Research Paper

Analysis of the Regional Distribution of Relatively Disadvantaged Areas using 2001 SEIFA

New
Issue

Research Paper

Analysis of the Regional Distribution of Relatively Disadvantaged Areas using 2001 SEIFA

Monika Ciurej, Robert Tanton and Alanna Sutcliffe

Analytical Services Branch

INQUIRIES

CONTENTS

ANALYSIS OF THE REGIONAL DISTRIBUTION OF RELATIVELY DISADVANTAGED AREAS USING 2001 SEIFA

Monika Ciurej, Robert Tanton and Alanna Sutcliffe [1]
Analytical Services Branch

ABSTRACT

In this paper we investigate the geographical distribution of disadvantaged areas across Australia. We use the Socio-economic Indexes for Areas (SEIFA), in particular the Index of Relative Socio-economic Disadvantage, to identify areas with relatively high proportions of people with characteristics associated with low socio-economic status.

We define relatively disadvantaged areas as those Census Collection Districts (CDs) in the bottom 5% of index scores. If disadvantage is equally distributed across Australia, we would expect each geographical region to have similar proportions of people living in disadvantaged CDs. This is not however the case.

While the majority of people living in disadvantaged CDs are in urban areas there is a proportional over-representation of disadvantaged CDs in remote areas. Only 2.7% of Australians live in remote or very remote areas but 13.7% of these are in disadvantaged CDs compared with 5.1% of people in major cities.

The distribution of people living in disadvantaged CDs is not equally distributed across states and territories. Over 15% of people in the Northern Territory live in disadvantaged CDs. At the other end of the scale, less than 1% of people in the Australian Capital Territory are in disadvantaged CDs.

---

1   An earlier version of this paper was presented at the ANZSEE /CofFEE Conference: A Future that Works –
     Economics, Employment and the Environment, 8–10 December 2004, Newcastle, Australia.

1. INTRODUCTION

There has been a growing demand for information which describes the socio-economic status of people living in Australian cities a well as rural and regional Australia. Information on levels of relative disadvantage according to where people live can allow for better targeting of services and assistance, and may be useful for policy formulation.

The Australian Standard Geographical Classification (ASGC) is used by the Australian Bureau of Statistics (ABS) for the collection and dissemination of geographically classified statistics. It provides a common framework of statistical geography and thereby enables the production of statistics which are comparable and can be spatially integrated. Using two different classifications, the Remoteness classification and the Section of State (SOS) classification, in conjunction with Socio-economic Indexes for Areas (SEIFA) we are able to observe the geographical distribution of those people living in disadvantaged areas and compare it to the geographical distribution of the Australian population.

Horst Posselt (2000) undertook an analysis investigating the geographic patterns of social disadvantage across urban, rural and remote parts of Australia using data from the 1996 Census of Population and Housing. This paper undertakes a similar analysis using data from the 2001 Census.

The aim of this paper is to investigate the geographical distribution of those in disadvantaged areas, as measured by the Index of Relative Socio-economic Disadvantage. The remainder of the paper is as follows: section 2 of the paper discusses the methodology for the analysis, section 3 presents the geographical distributions of various populations and section 4 concludes.

2. METHODOLOGY

This section describes the geographical classifications and the measure of relative disadvantage used for the analysis.

2.1 Section of State

Each Census Collection District (CD) in Australia can be classified into one Section of State (SOS) category. The classification distinguishes CDs according to their settlement type, urban or not, and among those in urban settings (or localities) in terms of the census counts of people within the urban area. The CD is classified as being part of an urban area if it has a certain population density and is contiguous with similar CDs.

2.1 Section of State categories

Category	Definition
Major urban	Urban Centres with a population of 100,000 or more
Other urban	Urban Centres with a population between 1,000 and 99,999
Bounded locality	Localities with a population between 200 and 999
Rural balance	The remainder of the State/Territory

Not all SOS categories are present in each state/territory. A map of Australia showing Section of State is shown in Appendix A. Major urban areas comprises Sydney, Melbourne, Brisbane, Adelaide, Perth, Hobart, Canberra, Newcastle, Wollongong, Geelong and Townsville. Other urban areas include large towns and cities such as Darwin, Launceston, Albury–Wodonga, Ballarat, Bendigo, Cairns, Toowomba, Rockhampton, Mackay and Bunbury.

It is relevant to note that the term 'rural' used to describe the last category can be misleading. The classification does not, for example, bring together information about the economic base of locations. Thus 'other urban' centres can be located in areas with an agricultural economic base and 'rural balance' areas, the places between urban centres can be located adjacent to large urban centres and in functional terms may not be linked to an agricultural base.

2.2 Remoteness classification

In 2001 the ABS developed a new remoteness classification.[2] The Accessibility/ Remoteness Index of Australia (ARIA)[3] was used as the underlying methodology for the determination of remoteness. ARIA was developed by the National Key Centre for Social Applications of GIS (GISCA).

ARIA was developed as an index (continuous variable with values between 0 and 15), in which remoteness is defined on the basis of road distance from any point to the nearest town (service centre) in each of five population size classes. The population size of the service centre is used as a proxy for the availability of a range of services and road distance is used as a proxy for the degree of remoteness from those services.

The ABS aggregated ARIA values to give six remoteness areas.

2.2 Remoteness categories

Category	Areas with average ARIA index values ...
Major cities of Australia	greater than or equal to 0 and less than 0.2
Inner regional Australia	greater than or equal to 0.2 and less than 2.4
Outer regional Australia	greater than or equal to 2.4 and less than 5.92
Remote Australia	greater than or equal to 5.92 and less than 10.53
Very remote Australia	greater than or equal to 10.53
Migratory	composed of off-shore, shipping and migratory CDs

A map of the remoteness classification is shown in Appendix B. The major cities category comprises Sydney, Melbourne, Brisbane, Adelaide, Perth, Canberra, Newcastle, Gold Coast–Tweed. Cities and large towns such as Darwin, Hobart, Wollongong, Albury–Wodonga, Cairns, Geelong, Launceston, Ballarat, Bendigo, Rockhampton, and Mackay are included in the inner regional areas.

2.3 Socio-economic Indexes for Areas (SEIFA)

Socio-economic disadvantage is a relative concept with many, often interrelated, dimensions to it. Social disadvantage is typically associated with low income, high unemployment and low levels of education. The Socio-economic Indexes for Areas (SEIFA) are indexes that summarise a number of socio-economic variables that represent disadvantage in an area. This single measure can be used to rank CDs to identify areas that are more or less disadvantaged relative to others.

---

2   Refer to *ABS Views on Remoteness, Australia – Information Paper* (cat. no. 1244.0) for reasons why the remoteness structure was introduced.

3   The ARIA classification was used in Horst Posselt's analysis in 2000.

In 2003, the Australian Bureau of Statistics constructed four indexes derived from the 2001 Census of Population and Housing. The four indexes are: [4]

- the Index of Relative Socio-economic Disadvantage

- the Index of Relative Socio-economic Advantage/Disadvantage

- the Index of Economic Resources

- the Index of Education and Occupation.

These indexes are area based and measure different aspects of socio-economic conditions at a CD level. The indexes have been derived using a multivariate technique known as 'principal components analysis', which summarises the information from a variety of social and economic variables into a single measure. [5] Different sets of CD level variables are used to construct the different indexes.

It is important to note that the SEIFA indexes are calculated for an area and hence reflect the socio-economic well-being of an area, rather than that of individuals. Because all people within an area are not identical, the index score does not directly apply to all individuals in the area, but rather these indexes summarise the average characteristics of the people living the area. It is possible for a relatively advantaged person to be resident in an area with a low score on the Index of Relative Socio-economic Disadvantage and vice versa.

The Index of Relative Socio-economic Disadvantage and the Index of Relative Socio-economic Advantage/Disadvantage are the two most general indexes. For this analysis we used the Index of Relative Socio-economic Disadvantage and define an area as being disadvantaged relative to other areas based on the ranking on this index.

As can be seen in table 2.3, variables with the highest contribution to the Index of Relative Socio-economic Disadvantage are related to low levels of education, some occupations (labourers) and low income.

---

4   For an in-depth description of the indexes, refer to the *Census of Population and Housing: Socio-economic Indexes for Areas, Australia – Information Paper* (ABS cat. no. 2039.0).

5   For technical details on the method and how the variables have been selected, refer to the *Census of Population and Housing: Socio-economic Indexes for Areas (SEIFA), Australia – Technical Paper* (ABS cat. no. 2039.0.55.001).

2.3 Index of Relative Socio-economic Disadvantage variables

Population characteristics	Contribution to Index Score*
% Persons aged 15 years and over with no qualifications	0.31
% Families with offspring having parental income less than $15,600	0.29
% Females (in Labour Force) unemployed	0.27
% Males (in Labour Force) unemployed	0.27
% Employed Males classified as 'Labourers & Related Workers'	0.27
% Employed Females classified as 'Labourers & Related Workers'	0.27
% One-parent families with dependent offspring only	0.25
% Persons aged 15 years and over who left school at Year 10 or lower	0.25
% Employed Males classified as 'Intermediate Production & Transport Workers'	0.24
% Families with income less than $15,600	0.23
% Households renting (Government Authority)	0.22
% Persons aged 15 years and over separated or divorced	0.19
% Dwellings with no motor car at dwelling	0.19
% Employed Females classified as 'Intermediate Production & Transport Workers'	0.19
% Persons aged 15 years and over who did not go to school	0.18
% Indigenous	0.18
% Lacking fluency in English	0.15
% Employed Females classified as 'Elementary Clerical, Sales & Service Workers'	0.13
% Occupied private dwellings with two or more families	0.13
% Employed Males classified as 'Tradespersons'	0.11

*   Contribution to Index Score values are multiplied by –1 so that lower numbers are more disadvantaged.

A high index score implies that the area has few families with low incomes and few people with little training and working in unskilled occupations. A low score implies that an area has many low income families and people with little training and working in unskilled occupations. It is important to understand that a high score here reflects lack of disadvantage rather than advantage or high advantage.

There are three factors which the indexes do not represent well. First, the indexes contain only limited information about accumulated wealth. Second, an area's infrastructure such as schools, community services, shops and transport is not represented by the indexes. Third, the indexes do not capture the difference in cost of living across different areas. The Census of Population and Housing does not collect information about these three factors, and so it is impossible to include them in the construction of the SEIFA indexes.

2.4 Analysing data

Using the Remoteness classification, Section of State classification and SEIFA, it is possible to observe the geographical distribution of people in these different regions as well as the distribution of disadvantaged areas.

In this paper a CD is classified as being disadvantaged relative to others if it is ranked (using the Index of Relative Socio-economic Disadvantage) in the bottom 5% of all CDs. There are two methods that could be used to identify the bottom 5% of CDs.

The first method is to simply divide the CDs into 20 equal groups. That is, the CDs are first ranked using their Index of Socio-economic Disadvantage score and then the bottom 1,785 CDs (5% of 35,695) are defined as disadvantaged.

The second method is to population weight the CDs. That is, divide the CDs into 20 equal groups based on the population size of the CDs. The CDs are ranked by their index score and cumulative population total is calculated. This is used to divide the population into 20 equal groups of 935,447 people. Using this population weighted method, there are 1,879 CDs in the bottom 5%. Box 1 provides an example of population weighted method.

BOX 1. POPULATION WEIGHTED METHOD

CD	Score	Population	Accumulated Population
1	50	175	175
2	100	200	375
3	125	125	500
4	300	400	900
5	350	300	1,200
6	375	225	1,425
7	400	200	1,625
8	425	275	1,900
9	450	275	2,175
10	500	200	2,375

For this example, we wish to divide the population into five equal parts.

Step 1:   Divide the population into 5 equal parts: $2,375 \div 5 = 475$

Step 2:   Find the CD which includes the first cutoff point – 475. In this case, CD 3.

Step 3:   Identify the CDs in the bottom 20% of all CDs : CD 1, CD 2 and CD 3.

The population weighted method has been used in this analysis to define disadvantaged areas. The difference in the CD population sizes can now be taken into account and we can easily compare population distributions across geographical regions. Using the first method, without population weighting, the bottom 5% of CDs accounted for 4.7% of the Australian population.

In the coming sections we show the distribution of Australia's total population; and contrast this with the distribution of the population living in disadvantaged areas to assess whether disadvantage is uniformly distributed across these regions in Australia.

2.5 Distribution of person and dwelling level characteristics by disadvantage

As noted early, SEIFA combines a number of CD level variables to create a single measure of disadvantage for the CD. This notion of disadvantage relies on the variables collected in the Census and the methodology for selection variables. Examining the variables used to construct the Index of Socio-economic Disadvantage in detail provides insight into the nature of disadvantage.

In the following table, we have calculated the proportion of people with various characteristics in disadvantaged CDs and compared this to the national figure. To calculate the national figure information from all 35,695 CDs was used while information from the 1,879 disadvantaged CDs was used to calculate the figure for disadvantaged CDs.

2.4 Selected population characteristics, by disadvantaged CDs, Australia, 2001

Population characteristics*	Australia %	Disadvantaged areas %
% Persons aged 15 years and over with no qualifications	56.6	74.4
% Families with offspring having parental income less than $15,600	7.5	19.9
% Females (in Labour Force) unemployed	6.6	18.6
% Males (in Labour Force) unemployed	8.0	25.0
% Employed Males classified as 'Labourers & Related Workers'	10.2	22.4
% Employed Females classified as 'Labourers & Related Workers'	7.2	18.9
% One-parent families with dependent offspring only	8.8	19.2
% Persons aged 15 years and over who left school at Year 10 or lower	45.1	60.6
% Employed Males classified as 'Intermediate Production & Transport Workers'	13.0	22.9
% Families with income less than $15,600	3.9	10.9
% Households renting (Government Authority)	4.9	31.5
% Persons aged 15 years and over separated or divorced	10.8	15.6
% Dwellings with no motor car at dwelling	10.6	25.7
% Employed Females classified as 'Intermediate Production & Transport Workers'	2.5	6.1
% Persons aged 15 years and over who did not go to school	1.1	4.1
% Indigenous	2.2	11.6
% Lacking fluency in English	2.8	9.2
% Employed Females classified as 'Elementary Clerical, Sales & Service Workers'	14.2	18.0
% Occupied private dwellings with two or more families	1.0	2.1
% Employed Males classified as 'Tradespersons'	20.4	21.2

*   If the variable is a person level variable then the denominator is per 100 persons
    If the variable is a household level variable then the denominator is per 100 households
    If the variable is a dwelling level variable then the denominator is per 100 dwellings.

Table 2.4 indicates the extent to which different variables that are associated with disadvantage are higher in disadvantaged areas compared to the Australian total. For example, at a national level, the number of females unemployed at the time of the 2001 Census was 6.6%. This figure was 18.6% in disadvantaged areas.

There were on average five times more Indigenous people and nearly six times more families renting from government agencies in the disadvantaged areas compared to total of Australia.

3. GEOGRAPHICAL DISTRIBUTIONS

3.1 Total population

The following table presents the geographical distribution of the Australian population by Section of State (SOS) and Remoteness classifications. Recall that the Remoteness classification essentially measures proximity to services and goods while the SOS classification describes population density.

In terms of the remoteness classification, the majority of Australians live in major cities (66%) and one in five (21%) live in inner regional areas. At the same time, using the SOS classification, 65% of Australians live in major urban areas. Taking this together, the majority of Australians live in urban areas with a high degree of access to goods and services. Less than 3% of Australians live in remote or very remote parts of Australia.

This table provides an insight into how the two classification systems can be used to understand how access to services (as seen by, the level of remoteness) differ across the different Sections of State and vice versa. For instance, over half the people living in locations between towns and cities (rural balance) live in highly accessible areas (major cities and inner regional Australia). On the other hand, nearly half the people living in remote/very remote Australia are in small towns (other urban areas).

3.1 Geographic distribution of Australia's total population, 2001 (%)

	Remoteness area				
Section of State	Major cities of Australia	Inner regional Australia	Outer regional Australia	Remote/ Very remote Australia	Total
Major urban	62.8	1.8	0.6	—	65.2
Other urban	2.4	12.8	5.6	1.3	22.1
Bounded locality	0.0	1.0	1.0	0.5	2.5
Rural balance	0.9	5.0	3.4	0.9	10.2
Total	66.1	20.6	10.6	2.7	100.0

3.2 Index of Relative Socio-economic Disadvantage

3.2.1 Distribution of people in disadvantaged CDs across Australia

We now look at how people in disadvantaged CDs are distributed across geographical areas. As noted in Section 2, we have population weighted our CDs to make our analysis comparable to table 3.1. The 5% of people in the bottom CDs comprise a total population of 935,702 people living in 1,879 CDs.

Table 3.2 and table 3.3 show the distribution of people in these 1,879 disadvantaged CDs by Remoteness classification and Section of State respectively. If disadvantage was uniformly distributed across regions, then when we compare the proportion of people in the disadvantaged areas to the overall population in the same geographic region it would be 5% (final column).

3.2 Population in Disadvantaged CDs by Remoteness Area

Remoteness area	Number of disadvantaged CDs	Number of people in disadvantaged CDs ('000)	People in disadvantaged CDs as a percentage of the population (%)
Major cities of Australia	1,142	630.6	5.1
Inner regional Australia	309	154.1	4.0
Outer regional Australia	184	81.9	4.2
Remote / Very remote Australia	244	69.1	13.7
Total	1,879	935.7	5.0

Numerically, the majority of disadvantaged people live in major cities, reflecting the distribution of the Australian population. However, there is an over-representation of people in disadvantaged CDs in remote or very remote areas. Only 2.7% of people live in remote or very remote areas and 13.7% of these people live in disadvantaged CDs. In contrast, there is slight under-representation of disadvantaged people in inner and outer regional areas.

3.3 Population in Disadvantaged CDs by Section of State

Section of State	Number of disadvantaged CDs	Number of people in disadvantaged CDs ('000)	People in disadvantaged CDs as a percentage of the population (%)
Major urban	1,152	635.5	5.2
Other urban	439	230.4	5.6
Bounded locality	104	41.7	8.8
Rural balance	184	28.1	1.5
Total	1,879	935.7	5.0

There were over 635,000 people from disadvantaged CDs living in major urban areas, again reflecting the population distribution. There is an under-representation of people in disadvantaged CDs in the rural balance. There is an over-representation of people living in disadvantaged CDs in small towns (bounded localities).

The results from this analysis are similar to the results using the 1996 Census data (Posselt).

3.2.2 State and Territory distribution of people in disadvantaged CDs

In this section, we examine how people in the 1,879 disadvantaged CDs are distributed across the states and territories.

As can be seen in Table 3.4, the Northern Territory has a large over-representation of people living in disadvantaged CDs, followed by Tasmania and then South Australia. New South Wales has a slight over-representation and all other states have an under-representation. The Australian Capital Territory has the largest under-representation of people living in disadvantaged CDs.

3.4 People in disadvantaged CDs as a percentage of the State/Territory population

Section of State	Number of disadvantaged CDs	Number of people in disadvantaged CDs ('000)	People in disadvantaged CDs as a percentage of the population (%)
New South Wales	643	365.3	5.8
Victoria	338	191.6	4.2
Queensland	288	139.2	3.9
South Australia	234	103.7	7.1
Western Australia	187	63.8	3.5
Tasmania	88	38.8	8.6
Northern Territory	90	29.9	16.2
Australian Capital Territory	6	2.3	0.7
Total*	1,879	935.0	5.0

* Includes migratory and other CDs

The following tables show how people living in disadvantaged CDs are distributed across the geographical regions within each state and territory.

3.5 People in disadvantaged CDs by Remoteness area as a percentage of the population in Remoteness areas for each state/territory population

State/ Territory	Major cities of Australia	Inner regional Australia	Outer regional Australia	Remote/ Very remote Australia	Total
New South Wales	6.2	4.5	4.5	14.1	5.8
Victoria	4.6	3.0	2.3	0.0	4.2
Queensland	4.4	2.5	3.0	10.3	3.9
South Australia	7.7	3.2	7.1	7.9	7.1
Western Australia	2.2	4.8	5.5	10.1	3.5
Tasmania	n.a	9.8	6.7	1.0	8.6
Northern Territory	n.a	n.a	3.5	31.9	16.2
Aust. Capital Territory	0.7	0.0	n.a	n.a	0.7
Total	5.1	4.0	4.2	13.7	5.0

In terms of remoteness (table 3.5), all states and territories except for Tasmania, have an over-representation of people in disadvantaged CDs in remote/very remote areas. Only South Australia and New South Wales have an over-representation of people living in disadvantaged CDs in major cities.

Appendix C contains a population summary for each state and territory.

In terms of the section of state classification (table 3.6), South Australia, Tasmania and New South Wales have an over-representation of disadvantaged CDs in major urban areas and other urban areas. In comparison for the Northern Territory it is in small towns (bounded localities) and rural areas. Western Australia has an over-representation of disadvantage people in bounded localities and has under-representation in all other areas.

3.6 People in disadvantaged CDs by Section of State as a percentage of the population in Section of State areas for each state/territory population

State/ Territory	Major urban	Other urban	Bounded locality	Rural balance	Total
New South Wales	6.3	6.4	4.6	1.1	5.8
Victoria	4.8	4.0	0.6	0.2	4.2
Queensland	4.4	3.3	11.3	0.9	3.9
South Australia	8.0	7.9	4.7	0.8	7.1
Western Australia	2.4	5.3	13.3	3.6	3.5
Tasmania	8.2	12.6	4.0	1.8	8.6
Northern Territory	n.a	6.6	77.4	30.9	16.2
Aust. Capital Territory	0.7	n.a	0.0	0.0	0.7
Total	5.2	5.6	8.8	1.5	5.0

A separate analysis for each state and territory can be found in Appendix D. That is, using the population weighted method described in section 2.4, we identified the 5% of people in the bottom CDs for each state and territory independently. These populations vary across the different jurisdictions which makes comparisons difficult. For example, all of the bottom 5% of CDs in the Northern Territory are in the bottom 1% of all Australian CDs. In contrast, between 70% and 83% of people in the bottom 5% of Victoria's, Queensland's and Western Australia's CDs respectively, are also included in the lowest 5% of CDs Australia wide. Hence, Appendix D is only suitable for within state/territory analyses and not for cross state/territory comparisons.

4. CONCLUSION

The total Australian population is highly urbanised; two-thirds living within major cities and inner regional areas, with most of the population living in major urban centres of 100,000 or more people within major cities. Numerically, the majority of people living in disadvantaged CDs live in these urbanised areas. While relatively small in number people living in remote and very remote areas are more likely to live in disadvantaged areas.

The distribution of the disadvantaged CDs across states and territories shows that people in the Northern Territory are more likely to live in disadvantaged areas. This is particularly so for those living in remote and very remote areas of the Northern Territory. People living in Western Australian and the Australian Capital Territory are less likely to live in disadvantaged CDs.

The presentation of data by Section of State and remoteness areas provides a succinct way of describing settlement properties across urban, rural and regional Australia and allows disadvantage to be observed for various settlement types, either independently or for particular area types e.g. towns and cities located in either inner or outer regional areas or the most remote parts of Australia.

REFERENCES

Australian Bureau of Statistics (1996) *Statistical Geography: Volume 1 – Australian Standard Geographical Classification (ASGC)*, cat. no. 1216.0, ABS, Canberra.

—— (2000) *Australian Social Trends – Socio-economic Disadvantage across Urban, Rural and Remote Areas*, cat. no. 4102.0, ABS, Canberra.

—— (2001) *ABS Views on Remoteness – Information Paper*, cat. no. 1244.0, ABS, Canberra.

—— (2001) *Census of Population and Housing: Australia in Profile – A Regional Analysis*, cat. no. 2032.0, ABS, Canberra.

—— (2001) *Census of Population and Housing: Socio-economic Indexes for Areas (SEIFA), Australia – Technical Paper*, cat. no. 2039.0.55.001, ABS, Canberra.

—— (2001) *Census of Population and Housing: Socio-economic Indexes for Areas (SEIFA), Australia – Information Paper*, cat. no. 2039.0, ABS, Canberra.

—— (2001) *Outcomes of ABS Views on Remoteness Consultation, Australia – Information Paper*, cat. no. 1244.0.00.001, ABS, Canberra.

—— (2001) *Statistical Geography: Volume 1 – Australian Standard Geographical Classification (ASGC)*, cat. no. 1216.0, ABS, Canberra.

Posselt, Horst (2000) *Socio-economic Disadvantage across Urban, Rural and Remote Areas*, presented at the Australian Population Association 10th Biennial Conference, Melbourne, November 2004.

APPENDIXES

A. SECTION OF STATE CLASSIFICATION

A.1 Australian Standard Geographical Classification: Section of State

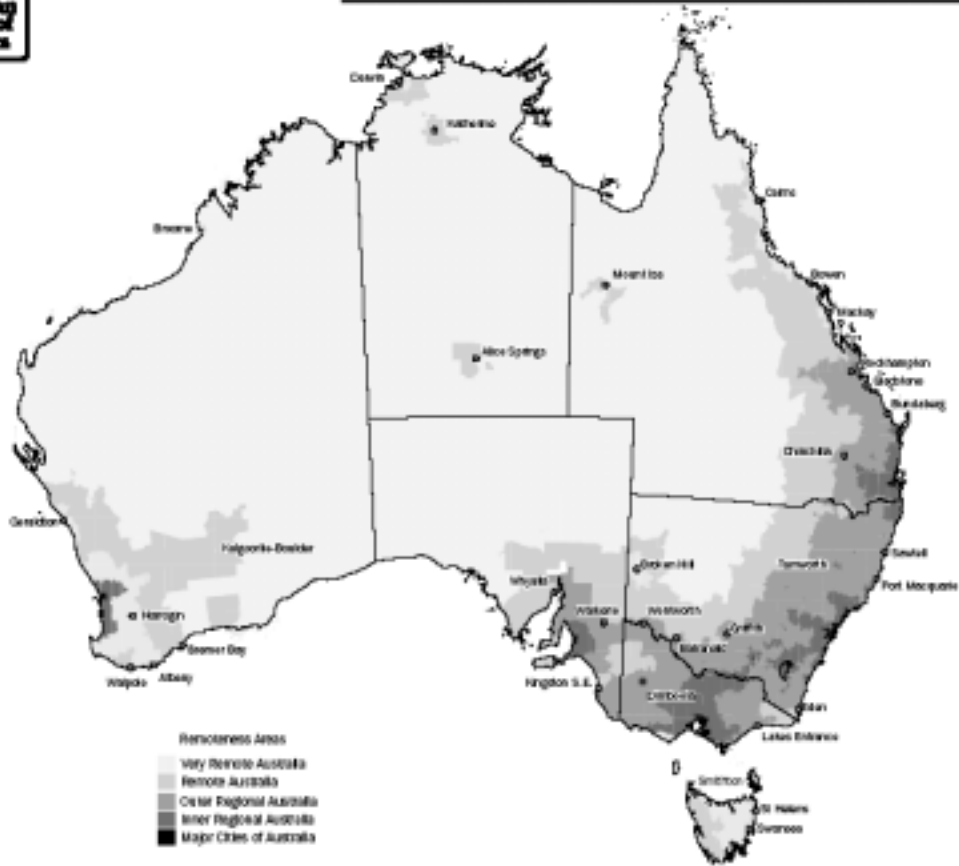Australian Standard Geographical Classification 2001 Section of State (SOS)

B. REMOTENESS CLASSIFICATION

B.1 Australian Standard Geographical Classification: Remoteness areas

C. GEOGRAPHIC DISTRIBUTION OF AUSTRALIA'S POPULATION

C.1 Geographic distribution of Australia's population, 2001 by state and territory

New South Wales

Section of State	Remoteness area				
	Major cities of Australia	*Inner regional Australia*	*Outer regional Australia*	*Remote/ Very remote Australia*	*Total*
Major urban	66.8%	0.1%	0.0%	0.0%	66.9%
Other urban	6.3%	15.0%	3.5%	0.3%	22.2%
Bounded locality	0.1%	1.1%	0.8%	0.1%	2.1%
Rural balance	0.9%	4.5%	3.2%	0.4%	8.9%
Total	71.2%	20.6%	7.5%	0.7%	100.0%

Victoria

Section of State	Remoteness area				
	Major cities of Australia	*Inner regional Australia*	*Outer regional Australia*	*Remote/ Very remote Australia*	*Total*
Major urban	70.6%	0.2%	0.0%	0.0%	70.8%
Other urban	2.2%	13.4%	2.6%	0.0%	18.2%
Bounded locality	0.0%	1.3%	0.5%	0.0%	1.9%
Rural balance	0.8%	6.0%	2.3%	0.1%	9.1%
Total	73.6%	20.9%	5.4%	0.1%	100.0%

Queensland

Section of State	Remoteness area				
	Major cities of Australia	*Inner regional Australia*	*Outer regional Australia*	*Remote/ Very remote Australia*	*Total*
Major urban	50.9%	5.7%	3.2%	0.0%	59.8%
Other urban	0.1%	12.6%	9.4%	1.8%	23.9%
Bounded locality	0.0%	0.9%	1.3%	0.7%	3.0%
Rural balance	1.2%	6.5%	4.1%	1.5%	13.4%
Total	52.2%	25.7%	18.0%	4.1%	100.0%

South Australia

Section of State	Remoteness area				
	Major cities of Australia	Inner regional Australia	Outer regional Australia	Remote/ Very remote Australia	Total
Major urban	68.4%	0.0%	0.0%	0.0%	68.4%
Other urban	2.4%	7.0%	6.8%	1.7%	17.9%
Bounded locality	0.0%	1.1%	1.1%	0.8%	3.0%
Rural balance	0.9%	4.3%	3.9%	1.6%	10.7%
Total	71.8%	12.3%	11.8%	4.1%	100.0%

Western Australia

Section of State	Remoteness area				
	Major cities of Australia	Inner regional Australia	Outer regional Australia	Remote/ Very remote Australia	Total
Major urban	64.0%	0.0%	0.0%	0.0%	64.0%
Other urban	4.8%	8.1%	6.3%	4.9%	24.1%
Bounded locality	0.0%	0.8%	0.8%	1.2%	2.8%
Rural balance	1.4%	2.9%	2.6%	2.2%	9.1%
Total	70.2%	11.8%	9.7%	8.3%	100.0%

Tasmania

Section of State	Remoteness area				
	Major cities of Australia	Inner regional Australia	Outer regional Australia	Remote/ Very remote Australia	Total
Major urban	n.a	27.5%	0.0%	0.0%	27.5%
Other urban	n.a	30.1%	14.2%	0.5%	44.9%
Bounded locality	n.a	1.1%	5.1%	0.6%	6.8%
Rural balance	n.a	4.9%	14.8%	1.3%	21.0%
Total	n.a	63.6%	34.0%	2.4%	100.0%

Northern Territory

	Remoteness area				
Section of State	Major cities of Australia	Inner regional Australia	Outer regional Australia	Remote/ Very remote Australia	Total
Major urban	n.a	n.a	n.a	n.a	n.a
Other urban	n.a	n.a	52.8%	24.3%	77.1%
Bounded locality	n.a	n.a	0.0%	8.7%	8.7%
Rural balance	n.a	n.a	2.6%	11.6%	14.2%
Total	n.a	n.a	55.4%	44.6%	100.0%

Australian Capital Territory

	Remoteness area				
Section of State	Major cities of Australia	Inner regional Australia	Outer regional Australia	Remote/ Very remote Australia	Total
Major urban	99.3%	0.0%	n.a	n.a	99.3%
Other urban	n.a	n.a	n.a	n.a	n.a
Bounded locality	0.1%	0.0%	n.a	n.a	0.1%
Rural balance	0.4%	0.2%	n.a	n.a	0.6%
Total	99.8%	0.2%	n.a	n.a	100.0%

D. GEOGRAPHIC DISTRIBUTION OF PEOPLE IN DISADVANTAGED CDS

In this appendix, disadvantage CDs were identified for each state and territory independently. Within each state/territory, we ranked the CDs by their Index of Relative Socio-economic Disadvantage score, then using the population weighted method described in section 2.4 we identified the 5% of the population in the bottom CDs for that state/territory. The state/territory's disadvantaged CDs were then compared with the total population in that state/territory.

This analysis has been provided to facilitate within state analyses and not for cross state comparisons. The following table provides a summary of the distribution of disadvantaged CDs in each state/territory compared to the bottom 1%, 5% and 20% of CDs in Australia.

D.1 Percentage of people in disadvantaged CDs in each State/Territory compared to the Australian distribution

State/ Territory	Total number of people in disadvantaged CDs (relative to the State / Territory)	Relative Disadvantage of CDs at Australian level		
		Bottom 1%	Bottom 5%	Bottom 20%
New South Wales	314,488	23.4	100.0	100.0
Victoria	230,437	12.9	83.1	100.0
Queensland	179,594	11.9	77.5	100.0
South Australia	72,645	26.3	100.0	100.0
Western Australia	90,920	12.4	70.2	100.0
Tasmania	22,355	52.3	100.0	100.0
Northern Territory	9,040	100.0	100.0	100.0
Aust. Capital Territory	15,231	8.8	14.8	19.4

To read the table above we can see that there are 314,488 people living in the bottom 5% of NSW CDs. The last three columns of the table compare the disadvantaged CDs in NSW to the national level – 23.4% of the 314,488 people living in disadvantaged NSW CDs live in the bottom 1% of Australian CDs and all 314,488 are living in the bottom 5% of Australian CDs.

D.2 Geographic distribution of people in disadvantaged CDs as a percentage of the population for each state and territory

New South Wales

Section of State	Remoteness area				
	Major cities of Australia	Inner regional Australia	Outer regional Australia	Remote/ Very remote Australia	Total
Major urban	5.4	0.0	–	–	5.4
Other urban	6.0	5.2	4.9	16.5	5.5
Bounded locality	0.0	1.7	4.7	35.9	4.1
Rural balance	0.6	0.4	1.4	7.1	1.0
Total	5.4	4.0	3.4	14.1	5.0

Victoria

Section of State	Remoteness area				
	Major cities of Australia	Inner regional Australia	Outer regional Australia	Remote/ Very remote Australia	Total
Major urban	5.9	0.0	–	–	5.9
Other urban	0.3	5.3	4.2	0.0	4.5
Bounded locality	0.0	0.0	2.3	0.0	0.6
Rural balance	0.0	0.0	0.6	0.0	0.2
Total	5.6	3.4	2.5	0.0	5.0

Queensland

Section of State	Remoteness area				
	Major cities of Australia	Inner regional Australia	Outer regional Australia	Remote/ Very remote Australia	Total
Major urban	5.5	5.3	4.1	–	5.4
Other urban	0.0	4.8	4.3	10.8	5.0
Bounded locality	0.0	4.8	4.3	10.8	12.7
Rural balance	0.0	0.0	3.4	4.3	1.5
Total	5.3	3.6	4.2	13.0	5.0

South Australia

| Section of State | Remoteness area | | | | |
	Major cities of Australia	Inner regional Australia	Outer regional Australia	Remote/ Very remote Australia	Total
Major urban	5.6	–	–	–	5.6
Other urban	3.7	3.5	6.5	7.5	5.1
Bounded locality	0.0	0.0	1.2	17.1	4.7
Rural balance	0.0	0.0	0.6	3.9	0.8
Total	5.5	2.0	4.0	7.9	5.0

Western Australia

| Section of State | Remoteness area | | | | |
	Major cities of Australia	Inner regional Australia	Outer regional Australia	Remote/ Very remote Australia	Total
Major urban	3.6	–	–	–	3.6
Other urban	5.9	7.9	10.1	7.7	8.1
Bounded locality	0.0	13.9	2.0	24.1	14.7
Rural balance	0.0	0.0	1.0	15.0	3.9
Total	3.6	6.4	6.9	12.1	5.0

Tasmania

| Section of State | Remoteness area | | | | |
	Major cities of Australia	Inner regional Australia	Outer regional Australia	Remote/ Very remote Australia	Total
Major urban	n.a	3.6	–	–	3.6
Other urban	n.a	9.8	5.7	0.0	8.4
Bounded locality	n.a	0.0	2.0	0.0	1.5
Rural balance	n.a	0.0	0.5	0.6	0.0
Total	n.a	6.2	2.9	0.3	5.0

Northern Territory

| | Remoteness area | | | | |
Section of State	Major cities of Australia	Inner regional Australia	Outer regional Australia	Remote/ Very remote Australia	Total
Major urban	n.a	n.a	n.a	n.a	n.a
Other urban	n.a	n.a	0.5	3.1	1.3
Bounded locality	n.a	n.a	–	28.3	28.3
Rural balance	n.a	n.a	2.9	11.5	9.9
Total	n.a	n.a	0.6	10.2	5.0

Australian Capital Territory

| | Remoteness area | | | | |
Section of State	Major cities of Australia	Inner regional Australia	Outer regional Australia	Remote/ Very remote Australia	Total
Major urban	4.7	–	n.a	n.a	4.7
Other urban	n.a	n.a	n.a	n.a	n.a
Bounded locality	0.0	–	n.a	n.a	0.0
Rural balance	2.0	10.4	n.a	n.a	0.2
Total	4.9	10.4	n.a	n.a	5.0

FOR MORE INFORMATION . . .

INTERNET	**www.abs.gov.au** the ABS web site is the best place for data from our publications and information about the ABS.
LIBRARY	A range of ABS publications are available from public and tertiary libraries Australia wide. Contact your nearest library to determine whether it has the ABS statistics you require, or visit our web site for a list of libraries.

INFORMATION AND REFERRAL SERVICE

Our consultants can help you access the full range of information published by the ABS that is available free of charge from our web site, or purchase a hard copy publication. Information tailored to your needs can also be requested as a 'user pays' service. Specialists are on hand to help you with analytical or methodological advice.

PHONE	1300 135 070
EMAIL	client.services@abs.gov.au
FAX	1300 135 211
POST	Client Services, ABS, GPO Box 796, Sydney NSW 2001

FREE ACCESS TO STATISTICS

All ABS statistics can be downloaded free of charge from the ABS web site.

WEB ADDRESS	www.abs.gov.au