

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

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

Queensland is the third most populous State in Australia. As **Table 3.1** shows, its 1996 population was 3,368,850 and its area of 1,730,311 square kilometres make it Australia's second largest State. However, in contrast with the other mainland states, less than half this population resides in the capital city Statistical Division. From 1947, the proportion of the population resident in the capital steadily increased from 36 per cent to 48 per cent in 1976. However, at the last three Censuses just over 44 per cent of Queensland's population has lived in the capital. Principally, this is a response to Queensland's physical environment, which has encouraged extensive agricultural activity centred around sugar cane production along most of the state's coastline. As well, a number of towns within this region have developed as port cities for their hinterlands, which have produced both minerals and livestock. As a result, Queensland is the most regionalised of the Australian states.

Although a penal settlement was established on St Helena Island in 1825, it was not until 1842 that free settlement occurred in Queensland. Brisbane was developed 20 kilometres upstream on the Brisbane River and in 1859 was designated the capital of the colony of Queensland. Initially, development focused on the river and its environs, but from the 1870s onwards, railways, trams and bridge construction allowed the city's development to break away from the constraint of the river and its role as the city's principal transport corridor. Whereas development had

previously been essentially oriented east-west, a north-south component was added to the urbanisation process in Brisbane. In the first decades after its establishment, Brisbane grew in an approximately circular fashion, and by the end of the nineteenth century, no part of the urban fringe was further than five kilometres from the river. Population data for Brisbane are difficult to locate. However, by 1860, Queensland had a population of 28,056. Twenty years later, it had increased to 211,040. In this period of rapid population increase, its rate of growth was substantially greater than that recorded for Australia. By the turn of the century, Queensland's population stood at 493,847. The earliest data for Brisbane's population is 1907, when 135,655 people resided there. These residents represented just one quarter of the state's population. Ten years later, Brisbane remained a relatively small city, although larger than Perth and Hobart. Its population had increased to 173,504, and its proportion of State population had remained virtually unchanged. During the first 40 years of the current century, Brisbane experienced consolidation, together with an expansion of its established circular pattern. In particular, it extended along the railway network east to Eagle Farm and Queensport, north-east to Northgate and Virginia, south-east to Indooroopilly and Corinda and south to Rocklea.

Between 1947 and 1971, Australia experienced a "long boom" of economic development, and Brisbane's population increased by 115 per cent, from 402,030 to 866,207. Much of this population growth was fuelled by the policies of post-war reconstruction and the development of a manufacturing and industrial base to the Australian economy. Widespread car ownership provided a mobility which had been unavailable in the past, which enabled a significant separation of residence from workplace. A booming economy together with car ownership allowed the urban area to expand, particularly to the north, north-east, south and south-west, opening up suburbs such as Strathpine, Petrie, Lawnton, Keperra, Ferny Hills, Ferny Grove, Inala, Richlands, Durack, Marsden, Loganlea and Redbank Plain. More notably, however, this growth rate continued during the next 20 years, when population growth in other states slowed due to the influence of global restructuring. Between 1971 and 1991, Brisbane's population increased by 115 per cent, compared with 21 per cent for both Melbourne and Adelaide, and 26 per cent for Sydney. During this time, population growth has been influenced by substantial net interstate migration on a scale not experienced by any other State. Between 1971 and 1986 nearly a quarter of a million Australians migrated into Queensland from other Australian states, mainly from Victoria and New South Wales. A large proportion of these people were older retirees, or early

Table 3.1: Population and area, Queensland, 1996

Section of State	Population	Area:		Population:	
		km ²	per cent	per km ²	per cent
Brisbane Statistical Division	1,488,883	4,643	0.3	320.7	44.2
Rest of State	1,879,967	1,725,668	99.7	1.1	55.8
Whole State	3,368,850	1,730,311	100.0	1.9	100.0

Source: ABS special data services

retirees from a restructured workforce. Another significant proportion is represented by youthful long term unemployed. For each group, aspects of Queensland's lifestyle and climate have influenced the decision to migrate. By 1996 Brisbane's population had increased to 1,488,883. There are significant implications for health providers and policy makers associated with these developing demographic characteristics.

In common with all large cities, Brisbane's population has developed strong patterns of socioeconomic differentiation. Broadly speaking, suburbs to the south-west and south of the city centre, and those near the mouth of the Brisbane River, have populations of lower socioeconomic status, represented by suburbs such as Ipswich, Bellbowrie, Browns Plains, Kingston and Loganholme. Other lower socioeconomic areas are found to the east and on the northern margins of the urban area. Suburbs in these locations include Victoria Point, Alexandra Hills and Birkdale, and Burpengary, Woody Point and Kallangur.

Higher status suburbs tend to be located in the more elevated parts of the western scarp, such as Mount Ommaney and Westlake, and in the inner western suburbs of Fig Tree Pocket and Chapel Hill, as well as to the north in suburbs such as Ferny

Grove and Albany Creek. A number of these patterns have significant implications for health service utilisation and provision.

Projected population

Between 1996 and 2006, Brisbane's population is projected to increase by 21.5 per cent to 1,808,300, and then to 2,095,700 by 2016. During the same time, the population in regional Queensland is projected to increase by 13.8 per cent to 2,138,600 persons, and to 2,447,100 by 2016. The projected growth rates for Brisbane are exceeded only by those predicted for Darwin (ABS 1998).

Data issues

Data quality of Indigenous population counts

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

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: Calculated from unpublished data supplied by ABS special data services

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

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

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

ABS SEIFA Index of Relative Socio-Economic Disadvantage

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

One of these indexes, the Index of Relative Socio-Economic Disadvantage (IRSD), summarises the information available from variables related to education, occupation, income, family structure, race (the proportion of Indigenous people), ethnicity (poor proficiency in use of the English language) and housing. The index reflects the extent of disadvantage represented by, for example, the proportion of low income families, of those with relatively low educational attainment and of high unemployment, in the area being examined. The variables are, therefore, similar to those presented in the remainder of this chapter. While the index number is a useful measure of socioeconomic disadvantage, users should realise its limitations. For example, while it represents the results of a particular set of statistical analyses on a set of variables from the 1996 Census, changing the variables could change the particular index values calculated (although the relativities between the areas for these variables are, in general, likely to remain). It also has a wide range of uses, such as in the allocation of resources or as a shorthand description of populations living in an area, but is not a universal answer to all such needs.

The IRSD 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 which comprise it. This average score is set at 1000. In this atlas, data mapped at the SLA level have been re-weighted so that Queensland 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 IRSD are on pages 76 to 79.

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 Brisbane (page 30), there is an inverse correlation of (-0.76) with the IRSD. Thus, at the small area level in Brisbane 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 (i.e. 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 straight forward to calculate from the Census the percentage of each SLAs adult population, leaving school at the age of 15 or less, but a significant part of the variation between SLAs in this measure is caused by age structure. A person aged 70 is less likely to have stayed at school past the age of 15 than a person aged 20, simply because of the changes over the past 55 years in the education system. Age-sex standardisation measures variations in educational participation in a way unaffected by age structure. For each SLA, a theoretical expected number of adult residents who left school at age 15 or less has been calculated, assuming that each 5 year age group in its population had the same educational participation record as that age group in the Queensland population as a whole. This expected number is then compared with the actual number, to establish whether the number of people who did not continue at school beyond 15 is significantly greater or less than one would expect given the area's age structure. A similar analysis compares the level of

participation for each State/Territory and capital city, with Australia as the standard.

Data definitions

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

Table 3.3: Details of demographic and socioeconomic variables mapped

Topic and variable name	Numerator	Denominator
Age distribution		
children aged 0 to 4	All children aged from 0 to 4 years	Total population
people aged 65 and over	All people aged 65 years & over	Total population
Families		
single parent families	Single parent families with dependent children [under 15 yrs]	All families
low income families ¹	Families with income less than \$21,000 p.a. [\$400 per week]	All families with an income
high income families ²	Families with income of \$52,000 or more p.a. [\$1,000 per week]	All families with an income
Labour force		
unskilled and semi-skilled workers	Intermediate production & transport workers; labourers & related workers	Total employed labour force
high status occupations ²	Managers and administrators; professionals	Total employed labour force
unemployed people	People with labour force status as unemployed	Total labour force
female labour force participation	All females aged 20 to 54 years in the labour force	All females aged 20 to 54 years
Educational participation and achievement		
early school leavers ³	People who left school at age 15 years or less, or did not go to school	Population aged 15 years & over
Aboriginal and Torres Strait Islander	Aboriginal and/or Torres Strait Islander people	Total population
People born in predominantly non-English speaking countries		
resident for 5 years or more	Number born in predominantly non-English speaking countries and resident for 5 years or more	Total population
resident for less than 5 years	Number born in predominantly non-English speaking countries and resident for less than 5 years	Total population
proficiency in English	People aged 5 years and over and born in predominantly non-English speaking countries who speak English 'not well' or 'not at all'	Population aged 5 years and over
Housing		
housing authority rented dwellings	Occupied private dwellings rented from the State/Territory housing authority	All occupied private dwellings
dwellings with no motor vehicle	Occupied private dwellings with no motor vehicles garaged or parked there on Census night	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

Brisbane

In 1986 there were 86,596 children aged from 0 to 4 years in **Brisbane**, 7.5 per cent of the population. Although their numbers rose to 96,483 in 1991 and 105,558 in 1996, the proportion declined to 7.2 per cent and then to 7.1 per cent.

High concentrations of young children occurred in locations to the south and north of the city centre (**Map 3.1**). The highest proportions of young children were in Marsden (12 per cent) and Loganlea (11.7 per cent). Other areas in the south of **Brisbane** with high concentrations of children aged from 0 to 4 years were Browns Plains (10.6 per cent), Greenbank [Part B] (10.6 per cent) and Waterford West (10.3 per cent). The highest concentrations in the north of the city were in Deception Bay (10.2 per cent) and in Burpengary-Narangba and Morayfield, each with ten per cent.

Whereas the more recently developed outer suburbs had the highest proportions of young children in their populations, the areas with proportions below six per cent were confined to older suburbs closer to the city centre and the Brisbane River. In the combined area of City/Spring Hill, children aged from 0 to 4 years represented 1.6 per cent of the population, while in New Farm and St Lucia their proportions were 2.5 and 2.8 per cent respectively.

Generally, areas with high concentrations of children aged from 0 to 4 years also had the largest numbers of young children. Between them, Ipswich Central (5,681) and Ipswich East (3,688) had nearly 10,000 children. In Gold Coast [Part A] there were 3,513 children, with a further 2,981 in the Birkdale/Ormiston area.

There were correlations of meaningful significance at the small area level with the variables for unskilled and semi-skilled workers (0.55) and early school leavers (0.70). Inverse correlations were recorded with the variables for managers and administrators, and professionals (-0.67), dwellings with no motor vehicle (-0.60)

and people aged 65 years and over (-0.58), indicating that these population groups are less likely to be found in high proportions in areas with high proportions of young children.

Gold Coast-Tweed Heads

In **Gold Coast-Tweed Heads** 5.9 per cent of the population was children aged from 0 to 4 years, slightly below that in **Brisbane**. This is as expected, as this region is a favoured retirement centre, not only for residents of Queensland, but also for retirees from other areas of Australia. The total number of young children in the **Gold Coast-Tweed Heads** in 1996 was 22,092.

The proportion of the population under the age of 5 was comparatively low along the coast in areas such as Surfers Paradise/Benowa (3.4 per cent) and the Broadbeach Waters/Mermaid Waters area (3.6 per cent). On the other hand, the highest proportions of young children were found in the inner areas of Oxenford (10.6 per cent) and Carrara-Merrimac (8.7 per cent).

Townsville-Thuringowa

Townsville-Thuringowa displayed similar characteristics to **Gold Coast-Tweed Heads** in that, in 1996, higher proportions of children aged from 0 to 4 years were located in areas away from the coast, with the lowest rates in seaside areas. In 1996, 7.8 per cent of **Townsville's** population was aged from 0 to 4 years (9,590 children).

Outer areas such as Thuringowa [Part A] and Murray/Mt Louisa had the highest proportions of young children, with 10.1 and 8.0 per cent respectively. The combined area of Townsville Coastal/Magnetic Island had the lowest proportion, of 5.2 per cent.

Map 3.1: Children aged 0 to 4 years, Brisbane, Gold Coast-Tweed Heads and Townsville-Thuringowa, 1996

as a percentage of the total population in each area*



*Most SLAs have been grouped to approximate postcode areas

Source: Calculated on data from ABS 1996 Census

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 nationwide percentage for the *Rest of State/Territory* areas was 7.5 per cent, with a similar percentage in Queensland (**Table 3.5**).

The percentage of children at the *Whole of State/Territory* level aged from 0 to 4 years in Queensland in 1996 corresponds to the national average, and is similar to all but South Australia (lower at 6.7 per cent) and the Northern Territory (considerably higher at 8.6 per cent). A comparison of *Rest of State/Territory* figures reveals a similar position, with only the Northern Territory and Western Australia exhibiting markedly different percentages.

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

At the time of the 1996 Census, there were 240,735 children aged from 0 to 4 years outside **Brisbane** and the other major urban centres in Queensland. Of these, just under half (105,848 children, 7.4 per cent of the total population) lived in areas outside the major urban centres. This represented a decline from the 1991 population of 107,534 children (7.9 per cent of the total population) but an increase from the 1986 figure of 100,340 children (6.4 per cent).

The overall pattern of distribution (**Map 3.2**) shows that the most remote SLAs, such as those in the far north, had the higher proportions of children aged from 0 to 4 years, although some of the numbers were small. This was the case with Torres (1,192 children, 13.9 per cent); Aurukun, on the west coast of Cape York (96 children, 12.3 per cent); and Mornington, in the Gulf of Carpentaria (129 children, 11.5 per cent). The next highest proportions were found near Rockhampton, with Duaranga and Fitzroy [Part A] each recording over 10.0 per cent.

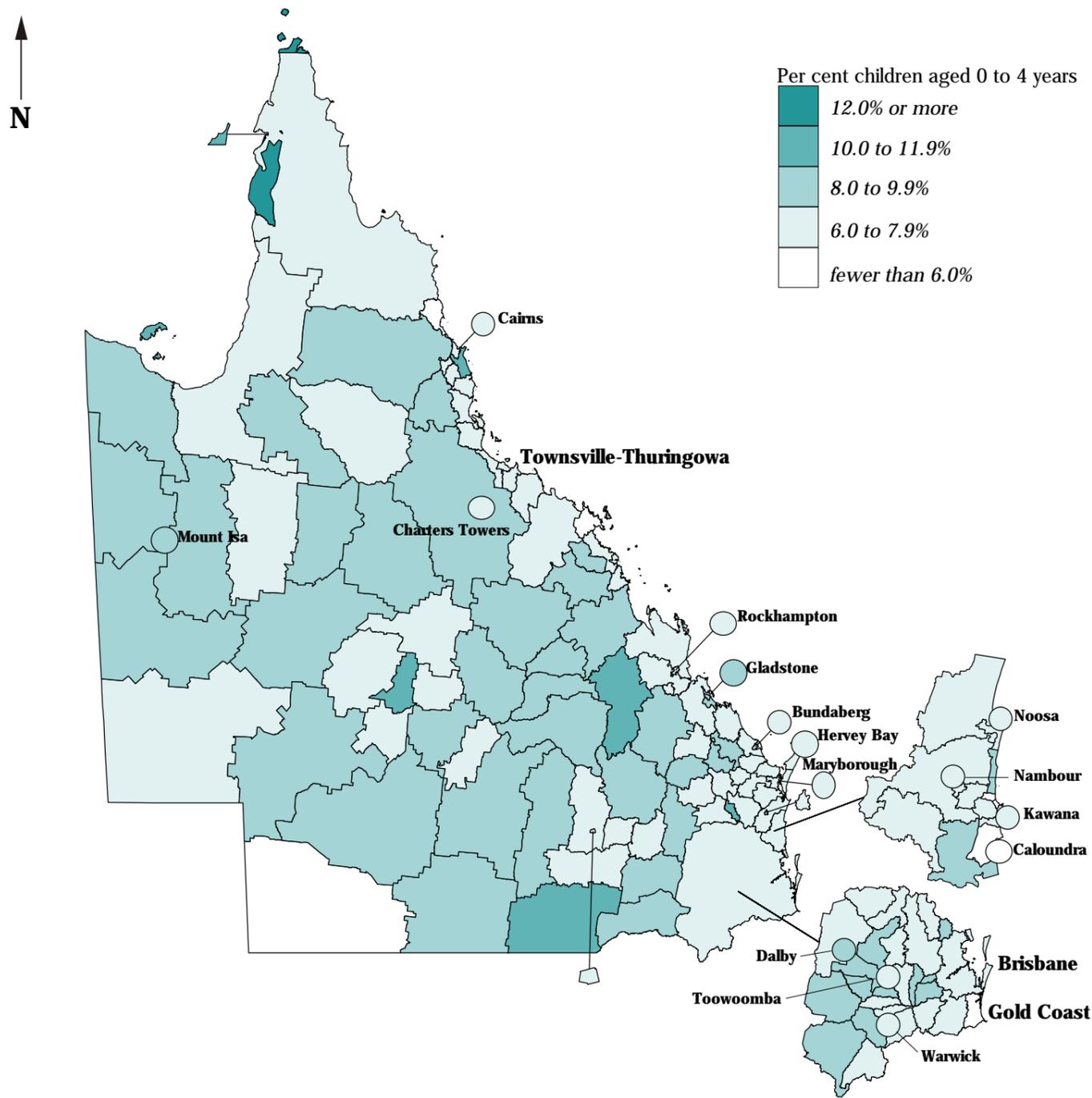
It would be expected that the SLAs with the largest overall populations would have the most children aged from 0 to 4 years. Regional centres such as Cairns (8,341 children, 6.9 per cent), Toowoomba (5,857 children, 7.0 per cent), Mackay [Part A] (4,766 children, 7.9 per cent), Rockhampton (4,246 children, 7.1 per cent), Bundaberg (3,261 children, 7.6 per cent) all had large numbers of children, as did Hervey Bay (2,649, 6.2 per cent).

Bulloo, in the south-west corner of the State near the New South Wales/South Australia borders, had only 4.1 per cent of its population in this age group. The remaining SLAs with proportions below 5.0 per cent were located on the Sunshine Coast, to the north of **Brisbane**, and included Mooloolaba and Caloundra South. As noted for **Gold Coast-Tweed Heads**, the low proportions can be attributed to the attraction of this area for people in retirement.

There was no consistent evidence in the correlation analysis of an association at the SLA level between high proportions of young children and socioeconomic status. The only correlation of meaningful significance was recorded with the variable for Indigenous people (0.56): there was also an inverse correlation of meaningful significance with the variable for people aged 65 years and over (-0.60).

Map 3.2: Children aged 0 to 4 years, Queensland, 1996

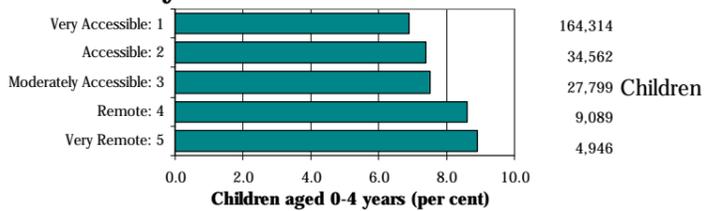
as a percentage of the total population in each Statistical Local Area



Source: Calculated on data from ABS 1996 Census

Details of map boundaries are in Appendix 1.2

Accessibility/Remoteness Index of Australia



The highest proportions of children aged from 0 to 4 years live in the most remote areas (8.9 per cent of the population in the Very Remote and 8.6 per cent in the Remote ARIA categories, respectively), with lower proportions in the Moderately Accessible (7.5 per cent) and Accessible (7.4 per cent) categories. The lowest proportion was in the Very Accessible areas (6.9 per cent of the population). The numbers of children are largest in the most highly populated areas, and drop off markedly at each level of increasing remoteness.

Source: Calculated on ARIA classification, DHAC

National Social Health Atlas Project, 1999

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, 11.0 per cent of the population of **Brisbane** was aged 65 years and over, with similar percentages in **Melbourne** and **Perth**. **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
Per cent

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

¹Includes Queanbeyan (C)

Source: ABS special data services

Brisbane

In 1986 there were 120,883 people aged 65 years and over in **Brisbane**, 10.5 per cent of the population. By 1991, this had increased to 144,783 (10.9 per cent) with a further increase to 163,158 in 1996 (11.0 per cent).

As **Map 3.3** shows, the highest concentrations of persons aged 65 years and over were generally confined to inner areas of **Brisbane** on the south side of the Brisbane River and extending north to the coast. The highest concentration was in Bribie Island, with 28.9 per cent of its population in this age group. The combined area of Chermside West/Chermside (22.0 per cent) and New Farm (20.1 per cent) also had proportions mapped in the highest range. Relatively high proportions were also found in Greenslopes (19.8 per cent), Redcliffe (19.1 per cent), Dutton Park/Woolloongabba (19.1 per cent) and Nundah/Wavell Heights (18.6 per cent).

Proportions of persons aged 65 years or more tended to reduce with increasing distance from the city centre, to the south, east and north-east of the city. The lowest proportions were recorded in Marsden (3.2 per cent), Browns Plains (3.5 per cent), Bray Park (3.8 per cent), in the combined area of Greenbank [Part A]/Beaudesert (4.1 per cent) and Ipswich North (4.1 per cent).

The largest number of people aged 65 years and over was recorded in Redcliffe, with 9,182 people, with a further 7,690 people in this age group in Ipswich Central, 6,243 in the combined area of Bridgeman Downs/Boondall and 5,092 located in the Mt Gravatt/Rochedale area.

There was no consistent evidence in the correlation analysis of an association at the small area level between high proportions of older people and socioeconomic status. The only correlation of substantial significance at the small area level was with the variable for dwellings with no motor vehicle (0.71); there was also an inverse correlation of meaningful significance with the variable for children aged from 0 to 4 years (-0.58).

Gold Coast-Tweed Heads

In **Gold Coast-Tweed Heads**, there has been a substantial increase in the population of people aged 65 years and over, which more than doubled in size from 31,072 people in 1986 to 68,054 or 18.1 per cent of the population in 1996 (an increase of 119 per cent).

The highest concentration of older people occurred in the areas adjacent to the coast, with 37.4 per cent in the stretch of coast from Coolangatta to Tugun and 26.8 per cent in the section from Broadbeach to Burleigh Heads. The areas further from the coast were characterised by lower proportions of people aged 65 years and over, with 6.5 per cent recorded in Oxenford and 6.7 per cent in Guanaba-Currumbin Valley.

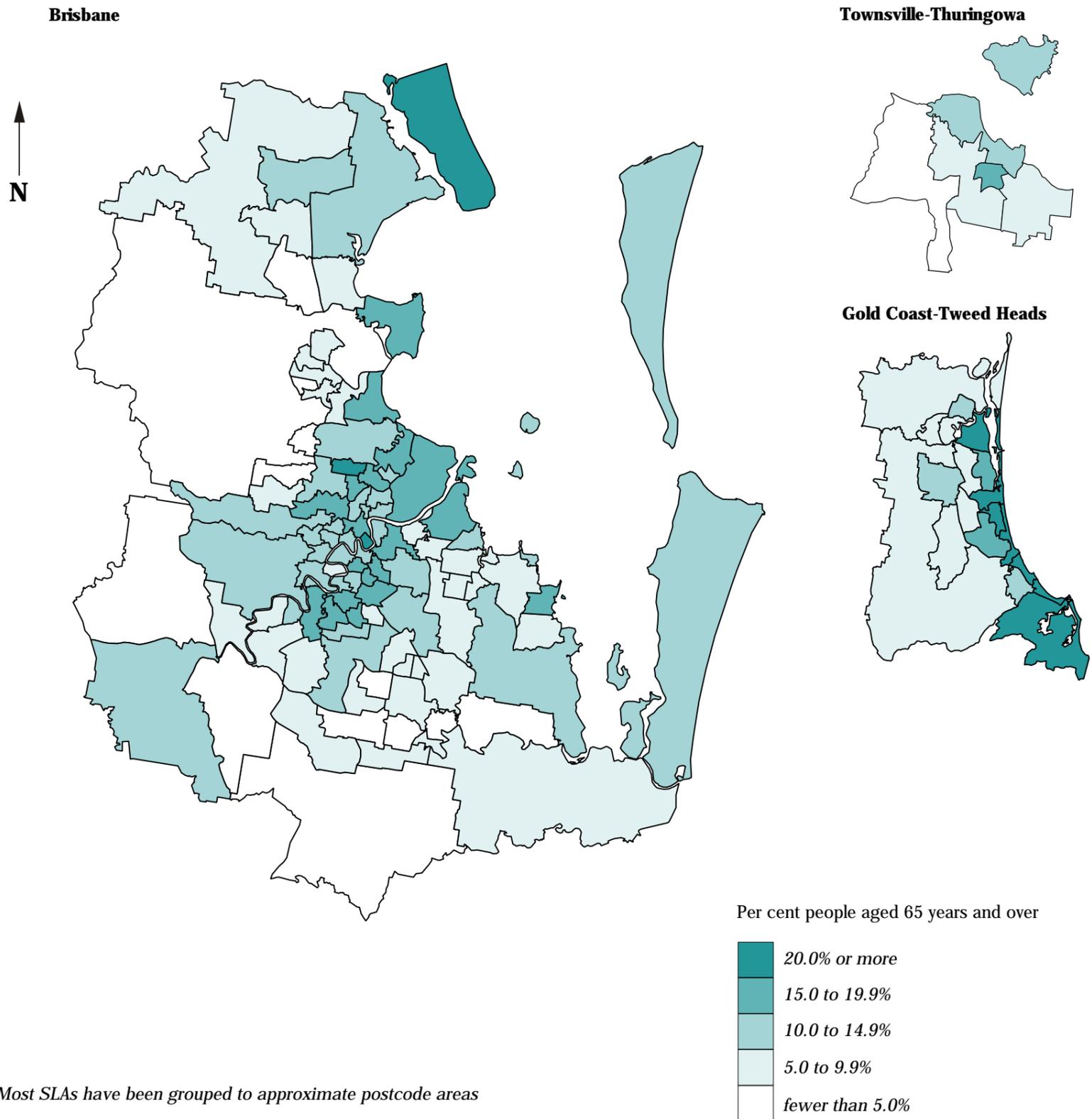
Townsville-Thuringowa

Townsville-Thuringowa displayed similar trends to those in **Gold Coast-Tweed Heads**, although concentrations of people in this age group were markedly lower. In 1996 the overall proportion of the population aged 65 years and over was 9.3 per cent (11,492 people).

The proportions of people aged 65 years and over fell as the distance from the coast increased. The areas from Gulliver to Hermit Park had the highest proportion (of 15.7 per cent) and the outer areas of Thuringowa [Part A] and Murray/Mt Louisa had the lowest proportions of 4.8 per cent and 7.5 per cent, respectively.

Map 3.3: People aged 65 years and over, Brisbane, Gold Coast-Tweed Heads and Townsville-Thuringowa, 1996

as a percentage of the total population in each area*



*Most SLAs have been grouped to approximate postcode areas

Source: Calculated on data from ABS 1996 Census

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

People aged 65 years and over, 1996

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 3.7**, 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 a 36.6 per cent increase between 1986 and 1996.

Table 3.7: Proportion of population aged 65 years and over, State/Territory
Per cent

	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

In 1986, 123,749 people outside the major urban centres in Queensland were aged 65 years and over, 10.3 per cent of the population. This number had increased to 157,036 (11.5 per cent) in 1991 and to 173,356 (12.2 per cent) in 1996.

The largest concentrations of people aged 65 years and over were centred immediately to the north of **Brisbane**, primarily in the Sunshine Coast (**Map 3.4**). The SLAs of Caloundra (North and South) (24.1 per cent) and Caloundra (Kawana) (19.4 per cent), Noosa (20.2 per cent) and Hervey Bay (19.9 per cent) had the highest percentages. Mount Morgan also had 19.9 per cent of its population in this group.

The largest numbers of people aged 65 years and over were recorded in regional centres including Cairns (with 19,429), Toowoomba (11,813) and Rockhampton (8,300). Hervey Bay, near Bundaberg, had 8,974 people in this age group, while Bundaberg itself had 6,995 people.

There are two main areas in non-metropolitan Queensland with low proportions of the population aged 65 years and over.

The first is in the remote regions in the far north of the State, including Weipa (with 1.2 per cent and 26 people in this age group), Aurukun (3.2 per cent and 25 people), Mornington (3.5 per cent and 39 people) and Torres (4.8 per cent and 410 people). These areas have comparatively high proportions of Aboriginal and Torres Strait Islander people and the low levels of people aged 65 and over are in part a reflection of the higher premature mortality rates experienced by the Indigenous population. The second area with low percentages of people aged 65 years and over was located near Mackay on the central coast. This region includes the SLAs of Duaringa, Broadsound, Nebo, Belyando and Peak Downs, all of which recorded under 5.0 per cent of their population in this age group.

There was no consistent evidence in the correlation analysis of an association at the SLA level between high proportions of older people and socioeconomic status. Inverse correlations of meaningful significance were recorded with the variables for high income families (-0.51) and young children (-0.60).

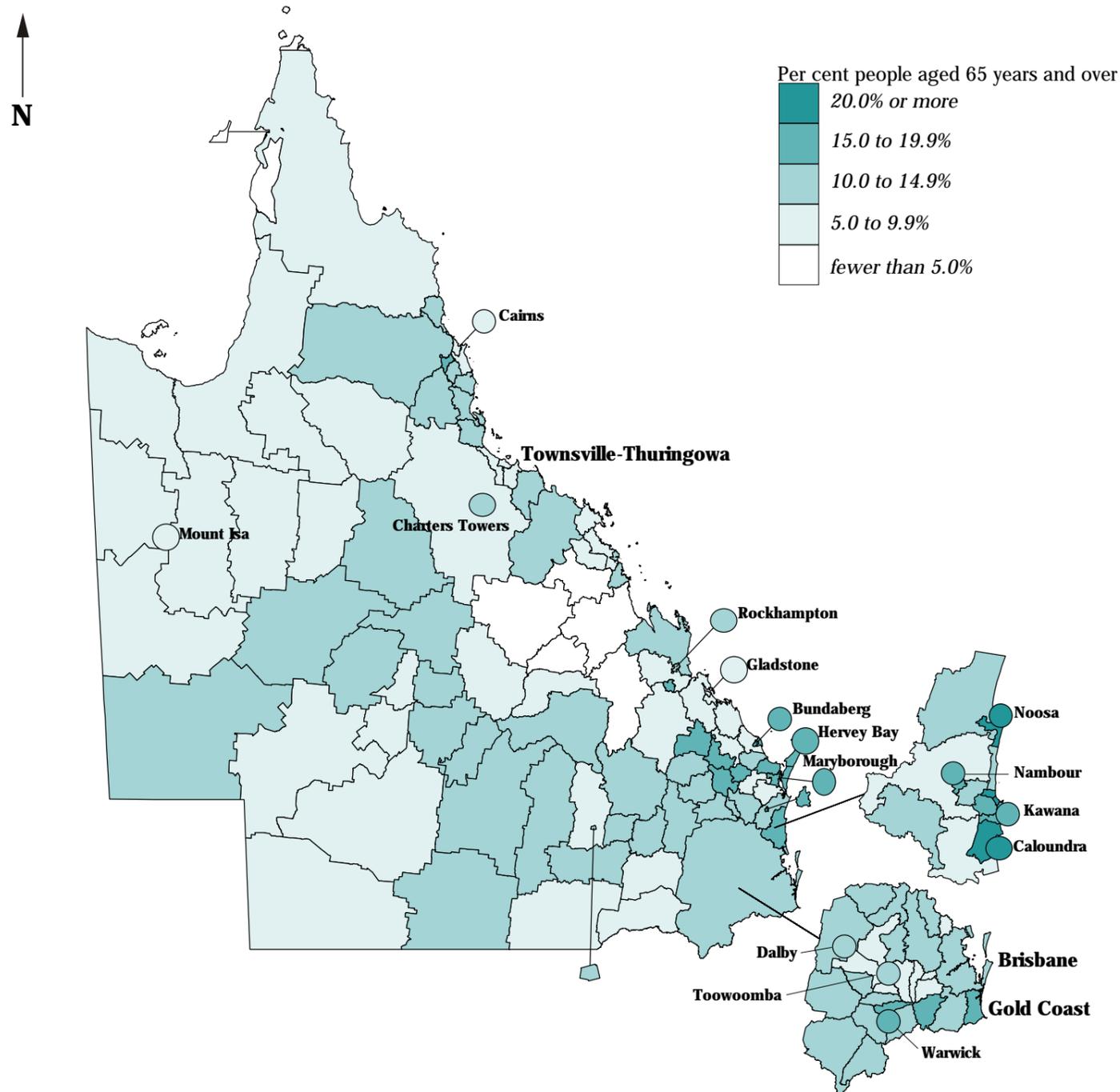
Table 3.8: Structure of population aged 65 years or more, Queensland, 1986 and 1996
Per cent

Age group (years)	People aged 65 years or more				Increase 1986 to 1996		Proportion of females, 1996	
	1986		1996		Brisbane	Rest of State	Brisbane	Rest of State
65 to 69	33.5	36.3	29.9	33.5	20.4	41.4	52.8	49.9
70 to 74	27.4	28.9	27.0	28.3	33.0	49.8	55.7	50.9
75 to 79	19.1	18.6	20.3	19.0	43.5	56.9	59.0	54.2
80 to 84	11.4	9.8	13.1	11.6	55.1	80.7	63.6	59.1
85 +	8.6	6.4	9.7	7.6	52.1	81.3	71.0	65.6
Total 65+	100.0	100.0	100.0	100.0	35.0	53.1	58.0	53.3

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

Map 3.4: People aged 65 years and over, Queensland, 1996

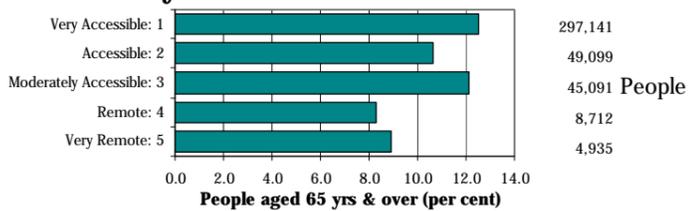
as a percentage of the total population in each Statistical Local Area



Source: Calculated on data from ABS 1996 Census

Details of map boundaries are in Appendix 1.2

Accessibility/Remoteness Index of Australia



The highest proportions of people aged 65 years and over live in the areas categorised as 'accessible', comprising 12.5 per cent of the population in the Very Accessible areas, 12.1 per cent in the Moderately Accessible areas and 10.6 per cent in the Accessible areas. The Remote areas had the lowest proportion, of 8.3 per cent, with a similar proportion (8.9 per cent) 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

Brisbane

In 1986, 8.3 per cent of families, or 25,393 families, in **Brisbane** were comprised of one parent with dependent children. In 1991 this number had increased to 31,577 families (9.3 per cent of all families), and by 1996 had increased again to 40,899 (10.5 per cent).

Single parent families in **Brisbane** were principally located in a band of suburbs stretching from Ipswich Central to the areas of Gold Coast [Part A] and in a number of localities north of the Brisbane River (**Map 3.5**). The highest concentrations of single parent families were in Waterford West (20.4 per cent), Loganlea (20.2 per cent), the combined area of Berrinba-Karawatha/Kingston (19.6 per cent) and Thorneside (17.9 per cent).

Generally, the lowest concentrations of single parent families were in localities towards the fringe of **Brisbane**. In Chandler, single parent families comprised 3.8 per cent of all families, with 4.9 per cent in Anstead/Bellbowrie/Moggill and 5.1 per cent in Caboolture Balance.

The largest numbers of single parent families were located to the south-west of **Brisbane**, where there were 2,272 families in Ipswich Central and another 1,341 in Ipswich East. Elsewhere, there were 1,655 single parent families in Redcliffe, 1,611 in the combined area of Berrinba-Karawatha/Kingston and 1,392 in Gold Coast [Part A].

The distribution of single parent families is strongly associated at the small area level with a number of indicators of socioeconomic disadvantage, including the variables for dwellings rented from the State housing authority (0.71), unskilled and semi-skilled workers (0.66), low income families (0.66) unemployed people (0.65) and Indigenous people (0.61).

These results, together with the inverse correlation of substantial significance with the IRSD (-0.76), indicate the existence of an association at the small area level between high proportions of single parent families and socioeconomic disadvantage.

Gold Coast-Tweed Heads

In 1996, the proportion of single parent families in **Gold Coast-Tweed Heads** was slightly higher than in **Brisbane**, at 11.1 per cent (a total of 10,197 single parent families).

The pattern of distribution evident from the map is of fewer single parent families on the coast or in the outermost regions. The highest proportions were in the combined area of Labrador/Southport (1,378 single parent families, 16.1 per cent), Oxenford (245, 13.1 per cent) and Carrara-Merrimac (418, 12.9 per cent). Areas with the lowest proportions of single parent families were found in the north, in Hope Island (7.3 per cent and 49 families) and Coomera-Cedar Creek (7.5 per cent and 122 families).

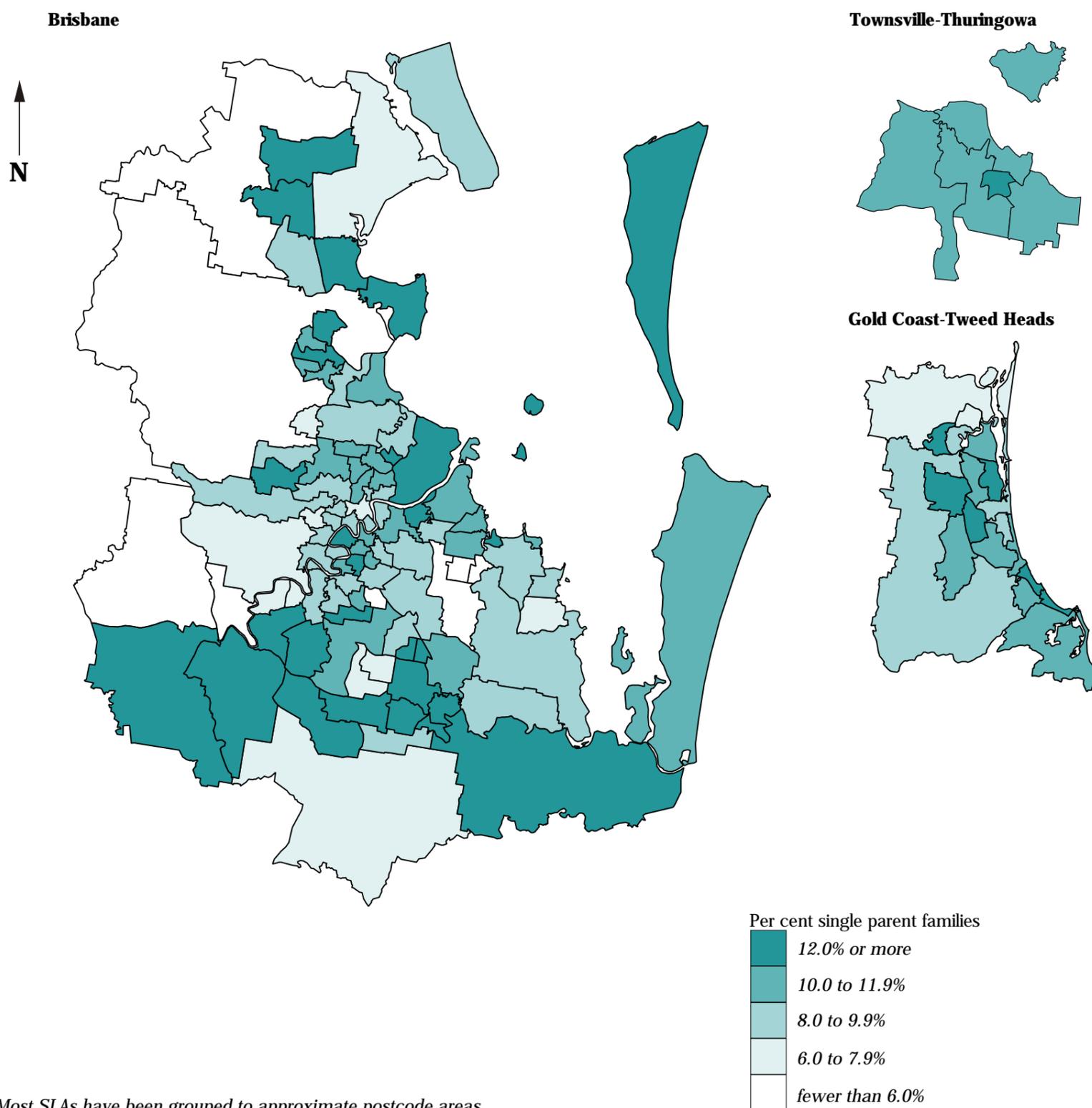
Townsville-Thuringowa

In 1996, 3,543 families in **Townsville-Thuringowa** were single parent families. This represented 11.8 per cent of all families.

High proportions of single parent families were distributed through much of **Townsville-Thuringowa**, ranging from 13.0 per cent in the combined area of Gulliver/Hermit Park to 11.3 per cent in the combined area of Townsville/Magnetic Island.

Map 3.5: Single parent families, Brisbane, Gold Coast-Tweed Heads and Townsville-Thuringowa, 1996

as a percentage of all families in each area*



*Most SLAs have been grouped to approximate postcode areas

Source: Calculated on data from ABS 1996 Census

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

Single parent families, 1996

State/Territory comparison

In 1996, 10.1 per cent of all families in the non-metropolitan areas of Queensland were single parent families (defined here as single parent families with dependent children under 15 years of age). 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 3.10**) and well below the proportion in the Northern Territory (14.6 per cent). 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 3.10: 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	..	..	..	..	..⁴	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

There were 35,813 single parent families (10.1 per cent of all families) in Queensland (outside the major urban centres) in 1996, a substantial increase from the 24,697 families (7.7 per cent of all families) in this category in 1986. The attraction in the non-metropolitan areas is in part related to the availability of low-rent public housing in these areas (**Map 3.25**). However the range of health and welfare services used by single parent families, in particular children in these families, is generally not available outside of the capital cities, raising issues of access.

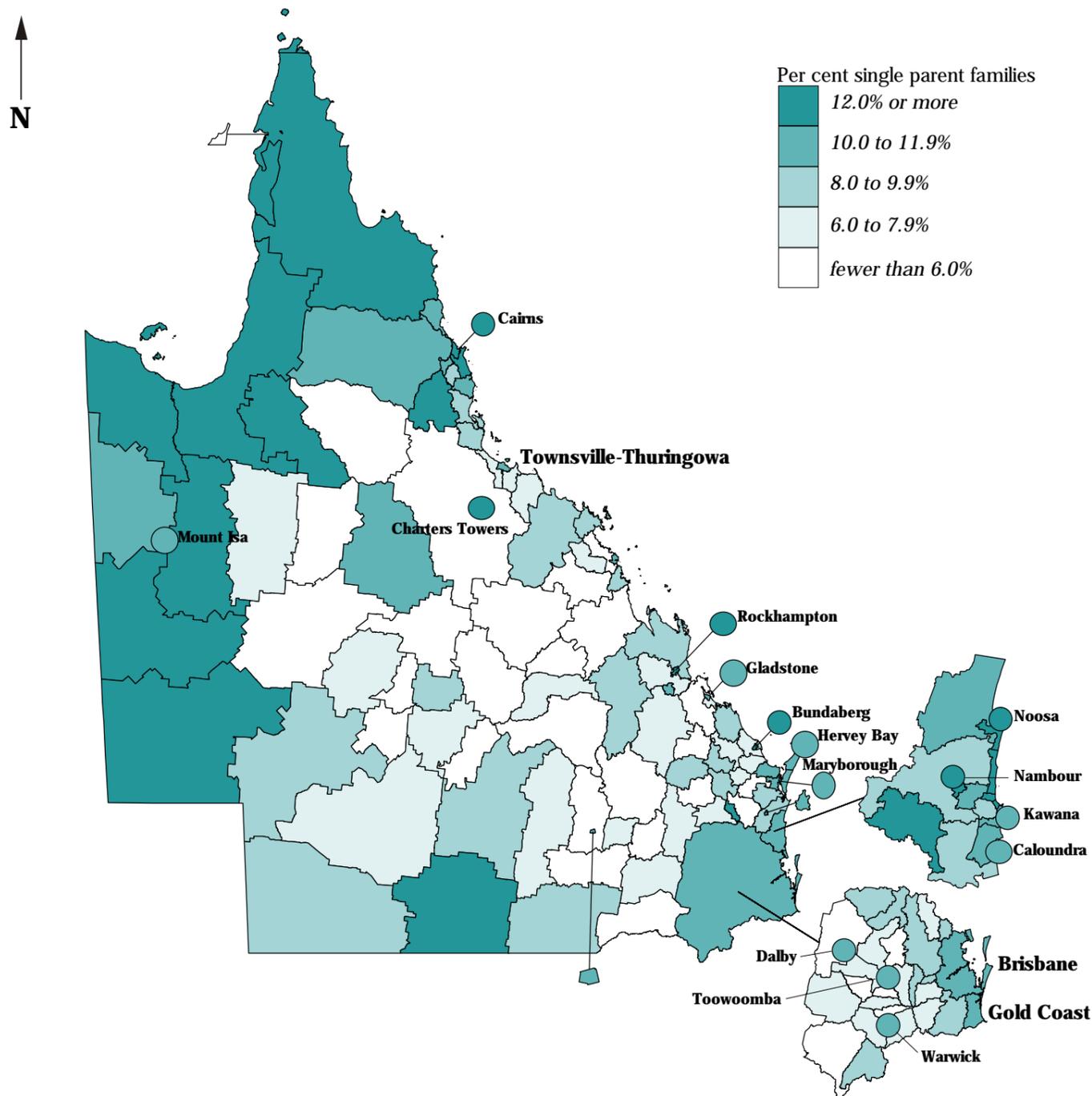
Map 3.6 shows a fairly distinctive pattern, of SLAs with medium to high proportions of single parent families, and SLAs with very low proportions. SLAs in the far northern region of Cape York generally recorded the highest percentages of single parent families, although numbers were small. The highest rates in this region were in Aurukun (38.2 per cent and 65 single parent families), Torres (25.2 per cent and 406), Mornington (25.0 per cent and 63), Carpentaria (19.7 per cent and 152) and Cook (18.8 per cent and 222). Diamantina, located in the south-west corner of the State, had a similarly high percentage, with 25.9 per cent. Comparatively high percentages were recorded all along the Northern Territory border.

The largest numbers of single parent families were primarily in larger centres. Cairns, with 3,274 single parent families (12.7 per cent, and 20.1 per cent in Cairns Central Suburbs); Toowoomba, with 2,466 (11.9 per cent); Rockhampton, with 1,814 (12.3 per cent); Mackay [Part A], with 1,769 (11.3 per cent); and Bundaberg, with 1,375 (12.0 per cent), are prime examples. Hervey Bay also warrants mention with 1,129 single parent families, 10.5 per cent of all families.

As shown in the map, many of the central areas of the State had low proportions of single parent families. The lowest were found in the SLAs of Ilfracombe and Isisford, where there were no single parent families recorded. Both of these SLAs are in the central west of the State and had only 77 and 71 families in them respectively. Nebo (near Mackay) had 12 single parent families and Waggamba (near the New South Wales border), 20 single parent families, equating to 2.3 and 2.6 per cent respectively.

There were correlations of substantial significance at the SLA level with the variables for dwellings with no motor vehicle (0.82) and the Indigenous population (0.81). These results, together with the inverse correlation of meaningful significance with the IRSD (-0.69), indicate the existence of an association at the SLA level between high proportions of single parent families and socioeconomic disadvantage.

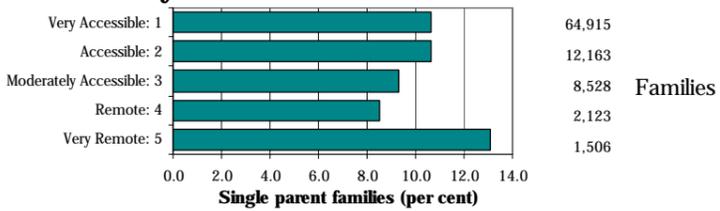
Map 3.6: Single parent families, Queensland, 1996
as a percentage of all families in each Statistical Local Area



Source: Calculated on data from ABS 1996 Census

Details of map boundaries are in Appendix 1.2

Accessibility/Remoteness Index of Australia



The most remote areas had the highest proportion of single parent families (13.1 per cent), with the lowest proportions in the Remote (8.5 per cent) and Moderately Accessible (9.3 per cent) categories. In both the Very Accessible and Moderately Accessible categories, 10.6 per cent of families were single parent families. The number of families again drops off rapidly with increasing remoteness.

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

Low income families, 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 18.0 per cent of all families in **Brisbane** for which income details were obtained at the 1996 Census (**Table 3.11**). 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 percentages, 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 20 regarding the interpretation of these comparisons over time.

Table 3.11: Low income families, capital cities
Per cent

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

¹Includes Queanbeyan (C)

Source: ABS special data services

Brisbane

In 1996 there were 69,782 low income families in **Brisbane**, 18.0 per cent of all families. This was a substantial increase in both the number and proportion from 1986, when there were 45,735 low income families (16.9 per cent). In 1991 there were 51,676 low income families (15.2 per cent).

The highest proportions of low income families in 1996 were in the SLAs of Bribie Island (39.1 per cent), Redland Balance (38.2 per cent), Moreton Island (35.3 per cent, but with just 6 low income families), Caboolture Central (28.9 per cent), the combined area of Berrinba-Karawatha/Kingston (28.9 per cent), Caboolture East (28.4 per cent), Waterford West (27.5 per cent) and Redcliffe (27.4 per cent) (**Map 3.7**).

Areas with low proportions of low income families were confined to the higher socioeconomic areas to the west of **Brisbane**. Among these areas, the highest proportions of low income families were in Anstead/Bellbowrie/Moggill (7.5 per cent), Albany Creek (7.9 per cent), Upper Brookfield/Fig Tree Pocket (8.0 per cent), Ipswich North (8.8 per cent), Pine Rivers Balance (9.6 per cent), Ferny Hills/Everton Hills (9.7 per cent) and Jindalee/River Hills (10.0 per cent).

Ipswich Central had the largest number of low income families (3,831), followed by Redcliffe (3,569), Gold Coast [Part A] (2,488) and Berrinba-Karawatha/Kingston (2,376).

There were correlations of substantial significance at the small area level with the variables for unemployed people (0.75) and the Indigenous population (0.73), and of meaningful significance with single parent families (0.66), unskilled and semi-skilled workers (0.63) and dwellings rented from the State housing authority (0.50). These results, together with the inverse correlation of substantial significance with the IRSD (-0.85), indicate the existence of an association at the small area level between high proportions of low income families and socioeconomic disadvantage.

Gold Coast-Tweed Heads

In 1996, there were 22,336 low income families in **Gold Coast-Tweed Heads**, 24.2 per cent of all families for which income details were obtained, considerably higher than the 18.0 per cent in **Brisbane**.

The largest concentrations of low income families were in SLAs adjacent to the coast: in Tweed Heads, in New South Wales (32.7 per cent), Coolangatta/Tugun (32.5 per cent), Labrador/Southport (30.2 per cent), Palm Beach/Currumbin (29.8 per cent), Paradise Point/Biggera Waters (27.6 per cent) and Broadbeach/Burleigh Heads (27.2 per cent). The lowest proportions were found in Hope Island (13.7 per cent) and in the combined area of Worongary-Tallai/Mudgeeraba (15.8 per cent)

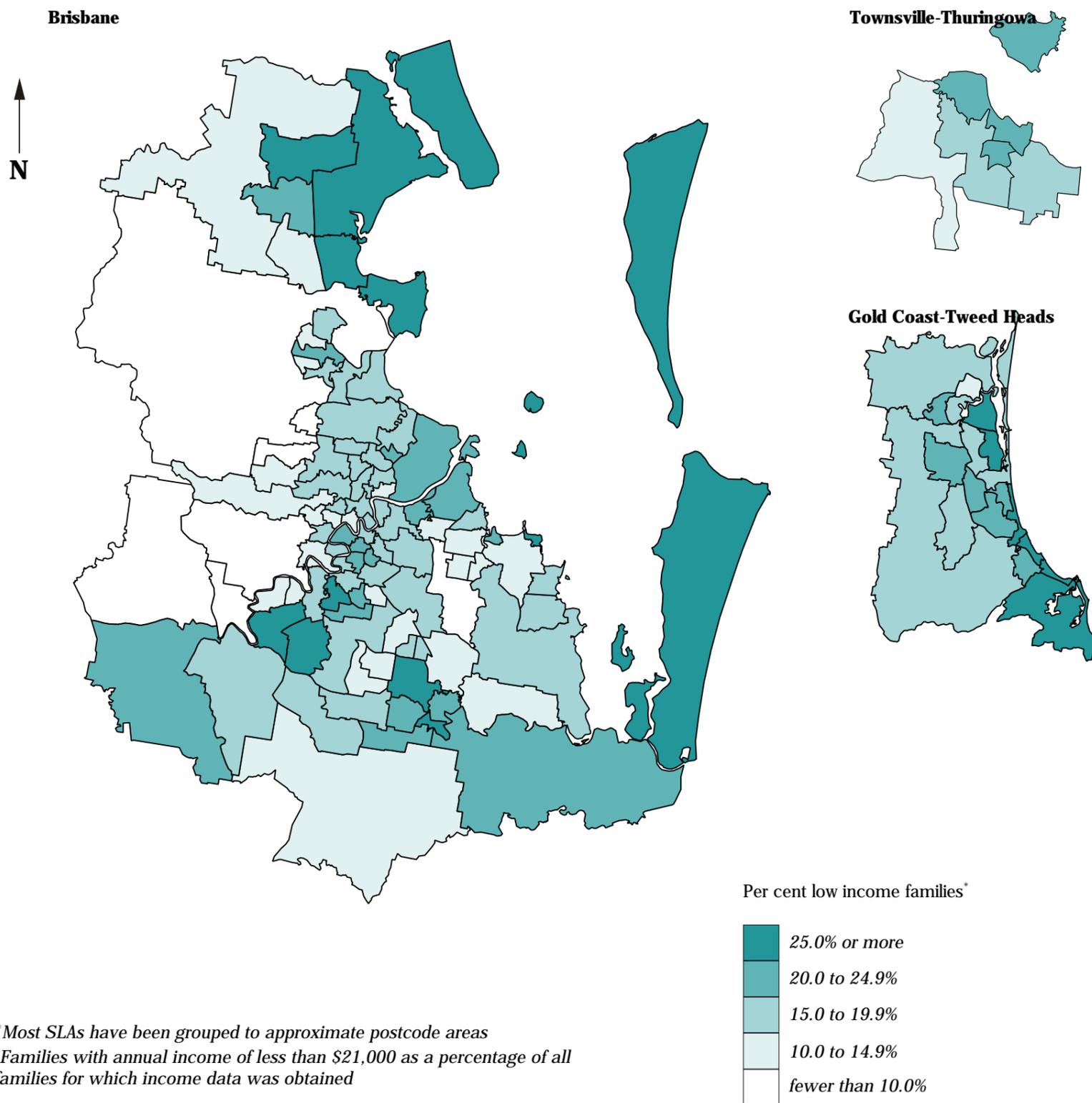
Townsville-Thuringowa

At the 1996 Census, 16.7 per cent of families in **Townsville-Thuringowa** had low incomes, a total of 5,033 families.

Proportions of 20 per cent or more low income families were recorded in the areas of Gulliver/Hermit Park (21.4 per cent) and Townsville Coastal/Magnetic Island (20.0 per cent). At the other end of the scale, Thuringowa [Part A] had 13.8 per cent, Murray/Mt Louisa had 15.4 per cent and Townsville South East had 18.2 per cent.

Map 3.7: Low income families*, Brisbane, Gold Coast-Tweed Heads and Townsville-Thuringowa, 1996

as a percentage of all families in each area#



#Most SLAs have been grouped to approximate postcode areas
 *Families with annual income of less than \$21,000 as a percentage of all families for which income data was obtained

Source: Calculated on data from ABS 1996 Census

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

Low income families, 1996

State/Territory comparison

The proportion of low income families (families with annual family incomes of less than \$21,000) living outside of the capital cities and other major urban centres in Queensland, at 23.6 per cent, is just below the average for these areas (**Table 3.12**). 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 declined slightly as a proportion of all families in Queensland for which income details were obtained. 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 20 regarding the interpretation of these comparisons over time.

Table 3.12: 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

The 83,469 families with incomes of less than \$21,000 per year comprised 23.6 per cent of all families in Queensland outside of **Brisbane** and the other major urban centres reporting an income in the 1996 Census. This represented a substantial increase in numbers from the 61,967 low income families (25.0 per cent) in 1986.

SLAs with the highest proportion of low income families are concentrated in two locations, one in the south-east and the other in the far north of the State (**Map 3.8**). Mornington and Aurukun in the far north had percentages of 48.6 per cent (120 low income families) and 45.6 per cent (73) respectively. In the south-east, a majority of SLAs adjacent to **Brisbane** also had very high proportions: these covered an area as far north as Miriam Vale (40.3 per cent), to the north-west to Taroom (30.8 per cent) and Bendemere (30.7 per cent), and to the south-west to Inglewood (32.1 per cent) and Stanthorpe (31.8 per cent). Mount Morgan, to the north of this group of SLAs, also had 43.0 per cent of its families in this category. Other towns with high proportions were Hervey Bay (36.5 per cent), Kawana (30.5 per cent, with 31.9 per cent in Caloundra), Maryborough (29.7 per cent), Nambour (29.2 per cent) and Noosa (28.4 per cent).

The largest numbers of low income families were located in the larger centres of Toowoomba (4,429), Cairns (3,930), Hervey Bay (3,914), Rockhampton (3,299) and Bundaberg (3,236).

The bauxite mining and alumina processing town of Weipa, with a notably low proportion (0.6 per cent) of families with low incomes, stands out in sharp contrast to the surrounding SLAs. A significant area of SLAs with low proportions of low income families is concentrated in the Nebo, Broadsound, Belyando,

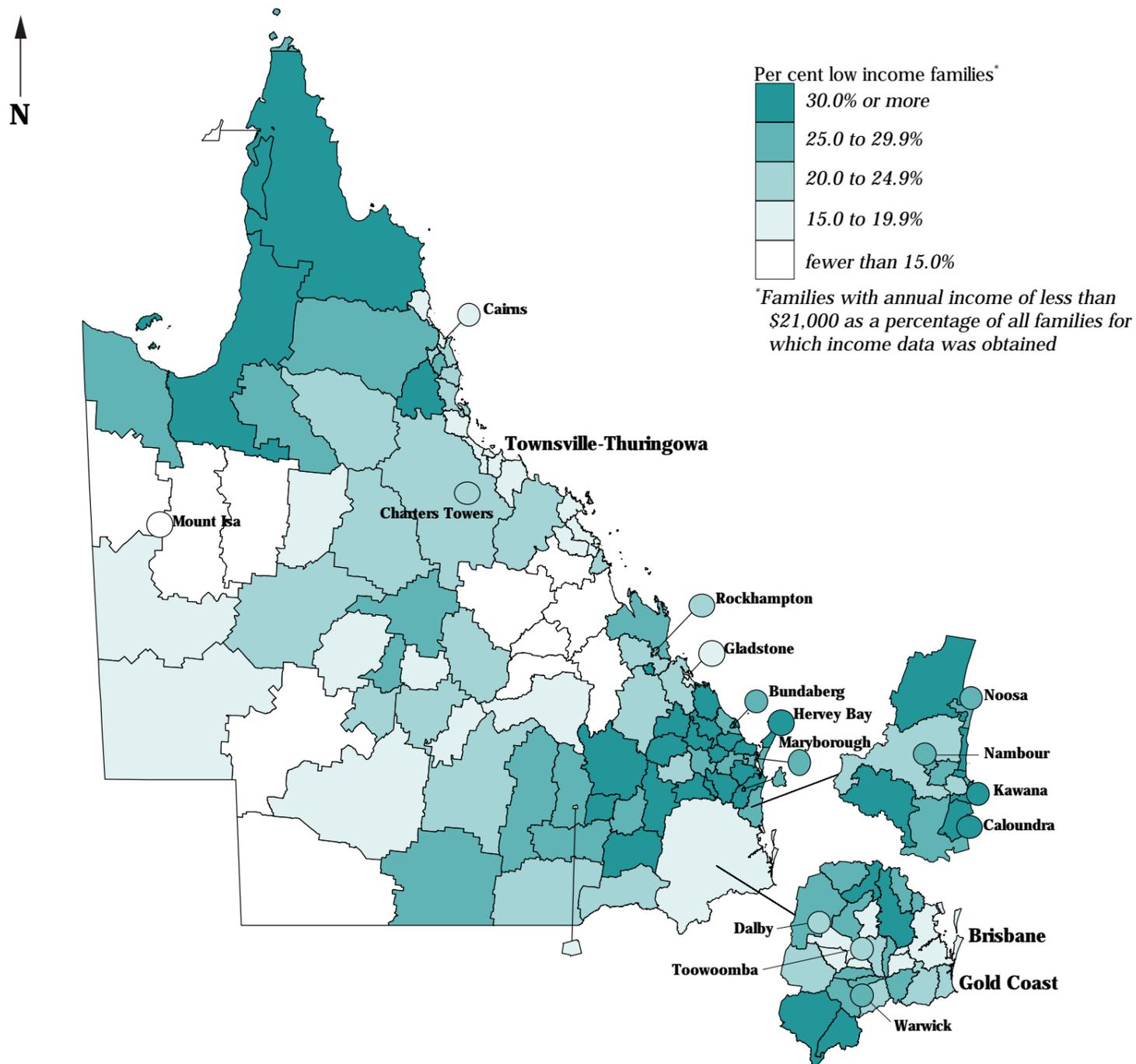
Peak Downs area near Mackay. This region is a prominent coal mining district with much of the population employed in the industry.

There was also a concentration of SLAs with smaller proportions of families with low incomes in the far west of the State in Mount Isa (10.2 per cent), Cloncurry (14.6 per cent) and McKinlay (13.8 per cent) as well as in the south-west in the large SLAs of Bulloo (10.7 per cent) and Barcoo (8.0 per cent).

There was a correlation of meaningful significance level with the variable for unemployed people (0.52), and inverse correlations with the variables for high income families (of substantial significance, -0.76) and female labour force participation (of meaningful significance, -0.53). These results, together with the inverse correlation of meaningful significance with the IRSD (-0.66), indicate the existence of an association at the SLA level between high proportions of low income families and socioeconomic disadvantage.

Map 3.8: Low income families*, Queensland, 1996

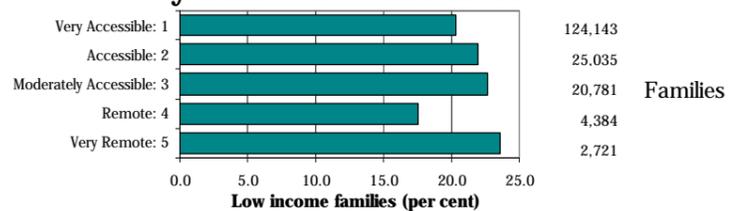
as a percentage of all families in each Statistical Local Area



Source: Calculated on data from ABS 1996 Census

Details of map boundaries are in Appendix 1.2

Accessibility/Remoteness Index of Australia



The proportion of low income families increases with increasing remoteness, with the exception of the Remote areas, with the lowest proportion, of 17.5 per cent. The range in the other ARIA categories was from 20.3 per cent in the Very Accessible areas to 23.6 per cent in the Very Remote areas.

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 had near average percentages for this variable, with the lower percentage in **Canberra** a reflection of low levels of manufacturing industry. The proportion in **Brisbane** (16.5 per cent) was the second highest, after that in **Adelaide** (Table 3.13).

The 1996 figures for this variable were considerably lower than those from 1986, including a fall from 21.6 per cent in **Brisbane** in 1986 to 16.5 per cent in 1996, largely a reflection of the changing nature of employment in Australia's capital cities. The overall decline for Australia's capital cities was from 20.9 per cent of all people with an occupation in 1986, to 17.8 per cent in 1991 and 15.6 per cent in 1996, a net loss 110,506 from these occupations.

Table 3.13: Unskilled and semi-skilled workers, capital cities
Per cent

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

¹Includes Queanbeyan (C)

Source: ABS special data services

Brisbane¹

At the 1996 Census, 16.5 per cent of **Brisbane's** employed labour force was classified as being unskilled and semi-skilled. The number of unskilled or semi-skilled workers increased marginally from 103,840 in 1986, to 108,658 in 1991 and 109,536 in 1996. In a growing workforce, these relatively small increases represented a decline from 21.6 per cent of the employed labour force in 1986, to 18.9 per cent in 1991 and 16.5 per cent in 1996.

As **Map 3.9** shows, unskilled and semi-skilled workers were most heavily concentrated in the area extending from Loganlea to Ipswich East, south-west of **Brisbane**. There were also isolated pockets of high proportions of unskilled and semi-skilled workers in areas to the north of the city, including the combined area of Darra-Sumner/Wacol, with 38.5 per cent. Other very high percentages were recorded in the outer south-west in Berrinba-Karawatha/Kingston (35.2 per cent), Marsden (32.8 per cent and Waterford West (30.1 per cent); and closer to the city centre in Rocklea (32.8 per cent) and Murarrie (31.0 per cent).

The lowest concentrations of unskilled and semi-skilled workers were in a contiguous area extending along the north bank of the Brisbane River, from the combined area of City/Spring Hill (5.6 per cent) to Milton and Paddington (6.9 per cent), Toowong (6.7 per cent), Bardon (6.8 per cent), Ashgrove and further out to The Gap (6.8 per cent) and Upper Brookfield/Fig Tree Pocket (5.1 per cent). This group also includes Chelmer/Taringa (6.9 per cent).

The largest numbers of unskilled and semi-skilled workers were recorded in the south-western and southern suburbs: Ipswich Central had 6,090, with 4,016 in Ipswich East and 3,636 in Gold Coast [Part A], Berrinba-Karawatha/Kingston (3,582), Redcliffe

(3,572), Birkdale/Ormiston (3,109) and Rochedale South/Slacks Creek (3,076).

There was a correlation of substantial significance at the small area level with the variable for early school leavers (0.84) and correlations of meaningful significance with a number of the other measures of socioeconomic status. These results, together with the inverse correlation of meaningful significance with the IRSD (-0.66), indicate the existence of an association at the small area level between high proportions of unskilled and semi-skilled workers and socioeconomic disadvantage.

Gold Coast-Tweed Heads

In **Gold Coast-Tweed Heads**, 22,167 people were in unskilled or semi-skilled occupations, 15.7 per cent of the employed labour force. The middle regions of Oxenford (21.1 per cent) and Nerang (20.3 per cent) recorded the highest proportions for this variable, with 18.8 per cent in Tweed Heads (in New South Wales). Hope Island and the combined area of Surfers Paradise/Benowa had considerably lower proportions than the remaining areas within **Gold Coast-Tweed Heads**, with 11.6 per cent and 9.8 per cent respectively.

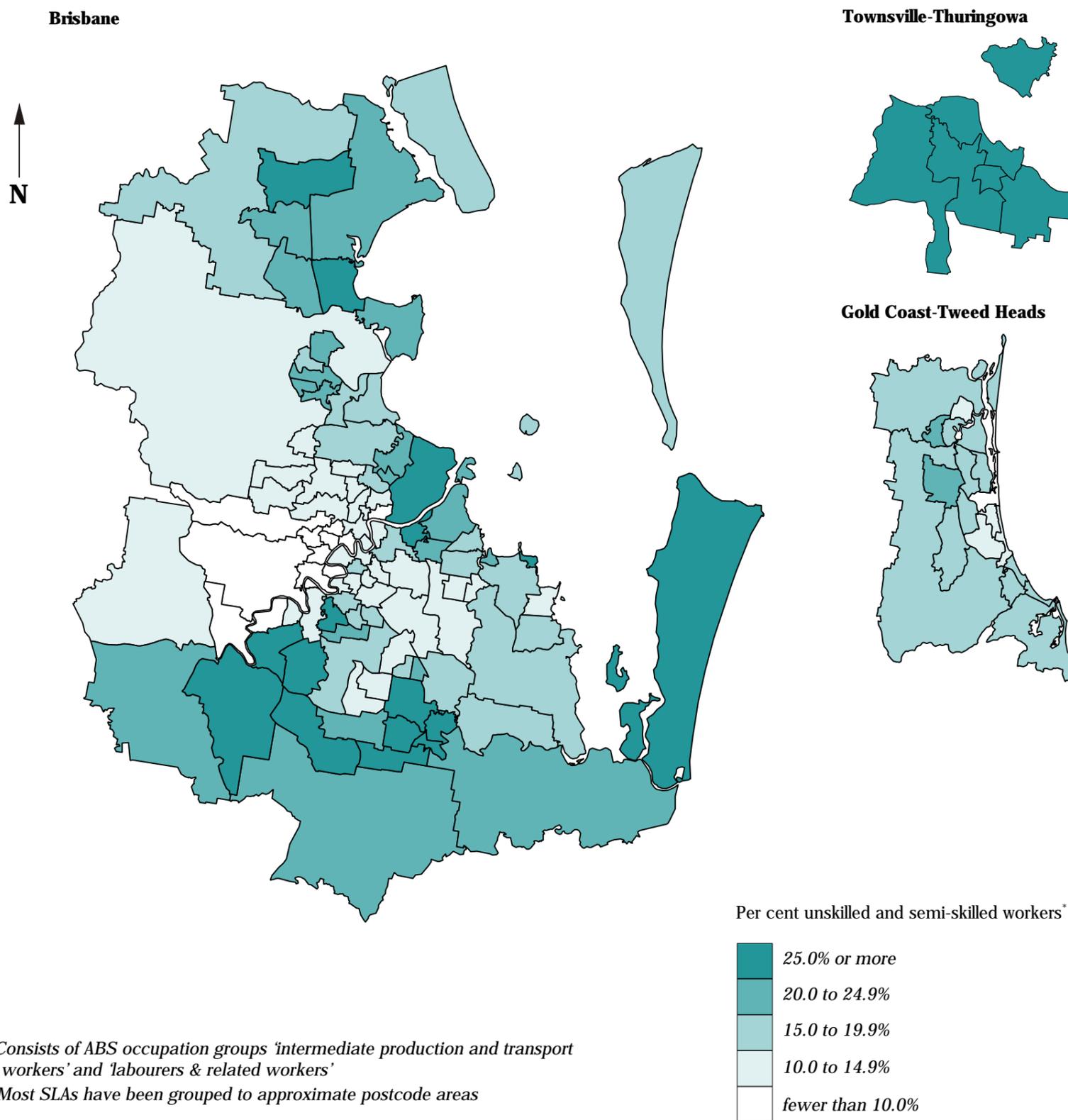
Townsville-Thuringowa

In 1996, there were 9,129 people in **Townsville-Thuringowa** classified as unskilled or semi-skilled workers (17.2 per cent of the employed labour force). Townsville South East (24.8 per cent) had the highest proportion of unskilled and semi-skilled workers, followed by Thuringowa [Part A] (19.6 per cent) with 3,201 unskilled and semi-skilled workers, the largest number of these workers. The lowest proportion was recorded in the combined area of Townsville Coastal/Magnetic Island, with 13.7 per cent.

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.

Map 3.9: Unskilled and semi-skilled workers*, Brisbane, Gold Coast-Tweed Heads and Townsville-Thuringowa, 1996

as a percentage of the total employed labour force in each area#



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

#Most SLAs have been grouped to approximate postcode areas

Source: Calculated on data from ABS 1996 Census

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

Unemployed people, 1996

Capital city comparison

At the 1996 Census, 771,972 Australians reported being unemployed and looking for work, of whom 463,429 resided in Australia's capital cities. More than a quarter of the *All capitals* unemployed lived in **Sydney** (134,857 people), 7.4 per cent of **Sydney's** labour force. The unemployment rate in the other capital cities ranged from 7.5 per cent in **Canberra** (13,062 people, and a considerably higher rate than in 1986 when it was 4.8 per cent) to 10.6 per cent in **Adelaide** (51,662 people): the figure in **Brisbane** was 8.8 per cent (**Table 3.14**). 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 3.14: 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

Brisbane

Levels of unemployment in **Brisbane** followed the trend for most Australian capital cities between 1986 and 1996, rising from 9.5 per cent in 1986 to 10.5 per cent in 1991, before falling to 8.8 per cent in 1996. Numbers of unemployed people also fluctuated between 1986 and 1996, rising from 50,402 in 1986 to 67,760 in 1991 and then falling to 63,784 in 1996.

The distribution of unemployed people shows higher rates generally concentrated in the southern and northern areas of **Brisbane** (**Map 3.10**). The highest rates were in the outer south, south-east and south-west of the city centre, in the combined area of Berrinba-Karawatha/Kingston (19.6 per cent of the workforce unemployed), Redland Balance (16.6 per cent), Darra-Sumner/Wacol (15.3 per cent), Loganlea (15.2 per cent) and Waterford West (14.3 per cent); to the north, in Bribie Island (17.8 per cent), Caboolture Central (16.2 per cent); and in the inner suburbs (West End/South Brisbane/Highgate Hills (14.5 per cent) and middle suburbs (Nathan (17.3 per cent).

Areas with low unemployment levels were widespread throughout **Brisbane**, especially in the inner and middle eastern suburbs, in the outlying north-eastern areas and to the south-west of the city (largely in the middle suburbs). The lowest rate was in Capalaba West (3.6 per cent), with levels of 4.6 per cent in Albany Creek and 4.7 per cent in Ipswich North. The outer areas of Pine Rivers, Burbank/Belmont-Mackenzie and Upper Brookfield/Fig Tree Pocket also had rates of less than 5 per cent.

The largest number of unemployed people were in Ipswich Central, with 2,792; Berrinba-Karawatha/Kingston, with 2,582; Redcliffe, with 2,509; and Gold Coast [Part A], with 2,334.

There were correlations of statistical significance at the SLA level with the variables for low income families (0.75), Indigenous people (0.66), single parent families (0.65), unskilled and semi-skilled workers (0.62) and dwellings rented from the State housing authority (0.53). An inverse correlation of substantial significance was also recorded with the variable for female labour force participation (-0.74). These results, together with the inverse correlation of substantial significance with the IRSD (-0.74), indicate the existence of an association at the small area level between unemployment and socioeconomic disadvantage.

Gold Coast-Tweed Heads

In 1996, there were 21,300 people unemployed in the major urban centre of **Gold Coast-Tweed Heads**, 12.8 per cent of the labour force.

Coolangatta/Tugun and Palm Beach/Currumbin, near the New South Wales border, had the highest levels of unemployment in **Gold Coast-Tweed Heads**, with 17.1 per cent and 16.7 per cent respectively. The lowest rate was recorded in the northern area of Hope Island, with 7.9 per cent.

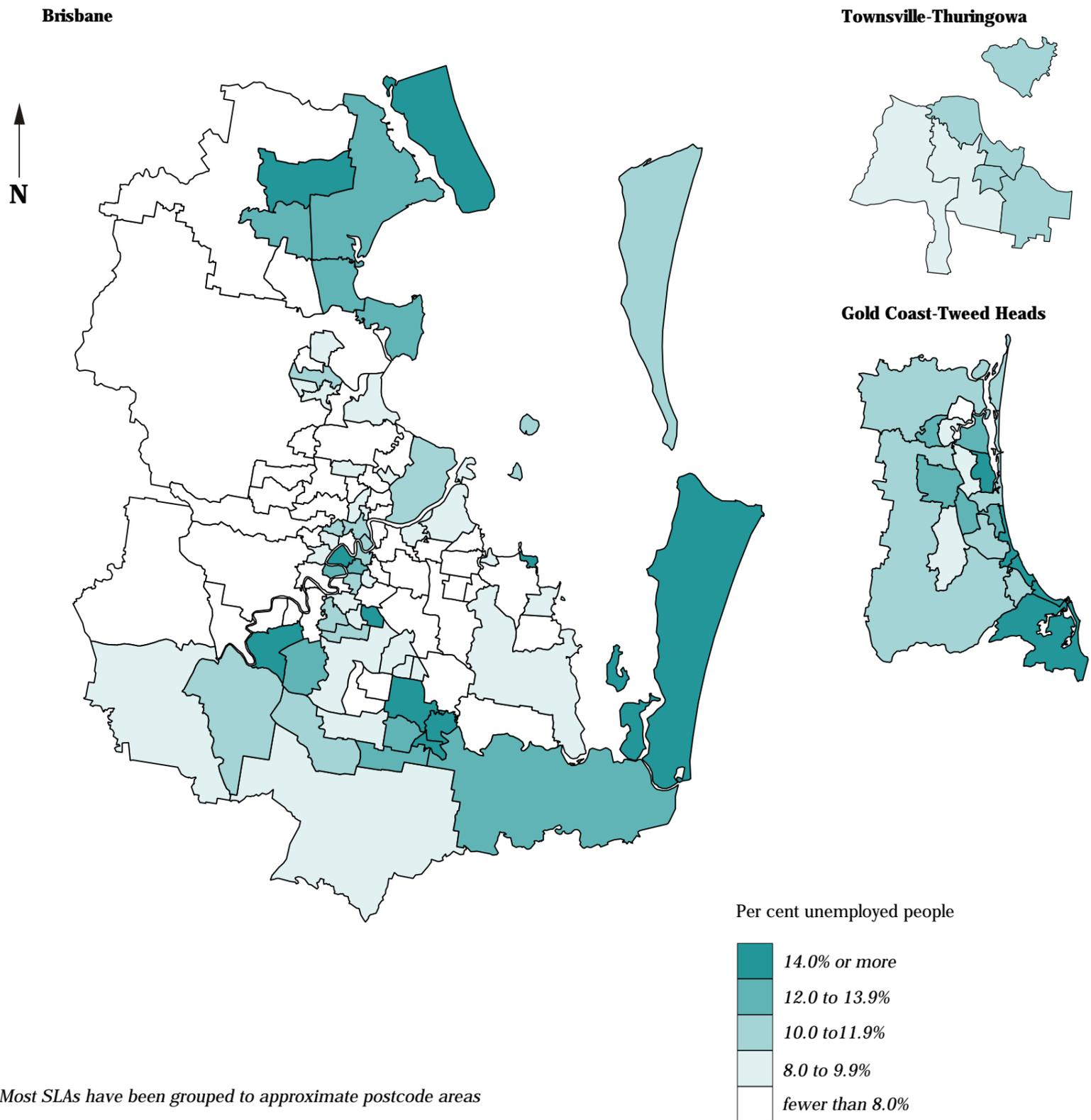
Townsville-Thuringowa

At the 1996 Census, 9.4 per cent of the labour force in **Townsville-Thuringowa** were unemployed, a total of 5,632 people.

The highest rate of unemployment was recorded in the combined area of Townsville/Magnetic Island, with 11.1 per cent of its labour force in this category. Thuringowa [Part A] and Murray/Mt Louisa had 8.4 per cent and 8.6 per cent respectively.

Map 3.10: Unemployed people, Brisbane, Gold Coast-Tweed Heads and Townsville-Thuringowa, 1996

as a percentage of the total labour force in each area*



*Most SLAs have been grouped to approximate postcode areas

Source: Calculated on data from ABS 1996 Census

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

Unemployed people, 1996

State/Territory comparison

In 1996, unemployment rates in the *Other major urban centres* category in **Table 3.15** 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 3.15: 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

There were 63,355 unemployed people in the areas of Queensland outside **Brisbane** and the other major urban centres (10.0 per cent) at the time of the 1996 Census. Unlike in **Brisbane** (where the unemployment rate fluctuated), in these non-metropolitan areas the percentage of unemployed people has fallen at each census from 12.2 per cent in 1986, to 11.8 per cent in 1991 and to 10.0 per cent in 1996. Over this period, the numbers of unemployed increased from 63,556 to 72,433 between 1986 and 1991, before falling even lower to 63,355 in 1996. Across Australia, rates of unemployment were generally higher in the non-metropolitan areas than in the capital cities, and Queensland is no exception.

Unemployment was fairly low across much of the State, with SLAs recording the highest proportions of unemployed people located to the north of **Brisbane**, in an area extending through the Sunshine Coast (with 15.9 per cent in Kawana and 16.5 per cent in Caloundra (excl. Kawana)) and Hervey Bay (19.9 per cent) to beyond Bundaberg (with 23.7 per cent in Miriam Vale, 22.8 per cent in Kolan and 22.6 per cent in Mount Morgan) (**Map 3.11**).

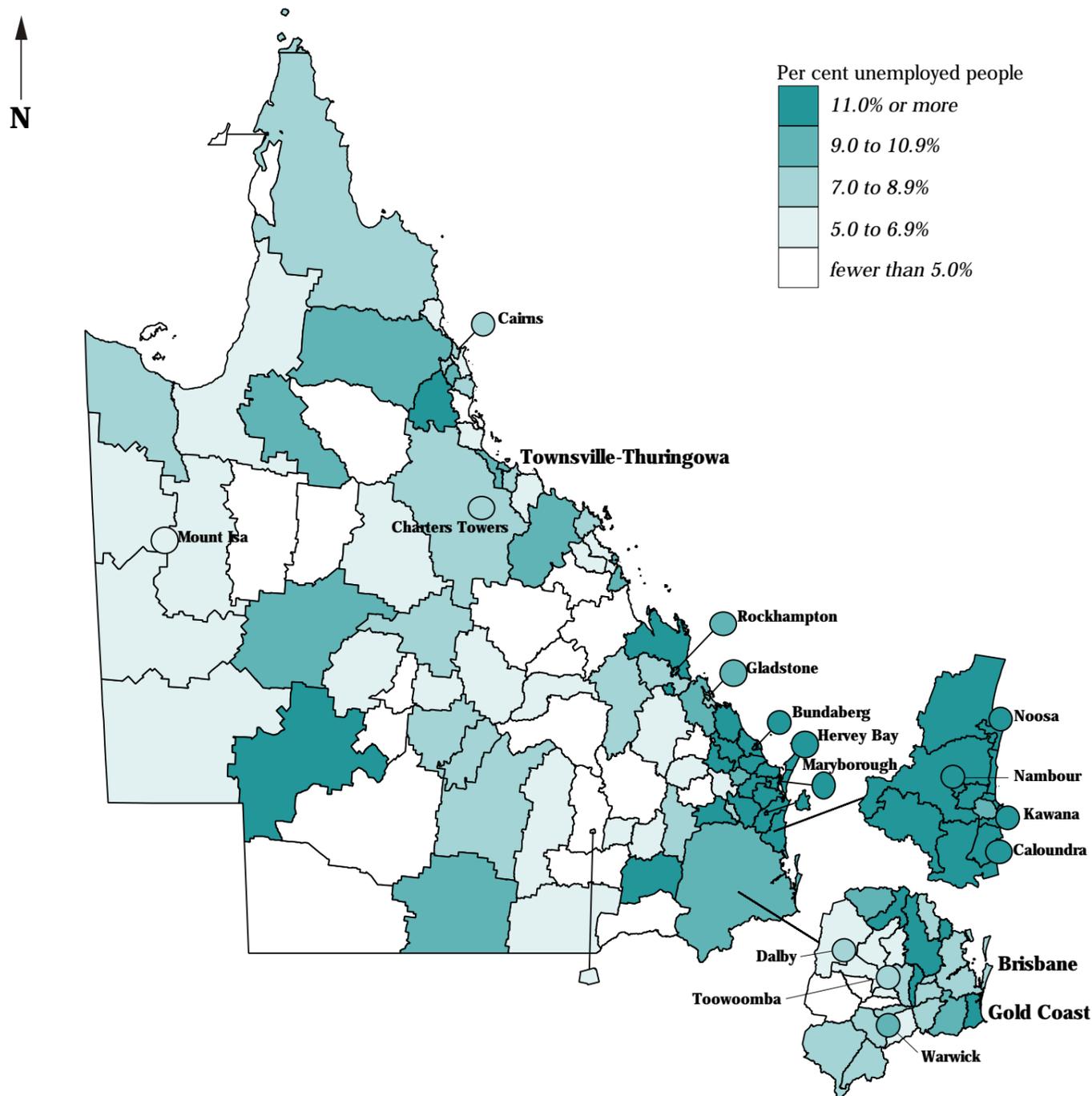
The largest numbers of unemployed people were in the towns of Cairns (4,901), Toowoomba (3,204), Hervey Bay (2,972), Rockhampton (2,846), Bundaberg (2,631), and Mackay (2,593).

In comparison, areas with the lowest levels of unemployment were further from **Brisbane**. Ilfracombe in the Central West and Bulloo in the south-west on the New South Wales, South Australia and Queensland border recorded 0 and 1.2 per cent, respectively, while in the far north of the State Aurukun had 1.1 per cent (3 unemployed people) and Weipa had 1.4 per cent (18 unemployed people).

The pattern of youth unemployment was similar to the distribution of overall unemployment although the rates were generally much higher. Mount Morgan (48.0 per cent) and Miriam Vale (46.9 per cent) recorded the highest proportion of people aged between 15 and 19 years who were out of work, almost double the overall unemployment rate in these areas. The same is true across much of the remainder of State with an overall average of 19.8 per cent youth unemployment. Despite this, the rate has fallen over the decade from 1986, when it was 24.1 per cent. The numbers of young unemployed also fell during this period, from 13,119 in 1986, to 11,730 in 1991 and to 9,578 in 1996.

There was a correlation of meaningful significance at the SLA level with the variable for low income families (0.52). This and the other correlations suggest the existence of a weak association at the SLA level in the non-metropolitan areas of Queensland between unemployment and socioeconomic disadvantage.

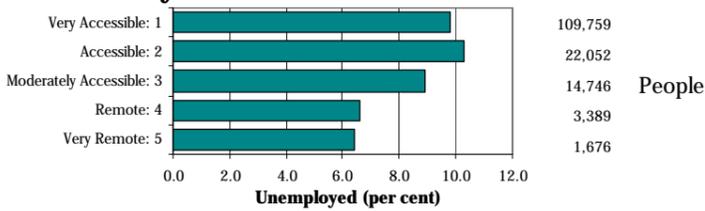
Map 3.11: Unemployed people, Queensland, 1996
as a percentage of the total labour force in each Statistical Local Area



Source: Calculated on data from ABS 1996 Census

Details of map boundaries are in Appendix 1.2

Accessibility/Remoteness Index of Australia



The three 'accessible' categories had the highest rates of unemployment, with percentages of 9.8 per cent in the Very Accessible areas, 10.3 per cent in the Accessible areas (the highest proportion) and 8.9 per cent in the Moderately Accessible areas. The lowest unemployment rates are in the Very Remote (6.4 per cent) and Remote (6.6 per cent) areas.

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 3.16** 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 3.16: 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

Brisbane

Female labour force participation in **Brisbane** has increased from 61.0 per cent in 1986 to 67.3 per cent in 1991 and 69.4 per cent in 1996, when there were 273,908 women aged 20 to 54 in the labour force.

The highest proportions of the female population aged 15 to 54 years in the labour force was in SLAs just north and south of the Brisbane River (**Map 3.12**). SLAs with the highest participation rates to the north of the Brisbane River included the combined area of Milton/Paddington (82.7 per cent), Bardon (79.1 per cent), the combined area of Wilston/Enoggera (78.6 per cent), Albion (78.3 per cent) and Ashgrove/The Gap (77.9 per cent); and those to the south included Coorparoo (79.3 per cent) and Yeronga (77.9 per cent).

The combined areas of Darra-Sumner/Wacol, Berrinba-Karawatha/Kingston and the SLA of Redland Balance had the lowest proportions of women in the labour force in **Brisbane**. These outer southern areas recorded participation rates of 51.5 per cent, 52.7 per cent and 53.3 per cent respectively.

Ipswich Central and the combined area of Rochedale South/Slacks Creek had the largest numbers of women in the labour force with 10,105 and 7,785 respectively. The lowest numbers were reported in Pinkenba-Eagle Farm, where just 69 women were in the labour force; Moreton Island, with 74; and Chandler, with 167.

A correlation of meaningful significance was recorded with the variable for high income families (0.64). There were inverse correlations of substantial significance with the variable for unemployed people (-0.74), and of meaningful significance with unskilled and semi-skilled workers (-0.69), low income families (-0.57) and the Indigenous population (-0.56). These results, together with the correlation of meaningful significance with the IRSD (0.68), indicate that high rates of female labour force participation at the small area level are strongly associated with high socioeconomic status.

Gold Coast-Tweed Heads

There were 63,065 women aged between 20 and 54 years in the labour force in **Gold Coast-Tweed Heads** at the time of the 1996 Census, a participation rate of 67.8 per cent.

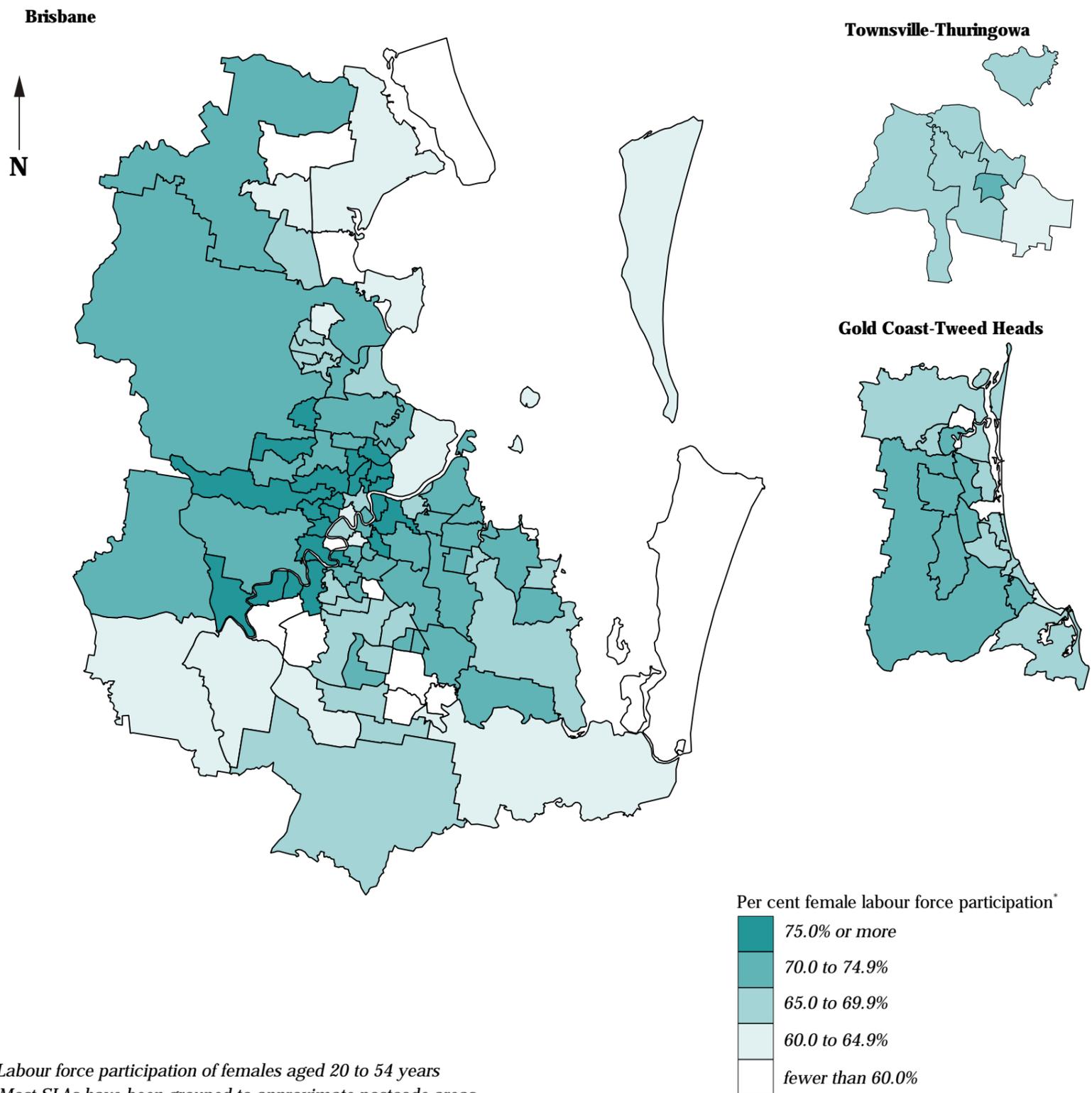
Map 3.12 shows that the majority of areas within this major urban centre had participation rates of between 65 and 75 per cent. The combined area of Arundel/Ashmore (73.2 per cent) and Worongary-Tallai/Mudgeeraba (72.7 per cent), as well as Helensvale (71.6 per cent) and Guanaba-Currumbin Valley (71.3 per cent) had the highest participation rates. Surfers Paradise/Benowa and Hope Island were the only two areas to record female participation rates of below 60.0 per cent.

Townsville-Thuringowa

In 1996, 21,958 females in **Townsville-Thuringowa** were in the labour force, a participation rate of 68.3 per cent.

The central SLAs of Gulliver/Hermit Park had the highest participation rate, with 71.5 per cent, while a high rate was also recorded in the combined area of Townsville Coastal/Magnetic Island (69.1 per cent). Townsville South East had the lowest rate, with 64.4 per cent of women aged from 15 to 54 years in the labour force.

Map 3.12: Female labour force participation*, Brisbane, Gold Coast-Tweed Heads and Townsville-Thuringowa, 1996
as a percentage of all females aged 20 to 54 years in each area#



*Labour force participation of females aged 20 to 54 years
#Most SLAs have been grouped to approximate postcode areas

Source: Calculated on data from ABS 1996 Census

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

Female labour force participation, 1996

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 3.17**). 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 3.17: 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

In 1986, the proportion of females aged 20 to 54 years in the labour force in Queensland outside **Brisbane** and the other major urban centres was 55.3 per cent. By 1991, the participation rate had risen to 62.3 per cent and by 1996, had risen further to 63.8 per cent, when there were 218,751 women aged 20 to 54 in the labour force.

Map 3.13 graphically displays the regional variation in female labour force participation at the time of the 1996 Census. The central west and south-west regions of the State are dominated by high rates of women participating in the labour force (participation rates of over 65.0 per cent). Low rates are evident in a number of the towns and coastal areas, and in the remote areas in the far north of the State.

Weipa, Barcoo and Ilfracombe, with participation rates of 78.0, 77.5 and 76.6 per cent, respectively, had the highest female labour force participation rates in the non-metropolitan areas of Queensland, although in absolute terms, the numbers employed were quite small. The next highest rates were recorded in Longreach (a participation rate of 75.4 per cent, 743 females), Mooloolaba (74.0 per cent, 2,024 females) and Roma (73.6 per cent, 1,219 females). Of all the areas with participation rates in excess of 70 per cent, Buderim had the largest number females in the labour force, with 4,155 (a participation rate of 71.5 per cent).

The SLAs with the largest numbers of females in the labour force in 1996 were Cairns (22,873 females, a participation rate of 66.8 per cent), Toowoomba (13,427 females, 65.9 per cent), Rockhampton (9,623 females, 66.6 per cent) and Hervey Bay (5,329, 57.6 per cent). Within Cairns, the suburbs of Mount

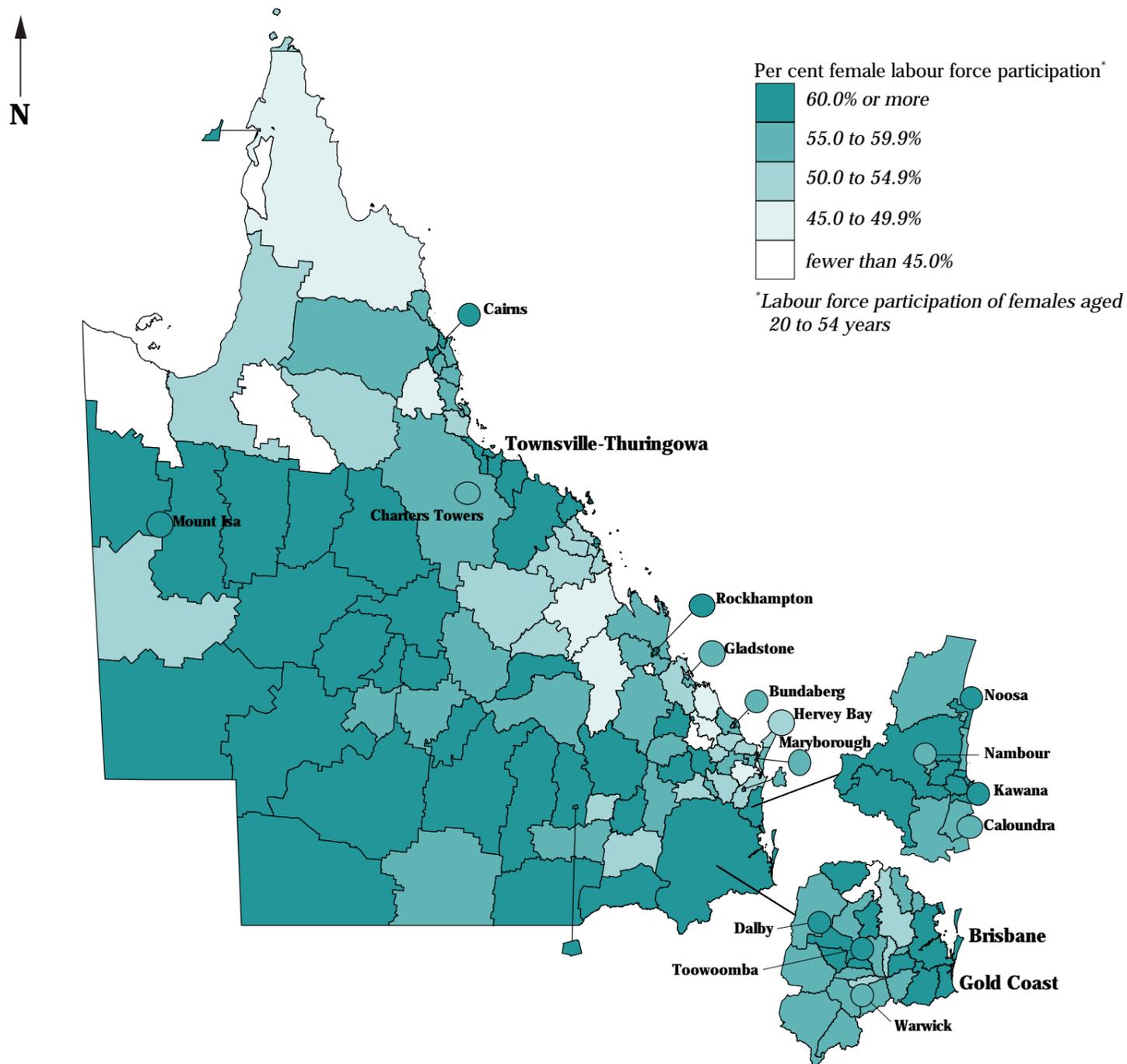
Whitfield (2,578 females, 79.7 per cent) and Trinity (5,208 females, 71.6 per cent) had significant numbers of women in the labour force and corresponding high participation rates.

As noted, the far north regions of the State have generally low rates of female labour force participation, with places such as Burke, Aurukun, Mornington and Croydon all reporting rates of below 50 per cent (although with relatively small numbers of females in the labour force). SLAs such as Mount Morgan, Perry and Nanango in the Wide Bay-Burnett area around Bundaberg had similarly low rates of participation.

The only positive correlation of meaningful significance was with the IRSD (0.68), indicating a positive association at the small area level between high female labour force participation rates and areas comprising the most advantaged populations. There was also an inverse correlation of meaningful significance with low income families (-0.53), and inverse correlations of lesser significance with the other indicators of socioeconomic disadvantage.

Map 3.13: Female labour force participation*, Queensland, 1996

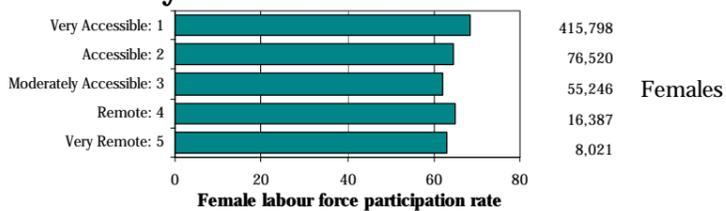
as a percentage of all females aged 20 to 54 years in each Statistical Local Area



Source: Calculated on data from ABS 1996 Census

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 Accessible areas (68.3 per cent) and lowest in the Moderately Accessible areas (62.1 per cent). Participation rates were slightly higher in the Very Remote areas (63.1 per cent).

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 19. Among the capital cities, the highest standardised ratio (SR) for early school leavers was recorded in **Perth** (an SR of 112**) and **Brisbane** (an SR of 110**), 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 3.18**), 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 3.18: 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

Brisbane (Queensland as the Standard)

Over the past decade, the areas of low participation in education have remained basically the same. Education data show that children growing up in these areas continue to have low rates of participation in schooling beyond the age of compulsion, and low rates of continuation to higher education. 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.

Variations within **Brisbane** in educational participation provide a striking illustration of the links between education, occupation, and income. Throughout the inner city areas and just north of the Brisbane River, the number of people who had left school at age 15 or less was well below the level expected (**Map 3.14**). Standardised ratios (using Queensland as the standard) were more than 50 per cent lower than expected in a number of high socioeconomic status areas, including the combined areas of City/Spring Hill (an SR of 49**), Chelmer/Taringa (43**), Upper Brookfield/Fig Tree Pocket (43**) as well as Toowong (43**) and St Lucia (30**).

Areas that were mapped in the middle range of 15 per cent above or below the level expected, were distributed throughout much of the metropolitan area. Within this group, the highest ratios were found in Gold Coast [Part A] (114**) and Brown Plains, Bald Hills, Lawnton and Strathpine (each with 113**).

To the south of the city, elevated ratios were recorded in Marsden (with an SR of 131**), Ipswich Central (125**), Waterford West (122**) and Logan Balance (121**) and, in the outer north, in Deception Bay (with an SR of 130**), Kallangur (122**) and Caboolture East (121**).

A total of 420,022 people living in **Brisbane** left school at age 15 or earlier, with the largest numbers in Ipswich Central (24,262 people), Redcliffe (18,147) and in the combined area of Bridgeman Downs/Boondall (13,046). There were more female early school leavers than males overall (196,870 males and 223,152 females) in most areas mapped.

There was a correlation of substantial significance at the small area level with the variable for unskilled and semi-skilled workers (0.84) and inverse correlations with the variables for managers and administrators, and professionals (-0.95) and high income families (-0.74). These results, together with the inverse correlation of substantial significance with the IRSD (-0.72), indicate an association at the small area level between high rates of early school leavers and socioeconomic disadvantage.

Gold Coast-Tweed Heads

Gold Coast-Tweed Heads had the lowest standardised ratio for early school leavers among the major urban centres, with 8 per cent fewer than expected (an SR of 92**). The majority of areas had ratios of between 15 per cent above or below the expected level, ranging from 106** in Oxenford to 72** in the area from Surfers Paradise/Benowa.

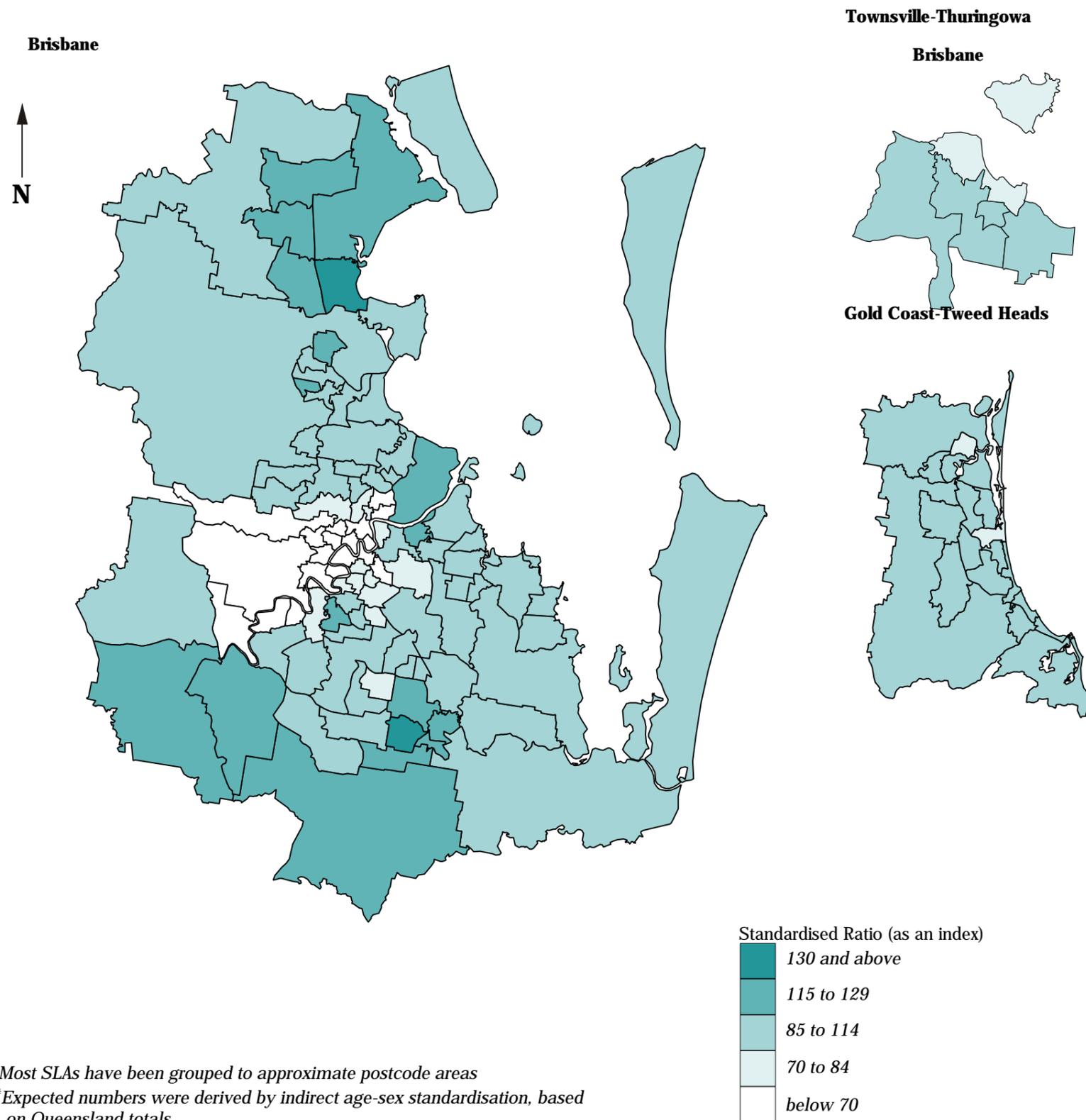
Townsville-Thuringowa

Townsville-Thuringowa also had fewer early school leavers than expected from the State rates, with a standardised ratio of 97**. Residents of Townsville South East and Thuringowa [Part A] had elevated ratios of 112** and 109**, respectively; the lowest ratio was recorded in the combined area of Townsville Coastal/Magnetic Island (an SR of 84**).

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

Brisbane, Gold Coast-Tweed Heads and Townsville-Thuringowa, 1996

Standardised Ratio: number of people in each area* compared with the number expected#



*Most SLAs have been grouped to approximate postcode areas
 #Expected numbers were derived by indirect age-sex standardisation, based on Queensland totals

Source: Calculated on data from ABS 1996 Census

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 19. The overall number of early school leavers (people who left school aged 15 years or less, or did not go to school), was 13 per cent higher than expected in the non-metropolitan areas of Australia, compared with eight per cent lower in the capital cities. This relationship was evident in all of the Australian States, with the biggest difference between capital city and non-metropolitan ratios occurring in the Northern Territory. Western Australia (with an SR of 133**) 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 3.19). The higher ratios suggest a decline in educational participation, relative to the Australian experience, over this ten year period.

Table 3.19: 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 (Queensland as the Standard)

There were 9 per cent more early school leavers outside **Brisbane** and the other major urban centres than expected from the State totals (an SR of 109**). This was a total of 477,304 people, of whom 244,448 were males and 232,856 were females.

High standardised ratios for early school leavers were predominant, with few ratios below the level expected from the State rates: the lowest of these were in Torres (an SR of 78**), Noosa (80**), Douglas (82**) and Buderim (84**) (Map 3.15).

The most highly elevated ratio was recorded in Boulia, situated in the central west, where there were 49 per cent more early school leavers than expected from the State rates (an SR of 149**). Other ratios elevated by 35 per cent or more were recorded for Croydon (with an SR of 147**) located in the far north; Jericho in the middle region (139**); and, to the north-east of **Brisbane**, in the SLAs of Kilcoy and Murgon (each with ratios of 135**). All of these SLAs had relatively small populations.

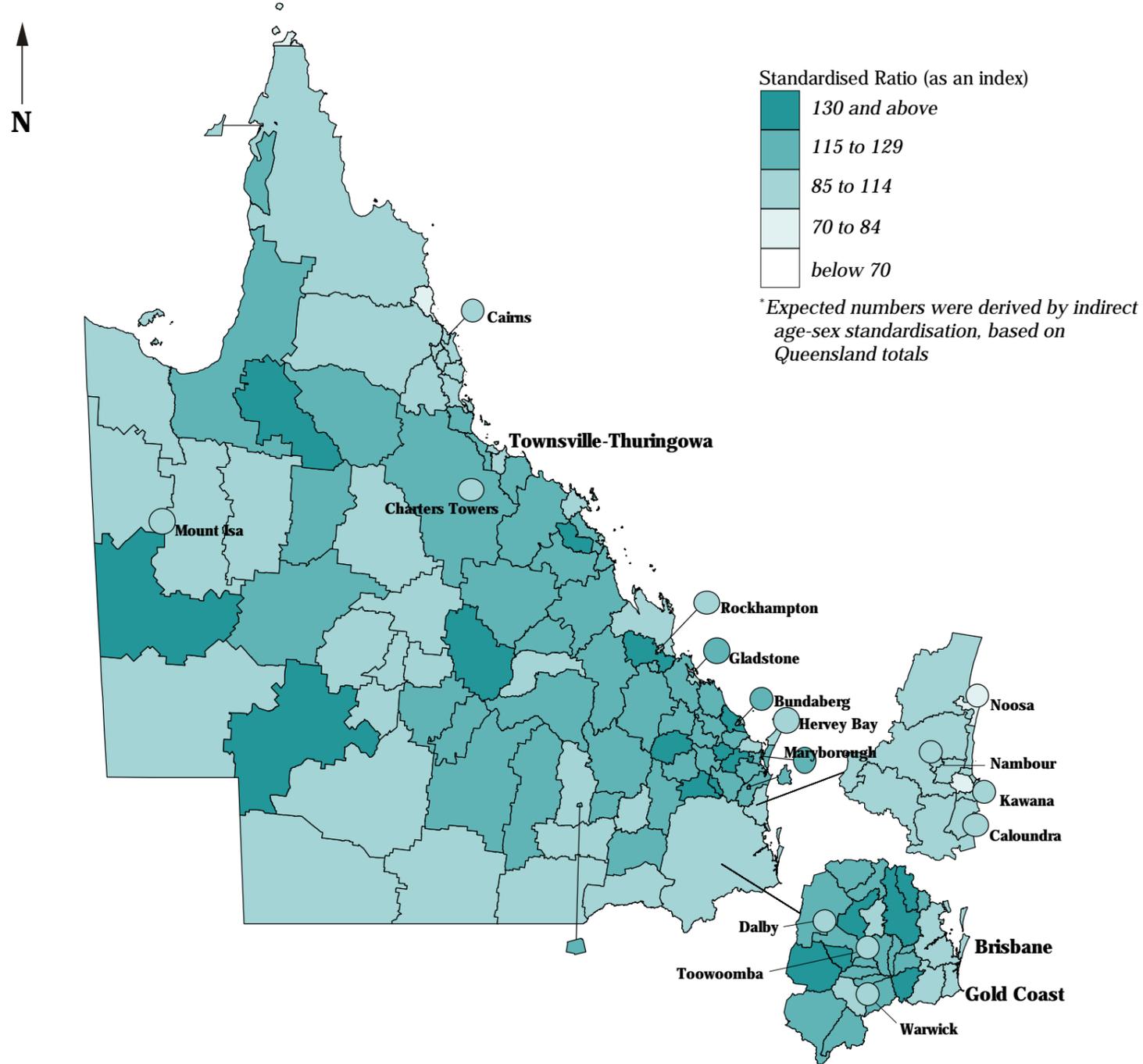
Several of the larger towns had elevated ratios (more early school leavers than expected), the highest being in Maryborough (with an SR of 126** and 10,303 early school leavers), Bundaberg (125**; 17,151), Gladstone (115**; 8,500) and Dalby (114**; 3,223).

The largest numbers of early school leavers were recorded in Cairns (29,612, and a low SR of 88**), Toowoomba (25,707; 102**), Mackay [Part A] (20,504; 114**), Rockhampton (20,443; 113**), Hervey Bay (16,991; 112**) and Bundaberg (17,151; 125**).

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

Map 3.15: People who left school at age 15 years or less, or did not go to school, Queensland, 1996

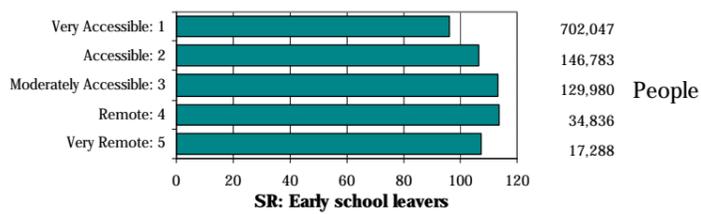
Standardised Ratio: number of people in each Statistical Local Area compared with the number expected*



Source: Calculated on data from ABS 1996 Census

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 96). The lowest rates of educational participation were in the areas in the Moderately Accessible and Remote categories (an SR of 113). There were slightly fewer early school leavers in the Very Remote ARIA category (an SR of 107).

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 was 1.0 per cent (**Table 3.20**). The exceptions were **Hobart** and **Darwin**, where Indigenous people comprised 2.5 per cent and 8.6 per cent of the population, respectively. The lowest percentage was recorded in **Melbourne** (0.3 per cent), with **Sydney** and **Adelaide** the next lowest, both with 0.9 per cent. However, some 36.6 per cent of Australia's Indigenous people (108,557 people) lived in the capital cities at the 1996 Census, with the largest numbers in **Sydney** (34,432 Indigenous people).

The proportion of Indigenous people living in Australia's capital cities increased in the ten years from 1986, rising from 0.6 per cent in 1986, to 0.7 per cent in 1991 and to 1.0 per cent in the 1996 Census. The number of Indigenous Australians rose by 47,945 in the same period. This substantial increase largely reflects changes over time in the preparedness of people to identify themselves as Indigenous on the Census form. The increase was greatest in New South Wales, and particularly marked in the non-metropolitan areas of the State, with a population of 56,474 in 1996 compared with 35,907 in 1986. Additional information about these increases is provided on pages 18 and 19 (see *Data quality of Indigenous population counts*).

Table 3.20: 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

Brisbane

In 1986, there were 11,257 people in **Brisbane** who identified themselves as Aboriginal and Torres Strait Islander people, 1.0 per cent of the population. By 1991, this number had increased slightly to 13,456 (with the proportion remaining at 1.0 per cent), and by 1996 it had risen to 21,874, which was 1.5 per cent of the population (see above for possible reasons for this large increase).

The outer south-western suburbs generally had higher proportions of Aboriginal and Torres Strait Islander people (**Map 3.16**), with 4.3 per cent recorded in the combined area of Inala/Durack/Doolandella-Forest Lake, 3.7 per cent in Ipswich East, 2.8 per cent in Ipswich Central and 2.3 per cent in the combined area of Darra-Sumner/Wacol. However, the highest proportions were recorded in Redland Balance and in the areas from Berrinba-Karawatha/Kingston, with 7.6 per cent and 4.4 per cent, respectively.

A concentration of areas with low proportions of Aboriginal and Torres Strait Islander people was evident in the western region of **Brisbane**, including Anstead/Bellbowrie/Moggill, the combined area of Upper Brookfield/Fig Tree Pocket and St Lucia, all with 0.2 per cent; and the combined area of Chelmer/Taringa and Bardon, both with 0.4 per cent.

The Ipswich region had the most Aboriginal and Torres Strait Islander people, with 1,821 in Ipswich Central and 1,380 in Ipswich East. Neither Capalaba West nor Chandler had any Indigenous people, while a further 17 areas, across a wide span of **Brisbane**, had fewer than 10 Aboriginal or Torres Strait Islander people.

There was a correlation of substantial significance at the SLA level with the variable for low income families (0.73), and of meaningful significance with unemployed people (0.66), unskilled and semi-skilled workers (0.62), single parent families (0.61) and dwellings rented from the State housing authority (0.53).

These results, together with the inverse correlation of substantial significance with the IRSD (-0.75), indicate the existence of an association at the small area level between Indigenous people and socioeconomic disadvantage.

Gold Coast-Tweed Heads

In 1996, Aboriginal and Torres Strait Islander people comprised 0.9 per cent of the population in **Gold Coast-Tweed Heads**, a total of 3,468 people. Because of the relatively small population, minimal patterns were evident in the population distribution.

Tweed Heads, in New South Wales, had the highest proportion of Aboriginal and Torres Strait Islander people, with 2.6 per cent of its population in this category. Relatively high proportions were also recorded in the combined areas of Labrador and Southport (1.3 per cent), Palm Beach and Currumbin (1.2 per cent) and the outer area of Nerang (1.2 per cent). The coastal areas of Surfers Paradise/Benowa and Broadbeach/Mermaid Waters had the lowest proportions, both with 0.3 per cent.

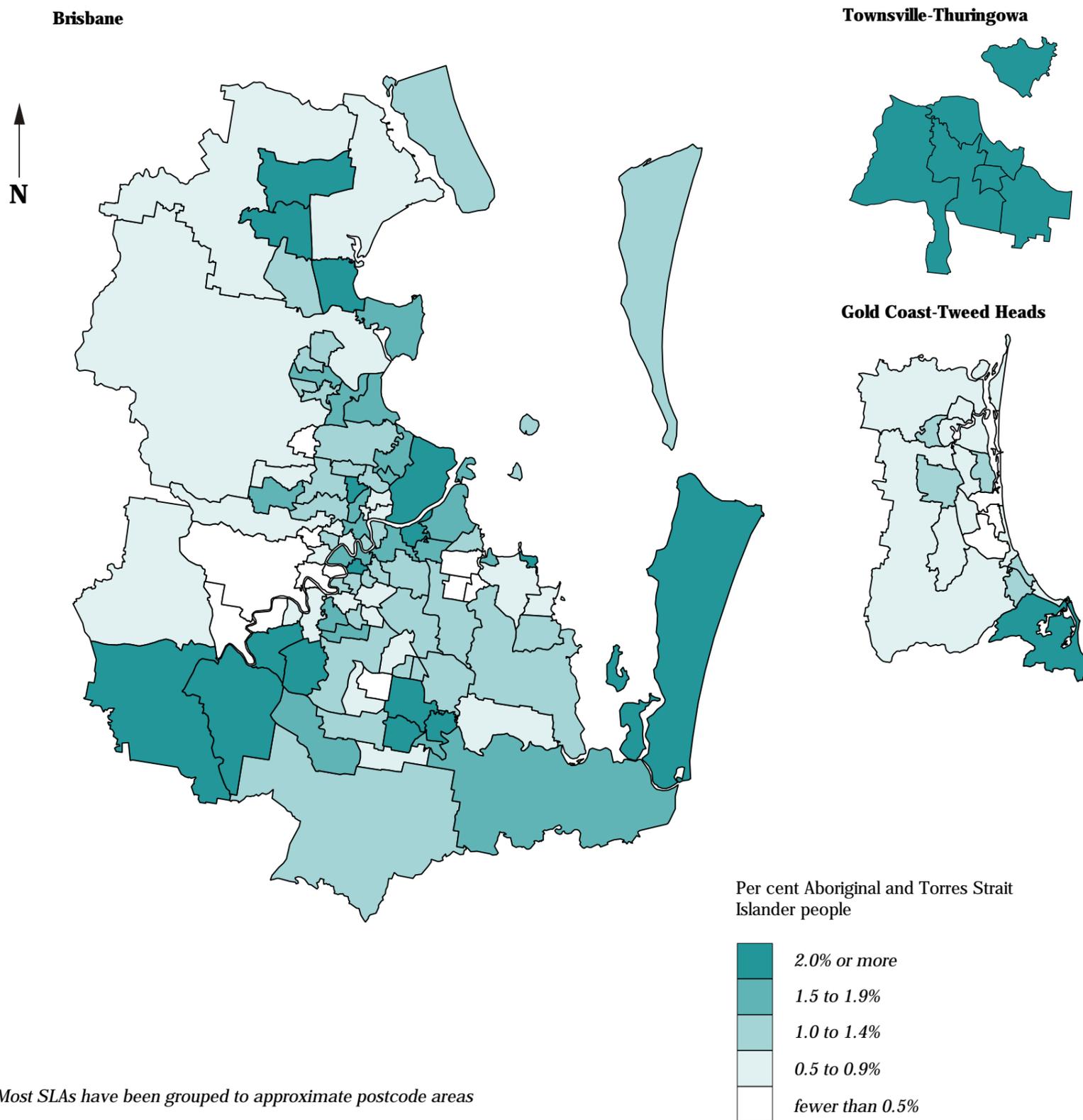
Townsville-Thuringowa

Townsville-Thuringowa had a notably higher proportion of Aboriginal and Torres Strait Islander people than the other major urban centres. There were 5,775 Indigenous people, comprising 4.7 per cent of the population.

Thuringowa [Part A] (5.4 per cent) and the combined area of Murray/Mt Louisa (5.0 per cent) had percentages above the **Townsville-Thuringowa** average, while in Townsville South East (4.1 per cent) and the combined areas of Gulliver/Hermit Park (4.0 per cent) and Townsville Coastal/Magnetic Island (3.9 per cent), percentages were below the average for **Townsville-Thuringowa**.

Map 3.16: Aboriginal and Torres Strait Islander people, Brisbane, Gold Coast-Tweed Heads and Townsville-Thuringowa, 1996

as a percentage of the total population in each area*



*Most SLAs have been grouped to approximate postcode areas

Source: Calculated on data from ABS 1996 Census

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 3.21**). 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 18 and 19.

Table 3.21: Aboriginal and Torres Strait Islander people, State/Territory
Per cent

	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

In 1996, 4.6 per cent of the population in Queensland outside **Brisbane** and the other major urban centres were Aboriginal and Torres Strait Islander people. There has been a slight increase in the percentage of the population over the ten years studied, from 3.7 per cent in 1986 to 3.6 per cent in 1991 and 4.6 per cent in 1996. In absolute terms, the trend has been for an increase in numbers over this period as well: in 1986 there were 44,101 Aboriginal and Torres Strait Islander people in rural Queensland, in 1991 there were 49,977 and by 1996, there were 65,473.

Map 3.17 illustrates the quite distinct distribution of the Aboriginal and Torres Strait Islander population in the non-metropolitan areas of Queensland in 1996. The highest proportions were centred in the far north region of Cape York, along the coast of the Gulf of Carpentaria, and along the border with the Northern Territory. The SLAs of Aurukun (88.6 per cent and 692 people), Mornington (84.8 per cent and 945) and Torres (79.9 per cent and 6,850) had the highest proportions of Aboriginal and Torres Strait Islander people.

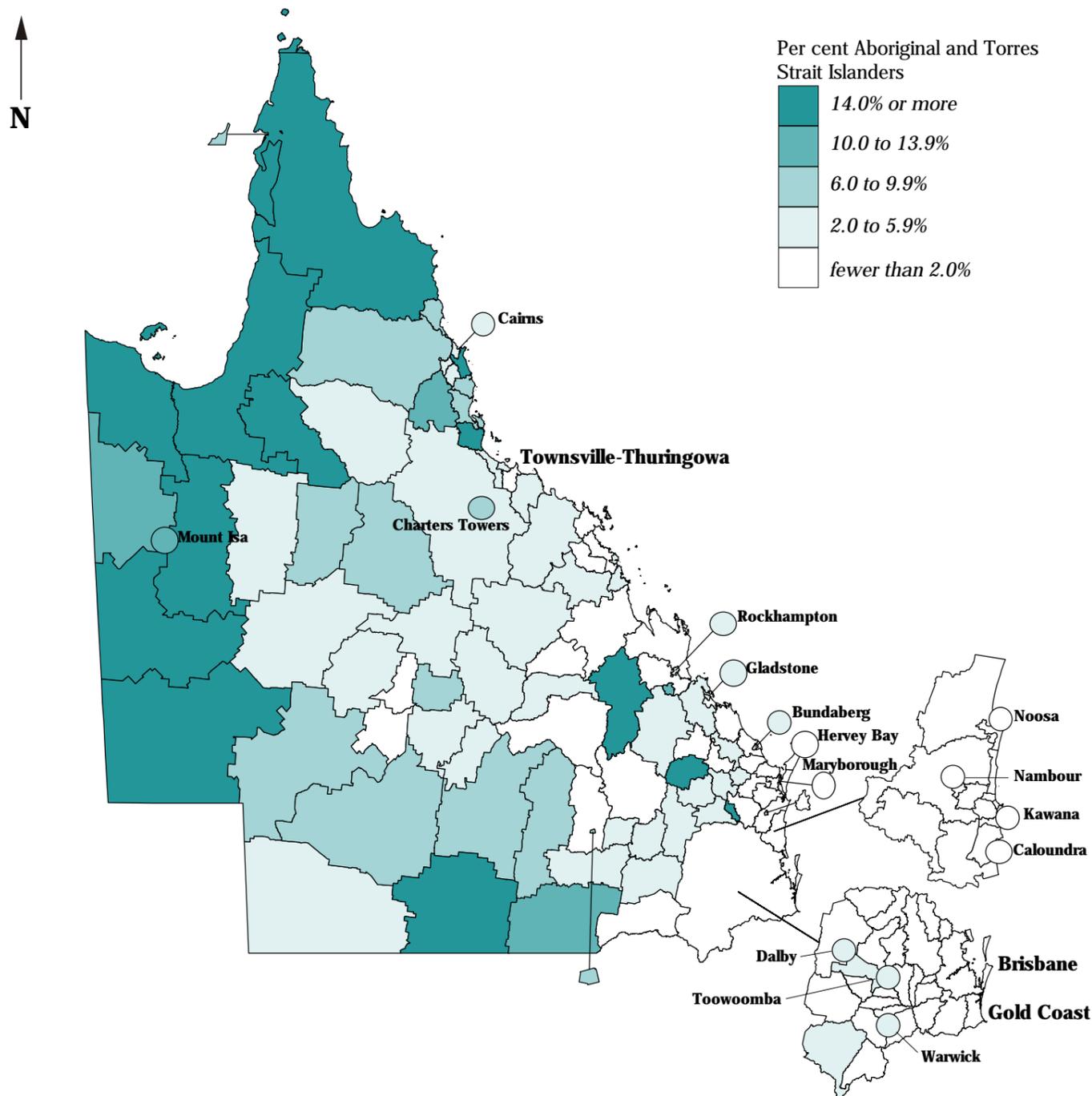
The largest populations of Aboriginal and Torres Strait Islander people, were in Cairns, with 7,072 Indigenous people (5.8 per cent); Mount Isa, with 3,025 (13.2 per cent); Rockhampton, with 2,868 people (4.8 per cent); Hinchinbrook, with 2,493 (16.0 per cent); and Mackay [Part A] with 2,437 people (4.0 per cent).

In comparison to areas with high proportions, those with low proportions of Aboriginal and Torres Strait Islander people were less remote and more developed. They included SLAs such as Noosa (0.5 per cent and 149 people), Crow's Nest (0.5 per cent

and 41), Buderim (0.6 per cent and 138) and Mooloolaba (0.7 per cent and 77).

There were correlations of substantial significance at the SLA level with the variables for dwellings with no motor vehicle (0.92) and single parent families (0.81). These results, together with the inverse correlation of substantial significance with the IRSD (-0.78), suggest the existence of an association at the SLA level between Indigenous people and socioeconomic disadvantage.

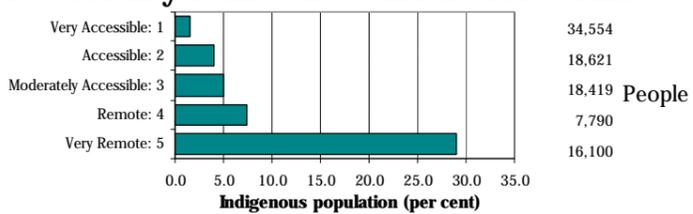
Map 3.17: Aboriginal and Torres Strait Islander people, Queensland, 1996
as a percentage of the total population in each Statistical Local Area



Source: Calculated on data from ABS 1996 Census

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 lower proportions of the population represented in the first four ARIA categories, from 1.5 per cent in the Very Accessible category, to 7.4 per cent in the Remote category, as well as the high 29.0 per cent in the Very Remote category. The numbers associated with the graph highlight the distribution of Indigenous people throughout Queensland, and their especially strong presence in the most remote areas.

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 of these 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, **Melbourne** has the highest proportion of its population in this category (**Table 3.22**), 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 fewer than in **Sydney**.

Table 3.22: People born in predominantly non-English speaking countries and resident in Australia for 5 years or more, capital cities

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

¹Includes Queanbeyan (C)

Source: ABS special data services

Brisbane

Over the ten year period from the 1986 to the 1996 Census, there was a significant increase in both the number and proportion of the **Brisbane** population who were from predominantly non-English speaking countries and resident for five years or more. In 1986, there were 69,091 people in this category (6.0 per cent of the population) and by 1996 the number had increased to 111,399 people (7.5 per cent).

The areas of **Brisbane** with the highest percentages of residents born in non-English speaking countries and resident for five years or more, were generally located just south of the Brisbane River (**Map 3.18**).

The highest proportions were recorded in the combined areas of Calamvale/Stretton (with 21.8 per cent), Darra-Sumner/Wacol (20.1 per cent) and Inala/Durack/Doolandella-Forest Lake/Ellen Grove/Richlands (16.6 per cent).

The outer and northern suburbs of **Brisbane** had the lowest proportions of their populations in this category: these areas included Ipswich Central (3.0 per cent), Kallangur (3.6 per cent), Bray Park (3.6 per cent), Petrie (3.7 per cent) and Deception Bay (3.7 per cent). The northern areas of Burpengary-Narangba and Pine Rivers Balance, and the combined coastal area of Lota/Manly/Manly West each had 3.8 per cent.

The combined area of MacGregor/Pallara-Heathwood-Larapinta, with 5,926 people; Inala/Durack/Doolandella-Forest Lake/Ellen Grove/Richlands, with 4,762 people; and Mt Gravatt/Rochedale, with 4,100 people, had the largest numbers of long term residents in this category. These large populations reflected the domination of the southern suburbs as locations for people born in predominantly non-English speaking countries to settle.

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

Gold Coast-Tweed Heads

At the 1996 Census, there were 25,494 people in **Gold Coast-Tweed Heads** born in non-English speaking countries and resident in Australia for five years or more.

The central coastal areas of Broadbeach/Mermaid Waters (10.8 per cent) and Surfers Paradise/Benowa (10.7 per cent) recorded the highest percentages for this variable. Areas in the south near the New South Wales border had the lowest rates. These included Tweed Heads (3.1 per cent), Coolangatta/Tugun (4.0 per cent) and the combined area of Currumbin Waters/Elanora (4.3 per cent).

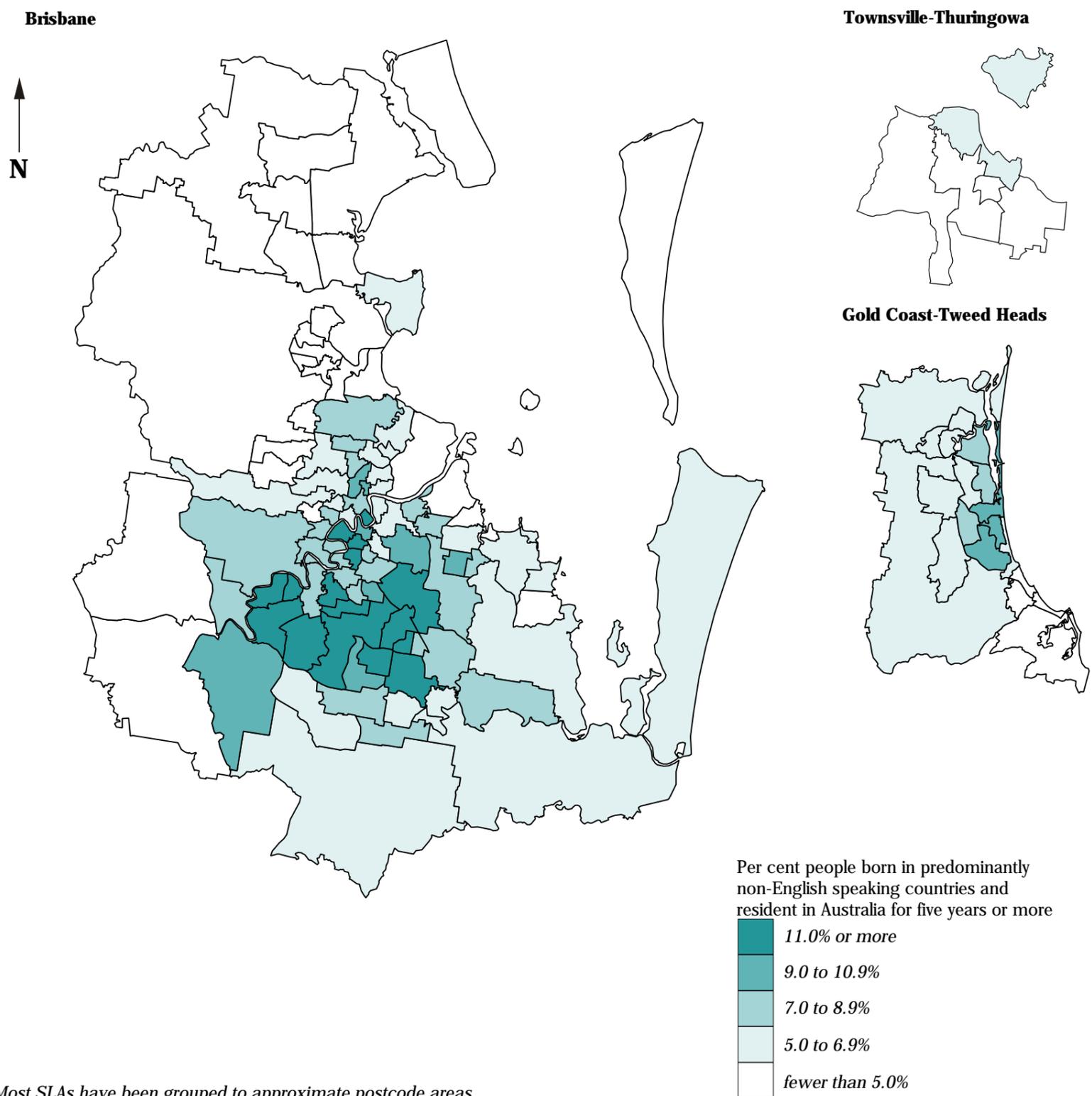
Townsville-Thuringowa

In 1996, there were 5,079 people born in predominantly non-English speaking countries resident in Australia for five years or more, 4.1 per cent of the population in **Townsville-Thuringowa**.

Much of the area had low proportions of people in this category, ranging from 5.2 per cent in the combined area of Townsville Coastal/Magnetic Island to 3.2 per cent in Townsville South East.

Map 3.18: People born in predominantly non-English speaking countries and resident in Australia for five years or more, Brisbane, Gold Coast-Tweed Heads and Townsville-Thuringowa, 1996

as a percentage of the total population in each area*



*Most SLAs have been grouped to approximate postcode areas

Source: Calculated on data from ABS 1996 Census

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

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

State/Territory comparison

The proportion of migrants born in predominantly non-English speaking countries, who arrived in Australia in or before 1991 and resided in the non-metropolitan areas at the 1996 Census, was highest in Victoria and Western Australia. However, as is shown in **Table 3.23**, 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 3.23** and **3.25** (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 3.23: People born in predominantly non-English speaking countries and resident in Australia for 5 years or more, State/Territory

	<i>Per cent</i>								
	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

In 1986, the areas of Queensland outside **Brisbane** and the other major urban centres accommodated 42,984 people (3.6 per cent of the population) who had been born in predominantly non-English speaking countries and resident in Australia for five years or more. Over the ten years to 1996, the number of people in this category rose by almost 10,000 and the proportion rose slightly to 3.7 per cent.

Map 3.19 clearly shows the higher concentrations of longer term migrants born in non-English speaking countries along the east coast. Although proportions for most of the State were quite low, Mareeba, near Cairns on the north coast, had 10.4 per cent of its population in this category, considerably more than any other SLAs in the non-metropolitan areas. The next highest percentages were in Hinchinbrook (7.5 per cent), Johnstone (7.3 per cent) and Stanthorpe on the New South Wales border (7.9 per cent).

Cairns had 7,791 people born in predominantly non-English speaking countries and resident in Australia for five years or more (6.4 per cent of its population); Mackay [Part A] had 2,109 (3.5 per cent); Hervey Bay, near Bundaberg, had 1,905 (4.5 per cent); while Mareeba had 1,891 (10.4 per cent).

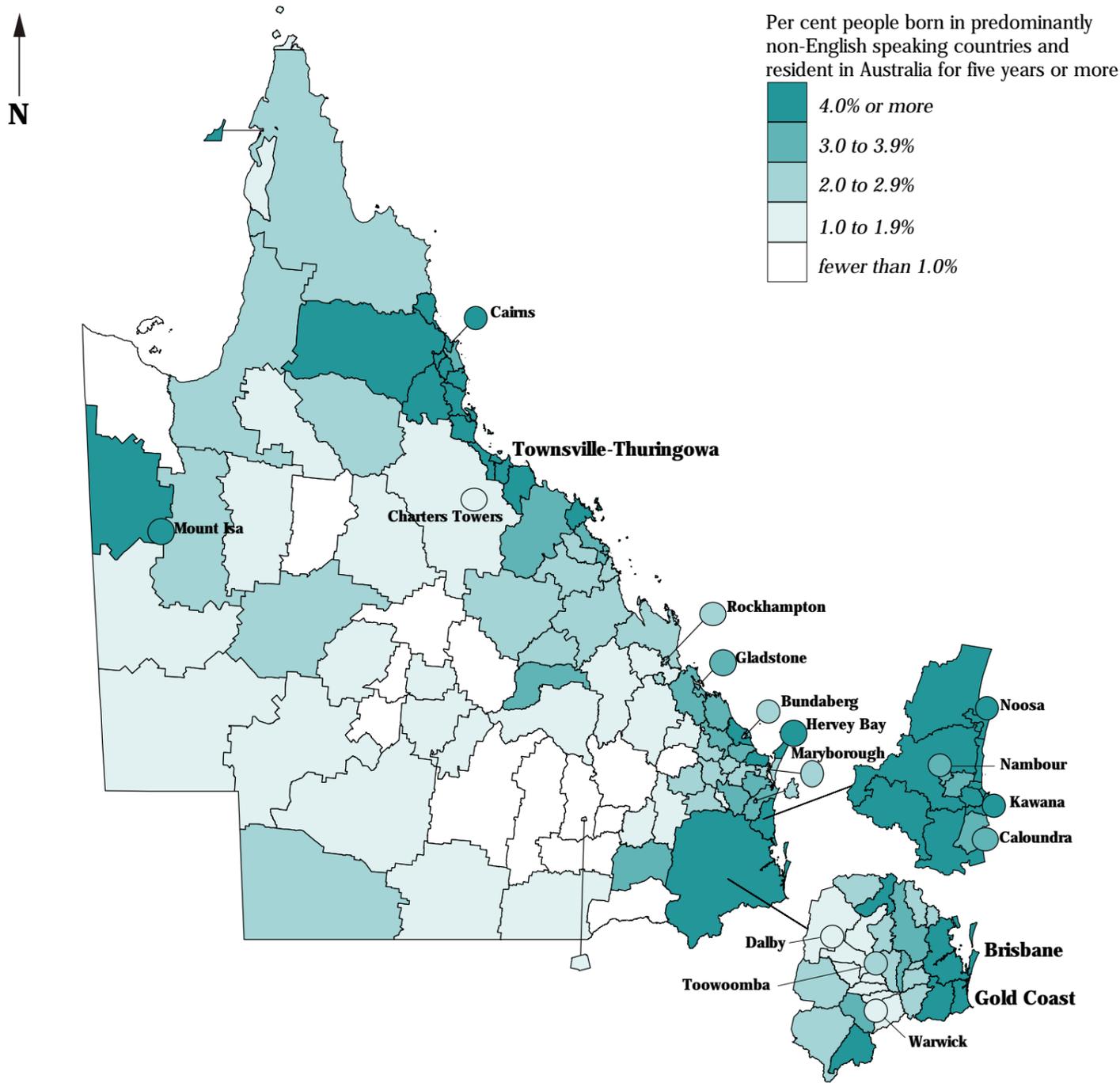
With the non-metropolitan areas of Queensland having such a low overall percentage of longer term migrants born in non-English speaking countries, it would be expected that a large number of individual SLAs would have low numbers and

proportions. This was the case, with 17 SLAs recording fewer than 10 people in this category and 18 SLAs recording proportions of 1.0 per cent or less. There was a concentration of areas with low proportions in the south-east of the State, west of **Brisbane**, including SLAs such as Bungil, Taroom, Booringa, Jericho, Waggamba and Warroo. The far north SLA of Mornington had a similarly low rate, with 0.3 per cent.

The only correlation of significance at the SLA level was recorded with the variable for people who reported having poor proficiency in English (0.74).

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

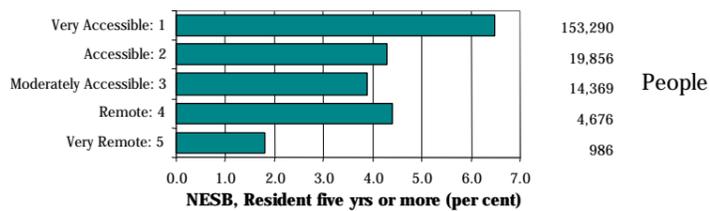
as a percentage of the total population in each Statistical Local Area



Source: Calculated on data from ABS 1996 Census

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 is in areas in the Very Accessible category (6.5 per cent of the population) and the lowest in the Remote category (1.8 per cent). The middle three categories have proportions of around four per cent.

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 3.24**). **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 3.24: People born in predominantly non-English speaking countries and resident in Australia for less than 5 years, capital cities

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

Brisbane

Almost 26,000 migrants of **Brisbane** arrived in Australia from predominantly non-English speaking countries between 1991 and 1996. This represented 1.7 per cent of the population in 1996, an increase in both the number and proportion of the population in this category from 1986 when there were 16,548 people, 1.4 per cent of the population.

High percentages of this population group were recorded in the southern areas of Nathan (11.7 per cent), Calamvale/Stretton (7.8 per cent) and Runcorn/Eight Mile Plains (5.9 per cent) (**Map 3.20**). These areas also have high proportions of longer term residents from non-English speaking countries and would therefore be attractive to new immigrants from the same countries. The inner areas of St Lucia (10.8 per cent) and West End/South Brisbane/Highgate Hill (5.7 per cent) also had comparatively high proportions. This could, in part, be attributable to higher numbers of overseas students living in these areas.

The combined area of Gumdale/Ransome/Wakerley had the lowest proportion of such recently arrived immigrants, with only 0.1 per cent of its population in this category. Low proportions were also recorded in the outer areas of Petrie (0.2 per cent), Caboolture (0.2 per cent), Kallangur (0.3 per cent) and Caboolture East (0.3 per cent). The map highlights the fact that, generally speaking, new arrivals from non-English speaking countries appear somewhat reluctant, at least initially, to move away from the city centre and inner suburbs.

The largest number of recently arrived immigrants born in non-English speaking countries was recorded in the combined area of MacGregor/Pallara-Heathwood-Larapinta, with 1,890 people.

There was no consistent evidence in the correlation analysis of an association at the small area level between people from predominantly non-English speaking countries and resident for five years or more and socioeconomic status. A negative correlation was, however, recorded with the variable for early school leavers (-0.50).

Gold Coast-Tweed Heads

In 1996, 5,178 people resident in **Gold Coast-Tweed Heads** were newly arrived Australian residents born in non-English speaking countries, representing 1.4 per cent of the population.

The central coastal regions of the State had the highest proportions in this category (**Map 3.20**). These included the combined areas of Robina-Clear Island Waters/Kerrydale-Stephens/Burleigh Waters (3.1 per cent), Labrador/Southport (2.7 per cent) and Surfers Paradise/Benowa (2.6 per cent). Ten areas had percentages of less than 1.0 per cent.

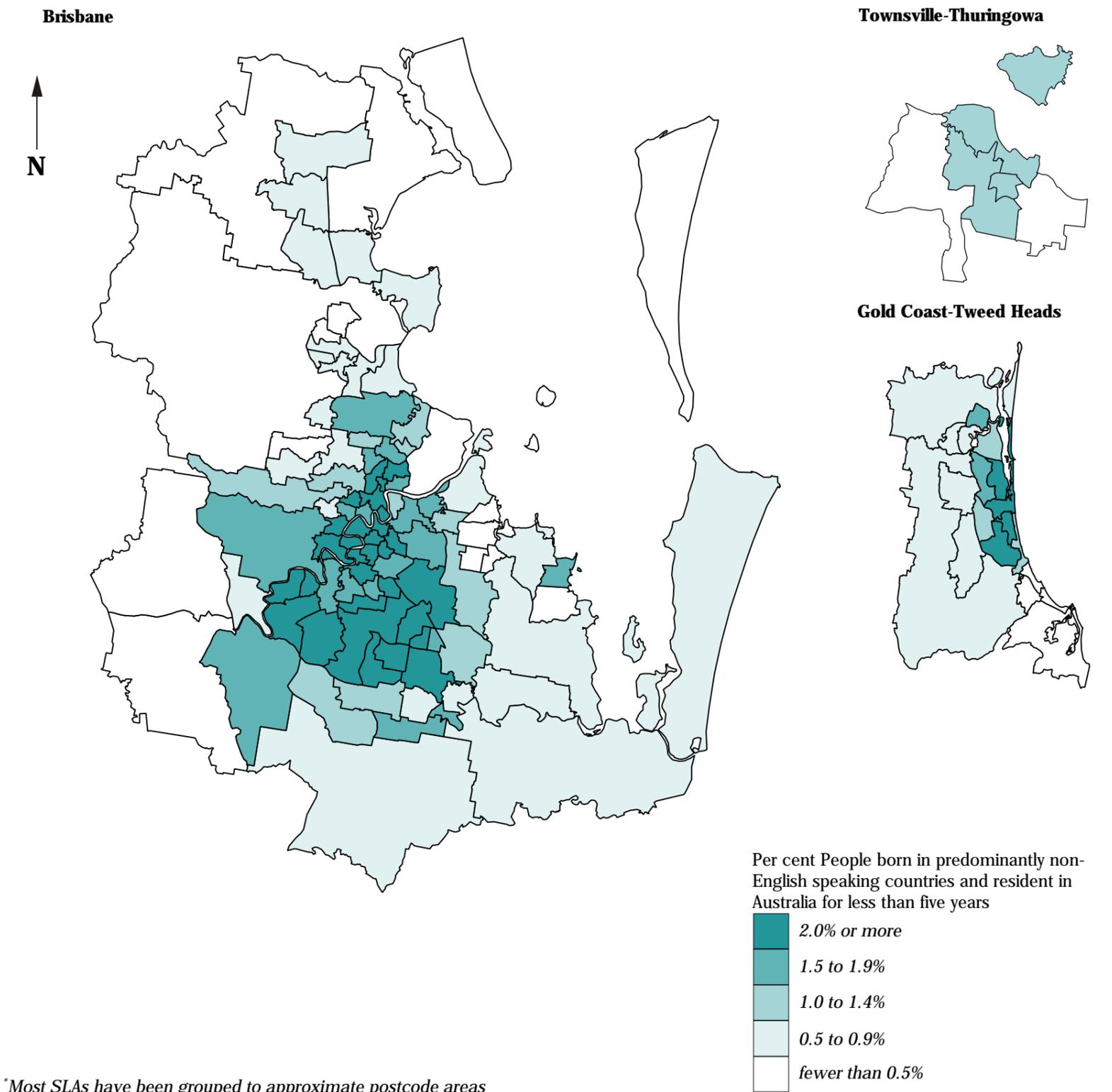
Townsville-Thuringowa

Townsville-Thuringowa had 997 people who had recently arrived in Australia from predominantly non-English speaking countries, 0.8 per cent of the population.

As with Queensland's other major urban centres, the highest concentrations were in the more centrally located areas of the city. The combined area of Murray/Mt Louisa had the highest proportion, with 1.2 per cent of its population in this category. The areas of Townsville South East and Thuringowa [Part A] each recorded below 1.0 per cent.

Map 3.20: People born in predominantly non-English speaking countries and resident in Australia for less than five years, Brisbane, Gold Coast-Tweed Heads and Townsville-Thuringowa, 1996

as a percentage of the total population in each area*



*Most SLAs have been grouped to approximate postcode areas

Source: Calculated on data from ABS 1996 Census

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

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

State/Territory comparison

Recently arrived migrants from predominantly non-English speaking countries have a strong preference for capital city residence, as is clear from **Table 3.25** (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 3.25: People born in predominantly non-English speaking countries and resident in Australia for less than 5 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

The non-metropolitan areas of Queensland (and the Northern Territory) had the highest proportion of recently arrived migrants from predominantly non-English speaking countries in 1996, with 0.5 per cent. In Queensland this represented 7,002 people, only marginally different from the 7,142 people in this category in 1986 (when they represented 0.6 per cent of the population).

Much of the non-metropolitan areas of the State had very low proportions of people in this category (**Map 3.21**), especially when compared to **Brisbane**. Only five SLAs had one per cent or more of their population recently arrived from predominantly non-English speaking countries. They were Charters Towers (with 1.5 per cent), Cairns (1.4 per cent), Toowoomba (1.2 per cent), Gatton (1.2 per cent) and Croydon (1.0 per cent). With just 7,008 people identified in the entire non-metropolitan area, the largest population concentrations were also relatively small, with 1,694 people in this category in Cairns, 996 in Toowoomba, 524 in Rockhampton, 216 in Beaudesert [Part B], 178 in Mackay [Part A], 171 in Gatton, 144 in Mount Isa, 141 in Noosa, 132 in Charters Towers and 109 and 105 in Bundaberg and Gladstone, respectively.

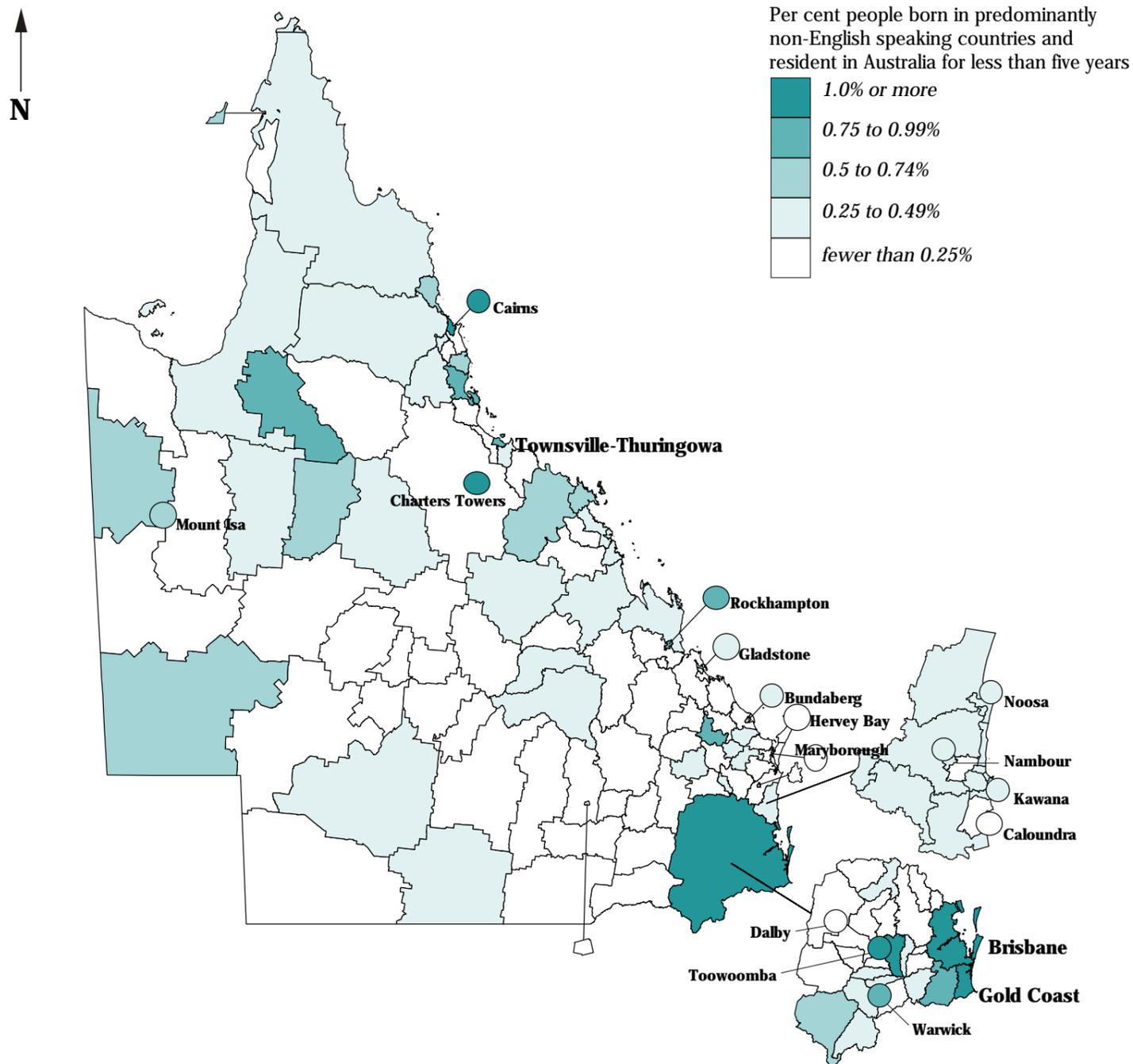
The vast majority of SLAs had proportions of people born in non-English speaking countries below one per cent, with no population in this category in 23 SLAs and less than 10 people in a further 42 SLAs.

The largest regions which failed to record any population in this category included Rosalie and Wambo west of **Brisbane**, Longreach in the central west and Dalrymple near **Townsville-Thuringowa**.

There was no consistent evidence in the correlation analysis of an association at the small area level between people from predominantly non-English speaking countries and resident for five years or more and socioeconomic status. Weak negative correlations were, however, recorded with the variables for early school leavers (-0.24) and managers and administrators, and professionals (-0.27).

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

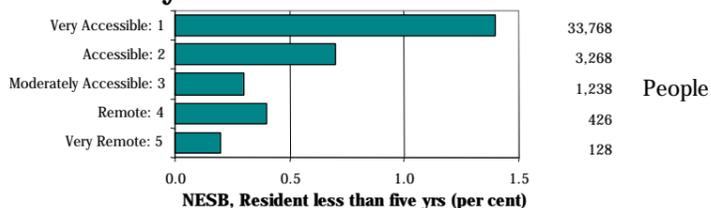
as a percentage of the total population in each Statistical Local Area



Source: Calculated on data from ABS 1996 Census

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 declines with increasing remoteness (other than for a higher proportion in the Remote category, of 0.4 per cent), from 1.4 per cent in the Very Accessible areas to 0.2 per cent in the Very Remote areas. Both the percentages and numbers are very small.

Source: Calculated on ARIA classification, DHAC

National Social Health Atlas Project, 1999

Proficiency in English, 1996

Capital city comparison

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

Poor proficiency in English of people aged 5 years and over and born overseas in predominantly non-English speaking countries was determined when people within this category reported speaking English 'not well' or 'not at all' (**Table 3.26**). The percentages shown are calculated on the total population aged 5 years and over, not just those born overseas. **Melbourne** and **Sydney** have the highest proportions of migrants with poor proficiency in English at 5.0 and 4.9 per cent respectively. These high levels are due largely to the fact that **Melbourne** and **Sydney** have been the principal destinations for migrants from South-East Asia during the last two decades, following the major influx of people from European countries in the 1950s and 1960s. However, since the 1986 Census, there has been a trend across most Australian cities towards increasing numbers of people who are not fluent in English. While proportions may have fluctuated, numbers increased in most cities. **Darwin** was the only capital city to record a fall in both proportions and numbers.

Table 3.26: Poor proficiency in English of people aged 5 years and over and born in predominantly non-English speaking countries, capital cities
Per cent

	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

Brisbane

In 1986 in **Brisbane**, there were 12,583 people aged five years and over born in predominantly non-English speaking countries who reported poor proficiency in English, 1.2 per cent of the population. Over the five years to 1991, both the number of people and the proportion increased (to 18,838 people, 1.5 per cent); however the proportion fell over the next Census period, to 1.4 per cent, while the number rose slightly to 19,916 people.

Map 3.22 graphically highlights the areas of highest and lowest proportions of this population, a pattern consistent with that shown for the two previous variables mapped. Areas to the north of the Brisbane River, and in particular the outermost areas, generally recorded high levels of English proficiency, while those with lower levels of proficiency were located to the south. The highest proportions of people with poor proficiency in English were in the combined area of Darra-Sumner/Wacol in the outer south-west (8.2 per cent), along with the neighbouring areas of Inala/Durack/Doolandella-Forest Lake/Ellen Grove/Richlands (6.8 per cent) and nearby Calamvale/Stretton (7.1 per cent). The lowest proportions were found in the northern areas of Petrie (0.1 per cent), Burpengary-Narangba (0.2 per cent), Pine Rivers Balance (0.2 per cent) and Caboolture Balance (0.2 per cent).

The combined areas of Inala/Durack/Doolandella-Forest Lake/Ellen Grove/Richlands and MacGregor/Pallara-Heathwood-Larapinta had the largest numbers of people in this category, with 1,757 and 1,661 respectively.

There were weak correlations with the indicators of socioeconomic disadvantage, other than for early school leavers

(with a weak inverse correlation). These results, together with the weak inverse correlation with the IRSD (-0.25), suggest the existence of an association at the small area level between people reporting poor proficiency in English and socioeconomic disadvantage.

Gold Coast-Tweed Heads

In 1996 there were 3,231 people aged 5 years and over and born in non-English speaking countries in **Gold Coast-Tweed Heads** who reported poor proficiency in English, 0.9 per cent of the population.

The highest proportion of 1.9 per cent, was recorded in the areas of Surfers Paradise/Benowa and the combined area of Robina-Clear Island Waters, Kerrydale - Stephens and Burleigh Waters. Both Tweed Heads and Coolangatta/Tugun had a proportion of 0.2 per cent, which was the lowest in this major urban centre.

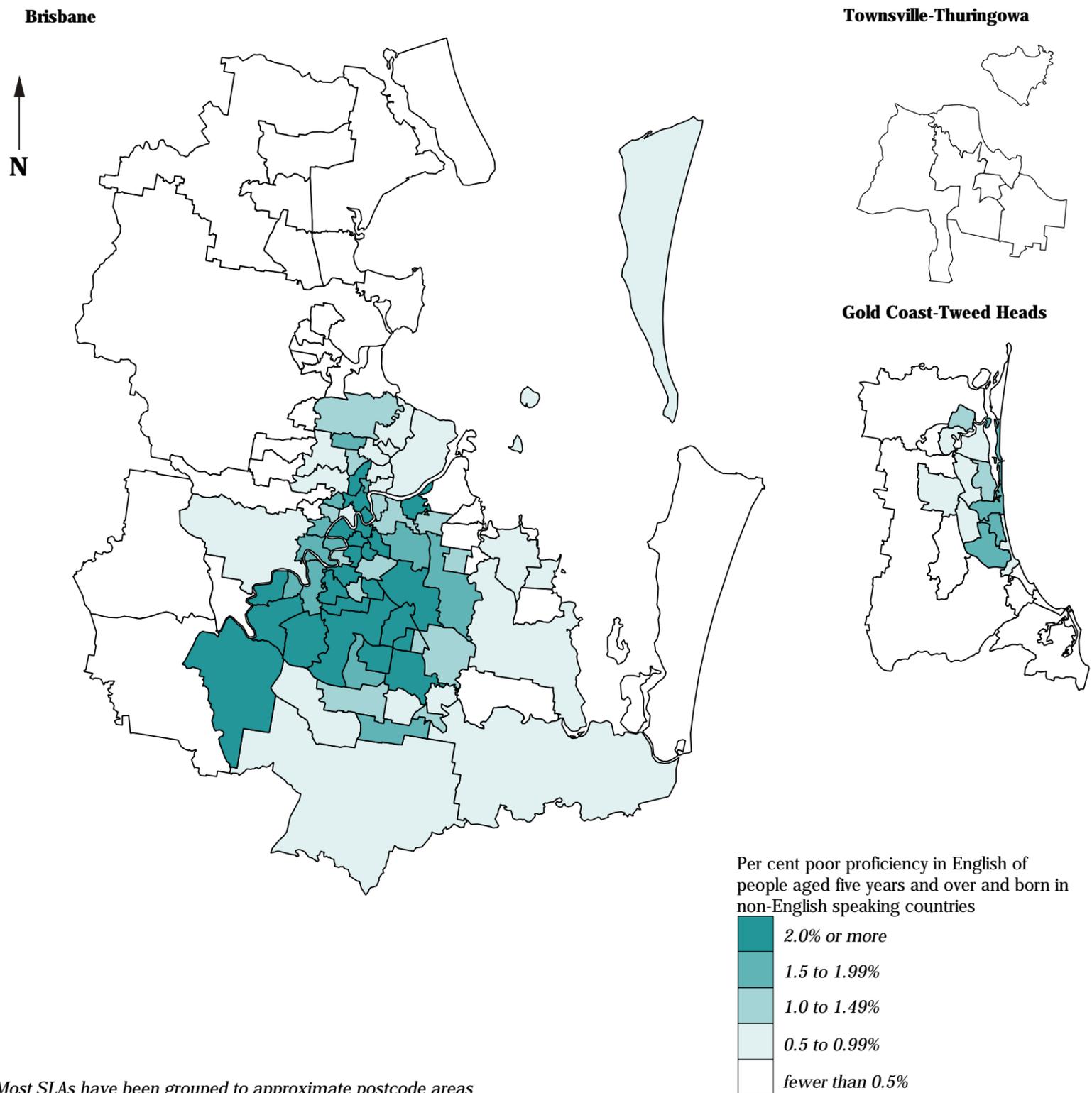
Townsville-Thuringowa

Townsville-Thuringowa had a relatively low proportion of people aged 5 years and over born in non-English speaking countries with poor proficiency in English. The overall rate recorded was 0.4 per cent and represented 420 people.

A rate of 0.5 was recorded in the areas from Murray to Mt Louisa and Gulliver to Hermit Park. Townsville South East had the lowest rate of poor English proficiency with 0.2 per cent.

Map 3.22: Poor proficiency in English of people aged five years and over and born in non-English speaking countries, Brisbane, Gold Coast-Tweed Heads and Townsville-Thuringowa, 1996

as a percentage of the population aged five years and over in each area*



*Most SLAs have been grouped to approximate postcode areas

Source: Calculated on data from ABS 1996 Census

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 5 years and over and born overseas in predominantly non-English speaking countries was determined when people within this category reported speaking English 'not well' or 'not at all'. Migration research has consistently demonstrated a propensity for migrants to locate in the major cities of the States and Territories, especially the capital cities. **Table 3.27** shows that this tendency is evident, possibly more so, for migrants reporting poor proficiency in English. Outside of **Brisbane**, the incidence of migrants with poor proficiency in English is very low, a characteristic shared by each of the States. For these migrants to move away from the capital city and seek employment and residence elsewhere requires an ability to interact with the wider community. Poor proficiency in English restricts this capacity. Consequently, until English proficiency improves, they generally remain restricted to areas where they have the security of their language community, including longer term resident migrants with better English skills who can represent them in their interactions with the labour market, schools, health services and government authorities.

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

Table 3.27: Poor proficiency in English of people aged 5 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

The areas of Queensland outside **Brisbane** and the other major urban centres, as with all of the States and the Northern Territory, had very low numbers and proportions of people (aged 5 years and over) who were from predominantly non-English speaking countries and reported poor proficiency in English. There were 4,811 people in this category (0.4 per cent of the population) in 1996. Although this was lower than the number in 1986 of 5,186 people (0.5 per cent), it was considerably lower than the 6,858 people in 1991.

Map 3.23 shows a pattern consistent with that of the two previous variables mapped. The south-eastern SLA of Stanthorpe (2.2 per cent) on the New South Wales border and Mareeba (2.1 per cent), Hinchinbrook (1.9 per cent) and Johnstone (1.7 per cent) in the far north of the State had the highest proportions of people who were from predominantly non-English speaking countries and had poor proficiency in English.

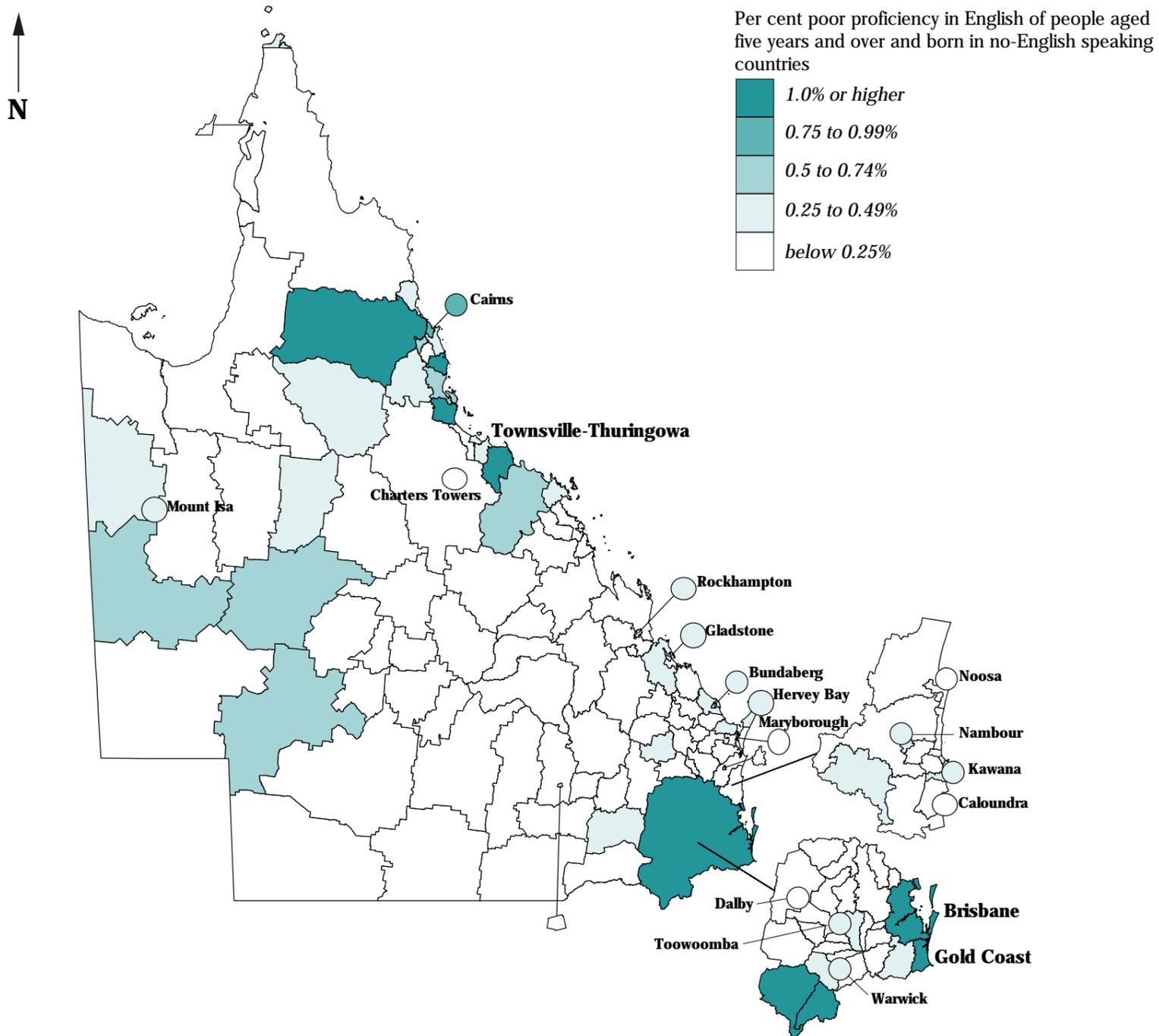
The largest numbers of people in this category were resident in Cairns (957 people, 0.9 per cent of the population), Mareeba (354 people, 2.1 per cent), Johnstone (326 people, 0.2 per cent) and Toowoomba (216 people, 0.3 per cent).

In all, 30 SLAs had no people in the appropriate category who reported poor proficiency in English, and a further 52 had fewer than 10.

There was no consistent evidence in the correlation analysis of an association at the small area level between people reporting poor proficiency in English and socioeconomic status.

Map 3.23: Poor proficiency in English of people aged five years and over and born in no-English speaking countries, Queensland, 1996

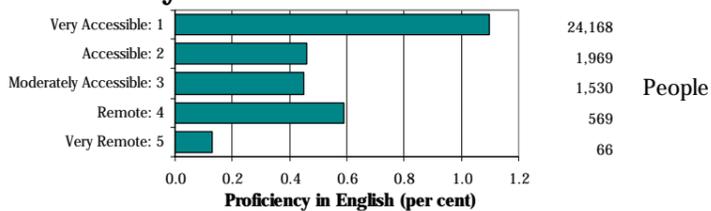
as a percentage of the population aged five years and over in each Statistical Local Area



Source: Calculated on data from ABS 1996 Census

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 proportions are in the Very Accessible (1.1 per cent of the population) and Remote (0.6 per cent) categories. 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 Housing Queensland: 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 below the national average for both **Brisbane** and Queensland (**Table 3.28**). In comparison, **Adelaide**, **Darwin** and **Canberra** have very high proportions of dwelling stock rented from State government housing authorities. The proportion of dwellings in this category increased from 3.9 per cent (at the 1986 Census) to 4.8 per cent (at the 1996 Census) of all dwellings in **Brisbane**, an additional 10,395 dwellings. . The largest relative decreases in the number of State housing authority dwellings in the ten years from 1986 to 1996 were recorded in **Darwin** and **Canberra**.

Table 3.28: 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

Brisbane

In 1996, 25,700 dwellings were rented from the State housing authority (4.8 per cent of the occupied private dwellings in **Brisbane**), an increase from 15,313 dwellings in 1986 (3.9 per cent) and 21,361 dwellings in 1991 (4.7 per cent).

The combined area of Inala/Durack/Doolandella-Forest Lake/Ellen Grove/Richlands in the south-west of **Brisbane** had a high proportion of dwellings rented from the housing authority, with 24.3 per cent (**Map 3.24**). High proportions were also recorded in other outer southern areas of Loganlea (20.9 per cent) and Berrinba-Karawatha/Kingston (17.1 per cent).

A total of 14 areas in **Brisbane** did not record any dwellings being rented from the State housing authority. The largest of these were in the outer southern and outer northern areas, although the inner area of St Lucia was also in this category. Several other areas had percentages of less than 1.5 per cent.

The combined area of Inala/Durack/Doolandella-Forest Lake/Ellen Grove/Richlands had a total of 2,451 such dwellings within its boundaries, while other areas to record large numbers included the combined area of Berrinba-Karawatha/Kingston (1,879), Ipswich Central (1,457) and Redcliffe (1,266).

There were correlations of meaningful significance at the small area level with the variables for unskilled and semi-skilled workers (0.55), Indigenous Australians (0.53) and unemployed people (0.53). The inverse correlation of meaningful significance with the IRSD (-0.67) also indicates a positive association between the distribution of these dwellings and socioeconomic disadvantage.

Gold Coast-Tweed Heads

In **Gold Coast-Tweed Heads** in 1996, 2,766 dwellings were rented from the State housing authority, 2.3 per cent of all occupied private dwellings.

The highest proportions were recorded in the central areas of Labrador/Southport (5.8 per cent), Nerang (5.3 per cent) and Arundel/Ashmore (3.0 per cent). At the other end of the scale Surfers Paradise/Benowa, Guanaba-Currumbin Valley and Coomera-Cedar Creek had proportions of 0.1 per cent.

Townsville-Thuringowa

In 1996, there were 2,770 dwellings rented from the State housing authority in **Townsville-Thuringowa**, 6.6 per cent of all occupied private dwellings.

Above average proportions were recorded in the combined area of Murray/Mt Louisa, with 9.8 per cent; Thuringowa [Part A], with 8.2 per cent; and Townsville South East, with 6.8 per cent. The combined area of Townsville Coastal/Magnetic Island had the lowest proportion for this variable, with 2.1 per cent of occupied private dwellings rented from the housing authority.

Map 3.24: Dwellings rented from the State housing authority, Brisbane, Gold Coast-Tweed Heads and Townsville-Thuringowa, 1996

as a percentage of all occupied private dwellings* in each area#



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

#Most SLAs have been grouped to approximate postcode areas

Source: Calculated on data from ABS 1996 Census

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

Dwellings rented from the State housing authority, 1996

State/Territory comparison

The Census collects data on dwellings rented from Housing Queensland: 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 3.29**). The lowest levels were recorded in the non-metropolitan areas of Queensland (2.9 per cent) and Victoria (3.9 per cent) and the highest in the Northern Territory (10.5 per cent) and South Australia (9.0 per cent). 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.

Table 3.29: 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

In 1986, 6,767 dwellings in Queensland (outside **Brisbane** and the other major urban centres) were rented from the State housing authority, 1.7 per cent of all occupied private dwellings. By 1991, this proportion had risen to 2.7 per cent (11,879 dwellings) and further to 2.9 per cent in 1996 (14,480 dwellings).

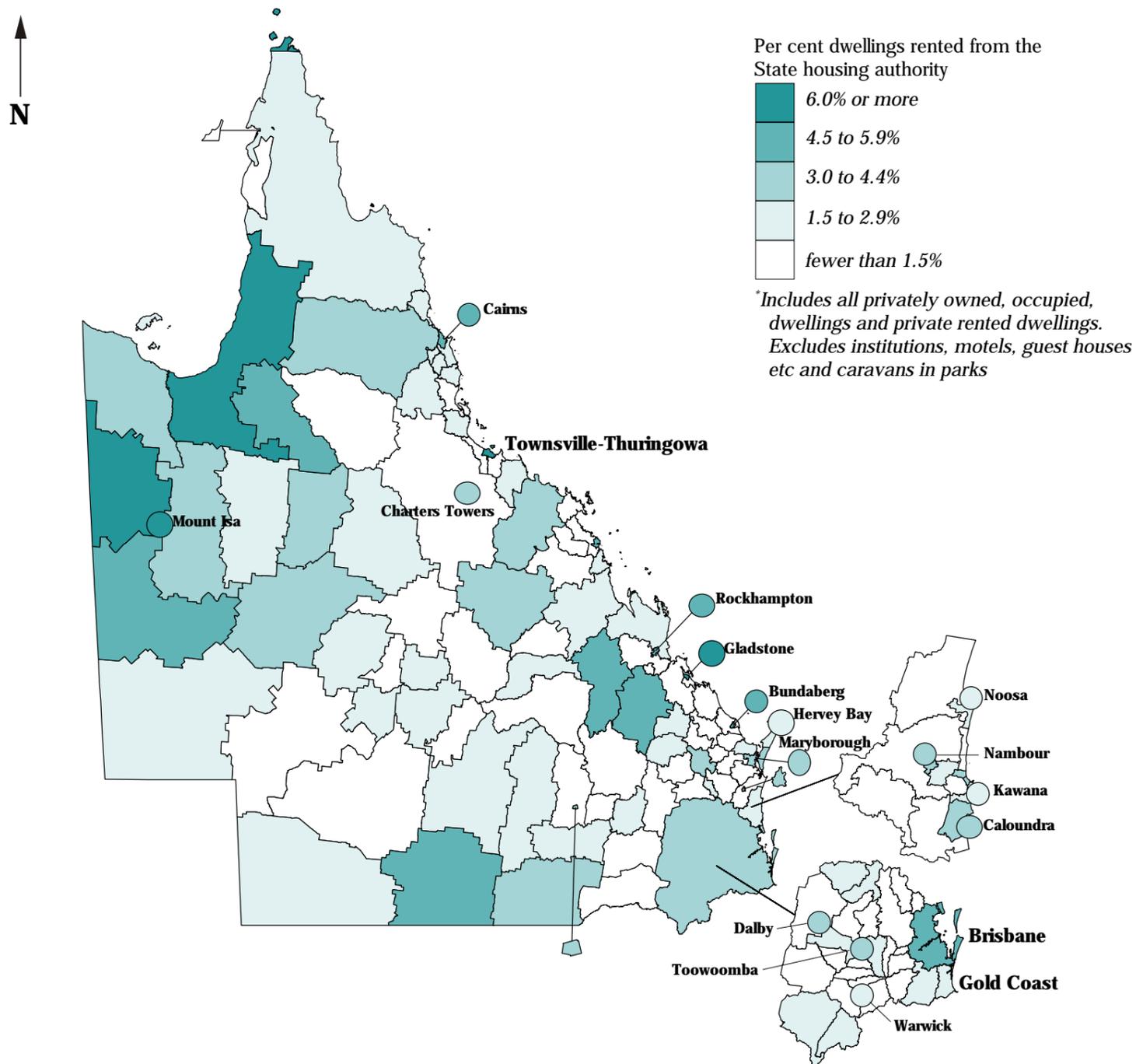
The highest proportions of housing authority rented dwellings in the non-metropolitan areas of Queensland were in the far north of the State, in Torres (11.3 per cent), Mt Isa (7.6 per cent), Carpentaria (6.8 per cent) and Croydon (5.9 per cent) **Map 3.25**.

In absolute terms, however, most of the housing authority dwellings were in the larger towns of Cairns, with 1,998 dwellings (5.0 per cent); Rockhampton, with 1,071 (5.0 per cent); and Mackay [Part A], with 1,046 (4.8 per cent).

At the time of the 1996 Census, twenty one of the SLAs in rural Queensland did not have any housing authority rented dwellings. The largest of these were Burnett [Part B], Caboolture [Part B] and Fitzroy [Part B]. The map clearly illustrates that large areas of the State throughout the central, western and northern regions have very small numbers of housing authority dwellings available for rental.

There was no consistent evidence in the correlation analysis of an association at the small area level between dwellings rented from the State housing authority and socioeconomic status.

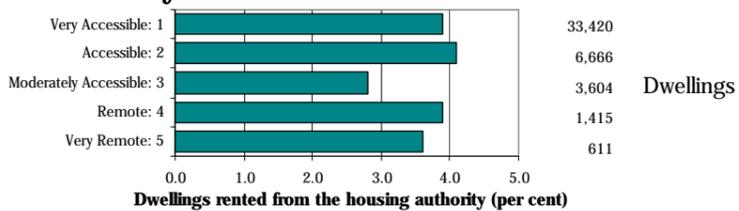
Map 3.25: Dwellings rented from the State housing authority, Queensland, 1996
as a percentage of all occupied private dwellings* in each Statistical Local Area



Source: Calculated on data from ABS 1996 Census

Details of map boundaries are in Appendix 1.2

Accessibility/Remoteness Index of Australia



The majority (73.1 per cent) of dwellings rented from the State housing authority are in the Very Accessible ARIA category. However, there are similar proportions of these dwellings in all but the Moderately Accessible areas, where they represent just 2.8 per cent of all occupied private dwellings. Proportions in the other areas range from 4.1 per cent in the Accessible areas to 3.6 per cent in the Very Remote areas.

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 vehicles parked or garaged overnight (**Table 3.30**), the highest percentage for the capital cities. The proportion in **Brisbane** was below the *All capitals* average. 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 3.30: Dwellings with no motor vehicle, capital cities
Per cent

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra ¹	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

Brisbane

In 1996, 11.6 per cent of occupied private dwellings in **Brisbane** did not have a motor vehicle parked or garaged overnight. This represented declines from 12.9 per cent in 1986 and further from 12.2 per cent in 1991. In absolute terms, however, there were increases in numbers of dwellings without a motor vehicle, from 49,952 in 1986 to 55,042 in 1991 and 62,003 in 1996.

Areas closest to the city centre had the highest proportion of dwellings without motor vehicles (**Map 3.26**). These included New Farm (33.3 per cent) and the combined areas of Dutton Park/ Woolloongabba (30.0 per cent), West End/South Brisbane/Highgate Hill (29.8 per cent), City/Spring Hill (26.5 per cent) and Herston/Newstead (24.9 per cent).

The outer areas of **Brisbane** had the lowest proportions of dwellings without a motor vehicle, with areas such as Ipswich North (1.2 per cent), Albany Creek (1.5 per cent), Calamvale/Stretton (1.8 per cent) and Greenbank [Part A]/Beaudesert (1.9 per cent) recording the lowest values.

The outer areas of Redcliffe (with 3,205 dwellings), Ipswich Central (3,059 dwellings) and Berrinba-Karawatha/Kingston (1,920 dwellings) had the most dwellings without a motor vehicle. In inner **Brisbane**, the highest number was in the combined area of West End/South Brisbane/Highgate Hill (1,717 dwellings).

There was a weak association evident in the correlation analysis at the small area level with most of the indicators of socioeconomic disadvantage. These results, together with the weak inverse correlation with the IRSD (-0.30), suggest the existence of an association at the small area level between dwellings without a motor vehicle and socioeconomic disadvantage.

Gold Coast-Tweed Heads

The total number of dwellings without a motor vehicle in 1996 in **Gold Coast-Tweed Heads** was 15,622, 11.0 per cent of all occupied private dwellings.

Of particular note were the coastal areas of Coolangatta/Tugun, with 20.1 per cent; Surfers Paradise/Benowa, with 19.0 per cent; and Broadbeach/Burleigh Heads, with 17.7 per cent, all with above average proportions. The areas with the lowest proportions of dwellings without a motor vehicle were generally found in the western areas and included Guanaba-Currumbin Valley (2.1 per cent) and Worongary-Tallai/Mudgeeraba (2.7 per cent).

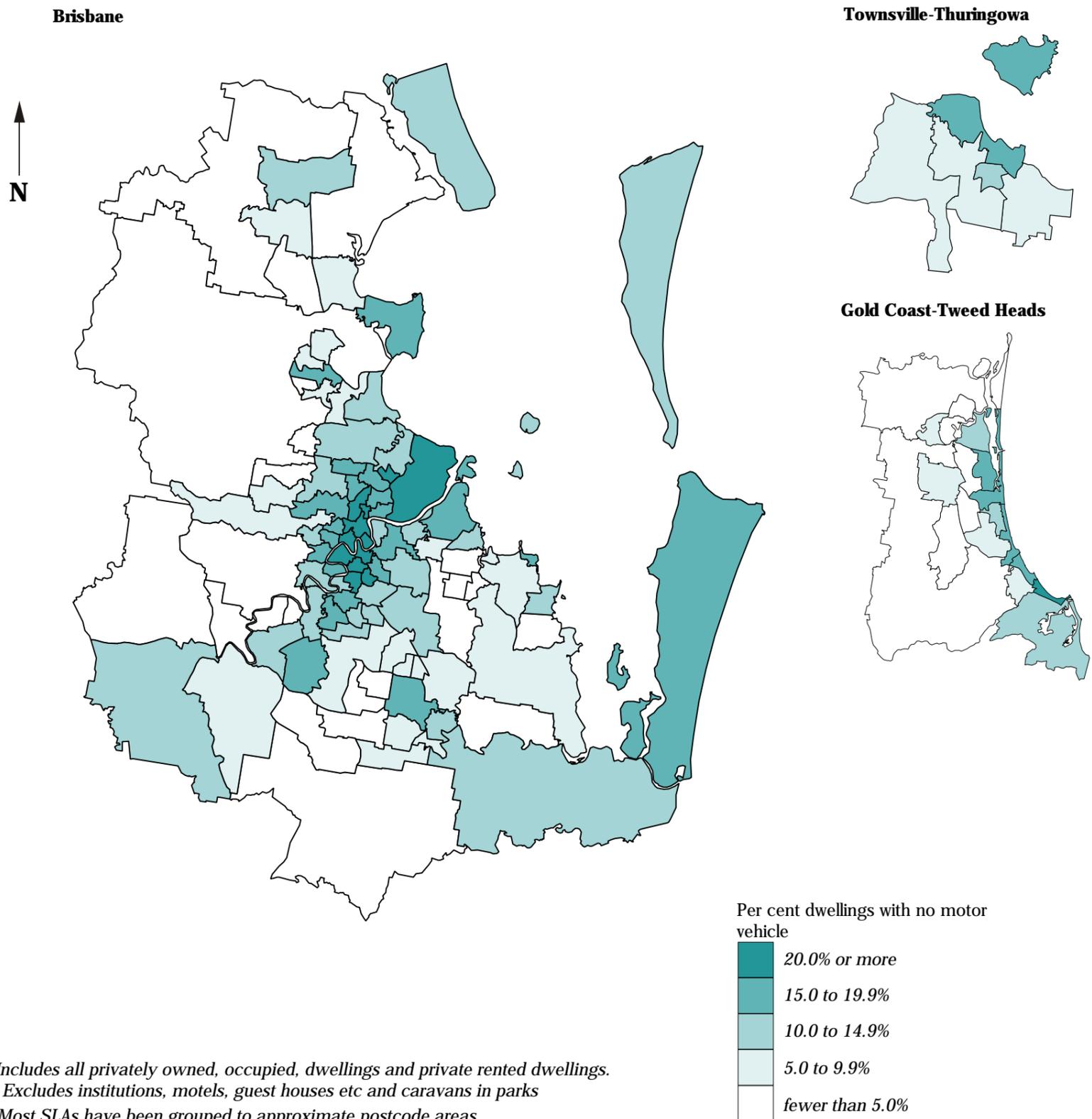
Townsville-Thuringowa

In 1996, there were 4,278 dwellings in **Townsville-Thuringowa** which were without a motor vehicle, 10.1 per cent of all occupied private dwellings.

The combined area of Townsville Coastal/Magnetic Island (16.7 per cent) and Gulliver/Hermit Park (13.8 per cent) had the highest proportions of dwellings without a motor vehicle. The lowest proportions were recorded in Townsville South East (7.4 per cent) and Thuringowa [Part A] (5.2 per cent).

Map 3.26: Dwellings with no motor vehicle, Brisbane, Gold Coast-Tweed Heads and Townsville-Thuringowa, 1996

as a percentage of all occupied private dwellings* in each area#



*Includes all privately owned, occupied, dwellings and private rented dwellings.
 Excludes institutions, motels, guest houses etc and caravans in parks
 #Most SLAs have been grouped to approximate postcode areas

Source: Calculated on data from ABS 1996 Census

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

Dwellings with no motor vehicle, 1996

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 3.31**). 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 3.31: 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

In 1996, 9.8 per cent of dwellings in the non-metropolitan areas of Queensland did not have a motor vehicle, similar to the proportions in both 1986 (9.7 per cent) and 1991 (9.5 per cent). In absolute terms, however, at each Census there has been an increase in the number of dwellings without a motor vehicle, from 37,523 dwellings in 1986, to 42,012 dwellings in 1991 and to 48,954 dwellings in 1996.

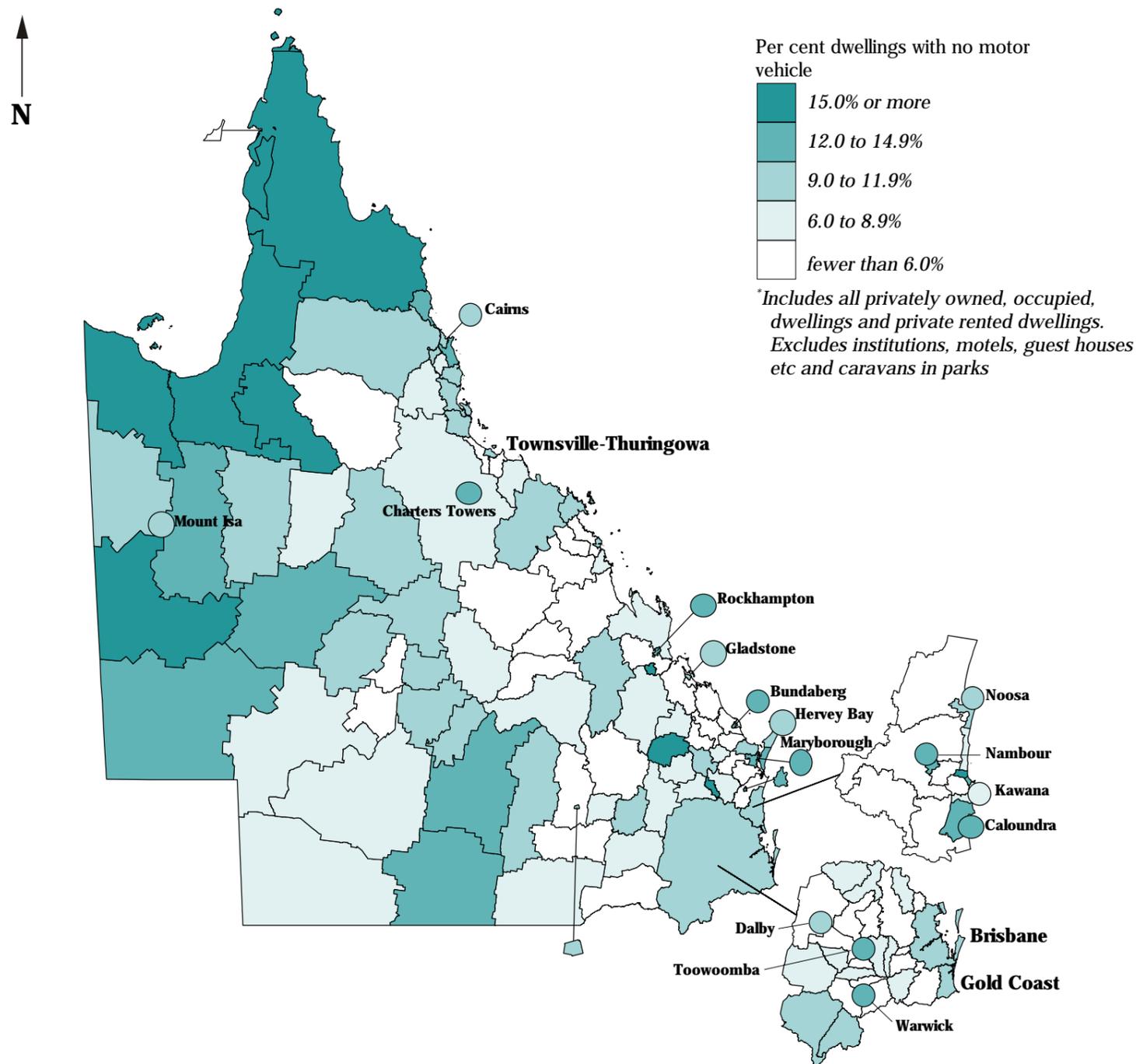
There was a smaller differential between the percentage of dwellings without a motor vehicle in the non-metropolitan areas and major urban centres in Queensland (and Western Australia) than in the other States. As shown in **Map 3.27**, more than half of the SLAs in the non-metropolitan areas of Queensland had percentages of below 10.0 per cent. The highest proportion of dwellings without motor vehicles were in the far north of the State, in Aurukun (with 60.7 per cent), Mornington (56.8 per cent) and Torres (51.1 per cent). These SLAs were exceptions to the general trend of the non-metropolitan areas where, with greater distances to travel for social interaction, access to goods and services and employment, motor vehicle ownership is almost a necessity.

The east coast and areas closer to **Brisbane** were particularly characterised by higher levels of car ownership. In absolute terms, however, it was these regions that had the largest numbers of dwellings without a motor vehicle. Cairns had 4,615 dwellings without a motor vehicle, 11.6 per cent of all occupied private dwellings; Toowoomba had 3,767 dwellings, 12.3 per cent; Rockhampton had 2,853 dwellings, 13.3 per cent; Mackay [Part A] had 2,173 dwellings, 10.1 per cent; and Bundaberg had 1,983 dwellings, 12.5 per cent. These SLAs are larger centres with comparatively higher populations where the reliance on motor vehicles is not as great as that in the more isolated regions in the west and the north of the State.

There were correlations of substantial significance with the variables for Indigenous people (0.92) and single parent families (0.82). Also of note was the strong inverse correlation with the IRSD (-0.78), indicating a positive association between dwellings without motor vehicles and socioeconomic disadvantage.

Map 3.27: Dwellings with no motor vehicle, Queensland, 1996

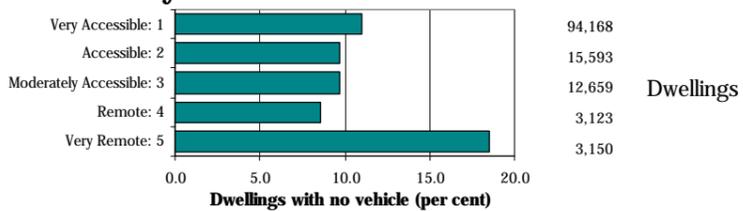
as a percentage of all occupied private dwellings* in each Statistical Local Area



Source: Calculated on data from ABS 1996 Census

Details of map boundaries are in Appendix 1.2

Accessibility/Remoteness Index of Australia



The highest proportion of dwellings without a motor vehicle is in the Very Remote areas (10.8 per cent). Proportions in the other ARIA categories decline from 11.0 per cent in the Very Accessible areas to 8.6 per cent in the Remote areas. The distribution of the Indigenous population is likely to have influenced the high proportion in the Very Remote areas.

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

SEIFA Index of Relative Socio-Economic Disadvantage, 1996

Capital city comparison (Australia equals 1,000)

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 19. 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 3.32**). 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 3.32: SEIFA Index of Relative Socio-Economic Disadvantage, capital cities
Index values (Australia equals 1000)

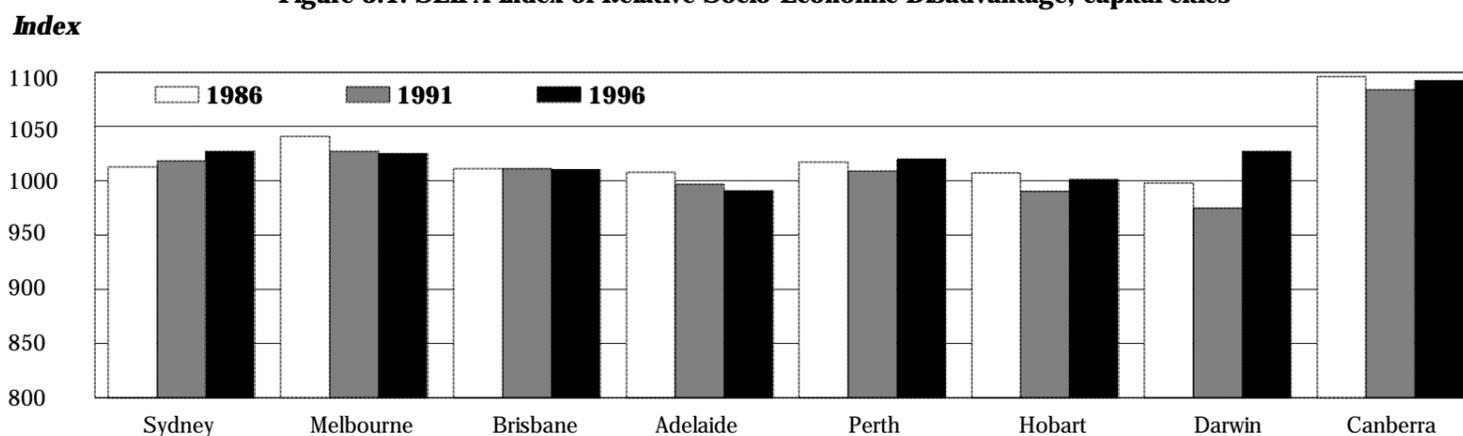
	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra ¹	All capitals
1996	1027	1025	1010	992	1020	1001	1027	1084	1021
1986	1013	1041	1011	1008	1017	1007	998	1089	1021

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

Brisbane (Queensland equals 1000)

At the 1996 Census, the SEIFA Index of Relative Socio-Economic Disadvantage (IRSD) score calculated for **Brisbane** was 1027 (when the index score for Queensland was 1000).

As expected from the earlier data mapped, the areas just to the north of the Brisbane River had the highest index scores (least disadvantaged) (**Map 3.28**). These included the combined area of Upper Brookfield/Fig Tree Pocket (with a score of 1176), Anstead/Bellbowrie/Moggill (1164), Ashgrove/The Gap (1138), Chelmer/Taringa (1137), Bardon (1136) and St Lucia (1135). To the south of the Brisbane River, the area from Jindalee to River Hills was also mapped in this highest range, with an IRSD of 1134.

Relatively low scores, indicating the most disadvantaged areas, were calculated for the combined south-western areas of Inala/Durack/Doolandella-Forest Lake/Allen Grove/Richlands (with a score of 895) and Darra-Sumner/Wacol (876). The southern area of Berrinba-Karawatha/Kingston had the lowest score, with 856.

The IRSD, understandably, was highly correlated with many of the individual variables mapped, including those for unskilled and semi-skilled workers (-0.89), low income families (-0.85), single parent families (-0.76) and unemployed people (-0.74). These relationships indicate a positive association at the small area level between this aggregate measure of socioeconomic disadvantage and the individual indicators analysed.

Gold Coast-Tweed Heads

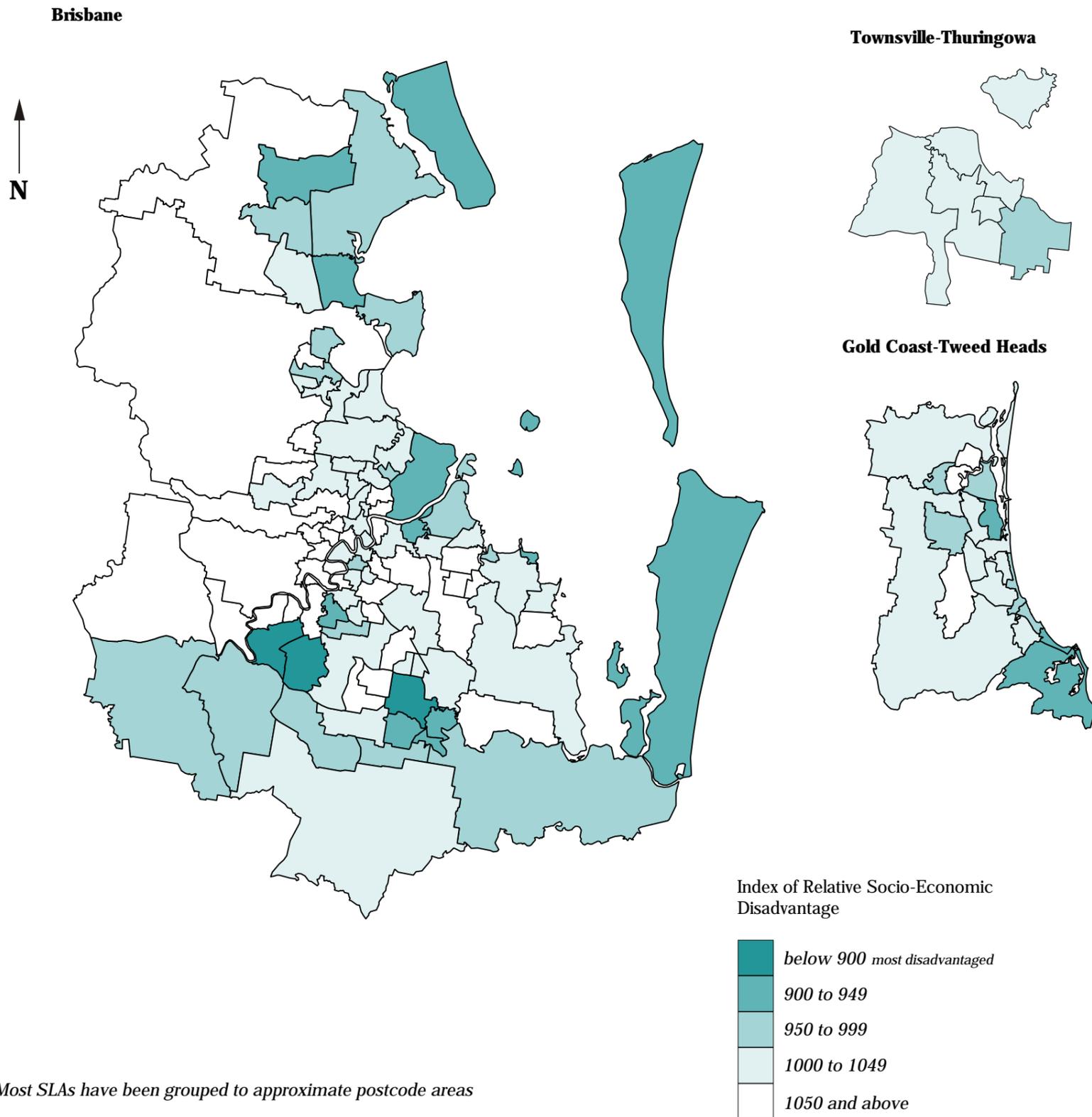
The IRSD score calculated for **Gold Coast-Tweed Heads** was 996. The scores for the areas mapped ranged from 927 in Tweed to 1080 in Hope Island.

Townsville-Thuringowa

Townsville-Thuringowa had a relatively high IRSD score at the 1996 Census, a score of 1014. The only area to record an index score of below 1000 was Townsville South East, with 975. The combined area of Townsville Coastal/Magnetic Island and Murray/Mt Louisa had scores of 1031 and 1020 respectively.

Map 3.28: SEIFA Index of Relative Socio-Economic Disadvantage, Brisbane, Gold Coast-Tweed Heads and Townsville-Thuringowa, 1996

IRSD index number for each area*



*Most SLAs have been grouped to approximate postcode areas

Source: Calculated on data from ABS 1996 Census

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

SEIFA Index of Relative Socio-Economic Disadvantage, 1996

State/Territory comparison (Australia equals 1,000)

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 19. 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 3.33**), although the score in Western Australia was almost stable.

Table 3.33: 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)

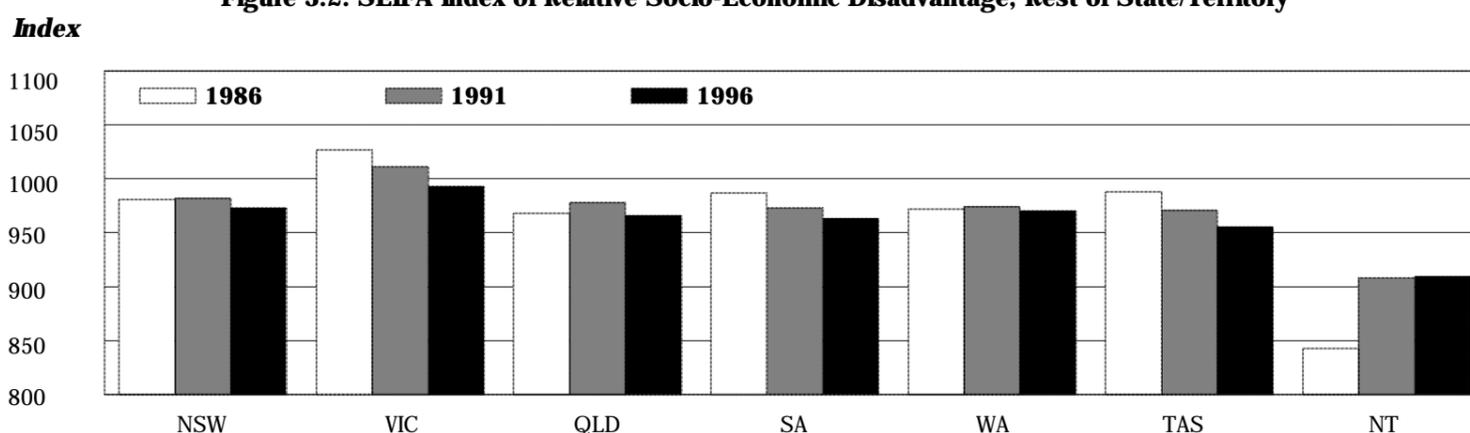
³Includes Newcastle and Wollongong (NSW); Geelong (Vic); and Gold Coast-Tweed Heads and Townsville-Thuringowa (Qld)

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 (Queensland equals 1,000)

At the 1996 Census, the areas of Queensland outside the other major urban centres had a SEIFA Index of Relative Socio-Economic Disadvantage score of 982 (when the index score for the whole of Queensland was 1000). This was considerably lower than the score of 1027 recorded in **Brisbane**, indicating a greater degree of disadvantage relative to Queensland as a whole.

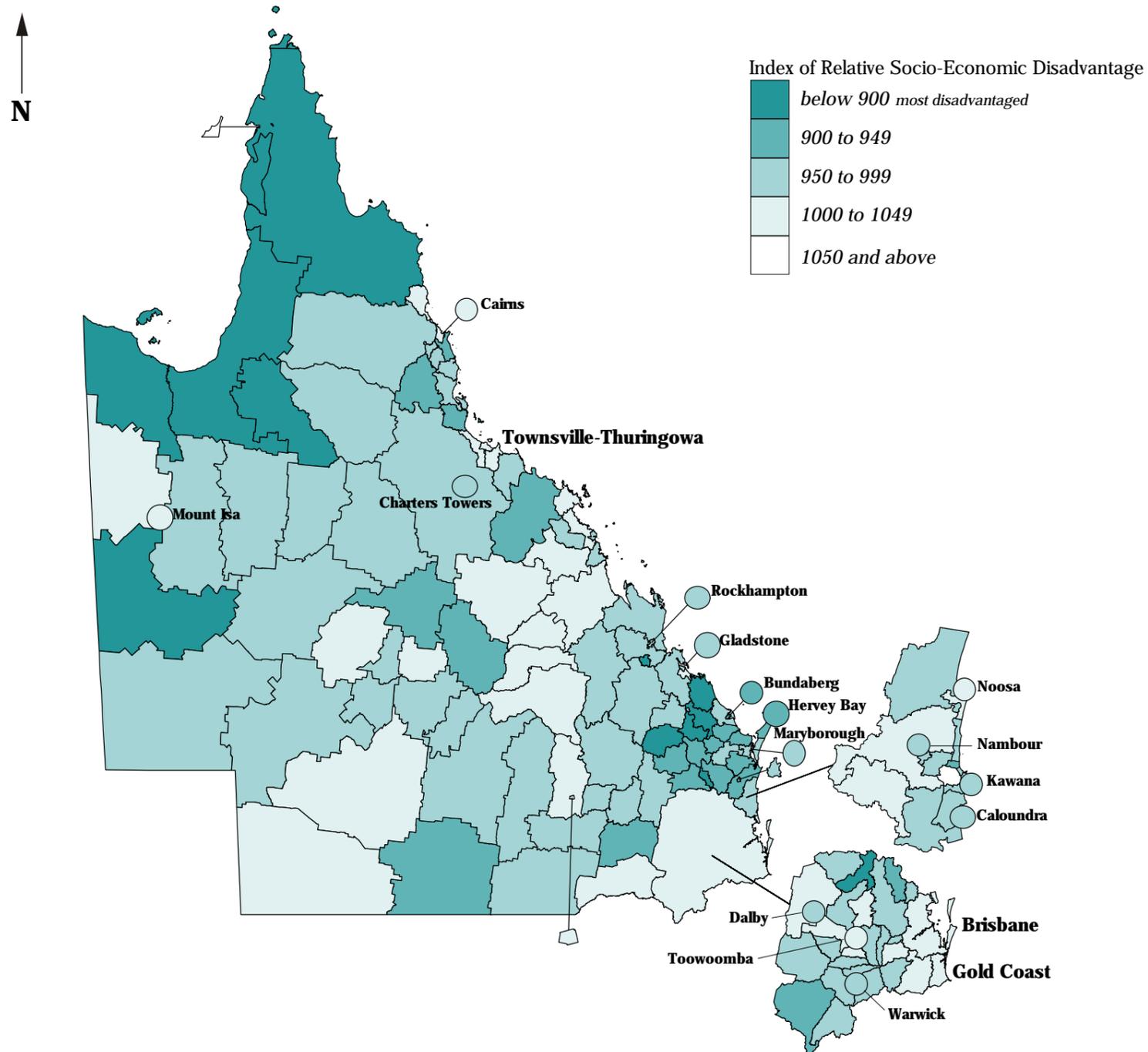
Outside **Brisbane** and the other major urban centres, the most disadvantaged areas were located in the north of the State (**Map 3.29**), with the lowest IRSD score of 637, recorded in Aurukun. IRSD scores of below 850 were also recorded in Mornington (677), Croydon (802), Torres (811), Carpentaria (828), Burke (830) and in Mount Morgan (835). Among the towns, the lowest score was in Hervey Bay (933).

At the other end of the scale, the least disadvantaged SLA was Weipa, with an index score of 1093. The SLAs of Cairns (1029), Toowoomba (1008) and Noosa (1008) had the highest scores for the regional centres.

The IRSD was, understandably, inversely correlated with a number of the indicators of socioeconomic disadvantage, mostly highly with the variables for Indigenous people (-0.78) and dwellings without a motor vehicle (-0.78). These inverse correlations indicate a positive association at the SLA level between this aggregate measure of socioeconomic disadvantage and the individual indicators analysed.

Map 3.29: SEIFA Index of Relative Socio-Economic Disadvantage, Queensland, 1996

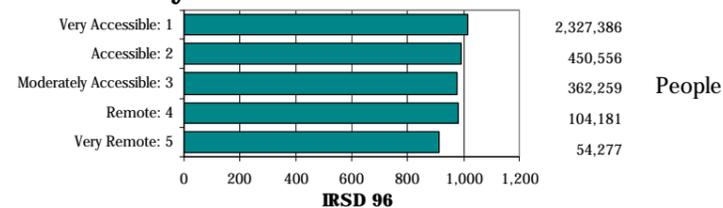
IRSD index number for each Statistical Local Area



Source: Calculated on data from ABS 1996 Census

Details of map boundaries are in Appendix 1.2

Accessibility/Remoteness Index of Australia



The graph of the ABS Index of Relative Socio-Economic Disadvantage shows the highest index score (indicating the most advantaged areas) is in the Very Accessible ARIA category (1016) and the lowest score is in the Very Remote category (913).

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

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