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Yearbook 2019

Progress in Australian Regions



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Progress in Australian Regions



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Director — Publishing and Communications Section
Department of Infrastructure, Transport, Cities and Regional Development
GPO Box 594, Canberra ACT 2601 Australia

Email: publishing@infrastructure.gov.au

Website: www.infrastructure.gov.au

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Foreword



This is the sixth edition of the *Progress in Australian Regions – Yearbook*.

This edition provides updated information on previous Yearbooks (where available), to provide a consistent measure of progress in Australia's regions over time.

This data will be available on both the Australian Government data site (data.gov.au) and the Bureau of Infrastructure, Transport and Regional Economics website (bitre.gov.au), to provide easy access – including data by additional geographical scales that are not published in this book. We anticipate this will be a useful tool for those analysing change at different regional scales.

We trust that this edition continues to be of value to regional stakeholders around the country, and we encourage you to provide any feedback via email at Regional.Progress@infrastructure.gov.au

Gary Dolman

Head of Bureau

Bureau of Infrastructure, Transport and Regional Economics

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Introduction



The 2019 Yearbook is the sixth in a series designed to answer the question of how our regions are progressing against social, economic, environmental and governance indicators. This information enables governments, private investors and the community to identify important trends. Understanding these trends is particularly important when making decisions in relation to infrastructure needs and government services, as both are influenced by the geographic distribution of people, economic activity and natural resources. This edition builds on previous Yearbooks by updating data sources wherever possible.

The framework

The information in this Yearbook is organised according to a framework that groups indicators into domains corresponding to different aspects of socio-economic progress (Table 1). This approach builds on a framework that was originally developed by the Australian Bureau of Statistics (ABS) for the *Measures of Australia's Progress* (MAP) publication¹. The MAP framework has been adjusted to incorporate data sources which are available across a wide range of geographies. It has also been extended to include contextual indicators that are not related to progress, but which are nonetheless important for forming a well-rounded understanding of the characteristics of each region.

Progress indicators

Most of the indicators in this Yearbook are based on the concept of societal progress. Progress is about improvements in the wellbeing of people and households over time. This requires looking beyond the economy of a region to include the wider range of people's experiences and living conditions.²

Internationally, measuring wellbeing and progress of societies forms part of the process of understanding countries and regions. Projects like the Commission on the Measurement of Economic Performance and Social Progress³ and the Organisation for Economic Co-operation and Development (OECD) Global Project on Measuring the Progress of Societies have highlighted the importance of broader measures of economic, environmental, and social sustainability. Multilateral agencies have developed methods for comparing the progress of different nations, including the UN Human Development Index⁴, the OECD Better Life Index⁵ and the related OECD Regional Well-Being initiative⁶.

The ABS has measured progress at the national scale in its MAP publication. The themes measured by MAP were selected through extensive national consultation to identify what Australians considered most important to them for national progress. In the Yearbook the MAP themes are examined at a regional scale uncovering the variation in rates of progress below the national level.

¹ ABS 2013, *Measures of Australia's Progress* (cat. no. 1370.0), Canberra.

² OECD 2013, *Measuring Well-Being and Progress*, Paris.

³ Stiglitz, Sen and Fitoussi 2009, *Report of the Commission on the Measurement of Economic Performance and Social Progress*.

⁴ United Nations Development Programme (UNDP) 2014, *Human Development Report 2014: Sustaining Human Progress: Reducing Vulnerabilities and Building Resilience*.

⁵ OECD n.d., *Better Life Index*, Paris.

⁶ OECD n.d., *Regional Well-Being*, Paris.

When measuring progress at a regional level, this Yearbook seeks to answer the question:

“Is life in your region getting better?”

Rather than make comparisons between regions, the information on progress in this Yearbook can be used to consider how individual regions are doing over time, and if these changes are in line with the broader national trend.

The concept of progress is multidimensional and a range of indicators have been selected to show whether progress is being made across four domains. The Progress section of the Yearbook has been divided into four sections (Table 1), each focusing on one of the four domains of progress:

- Part P.1, Society;
- Part P.2, Economy;
- Part P.3, Environment; and
- Part P.4, Governance.

Each domain consists of a set of themes, reflecting the aspirations that Australians have for their nation. Each theme is represented by one or more **progress indicators** (Table 1), which are summary statistics that signal whether that aspect of life is moving in a ‘good’ direction (progress) or a ‘bad’ direction (regress) (Box 1).

Many of the progress indicators in this Yearbook have been adapted directly from MAP. Some indicators use the same data source as the relevant MAP indicator. For other indicators, the MAP data source could only provide information at the national or state level, and not at the more detailed geographic level required to provide acceptable regional coverage. In these cases, the MAP data source has been replaced in favour of related data sources which provide information on the same concept but at a more detailed geographic level.

In addition, some themes from MAP are based on indicators that are not available below the national or state level. These themes represent gaps in the regional evidence base. However each year, the Yearbook attempts to fill these gaps.

Contextual indicators

The Yearbook provides an overview of how Australia’s regions are progressing over time. While the main focus is on progress, these indicators have also been supplemented with **contextual indicators** that provide background information to help interpret changes in a region.

The contextual indicators part of the Yearbook has been divided into three sections (Table 1), each focusing on one of three contextual domains:

- Part C.1, Population and Demographics;
- Part C.2, Transport and Infrastructure; and
- Part C.3, Industry and Innovation.

Like the progress indicators, each domain consists of a set of themes that are represented by one or more statistical indicators.

Table 2 presents those indicators that have been updated for the 2019 Yearbook.

Table 1 Indicator framework

| Regions – Remoteness Classes, Major Urban Areas, Sub-State Regions | Progress Indicators | | Contextual Indicators | |
|--------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|-----------------------------------------------------------------------------|
| | Society | Economy | Population and Demographics | Transport and Infrastructure |
| | Health and wellbeing Close relationships Home Safety Learning and knowledge Community connections Fair opportunities Enriched lives | Opportunities Jobs A resilient economy Enhanced living standards Fair outcomes International economic engagement | Population Age structure Housing Social characteristics | Moving people Moving freight Communications and utilities Land use |
| | Environment | Governance | Industry and Innovation | |
| | Healthy natural environment Appreciating the environment Protecting the environment Sustaining the environment Healthy built environments | Trust Participation | Industry Business activity Innovation | |

Source: Adapted from ABS 2013, *Measures of Australia's Progress* (cat. no. 1370.0), Canberra.

Box 1 Some key terms

Statistical indicators are measures that provide users with a summary of the state of play with respect to a topic. For example, median income is a statistical indicator that provides an easily interpreted summary measure of the distribution of income in a region. This would otherwise be a detailed set of data items relating to the number of people in different income groups.

Progress indicators are a particular type of statistical indicator. Progress indicators are chosen on the basis that most people would agree that an increase (or decrease) in the indicator can be unambiguously associated with either progress or regress. For example, *life expectancy* is a commonly used indicator of progress in the theme of Health and Wellbeing. An increase in *life expectancy* is directly related to progress in the health of people living in the region.

In comparison, *population growth* does not qualify as a progress indicator, as there is considerable disagreement as to whether population growth in a region represents progress.

Table 2 Indicators updated in the 2019 Yearbook

| Update indicators | Table number | Nature of update |
|--------------------------------------------------------------------------|--------------|-------------------|
| Society | | |
| Life expectancy at birth | P 1.1.1 | Complete update |
| Psychological distress | P 1.1.2 | Complete update |
| Suicide rate | P 1.1.3 | Complete update |
| Overweight or obese | P 1.1.4 | Complete update |
| Physical activity | P 1.1.5 | Complete update |
| Smoking rates | P 1.1.6 | Complete update |
| Children developmentally vulnerable due to physical health and wellbeing | P 1.2.1 | Complete update |
| Victims of physical assault | P 1.4.1 | Complete update |
| Victims of malicious property damage | P 1.4.2 | Complete update |
| Road fatalities | P 1.4.3 | Complete update |
| Year 5 and 9 reading standards | P 1.5.2 | Complete update |
| Year 5 and 9 numeracy standards | P 1.5.3 | Complete update |
| Disposable household income for low and middle income households | P 1.7.1 | Complete update |
| Attendance at cultural venues and events | P 1.8.2 | Complete update |
| Economy | | |
| Net business entry rate | P 2.1.3 | Complete update |
| Employed persons | P 2.2.1 | Complete update |
| Unemployment rate | P 2.2.2 | Complete update |
| Youth unemployment rate | P 2.2.3 | Complete update |
| Proportion of unemployed persons unemployed for 12 months or more | P 2.3.1 | Complete update |
| Labour force underutilisation rate | P 2.3.2 | Complete update |
| Value of new building approvals | P 2.3.3 | Complete update |
| Real mean household net worth | P 2.4.2 | Complete update |
| Labour force participation | P 2.4.3 | Complete update |
| International visits to resident ratio | P 2.6.1 | Complete update |
| Environment | | |
| Air pollution | P 3.1.1 | Definition update |
| Domestic trips involving nature activities | P 3.2.1 | Complete update |
| Greenhouse gas emissions | P 3.4.1 | Definition update |
| Average commuting time | P 3.5.1 | Complete update |
| Number of solar panel systems | P 3.5.3 | Complete update |
| Governance | | |
| Informal votes | P 4.1.2 | Complete update |
| Voter turnout | P 4.2.1 | Complete update |

(continued)

Indicators updated in the 2019 Yearbook (continued)

| Update indicators | Table number | Nature of update |
|----------------------------------------------|--------------|-------------------|
| Population and Demographics | | |
| Estimated resident population | C 1.1.1 | Complete update |
| Population projections | C 1.1.2 | Complete update |
| Age profile | C 1.2.1 | Complete update |
| Proportion of people who are working age | C 1.2.2 | Complete update |
| Residential property prices | C 1.3.3 | Complete update |
| Dwelling approvals | C 1.3.4 | Complete update |
| People on selected pensions or allowances | C 1.4.2 | Complete update |
| Transport and Infrastructure | | |
| Passengers through airports | C 2.1.2 | Complete update |
| Kilometres travelled by passenger vehicles | C 2.1.4 | Complete update |
| Road speed performance | C 2.1.5 | Definition update |
| Road freight activity | C 2.2.1 | Complete update |
| Volume of freight through ports | C 2.2.2 | Complete update |
| Value of international freight through ports | C 2.2.3 | Complete update |
| Residential water supply | C 2.3.2 | Complete update |
| Industry and Innovation | | |
| Top employing industry | C 3.1.1 | Complete update |
| Main growth and decline industry | C 3.1.2 | Complete update |
| Structural change index | C 3.1.3 | Complete update |
| Actively trading businesses | C 3.2.1 | Complete update |
| Business size | C 3.2.2 | Complete update |
| Employment in knowledge-intensive industries | C 3.3.1 | Complete update |

Geographic and regional variation

A statistical geography is a system for organising data according to location. Statistical geographies divide a large geographic area (such as a country) into smaller geographic areas. The smaller areas can then be grouped together in different combinations to represent regions of interest.

The indicators in this Yearbook are viewed through a geographic lens providing the ability to track the progress of regions at several scales. For the most part, the Yearbook uses the geographic classification in the ABS 2016 Australian Statistical Geography Standard (ASGS) to define the boundaries of the statistical regions presented.

Where available, each indicator has been compiled at the following geographic scales:

- Remoteness classes;
- Major urban areas;
- Capital city and balance of state; and
- Sub-state regions.

Remoteness classes

The remoteness classes are from the ABS Remoteness Area classification, which divides Australia into five classes based on relative access to services (Figure 1). This classification enables comparisons of how outcomes vary between large regions that share common characteristics of remoteness. These remoteness classes are:

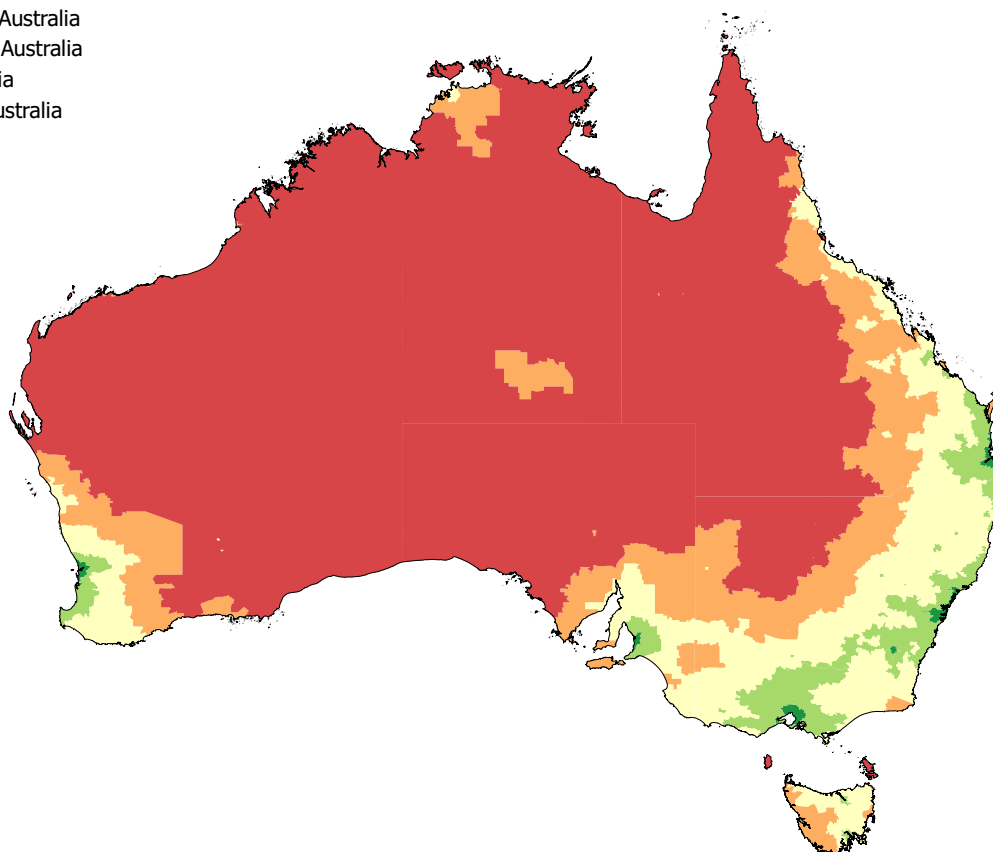
- Major cities of Australia;
- Inner regional Australia;
- Outer regional Australia;
- Remote Australia; and
- Very remote Australia.

As examples, Dubbo (NSW) and Bunbury (WA) are in Inner Regional Australia, Darwin (NT) and Port Pirie (SA) are in Outer Regional Australia, and Christmas Island, the Cocos (Keeling) Islands and Norfolk Island are in Very Remote Australia.

Figure 1 Remoteness classes, 2016 Australian Statistical Geography Standard (ASGS)

Remoteness Areas 2016

- Major Cities of Australia
- Inner Regional Australia
- Outer Regional Australia
- Remote Australia
- Very Remote Australia



Source: ABS 2018, Australian Statistical Geography Standard (ASGS): Volume 5 – Remoteness Structure, July 2016 (cat. no. 1270.0.55.005)

Major urban areas

The major urban areas⁷ (MUA) of Australia are identified as the large urban cores and surrounding built-up urban areas with a population of more than 85,000 residents in 2016 (Figure 2). Throughout the Yearbook the major urban areas are presented in order of population, with the most populated areas at the top of the tables and the least populated areas at the bottom. In total, Australia's 20 largest cities have been included in the Yearbook (Table 3).

Table 3 Statistical geographic areas used to define Australia's major urban areas

| Greater Capital City Statistical Areas (GCCSAs) | Significant Urban Areas (SUAs) | |
|--------------------------------------------------------|---------------------------------------|------------------|
| Greater Sydney | Gold Coast - Tweed Heads | Cairns |
| Greater Melbourne | Newcastle - Maitland | Toowoomba |
| Greater Brisbane | Canberra - Queanbeyan | Ballarat |
| Greater Perth | Sunshine Coast | Bendigo |
| Greater Adelaide | Wollongong | Albury - Wodonga |
| Greater Hobart | Geelong | Launceston |
| Greater Darwin | Townsville | |

Source: ABS 2017, Australian Statistical Geography Standard (ASGS): Volume 4 - Significant Urban Areas, Urban Centres and Localities, Section of State, July 2016 (cat. no. 1270.0.55.004); and ABS 2016, Australian Statistical Geography Standard (ASGS): Volume 1 - Main Structure and Greater Capital City Statistical Areas, July 2016 (cat. no. 1270.0.55.001)

For the seven capital cities (excluding Canberra), the ABS-defined Greater Capital City Statistical Areas (GCCSAs) have been used to represent the major urban area. These regions represent the functional socio-economic extent of each of the state and territory capitals. The boundaries cover people who regularly socialise, shop or work within each city, including those who live in small towns and rural areas surrounding the city.

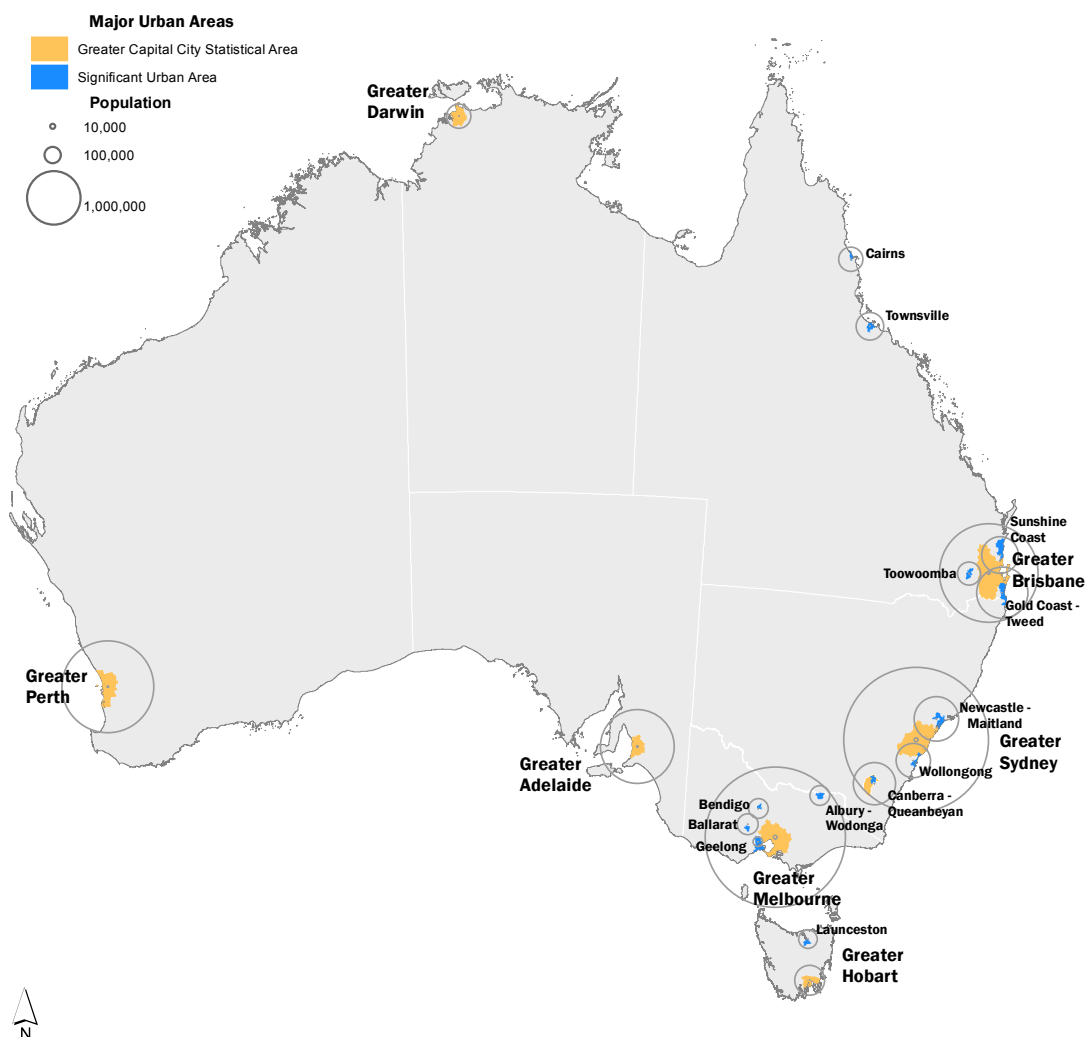
The remaining 13 major urban areas are based on the ABS-defined Significant Urban Areas (SUAs). SUA regions are concentrations of urban development with a population of 10,000 people or greater, which include a dense urban core and some surrounding hinterland. SUAs do not represent the functional labour market zone of a major city, as many people who live outside the urban area may still travel to work inside the urban area.

Canberra has been defined by the SUA of Canberra - Queanbeyan, which crosses the New South Wales and Australian Capital Territory border and so includes a wider urban extent than the GCCSA of the ACT. While Canberra is still a capital city, the SUA used to define the major urban area of Canberra - Queanbeyan is a better approximation of the wider urban core that crosses the state border. Similarly two other SUAs cross state boundaries: the Gold Coast - Tweed Heads SUA crosses the Queensland and New South Wales border; and the SUA of Albury-Wodonga crosses the New South Wales and Victoria border.

In some cases the names of major urban areas are the same as those for the larger sub-state regions in which they are located (see sub-state regions below). For example, the major urban area of Cairns is located within the sub-state region of the same name. In these cases the major urban area is always smaller than the wider sub-state region, which often includes a significant amount of the surrounding hinterland.

⁷ Note that while major urban areas are not themselves an ABS geography they were developed using existing ABS geographies.

Figure 2 Major urban areas – Greater Capital City Statistical Areas (GCCSA) and Significant Urban Areas (SUA)



Source: ABS 2017, Australian Statistical Geography Standard (ASGS): Volume 4 - Significant Urban Areas, Urban Centres and Localities, Section of State, July 2016 (cat. no. 1270.0.55.004); and ABS 2016, Australian Statistical Geography Standard (ASGS): Volume 1 - Main Structure and Greater Capital City Statistical Areas, July 2016 (cat. no. 1270.0.55.001)

Capital city and balance of state

For some of the indicators, data for remoteness classes or major urban areas is unavailable. In these cases the indicator is presented for the capital city and balance of the state (using the ABS' GCCSA geography). Each state is divided into the region which represents the socio-economic extent of each of the eight state and territory capital cities and the regions that represent the remaining area of the state or territory. These capital cities are equivalent to the capital cities defined under the previously discussed major urban areas geography – both are based on the ABS' GCCSA geography. However, the geography for the GCCSA based Australian Capital Territory is different to the boundary of the SUA-based Canberra - Queanbeyan geography which is used under the major urban areas geography. An aggregate figure for all capital cities and all rest of state areas is provided where data is presented for capital cities and the balance of state. Aggregate figures for Australian capital cities includes data for the Australian Capital Territory.

Sub-state regions

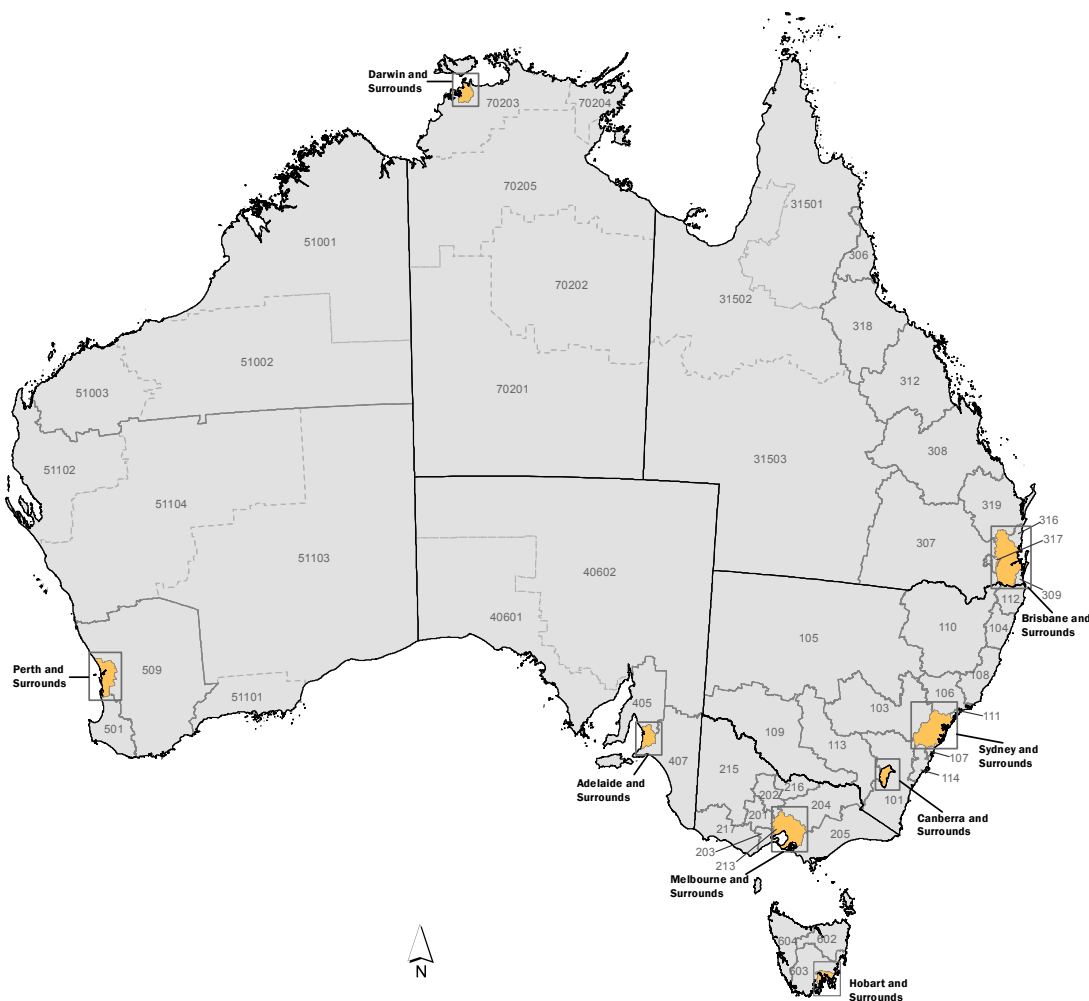
The sub-state regions in the Yearbook are geographic areas within the states and territories (Figure 3). Statistical Areas Level 4 (SA4s) are informed by labour market catchment areas, the population of the region, state and territory boundaries and sample design of the ABS Labour Force Survey.

These regions have a minimum population of 100,000, with some exceptions for sparsely populated remote areas. In regional areas, SA4s tend to have populations closer to the minimum (100,000 - 300,000). In metropolitan areas, SA4s tend to have larger populations (300,000 - 500,000).

The sub-state regions aggregate to the capital cities and the balance of the states (the GCCSA classification). For example, the GCCSA of Greater Sydney is made up of 15 SA4s and the remaining 13 SA4s in New South Wales make up the balance of the state.

In addition, based on user feedback, since 2016 the Yearbook has included data for Statistical Areas Level 3 (SA3s), where available, for outback regions in Queensland, South Australia, Western Australia and the Northern Territory within the data tables for sub-state regions. The SA3s provide an indication of the variation within these sub-state regions. However, because only selected SA3s have been included in the tables, they are not considered in the discussions in the accompanying text, for example in relation to the largest changes.

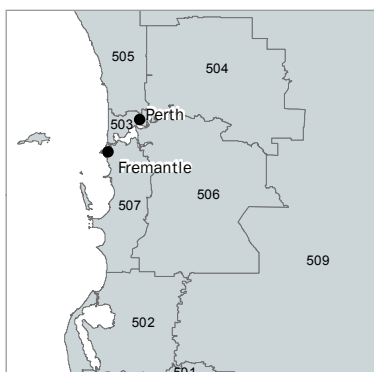
Figure 3 Sub-state regions – Greater Capital City Statistical Areas and Statistical Areas Level 3 (in Outback areas) and Level 4, 2016 ASGS



Source: ABS 2016, Australian Statistical Geography Standard (ASGS): Volume 1 - Main Structure and Greater Capital City Statistical Areas, July 2016 (cat. no. 1270.0.55.001)

*Sub-state regions – Greater Capital City Statistical Areas and Statistical Areas Level 3
(in Outback areas) and Level 4, 2016 ASGS (continued)*

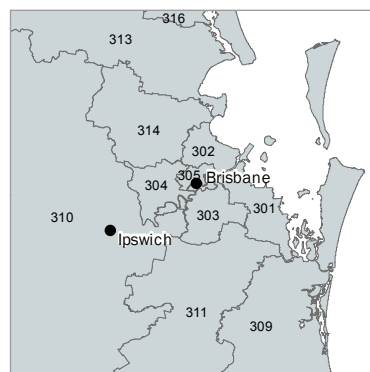
Perth and Surrounds



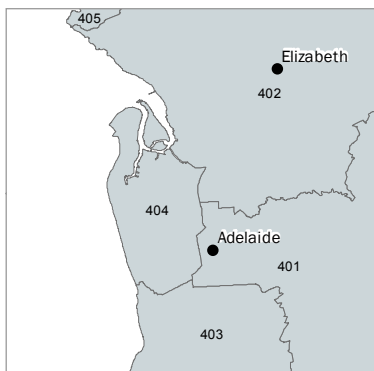
Darwin and Surrounds



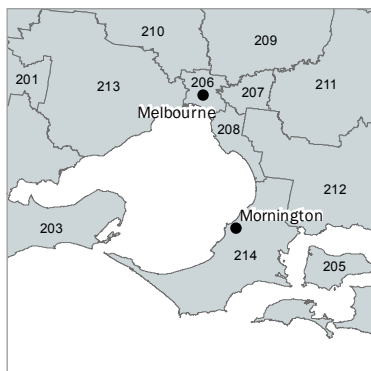
Brisbane and Surrounds



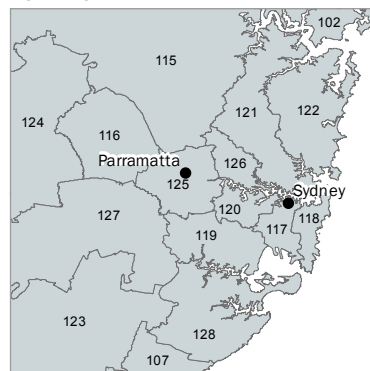
Adelaide and Surrounds



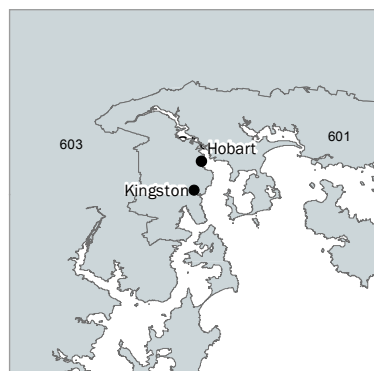
Melbourne and Surrounds



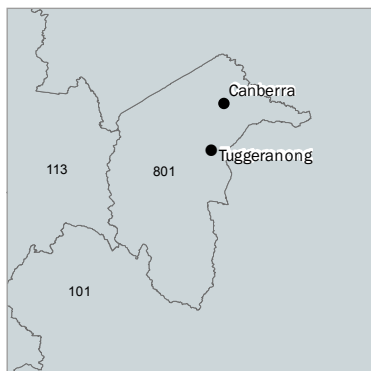
Sydney and Surrounds



Hobart and Surrounds



Canberra and Surrounds



Source: ABS 2016, Australian Statistical Geography Standard (ASGS): Volume 1 - Main Structure and Greater Capital City Statistical Areas, July 2016 (cat. no. 1270.0.55.001)

Table 4 List of sub-state regions based on 2016 ASGS

| New South Wales | | | |
|-------------------|----------------------------------------|-------------------------|-----------------------------------|
| Greater Sydney | | Rest of New South Wales | |
| 102 | Central Coast | 101 | Capital Region |
| 115 | Sydney - Baulkham Hills and Hawkesbury | 103 | Central West |
| 116 | Sydney - Blacktown | 104 | Coffs Harbour - Grafton |
| 117 | Sydney - City and Inner South | 105 | Far West and Orana |
| 118 | Sydney - Eastern Suburbs | 106 | Hunter Valley exc Newcastle |
| 119 | Sydney - Inner South West | 107 | Illawarra |
| 120 | Sydney - Inner West | 108 | Mid North Coast |
| 121 | Sydney - North Sydney and Hornsby | 109 | Murray |
| 122 | Sydney - Northern Beaches | 110 | New England and North West |
| 123 | Sydney - Outer South West | 111 | Newcastle and Lake Macquarie |
| 124 | Sydney - Outer West and Blue Mountains | 112 | Richmond - Tweed |
| 125 | Sydney - Parramatta | 113 | Riverina |
| 126 | Sydney - Ryde | 114 | Southern Highlands and Shoalhaven |
| 127 | Sydney - South West | | |
| 128 | Sydney - Sutherland | | |
| Victoria | | | |
| Greater Melbourne | | Rest of Victoria | |
| 206 | Melbourne - Inner | 201 | Ballarat |
| 207 | Melbourne - Inner East | 202 | Bendigo |
| 208 | Melbourne - Inner South | 203 | Geelong |
| 209 | Melbourne - North East | 204 | Hume |
| 210 | Melbourne - North West | 205 | Latrobe - Gippsland |
| 211 | Melbourne - Outer East | 215 | North West |
| 212 | Melbourne - South East | 216 | Shepparton |
| 213 | Melbourne - West | 217 | Warrnambool and South West |
| 214 | Mornington Peninsula | | |
| Queensland | | | |
| Greater Brisbane | | Rest of Queensland | |
| 301 | Brisbane - East | 306 | Cairns |
| 302 | Brisbane - North | 307 | Darling Downs - Maranoa |
| 303 | Brisbane - South | 308 | Central Queensland |
| 304 | Brisbane - West | 309 | Gold Coast |
| 305 | Brisbane Inner City | 312 | Mackay - Isaac - Whitsunday |
| 310 | Ipswich | 315 | Queensland - Outback |
| 311 | Logan - Beaudesert | 316 | Sunshine Coast |
| 313 | Moreton Bay - North | 317 | Toowoomba |
| 314 | Moreton Bay - South | 318 | Townsville |
| | | 319 | Wide Bay |
| South Australia | | | |
| Greater Adelaide | | Rest of South Australia | |
| 401 | Adelaide - Central and Hills | 405 | Barossa - Yorke - Mid North |
| 402 | Adelaide - North | 406 | South Australia - Outback |
| 403 | Adelaide - South | 407 | South Australia - South East |
| 404 | Adelaide - West | | |

(continued)

List of sub-state regions based on 2016 ASGS (continued)

| | |
|-------------------------------------|-----------------------------------------|
| Western Australia | |
| Greater Perth | Rest of Western Australia |
| 502 Mandurah | 501 Bunbury |
| 503 Perth - Inner | 509 Western Australia - Wheat Belt |
| 504 Perth - North East | 510 Western Australia - Outback (North) |
| 505 Perth - North West | 511 Western Australia - Outback (South) |
| 506 Perth - South East | |
| 507 Perth - South West | |
| Tasmania | |
| 601 Greater Hobart | Rest of Tasmania |
| | 602 Launceston and North East |
| | 603 South East |
| | 604 West and North West |
| Northern Territory | |
| 701 Greater Darwin | Rest of Northern Territory |
| | 702 Northern Territory - Outback |
| Australian Capital Territory | |
| 801 Australian Capital Territory | |

Source: ABS 2016, Australian Statistical Geography Standard (ASGS): Volume 1 - Main Structure and Greater Capital City Statistical Areas, July 2016 (cat. no. 1270.0.55.001)

Reading the tables

The Yearbook presents changes by indicator for regions across time. These tables include both the values for the indicators as well as a visual representation of the change in the indicator. Table 5 provides guidance on reading Yearbook tables and an explanation of key features.

The change bars represent the change in the indicator from the first reference period to the last reference period. The size of the bar corresponds to the size of the change. The change bars use a consistent scale within a single table, however, the scales may vary between tables, including using a separate scale for a single indicator across the different geographic levels.

When this change is indicative of progress in the region, the bar is coloured blue. When the change is indicative of regression in the region, the bar is coloured pink. The colour of the bar does not always correspond to the direction of the sign of the value. For the contextual indicators, the change bars are coloured grey irrespective of the direction of the change because these changes are not related to the concepts of progress or regress.

In some cases changes over time have been calculated before the rounding of table data. In these cases, the figure published for change over time may not sum with the rest of the data published for that region.

Table 5 Example table with guidance for interpretation

| Remoteness Class | 2006 per cent | 2011 per cent | 2016 per cent | 2006-2016 change percentage points |
|---------------------------|------------------|------------------|------------------|---------------------------------------------|
| Major Cities | 53.2 | 54.0 | 55.6 | 2.4 |
| Inner Regional | *56.3 | 55.7 | 52.3 | -4.0 |
| Outer Regional and Remote | 55.4 | 51.9 | 50.8 | -4.6 |

Geographic regions
Based on the ABS Australian Statistical Geography Standard (ASGS).

Relative standard errors
* Indicates that the estimate has a relative standard error between 25 per cent and 50 per cent and should be used with caution.

Change
Presents the change in the indicator from the first reference period to the last reference period. The size of the bar corresponds to the size of the change. When the change is indicative of progress in the region, the bar is coloured blue. When the change is indicative of regression in the region, the bar is coloured pink. The colour of the bar does not always correspond to the direction of the sign of the value.

Source: BITRE analysis

Data quality and availability

Data quality

The indicators selected for inclusion in this Yearbook have met criteria that set a benchmark for the statistical quality of the data. These criteria are:

- Regional availability – indicators should be available for at least one, but preferably two or more geographic scales.
- Time series – progress indicators should be available as a consistent time series, with data frequency that supports assessment of medium-term trends. This also means that there should be firm plans for the data to be collected again in the short or medium term.
- Authoritative – indicators should be collected by an official or government organisation, or a private organisation with a recognised history of high quality data provision.
- Nationally consistent – indicators should be available on a nationally consistent basis. In cases where the data is collected by individual jurisdictions, it should use a consistent set of concepts and methods across regions.

However, some geographies are very small and data presented at this scale will be subject to volatility over time, particularly those presented at the Statistical Area Level 3 scale.

Data gaps

When developing the MAP publication, the ABS identified several progress themes that did not have any current data sources to support the measurement of progress at a national level. These themes are not represented in this Yearbook and represent current gaps in our ability to measure progress on key elements of societal progress.

Regional data

Developing this publication has highlighted where availability of regional data is limited. Some indicators included in this publication are only available at a limited number of geographic scales, are available on geographic scales that do not allow for easy comparisons to other indicators, or must be built from alternative data sources.

Some indicators which have high quality and timely data sources at the national level cannot be disaggregated to smaller geographic regions and therefore proxy indicators have been used. These indicators may not exactly match those presented in the ABS MAP publication, but broadly capture the same concepts of progress. Care should be taken when comparing the national data included in this Yearbook with the data presented in the MAP publication.

In other cases, there is extensive information published at the national and state level by government departments and agencies. Australian Government sites which may prove particularly useful in accessing regional data are nationalmap.gov.au and data.gov.au.

Online access

The online datasets will provide a more detailed geographic breakdown of data, allowing users to access data for Local Government Areas (2016, 2017 and 2018 – depending on data availability) and Statistical Areas Level 2 (SA2), where data is available. This more detailed data will provide the opportunity to develop better insights at the sub-state level.

The web data will be available from both the Australian Government data site data.gov.au and the Bureau of Infrastructure, Transport and Regional Economics (BITRE) website bitre.gov.au.

For further development

It is important to acknowledge that the existing set of indicators has some gaps. Data to be released in the next few years may help to fill some of those gaps. Some examples are provided below:

- A considerable number of indicators rely on data from the ABS that is available less frequently than yearly. In the future, there may be potential to improve the frequency of available data through statistical techniques such as data pooling to provide rolling annual estimates.
- Some data is still only available for capital city and balance of state; lower level geography is currently not available but is highly desirable. In the future, there may be potential to improve the level of geographic disaggregation through small area estimation techniques that are becoming increasingly standard methods for production of data at the ABS.

Readers are encouraged to provide feedback or suggestions for further development by email to Regional.Progress@infrastructure.gov.au.

