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Youth unemployment statistics for small geographic areas: a quick guide

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Statistics and Mapping

This guide provides a brief overview of the youth unemployment data available for small geographic areas. This is one in a series of quick guides related to labour statistics, designed to provide a basic understanding of Australian labour market data. Other guides include [unemployment](#), [youth unemployment](#), [labour force](#) and [employment](#), which are available from the [‘Your electorate’](#) portal on the Parliamentary Library website.

Labour force survey

The Australian Bureau of Statistics (ABS) publishes regular labour force estimates through the [Labour Force Survey](#). The survey is a key source of information on employment, unemployment, the labour force and associated rates and ratios. This monthly household survey is based on a sample of approximately 53,000 respondents across Australia.

The *Labour Force Survey* is designed to provide accurate national and state/territory estimates. However, estimates for regions within the states can also be produced (at a lower level of [statistical quality](#)). Smaller populations mean a smaller pool of people on which to draw information, which can mean higher sampling errors for some estimates. Estimates may also be less reliable when split into sub-populations, such as unemployed people by age groups (i.e. young unemployed).

Unemployment

The ABS defines [unemployed people](#) as:

People aged 15 years and over who were not employed during the survey reference week and:

- had actively looked for work and were available to work (in the reference week), or
- were waiting to start a new job (within a defined period).

Young unemployed people are a sub-set of the unemployed. Generally, the youth population refers to people aged 15 to 24 years, but this may vary (e.g. 15 to 19 years and/or 20 to 24 years). See [Youth unemployment statistics: a quick guide](#) for more information.

Small area estimates for young people

For small areas, such as Commonwealth Electoral Divisions (CEDs), there is limited labour force data available on young people (aged 15 to 24 years). This is due to the number of persons available to be selected for the survey sample and the volatile nature of small area population estimates. The exception to this is Census data, however it only relates to a small time frame every five years (the week prior to Census Night). The most recently available Census data is at August 2011. The 2016 Census labour data is expected to be released in October 2017. However, the ABS does release regular unemployment estimates for labour market regions by selected age groups.

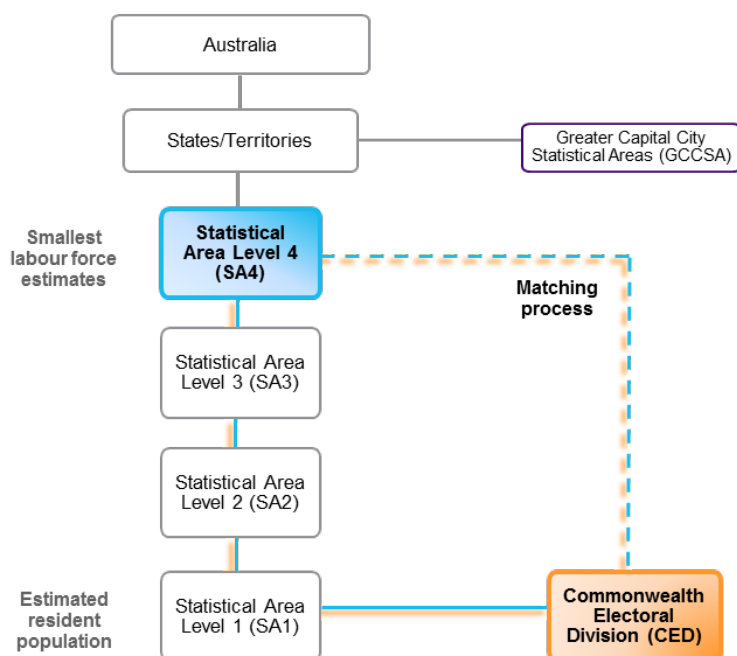
Labour market regions

The ABS geographic structure provides statistical regions that are relatively stable over time, fairly consistent in size, and that strive to be representative of underlying settlement patterns and socio-economic relationships. For example, the geographic areas used for the [dissemination of labour statistics](#) have been designed to reflect large regional centres and hubs of labour market activity. These areas are referred to as Statistical Area Level 4 (SA4s) or 'labour market regions'. Labour force estimates for 87 spatial areas are released each month. SA4s are the largest sub-state regions in the geographic structure and provide the best sub-state breakdown. More information is available from the ABS, [Information paper: Regional labour force statistics, 2014](#) (cat. no. 6262.0).

Statistical Area Level 4 (SA4)

Estimates for SA4s generally relate to a minimum [population](#) of 100,000 people per area. In regional areas, populations are closer to the minimum (100,000 to 300,000), whereas in metropolitan areas, SA4s tend to have larger populations (300,000 to 500,000). The use of SA4s is guided by the classification structures within the [Australian Statistical Geography Standard \(ASGS\)](#). More information is provided in [Volume 1–Main structure and Greater Capital City Statistical Areas, July 2011](#) (cat. no. 1270.0.55.001, see Expanded Contents>Statistical Area Level 4 (SA4)). Figure 1 (below) provides an overview of relevant geographic levels.

Figure 1. Main geographic structure of the *Australian Statistical Geography Standard (ASGS), 2011*



Source: ABS, [Australian Statistical Geography Standard \(ASGS\), 2011](#), Structure diagram.

Which SA4 is most relevant to the electorate?

A look up list of SA4s has been created for each electorate (Commonwealth Electoral Divisions, 2016 boundaries)—see Table 1. The suggestions are based on the SA4(s) in which the largest proportion(s) of electorate population fell wholly or partly within. The 2015 [Estimated Resident Population](#) (ERP) has been used to approximate the population for each electorate.

While not an exact match, this method serves as a guide for selecting the best available regional data. Some electorates will have one suggestion. For example, the best match for the electorate of Bendigo is Bendigo SA4 with 95% of the electorate population falling within the SA4. Other electorates will have a lower proportion of overlap. For example, just under half (47%) the electorate population of Cook falls within the Sydney–Sutherland SA4. In some instances, two SA4s are likely to provide a better estimate of regional labour force conditions. For example, the electorate of Capricornia falls between – Fitzroy SA4 (44%) and Mackay SA4 (33%). Note: in a few cases, a third SA4 may be helpful for interpreting the data. The [Your electorate](#) web portal provides a list of suggested labour market regions for each electorate, see ‘Labour’ > [Labour market regions](#) > **Look up list (.xlsx)**.

Using regional labour force data

Each month the ABS releases labour force estimates by regions through [Labour Force, detailed–electronic delivery](#) (cat. no. 6291.0.55.001, ‘Downloads’ tab). Estimates by these regions (SA4s) are available from October 1998, however, caution should be used when analysing estimates prior to April 2001, as a new survey questionnaire was introduced at this time and only core labour force estimates were revised.

The level of youth unemployment is subject to fluctuations throughout the year, particularly around peak times of education commencement or conclusion. Trend and seasonally adjusted data aim to account for these types of variations. At this time, the ABS produces labour force estimates by SA4 in an original (unadjusted) series and as a 12-month rolling average. Care should be taken when analysing any month-to-month, or period-to-period changes in the original series. Additional information on the reliability of regional estimates is available from the ABS article, [‘Advice on reporting regional labour force data’](#) (cat. no. 6291.0.55.001, Jul 2016). For regional estimates, see:

- Table 16. Labour force status by labour market region (ASGS) and sex
- Table 16b. Labour force status by labour market region (ASGS) and sex, Annual averages of the previous 12 months
- Table 16c. Median duration of job search by labour market region (ASGS) and duration of job search
- Data cube RM1. Labour force status by **age**, labour market region (ASGS) and sex, October 1998 onwards
- Data cube RM3. Unemployed persons by duration of job search and labour market region (ASGS), July 1991 onwards.

The estimates released by regions and **age** (RM1) can be used to assess the youth labour market—employment, unemployment, and participation rates. They can also be used to look at the older labour market (e.g. people aged 55 years and over), or other selected age groups of interest. The use of an annual average (e.g. 12-month rolling) is recommended for period-to-period comparisons.

Also available by SA4 are estimates of employment by industry (division) and by occupation (major group). These are not available by age groups, but are available by gender, see: [Labour force, detailed, quarterly](#) (cat. no. 6291.0.55.003, ‘Downloads’ tab, Data cubes RQ1 and RQ2). While the focus of this paper is on data available at small geographical levels, (youth) unemployment (and employment) data is available for states and territories, and parts of state. For state level estimates, see: [Labour Force](#), Tables 12, 16, 19, 23 and 25 (cat. no. 6202.0) and for capital city/balance of state estimates, see: [Labour Force, detailed–electronic delivery](#), Tables 2, 3, 14c and 20c (cat. no. 6291.0.55.001).

Table 1. Youth unemployment (15 to 24 years) by Statistical Area Level 4 (SA4), 2016 and 2017 (12-month average)

Region	12 mths end Jun-16			12 mths end Jun-17		
	Young unemployed ('000)	Youth labour force ('000)	Youth unemployment rate (%)	Young unemployed ('000)	Youth labour force ('000)	Youth unemployment rate (%)
Australia	264.5	2,113.9	12.5	272.9	2,113.6	12.9
New South Wales	77.6	663.4	11.7	78.0	661.0	11.8
Greater Sydney	45.0	419.3	10.7	46.4	416.0	11.1
Central Coast	5.5	32.8	16.7	5.9	34.0	17.3
Sydney - Baulkham Hills and Hawkesbury	2.6	25.4	10.3	2.5	20.7	11.9
Sydney - Blacktown	3.7	30.3	12.4	3.7	32.5	11.5
Sydney - City and Inner South	1.5	21.0	7.4	2.2	22.6	9.6
Sydney - Eastern Suburbs	#1.6	16.3	9.7	#1.1	12.6	8.4
Sydney - Inner South West	5.9	42.9	13.7	6.6	55.2	11.9
Sydney - Inner West	2.0	26.0	7.5	1.9	25.7	7.4
Sydney - North Sydney and Hornsby	2.7	32.7	8.2	2.6	31.7	8.3
Sydney - Northern Beaches	#1.2	21.9	5.7	#1.1	18.0	6.0
Sydney - Outer South West	2.7	22.3	12.3	3.8	27.7	13.5
Sydney - Outer West and Blue Mountains	2.7	31.9	8.3	2.6	32.2	8.2
Sydney - Parramatta	5.1	42.5	11.9	4.8	32.9	14.5
Sydney - Ryde	3.0	18.7	15.8	2.7	15.8	17.0
Sydney - South West	3.1	32.1	9.8	4.0	35.9	11.1
Sydney - Sutherland	#1.7	22.5	7.6	~1.0	18.4	5.6
Rest of NSW	32.6	244.1	13.3	31.6	245.0	12.9
Capital Region	1.1	17.1	6.2	1.6	15.4	10.6
New South Wales - Central West	2.6	20.9	12.5	2.2	21.3	10.5
Coffs Harbour - Grafton	1.0	12.9	8.0	#1.3	10.2	12.8
Far West and Orana	#1.6	9.3	17.0	^1.3	11.5	11.1
Hunter Valley exc Newcastle	4.1	25.0	16.3	2.8	25.8	10.7
Illawarra	4.8	30.4	15.7	4.4	34.3	12.9
Mid North Coast	2.9	13.0	22.1	2.7	17.8	15.0
Murray	#1.4	10.5	13.2	#1.2	8.9	13.0
New England and North West	2.2	14.2	15.8	2.5	16.3	15.1
Newcastle and Lake Macquarie	5.2	43.4	12.1	4.4	40.5	10.9
Richmond - Tweed	#2.6	20.7	12.4	2.8	19.6	14.1
Riverina	0.9	13.7	6.8	2.3	15.3	15.3
Southern Highlands and Shoalhaven	2.2	12.8	17.0	2.2	8.1	27.4
Victoria	68.4	519.3	13.2	70.2	533.0	13.2
Greater Melbourne	55.0	400.7	13.7	57.8	410.2	14.1
Melbourne - Inner	5.7	45.6	12.5	5.1	45.2	11.3
Melbourne - Inner East	4.4	40.1	10.9	4.9	42.3	11.7
Melbourne - Inner South	3.3	29.5	11.3	3.3	29.5	11.1
Melbourne - North East	5.4	41.4	13.0	7.5	42.6	17.6
Melbourne - North West	4.8	31.0	15.6	6.5	36.3	17.9
Melbourne - Outer East	6.1	51.6	11.9	4.2	46.7	8.9
Melbourne - South East	12.1	70.9	17.1	11.2	71.7	15.6
Melbourne - West	11.0	68.4	16.1	12.4	75.3	16.5
Mornington Peninsula	2.1	22.2	9.7	2.7	20.6	13.2
Rest of Vic.	13.3	118.5	11.3	12.4	122.8	10.1
Ballarat	2.2	12.7	17.4	~1.0	13.2	7.5
Bendigo	#1.1	13.1	8.4	#1.0	14.2	6.8
Geelong	2.4	20.6	11.5	2.6	27.7	9.4
Hume	1.6	14.5	11.1	2.2	16.7	13.4
Latrobe - Gippsland	2.9	22.3	12.8	3.2	20.3	15.8
Victoria - North West	#1.2	11.2	10.7	np	11.9	np
Shepparton	1.3	13.7	9.8	1.1	8.7	12.5
Warrnambool and South West	#0.7	10.5	6.3	#1.0	10.0	9.8

Continued over page, see notes on page 6

Table 1 continued...

Region	12 mths end Jun-16			12 mths end Jun-17		
	Young unemployed ('000)	Youth labour force ('000)	Youth unemployment rate (%)	Young unemployed ('000)	Youth labour force ('000)	Youth unemployment rate (%)
Queensland	57.9	450.0	12.9	60.2	442.1	13.6
Greater Brisbane	28.3	234.4	12.1	29.2	229.1	12.7
Brisbane - East	3.1	21.6	14.4	3.6	17.8	20.5
Brisbane - North	2.0	21.4	9.4	2.4	21.8	10.8
Brisbane - South	4.8	40.3	12.0	6.2	43.0	14.4
Brisbane - West	1.9	19.3	9.8	2.5	16.4	15.2
Brisbane Inner City	2.0	29.0	6.7	1.8	29.0	6.2
Ipswich	3.9	30.7	12.6	4.5	35.6	12.7
Logan - Beaudesert	3.6	25.3	14.1	3.4	24.7	13.8
Moreton Bay - North	3.9	22.8	17.0	2.8	20.9	13.2
Moreton Bay - South	3.1	24.0	13.1	#2.0	19.9	10.2
Rest of Qld	29.7	215.5	13.8	31.0	213.0	14.5
Cairns	4.0	14.9	26.6	2.6	14.8	17.2
Darling Downs - Maranoa	#0.8	10.9	7.5	#0.9	10.9	8.3
Fitzroy	2.1	22.2	9.4	3.0	22.1	13.7
Gold Coast	7.0	59.4	11.8	6.8	60.7	11.2
Mackay	1.8	16.7	10.9	2.0	19.4	10.2
Queensland - Outback	#2.1	5.9	36.5	~2.4	4.2	56.2
Sunshine Coast	2.8	29.3	9.4	2.7	26.5	10.2
Toowoomba	1.0	12.5	7.9	1.4	13.7	10.4
Townsville	4.1	24.6	16.5	4.8	21.8	21.8
Wide Bay	4.0	19.3	21.0	4.4	18.9	23.5
South Australia	21.9	144.4	15.2	22.3	142.4	15.7
Greater Adelaide	17.7	115.3	15.4	18.3	113.3	16.1
Adelaide - Central and Hills	4.3	24.9	17.4	3.4	28.5	12.1
Adelaide - North	6.4	36.8	17.4	6.4	33.5	19.2
Adelaide - South	5.3	37.0	14.4	4.9	33.6	14.6
Adelaide - West	1.7	16.6	10.2	3.5	17.7	19.7
Rest of SA	4.1	29.1	14.2	4.0	29.1	13.8
Barossa - Yorke - Mid North	1.5	8.7	16.8	1.0	8.7	11.1
South Australia - Outback	#0.7	5.0	14.5	~0.9	7.2	12.3
South Australia - South East	2.0	15.4	12.7	2.2	13.2	16.5
Western Australia	26.3	235.9	11.1	29.9	232.4	12.8
Greater Perth	22.4	190.9	11.7	25.6	187.2	13.7
Mandurah	#0.8	5.6	13.5	1.2	7.3	16.6
Perth - Inner	1.2	16.6	7.1	1.8	19.5	9.0
Perth - North East	2.9	24.3	11.8	3.4	18.7	18.3
Perth - North West	8.1	52.8	15.4	8.0	54.5	14.8
Perth - South East	4.6	49.8	9.3	5.4	49.6	10.9
Perth - South West	4.8	41.7	11.5	5.8	37.6	15.5
Rest of WA	3.9	45.0	8.6	4.2	45.2	9.3
Bunbury	0.7	13.1	5.4	#1.1	15.7	6.8
Western Australia - Outback	2.1	22.2	9.3	#1.5	21.0	7.1
Western Australia - Wheat Belt	~1.1	9.6	11.6	#1.7	8.5	19.6
Tasmania	6.8	44.4	15.3	6.6	44.7	14.9
Greater Hobart	2.8	19.1	14.5	2.7	20.1	13.6
Rest of Tas.	4.0	25.3	15.8	3.9	24.7	15.9
Launceston and North East	2.4	12.6	19.3	2.1	11.6	18.5
Tasmania - South East	0.4	1.9	19.7	0.6	2.7	21.3
Tasmania - West and North West	1.2	10.8	11.1	1.2	10.4	11.6
Northern Territory	1.8	22.7	8.0	1.8	22.4	8.1
Darwin	0.9	14.9	6.3	1.0	13.3	7.9
Northern Territory - Outback	0.9	7.8	11.2	0.8	9.1	8.5
Australian Capital Territory	3.8	33.9	11.3	3.9	35.5	11.0

See notes on next page

Notes for Table 1

* Annual average calculation based on 12 months original data.

* There are missing unemployment estimates for some SA4s. The estimates have not been adjusted, as the true value is unknown (nil or other). The rates may therefore differ to those that would result from an adjustment to the base figures. Missing values are denoted as follows:

One missing value

~ Two missing values

^ Three or more missing values—interpret estimates with extreme caution

np Not published, the estimate has seven missing values.

* Due to the sample size involved, some sampling errors may be quite high and estimates should therefore be interpreted with caution.

* There are no sub-territory regions for the ACT.

* The unemployed are people who were actively looking for work and available to work within a defined period.

* The labour force is sum of the employed and the unemployed.

* The rate is the unemployed expressed as a proportion of the labour force (in the same age group).

Source: ABS, [Labour force, detailed—electronic delivery, Jun 2017](#), cat. no. 6291.0.55.001 (Data cube RM1)

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