

7 Availability of selected health services

Introduction

The location of services and facilities in relation to the distribution of the population is an important indicator of accessibility. Unfortunately the data currently available as to the location of health, welfare and other services and facilities are limited. This is true even for data at the SLA level: the range of data by actual address location that can be mapped precisely are even more limited.

Greater interest is, however, being shown in establishing databases of services by exact location. Such databases can assist in developing a better understanding of the patterns of provision, access to and use of services and inform policy development and strategic planning processes for the location and delivery of health services. These initiatives are being aided by the use of Geographical Information Systems (GIS) techniques¹.

In this chapter data are mapped at the SLA level for general medical practitioners (GPs), hospital beds (public acute and private hospitals) and residential aged care facilities (nursing home places and hostel places) and child care places (long day child care and outside school hours care).

Data mapped

Population per GP

The spatial distribution of GPs has been illustrated by mapping the population per GP in each area.

Data are of the number of full-time equivalent (FTE) GPs² per practice site. Data were available for postcode areas and were converted to SLA, except for **Brisbane, Gold Coast-Tweed Heads, Townsville-Thuringowa, Darwin** and **Canberra-Queanbeyan**, for which postcode data were mapped.

The rate of population per GP was calculated for each area and is mapped over five ranges. In many non-metropolitan SLAs the rate was very high, because the denominator, the FTE number of GPs, was very small. An examination of the distribution of rates across all non-metropolitan areas in Australia revealed that a sensible cut-off would be where the rate of population per GP exceeded 10,000 people per GP. Most of the SLAs with rates of this size had fewer than 0.3 FTE GPs. On the maps, these areas are shown as having 'No GP' (or fewer than 10,000 people per GP) even though they may have a GP practising for one session per week. The other areas are mapped across the remaining four ranges.

¹GIS is an organised collection of computer hardware and software designed to efficiently capture, store, update, manipulate, analyse and display all forms of geographically referenced information.

²In computing full-time equivalent GPs, use was made of a threshold of \$71,725 in Schedule fee income in 1995-96. Practitioners with a Schedule fee income above the average, were given a fraction of '1'. All other practitioners were given a proportion of 1, having regard to the Schedule fee income for the practitioner concerned relative to the threshold income of \$71,725.

The GPs included in this analysis exclude GPs working in salaried practice who do not submit accounts to Medicare. Examples include GPs working for the Royal Flying Doctor Service and the Aboriginal Medical Service, those working in specialist services such as low vision clinics, as well as in a small number of community health centres (see comments on page 305 in relation to GP services not included in the data mapped). If, however, these GPs meet the definition quoted above for work performed in another practice, they will be included as practising from that location.

Users should be cautious not to place too heavy an emphasis on the population per GP in any one SLA, as the location of the principal practice in an SLA may be close to the population of a neighbouring SLA and provide a significant number of services to people in this neighbouring SLA. This is less of a problem for the larger areas (SSDs) mapped in the Australian atlas.

It is not possible to directly compare the data shown here with that in the first edition of the atlas because of the use in this edition of the more accurate FTE measure. In the first edition GPs were defined as the number of medical practitioners who performed (during 1990/91) at least 1,000 GP services (based on selected items in the Commonwealth Medical Benefits Schedule) for which Medicare benefits were paid, and who received more than 50 per cent of fee-charged income from those items (ie. they were charging patients for services appropriate for a GP for more than 50 per cent of the income they derived from Medicare). This was a relatively small number of services and, as such allowed for the inclusion, in the number of GPs, of many (but not all) of the medical practitioners who were practising part-time in medicine.

Despite this change in definition, the data for the earlier period have been shown below to allow users to examine variations in the rates between the States and Territories at each reference date.

Hospital beds

The number of beds in public acute hospitals and private hospitals has been mapped per 1,000 population of the area in which the hospital is located. The public hospital data were available at 30 June 1996 and the private hospital data at 30 June 1997.

Questions remain as to the accuracy of the data, even at this broad level of publication, as it is has not been used in this way before and has therefore not been subject to scrutiny. Although the public hospitals are referred to as 'acute' hospitals, they treat and care for patients with long term care needs, including for rehabilitation (leading to a return to life outside of a hospital or nursing home) and those who are unlikely to ever leave such care, whether in a hospital or nursing home (see below under *Residential aged care facilities*).

The data for some States is also likely to be more difficult to obtain in the future as the organisational arrangements for the management and delivery of health services changes, with hospital data being available only for areas or networks, and not

by each service location. Some data are already supplied at the establishment level, even when there are two or more separately located campuses operated by the establishment. In these cases the campus location without bed numbers was removed from the file before mapping.

Residential aged care facilities

Nursing home places and hostel places are mapped per 1,000 population aged 70 years and over, in line with the Commonwealth planning targets for residential care places of 90 places per 1,000 population aged 70 years and over. This target is comprised of 40 nursing home places and 50 hostel places per 1,000 population aged 70 years and over. Data for community aged care packages have not been mapped as these packages are allocated on a regional basis that does not fit well with the areas mapped.

In many areas (in particular areas away from the capital cities and other major regional centres) of Australia where there are few (or no) nursing home facilities, people requiring long term intensive care are often cared for in public hospitals (where they are classified as 'long stay nursing home type patients'). Overall, 6.6 per cent of patient days in public acute hospitals in Queensland were for nursing home type patients, 13.7 per cent of bed days in the non-metropolitan areas, and 2.1 per cent in **Brisbane** (Table 7.1). New South Wales had 12.6 per cent of its bed days used by nursing home type patients, with 9.7 per cent in South Australia and 9.5 per cent in Tasmania. South Australia had the highest proportion in the non-metropolitan areas, with 30.8 per cent of bed days used by nursing home type patients; New South Wales had the second highest proportion, with 25.9 per cent.

As the number of beds used by these patients is not available, their details have not been included in the maps.

Table 7.1: Patient days for nursing home type patients in public acute hospitals, by area, States and Territories, 1997/98

Location of hospital	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
	Number								
Metropolitan	270,289	32,545	32,166	2,675	3,737	948	2,081	1,171	345,612
Non-metropolitan	442,350	41,602	136,682	21,380	128,382	30,746	..	388	801,530
Total	712,639	74,147	168,848	24,055	132,119	31,694	2,081	1,559	1,147,142
	Per cent: Nursing home type patient bed days as a proportion of all bed days								
Metropolitan	6.9	1.2	2.1	0.3	0.4	0.6	0.8	1.1	3.3
Non-metropolitan	25.9	4.3	13.7	6.4	30.8	17.0	..	0.5	17.1
Total	12.6	2.0	6.6	1.8	9.7	9.5	0.8	0.8	7.5

Source: AIHW, unpublished data

The tables and maps of nursing home and hostel places show each of these variables separately. To assist readers in assessing the provision of residential care places in relation to the Commonwealth planning targets (90 places per 1,000 population aged 70 years and over) they have been combined in Table 7.2.

In all capital cities, excluding **Darwin** (72 places per 1,000 population), the number of residential care places per 1,000 population was above the Commonwealth planning target. There were more places per 1,000 population in the capital cities than in the *Rest of State /Territory* areas of Australia in all but the Northern Territory and Victoria (where there were fewer).

Table 7.2: Nursing home and hostel places per 1,000 population aged 70 years and over, 1997

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total
Capital city	101	91	103	105	102	99	72	96	99
Other major urban centres ²	84	96	74	..	..	..	..	..	82
Rest of State/Territory	81	94	88	74	75	87	72	- ³	85
Whole of State/Territory	93	92	92	97	96	92	72	96	93

¹Includes Queanbeyan (C).

²Includes Newcastle and Wollongong (NSW); Geelong (Vic); and Gold Coast-Tweed Heads and Townsville-Thuringowa (Qld).

³Data unreliable: included with ACT total.

Source: See Data sources, Appendix 1.3

Gaps and deficiencies in the data

In addition to the limitations noted above in the *Introduction* as to the small range of data available, the limitations of the choropleth mapping technique should also be kept in mind when reading this chapter.

For example, users should be cautious not to place too much emphasis on the population per GP in any one SLA, as the location of the practice in an SLA may be close to the population of a neighbouring SLA and provide a significant number of services to people in that neighbouring SLA. Other factors also impact on accessibility, including the availability of private and

public transport. However, where a contiguous group of SLAs all have high populations per GP (high relative to the State or Territory average), it is likely that the level of provision is low. Similarly, where regional groupings of SLAs together have relatively low nursing home bed rates, provision of these care places is clearly low (although readers should be aware of the note above as to the use, in some instances, of hospital beds for long term care).

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Population per general medical practitioner, 1996/97

Capital city comparison

Details of general medical practitioners (GPs) included in the following analysis, and the way in which the number of GPs has been calculated, are on page 321.

As can be seen from **Table 7.3**, the population per GP was highest in **Darwin** (1,642 people per GP) and **Canberra** (1,467 people per GP), (indicating that there were fewer GPs per head of population practising in these cities) and lowest in **Sydney** (1,118 people per GP) and **Adelaide** (1,145 people per GP).

Although calculated in a different way (see notes on page 321 under *Data mapped*), the 1990/91 figures can be used to examine the differences of rates between the capital cities. The earlier rates show that levels of provision of GPs in **Hobart**, **Brisbane** and **Darwin** have decreased between the periods shown, while levels of provision in Melbourne have moved closer to the *All capitals* average (**Table 7.3**).

Table 7.3: Population per general medical practitioner, capital cities

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra ¹	All capitals
1996/97	1,118	1,181	1,182	1,145	1,259	1,167	1,642	1,467	1,169
1990/91	860	921	834	827	1,015	820	900	1,042	886

¹Includes Queanbeyan (C)

Source: See *Data sources*, Appendix 1.3

Brisbane

In 1996/97, there were 1,182 people per GP in **Brisbane**. Of the total of 1,249 GPs, 858 were males (68.7 per cent) and 384 were females, a rate of 1,721 people per male GP and 3,843 people per female GP. In contrast to the overall predominance of male GPs in **Brisbane** (2.2 male GPs to each female GP), it was estimated (using the technique described on page 321) that Nathan had more female than male GPs (a rate of 4.9 female to one male GP), although this was one of the smallest number of GPs in any small area in **Brisbane**. Other areas with relatively high proportions of female GPs practising were Red Hill/Kelvin Grove (3.9 female GPs per male GP), Seventeen Mile Rocks (2.6), Albion (1.9), Jindalee/River Hills (1.8) and Waterford West (1.3).

In general, the population per GP was highest in the outer metropolitan regions and lowest in and around the city centre (**Map 7.1**). The exceptions to this were the high rates recorded in Seventeen Mile Rocks (a rate of 11,099 people per GP and 0.39 full time equivalent (FTEs) GPs), Rocklea (4,983 and 0.29 FTE GPs), Bardon (3,763 and 2 GPs) and Yeronga (3,199 and one GP), and the lower rate in Cleveland (533 and 20 GPs), Strathpine (931 and 11), Bray Park (932 and 8) and Browns Plains (978 and 24).

Eight areas mapped in the highest class interval had nil or fewer than 0.5 FTE GPs; Seventeen Mile Rocks, Calamvale and Stretton, Gumdale/Ransome/Wakerley, Pinkemba-Eagle Farm, Moreton Island, Chandler and Capalaba West, Murarrie and Rocklea. Other SLAs mapped in the highest class interval included Greenbank [Part B] (with 5,835 people per GP and one GP), Burbank/Belmont-Mackenzie (3,546 and one), Runcorn/Eight Mile Plains (2,892 and six), Algester/Parkinson-Drewvale (2,839 and three), Underwood (2,657 and one) and Thornlands (2,551 and three), situated in the outer southern regions; Bald Hills (5,708 and one), Northgate (3,307 and one), Lawnton (3,250 and two) and Pine Rivers Balance (2,527 and 11), located to the north of the Brisbane River; Bardon (3,763 and two) and Yeronga (3,199 and one) near the city centre; Ipswich North (3,253 and three) located in the outer west; and Birkdale/Ormiston (2,661 and 14) located in the east.

At the other end of the scale, there were only 187 people per GP in the City/Spring Hill area, based on an estimated 44 GPs. Rates of below 1,000 people per GP were also recorded in the inner areas of Herston/Newstead (526 people per GP and 13 GPs), Annerley/Fairfield (566 and 19), Milton/Paddington (616 and 14), Dutton Park/Woolloongabba (697 and nine), Chelmer/Taringa (700 and 26), Coorparoo (798 and 16) and Salisbury (803 and six). Cleveland (with 533 people per GP), Kedron (720) and Capalaba West (727) also had low rates.

The largest numbers of GPs were recorded in Ipswich Central (61 GPs), Redcliffe (43), Macgregor/Pallara-Heathwood-Larapinta (39), Bridgeman Downs/Boondall (35), Camp Hill/Carindale (33) and Capalaba/Redland Bay and Rochedale/Slacks Creek (both with 32). No GPs were recorded in four of the metropolitan areas.

There was no consistent evidence in the correlation analysis of an association at the SLA level between the availability of GPs and socioeconomic status.

Gold Coast-Tweed Heads

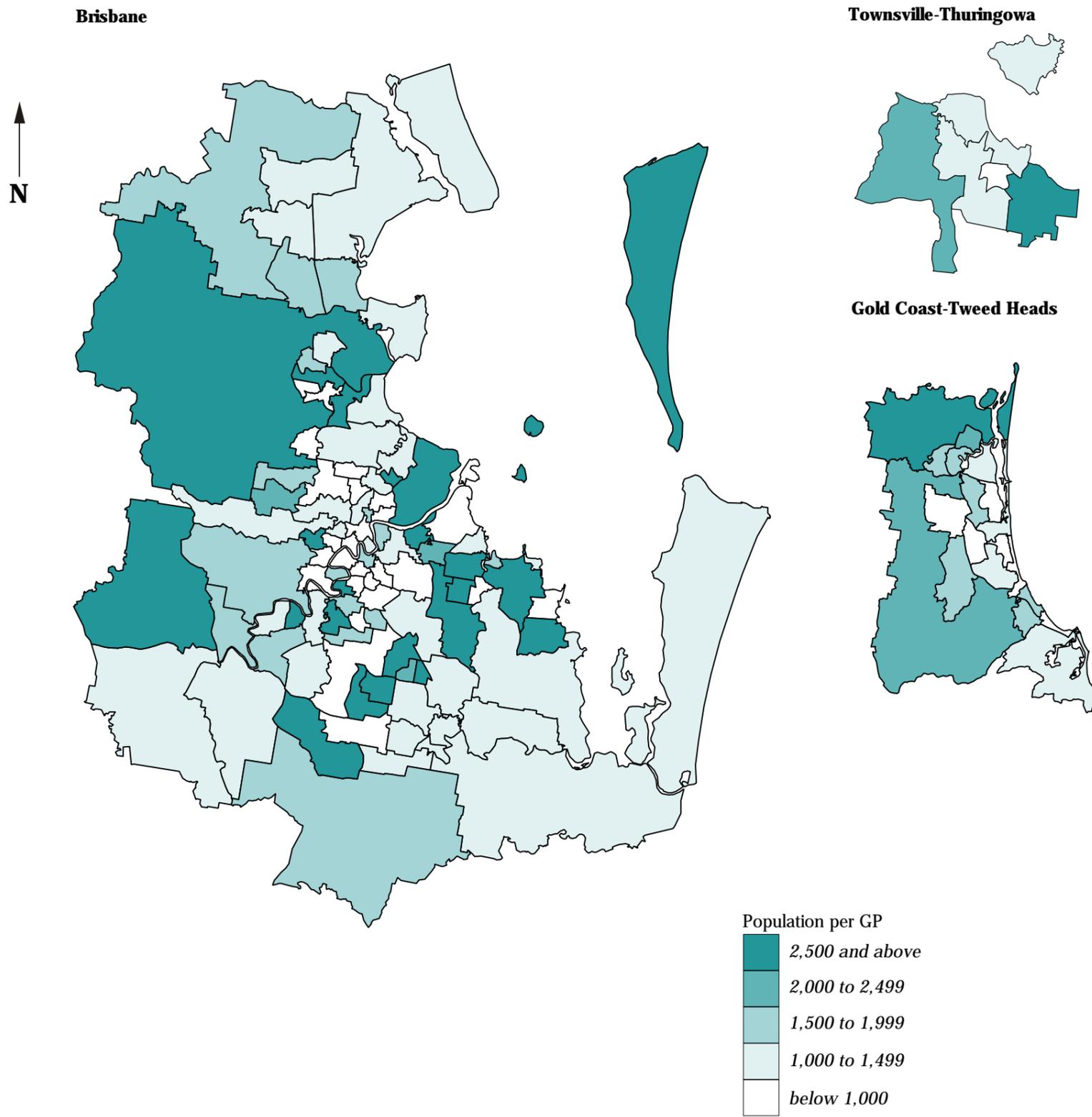
There were 1,150 people per GP in the major urban centre of **Gold Coast-Tweed Heads**, 7,931 people per female GP and 1,350 per male GP. Females comprised 14.5 per cent of the estimated number of GPs in **Gold Coast-Tweed Heads**. The majority of the areas within **Gold Coast-Tweed Heads** recorded rates of above 1,000 people per GP, with the highest in Coomera-Cedar Creek (a rate of 2,926) and Hope Island (2,252). Broadbeach/Mermaid Waters (928 people per GP), Coolangatta/Tugun (877), Broadbeach/Burleigh Heads (845) and Labrador/Southport (676) all had rates of below 1,000.

Townsville-Thuringowa

In 1996/97, there were 92 GPs in **Townsville-Thuringowa**, a rate of 1,324 people per GP (3,976 people per female GP and 1,986 per male GP). The rates varied widely, from as high as 6,135 people per GP in Townsville South East to a low 787 people per GP in Gulliver/Hermit Park.

Map 7.1: Population per general medical practitioner, Brisbane, Gold Coast-Tweed Heads and Townsville-Thuringowa, 1996/97

number of people in each area* per general medical practitioner (GP)



*Most SLAs have been grouped to approximate postcode areas

Source: See Data sources, Appendix 1.3

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

Population per general medical practitioner, 1996/97

State/Territory comparison

The notes on page 321 as to the GPs and GP type services not covered by this data are of particular relevance to the data for the non-metropolitan areas. The population per GP was higher in the non-metropolitan areas of the States and the Northern Territory than in the capital cities, indicating that there were fewer GPs in these areas (**Table 7.4**). The *Rest of State/Territory* figures ranged from 1,464 people per GP in Tasmania to a very high 3,604 people per GP in the Northern Territory. The rate of population to GPs in Western Australia was also well above the *Rest of State/Territory* average, at 1,968 people per GP.

Although calculated in a different way (see notes on page 321 under *Data mapped*), the 1990/91 figures show that New South Wales, South Australia, Tasmania and the Northern Territory had fewer people per GP in the *Rest of State/Territory* areas than the average for these areas (ie. more GPs) whereas in 1996/97 New South Wales had just above the average and the Northern Territory had a considerably higher rate.

Table 7.4: Population per general medical practitioner, State/Territory

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total
1996/97									
Capital city	1,118	1,181	1,182	1,145	1,259	1,167	1,642	1,467 ¹	1,169
Other major urban centres ²	1,339	1,337	1,188	..	..	..	..	..	1,278
Rest of State/Territory	1,656	1,559	1,616	1,517	1,968	1,464	3,604	- ³	1,627
Whole of State/Territory	1,250	1,262	1,335	1,225	1,400	1,325	2,356	1,451	1,290
1990/91									
Rest of State/Territory	942	1,196	1,203	1,145	1,374	1,000	1,133	- ³	1,147

¹Includes Queanbeyan (C)

²Includes Newcastle and Wollongong (NSW); Geelong (Vic); and Gold Coast-Tweed Heads and Townsville-Thuringowa (Qld)

³Data unreliable: included with ACT total

Source: See *Data sources*, Appendix 1.3

Rest of State

As expected, the population per GP was considerably higher in the non-metropolitan areas of Queensland (1,616 people per GP) than in **Brisbane** (1,182 people per GP). In 1996/97, there were 865 GPs outside of the major urban centres, just over two thirds the number recorded in **Brisbane** (with 1,249 GPs).

Whereas just under one third (30.8 per cent) of GPs in **Brisbane** were females, in the non-metropolitan areas of Queensland only 23.9 per cent were females.

As can be seen from **Map 7.2**, the most highly elevated rates were generally in the more remote areas of Queensland, with the lowest rates (highest provision of GPs) located in the areas nearest the major urban centres and extending along the north coast.

In total, it was estimated that 21 SLAs throughout the non-metropolitan areas of Queensland had fewer than 0.5 FTE GPs. Areas with no GPs included Bulloo, Townsville [Part B], Burke, Ilfracombe and Torres. Excluding the SLAs with no GPs, more than 10,000 people per GP were recorded in Cambooya (with 0.15 full time equivalent (FTE) GPs), Aramac (0.03) and Diamantina (0.02).

The next highest rates of population per GP (indicating the lowest number of GPs) were recorded for Boulia (8,621 people per GP and 0.06 FTE GPs), Tambo (6,912 and 0.08), Isisford (6,740 and 0.05), Nebo (6,331 and 0.39), Mirani (6,159 and 0.82) and Cloncurry (6,056 and 0.64). Also in this range was Fitzroy [Part B], where there were an estimated 5,995 people per GP, with a similarly high rate recorded in Fitzroy [Part A] (5,473). Rates of at least 3,000 were also recorded in the south-western SLA of

Bendemere (5,678 people per GP); in the far northern SLAs of Carpentaria (5,523), Aurukun (4,096), Etheridge (4,078), Croydon (3,890), Cook (3,859), Hinchinbrook (3,168) and McKinlay (3,294); in the SLAs just west of **Brisbane** in Ipswich South West (4,861), Rosalie (4,278), Ipswich West (3,871) and Clifton (3,597); in the central western SLA of Barcoo (4,711); in the far north-western SLAs of Morrington (4,123) and Mount Isa (3,667); in the SLAs situated along the mid north coast of Mackay [Part B] (3,658) and Broadsound (3,641); and in the SLAs of Kilkivan (3,516), Duaringa (3,312) and Peak Downs (3,296).

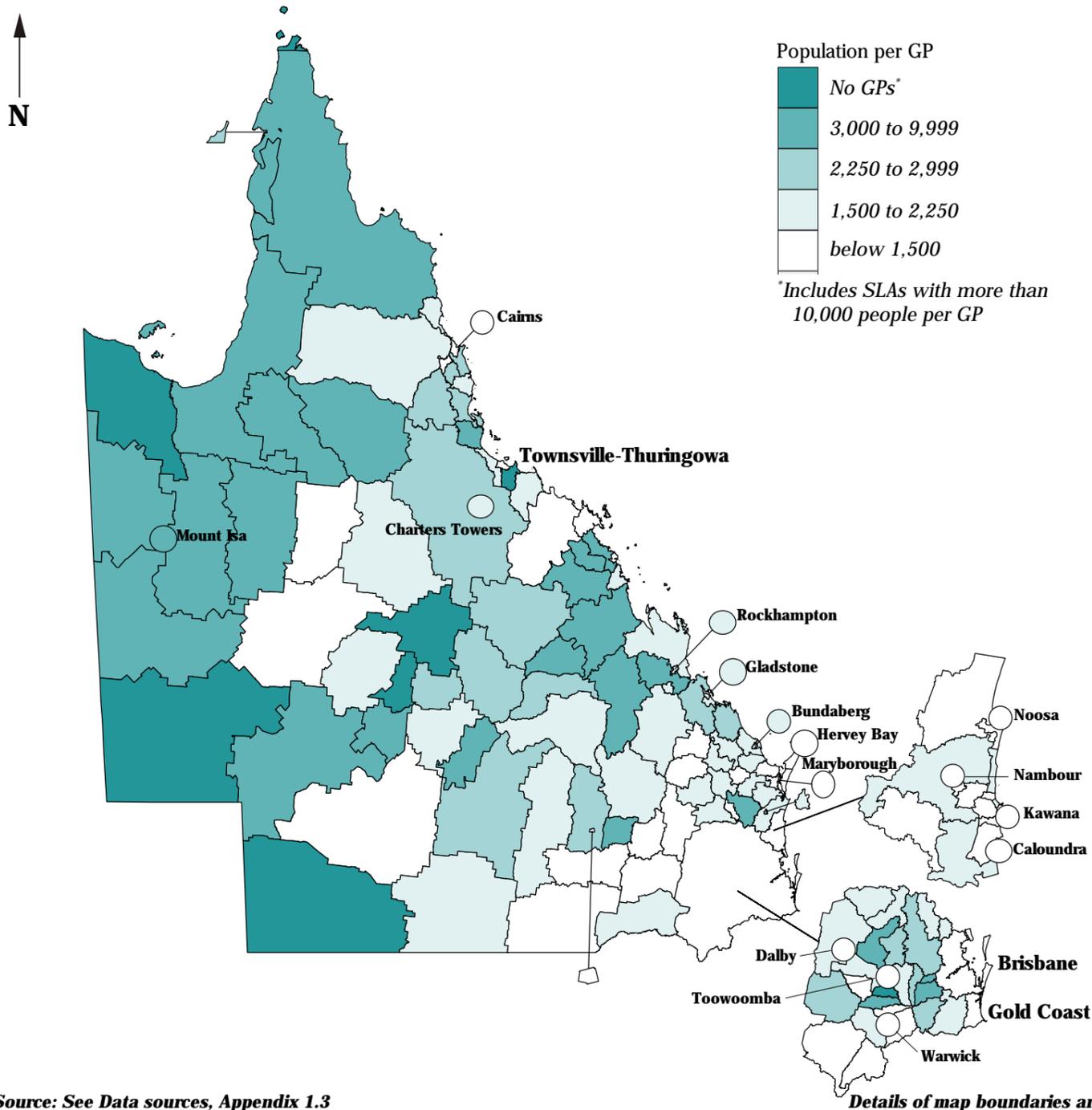
The only SLAs to record a rate of below 1,000 people per GP were Maroochydore (with 692 people per GP), Eidsvold (746), Kawana (954), Noosa (956) and Atherton (975). Relatively low rates were also recorded for Biggenden (1,021 people per GP), Caloundra (1,031), Balonne (1,036), Murilla (1,040), Toowoomba (1,115), Inglewood (1,143), Buderim (1,160), Goondiwindi (1,170), Noosa Balance (1,183) and Richmond (1,204).

In 1996/97, there were an estimated 76 GPs in the town of Cairns: more than 20 GPs were also estimated for Toowoomba (75), Mackay [Part A] (47), Rockhampton (38), Noosa (29), Hervey Bay and Caloundra (both with 28), Bundaberg (26), Maroochydore (24) and Buderim (21).

There was no consistent evidence in the correlation analysis of an association at the SLA level between the availability of GPs and socioeconomic status.

Map 7.2: Population per general medical practitioner, Queensland, 1996/97

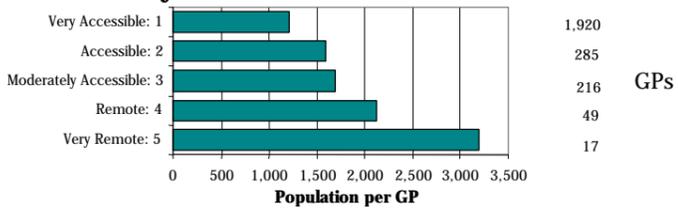
number of people in each Statistical Local Area per general medical practitioner (GP)



Source: See Data sources, Appendix 1.3

Details of map boundaries are in Appendix 1.2

Accessibility/Remoteness Index of Australia



There are distinct levels evident across the ARIA categories in the rate of population GP. The lowest rate is 1,218 people per GP in the Very Accessible areas; the next two categories have similar rates, of 1,589 and 1,695 people per GP, respectively; the Remote areas have a higher 2,131 people per GP, and the Very Remote areas have 3,193 people per GP, more than two and a half times the number in ARIA category 1. Although levels of provision of GP services are low in the remote areas, readers should note the cautions on the page opposite as to the limitations of these data.

Source: Calculated on ARIA classification, DHAC

National Social Health Atlas Project, 1999

Public acute hospital beds per 1,000 population, 1995/96

Capital city comparison

In 1995/96, there were 3.1 beds (average available beds over 1995/96) per 1,000 population in public acute hospitals in the capital cities. There was little variation, with rates varying from 2.7 beds per 1,000 population in **Canberra** to 4.0 per 1,000 in **Hobart** (Table 7.5).

Over the period from 1989 to 1995/96, the rate of public acute hospital beds decreased in each of the capital cities for which data were available in the first edition of the atlas, with the exception of **Melbourne** (where the rate remained stable at 2.8 public hospital beds per 1,000 population) and **Adelaide** and **Sydney** (both with a small increase, from 3.1 beds to 3.2 per 1,000 population). The largest decline occurred in **Brisbane**, where the rate decreased from 4.1 public hospital beds per 1,000 population in 1989 to 3.4 in 1995/96.

Table 7.5: Public acute hospital beds per 1,000 population, capital cities

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra ¹	All capitals
1995/96	3.2	2.8	3.4	3.2	3.1	4.0	3.5	2.7	3.1
1989	3.1	2.8	4.1	3.1	3.3	..	..	..	3.2

¹Includes Queanbeyan (C)

Source: See *Data sources*, Appendix 1.3

Brisbane

In 1995/96, there were 4,961 public acute hospital beds (average available beds during 1995/96) in **Brisbane**, representing 3.4 beds per 1,000 population.

As can be seen from **Map 7.3**, a large number of areas throughout the metropolitan region (85.1 per cent of all SLAs) recorded no public acute hospital beds in 1995/96. Of those that did contain a public hospital, there was a wide variation in the number of available beds, ranging from as high as 195.0 public hospital beds per 1,000 population in the area of Herston/Newstead to as low as 0.2 in Bracken Ridge/Sandgate.

Rates above 20.0 were recorded in the areas of Herston/Newstead (195.0 public hospital beds per 1,000 population), Dutton Park/Woolloongabba (145.6), Darra-Sumner/Wacol (65.1), Chermside West/Chermside (41.8), West End/South Brisbane/Highgate Hill (37.8), Loganlea (31.4) and Archfield/Coopers Plains (19.0). While relatively low rates were recorded in Caboolture Central (7.9), Redcliffe (5.9), Keperra/Upper Kedron (2.7) and Bracken Ridge/Sandgate (0.2), all of which are located north of the Brisbane River; in the inner city region of City/Spring Hill (6.3); in the south-western area of Ipswich Central (4.7); and Cleveland (3.7) and Lota/Manly/Manly West (1.5), situated to the east of the city centre.

The largest number of public acute hospital beds was recorded in Herston/Newstead, with 1,321 beds. More than 300 beds were also recorded in Dutton Park/Woolloongabba (877 beds), Darra-Sumner/Wacol (577), West End/South Brisbane/Highgate Hill (537), Chermside West/Chermside (492) and Ipswich Central (310).

The correlation analysis was not undertaken as there were too many areas with no data.

Gold Coast-Tweed Heads

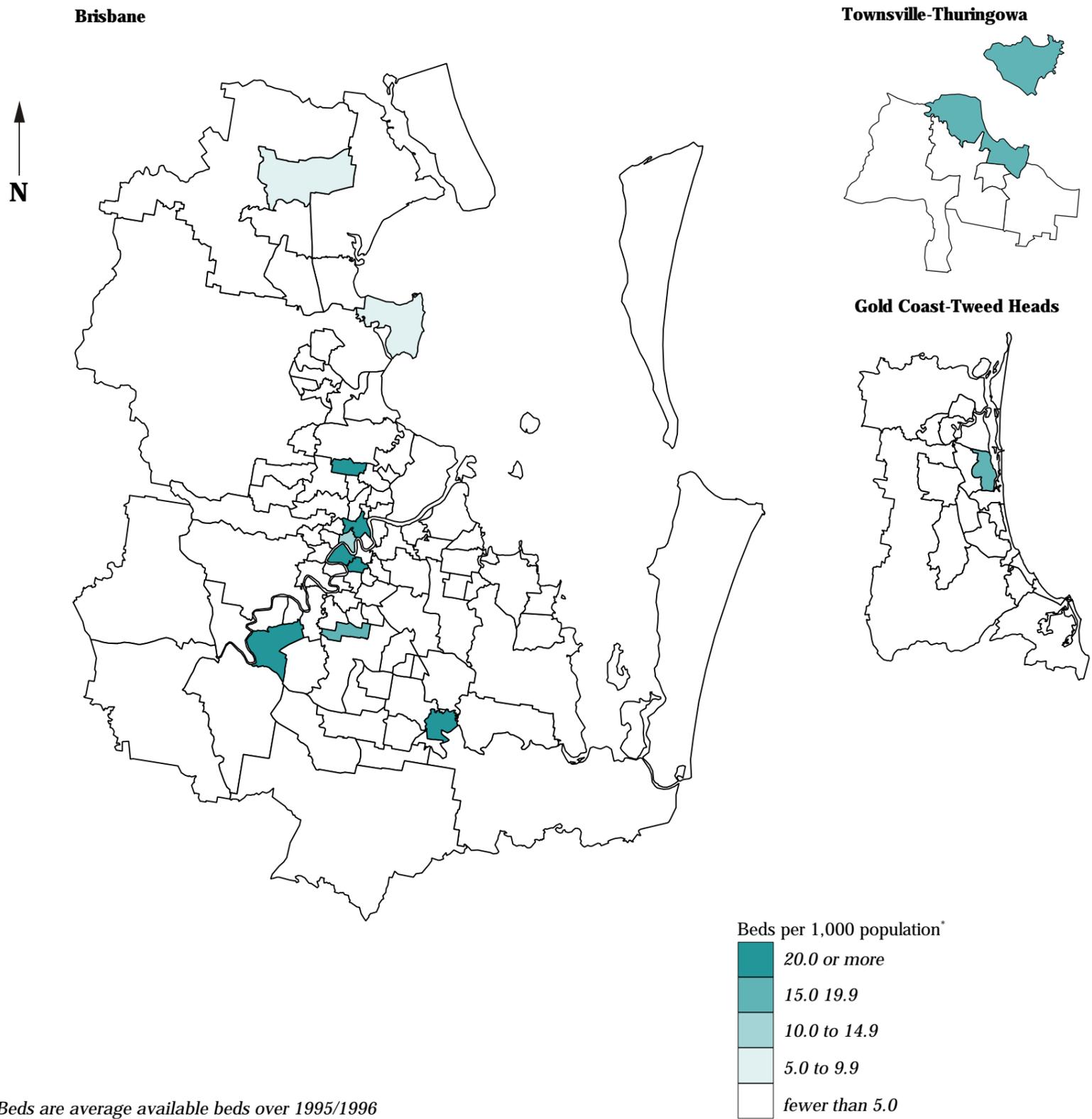
Gold Coast-Tweed Heads recorded the lowest rate among the major urban centres, with 1.8 public acute hospital beds per 1,000 population (a total of 665 beds). The only areas to record public hospital beds were Labrador/Southport (548 beds, 15.4 public beds per 1,000 population) and Tweed Heads (117 beds, 2.9 public beds per 1,000 population).

Townsville-Thuringowa

There were 412 public acute hospital beds in **Townsville-Thuringowa** in 1995/96, representing 3.4 beds per 1,000 population. The rates varied greatly, from as high as 15.5 public hospital beds per 1,000 population in Townsville Coastal/Magnetic Island to a low 1.9 in Thuringowa [Part A]. No public hospital beds were recorded in Townsville South East, Gulliver/Hermit Park and Murray/Mt Louisa.

Map 7.3: Public acute hospital beds per 1,000 population, Brisbane, Gold Coast-Tweed Heads and Townsville-Thuringowa, 1995/96

number of public acute hospital beds* in each area# per 1,000 population



*Beds are average available beds over 1995/1996

#Most SLAs have been grouped to approximate postcode areas

Source: Calculated on data from ABS 1996 Census

Scale: Details of map scales and boundaries are in Appendix 1.2

National Social Health Atlas Project, 1999

Public acute hospital beds per 1,000 population, 1995/96

State/Territory comparison

There were more beds (average available beds over 1995/96) per 1,000 population in public acute hospitals in the *Rest of State /Territory* areas of Australia than in the capital cities in all but Tasmania and the Northern Territory (where there were fewer). The average *Rest of State /Territory* rate across Australia was 4.0 public acute hospital beds per 1,000 population, with similar rates recorded in most non-metropolitan areas excluding South Australia, where the rate was higher, at 5.9 beds per 1,000 population. The beds in the non-metropolitan areas include beds used by long stay patients (see page 321)

The non-metropolitan areas of New South Wales, Victoria and Queensland recorded similar rates in both periods as shown in **Table 7.6**. Western Australian recorded a considerable decrease, down from 6.4 public hospital beds per 1,000 population in 1989 to 3.6 public acute hospital beds in 1995/96, with a smaller decrease in South Australia.

Table 7.6: Public acute hospital beds per 1,000 population, State/Territory

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total
1995/96									
Capital city	3.2	2.8	3.4	3.2	3.1	4.0	3.5	2.7 ¹	3.1
Other major urban centres ²	3.2	3.3	2.2	..	..	..	..	..	2.8
Rest of State/Territory	4.6	3.6	3.7	5.9	3.6	2.6	2.7	— ³	4.0
Whole of State/Territory	3.6	3.0	3.3	3.9	3.3	3.2	3.0	2.6	3.4
1989									
Rest of State/Territory	4.5	3.9	4.6	6.5	6.4	..	..	..	4.7

¹Includes Queanbeyan (C)

²Includes Newcastle and Wollongong (NSW); Geelong (Vic); and Gold Coast-Tweed Heads and Townsville-Thuringowa (Qld)

³Data unreliable: included with ACT total

Source: See *Data sources*, Appendix 1.3

Rest of State

In the non-metropolitan areas of Queensland, there were 3.7 public acute hospital beds (average available beds over 1995/96) per 1,000 population based on a total of 126 hospitals with an average of 5,176 available beds.

The overall pattern of distribution of public hospital beds shows that higher rates are in the areas surrounding **Brisbane**, and in the central western and south-western SLAs (**Map 7.4**). SLAs mapped in the highest range included Nambour (27.8 public hospital beds per 1,000 population), Biggenden (18.6), Inglewood (18.1), Eidsvold (11.4), Goondiwindi (10.4), Kilcoy (10.3), Murilla (9.7), Toowoomba (9.1), Murgon (8.5) and Gayndah (8.2), located in the areas surrounding **Brisbane**; Charters Towers (15.3) and Mount Morgan (11.9), situated in the further north-west of the city; Aramac (14.0), Blackall (13.7), Barcaldine (13.6), Winton (10.4), Jericho (10.3), Longreach (8.7) and Richmond (8.6), in the central west; Warroo (10.0), Paroo (9.5), Balonne (9.3) and Murweh (8.7), located in the south-west; and Torres (9.4) and Herberton (8.4), situated in the far north.

There were 24 SLAs mapped in the middle class interval, ranging from a rate of 4.0 public hospital beds per 1,000 population in both Etheridge and Cook to 5.9 in the central western SLA of Isisford.

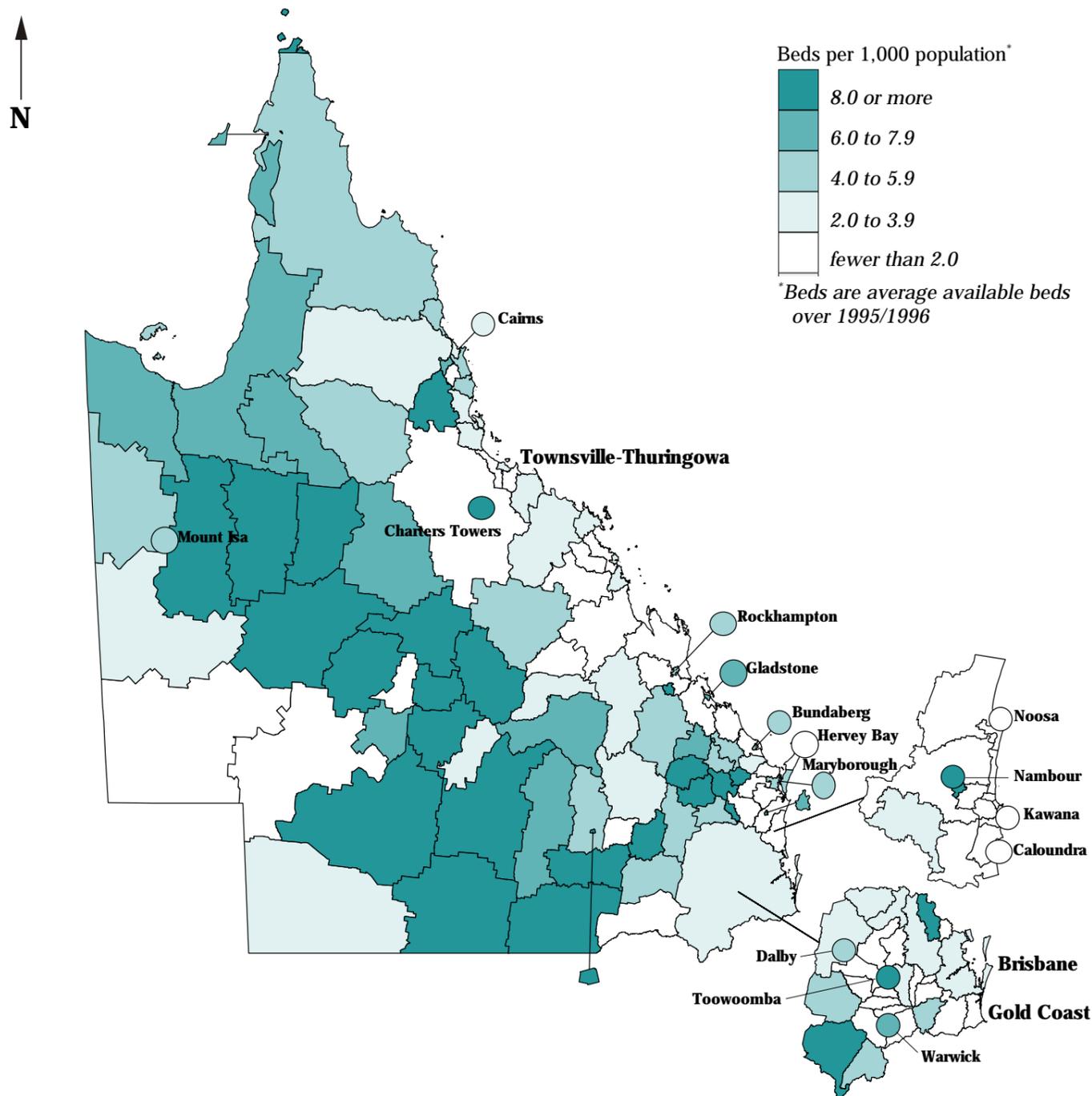
A number of SLAs throughout the non-metropolitan areas of Queensland had no public hospital beds, including the towns of Caloundra Kawana and Noosa. Rates of below 2.0 were recorded in Broadsound (1.9 public hospital beds per 1,000 population), Whitsunday (1.8), Beaudesert [Part B] (1.6), Bulloo and Caloundra (both with 1.3), Laidley (1.2), Bendemere and Hervey Bay (both with 1.0) and Jondaryan (0.8).

In 1995/96, the largest numbers of public acute hospital beds were recorded in the towns of Toowoomba (757 beds), Cairns (388), Nambour (316), Rockhampton (272), Bundaberg (189), Gladstone (163), Maryborough (137) and Charters Towers (135). More than 100 public hospital beds were also recorded in Mackay [Part A] (222 beds), Gympie (119), Mount Isa (113) and Johnstone (104).

The correlation analysis was not undertaken as there were too many SLAs with no data.

Map 7.4: Public acute hospital beds per 1,000 population, Queensland, 1995/96

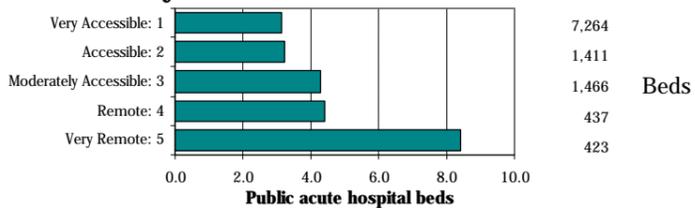
number of public acute hospital beds* in each Statistical Local Area per 1,000 population



Source: See Data sources, Appendix 1.3

Details of map boundaries are in Appendix 1.2

Accessibility/Remoteness Index of Australia



Beds in public acute hospitals are located throughout Queensland, with increasing levels of provision with increasing remoteness. Rates vary from 3.2 beds per 1,000 population in the Very Accessible and Accessible ARIA categories, to a very high 8.4 beds per 1,000 in the Very Remote category. The largest number of beds (and the widest range of services) is, however, in the most accessible areas.

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

Private hospital beds per 1,000 population, 30 June 1997

Capital city comparison

At 30 June 1997, there were 1.5 private hospital beds per 1,000 population in the capital cities. The majority of capital cities had near average percentages for this variable, with lower rates recorded in both **Canberra** (a rate of 0.5) and **Sydney** (a rate of 1.1). **Adelaide** and **Hobart** recorded the highest rates with 2.0 and 2.1 private hospital beds per 1,000 population, respectively (Table 7.7).

The *All capitals* rate increased slightly between the two periods for which data were analysed, rising from 1.4 private hospital beds per 1,000 population in 1989 to 1.5 in 1997.

Table 7.7: Private hospital beds per 1,000 population, capital cities

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra ¹	All capitals
1997	1.1	1.7	1.7	2.0	1.7	2.1	1.7	0.5	1.5
1989	1.2	1.6	1.5	1.8	1.5	..	..	..	1.4

¹Includes Queanbeyan (C)

Source: See *Data sources*, Appendix 1.3

Brisbane

At 30 June 1997, there were 1.7 private hospital beds per 1,000 population in **Brisbane** based on a total of 2,679 beds in 19 private hospitals.

As can be seen from **Map 7.5**, a number of areas throughout the metropolitan region recorded no private hospital beds (86 areas). However, those that did contain a private hospital were generally situated in the inner city region.

High rates of private hospital beds were recorded in the inner areas of City/Spring Hill (84.9 private hospital beds per 1,000 population), Greenslopes (47.7), Toowong (33.6), East Brisbane/Kangaroo Point (30.8) and West End/South Brisbane/Highgate Hill (20.4). Relatively high rates were also recorded in the inner areas of Graceville/Oxley (8.9 private hospital beds per 1,000 population) and New Farm (8.1).

The lowest rates were distributed throughout the northern, inner and south-western regions of **Brisbane** and included Ipswich Central (a rate of 1.5 private hospital beds per 1,000 population) and Macgregor/Pallara-Heathwood/Larapinta (3.4), situated in the south-west; Ascot/Hamilton (1.6), Camp Hill/Carindale (3.0) and Clayfield/Hendra (4.7), located in the inner city region; and Redcliffe (1.7), Stafford Heights/Mitchelton (2.7) and Strathpine (5.8), north of the Brisbane River.

There were 436 private hospital beds recorded in the area of Toowong, and more than 100 beds were also recorded in City/Spring Hill (421 beds), Greenslopes (350), East Brisbane/Kangaroo Point (300), West End/South Brisbane/Highgate Hill (276), Graceville/Oxley (163), Macgregor/Pallara-Heathwood/Larapinta (138), Camp Hill/Carindale (107) and Ipswich Central (102).

The correlation analysis was not undertaken as there were too many areas with no data.

Gold Coast-Tweed Heads

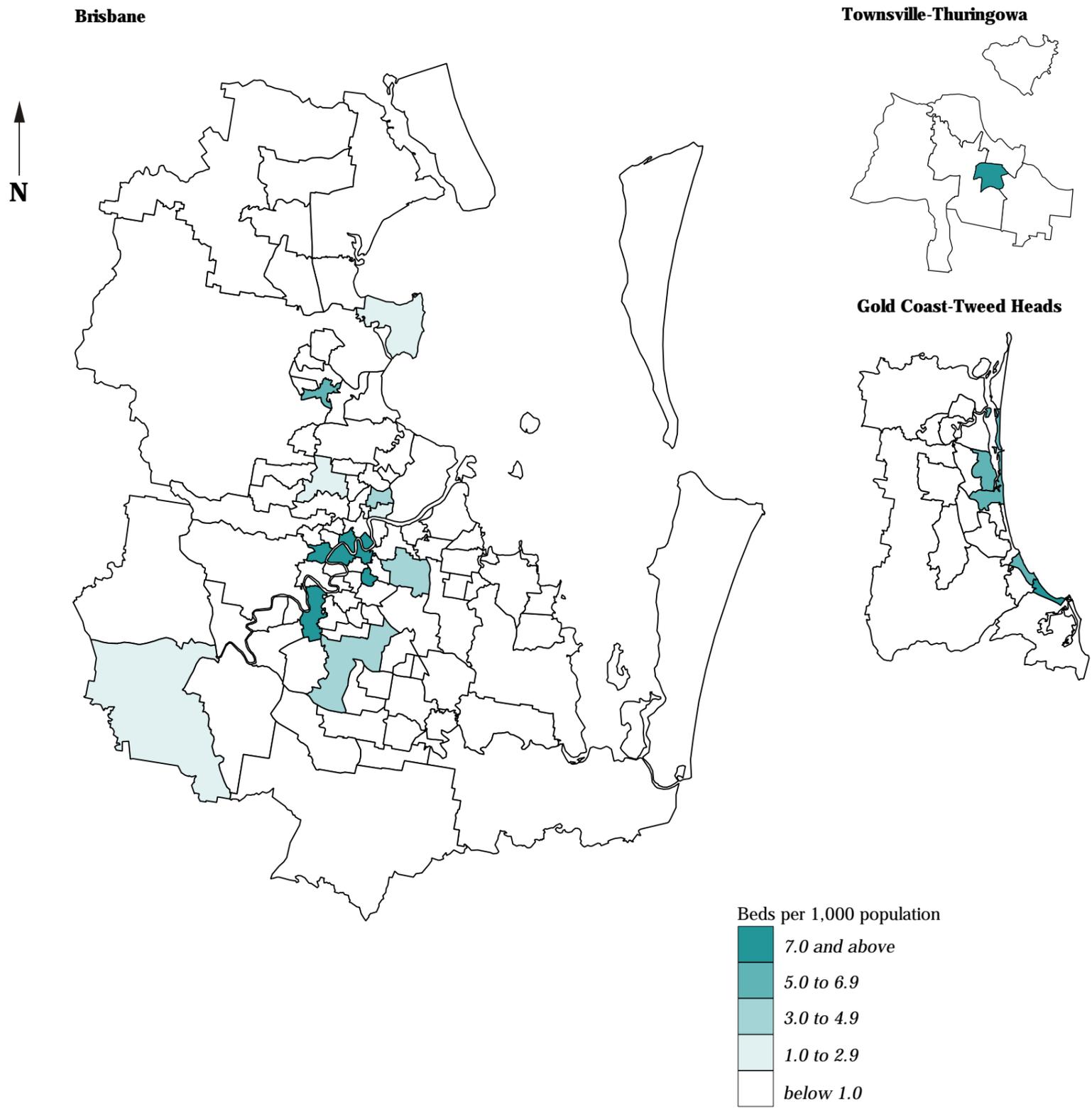
There were 743 private hospital beds in **Gold Coast-Tweed Heads** in 1997, representing 2.0 private hospital beds per 1,000 population. By far the highest rate was recorded in Coolangatta/Tugun, with a rate of 30.4. The lowest rates were recorded in Surfers Paradise/Benowa (a rate of 6.6 private hospital beds per 1,000 population), Labrador/Southport (5.9) and Palm Beach/Currumbin (5.1). No private hospital beds were recorded in the remaining 15 small areas.

Townsville-Thuringowa

Townsville-Thuringowa recorded 1.8 private hospital beds per 1,000 population in 1997 with a total of 2 private hospitals with 224 beds. Both private hospitals were located in Gulliver/Hermit Park, representing 11.4 private hospitals per 1,000 population in this area. The remaining four areas recorded no private hospital beds.

Map 7.5: Private hospital beds per 1,000 population, Brisbane, Gold Coast-Tweed Heads and Townsville-Thuringowa, 1997

number of private hospital beds in each area* per 1,000 population



*Most SLAs have been grouped to approximate postcode areas

Source: See Data sources, Appendix 1.3

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

Private hospital beds per 1,000 population, 30 June 1997

State/Territory comparison

In 1997, rates of private hospital beds were higher in the capital cities than in the *Rest of State/Territory* areas, with the exception of the Northern Territory, with no private hospital beds in the non-metropolitan areas (**Table 7.8**). The highest non-metropolitan rate was recorded in Tasmania (1.9 private hospital beds per 1,000 population), while the lowest (excluding the Northern Territory) was recorded in South Australia and Western Australia (both with a rate of 0.4).

Rates of private hospital beds in the *Rest of State/Territory* remained reasonably consistent between 1989 and 1997, with slight decreases occurring in Victoria, Queensland and Western Australia. The rate recorded in New South Wales increased marginally from 0.6 private hospital beds per 1,000 population in 1989 to 0.7 in 1997, while the rate in South Australia remained consistent (0.4 private hospital beds per 1,000 population).

Table 7.8: Private hospital beds per 1,000 population, State/Territory

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total
1997									
Capital city	1.1	1.7	1.7	2.0	1.7	2.1	1.7	0.5 ¹	1.5
Other major urban centres ²	1.0	1.3	2.0	..	..	..	..	..	1.4
Rest of State/Territory	0.7	0.8	1.2	0.4	0.4	1.9	0.0	— ³	0.8
Whole of State/Territory	1.0	1.4	1.6	1.6	1.4	2.0	0.8	0.5	1.3
1989									
Rest of State/Territory	0.6	0.9	1.3	0.4	0.5	..	..	..	0.8

¹Includes Queanbeyan (C)

²Includes Newcastle and Wollongong (NSW); Geelong (Vic); and Gold Coast-Tweed Heads and Townsville-Thuringowa (Qld)

³Data unreliable: included with ACT total

Source: See *Data sources*, Appendix 1.3

Rest of State

There were relatively few private hospitals in the non-metropolitan areas of Queensland, a total of 25 hospitals with 1,651 beds at 30 June 1997. These figures represented 1.2 private hospital beds per 1,000 population.

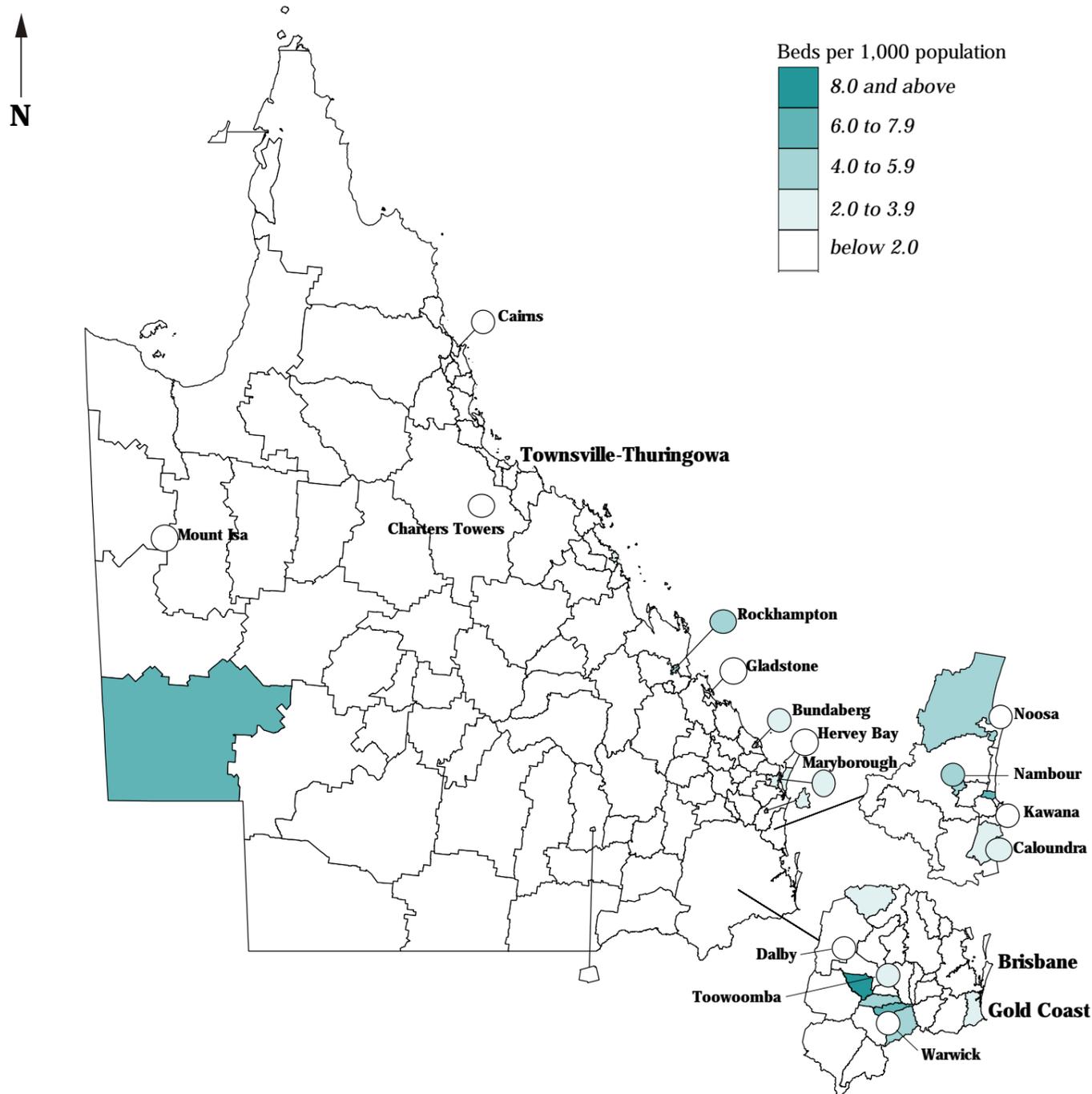
Private hospitals were located in only nineteen of the non-metropolitan SLAs (**Map 7.6**). These areas included the towns of Nambour (with 5.0 private hospital beds per 1,000 population), Rockhampton (4.9), Toowoomba (3.5), Maryborough (3.4), Bundaberg (3.1), Caloundra (2.3) and Cairns (1.3). The remaining SLAs were Pittsworth (8.7 private hospital beds per 1,000 population), Warwick North (7.6), Maroochydore (7.2), Noosa Balance (5.1), Clifton (5.0), Warwick East (4.4), Kingaroy (3.0), Gympie (2.5) and Crows Nest (1.8), all of which were located in the areas surrounding **Brisbane**; Diamantina (6.0) located in the central west; and Mackay [Part A] (3.2) and Livingstone (0.8), located on the mid north coast.

By far the largest numbers of private hospital beds were recorded in the towns of Toowoomba and Rockhampton, with 306 and 295 beds respectively. More than 60 beds were also recorded in Mackay [Part A] (197 beds), Cairns (139), Bundaberg (137), Maroochydore (109), Maryborough (84) and Noosa Balance and Caloundra (both with 64).

The correlation analysis was not undertaken as there were too many SLAs with no data.

Map 7.6: Private hospital beds per 1,000 population, Queensland, 1997

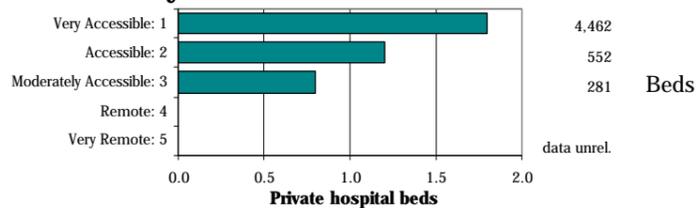
number of private hospital beds in each Statistical Local Area per 1,000 population



Source: See Data sources, Appendix 1.3

Details of map boundaries are in Appendix 1.2

Accessibility/Remoteness Index of Australia



Private hospital beds were only located in the three 'accessible' categories, with rates of 1.8 private hospital beds per 1,000 population in the Very Accessible ARIA category, 1.2 in the Moderately Accessible category and 0.8 private hospital beds per 1,000 population in the Accessible category. The majority of these beds (4,462 beds, 84.2 per cent) were located in the Very Accessible category at 30 June 1997.

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

Nursing home places per 1,000 population aged 70 years and over, 1997

Capital city comparison

There were 56 nursing home places per 1,000 population aged 70 years and over in the capital cities at 30 June 1997. The range of rates was from a high of 65 in **Sydney**, 58 in **Adelaide** and 57 in **Hobart**, to a low of 39 in **Canberra** and 41 in **Darwin** (Table 7.9).

The rates for all of the cities for which data were published in the first edition of the atlas have decreased, some more substantially than others. This is largely a result of moves to meet the target rate of 40 nursing home places per 1,000 population aged 70 years and over. At the same time, the number of hostel places has increased (page 340). The largest decrease was recorded in **Perth**, where the rate decreased from being equivalent to the *All capitals* average in 1992 to 7.1 per cent below in 1997, a drop of 24.6 per cent: the decrease of 23.9 in **Brisbane** was almost as marked.

Table 7.9: Nursing home places per 1,000 population aged 70 years and over, capital cities

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra ¹	All capitals
1997	65	48	54	58	52	57	41	39	56
1992	79	53	71	74	69	..	..	..	69

¹Includes Queanbeyan (C)

Source: See *Data sources*, Appendix 1.3

Brisbane

At 30 June 1997, there were 6,147 nursing home places (in 96 nursing home facilities) in **Brisbane**, representing 54 places per 1,000 population aged 70 years and over.

As shown in **Map 7.7**, there was a wide variation in the provision of nursing home places at the small area level within **Brisbane**. A large number of inner and middle areas had high rates, particularly those located on the southern side of the Brisbane River. The inner areas of New Farm (with 364 nursing home places per 1,000 population aged 70 years and over), Herston/Newstead (244), Annerley and Fairfield (155), Windsor/Lutwyche/Wooloowin (130) and Greenslopes (123); and the middle areas of Hemmant-Lytton/Wynnum/Wynnum West (143), Seventeen Mile Rocks (123) and Graceville/Oxley (106) recorded some of the highest rates for this variable.

The lowest rates were recorded in Inala/Durack/Doolandella-Forest Lake/Ellen Grove/Richlands (15 places per 1,000 population) and Holland Park/Tarragindi and Cannon Hill/Morningside/Norman Park (both with 16). Relatively low rates were also recorded in Birrkdale/Orminston (20 places per 1,000 population), Macgregor/Pallara-Heathwood/Larapinta (28) and Capalaba/Redland Bay (30), located in the southern and south-eastern areas; Bribie Island (20), Stafford Heights/Mitchelton (21) and Nudgee Beach/Virginia (34), situated to the north of the Brisbane River; and East Brisbane/Kangaroo Point (32) and Camp Hill/Carindale (38), located in the inner city region.

The areas of Braken Ridge/Sandgate recorded the largest number of nursing home places in **Brisbane** in 1997 (714 places and five facilities), followed by New Farm (524; six), Hemmant-Lytton/Wynnum/Wynnum West (412; four), Redcliffe (348; six), Ipswich Central (346; seven), Mt Gravatt/Rochedale (317; 3), Graceville/Oxley (247; four), Herston/Newstead (234; four) and Bridgeman Downs/Boondall (205; three). There were no nursing home places located in 57 small areas in **Brisbane**.

The correlation analysis was not undertaken as there were too many areas with no data.

Gold Coast-Tweed Heads

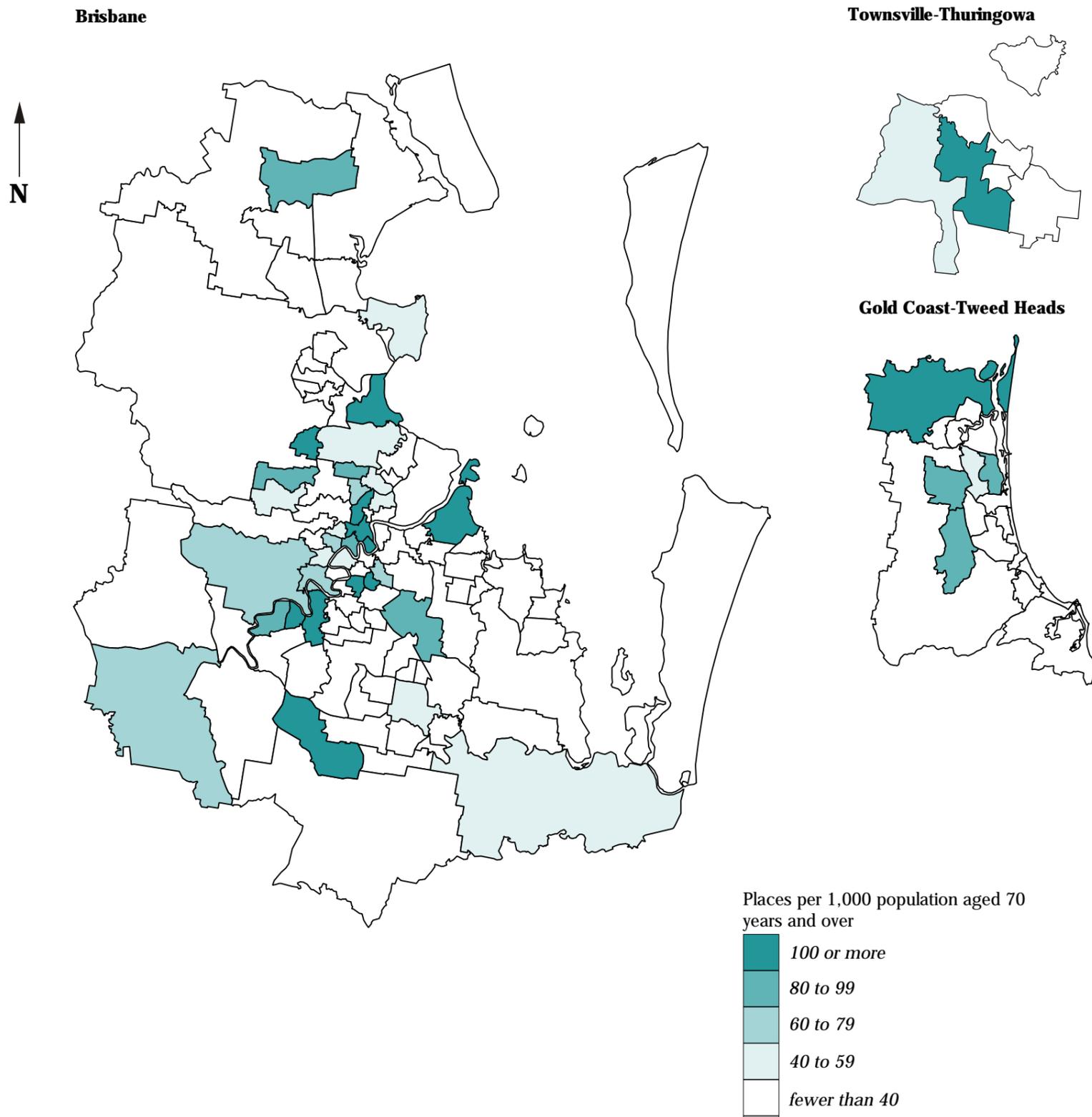
There were 23 nursing home facilities located in **Gold Coast-Tweed Heads** in 1997, with a total of 1,440 places. This represented 32 nursing home places per 1,000 population aged 70 years and over. By far the highest rate was recorded in Coomera-Cedar Creek (401 places), followed by Labrador/Southport (92), Nerang (90) and Worongary-Tallai/Mudgeeraba (86). The lowest rates were recorded in the coastal areas of Palm Beach/Currumbin and Surfers Paradise/Benowa (each with 9 nursing home places per 1,000 people aged 70 years and over) and Broadbeach/Burleigh Heads (15). In total, seven areas recorded no nursing home places.

Townsville-Thuringowa

Townsville-Thuringowa recorded 53 nursing home places per 1,000 population aged 70 years and over. There were 6 nursing home facilities within this major urban centre, with a total of 398 places. By far the highest rate was recorded in Murray/Mt Louisa, with 129 places per 1,000 population aged 70 years and over, with lower rates in the City of Thuringowa [Part A] (45 places), Gulliver/Hermit Park (33) and Townsville Coastal/Magnetic Island (25). No nursing home places were recorded in Townsville South East.

Map 7.7: Nursing home places per 1,000 population aged 70 years and over, Brisbane, Gold Coast-Tweed Heads and Townsville-Thuringowa, 1997

number of nursing home places in each area* per 1,000 population aged 70 years and over



*Most SLAs have been grouped to approximate postcode areas

Source: See Data sources, Appendix 1.3

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

Nursing home places per 1,000 population aged 70 years and over, 1997

State/Territory comparison

Readers should note the comments on page 321 under the heading *Data mapped* regarding the limitations of this data, especially in regard to the availability, in some instances, of beds in hospitals for long term aged care. Such beds are not included in this data.

There were fewer places per 1,000 population aged 70 years and over in the *Rest of State /Territory* areas of Australia than in the capital cities in all but the Northern Territory (where there were more places) (**Table 7.10**). The highest rates in the *Rest of State /Territory* areas were in Tasmania (49 places per 1,000 population aged 70 years and over) and Victoria (45 places).

Of the States and Territories for which data were published in the first edition of the atlas, South Australia had a very low rate of nursing home places per 1,000 population aged 70 years and over in the *Rest of State /Territory* areas in both periods (a rate of 27 in 1992 and 28 in 1997). In this context it is worthwhile noting that South Australia has the highest proportion of its inpatient bed days in non-metropolitan hospitals used by nursing home type patients (**Table 7.1**, page 322; New South Wales has second highest in the non-metropolitan areas). Western Australia had the only other rate below the *Rest of State /Territory* average for either period.

Table 7.10: Nursing home places per 1,000 population aged 70 years and over, State/Territory

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total
1997									
Capital city	65	48	54	58	52	57	41	39 ¹	56
Other major urban centres ²	45	55	35	..	..	..	..	..³	42
Rest of State/Territory	39	45	40	28	31	49	44	.. ³	40
Whole of State/Territory	55	48	45	50	47	52	42	37	50
1992									
Rest of State/Territory	52	53	52	27	40	..	..	..	50

¹Includes Queanbeyan (C)

²Includes Newcastle and Wollongong (NSW); Geelong (Vic); and Gold Coast-Tweed Heads and Townsville-Thuringowa (Qld)

³Data unreliable: included with ACT total

Source: See *Data sources*, Appendix 1.3

Rest of State

In 1997, there were 40 nursing home places per 1,000 population aged 70 years and over in the non-metropolitan areas of Queensland: this represented a total of 4,444 places in 89 nursing home facilities.

The overall pattern of distribution of nursing home places is one of higher rates in the areas surrounding **Brisbane**, extending along the north coast. A large number of SLAs located in more remote areas had none of these facilities.

The highest rate was recorded in the town of Charters Towers, with 156 nursing home places per 1,000 population aged 70 years and over. Relatively high rates were also recorded in the coastal areas of Calliope [Part A] (149 places), Maroochy Nambour (142) and Fitzroy [Part A] (134); in the areas to the west of **Brisbane** in Jondaryan (119), Roma and Dalby (both with 92) and Laidley (86); and just north-west of **Brisbane** in the areas of Kingaroy (112), Wondai (85) and Gayndah (83). Longreach (situated in the central west) and Torres (located to the far north) also recorded relatively high rates, with 104 and 84 nursing home places per 1,000 population aged 70 years and over, respectively.

Map 7.8 shows that the SLAs with the lowest rates were mainly located in the western region of the State, with no nursing home places located in more than three quarters (80.0 per cent) of the non-metropolitan SLAs. Rates of below 40 were recorded in the SLAs of Burdekin (18 nursing home places per 1,000 population aged 70 years and over), Livingstone and Hervey Bay (both with 22 places), Atherton (23), Johnstone and Kawana (both with 24), Buderim, Bowen and Warwick East (each with 28), Maroochy

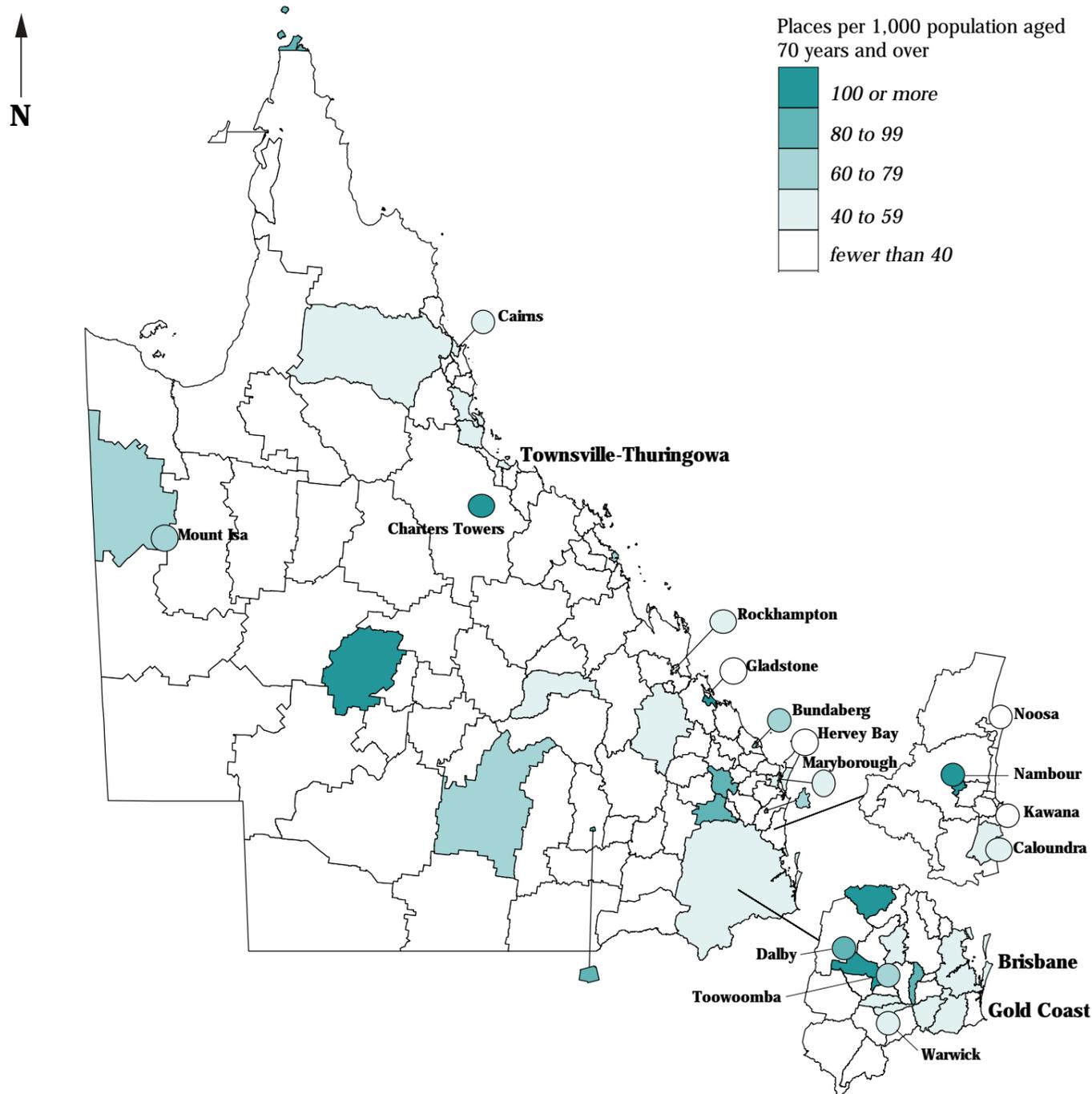
Balance (30), Whitsunday and Coastal North (Maroochy) (both with 32), Stanthorpe and Monto (both with 33) and Noosa (37).

The largest numbers of nursing home places were located in the towns of Toowoomba (546 places), Cairns (317), Rockhampton (312), Bundaberg (301), Nambour (235), Caloundra (200), Maryborough (163), Charters Towers (140) and Noosa (132).

The correlation analysis was not undertaken as there were too many areas with no data.

Map 7.8: Nursing home places per 1,000 population aged 70 years and over, Queensland, 1997

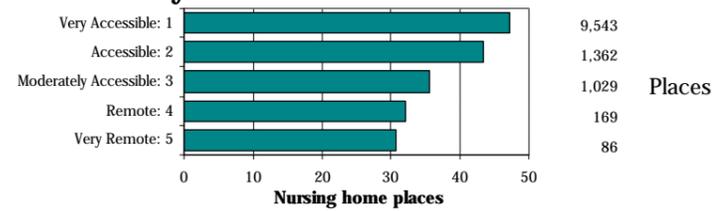
number of nursing home places in each Statistical Local Area per 1,000 population aged 70 years and over



Source: See Data sources, Appendix 1.3

Details of map boundaries are in Appendix 1.2

Accessibility/Remoteness Index of Australia



The provision of nursing home places decreases from 47 places per 1,000 population aged 70 years and over in the Very Accessible ARIA category to 31 places per 1,000 population aged 70 years and over in the Very Remote category.

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

Hostel places per 1,000 population aged 70 years and over, 1997

Capital city comparison

There were 43 hostel places per 1,000 population aged 70 years and over in the capital cities at 30 June 1997. The range of rates was from a high of 57 places in **Canberra**, 50 in **Perth** and 49 in **Brisbane** to a low of 30 in **Darwin** (Table 7.11).

The rates for all of the cities for which data were published in the first edition of the atlas have increased, some more substantially than others, in all of the capitals other than **Brisbane** (the city with the highest rate in 1992). This is largely a result of moves to meet the target rate of 50 hostel places per 1,000 population aged 70 years and over. At the same time, the number of nursing home places has decreased (page 336). The largest increase was recorded in **Sydney**, where the rate increased from 28 places per 1,000 population aged 70 years and over in 1992 to 36 in 1997, an increase of 22.2 per cent.

Table 7.11: Hostel places per 1,000 population aged 70 years and over, capital cities

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra ¹	All capitals
1997	36	43	49	47	50	42	30	57	43
1992	28	35	55	43	45	..	..	..	37

¹Includes Queanbeyan (C)

Source: See *Data sources*, Appendix 1.3

Brisbane

There were 49 hostel places per 1,000 population aged 70 years and over in **Brisbane** in 1997, a total of 99 hostel facilities and 5,508 places.

The distribution of the highest rates were generally found in the areas to the north of the Brisbane River and within the inner city region, while those with the lowest rates were situated in a number of locations throughout the metropolitan area (Map 7.9).

By far the highest rate was recorded in Seventeen Mile Rocks, with 670 hostel places per 1,000 population aged 70 years and over. Rates in the highest range were also recorded in Rocklea (with a rate of 234 places), East Brisbane/Kangaroo Point (194), Balmoral/Bulimba/Hawthorne (172) and Herston/Newstead and Red Hill/Kelvin Grove (both with 127) and Graceville/Oxley (85), located in the inner city region; Greenbank [Part B] (192) and Thornlands (191), in the outer southern region; and Upper Brookfield/Fig Tree Pocket (149), Kallangur (139), Caboolture Central (138), Lawnton (126), Chermside West/Chermside (122) and Burpengary-Narangba (111), situated to the north of the Brisbane River.

Rates of ten per cent or lower were recorded in the areas of Kedron (four hostel places per 1,000 population aged 70 years and over) and Redland Balance and Stafford Heights/Mitchelton (both with 10). Relatively low rates were recorded in the southern regions of Mt Gravatt/Rochedale (13 places), Holland Park/Tarragindi (20), Capalaba/Redland Bay (21), Lota/ Manly/Manly West (22), and Camp Hill/Carindale (23).

More than 200 hostel places were located in the areas of Ipswich Central (432 places), Bracken Ridge/Sandgate (352), Seventeen Mile Rocks (306), Bridgeman Downs/Boondall (300), Upper Brookfield/Fig Tree Pocket (290) and Chermside West/Chermside and Redcliffe (both with 241). At the other end of the scale no hostel places were recorded in 52 small areas.

The correlation analysis was not undertaken as there were too many areas with no data.

Gold Coast-Tweed Heads

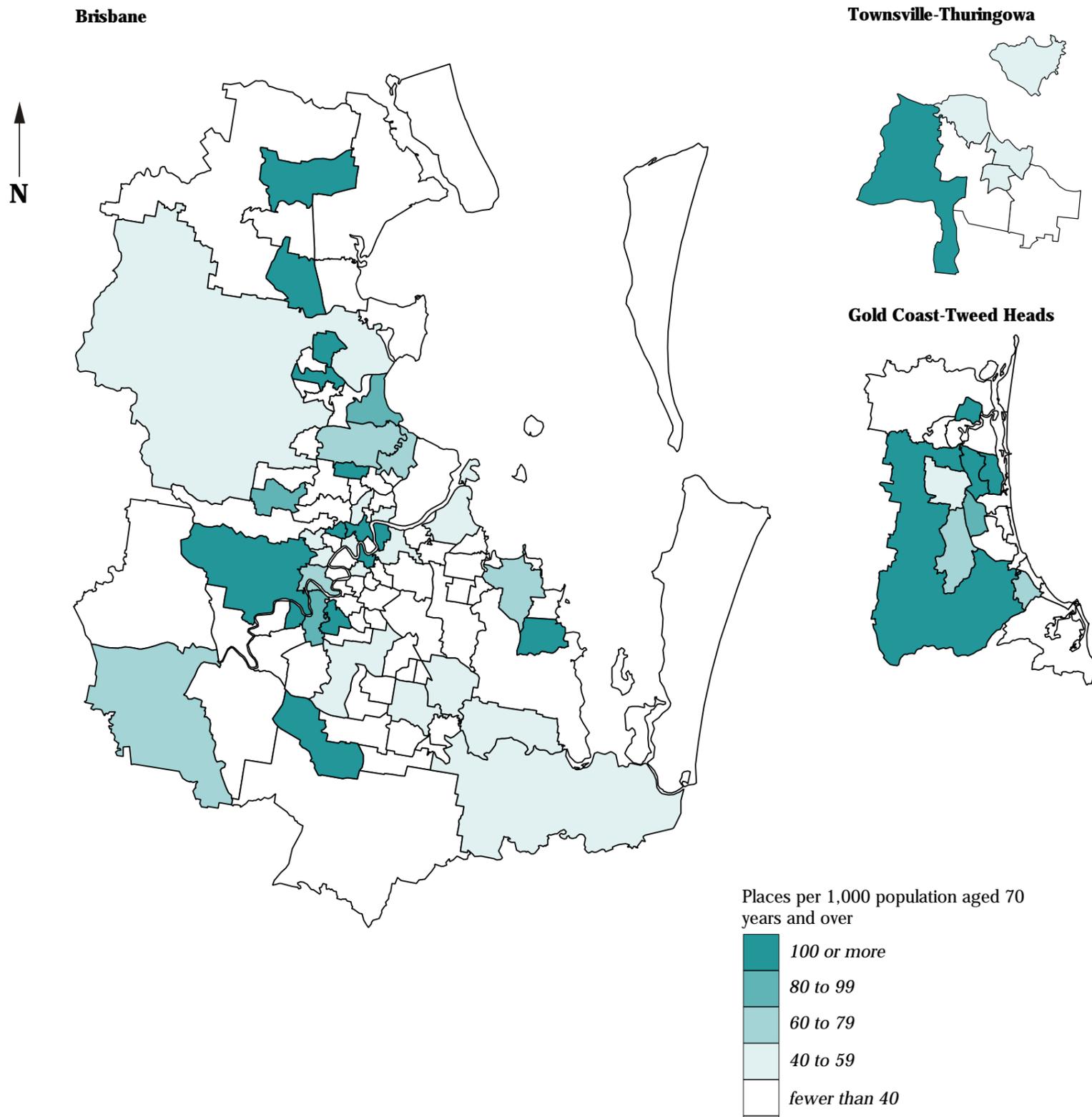
In 1997, there were 37 hostel places per 1,000 population aged 70 years and over in **Gold Coast-Tweed Heads**, with 32 hostel facilities and 1,655 places. Coomera-Cedar Creek had the highest rate (260 hostel places per 1,000 population aged 70 years and over), followed by Labrador/Southport (200 places), Nerang (130) and Worongary-Tallai/Mudgeeraba (102). Rates of below 20 were recorded in the coastal areas of Surfers Paradise/Benowa (14), Palm Beach/Currumbin (12) and Carrara/Merrimac (5). In total, six areas recorded no hostel places in 1997.

Townsville-Thuringowa

Townsville-Thuringowa had 6 hostel facilities with 417 places in 1997, representing 55 hostel places per 1,000 population aged 70 years and over. The rates varied greatly, from a low 21 places in Murray/Mt Louisa to 147 in Thuringowa [Part A]. Townsville Coastal/Magnetic Island had a near average rate, with 56 hostel places per 1,000 population aged 70 years and over. No hostel places were recorded in Townsville South East.

Map 7.9: Hostel places per 1,000 population aged 70 years and over, Brisbane, Gold Coast-Tweed Heads and Townsville-Thuringowa, 1997

number of hostel places in each area* per 1,000 population aged 70 years and over



*Most SLAs have been grouped to approximate postcode areas

Source: Calculated on data from ABS 1996 Census

Scale: Details of map scales and boundaries are in Appendix 1.2
National Social Health Atlas Project, 1999

Hostel places per 1,000 population aged 70 years and over, 1997

State/Territory comparison

There were fewer hostel places per thousand population aged 70 years and over in the *Rest of State /Territory* areas of Australia than in the capital cities in all but New South Wales and Victoria (with more places) and Queensland (with the same number of places) (**Table 7.12**). The highest rates were in Victoria and Queensland and the lowest was in the Northern Territory.

Of the States/Territories for which data were published in the first edition of the atlas, the largest increase in the *Rest of State /Territory* areas was recorded for Victoria. There was a small increase in the rate in New South Wales and a small decrease for Western Australia: the rate in Queensland and South Australia remained the same.

Table 7.12: Hostel places per 1,000 population aged 70 years and over, State/Territory

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total
1997									
Capital city	36	43	49	47	50	42	30	57 ¹	43
Other major urban centres ²	40	42	39	..	..	..	..	..	40
Rest of State/Territory	42	49	49	46	43	39	28	— ³	46
Whole of State/Territory	38	45	47	47	48	40	29	60	43
1992									
Rest of State/Territory	39	40	49	46	45	..	..	..	42

¹Includes Queanbeyan (C)

²Includes Newcastle and Wollongong (NSW); Geelong (Vic); and Gold Coast-Tweed Heads and Townsville-Thuringowa (Qld)

³Data unreliable: included with ACT total

Source: See *Data sources*, Appendix 1.3

Rest of State

The rate recorded for the non-metropolitan areas of Queensland was slightly higher than that recorded in **Brisbane**, with 49 hostel places per 1,000 population aged 70 years and over. This represented a total of 141 hostel facilities with 5,436 places.

The distribution of hostel places per 1,000 population aged 70 years and over is shown in **Map 7.10**, from which it can be seen that SLAs with the highest rates were mainly concentrated in the areas surrounding Brisbane, while those with the lowest were located in the more remote regions.

Rates mapped in the highest range were recorded in the far north-western SLAs of Mornington (1,333 hostel places per 1,000 population aged 70 years and over) and Burke (244 places); on the mid north coast in Fitzroy [Part A] (259) and Mirani (141); in the areas surrounding **Brisbane** of Monto (229), Chinchilla (184), Murgon (174), Millmerran (132), Warwick North (125), Maroochy Balance (114), Pittsworth (112), Hinterland (106), Laidley (104), Nambour (102) and Goondiwindi (100); in the south-western SLAs of Booringa (150) and Balonne (109); and in the far northern SLAs of Cook (121) and Torres (101). Also mapped in the highest range were the SLAs of Longreach and Duaringa, with 125 and 106 hostel places per 1,000 population aged 70 years and over, respectively.

In total, 12 SLAs were mapped in the middle range, with rates ranging from 63 hostel places per 1,000 population aged 70 years and over in Mount Morgan and Boonah to 77 in both Burdekin and Beaudesert[Part B].

The lowest rates, in areas where nursing home facilities were located, were recorded in Whitsunday (with a rate of 15 places per 1,000 population and a total of 14 places), Gatton (24 and 20) and Buderim (24 and 70). SLAs with 40 or fewer hostel places per 1,000 population aged 70 years and over included

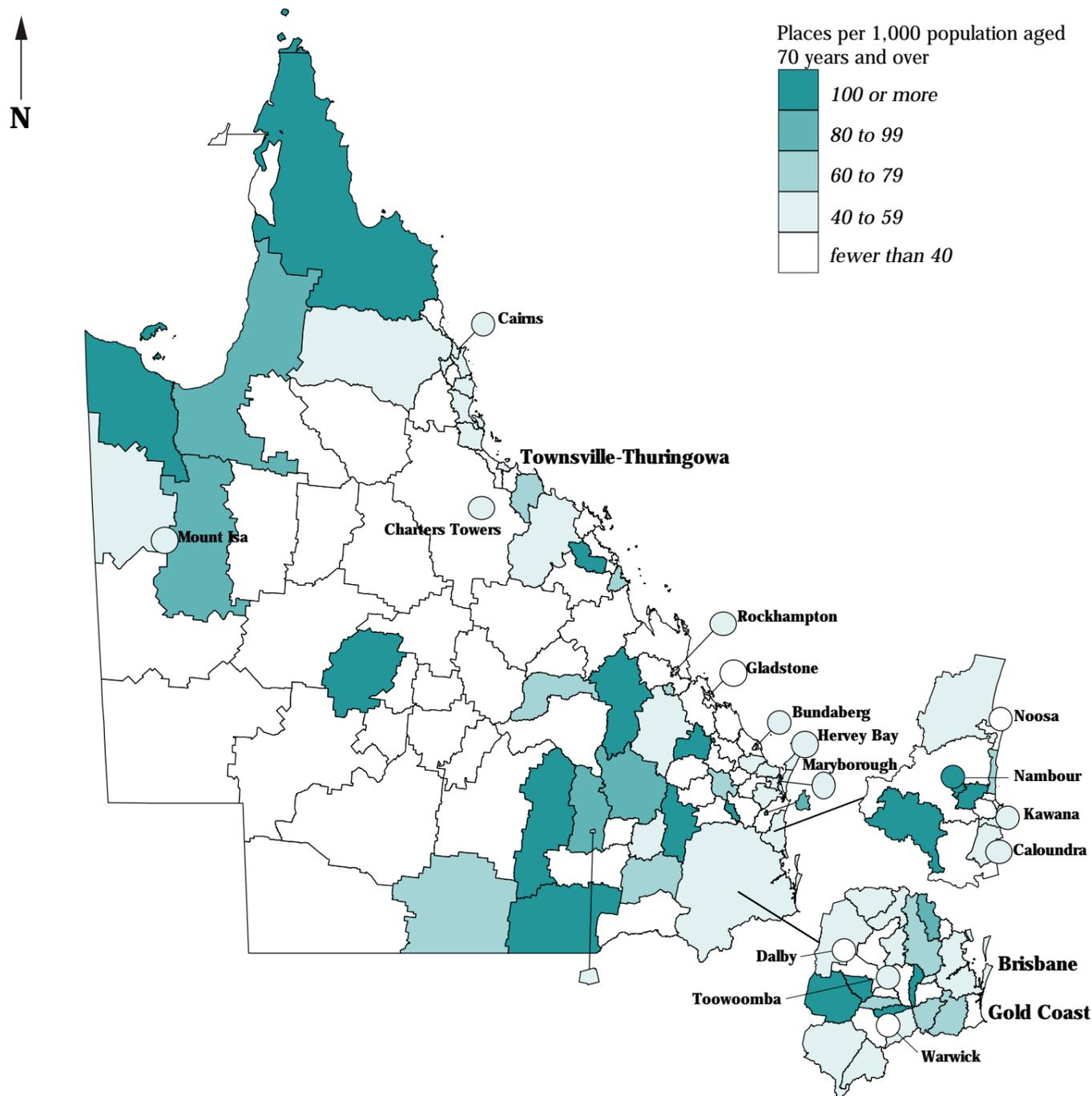
Murweh and Noosa (both with 33 places), Warwick (36), Dalby (37), Mackay [Part A] (38), Jondaryan, Livingstone and Gladstone (each with 39) and Douglas (40).

The largest numbers of hostel places were recorded in the town of Toowoomba (486 places), Cairns (317), Rockhampton (309), Caloundra (235), Hervey Bay (231) and Bundaberg (222). No hostels were located in 48 of the non-metropolitan SLAs.

The correlation analysis was not undertaken as there were too many SLAs with no data.

Map 7.10: Hostel places per 1,000 population aged 70 years and over, Queensland, 1997

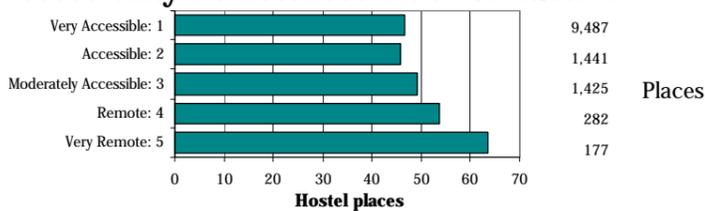
number of hostel places in each Statistical Local Area per 1,000 population aged 70 years and over



Source: See Data sources, Appendix 1.3

Details of map boundaries are in Appendix 1.2

Accessibility/Remoteness Index of Australia



The provision of aged care hostel places is almost the reverse of that for nursing home places, and much more like the distribution of public acute hospital beds. The rate of provision increases, from 46 places per 1,000 population aged 70 years and over in the Accessible and 47 places in the Very Accessible ARIA categories, to a high of 63 places per 1,000 population aged 70 years and over in the Very Remote category.

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

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