Introduction

The 2016 Yearbook is the third in a series of statistical reports that are designed to help answer the question of how our regions are progressing against social, economic, environmental and governance indicators. This information will enable governments, private investors and the community to identify trends that are important for policy development, investment decisions and planning. Understanding these issues is particularly important when making decisions in relation to infrastructure needs and government services, as both are influenced by the geographic distribution of population, economic activity and natural resources. This Yearbook builds on the information that was provided in 2015 by updating data sources wherever possible. A full list of the updated indicators is provided in Table 1 on page five.

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. This approach builds on a framework that was originally developed by the Australian Bureau of Statistics (ABS) for the *Measures of Australia's Progress* publication. The *Measures of Australia's Progress* 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 provide information that is not related to progress, but which are nonetheless important for forming a well-rounded understanding of the basic 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 well-being of people and households over time. This requires looking beyond the economic system in a region to also include the wider range of experiences and living conditions of people in those regions.[1]

Internationally, there has been an increasing interest in measuring well-being and progress of societies. Projects like the Commission on the measurement of economic performance and social progress[2] and the Organisation for Economic Cooperation 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 United Nations (UN) Human Development Index[3], the OECD Better Life Index[4] and the related OECD Regional Well-Being initiative.[5]

The Australian Bureau of Statistics has measured progress at the national scale in the publication *Measures of Australia's Progress* (MAP).[6] 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.

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

"Is life in your region getting better?"

Rather than make comparisons between regions, the information on progress in this Yearbook is intended to be used to look at 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, each focusing on one of the four domains of progress:

- Part P.1, for Society;
- Part P.2, for Economy;
- Part P.3, for Environment; and
- Part P.4, for 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***, which are summary statistics that signal whether that aspect of life is moving in a 'good' direction (progress) or a 'bad' direction (regress).

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 and future versions of the Yearbook will seek to fill these gaps (see For Further Development below).

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.

1 OECD, Measuring Well-being and Progress: Understanding the issue, 2013
2 Stiglitz, Sen, and Fitoussi, Report of the commission on the measurement of economic performance and social progress, 2009
3 UNDP, Human Development Report 2014, Sustaining Human Progress: Reducing Vulnerabilities and Building Resilience, 2014
4 OECD, Better Life Index, 2014
5 OECD, Regional Well-Being, 2014
6 ABS, Measures of Australia's Progress, 2013 (cat. no. 1370.0)

Contextual Indicators

The Yearbook aims to provide a general overview of the way in which 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.

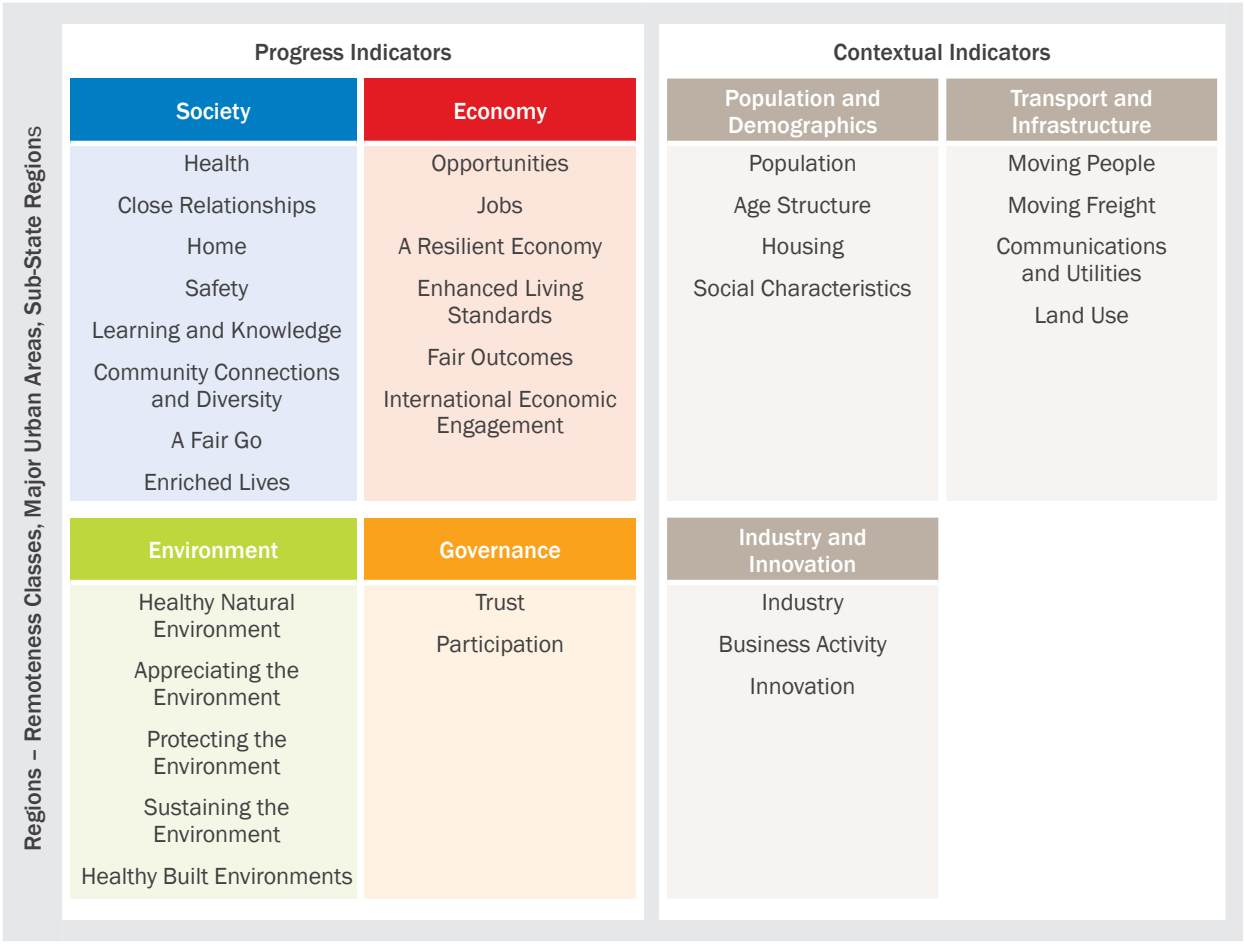
The contextual indicators section of the Yearbook has been divided into three sections, each focusing on one of three contextual domains:

- 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.

The Department of Infrastructure and Regional Development develops and publishes statistical information about transport and infrastructure across Australia. This Yearbook draws on information from the Department's Bureau of Infrastructure, Transport and Regional Economics (BITRE) and other sources to supplement the information on national progress, as well as highlight the important contribution that infrastructure and transport investment makes in facilitating growth in the regions of Australia.

Figure 1 Indicator Framework



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. An increase in *life expectancy* is directly related to progress in the health condition 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 1 Indicators updated in the 2016 Yearbook

Updated indicators	*Table Number*	*Nature of Update*
Society		
Life expectancy at birth	P 1.1.1	Additional year of data
Psychological distress	P 1.1.2	Additional year of data
Overweight or obese	P 1.1.3	Additional year of data
Smoking rates	P 1.1.4	Additional year of data
Physical activity	P 1.1.5	Additional year of data
Children developmentally vulnerable	P 1.2.1	Additional year of data
Recognising traditional country	P 1.3.4	Additional year of data
Victims of physical assault	P 1.4.1	Additional year of data
Victims of malicious property damage	P 1.4.2	Additional year of data
Road fatalities	P 1.4.3	Additional year of data
Vocational or higher educational qualifications	P 1.5.1	Revised calculations
Year 5 and 9 reading standards	P 1.5.2	Additional year of data
Disposable household income	P 1.7.1	Additional year of data
Economy		
New business entry rate	P 2.1.3	Additional year of data
Unemployment rate	P 2.2.1	Additional year of data
Average duration of unemployment	P 2.3.1	Additional year of data
Real household net worth	P 2.4.2	Additional year of data
International visits to residents ratio	P 2.6.1	Additional year of data
Value of international freight	P 2.6.2	Additional year of data
Environment		
Domestic trips involving nature activities	P 3.2.1	Additional year of data
Greenhouse gas emissions from road transport	P 3.4.1	Additional year of data
Average commuting time	P 3.5.2	Additional year of data
Context		
Estimated resident population	C 1.1.1	Additional year of data
Net internal migration	C 1.1.3	Additional year of data
Age profile	C 1.2.1	Additional year of data
Residential property prices	C 1.3.3	Additional year of data
People on selected pensions or allowances	C 1.4.2	Additional year of data
Passengers through airports	C 2.1.2	Additional year of data
Kilometres travelled by passenger vehicles	C 2.1.4	Additional year of data
Road freight activity	C 2.2.1	Additional year of data
Residential water supply	C 2.3.3	Additional year of data
Actively trading businesses	C 3.2.1	Additional year of data
Business size	C 3.2.2	Additional year of data

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. The Yearbook uses the geographic classification in the ABS Australian Statistical Geography Standard (ASGS) 2011 to define the boundaries of the statistical regions presented.

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

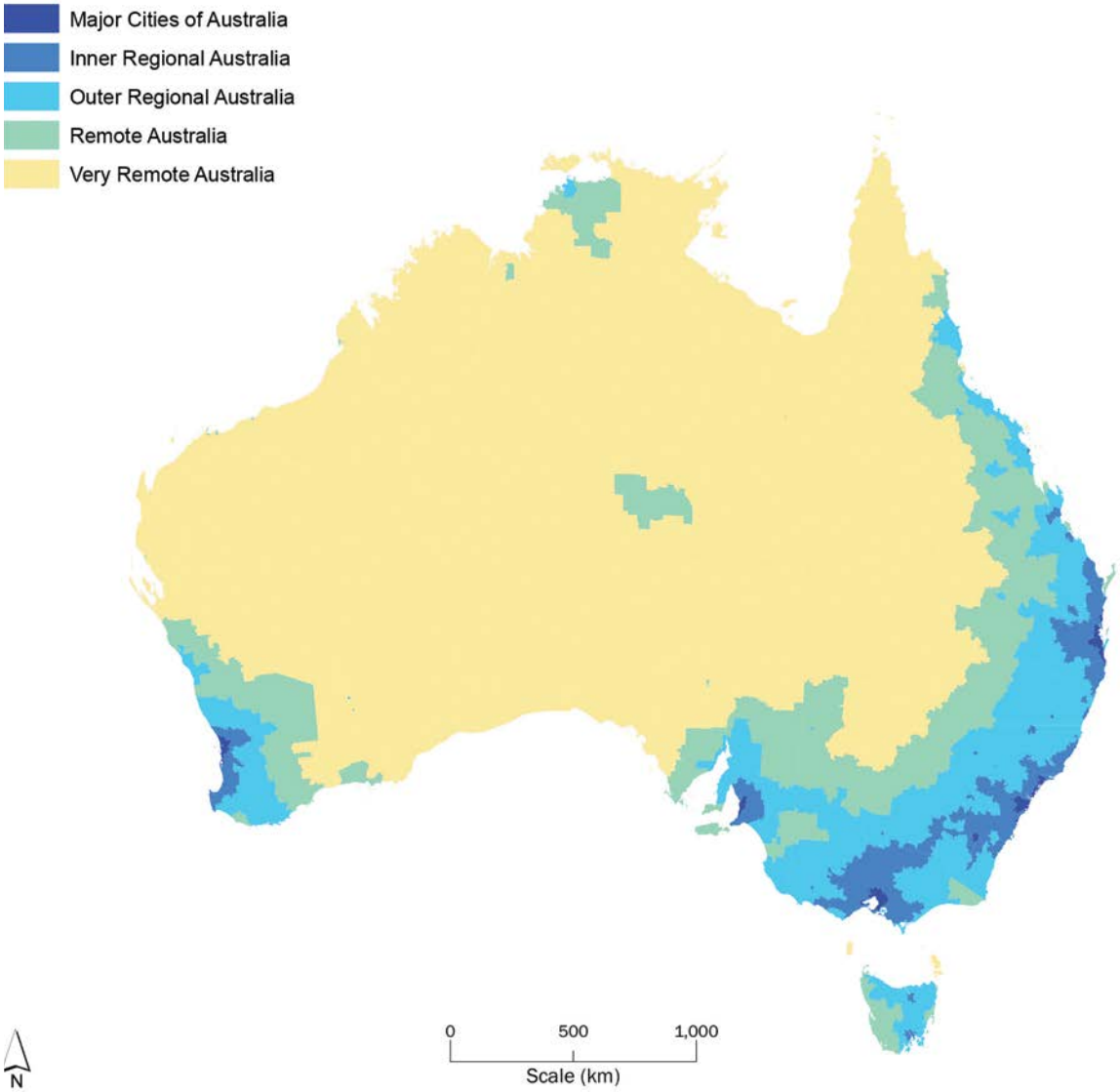
- Remoteness Classes;
- Major Urban Areas;
- Capital City and Balance of State; and
- Sub-State Regions.

Remoteness Classes

Australia has been divided into five remoteness classes defined in the ABS Australian Statistical Geography Standard (ASGS), which reflect differences in access-to-services due to the physical connections between locations. Remoteness classes provide a summary geographic classification to compare 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.

Figure 2 Remoteness Classes, ASGS 2011



Major Urban Areas

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

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 that 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). These 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. Unlike GCCSAs, SUAs do not always 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.

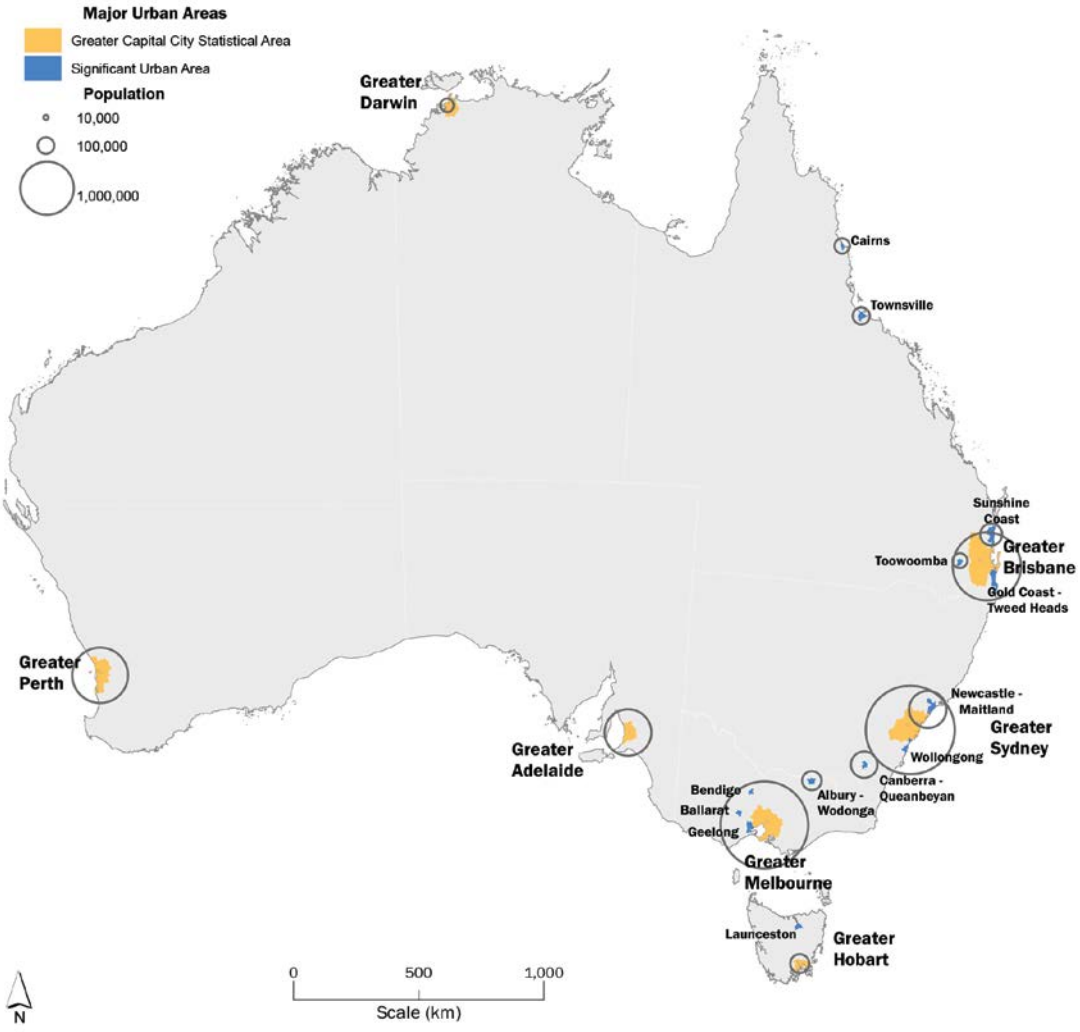
Canberra has been defined by the SUA of Canberra-Queanbeyan, which crosses the New South Wales and Australian Capital Territory border and includes a wider urban extent than the GCCSA of the ACT. While Canberra is still a capital city, the SUA used to define the major urban area of Canberra-Queanbeyan is a better approximation of the wider urban core that crosses the state border. Similarly, the SUA of Albury-Wodonga crosses the New South Wales and Victoria border to account for the integrated nature of the urban extent across the Murray River.

In some cases the names of major urban areas are the same as the names 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.

Table 2 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	

Figure 3 Major Urban Areas – Greater Capital City Statistical Areas and Significant Urban Areas



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. 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 the same geographic regions defined in the Major Urban Areas (with the exception of Canberra - Queanbeyan).

Sub-State Regions

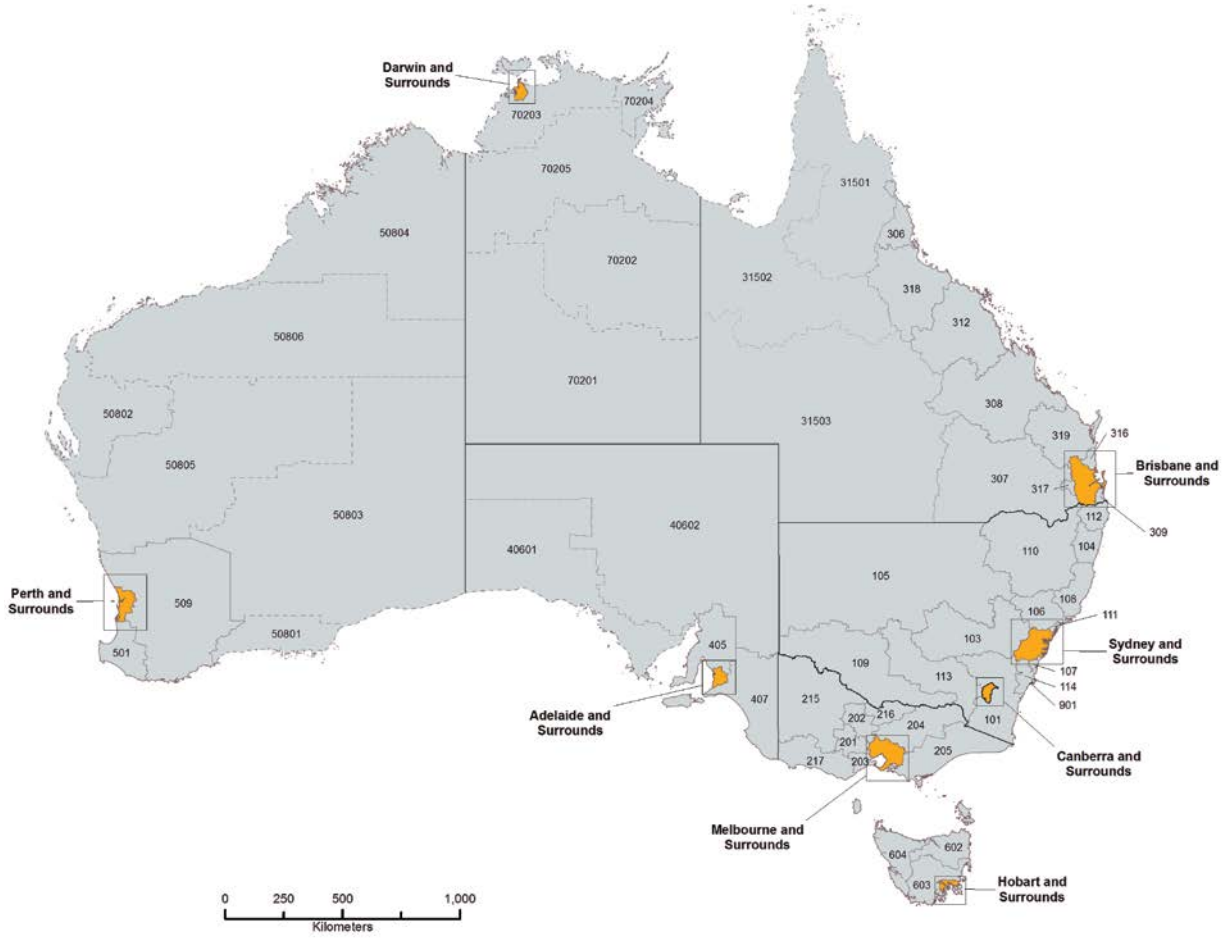
The sub-state regions in the Yearbook are geographic areas that represent functional economic zones within the States and Territories. Statistical Areas Level 4 (SA4s) are informed by labour market catchment areas, the population of the region, State and Territory boundaries and sample design of the ABS Labour Force Survey.

These regions have a minimum size of 100,000 people, 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. For example, the Greater Capital City Statistical Area (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. The GCCSAs represent the socio-economic extent of each of the eight State and Territory capital cities.

Based on user feedback, the 2016 Yearbook includes data for Statistical Areas Level 3 (SA3s), where available, for outback regions in Queensland, South Australia, Western Australia and Northern Territory within data tables for Sub-State Regions.

Figure 4 Sub-State Regions – Greater Capital City Statistical Areas, Statistical Areas Level 4 and Selected Statistical Areas Level 3, ASGS 2011



New South Wales

Greater Sydney

102	Central Coast
115	Sydney - Baulkham Hills and Hawkesbury
116	Sydney - Blacktown
117	Sydney - City and Inner South
118	Sydney - Eastern Suburbs
119	Sydney - Inner South West
120	Sydney - Inner West
121	Sydney - North Sydney and Hornsby
122	Sydney - Northern Beaches
123	Sydney - Outer South West
124	Sydney - Outer West and Blue Mountains
125	Sydney - Parramatta
126	Sydney - Ryde
127	Sydney - South West
128	Sydney - Sutherland

Rest of New South Wales

101	Capital Region
103	Central West
104	Coffs Harbour - Grafton
105	Far West and Orana
106	Hunter Valley exc Newcastle
107	Illawarra
108	Mid North Coast
109	Murray
110	New England and North West
111	Newcastle and Lake Macquarie
112	Richmond - Tweed
113	Riverina
114	Southern Highlands and Shoalhaven

Victoria

Greater Melbourne

206	Melbourne - Inner
207	Melbourne - Inner East
208	Melbourne - Inner South
209	Melbourne - North East
210	Melbourne - North West
211	Melbourne - Outer East
212	Melbourne - South East
213	Melbourne - West
214	Mornington Peninsula

Rest of Victoria

201	Ballarat
202	Bendigo
203	Geelong
204	Hume
205	Latrobe - Gippsland
215	North West
216	Shepparton
217	Warrnambool and South West

Perth and Surrounds

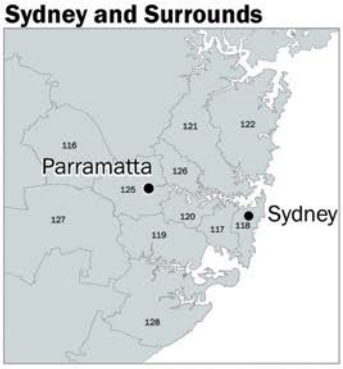
Darwin and Surrounds

Brisbane and Surrounds

Adelaide and Surrounds

Melbourne and Surrounds

Sydney and Surrounds



Hobart and Surrounds

Canberra and Surrounds

Queensland

Greater Brisbane

301 Brisbane - East
302 Brisbane - North
303 Brisbane - South
304 Brisbane - West
305 Brisbane Inner City
310 Ipswich
311 Logan - Beaudesert
313 Moreton Bay - North
314 Moreton Bay - South

Rest of Queensland

306 Cairns
307 Darling Downs - Maranoa
308 Fitzroy
309 Gold Coast
312 Mackay
315 Queensland - Outback
316 Sunshine Coast
317 Toowoomba
318 Townsville
319 Wide Bay

South Australia

Greater Adelaide

401 Adelaide - Central and Hills
402 Adelaide - North
403 Adelaide - South
404 Adelaide - West

Rest of South Australia

405 Barossa - Yorke - Mid North
406 South Australia - Outback
407 South Australia - South East

Western Australia

Greater Perth

502 Mandurah
503 Perth - Inner
504 Perth - North East
505 Perth - North West
506 Perth - South East
507 Perth - South West

Rest of Western Australia

501 Bunbury
508 Western Australia - Outback
509 Western Australia - Wheat Belt

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
702 Northern Territory - Outback

Australian Capital Territory

801 Australian Capital Territory

Reading the Tables

This Yearbook presents data on the changes to indicators 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 and the trend over time.

Trend lines are used to provide a visual representation of progress over time for a specific region, rather than to compare the rate of change between regions. It is important to note that the trend lines do not use a consistent scale, either within an individual table, or across different tables.

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.

Figure 5 Example table with guidance for interpretation

Remoteness Class	*2009-11* *$ real*	*2011-12* *$ real*	*2013-14* *$ real*	*2009-11 to 2013-14 change $ real*	*Trend*
Major Cities	835,599	798,847	853,909	18,310	
Inner Regional	718,828	664,956	687,351	-31,477	
Outer Regional	705,262	709,230	743,906	38,644	

Geographic regions
Based on the geographic classification in the ASGS.

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 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.

Trend Line
Presents the change in the indicator over time. Based on the three reference periods included in the table. The indicator may be available at greater frequency than included in the table, but the trend line is only based on the information in the table.

Data Quality and Availability

Data Quality

The indicators that have been 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. 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.

Data Gaps

When developing the *Measures of Australia's Progress* 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 the availability limitations for regional data. 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 publication Measures of Australia's Progress, 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 Measures of Australia's Progress.

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 <https://nationalmap.gov.au/> and <http://data.gov.au/>.

Online Access of Yearbook Data

Web Application

In late 2016 the Department launched an interactive web application to enhance online access of Yearbook data. The application allows users to easily search for their own region and access interactive charts and tables that illustrate how the region is progressing on key indicators. In response to feedback provided by stakeholders in 2014, the web application will also provide a more detailed geographic breakdown of data, allowing users to search for their region according to Local Government Area boundaries and Regional Development Australia committee boundaries. This more detailed data will provide the opportunity to develop better insights at the sub-state level.

The web data will updated on an annual basis, soon after the release of each Yearbook publication. The application can be accessed via the Department's website at <http://regional.gov.au/regional/data/>.

Other Sub-State Regions

The Yearbook web application provides an even more detailed split of sub-state regions according to Local Government Area (LGA) boundaries and Regional Development Australia committee boundaries (RDAs). There are 565 LGAs within Australia, each corresponding to the area of a local government, council, shire or similar administrative body. More information about LGAs can be found at <http://www.abs.gov.au/websitedbs/D3310114.nsf/home/ASGS+Fact+Sheets>.

In turn, RDA boundaries are generally defined as amalgamations of LGAs. There are 55 RDAs which cover the entirety of Australia excluding external territories. Each RDA is an appointed committee of local stakeholders that are involved in coordinating regional development and planning activities. More information about RDAs can be found at <https://rda.gov.au/about/>.

For Further Development

In 2016, a comprehensive assessment of the Indicator Framework for the Yearbook was conducted by the Department in partnership with the ABS. This involved reviewing existing data sources to ensure indicator quality is maintained over time and that information can continue to be presented in a consistent format. As a result of this review, some improvements to the Framework have been identified for future publications.

Another key change on the horizon is the forthcoming availability of data from the 2016 Census. Census data underpins a significant proportion of the Yearbook and new data will enable meaningful updates to a number of indicators. 2016 Census data will be released gradually, starting from late 2017. The Department will update the corresponding Yearbook indicators as the Census data becomes available.

Finally, it's important to acknowledge that the existing set of indicators have some important gaps. Data to be released in the next few years may help fill some of those gaps. Some examples are provided below:

- A significant number of indicators rely on data from the ABS, which 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 only; 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 any feedback or suggestions for further development via email to <Regional.Progress@infrastructure.gov.au>.