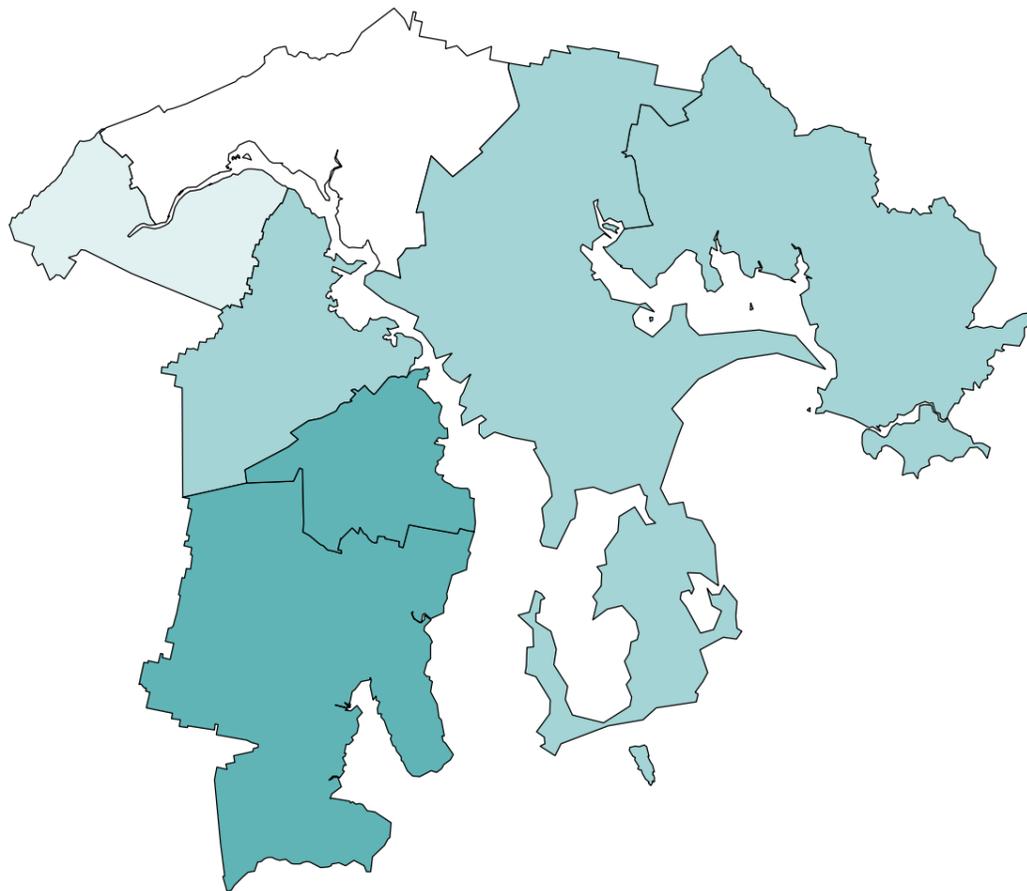
The largest numbers of women participating in the labour force were in Hobart (with 9,328 women), Clarence (8,229 women) and Glenorchy (7,118 women).

Correlations of substantial significance were recorded with the variables for high income families (0.82), managers and administrators, and professionals (0.82), people aged 65 and over (0.74) and immigrants resident in Australia for 5 years or more (0.76). 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 rates of female labour force participation and socioeconomic advantage.

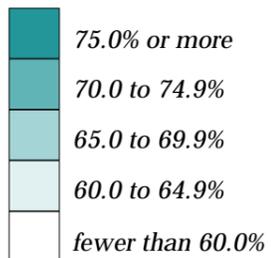
Map 3.12

Female labour force participation*, Hobart, 1996

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



Per cent female labour force participation*



*Labour force participation of females aged 20 to 54 years

Source: See Data sources, Appendix 1.3

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

Female labour force participation, 1996

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.

Table 3.19: Female labour force participation, State/Territory
Per cent

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total ¹
1996									
Capital city	69.3	69.8	69.4	69.1	68.3	68.9	70.7	76.3 ²	69.5
Other major urban centres ³	64.7	66.8	67.9	..	..	..	..	..	66.1
Rest of State/Territory	65.4	66.5	63.8	66.2	64.6	62.2	58.3	- ⁴	64.8
Whole of State/Territory	67.8	69.0	67.0	68.4	67.3	65.1	64.1	76.6	68.0
1986									
Rest of State/Territory	58.0	60.1	55.3	60.7	56.8	55.4	56.6	- ⁴	57.7

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

²Includes Queanbeyan (C)

³Includes Newcastle and Wollongong (NSW); Geelong (Vic); and Gold Coast-Tweed Heads and Townsville-Thuringowa (Qld)

⁴Data included with ACT total

Source: ABS special data services

Rest of State

The labour force participation rate of females in non-metropolitan Tasmania was 62.2 per cent, compared with 68.9 per cent in **Hobart**. The overall non-metropolitan rate has risen quite notably, from 55.4 per cent in 1986.

With the exception of King Island (with the highest proportion of 75.3 per cent) and Kingborough [Part B] (65.6 per cent), all SLAs with proportions in the top two ranges as shown on **Map 3.13** were located around the Tamar River. In Meander Valley [Part A], 70.9 per cent of women aged 20 to 54 were participating in the labour force. In West Tamar [Part A] and Launceston the proportions were 66.9 per cent and 65.3 per cent respectively. Sixteen of Tasmania's non-metropolitan SLAs recorded participation rates of between 60 and 65 per cent. The majority of these formed a continuous band along the north coast, from Circular Head (64.8 per cent) to Dorset (60.1 per cent). Flinders, Tasman and Southern Midlands also recorded percentages in this range.

The central areas of Tasmania tended to have lower female labour force participation rates, with the lowest rate in George Town [Part B] (51.8 per cent). Break O'Day, George Town [Part A], Central Highlands and West Coast also recorded participation rates of below 55 per cent.

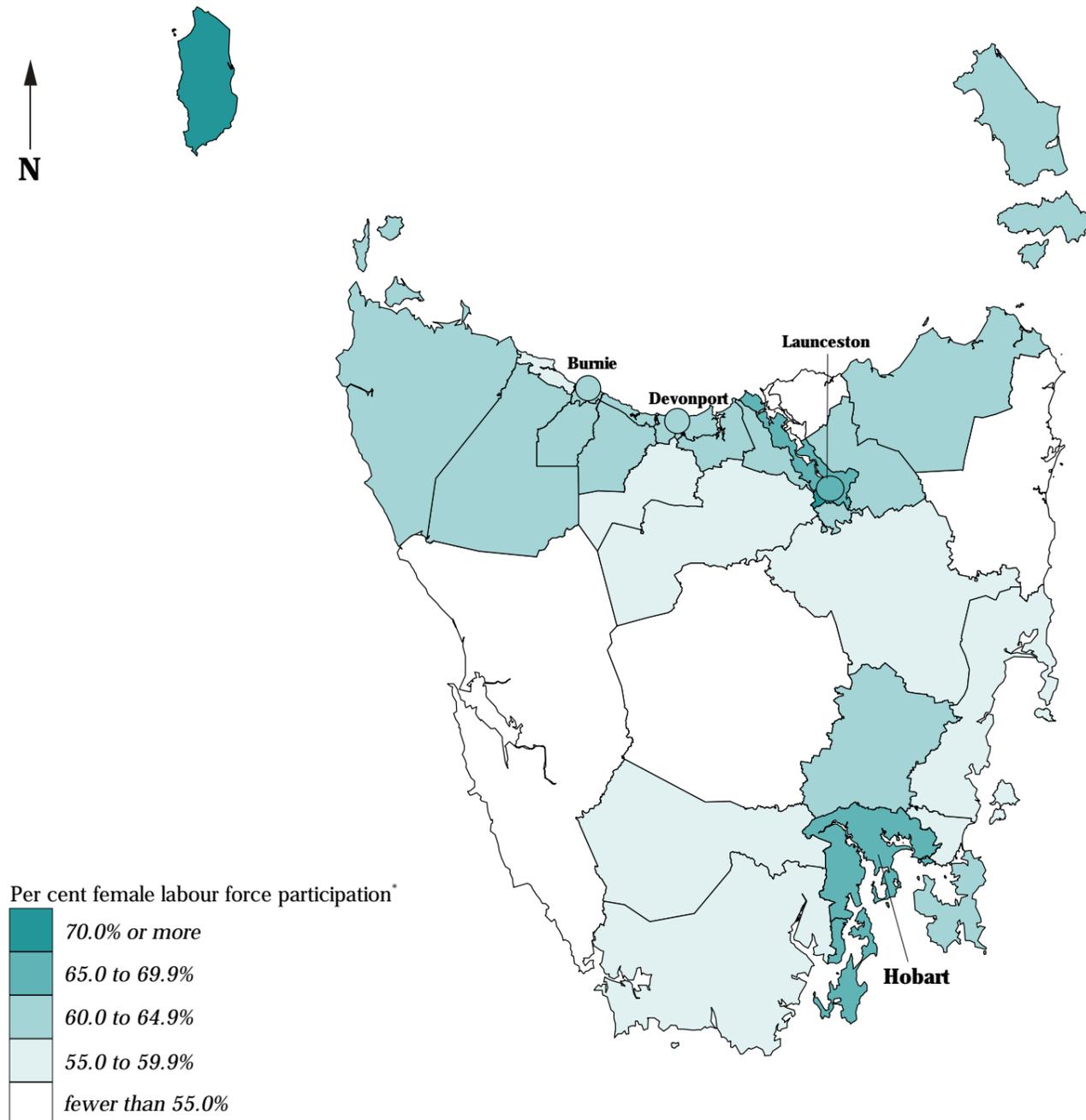
The largest number of women aged from 20 to 54 years participating in the labour force was in Launceston (9,733 females). This was followed by 3,637 females in Devonport and 2,802 females in West Tamar [Part A].

The correlation analysis showed there to be a weak positive association at the SLA level with indicators of high socioeconomic status. The strongest of these was with the variable for high income families (0.34). There were inverse correlations of meaningful significance with the variables for unemployed people (-0.63) and early school leavers (-0.56). The correlation of meaningful significance with the IRSD (0.68) indicates an association at the SLA level between high rates of female labour force participation and high socioeconomic status.

Map 3.13

Female labour force participation*, Tasmania, 1996

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

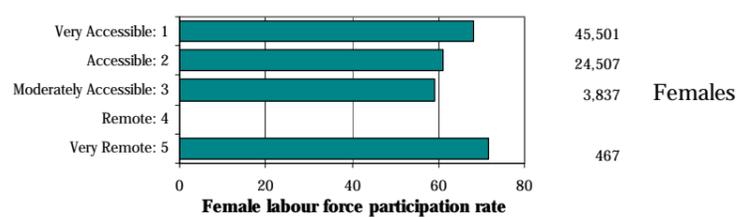


*Labour force participation of females aged 20 to 54 years

Source: See Data sources, Appendix 1.3

Details of map boundaries are in Appendix 1.2

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 Remote ARIA category (71.7 per cent, and 467 females). Participation rates declined across the other three ARIA categories, from 68.1 per cent in the Very Accessible areas, to 61.0 and 59.1 per cent in the Accessible and Moderately Accessible areas, respectively.

Source: Calculated on ARIA classification, DHAC

National Social Health Atlas Project, 1999

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

Capital city comparison (Australia as the Standard)

The age at which people cease their formal education does not determine absolutely how they will fare in life, but it does have a strong influence, not only on the ability to gain secure and rewarding employment but also on general life style. Differences in educational participation are examined in this analysis by comparing variations in the extent to which the population left school at age 15 or less, or did not go to school (jointly referred to as early school leavers). This variable has been age-sex standardised to remove differences in participation rates occurring between areas solely because of differences in the age and sex of the population in the areas being studied. A description of this process is on page 17. Among the capital cities, the highest standardised ratio (SR) of early school leavers was recorded in **Perth**, with 12 per cent more early school leavers than expected (an SR of 112**), and the lowest was recorded in **Canberra**, where the ratio of 68** indicated that there were 32 per cent fewer early school leavers than were expected from the Australian rates.

There was relatively little difference in the early school leaver ratios for 1986 and 1996 (**Table 3.20**), 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 ratios

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

¹Includes Queanbeyan (C)

Source: ABS special data services

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

Hobart (Tasmania as the Standard)

Variations within **Hobart** in age-standardised educational participation provide a marked illustration of the links between education, occupation and income. As supported by the correlation analysis, there was a notable association between the patterns of distribution of early school leavers and those of low income families, unemployed people and semi-skilled and unskilled workers.

Brighton had the highest ratio of early school leavers, with 27 per cent more than expected from the State rates, an SR of 127** (**Map 3.14**). As well as having the highest proportions for the variables mentioned above, Brighton also had the highest proportions of single parent families and Indigenous people. Derwent Valley [Part A] (with an SR of 114**), Sorell [Part A] (108**) and Glenorchy (106**) all had significantly more early school leavers than were expected from the Tasmanian rates.

SLAs with fewer than the expected number of early school leavers were Clarence (with an SR of 91**), Kingborough [Part A] (76**) and Hobart (60**). All of the ratios for SLAs in **Hobart** for this variable were highly statistically significant.

The largest numbers of early school leavers were recorded in Glenorchy (14,137 people) and Clarence (12,974 people). Other SLAs had considerably fewer than 10,000 early school leavers.

The data, being relative measures, cannot be compared directly with those in the 1986 Social Health Atlas. Some SLAs in **Hobart** have also undergone boundary changes. However, the pattern of variation in participation rates has remained similar. 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. Secondary and tertiary education bodies have attempted to address the problem through participation and

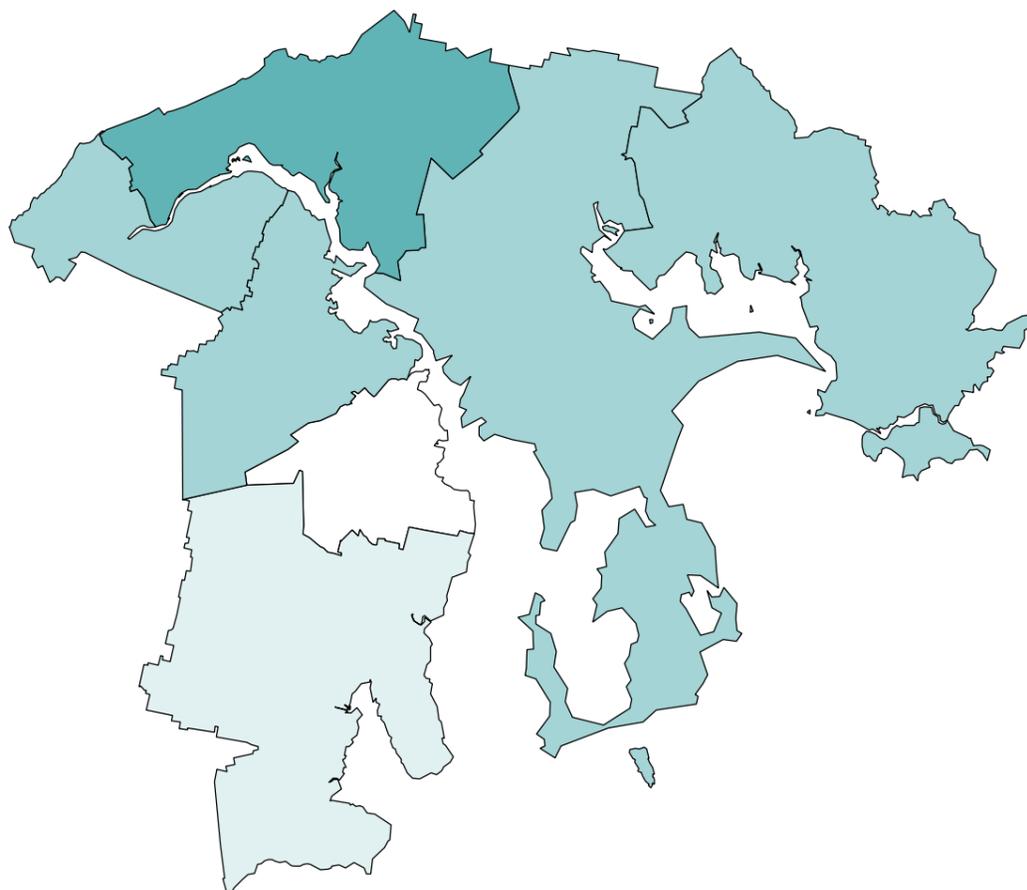
equity programs, but there is a danger that the pattern of inequality of opportunity expressed in this map will perpetuate itself or even intensify in the future, with a wide range of social health implications.

There were correlations of meaningful significance with the variables for unemployed people (0.98), low income families (0.96), semi-skilled and unskilled workers (0.96), children aged from 0 to 4 years (0.79) and the Indigenous population (0.76). Inverse correlations of meaningful significance were recorded with the indicators for high socioeconomic status. 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 low rates of educational participation and socioeconomic disadvantage

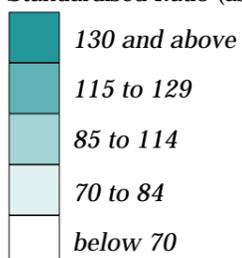
Map 3.14

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

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



Standardised Ratio (as an index)



*Expected numbers were derived by indirect age-sex standardisation, based on TAS totals

Source: See Data sources, Appendix 1.3

Details of map boundaries are in Appendix 1.2
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 page 17. The overall number of early school leavers (people had 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**) and Queensland (127**) 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 ratios

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total ¹
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	96**	86**	116**	102**	118**	111**	108**	64**	100**
1986									
Rest of State/Territory	104**	98**	125**	112**	123**	111**	104**	- ⁴	110**

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

²Includes Queanbeyan (C)

³Includes Newcastle and Wollongong (NSW); Geelong (Vic); and Gold Coast-Tweed Heads and Townsville-Thuringowa (Qld)

⁴Data 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 (Tasmania as the Standard)

There were 8 per cent more early school leavers in the non-metropolitan areas than expected from the Tasmanian rates, an SR of 108**. This was considerably higher than the ratio for **Hobart**, of 88**.

The overall impression from **Map 3.15** is of a relatively narrow range of participation ratios across the rural areas of Tasmania, with all but five of Tasmania's non-metropolitan SLAs recording more early school leavers than expected from the State rates.

Eleven SLAs had values in the second highest range mapped. The highest of these was in Georgetown [Part B], with 26 per cent more early school leavers than expected from the Tasmanian rates (an SR of 126**). Next were Burnie [Part B], Circular Head, George Town [Part B] and Kentish all with 19 per cent or more early school leavers than expected.

None of the four non-metropolitan SLAs that had fewer early school leavers than expected recorded ratios more than 10 per cent below the level expected. The SLAs were West Tamar [Part A] (an SR of 98), King Island (97), Flinders (95) and Kingborough [Part B] (90).

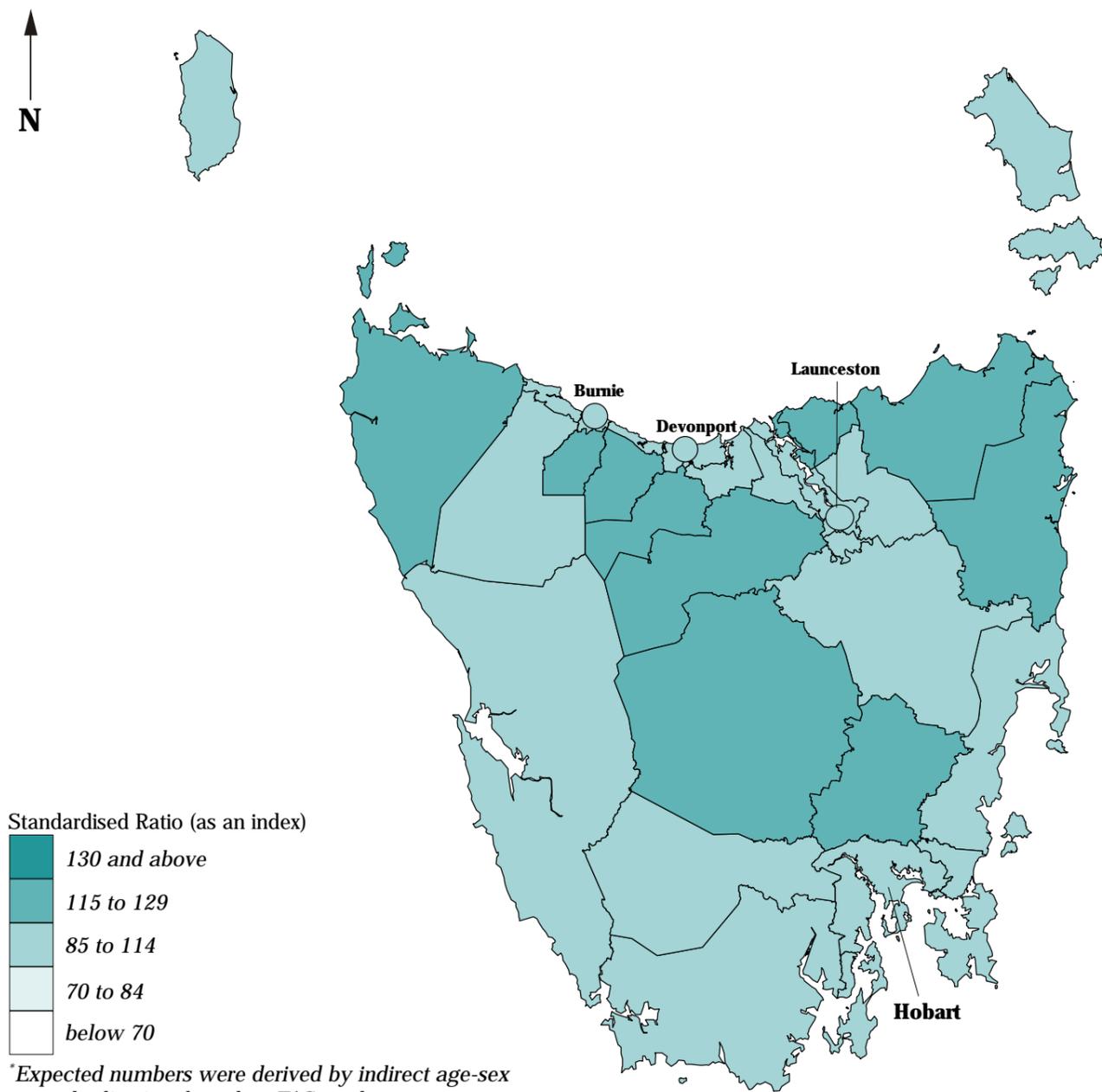
Launceston had the largest number of early school leavers with 18,269 residents in this category, with the next largest numbers in Devonport (8,077) and Central Coast [Part A] (5,758).

Overall, correlations with high rates of early school leavers were weak. The strongest correlations were inverse correlations with the variables for female labour force participation (-0.56) and immigrants resident in Australia for 5 years or longer (-0.54).

Map 3.15

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

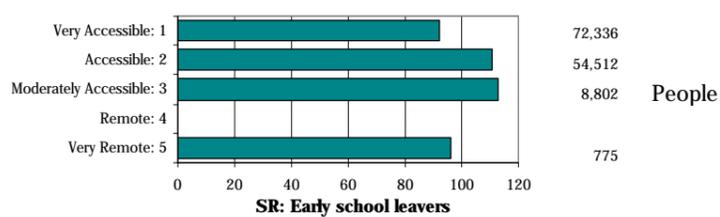
Standardised Ratio: number of people in each Statistical Local Area compared with the number expected*



Source: See Data sources, Appendix 1.3

Details of map boundaries are in Appendix 1.2

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 92). The lowest rates of educational participation were in the areas in the Moderately Accessible (an SR of 113) and Accessible (111) areas. People living in the Very Remote areas had the second lowest rate of educational participation, an SR of 96).

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

Aboriginal and Torres Strait Islander people, 1996

Capital city comparison

The percentages of people identifying as Aboriginal and Torres Strait Islanders in the 1996 Census were low, with the *All capitals* average at 1.0 per cent (**Table 3.22**). 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 recorded in Australia's capital cities increased in the ten years from 1986, rising from 0.6 per cent in 1986, to 0.7 per cent in 1991 and to 1.0 per cent in the 1996 Census. The number of Indigenous Australians rose by 47,945 in the same period. This substantial increase largely reflects changes over time in the preparedness of people to identify themselves as Indigenous on the Census form. The increase was greatest in New South Wales, and particularly marked in the non-metropolitan areas of the State, with a population of 56,474 in 1996 compared with 35,907 in 1986. Additional information about these increases is provided on pages 16 and 17 (see *Data quality of Indigenous population counts*).

Table 3.22: Aboriginal and Torres Strait Islander people, capital cities
Per cent

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

¹Includes Queanbeyan (C)

Source: ABS special data services

Hobart

Indigenous people made up 2.5 per cent of the total population of **Hobart** in 1996, compared with 1.2 per cent in 1986. This represented an increase in the Indigenous population of 2,569 people, or 120.3 per cent, in the ten year period (see the note above about possible reasons for this large increase).

Brighton stood out as having the highest proportion of Indigenous people in **Hobart**, with 5.8 per cent. This was more than twice the **Hobart** average and almost twice the next highest proportion, of 3.1 per cent, recorded in Glenorchy. Derwent Valley [Part A] had a proportion equal to the **Hobart** average of 2.5 per cent and Clarence (2.4 per cent), Kingborough [Part A] (2.3 per cent) and Sorell [Part A] (2.2 per cent) recorded just below average values.

The lowest proportion, 1.2 per cent, was recorded in The City of Hobart.

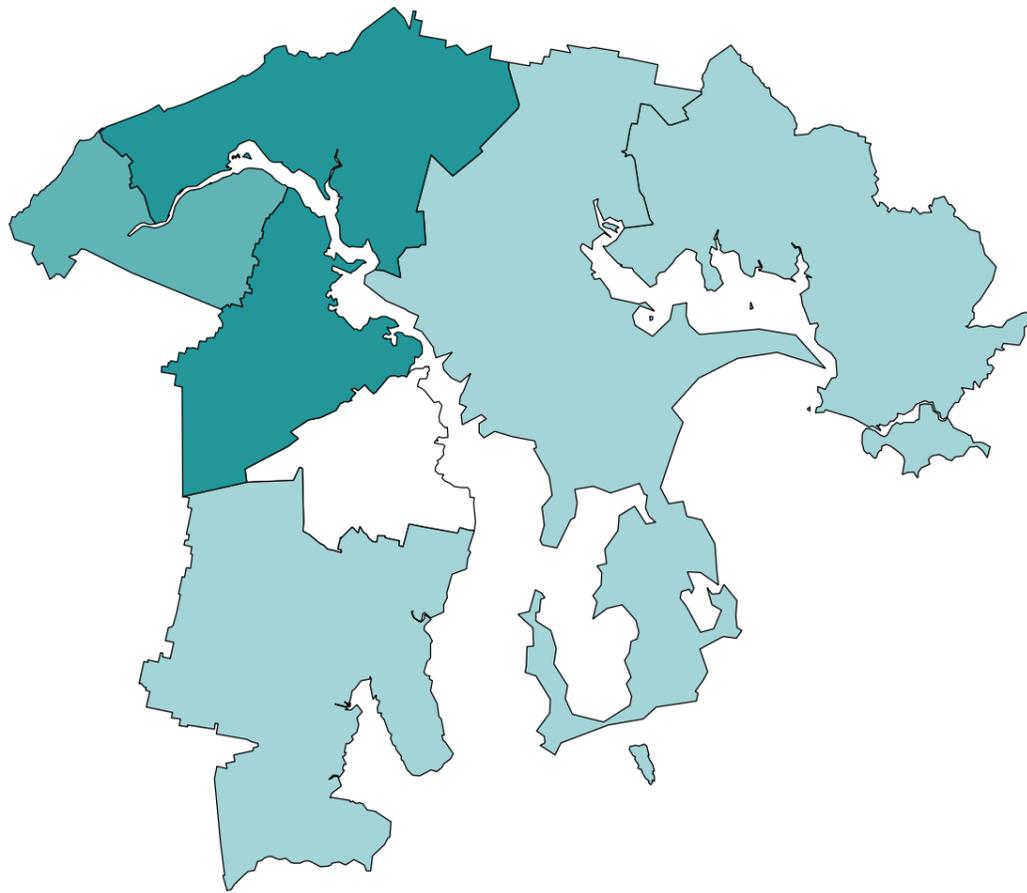
The largest numbers of Indigenous people were located in Clarence and Glenorchy, with 1,153 and 1,335 people respectively. The lowest numbers were recorded in Derwent Valley [Part A] (163 people) and Sorell [Part A] (206 people).

The results of the correlation analysis revealed a positive association between high proportions of Indigenous people with most of the indicators of socioeconomic disadvantage, including correlations of substantial significance with public rental housing (0.95), single parent families (0.92), unemployed people (0.88), low income families (0.80) and early school leavers (0.76). These results, together with the inverse correlation of substantial significance with the IRSD (-0.88), indicate an association at the SLA level between high proportions of Indigenous people and socioeconomic disadvantage.

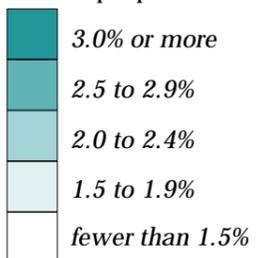
Map 3.16

Aboriginal and Torres Strait Islander people, Hobart, 1996

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



Per cent Aboriginal and Torres Strait Islander people



Source: See Data sources, Appendix 1.3

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

Aboriginal and Torres Strait Islander people, 1996

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.

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

	<i>Per cent</i>								
	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total ¹
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 ³	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
1986									
Rest of State/Territory	2.6	0.6	3.7	2.3	6.7	1.8	35.7	– ⁴	3.3

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

²Includes Queanbeyan (C)

³Includes Newcastle and Wollongong (NSW); Geelong (Vic); and Gold Coast-Tweed Heads and Townsville-Thuringowa (Qld)

⁴Data included with ACT total

Source: ABS special data services

Rest of State

There were 9,154 Indigenous people recorded in non-metropolitan Tasmania at the 1996 Census, 3.4 per cent of the total population. The number of non-metropolitan Indigenous people recorded in the Census has risen almost as sharply as in **Hobart**, with an increase of 99.9 per cent since 1986. See the note above about possible reasons for this increase.

By far the highest proportion was recorded in the SLA of Flinders, with 16.0 per cent of the population indicating that they were Aboriginal and/or Torres Strait Islanders. However, the total population in Flinders was 924 people, and this high percentage represents a total of just 148 people. The next highest percentage (9.5 per cent) was recorded in Huon Valley, with the second largest number of Indigenous people (1,231 people) in non-metropolitan Tasmania. Launceston had the largest number of Indigenous people in 1996 (1,408).

Other SLAs with well above average proportions of Indigenous people were Latrobe [Part B] (6.7 per cent), Central Coast [Part B] (5.6 per cent), Circular Head (5.4 per cent) and Waratah/Wynyard [Part A] (5.1 per cent).

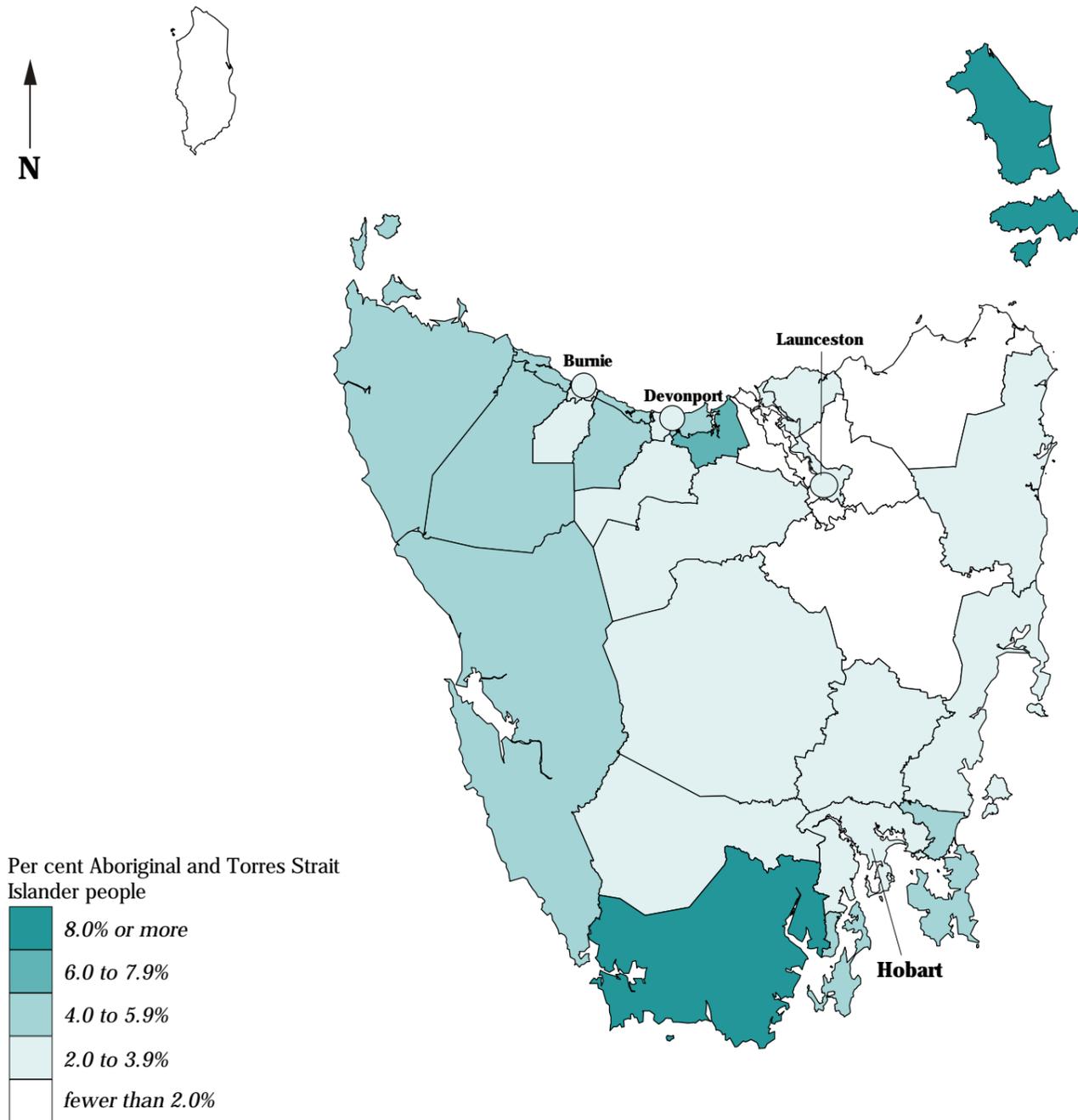
The SLAs with the lowest proportions of Indigenous people – all situated in the north of the State, about the River Tamar – were Launceston [Part C], Meander Valley [Part A] and West Tamar [Part A], all with 1.2 per cent.

There were no correlations of significance for this variable.

Map 3.17

Aboriginal and Torres Strait Islander people, Tasmania, 1996

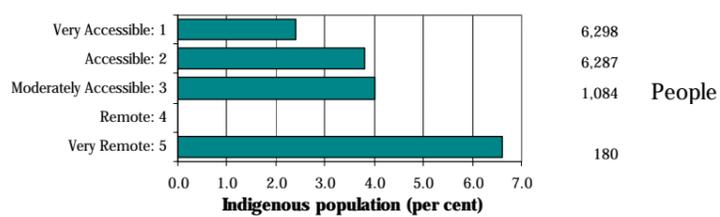
as a percentage of the total population in each Statistical Local Area



Source: See Data sources, Appendix 1.3

Details of map boundaries are in Appendix 1.2

Accessibility/Remoteness Index of Australia



The distribution of the Indigenous population under ARIA is quite striking. The graph shows the relatively low proportions of Indigenous people in the first four ARIA categories, ranging from 2.4 per cent in the Very Accessible category to 4.0 per cent in the Moderately Accessible category, as well as the high 6.6 per cent in the Very Remote category. The numbers associated with the graph highlight the distribution of Indigenous people throughout Tasmania, although the numbers in the most remote areas are quite small (180 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. Of the Australian capital cities, **Sydney** has the second highest proportion of its population in this category (**Table 3.24**), while **Hobart** has the lowest (4.3 per cent). This characteristic, of a strong over representation of non-English speaking migrants, has been a feature of New South Wales' demography during the post-war period. There were 666,190 people in this category in **Sydney** in 1996 (17.8 per cent of the population), well above **Melbourne's** population of 568,565 people. This represents a major change from the situation in 1986, when **Melbourne** had 456,686, just 15,177 less than in **Sydney**.

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

	<i>Per cent</i>								
	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra¹	All capitals
1996	17.8	18.1	7.5	11.1	11.7	4.3	10.7	11.4	14.8
1986	14.0	16.1	6.0	10.5	10.5	4.2	10.2	10.8	12.7

¹Includes Queanbeyan (C)

Source: ABS special data services

Hobart

Of all the capital cities, **Hobart** had the lowest proportion of people who had immigrated from a predominantly non-English speaking country in or before 1991. This reflects the more limited impact of the post war migration boom on **Hobart** in comparison with the mainland cities. Nor has the more recent increase in Asian immigration contributed to population change in **Hobart** as much as in other capital cities. The highest proportions of earlier immigrants in **Hobart** came from European countries, particularly from Germany, the Netherlands, Italy and Poland. Between the 1986 and 1996 Censuses, the proportion of people born in predominantly non-English speaking countries who had been resident in Australia for five years or more increased from 4.2 per cent to 4.3 per cent in **Hobart**. This represented an increase from 7,434 people to 8,147 people.

It can be seen from **Map 3.18** that the highest proportions of this population group were concentrated in the western, higher socioeconomic SLAs of **Hobart** and the lowest proportions were in northern SLAs. The highest proportions of longer term migrants were in the SLAs of Hobart (6.1 per cent), Glenorchy (5.2 per cent) and Kingborough [Part A] (5.1 per cent). Hobart and Glenorchy also had the largest numbers of people in this population group, with 2,844 and 2,252 people respectively.

The lowest proportions of longer term migrants were in Derwent Valley [Part A] (1.6 per cent representing the lowest number of 103 immigrants), Brighton (1.7 per cent) and Sorell Pt A (2.1 per cent). These SLAs also had the highest proportions of low income families, public rental housing and unskilled and semi-skilled workers.

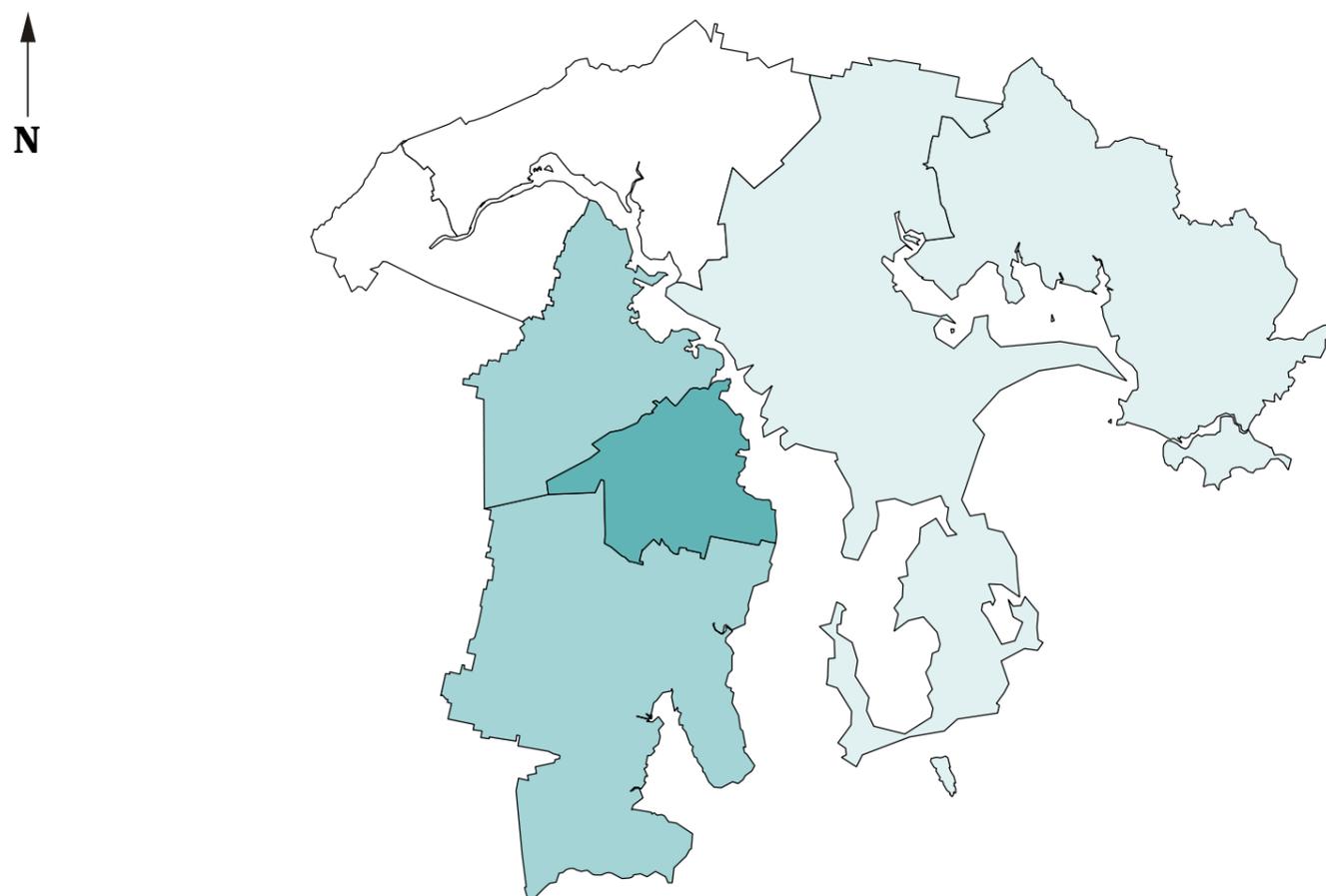
The distribution of longer term immigrants in **Hobart** is associated with populations of high socioeconomic status. There were correlations of substantial significance with the variables for female labour force participation (0.76), managers and administrators, and professionals (0.72) and high income families (0.71), as well as people with poor English proficiency (0.88) and recent immigrants (0.80).

These results, together with the correlation of substantial significance with the IRSD (0.69), indicate the existence of an association at the SLA level between high proportions of long term migrants and high socioeconomic status.

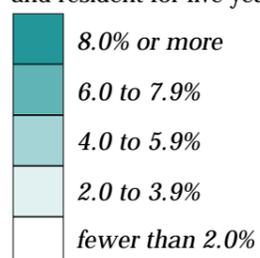
Map 3.18

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

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



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



Source: See Data sources, Appendix 1.3

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 **3.27** (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.

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

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total ¹
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 ²	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

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

²Includes Queanbeyan (C)

³Includes Newcastle and Wollongong (NSW); Geelong (Vic); and Gold Coast-Tweed Heads and Townsville-Thuringowa (Qld)

⁴Data included with ACT total

Source: ABS special data services

Rest of State

About 85 per cent of people born in non-English speaking countries and resident in Australia for five years or more have settled in Australia's capital cities rather than in non-metropolitan areas. However, in Tasmania, the distribution of earlier immigrants was more even, with approximately 54 per cent living in **Hobart** and the non-metropolitan areas attracting about 46 per cent. As in **Hobart**, the highest proportions in non-metropolitan Tasmania came from European countries, with people from the Netherlands and Germany being particularly prevalent. Between 1986 and 1996, the proportion of Tasmania's non-metropolitan population born in predominantly non-English speaking countries and resident for five years or more increased from 2.4 per cent (6,398 people) to 2.6 per cent (6,888 people) respectively.

Map 3.19 shows that higher concentrations of people from non-English speaking backgrounds were in roughly three locations across Tasmania. One group was in SLAs clustered adjacent to **Hobart**. Another was located around the Tamar River and extending to the east coast. The third group was comprised of SLAs with proportions of 2.5 per cent or more, in Central Coast [Part B], Waratah/Wynyard [Part B] and King Island. The highest proportions of longer term migrants were in Kingborough [Part B] (4.8 per cent), West Tamar (4.6 per cent) and Launceston [Part C] (4.4 per cent).

SLAs with lower proportions of people born in predominantly non-English speaking countries and resident for five years or more were varied in their distribution. The central regions of Tasmania from the east to the west coast all had proportions below 2.5 per cent, as did the northern coastal areas, including the more densely populated Devonport and Burnie [Part A]. The lowest proportions were in Latrobe [Part B] (0.9 per cent), Central Highlands (1.1 per cent) and Northern Midlands [Part B] (1.2 per cent)

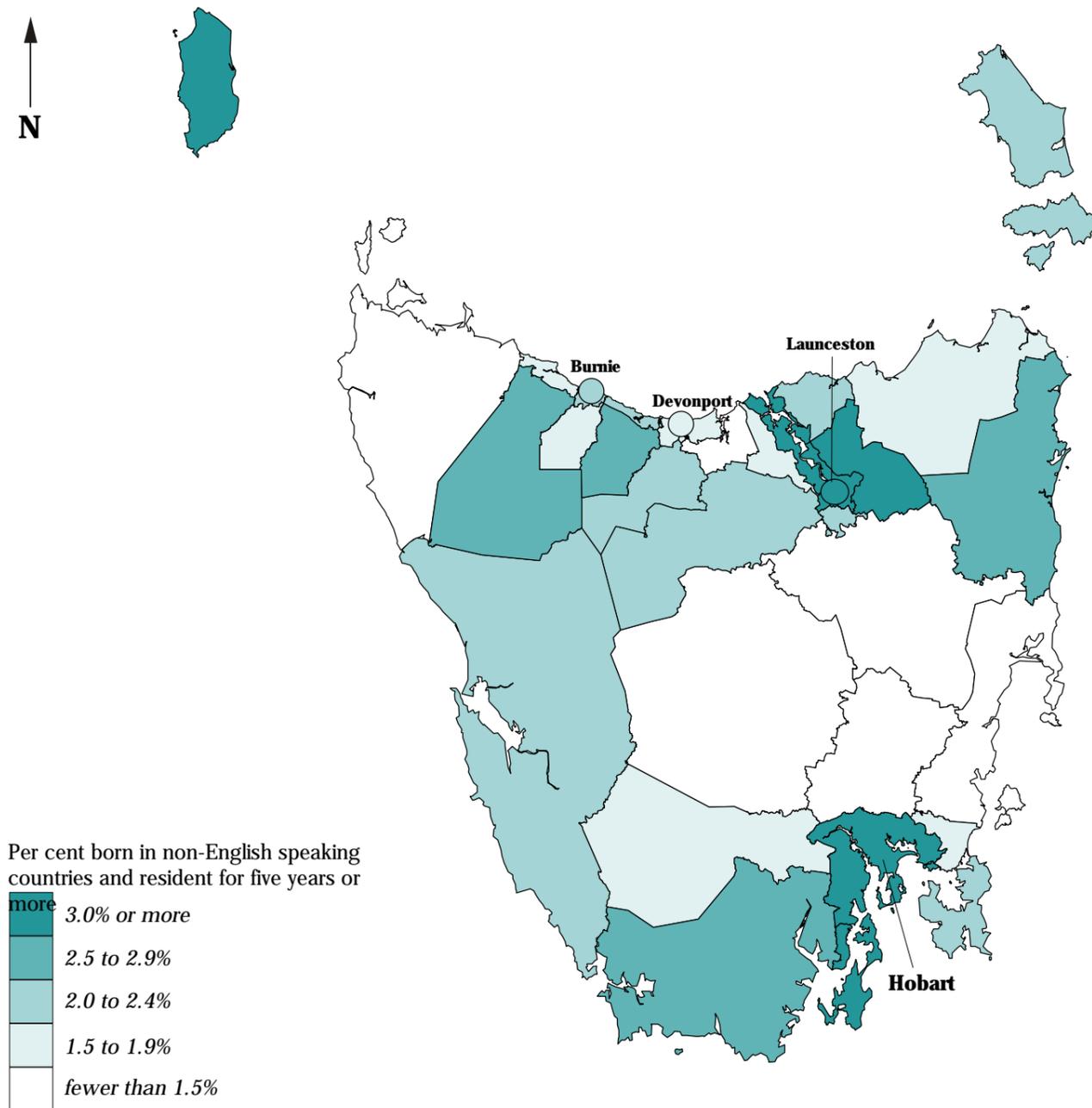
The largest numbers of people in this demographic group were in Launceston (with 1,828 people), West Tamar [Part A] (794 people) and Devonport (455 people).

The correlation analysis showed there to be a weak association with indicators of high socioeconomic status. The strongest was the inverse correlation with the variable for early school leavers (-0.54).

Map 3.19

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

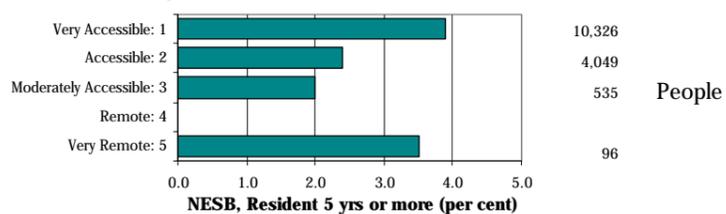
as a percentage of the total population in each Statistical local Area



Source: See Data sources, Appendix 1.3

Details of map boundaries are in Appendix 1.2

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 live in areas in the Very Accessible category (3.9 per cent of the population) and the lowest in the Moderately Accessible areas (2.0 per cent). The Very Remote areas had the second highest proportion, of 3.5 per cent, a characteristic shared only by South Australia and Western Australia.

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 3.26**). **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 3.26: People born in predominantly non-English speaking countries and resident in Australia for less than five years, capital cities

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

¹Includes Queanbeyan (C)

Source: ABS special data services

Hobart

Hobart continued its earlier pattern of attracting very low numbers of immigrants from non-English speaking countries. At the 1996 Census, the proportion of people born in non-English speaking countries and resident in Australia for less than five years had not changed from the 1986 proportion, of 0.7 per cent. Absolute numbers had, however, increased by 7 per cent, from 1,248 to 1,336 immigrants between the two periods. Asian immigrants have been an increasing component of people coming to Australia from non-English speaking countries and Tasmania has not been excluded from this trend. Between 1992 and 1996, Malaysians formed the largest group of Asian immigrants in **Hobart**, followed by people from Singapore and Hong Kong. People from the Federal Republic of Germany formed the largest European group.

In common with other capital cities, recent immigrants to **Hobart** have tended to concentrate close to the city centre (**Map 3.20**). The highest proportion at the SLA level was 1.9 per cent in the City of Hobart, the only SLA to have a percentage above the **Hobart** average, of 0.7 per cent. The SLA of Hobart also had the largest number of recent arrivals, with 894 people. This can partly be explained by the fact that new immigrants tend to settle in locations accessible to government services: in addition, the SLA of Hobart has a high level of private rental accommodation. Overseas students also contribute to the number of people recently arrived from non-English speaking countries. The University of Tasmania has its campus at Sandy Bay and there are also several colleges of accommodation in this area. The next highest proportions of people born in non-English speaking countries and resident for less than 5 five years were in Kingborough and Glenorchy (both with 0.5 per cent). This group of three SLAs on the western side of the Derwent River accounted for 92 per cent of recent arrivals in **Hobart**.

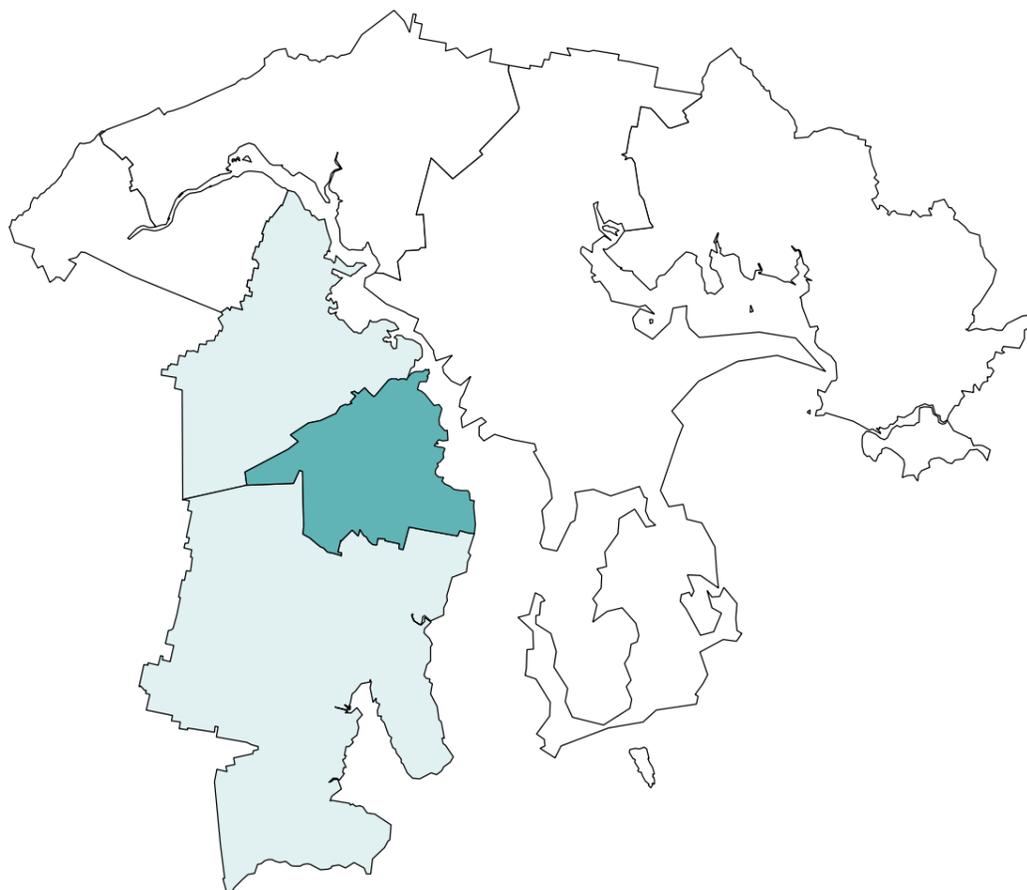
The lowest proportions of recent arrivals from predominantly non-English speaking countries in **Hobart** were recorded in the SLAs of Brighton, Derwent Valley and Sorell, all with 0.1 per cent.

Like in other capital cities, high proportions of people recently arrived from non-English speaking countries and settled in **Hobart** were correlated with the variable for people with poor proficiency in English (0.80). However, **Hobart** differed from the other capital cities with respect to associations between new arrivals and indicators of high socioeconomic status. There were correlations of substantial significance with the variables for managers and administrators, and professionals (0.82), high income families (0.77) and female labour force participation (0.62). The correlation of meaningful significance with the IRSD (0.62) also indicates the existence of an association at the SLA level with indicators of high socioeconomic status.

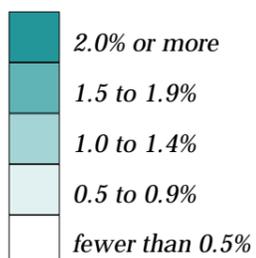
Map 3.20

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



Source: See *Data sources, Appendix 1.3*

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 3.27** (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.

Table 3.27: People born in predominantly non-English speaking countries and resident in Australia for less than five years, State/Territory

	<i>Per cent</i>								
	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total ¹
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 ³	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
1986									
Rest of State/Territory	0.4	0.4	0.6	0.4	0.8	0.4	1.0	– ⁴	0.5

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

²Includes Queanbeyan (C)

³Includes Newcastle and Wollongong (NSW); Geelong (Vic); and Gold Coast-Tweed Heads and Townsville-Thuringowa (Qld)

⁴Data included with ACT total

Source: ABS special data services

Rest of State

There were 955 people born in non-English speaking countries and resident in Australia for less than five years who were resident in the non-metropolitan areas of Tasmania in 1996 (0.4 per cent of the population). Of these, over half (58.8 per cent) were located in Launceston. All other SLAs had fewer than 80 recent migrants, and nine had none.

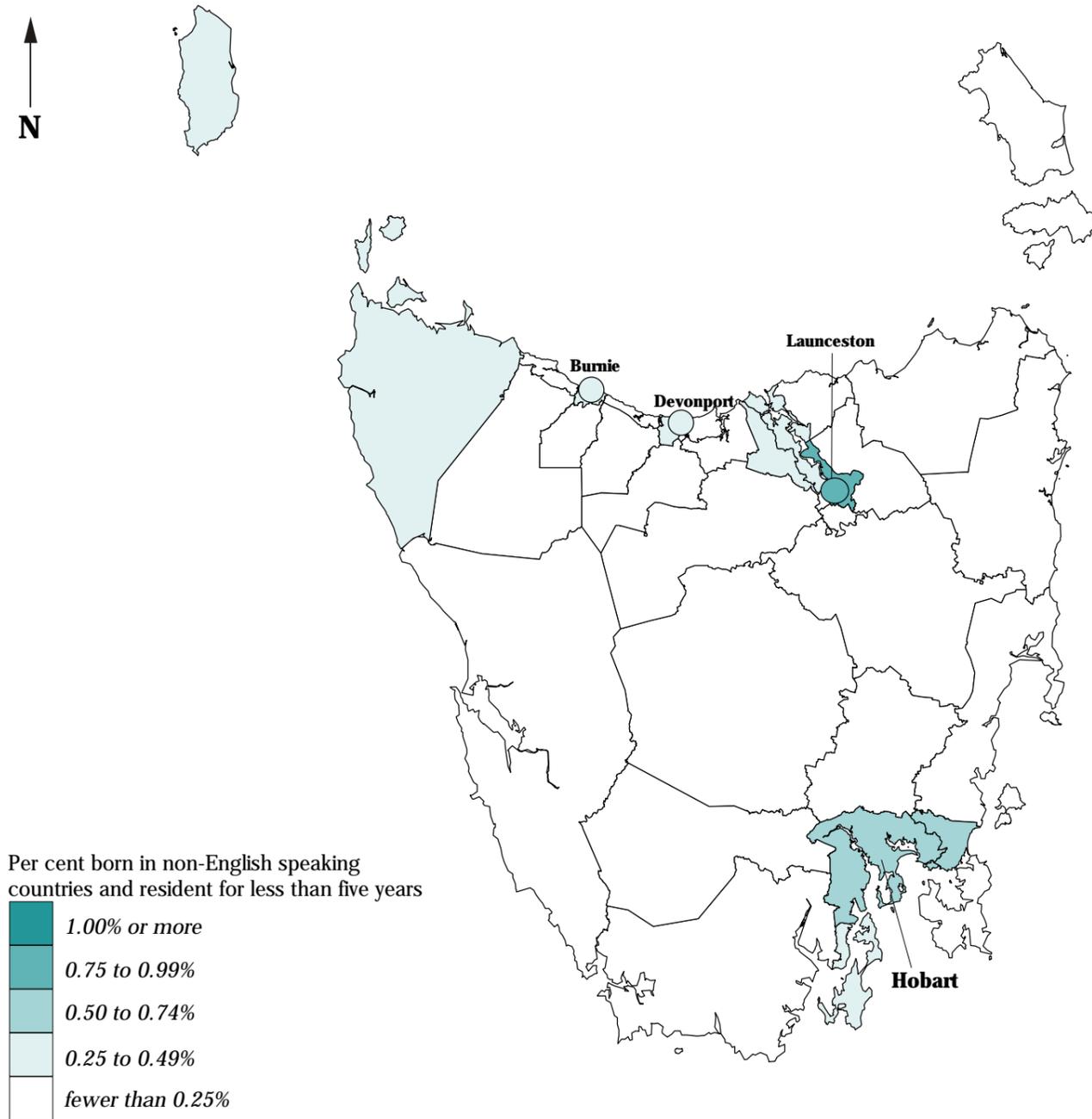
Map 3.21 shows that, within the small overall population, higher proportions were found in areas around **Hobart** and Launceston, as well as in Devonport, Burnie [Part A], Circular Head and King Island.

Overall, correlations were weak between high proportions of recent immigrants and most indicators of socioeconomic status. The strongest correlations were with the variables for people with poor English proficiency (0.71) and single parent families (0.53).

Map 3.21

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

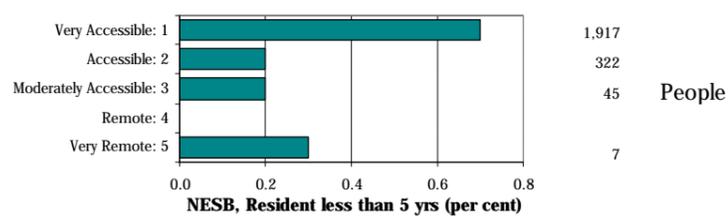
as a percentage of the total population in each Statistical Local Area



Source: See Data sources, Appendix 1.3

Details of map boundaries are in Appendix 1.2

Accessibility/Remoteness Index of Australia



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 (0.7 per cent) and drops away to less than a third of this level (0.2 per cent) in the next two ARIA categories. There is a higher proportion, of 0.3 per cent (but just seven people), in the Very Remote areas. Both percentages and numbers are very small for this variable.

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

Proficiency in English

Capital city comparison

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

Poor proficiency in English of people aged five years and over and born overseas in predominantly non-English speaking countries was determined when people within this category reported speaking English 'not well' or 'not at all' (**Table 3.28**). The percentages shown are calculated on the total population aged five years and over, not just those born overseas. **Melbourne** and **Sydney** have the highest proportions of migrants with poor proficiency in English at 5.0 and 4.9 per cent respectively. These high levels are due largely to the fact that **Melbourne** and **Sydney** have been the principal destinations for migrants from South-East Asia during the last two decades, following the major influx of people from European countries in the 1950s and 1960s. However, since the 1986 Census, there has been a trend across most Australian cities towards increasing numbers of people who are not fluent in English. While proportions may have fluctuated, numbers increased in most cities. **Darwin** was the only capital city to record a fall in both proportions and numbers.

Table 3.28: Poor proficiency in English of people aged five years and over and born in predominantly non-English speaking countries, capital cities

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

¹Includes Queanbeyan (C)

Source: ABS special data services

Hobart

At the 1996 Census, only 979 people in **Hobart** who were born overseas in a predominantly non-English speaking country reported either speaking English not well or not at all. In total, these people with poor proficiency in English comprised 0.6 per cent of the population aged five years and over. This low percentage can largely be attributed to the fact that **Hobart** has not been a major destination for people from non-English speaking backgrounds (see the two previous variables mapped).

The highest rate of poor proficiency in English recorded in **Hobart** was one per cent (445 people) in the SLA of Hobart, which also had the highest proportion and number of migrants who had been in Australia for fewer than five years (**Map 3.22**). Glenorchy was the only other SLA to record an above average figure, with 0.9 per cent, or 378 people, reporting poor proficiency in English in 1996.

Sorell [Part A], Derwent Valley [Part A] and Brighton had the lowest proportions for this variable, with less than 0.1 per cent of their populations aged five years and over reporting poor proficiency in English (a total of 18 people). Clarence (0.16 per cent) had 71 people with poor English proficiency.

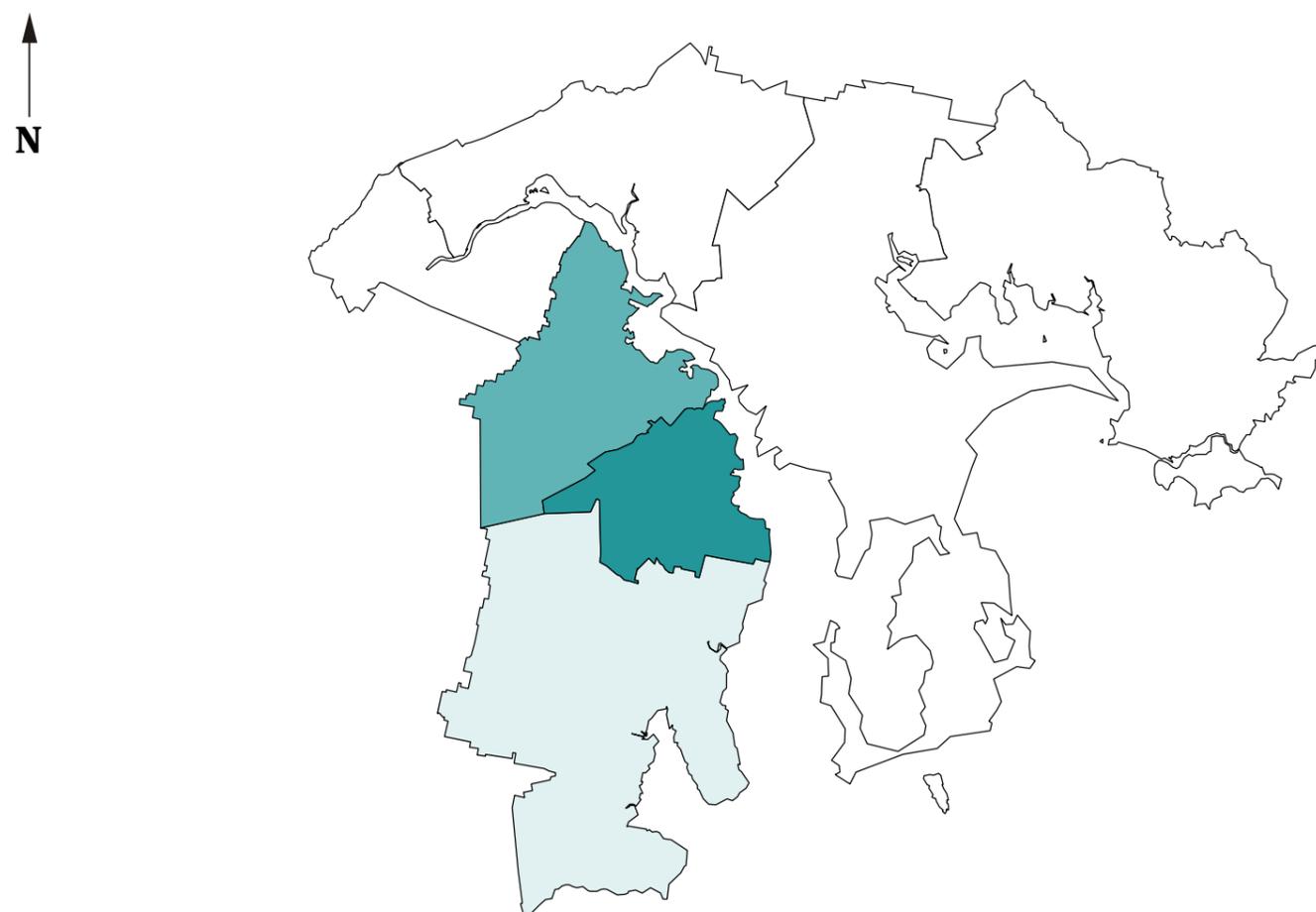
The strongest correlations were with the variables for female labour force participation (0.53) and managers and administrators, and professionals (0.48). There were correlations of substantial significance with the variables for immigrants from predominantly non-English speaking countries, both recent (0.80) and longer term residents (0.88), as well as the variable for private dwellings without a vehicle (0.74).

These results, together with the correlation with the IRSD (0.40), suggest the existence of an association at the SLA level between high rates of reporting poor proficiency in English and high socioeconomic status.

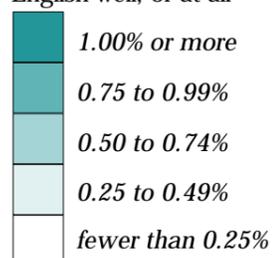
Map 3.22

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



Source: See Data sources, Appendix 1.3

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

Proficiency in English, 1996

State/Territory comparison

Poor proficiency in English of people aged five years and over and born overseas in predominantly non-English speaking countries was determined when people within this category reported speaking English 'not well' or 'not at all'. 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 3.29** shows that this tendency is evident, possibly more so, for migrants reporting a poor proficiency in English. Outside of **Sydney** (and, to a lesser extent, **Newcastle** and **Wollongong**), 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 five 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.

Table 3.29: Poor proficiency in English of people aged five years and over and born in predominantly non-English speaking countries, State/Territory
Per cent

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total ¹
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 ³	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
1986									
Rest of State/Territory	0.4	0.6	0.5	0.6	0.7	0.2	0.4	– ⁴	0.5

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

²Includes Queanbeyan (C)

³Includes Newcastle and Wollongong (NSW); Geelong (Vic); and Gold Coast-Tweed Heads and Townsville-Thuringowa (Qld)

⁴Data included with ACT total

Source: ABS special data services

Rest of State

As indicated in **Table 3.29**, few people born overseas in a predominantly non-English speaking country and living in Tasmania's non-metropolitan areas reported poor proficiency in English, with just 0.2 per cent of the population aged five years and over speaking English either not well, or not at all. This represented 414 people from the area's total population of almost 25,000. This number was less than the 446 recorded at the 1986 Census, reflecting the limited numbers of people immigrating to Australia who choose to live in non-metropolitan Tasmania.

The highest percentages of people reporting poor proficiency in English were recorded in Launceston and Sorell [Part B] (both with 0.4 per cent). All other SLAs recorded proportions of 0.2 per cent or less (**Map 3.23**).

The largest number of people who did not speak English well, if at all, was 200 in Launceston: the next largest was 33, in Devonport.

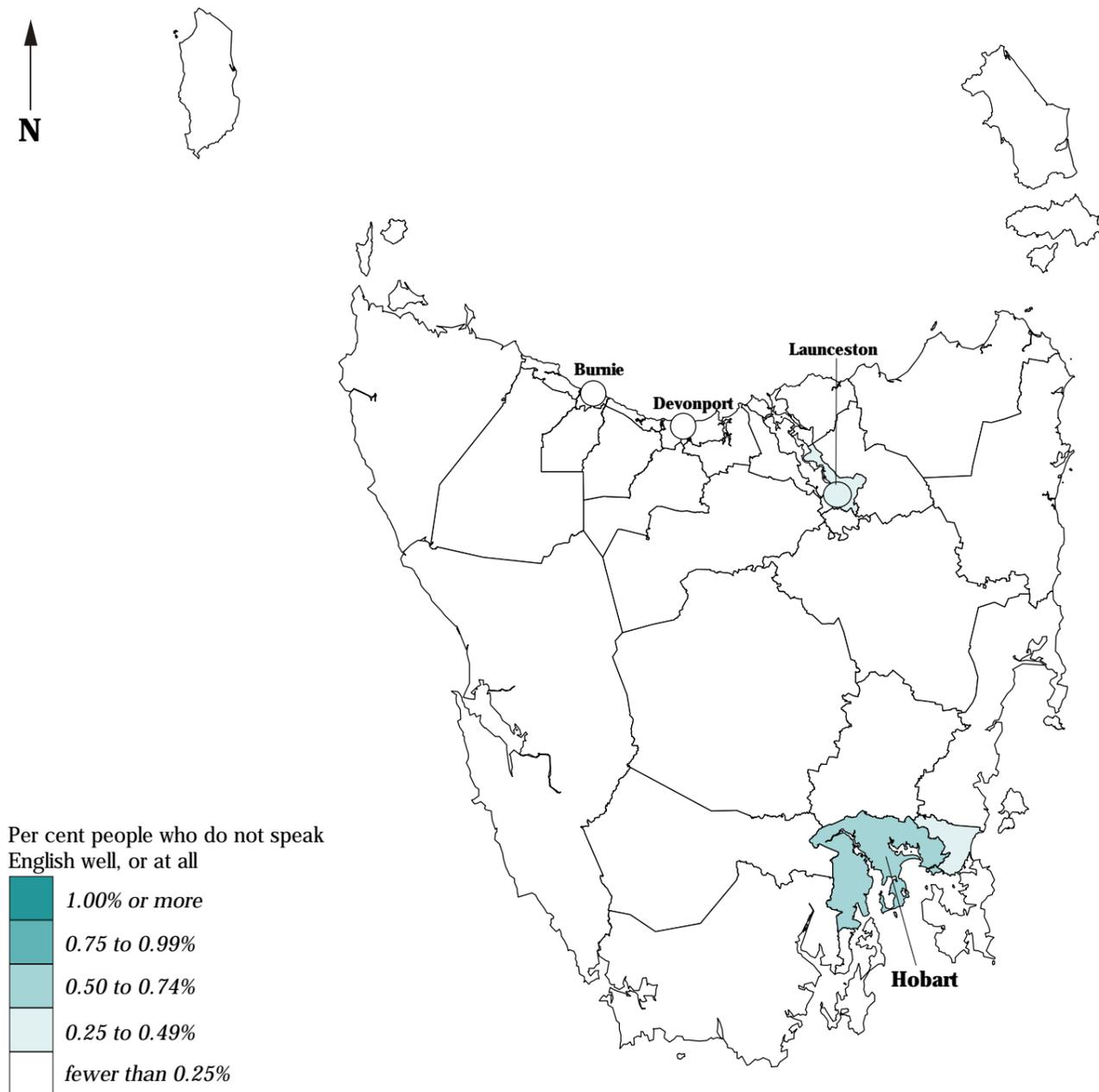
Given that the highest proportions were still very low, it was no surprise that several SLAs had no people in this population category: these were Derwent Valley [Part B], George Town [Part B], Flinders, King Island, Latrobe [Part B], Waratah/Wynyard [Part B] and Tasman.

The correlation analysis showed there to be generally weak associations between people reporting poor English proficiency and other variables. The only significant correlation was with the variable for recent immigrants from a non-English speaking background (0.71).

Map 3.23

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

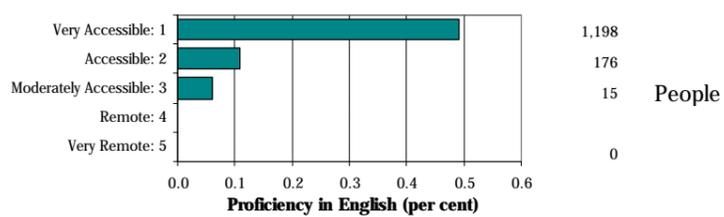
as a percentage of the total population aged five years and over in each Statistical Local Area



Source: See Data sources, Appendix 1.3

Details of map boundaries are in Appendix 1.2

Accessibility/Remoteness Index of Australia



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 proportion is in the Very Accessible (0.5 per cent of the population), with lower proportions of 0.11 and 0.06 per cent in the Accessible and Moderately Accessible areas, respectively. There were no people in the Very Remote areas who reported having poor proficiency in English. Both the percentages and numbers are very small.

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

Dwellings rented from the State housing authority, 1996

Capital city comparison

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

The proportion of the dwelling stock rented from the State housing authority is just above the national average for both **Sydney** and New South Wales (**Table 3.30**). In comparison, **Darwin**, **Adelaide** and **Canberra** have above average proportions of dwelling stock rented from State government housing authorities. Although the proportion of dwellings in this category increased only slightly, from 5.2 per cent (at the 1986 Census) to 5.5 per cent (at the 1996 Census) of all dwellings in **Sydney**, the 1996 figure represented an additional 13,766 dwellings. The largest relative increase in the number of State housing authority dwellings in the ten years from 1986 to 1996 was recorded in **Brisbane**, and the largest decreases were recorded in **Darwin** and **Canberra**.

Table 3.30: Dwellings rented from the State housing authority, capital cities
Per cent

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

¹Includes Queanbeyan (C)

Source: ABS special data services

Hobart

The **Hobart** average for dwellings rented from the State housing authority was 8.3 per cent in 1996, down from 10.0 per cent in 1986. This represented a slight decline in the number of these dwellings, from 6,089 in 1986 to 6,033 in 1996. The 1991 figure was higher, at 6,443 dwellings, 9.8 per cent of all occupied private dwellings.

There was significant deviation at the SLA level from the average for **Hobart**, from a low of 1.6 per cent to a high of 35.8 per cent. The low was recorded in Sorell [Part A], where a total of 54 dwellings were rented from the housing authority. The high was recorded in Brighton, where 1,452 housing authority rented dwellings were located. This SLA is clearly seen in the darkest shading on **Map 3.24**.

Other above average proportions of dwellings rented from the State housing authority were recorded in Derwent Valley [Part A], Glenorchy and Clarence, with 11.0 per cent, 9.8 per cent and 9.3 per cent respectively. Glenorchy also had the largest number of public rental dwellings, with 1,689, and Clarence had only slightly fewer, with 1,655.

The SLAs of Hobart (3.4 per cent), Kingborough [Part A] (3.0 per cent) and Sorell [Part A] (1.6 per cent) had below average proportions of dwellings rented from the State housing authority, with the Hobart figure representing 659 dwellings.

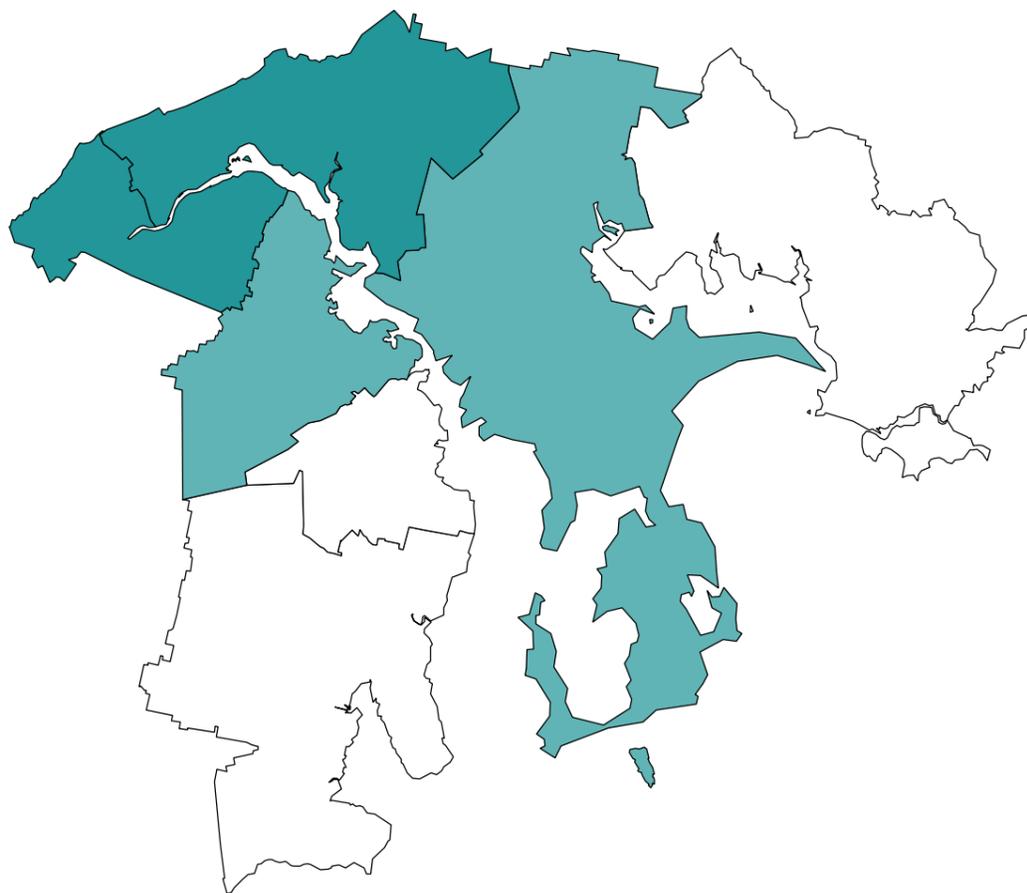
Changes were evident when comparing the distributions for 1996 with those at the 1986 Census. There was an obvious decline in the proportions of housing authority rented dwellings in Brighton, Clarence and Glenorchy. The absolute number of dwellings in Brighton and Clarence also declined, but there was an increase in Glenorchy, of 170 State housing authority rented dwellings over the ten year period from 1986.

The correlation analysis showed there to be a strong association with indicators of socioeconomic disadvantage. The strongest of these were correlations of substantial significance with the variables for single parent families (0.95), the Indigenous population (0.95), unemployed people (0.88), low income families (0.76) and children aged from 0 to 4 years (0.73). These results, together with the inverse correlation of substantial significance with the IRSD (-0.85), indicate the existence of an association at the SLA level between high rates of public rental housing and socioeconomic disadvantage.

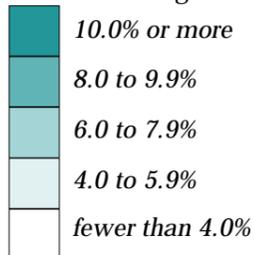
Map 3.24

Dwellings rented from the State housing authority, Hobart, 1996

as a percentage of all occupied private dwellings* in each Statistical Local Area



Per cent housing authority rented dwellings



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

Source: See Data sources, Appendix 1.3

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

Dwellings rented from the State housing authority, 1996

State/Territory comparison

The Census collects data on dwellings rented from the State and Territory housing authorities (in Tasmania it is the Housing Division, Department of Community and Health Services): 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 1996, the Northern Territory had the highest proportion of housing authority rented dwellings outside the capital cities (**Table 3.31**). 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 non-metropolitan areas between 1986 and 1996.

The non-metropolitan areas of New South Wales had just below the national average proportion of these dwellings (4.3 per cent), well below the level in the non-metropolitan areas of Northern Territory (10.5 per cent) and South Australia (9.0 per cent). Although the number of public rented dwellings rose from 22,914 in 1986 to 25,377 in 1996, their proportion of all occupied private dwellings in these areas in New South Wales declined from 4.9 per cent to 4.3 per cent. This indicates that the stock of public rental dwellings is not keeping pace with the total stock of dwellings.

Table 3.31: Dwellings rented from the State housing authority, State/Territory
Per cent

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total ¹
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 ³	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

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

²Includes Queanbeyan (C)

³Includes Newcastle and Wollongong (NSW); Geelong (Vic); and Gold Coast-Tweed Heads and Townsville-Thuringowa (Qld)

⁴Data included with ACT total

Source: ABS special data services

Rest of State

A total of 6.2 per cent of the occupied private dwellings in Tasmania's non-metropolitan areas was rented from the State housing authority in 1996, above the national average of 4.6 per cent. Although lower than the 6.9 per cent of dwellings in this category in 1986, it represented an increase in the number of these dwellings, from 6,124 to 6,372 over ten years.

As shown on **Map 3.25**, higher proportions of dwellings rented from the State housing authority were found in the urban areas along the north coast, with George Town [Part A] (17.2 per cent of dwellings in this category), Burnie [Part A] (12.2 per cent), Devonport (11.3 per cent), Launceston (9.2 per cent), Waratah/Wynyard [Part A] (8.6 per cent) and Central Coast [Part A] (7.8 per cent) all recording proportions well above the Tasmanian average.

West Coast, Huon Valley, Derwent Valley [Part B], Kingborough [Part B], Sorell [Part B], Tasman, Southern Midlands and Central Highlands all had well below average proportions of State housing authority rented dwellings. Of all these SLAs (all in the southern half of Tasmania), not one had proportions of greater than 2.0 per cent.

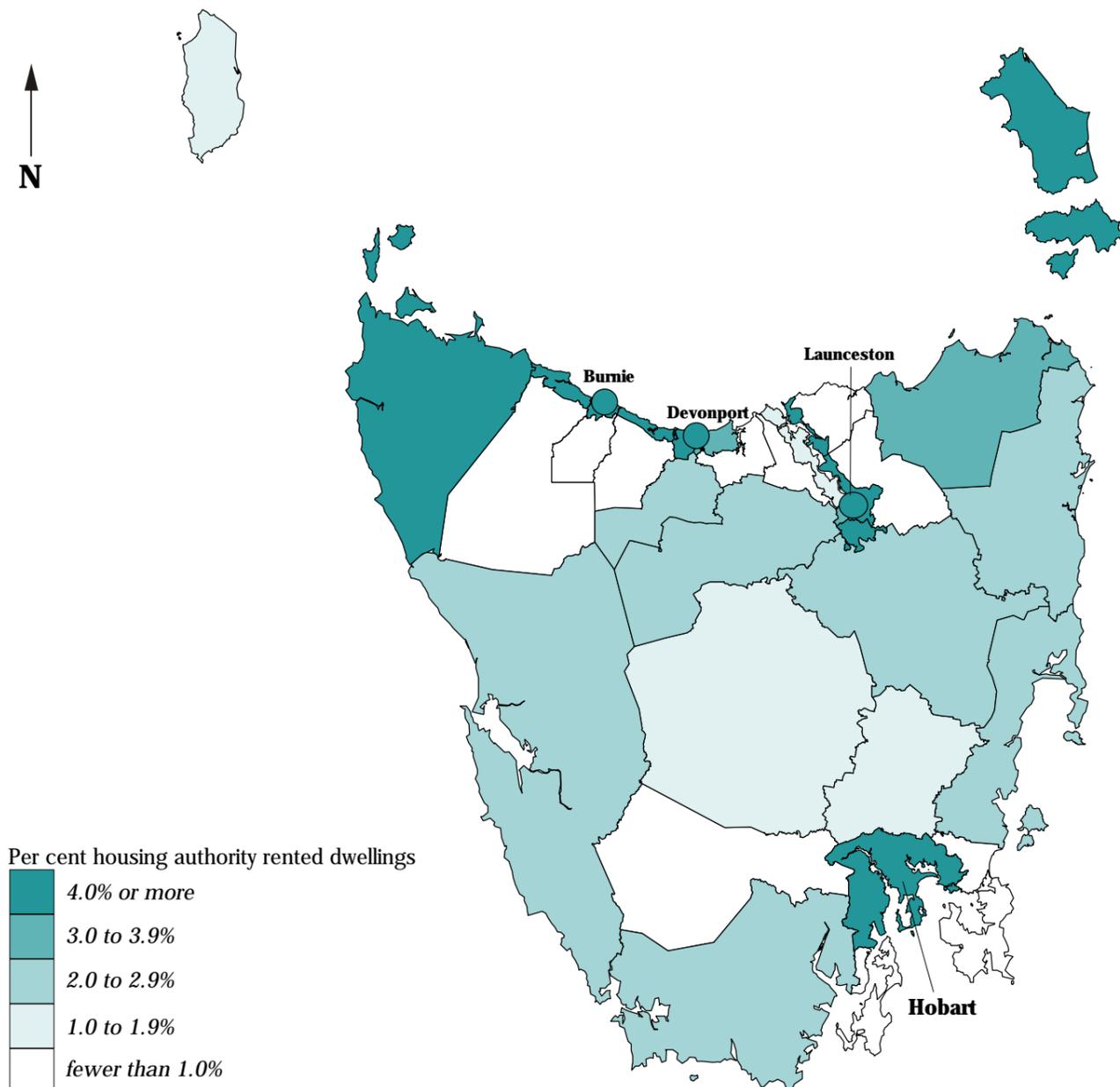
By far the largest number of State housing authority rented dwellings was in Launceston (2,162 dwellings of this type), with the next highest in Devonport (1,054 dwellings) and Burnie [Part A] (811).

The results of the correlation analysis showed there to be a positive association with indicators of socioeconomic disadvantage. The strongest correlations (both of substantial significance) were with the variables for private dwellings without a motor vehicle (0.78) and single parent families (0.68); there was also an inverse correlation of meaningful significance with the variable for managers and administrators, and professionals (-.055). These results, together with the inverse correlation with the IRSD (-0.46), indicate the existence of an association at the SLA level between high rates of dwellings rented from the State housing authority and socioeconomic disadvantage.

Map 3.25

Dwellings rented from the State housing authority, Tasmania, 1996

as a percentage of all occupied private dwellings* in each Statistical Local Area

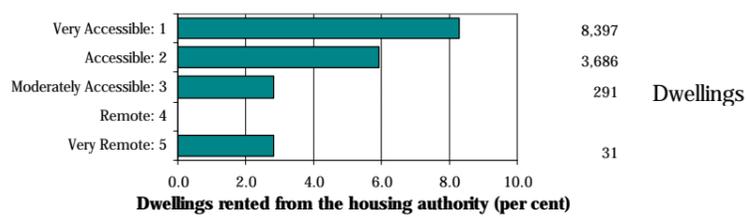


*Includes all privately owned, occupied, dwellings and private rented dwellings. Excludes institutions, motels, guest houses etc and caravans in parks

Source: See Data sources, Appendix 1.3

Details of map boundaries are in Appendix 1.2

Accessibility/Remoteness Index of Australia



Just over two thirds (67.9 per cent) of dwellings rented from the State housing authority are in the Very Accessible category, the lowest proportion after the Northern Territory (with 58.2 per cent of these dwellings in the most accessible areas) and much lower than in New South Wales (88.0 per cent). The Very Accessible areas also had the highest proportion of these dwellings (8.3 per cent), with lower proportions in the Accessible areas (5.9 per cent) and Moderately Accessible and Very Remote areas (both 2.8 per cent).

Source: Calculated on ARIA classification, DHAC

National Social Health Atlas Project, 1999

Dwellings with no motor vehicle, 1996

Capital city comparison

People living in households without cars face many disadvantages in gaining access to jobs, services and recreation, especially if they are in low-density outer suburbia. In 1996, 15.4 per cent of all occupied private dwellings in **Sydney** had no motor vehicle parked or garaged overnight (**Table 3.32**), the highest percentage for the capital cities. The lowest percentage was in **Canberra**, with 8.8 per cent.

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

Table 3.32: Dwellings with no motor vehicle, capital cities
Per cent

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

¹Includes Queanbeyan (C)

Source: ABS special data services

Hobart

Overall rates of car ownership in **Hobart** were high in 1996: even in the areas with the highest percentages of dwellings without a vehicle, over 80 per cent did have a car.

Variations in car ownership levels are often influenced by socioeconomic status, age structure, dwelling type and distance from the city centre. In **Hobart**, these influences are evident in several SLAs. The highest proportion of dwellings without a motor vehicle was recorded in the SLA of Hobart, with 16.2 per cent. In inner SLAs, the above average percentage of dwellings without a vehicle may be because residents of the inner suburbs work in the city centre and are well served by public transport; and because the inner suburbs also house relatively large numbers of older people, who tend to have lower car ownership rates. They may also reflect low income levels of residents resulting in an inability to afford a car.

In SLAs on the periphery of the city centre, car ownership rates tend to vary with social status. Kingborough [Part A] had low percentages of low income families, and as a result dwellings with no motor vehicles were uncommon (6.0 per cent). In contrast, Glenorchy (a similar distance from the centre of **Hobart** as Kingborough [Part A]) had a high proportion of low income families, and also had a high proportion of dwellings without vehicles (14.8 per cent).

In the outer suburbs, car ownership rates were generally very high. This was evident in the case of Sorell [Part A], where only 5.8 per cent of dwellings were without motor vehicles at the 1996 Census. Clarence had 10.0 per cent of dwellings without a motor vehicle.

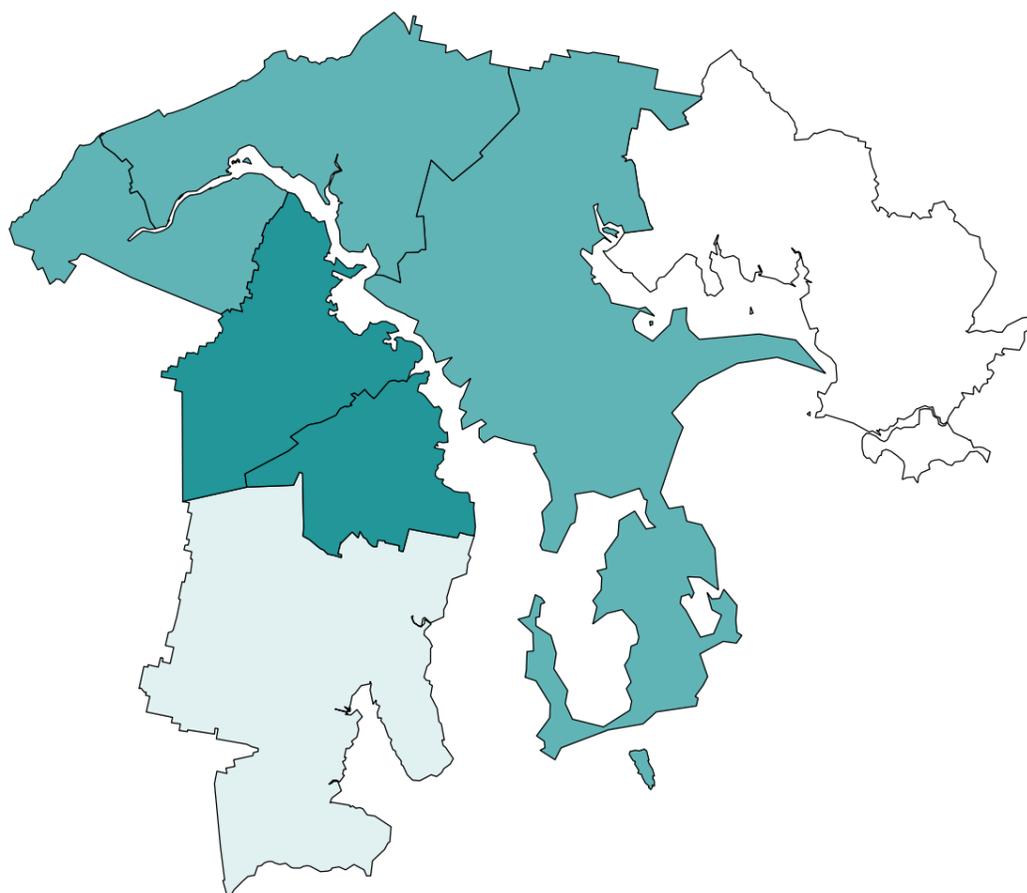
The largest numbers of dwellings without a motor vehicle were recorded in Hobart (3,098 dwellings), Glenorchy (2,561) and Clarence (1,775).

Overall, correlations were weak, with the only significant correlations being with the variables for people with poor English proficiency (0.74) and recent immigrants (0.60). There was a weaker association with the variable for people aged 65 years and over (0.45).

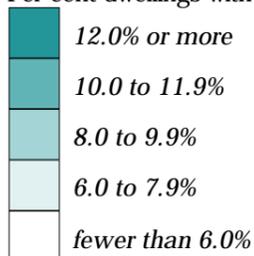
Map 3.26

Dwellings with no motor vehicle, Hobart, 1996

as a percentage of all occupied private dwellings* in each Statistical Local Area



Per cent dwellings with no vehicles



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

Source: See Data sources, Appendix 1.3

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

Dwellings with no motor vehicle, 1996

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 7.8 per cent of occupied private dwellings with no motor vehicle in Western Australia to 18.3 per cent in the Northern Territory, with most States and Territories recording between 8 and 10 per cent (**Table 3.33**). 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 3.33: Dwellings with no motor vehicle, State/Territory
Per cent

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total ¹
1996									
Capital city	15.4	11.2	11.6	12.5	9.5	12.2	10.2	8.8 ²	12.5
Other major urban centres ³	13.8	11.7	10.8	..	..	..	..	..	12.4
Rest of State/Territory	10.7	8.3	9.8	8.2	7.8	9.5	18.3	— ⁴	9.6
Whole of State/Territory	14.0	10.5	10.7	11.4	9.0	10.7	14.4	8.5	11.6
1986									
Rest of State/Territory	10.6	8.6	9.7	8.1	8.1	10.2	19.8	— ⁴	9.6

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

²Includes Queanbeyan (C)

³Includes Newcastle and Wollongong (NSW); Geelong (Vic); and Gold Coast-Tweed Heads and Townsville-Thuringowa (Qld)

⁴Data included with ACT total

Source: ABS special data services

Rest of State

A total of 9.5 per cent of the occupied private dwellings in non-metropolitan Tasmania was without a motor vehicle in 1996. The figures for 1986 and 1991 were similar, with proportions of 10.2 and 10.3 per cent respectively. High levels of car ownership are only to be expected, given the low population densities typical of non-metropolitan areas in Australia and the distances many people must travel for social interaction, to gain access to services and facilities, and in connection with employment.

Throughout most of Tasmania's non-metropolitan areas, fewer than seven per cent of households were without cars. Only a few SLAs recorded rates in excess of 12 per cent for this variable, including West Coast (12.2 per cent of dwellings with no motor vehicle), Burnie [Part A] (13.4 per cent) and Launceston (with the highest proportion, of 14.4 per cent).

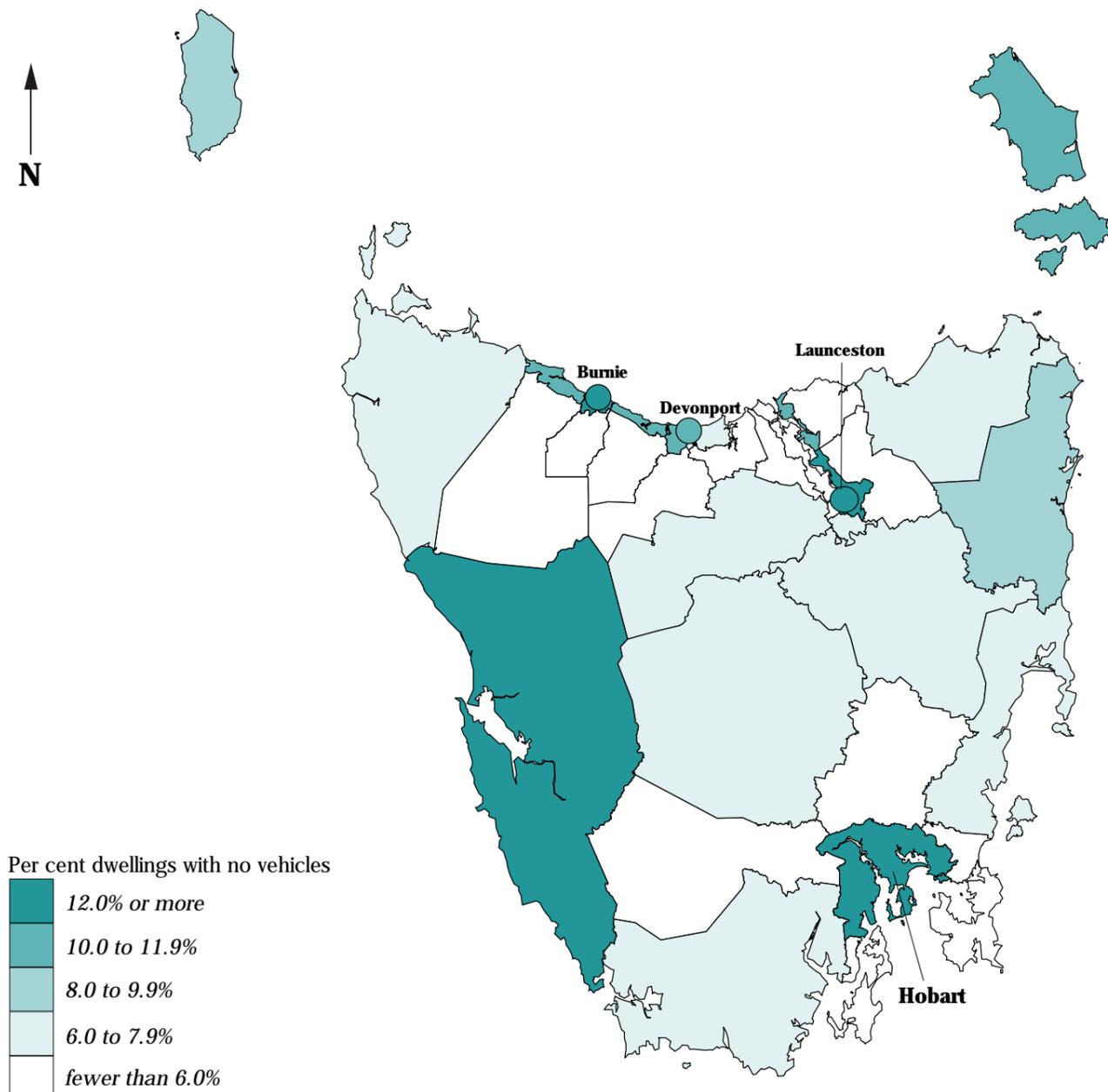
Indeed, the majority of SLAs had low rates of dwellings without a motor vehicle, with rates of less than 10 per cent recorded in three quarters of the non-metropolitan SLAs.

The correlation analysis showed there to be a generally weak association with most indicators of socioeconomic disadvantage. However, there were correlations of substantial significance with the variables for public rental housing (0.78) and single parent families (0.73). These results, together with the inverse correlation of substantial significance with the IRSD (-0.44), indicate the existence of an association at the SLA level between high rates of dwellings without a motor vehicle and socioeconomic disadvantage.

Map 3.27

Dwellings with no motor vehicle, Tasmania, 1996

as a percentage of all occupied private dwellings* in each Statistical Local Area

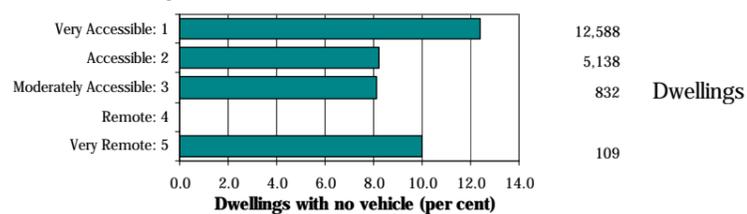


*Includes all privately owned, occupied, dwellings and private rented dwellings. Excludes institutions, motels, guest houses etc and caravans in parks

Source: See Data sources, Appendix 1.3

Details of map boundaries are in Appendix 1.2

Accessibility/Remoteness Index of Australia



The ARIA graph of dwellings without a motor vehicle shows declining proportions across the three 'accessible' ARIA categories, from the highest proportion in the Very Accessible areas (12.4 per cent) to the lowest in the Accessible (8.2 per cent) and Moderately Accessible (8.1 per cent) areas, respectively. There is a higher proportion of 10.0 per cent 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 3.34**). 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 3.34: SEIFA Index of Relative Socio-Economic Disadvantage, capital cities
Index values (Australia equals 1000)

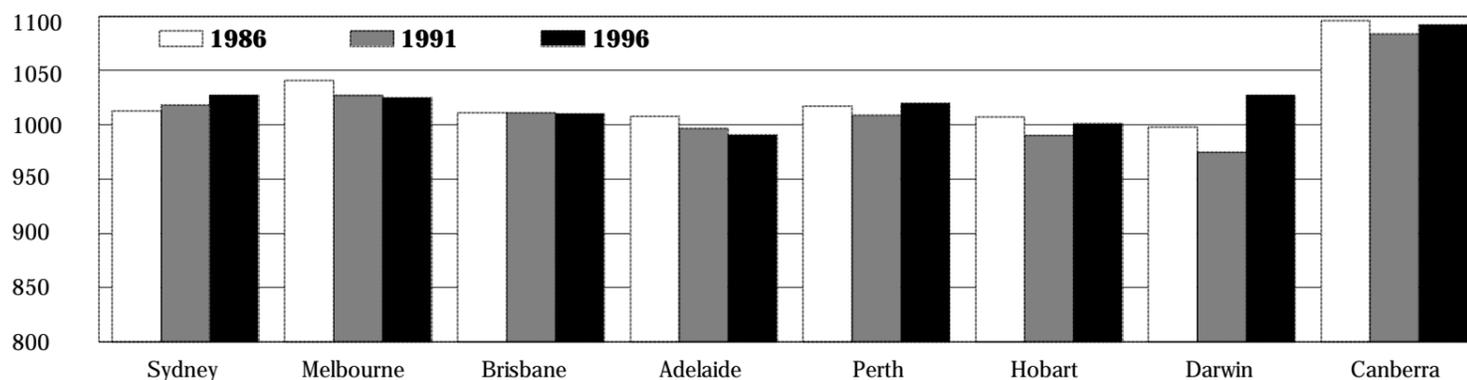
	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra ¹	All capitals
1996	1027	1025	1010	992	1020	1001	1027	1084	1021
1986	1013	1041	1011	1008	1017	1007	998	1089	1021

¹Includes Queanbeyan (C)

Source: ABS special data services

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

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



Source: ABS special data services

Hobart (Tasmania equals 1000)

At the 1996 Census, the SEIFA Index of Relative Socioeconomic Disadvantage (IRSD) score calculated for the Statistical Subdivision of **Hobart** was 1027 (when the index score for Tasmania was 1000).

Areas with relatively greater disadvantage (i.e. those of lower socioeconomic status) were Derwent Valley [Part A] (with an IRSD of 951) and Glenorchy (965). The most disadvantaged SLA in **Hobart** was Brighton, with an index score of 846. Brighton had the highest values for most indicators of socioeconomic disadvantage including those for low income families, single parent families, unemployed people and public rental housing.

As **Map 3.28** shows, high socioeconomic status SLAs in **Hobart** were on the lower western side of the Derwent River, with the SLAs of Hobart recording an index score of 1106 and Kingborough [Part A] a score of 1102. These SLAs also had the highest rates for high socioeconomic status indicators such as high income families and managers and administrators, and professionals.

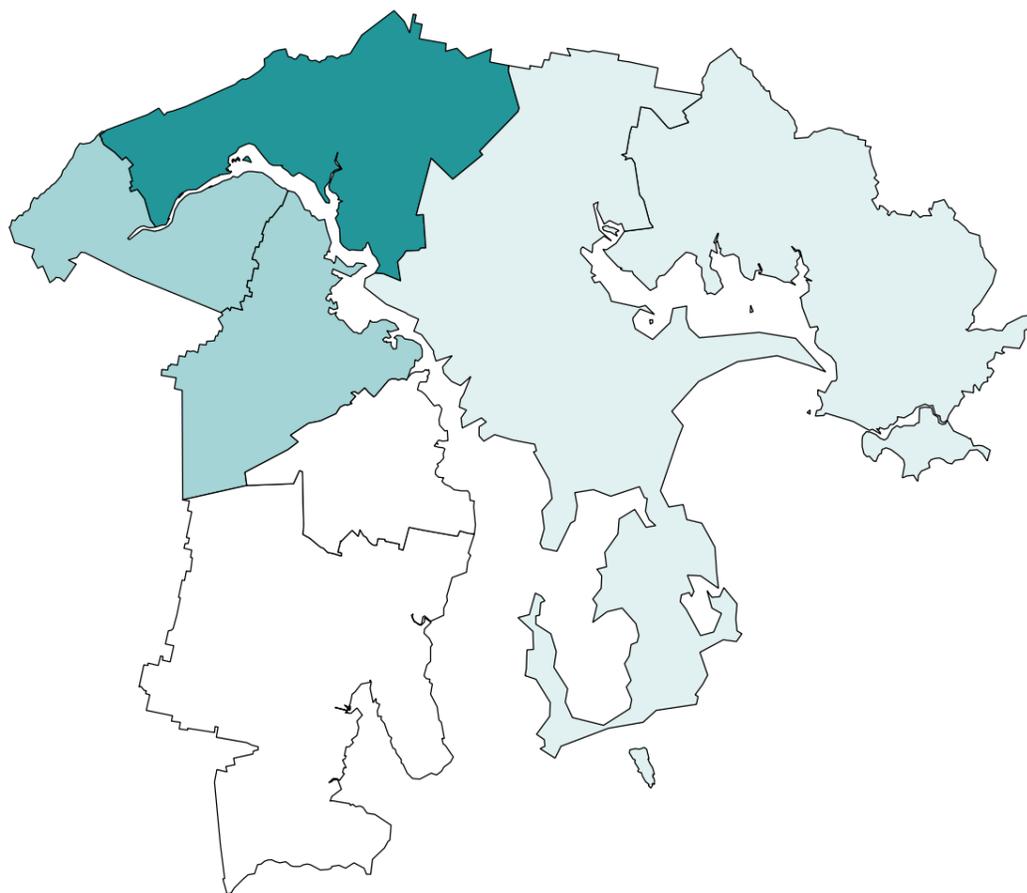
On the eastern side of the Derwent River, Clarence and Sorell had index scores of 1033 and 1002 respectively.

The IRSD was, understandably, highly correlated with many of the individual variables mapped, including those for low income families (-0.99), early school leavers (-0.95), semi-skilled and unskilled workers (-0.94), unemployed people (-0.91), the Indigenous population (-0.88), public rental housing (-0.85) and single parent families (-0.83). Conversely, there were correlations of substantial significance with indicators of high socioeconomic status, the strongest being with the variable for female labour force participation (0.97). These relationships indicate a positive association at the SLA level between this aggregate measure of socioeconomic disadvantage and the individual indicators analysed.

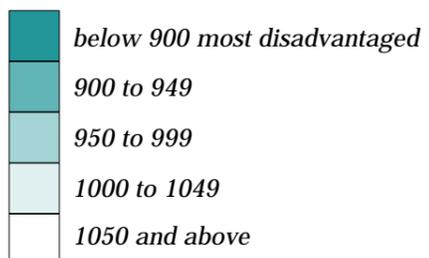
Map 3.28

ABS Index of Relative Socio-Economic Disadvantage, Hobart, 1996

IRSD index number for each Statistical Local Area



Index of Relative Socio-Economic Disadvantage



Source: See *Data sources, Appendix 1.3*

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 3.35), although the score in Western Australia was almost stable.

Table 3.35: SEIFA Index of Relative Socio-Economic Disadvantage, State/Territory
Index values (Australia equals 1000)

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total ¹
1996									
Capital city	1027	1025	1010	992	1020	1001	1027	1084	1021
Other major urban centres	973	980	985	..	..	..	..	..	978
Rest of State/Territory	973	995	965	963	970	955	909	- ⁴	972
Whole of State/Territory	1007	1016	989	984	1006	974	962	1091	1000
1986									
Rest of State/Territory	981	1026	972	986	971	988	917	- ⁴	999

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

²Includes Queanbeyan (C)

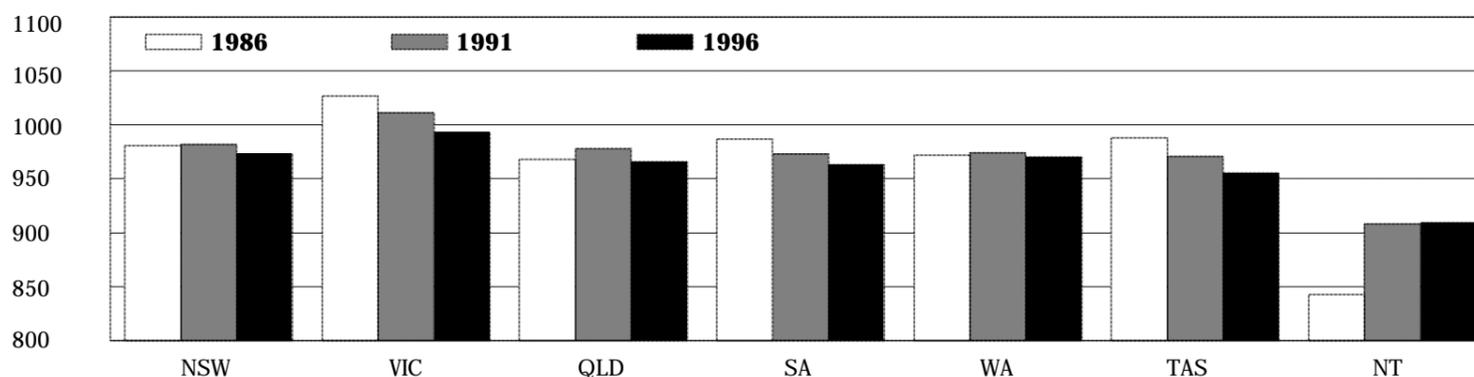
³Includes Newcastle and Wollongong (NSW); Geelong (Vic); and Gold Coast-Tweed Heads and Townsville-Thuringowa (Qld)

⁴Data 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.

Figure 3.2: SEIFA Index of Relative Socio-Economic Disadvantage, Rest of State/Territory



Source: ABS special data services

Rest of State (Tasmania equals 1000)

At the 1996 Census, the non-metropolitan area of Tasmania had a SEIFA Index of Relative Socio-Economic Disadvantage (IRSD) score of 981 (when the index score for Tasmania was 1000). This was considerably lower than the score recorded in **Hobart** (of 1027), indicating a greater degree of disadvantage for non-metropolitan residents relative to Tasmanians as a whole.

The majority of SLAs in non-metropolitan Tasmania had IRSD scores of between 950 and 1000, with four SLAs recording scores below 950. These lowest IRSD scores were in George Town [Part A] (904), Break O'Day (924), Tasman (948) and Central Highlands (949).

Map 3.29 shows that most SLAs with IRSD scores above 1000 were in the northern part of Tasmania. The two highest scores were in Meander Valley [Part A] (an IRSD score of 1056) and West Tamar [Part A] (1055), both on the western bank of the

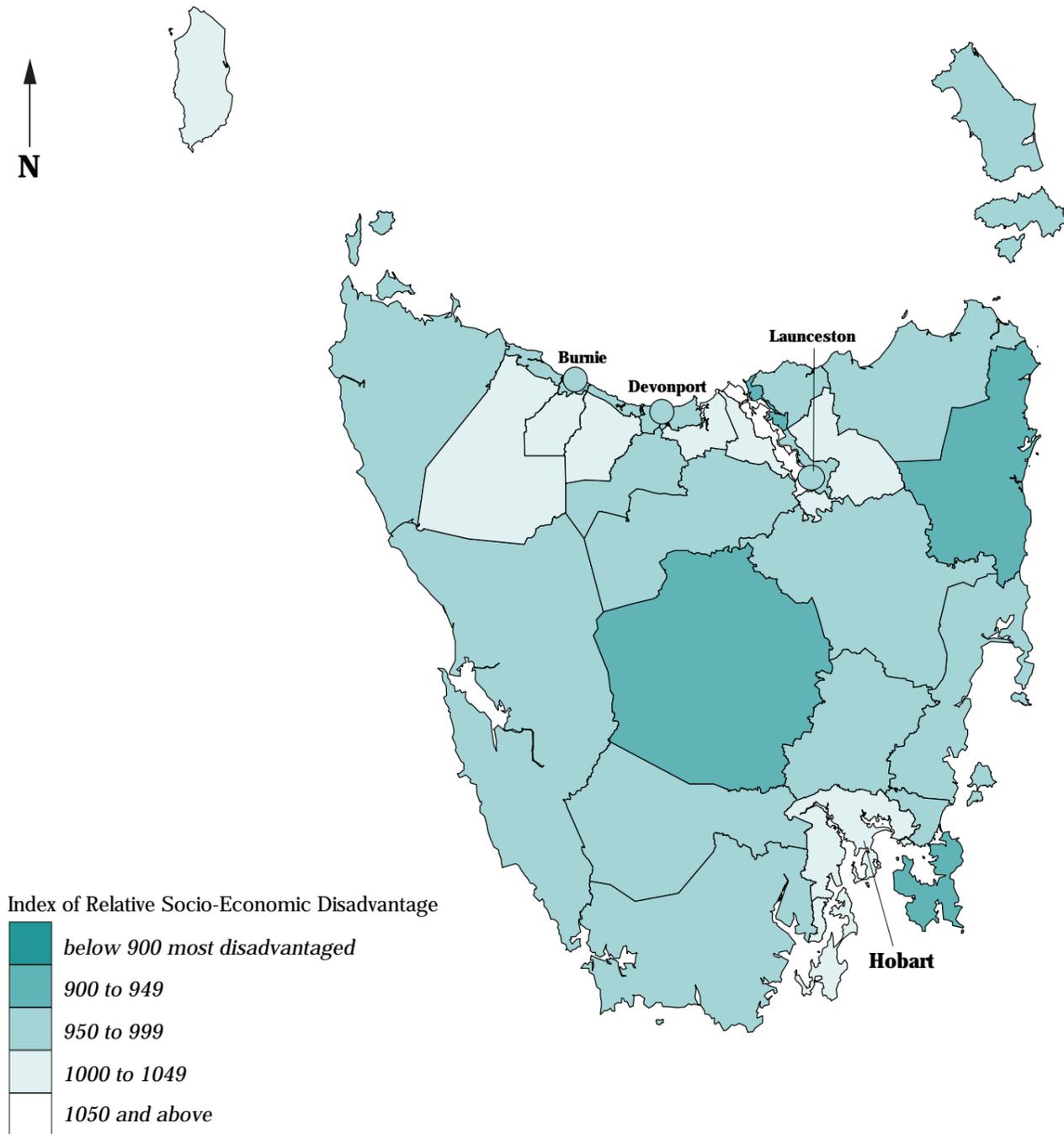
Tamar River. Of the nine SLAs which had scores of between 1000 and 1050, Kingborough [Part B] (1029) was the only one in the southern area of Tasmania.

The IRSD was, understandably, highly inversely correlated with many of the individual variables mapped, including those for low income families (-0.78) and unemployed people (-0.67). Positive correlations of meaningful significance were recorded with the variables for female labour force participation (0.68) and managers and administrators, and professionals (0.50). These relationships 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, Tasmania, 1996

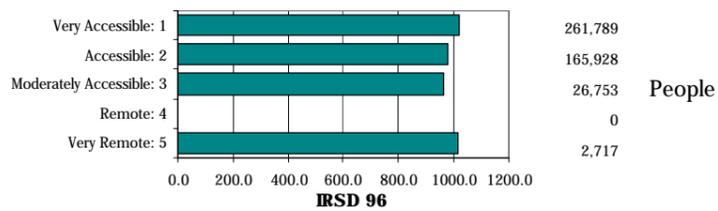
IRSD index number for each Statistical Local Area



Source: See Data sources, Appendix 1.3

Details of map boundaries are in Appendix 1.2

Accessibility/Remoteness Index of Australia



Only in Western Australia do the ABS Index of Relative Socio-Economic Disadvantage scores cover a narrower range when calculated by ARIA category. The highest index score (indicating the most advantaged areas) is shared by the Very Accessible and Very Remote ARIA areas (both with an IRSD of 1017) and the lowest score is in the Moderately Accessible areas (966).

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

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