



## Poverty rates by electoral divisions, 2006

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### Executive summary

This paper provides 2006 estimates, for each Commonwealth Electoral Division, of the number of persons living in poverty and the proportion which this represents of the total population (i.e. poverty rate). The estimates were derived from synthetic small area data produced by the National Centre for Social and Economic Modelling (NATSEM) at the University of Canberra.

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## Introduction

Based on a measure of relative poverty that is described in detail below, 11.7 per cent of all Australians (or more than one in nine Australians) were living in poverty in 2006. There were, however, significant regional variations. On a state and territory basis, rates of poverty ranged from 6.2 per cent in the ACT to 14.7 per cent in Tasmania. On an electorate basis, rates ranged from 5.6 per cent in Mitchell (NSW) to 19.0 per cent in Cowper (NSW).

Note that the poverty estimates presented in this paper are synthetic (or model based) estimates and, therefore, should be regarded as indicative only.

It is also important to note that the poverty estimates in this paper cannot be compared with earlier estimates produced by the Parliamentary Library due to numerous methodological differences underlying production of the small area estimates, including refinements in reweighting procedures and changes in definitions, geographical units and source data.

## Methodology and definitions

The National Centre for Social and Economic Modelling (NATSEM) has produced a series of population and poverty estimates at the statistical local area (SLA) level<sup>1</sup>. The estimates were generated using spatial microsimulation techniques, and the initial development and validation of the methodology underlying the estimates was funded by an Australian Research Council Discovery Grant (DP0664429).

NATSEM estimates at the SLA level were derived by taking unit record data from the 2002–03 and 2003–04 Australian Bureau of Statistics Surveys of Income and Housing and applying a set of weights to the data. The weights, representing households in SLAs across Australia, were created by matching a number of benchmarks from the 2006 Census of Population and Housing with data from the Surveys of Income and Housing. The benchmarks included type of household, tenure type, household income, dwelling structure, household mortgage and several other variables. Incomes from Surveys of Income and Housing were converted to 2006 dollars using the change in average weekly earnings. NATSEM estimates of population and poverty at the SLA level were then aggregated to electoral divisions by the Parliamentary Library using an SLA to Commonwealth electoral division concordance.

As there is no universally accepted definition of poverty, NATSEM has adopted a widely used measure of relative poverty in which persons are defined to be in poverty if they are living below some community standard. In line with current Australian practice, the poverty line has been set at 50 per cent of median disposable household income<sup>2</sup>—with income first adjusted for household size and composition, and with all members of a household whose income falls below the poverty line deemed to be in poverty. The scale used to adjust household disposable incomes is the modified OECD equivalence scale which gives a value of 1.0 for the first adult in a household, 0.5 for the second and subsequent adults, and 0.3 for

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1. The SLA is a general purpose spatial unit. In aggregate, SLAs cover the whole of Australia.
  2. Disposable household income is gross household income less the value of income tax and Medicare levy to be paid on the gross income. Median disposable household income is arrived at by first ranking all persons by the income of the household in which they reside. Median household income is that level of income which has an equal number of persons receiving above as below it.

any dependent children. Points are calculated for each household using this scale. Disposable household income is then divided by the number of points, to produce a measure of equivalised income for each household.<sup>3</sup>

The process of adjusting household disposable incomes using an equivalence scale recognises that there are economies of scale to be gained in household consumption. For example, by assigning a value of 1.0 to a lone person household, and a value of 2.1 to a standard family household consisting of a couple with two children, the OECD scale is assuming that a lone person household requires about 48 per cent [= (1 / 2.1) \* 100] of the income of a standard family household to achieve the same standard of living.

## Scope

Population and poverty estimates produced by NATSEM at the SLA level exclude persons living in non-private dwellings and non-classifiable households. Aggregations of these population numbers (to state or electorate levels)—the denominator used for the calculation of poverty rates—therefore, will not be exactly the same as published population data from the 2006 Census of Population and Housing.

## Missing data

As the results produced by spatial microsimulation are estimates, NATSEM has sought to validate the results to ensure they are sufficiently reliable. In total, NATSEM was forced to exclude 163 SLAs from its analysis, the major reason being an inability to calculate household weights for these areas—generally these were highly unusual SLAs, such as military bases or industrial areas, or those with low populations. Since many of the areas excluded were sparsely populated remote areas, total exclusions covered only 0.72 per cent of the Australian population. Unfortunately, however, the excluded SLAs tended to be concentrated in just a few electorates, thereby affecting the accuracy of the poverty estimates produced for those electorates.

Table 1 lists those electorates which were significantly affected by exclusions. For this paper, ‘significantly affected’ means the excluded SLAs made up more than five per cent of the overall population of an electorate. There were six electorates in this category—Kalgoorlie, Kennedy, Leichhardt, Lingiari, Solomon and Sydney. A further 20 electorates were affected to a lesser extent, with exclusions comprising less than two per cent of the overall population in 16 of these electorates and between two and five per cent of the overall population in the remaining four electorates.

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3. For a more detailed discussion of equivalised income see [H Australian Bureau of Statistics \(ABS\), \*Household Income and Income Distribution, 2005–06\* \(Cat. no. 6523.0\), ABS, Canberra, 2007H.](#)

Table 1. Electorates 'significantly affected' by exclusions, 2006

Electorate	Number of excluded SLAs	Population of excluded SLAs		After exclusions <sup>(a)</sup>	
		Number	Percentage of total electorate population	Number in poverty	Poverty rate (%)
Kalgoorlie (WA)	13	18 484	15.4	8 615	8.5
Kennedy (Qld)	8	9 352	7.2	15 255	12.7
Leichhardt (Qld)	30	15 006	10.8	12 604	10.2
Lingiari (NT)	44	43 051	45.8	4 218	8.6
Solomon (NT)	7	5 075	6.1	6 132	7.8
Sydney (NSW)	2	22 273	18.1	12 315	12.2

(a) After SLAs with missing data were excluded from the analysis. In other words, the number of persons in poverty and the poverty rate were calculated on the basis of only those SLAs for which data were available.

Source: Derived from NATSEM synthetic estimates of population and poverty data which were produced with NATSEM's SpatialMSM/08C model and applied to data from the 2002–03 and 2003–04 ABS Surveys of Income and Housing.

As a result of exclusions, the number of persons identified as being in poverty in each electorate in Table 1 is potentially severely understated. In addition, since data are missing for a number of SLAs, the poverty rate shown for each electorate should not be regarded as representative of the electorate as a whole.

## Results

### States and territories

Based on the above definition, 11.7 per cent of all Australians were in poverty in 2006 (Table 2). The state with the highest poverty rate was Tasmania at 14.7 per cent, followed by South Australia and New South Wales with 13.1 and 12.4 per cent of their respective populations in poverty. The ACT had the lowest poverty rate of 6.2 per cent. The poverty rate for the Northern Territory was not available owing to the significant number of SLAs in the Northern Territory for which there were no valid data.

Table 2. Poverty rates<sup>(a)</sup> by state, 2006

State	Number in poverty	Poverty rate (%)
New South Wales	738 441	12.4
Victoria	530 734	11.7
Queensland	378 920	10.7
South Australia	181 423	13.1
Western Australia	177 773	10.2
Tasmania	63 957	14.7
Northern Territory	-----insufficient data-----	
ACT	18 194	6.2
Australia <sup>(b)</sup>	2 099 792	11.7

(a) Percentage of total population in each state who were living in poverty.

(b) Included in Australia are those SLAs in the Northern Territory for which data were available.

Source: Derived from NATSEM synthetic estimates of population and poverty data which were produced with NATSEM's SpatialMSM/08C model and applied to data from the 2002–03 and 2003–04 ABS Surveys of Income and Housing.

### Electoral divisions

The electorate with the lowest poverty rate was Mitchell in NSW at 5.6 per cent, closely followed by Canberra at 5.7 per cent (Table 3). Not surprisingly, of the 10 electorates with the lowest poverty rates, four were to be found in a cluster to the north of Sydney Harbour. These were Bradfield, Warringah, Mackellar and North Sydney, all with poverty rates below seven per cent. The highest poverty rate was in Cowper in NSW with 19.0 per cent of its population (or almost one in every five persons) in poverty. Interestingly, while NSW electorates accounted for six of the 10 electorates with the lowest poverty rates, they also accounted for seven of the 10 electorates with the highest poverty rates.

The average poverty rate rose from 10.2 per cent for outer metropolitan electorates, to 10.8 per cent for inner metropolitan electorates, to 12.7 per cent for provincial electorates, and to 13.8 per cent for rural electorates.

**Table 3. Poverty rates<sup>(a)</sup> by Commonwealth electoral division, 2006**

<b>Electoral Division</b>	<b>Party</b>	<b>Number in poverty</b>	<b>Poverty rate (%)</b>	<b>Electoral Division</b>	<b>Party</b>	<b>Number in poverty</b>	<b>Poverty rate (%)</b>
Adelaide (SA)	ALP	16 336	13.2	Charlton (NSW)	ALP	14 227	12.4
Aston (Vic)	Lib	9 676	7.9	Chifley (NSW)	ALP	20 085	13.9
Ballarat (Vic)	ALP	16 243	13.7	Chisholm (Vic)	ALP	13 453	11.2
Banks (NSW)	ALP	15 737	13.0	Cook (NSW)	Lib	8 581	7.4
Barker (SA) <sup>(b)</sup>	Lib	19 110	14.4	Corangamite (Vic)	ALP	13 267	11.4
Barton (NSW)	ALP	14 538	11.7	Corio (Vic)	ALP	16 228	14.0
Bass (Tas) <sup>(b)</sup>	ALP	13 132	15.2	Cowan (WA)	Lib	11 487	9.0
Batman (Vic)	ALP	16 089	13.9	Cowper (NSW)	NP	22 516	19.0
Bendigo (Vic)	ALP	18 238	15.1	Cunningham (NSW)	ALP	17 057	14.4
Bennelong (NSW)	ALP	12 765	10.0	Curtin (WA)	Lib	9 637	8.8
Berowra (NSW)	Lib	8 332	6.9	Dawson (Qld)	ALP	11 719	10.0
Blair (Qld)	ALP	14 499	11.6	Deakin (Vic)	ALP	10 137	9.0
Blaxland (NSW)	ALP	24 132	18.2	Denison (Tas)	ALP	11 277	13.2
Bonner (Qld) <sup>(b)</sup>	ALP	10 066	8.3	Dickson (Qld)	Lib	9 245	7.5
Boothby (SA)	Lib	12 167	10.2	Dobell (NSW)	ALP	16 561	13.9
Bowman (Qld)	Lib	10 925	9.0	Dunkley (Vic)	Lib	14 099	11.6
Braddon (Tas)	ALP	13 880	15.7	Eden-Monaro (NSW)	ALP	14 936	13.0
Bradfield (NSW)	Lib	7 275	5.9	Fadden (Qld)	Lib	14 449	10.7
Brand (WA)	ALP	14 313	11.6	Fairfax (Qld)	Lib	14 634	12.3
Brisbane (Qld) <sup>(b)</sup>	ALP	8 989	7.9	Farrer (NSW) <sup>(b)</sup>	Lib	17 598	14.5
Bruce (Vic)	ALP	15 337	12.8	Fisher (Qld)	Lib	14 030	12.3
Calare (NSW) <sup>(b)</sup>	NP	17 861	15.5	Flinders (Vic) <sup>(b)</sup>	Lib	14 608	12.8
Calwell (Vic)	ALP	18 189	13.1	Flynn (Qld) <sup>(b)</sup>	ALP	13 205	11.0
Canberra (ACT) <sup>(b)</sup>	ALP	8 747	5.7	Forde (Qld)	ALP	13 048	10.3
Canning (WA)	Lib	14 129	11.1	Forrest (WA)	Lib	13 304	11.2
Capricornia (Qld)	ALP	13 754	11.1	Fowler (NSW)	ALP	17 189	13.6
Casey (Vic)	Lib	10 303	8.7	Franklin (Tas)	ALP	11 606	12.8

**Table 3. Poverty rates<sup>(a)</sup> by Commonwealth electoral division, 2006 (continued)**

<b>Electoral Division</b>	<b>Party</b>	<b>Number in poverty</b>	<b>Poverty rate (%)</b>	<b>Electoral Division</b>	<b>Party</b>	<b>Number in poverty</b>	<b>Poverty rate (%)</b>
Fraser (ACT) <sup>(b)</sup>	ALP	9 447	6.6	Kingsford Smith (NSW)	ALP	16 657	12.6
Fremantle (WA) <sup>(b)</sup>	ALP	11 587	10.1	Kingston (SA)	ALP	16 540	12.6
Gellibrand (Vic)	ALP	16 456	13.0	Kooyong (Vic)	Lib	8 651	7.5
Gilmore (NSW)	Lib	17 385	16.4	La Trobe (Vic)	Lib	10 923	8.8
Gippsland (Vic)	NP	18 320	15.5	Lalor (Vic)	ALP	14 703	10.0
Goldstein (Vic)	Lib	9 743	8.3	Leichhardt (Qld)	ALP	-----See Table 1-----	
Gorton (Vic)	ALP	18 992	12.9	Lilley (Qld)	ALP	10 739	9.1
Grayndler (NSW)	ALP	12 627	10.4	Lindsay (NSW)	ALP	12 123	9.5
Greenway (NSW)	Lib	10 818	8.6	Lingiari (NT)	ALP	-----See Table 1-----	
Grey (SA) <sup>(b)</sup>	Lib	20 628	17.0	Longman (Qld)	ALP	14 864	11.8
Griffith (Qld)	ALP	9 977	8.5	Lowe (NSW)	ALP	12 764	10.7
Groom (Qld)	Lib	13 115	11.0	Lyne (NSW)	Ind	18 423	17.0
Hasluck (WA)	ALP	10 035	8.9	Lyons (Tas)	ALP	14 062	16.6
Herbert (Qld) <sup>(b)</sup>	Lib	11 041	9.2	Macarthur (NSW)	Lib	11 658	9.7
Higgins (Vic)	Lib	9 543	8.4	Mackellar (NSW)	Lib	7 822	6.6
Hindmarsh (SA)	ALP	16 086	13.2	Macquarie (NSW)	ALP	14 204	11.7
Hinkler (Qld)	NP	18 440	16.1	Makin (SA)	ALP	12 895	10.3
Holt (Vic)	ALP	16 053	10.5	Mallee (Vic)	NP	18 388	15.6
Hotham (Vic)	ALP	13 309	11.4	Maranoa (Qld) <sup>(b)</sup>	NP	16 923	14.8
Hughes (NSW)	Lib	11 876	9.7	Maribyrnong (Vic)	ALP	14 858	12.9
Hume (NSW)	Lib	14 267	12.4	Mayo (SA)	Lib	12 997	10.9
Hunter (NSW)	ALP	14 901	12.6	McEwen (Vic)	Lib	13 930	10.2
Indi (Vic) <sup>(b)</sup>	Lib	15 498	13.8	McMillan (Vic) <sup>(b)</sup>	Lib	15 091	13.9
Isaacs (Vic)	ALP	15 452	11.8	Mcpherson (Qld)	Lib	14 171	11.2
Jagajaga (Vic)	ALP	10 404	8.7	Melbourne (Vic)	ALP	18 750	14.5
Kalgoorlie (WA)	Lib	-----See Table 1-----		Melbourne Ports (Vic)	ALP	12 807	10.7
Kennedy (Qld)	Ind	-----See Table 1-----		Menzies (Vic)	Lib	9 661	8.5



**Table 3. Poverty rates<sup>(a)</sup> by Commonwealth electoral division, 2006 (continued)**

Electoral Division	Party	Number in poverty	Poverty rate (%)	Electoral Division	Party	Number in poverty	Poverty rate (%)
Mitchell (NSW)	Lib	6 704	5.6	Richmond (NSW)	ALP	19 259	16.6
Moncrieff (Qld)	Lib	14 763	11.9	Riverina (NSW)	NP	16 767	13.7
Moore (WA)	Lib	7 242	6.7	Robertson (NSW)	ALP	14 566	12.2
Moreton (Qld)	ALP	12 112	9.8	Ryan (Qld)	Lib	7 843	6.5
Murray (Vic)	Lib	16 453	14.3	Scullin (Vic)	ALP	13 908	11.5
New England (NSW)	Ind	19 035	16.0	Shortland (NSW)	ALP	15 734	13.5
Newcastle (NSW)	ALP	16 161	13.8	Solomon (NT)	ALP	-----See Table 1-----	
North Sydney (NSW)	Lib	7 948	6.6	Stirling (WA)	Lib	13 215	11.3
O'Connor (WA) <sup>(b)</sup>	Lib	14 775	13.8	Sturt (SA)	Lib	13 774	11.1
Oxley (Qld) <sup>(b)</sup>	ALP	13 537	10.3	Swan (WA)	Lib	12 984	11.5
Page (NSW)	ALP	20 627	17.1	Sydney (NSW)	ALP	-----See Table 1-----	
Parkes (NSW)	NP	19 510	16.1	Tangney (WA)	Lib	10 531	9.4
Parramatta (NSW)	ALP	14 470	10.9	Throsby (NSW)	ALP	15 003	13.0
Paterson (NSW)	Lib	16 445	14.7	Wakefield (SA)	ALP	19 684	15.0
Pearce (WA)	Lib	13 873	10.6	Wannon (Vic)	Lib	16 136	14.1
Perth (WA) <sup>(b)</sup>	ALP	12 046	10.7	Warringah (NSW)	Lib	7 945	6.5
Petrie (Qld)	ALP	11 297	9.6	Watson (NSW)	ALP	20 966	15.4
Port Adelaide (SA)	ALP	21 206	15.7	Wentworth (NSW)	Lib	10 317	8.6
Prospect (NSW)	ALP	18 888	14.9	Werriwa (NSW)	ALP	17 035	12.8
Rankin (Qld)	ALP	15 138	11.0	Wide Bay (Qld) <sup>(b)</sup>	NP	18 538	16.2
Reid (NSW)	ALP	23 831	16.4	Wills (Vic)	ALP	16 838	13.1

(a) Percentage of total population in each electorate who were living in poverty.

(b) The electorate contains some statistical local areas (SLAs) for which no poverty data were available. These SLAs have therefore been excluded from the poverty rate calculation for the electorate. As these SLAs make up less than five per cent of the overall population of the electorate, their exclusion is unlikely to have a significant affect on the poverty rate.

Source: Derived from NATSEM synthetic estimates of population and poverty data which were produced with NATSEM's SpatialMSM/08C model and applied to data from the 2002–03 and 2003–04 ABS Surveys of Income and Housing.

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