



# FORWARD WORK PROGRAM

## 2018–19







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### Further information

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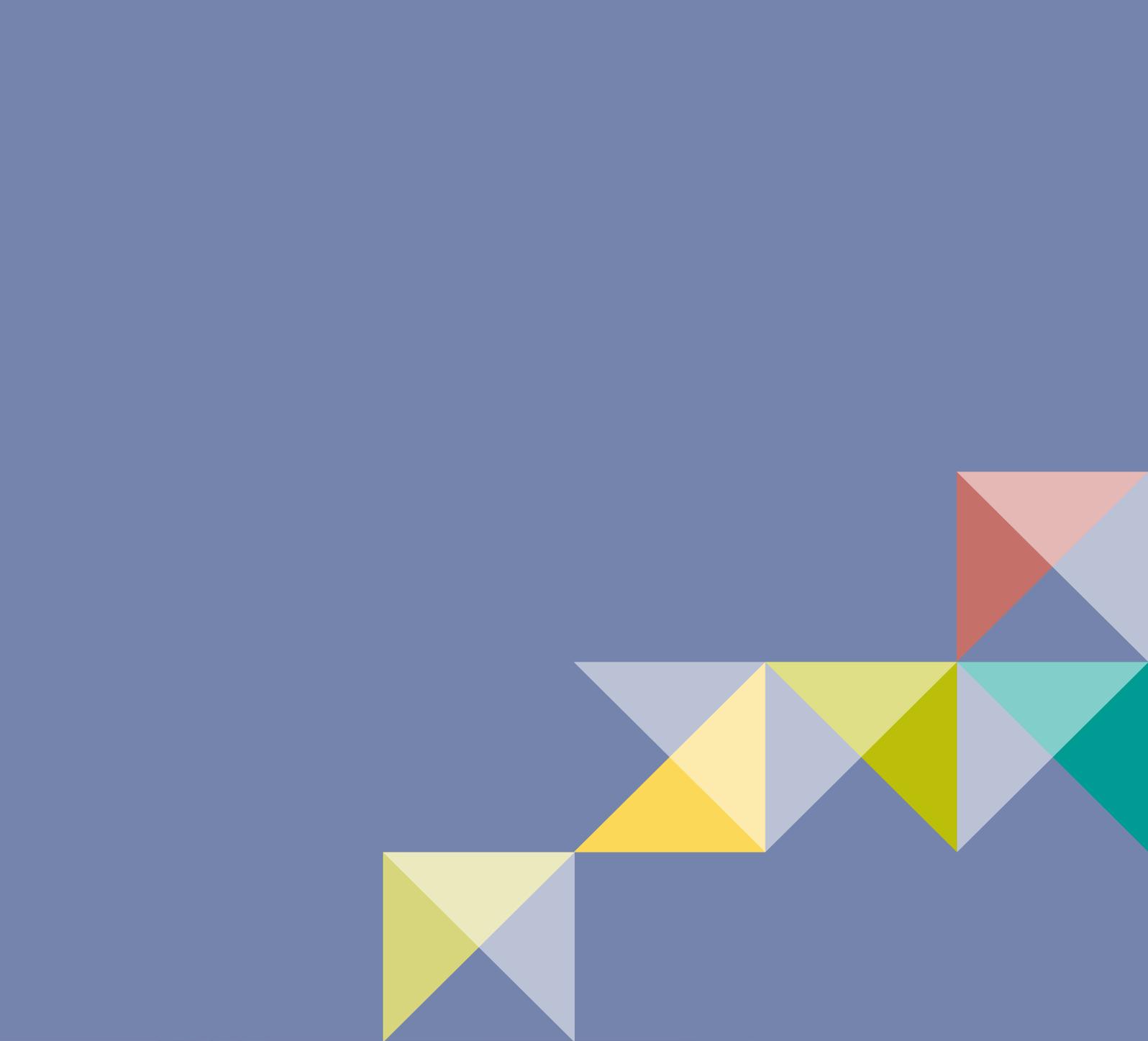
The Forward Work Program 2018–19  
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# CONTENTS

PREFACE .....	3
<b>1. ENVIRONMENTAL AND RESOURCE CONTEXT .....</b>	<b>4</b>
1.1 ENVIRONMENTAL CONTEXT .....	4
1.2 FINANCIAL CONTEXT FOR 2018–19 .....	4
1.3 MEDIUM TERM FUNDING OUTLOOK .....	5
<b>2. STRATEGIC PRIORITIES FOR 2018–19.....</b>	<b>7</b>
<b>2.1 STRATEGIC PRIORITY ONE: PROVIDING HIGH QUALITY     OFFICIAL STATISTICS.....</b>	<b>7</b>
2.1.1 Economic measurement and the Labour Force Survey.....	7
2.1.2 Estimated Resident Population.....	10
2.1.3 Social statistics program .....	11
2.1.4 Census .....	11
2.1.5 Adjustments to the ABS Forward Work Program.....	12
<b>2.2 STRATEGIC PRIORITY TWO: TRANSFORMING THE ABS FOR     THE FUTURE .....</b>	<b>13</b>
2.2.1 Statistical Business Transformation Program (SBTP) .....	13
2.2.2 Risk management.....	13
2.2.3 Future functional model .....	13
2.2.4 Workforce strategy and capability.....	14
<b>2.3 STRATEGIC PRIORITY THREE: DELIVERING NEW STATISTICAL     SOLUTIONS TO MAXIMISE THE VALUE OF PUBLIC DATA .....</b>	<b>15</b>
2.3.1 Data integration and the Data Integration Partnership for Australia (DIPA) initiative.....	15
2.3.2 Environmental and satellite accounts .....	16
2.3.3 Alternate data sources.....	16
2.3.4 Communication, dissemination and microdata access.....	17
<b>APPENDIX 1: ABS STATISTICAL WORK PROGRAM BY COMPONENT.....</b>	<b>19</b>
ENABLING CAPABILITIES AND ASSETS.....	20
TIER 1 .....	21
TIER 2 .....	22
TIER 3 .....	23





## PREFACE

The Australian Bureau of Statistics' (ABS) purpose is to inform Australia's important decisions by partnering and innovating to deliver relevant, trusted and objective data, statistics and insights.

The ABS sets its work program following extensive consultation with stakeholders. We operate within the Appropriation revenues we receive from government and other user funding.

The ABS has been prioritising its statistical work program for some time, with reductions in the ABS statistical program announced in 2008, 2009, 2013, 2014, 2017 and some limited changes this year. Our critical social statistics program is very dependent upon user funding.

From our budget funding, we have prioritised delivery of key official statistics. We have devoted more resources to risk management of our core economic and population statistics, and we are spending more on some key collections (such as our monthly Labour Force Survey) to maintain the quality of statistical outputs demanded by key users. Planning for the 2021 Census is on track and significant improvements are being made in the program.

User funding is allowing the ABS to pursue a number of our major social surveys over coming years, including the Survey of Disability Ageing and Carers, National Health Survey, a number of key surveys measuring the social condition and health of our Indigenous people, and the Personal Safety Survey. ABS is grateful for this extra funding that allows us to conduct these essential social surveys.

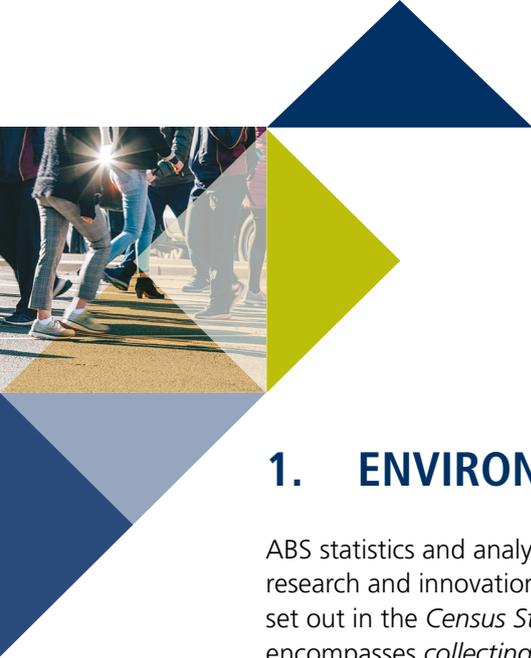
At the same time, we are enhancing our effectiveness. We have improved external collaborations, enhanced governance to better manage risks, now have a more diverse workforce, improved internal collaboration, and are introducing fit for purpose infrastructure. Government and ABS co-investment will strengthen our statistical infrastructure over time and ABS is continually upgrading our data protections.

The information environment and our economy, population, society and natural environment are constantly changing. As much as resources allow, the ABS is pursuing improvements to our measurement of the economy, labour market and population. Additional government funding in the 2018 Budget is enabling some enhancements of our core economic statistics, including housing stock, Consumer Price Index (CPI) and labour accounts.

The ABS is also pursuing some new statistical solutions. The Data Integration Partnership for Australia, funded until June 2020, is enriching the information available to inform significant public policy issues and evaluate the effectiveness of government programs. This should be an increasingly valuable data resource to inform public policy choices. Some attention is being given to statistical innovation, the use of big data for statistical purposes and enabling greater use of data. ABS staff are progressing as much innovation as feasible.

The ABS necessarily needs to make choices about what we do and what we cannot do within the resources we receive. I am pleased to present our work program for 2018–19 and following years.

**David W. Kalisch**  
Australian Statistician



## 1. ENVIRONMENTAL AND RESOURCE CONTEXT

ABS statistics and analysis informs economic policy, public sector policy, business decisions, research and innovation, and community debate and participation. The information remit set out in the *Census Statistics Act 1905* and the *Australian Bureau of Statistics Act 1975* encompasses *collecting, compiling, analysing and disseminating statistics and related information*.

Against the back drop of its legislation, the ABS needs to prioritise its activities taking into account available resourcing, changes in the economy and society to be measured, changing government and community priorities and changes in the authorising environment within which it operates.

### 1.1 ENVIRONMENTAL CONTEXT

In the provision of high quality statistics the ABS needs to constantly evaluate its program in light of the changing external environment. Over the course of 2018–19 a number of external developments will continue to inform the shape of the ABS work program.

In terms of what we measure, an evolving economy and society necessitates development of new statistical solutions, with our focus on better measuring productivity, the non-market sector and developing a richer picture of the dynamics of the labour market.

There is also increasing demand for evidence and data. At the same time, technological advances will enable increased access to a plethora of information (often instantaneously), against the back drop of growing public awareness and concern about the use of data.

The ABS is committed to balancing the secrecy of personal and business information with effective use of that data and meeting stakeholders' expectations about ease of access to detailed information. Maintaining the trust of Australians who provide the ABS with their information is critical to producing high quality statistics.

The ABS will support the Australian Government's commitment to reform the national data system by providing technical advice and assistance to the newly established National Data Commissioner (NDC) and other government entities. The ABS will advise on issues such as data quality, data integration, confidentialisation, high value datasets, and the use of the Five Safes Framework and Trusted User model for managing disclosure risk.

### 1.2 FINANCIAL CONTEXT FOR 2018–19

The level of ABS resources is a function of Government appropriation and user funding provided by stakeholders to deliver our data products and services.

In 2018–19, the ABS will receive an annual appropriation of \$255 million and user funding of \$46 million. This excludes funding for the Census of Population and Housing, which is appropriated separately, and Government investment in the Statistical Business Transformation Program (SBTP).

In 2018–19 the allocation of the ABS appropriation is approximately:

- 74 per cent for the production of official statistics comprising economic, environment, demographic and social programs and associated methodology and standards;
- 19 per cent for data collection, including phone, web and face-to-face interviews for business, household and the Labour Force Surveys; and
- Seven per cent for data integration, inclusive of \$11.9 million in funding for the Data Integration Partnership for Australia (DIPA) initiative.

The majority of user funding (82 per cent of the \$46 million in 2018–19) supports the social statistics program, with a small proportion supporting the industry, environment and agricultural statistical programs and some data integration. User funding is cyclical in nature and fluctuates according to the work program requirements of each individual revenue activity.

### 1.3 MEDIUM TERM FUNDING OUTLOOK

Stakeholders will always want more information than the ABS can afford to provide. This has always been the case given the high public value of information. The ABS substantially reviewed and prioritised our products and service offerings, in consultation with key stakeholders, to prepare the 2017–18 work program. That review confirmed the limited scope for reducing the statistical program; inevitably we cannot meet everyone's preferences. See Box 1 for more details of our consultative mechanisms.

Over the past decade the need for prioritisation has become sharper as the ABS appropriation has reduced in real terms (see Chart 1). Significant statistical information is reliant on user funding, and there are a number of surveys that have not been undertaken now for over a decade such as the Time Use Survey and Mental Health Survey.

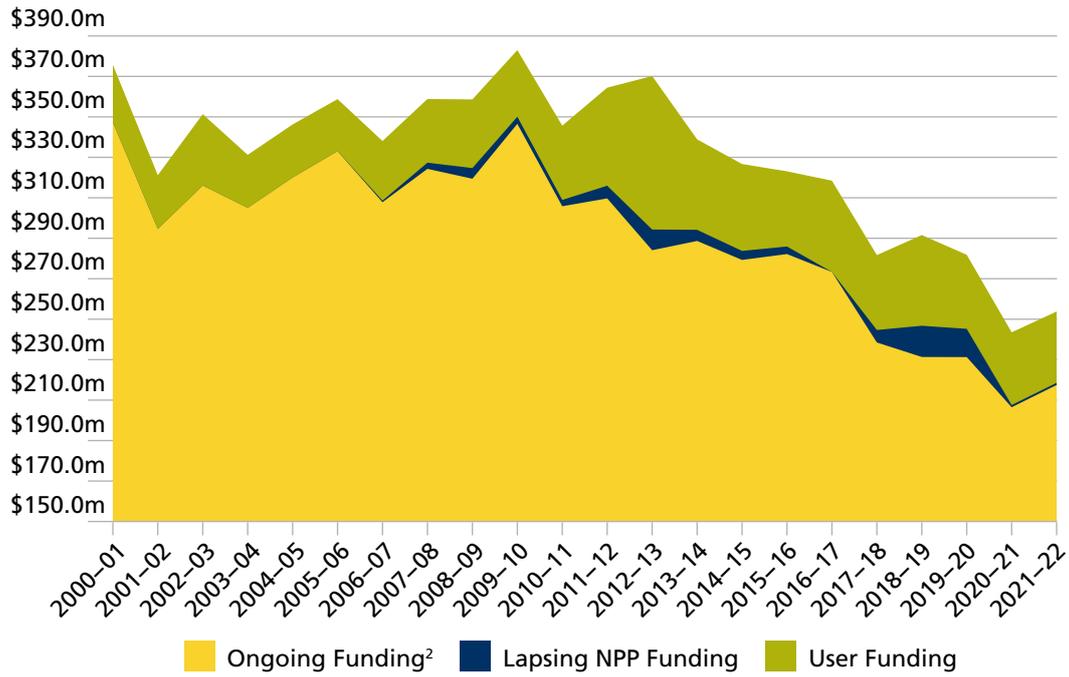
The ABS has achieved efficiencies by reducing its corporate overheads, reducing staffing numbers through several rounds of redundancies, and reducing its property footprint through activity based working and sharing with other government agencies.

Increased use of administrative and transactional data collected by other entities is reducing the cost of directly collecting some information. The ABS intends to do this more in the future. However, this is offset by rising costs of household surveys, data security protections, and qualified expert staff attraction and development.

The review of the 2017–18 Forward Work Program yielded small ongoing savings. The Department of Jobs and Small Business provided user funding for the continuation of the industrial disputes collection, the Department of Foreign Affairs and Trade for the annual international trade publication, and the Australian Competition and Consumer Commission assumed responsibility for the Internet Activity Survey. The following activities were ceased: Household Use of Technology; Sales of New Motor Vehicles; Statistical Clearance House; and Agricultural Land and Water Ownership Survey.

Sizeable future efficiencies will be dependent on changes in the way the ABS collects information, such as more eform collection, and the efficiency with which we compile and analyse this information, such as more automation of coding and editing. These efficiencies are dependent on the delivery of the SBTP.

**CHART 1: REAL ABS OPERATING FUNDING<sup>1</sup>, 2000–01 TO 2021–22**



- Notes: 1. Excludes funding for SBTP, the Census of Population and Housing and the Australian Marriage Law Postal Survey. Depreciation funding of approximately \$30m per annum was removed from 2010–11 onwards.
2. Base funding after WCI, Efficiency Dividend, efficiencies following SBTP and Whole-of-Government Savings. Includes ongoing NPP funding and offsets for property savings.



## 2. STRATEGIC PRIORITIES FOR 2018–19

### 2.1 STRATEGIC PRIORITY ONE: PROVIDING HIGH QUALITY OFFICIAL STATISTICS

The 2017–18 review of the statistical program was comprehensive. Stakeholders confirmed support for the shape of the statistical program and prioritising government funding for core official economic statistics and population measurement. Small reductions in work program were achieved over a number of years and further incremental changes will not yield significant savings. Minimal change to the shape of the program is proposed in 2018–19.

#### BOX 1: CONSULTATIVE MECHANISMS

The ABS has a significant stakeholder consultation program that helps shape the statistical Forward Work Program. Key consultation groups include the Australian Statistics Advisory Council, the Economic Statistics Advisory Group, the Population and Social Statistics Advisory Group, the Labour Statistics Advisory Group, and the State Statistical Forum. Membership typically comprises representatives from Commonwealth agencies, state and territory government agencies, academia and private sector organisations.

These forums provide an important mechanism for the ABS to receive feedback from the user community on current and planned developments in statistics and to ensure that the ABS meets the needs of users.

Other committees, both ongoing and project-specific, provide specific subject or program expertise or to assist with time-limited projects.

The relevance of our program is further enhanced through collaboration with our state and territory partners by ABS Strategic Partnership Managers based in each jurisdiction.

The ABS has also established a public and stakeholder consultation hub on our website to facilitate better and more transparent engagement. This was used extensively for the engagement on 2021 Census content and is used for all ABS public engagement activities.

#### 2.1.1 Economic measurement and the Labour Force Survey

**Main Economic Indicators:** The main economic indicators are the National Accounts and the critical business survey and administrative data feeders into the national accounts, the Consumer Price Index (CPI) and the Labour Force Survey. These remain the highest priority economic statistical programs.

The ABS has prioritised maintaining the quality of these core statistics, and ensuring their continuing relevance. This has included enhanced statistical risk management through promulgating risk mitigation strategies and quality controls, and prioritising critical staff capability and availability. Throughout 2018–19, enhanced risk planning and culture will remain a focus, and progress will be closely monitored.

The ABS Economic Statistics Advisory Group will continue to provide a strategic focus to the economic statistical program.

**Enhancing economic measurement and relevance in a changing economy:** The ABS has sought to develop new CPI sources and methods, improve statistics of the non-market sector of the economy and productivity, and enhance the measurement of the labour market.

The use of new sources is enabling improvements to the CPI. Web scraping, a technique employed to extract large amounts of data from websites, is being used with transactions or point-of-sale scanner data from retailers to: increase the sample of goods and services in the CPI basket; lower collection costs; and increase data collection frequency.

The ABS will be examining the key areas of globalisation, digital economy, and non-market outputs. An Economics Research Hub was recently established to support this work. Initial research projects for the Hub include enhancing measurement of health care outputs for economic and productivity measurement; researching potential impacts from globalisation and the digital economy on economic statistics; and development work for a potential monthly CPI. The Chief Economist role is also bringing a whole-of-economy view to this work, ensuring a coherent and consistent economic story across the breadth of economic indicators.

The ABS, in collaboration with the Australian Prudential Regulation Authority (APRA) and the Reserve Bank of Australia (RBA), will start implementing the new Economic and Financial Statistics (EFS) collection. This will modernise all data collected from the financial sector by APRA on behalf of the ABS and the RBA. Some of the frameworks and classifications for financial data haven't been updated for nearly 20 years. This work will significantly improve the quality of financial data in national accounts and finance and wealth publications, and will enhance key indicators of lending activity.

The ABS is participating in a review led by the Department of Industry, Innovation and Science into innovation metrics and methodologies which will assess current measures and explore new ways of measuring innovation performance.

The Government investment (announced in the 2018–19 Budget) in improving housing-related data over the next four years will enable the ABS to construct better-quality estimates of the stock of affordable housing and enhance existing survey-based planning and zoning data and dwelling construction cost collections.

Through the creation of an Annual and Quarterly Labour Account, the ABS has built an overarching picture of the labour market over time, with highly coherent estimates of the number of jobs, people, hours worked and labour income in each industry. The Australian Labour Account complements other ABS measures to build a comprehensive and coherent picture of the labour market: Labour Account data provides the number of filled jobs at a point-in-time each quarter; Jobs in Australia data provides insights into all jobs held throughout the year; and Labour Force Survey data measures the number of people employed each month.

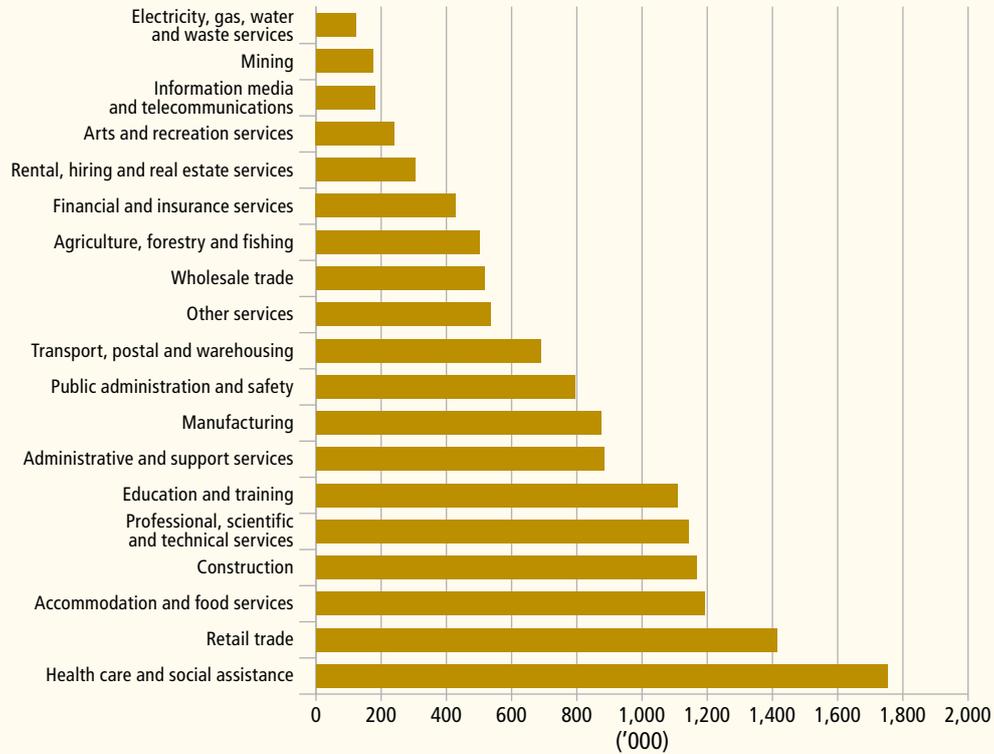
**BOX 2: QUARTERLY LABOUR ACCOUNT**

Through the year to June 2018, filled jobs grew by 2.9% from 13.6 million to 14.0 million. Over the same period, the number of employed persons increased by 2.8% from 12.8 million to 13.2 million.

Secondary jobs increased strongly over this period by 5.5%, compared with main jobs which increased by 2.8%.

In June 2018, health care and social assistance was the largest employing industry, with nearly 1.8 million jobs. Five years ago, retail trade and health care and social assistance were of comparable size of employing industries. Since then, the health care and social assistance industry has grown by nearly 25% while the retail trade industry has only seen growth of 3%.

**CHART 2: FILLED JOBS, BY INDUSTRY, JUNE QTR 2018**



The ABS released the second quarterly Labour Account on 28 September 2018, adding three additional time periods to extend the time series to June 2018. From December 2018, it is anticipated that we will publish the Quarterly Labour Account shortly after the National Accounts release to support economic monitoring and forecasting.

The ABS is exploring the potential of existing large datasets, and plans to build on its Linked Employer Employee Dataset (LEED), which links selected Personal Income Tax data to the ABS Business Longitudinal Analytical Data Environment. The LEED for 2011–12 to 2015–16 (Jobs in Australia) was published on 19 September 2018 and brings together consecutive years of tax data, so communities can better understand how their local labour markets are changing.

**Labour Force Survey:** The Labour Force Survey remains our flagship labour indicator; considerable attention has and will continue to be paid to sustaining a high quality Labour Force Survey.

Australia's Labour Force Survey is first class by world standards, see Box 3. The Monthly Population Survey, which includes the Labour Force Survey, represents a considerable financial challenge for the ABS, with its collection costs accounting for around 40% of total ABS data acquisition costs, and increasing. Internationally, statistical agencies are facing increasing difficulty in maintaining high response rates to surveys as society and people's lifestyles change.

These two factors will put pressure on maintaining the quality of Australia's world class labour force statistics. In order to sustain the survey, the ABS has identified a range of essential changes which it will look to implement over the coming years.

The ABS has commenced consultation with key stakeholders on these changes, with a view to progressive implementation by June 2020. International and domestic methodological experts, alongside the Treasury, Reserve Bank, state treasuries and other key government agencies will inform the strategy.

### BOX 3: INTERNATIONAL LABOUR FORCE SURVEY COMPARISONS

	AUSTRALIA	CANADA	NZ	UK	US
Frequency	Monthly	Monthly	Quarterly	Quarterly	Monthly
Responding sample size	26,000 households	56,000 households	15,000 households	40,000 households	74,000 households
	50,000 people	100,000 people	30,000 people	100,000 people	105,000 people
Response rates	Around 93%	Around 90%	Around 86%	Around 49%	Around 86%
Rotation groups	8	6	8	5	8*
Population compared to Australia		1.5 times the size of Australia	19% the size of Australia	2.7 times the size of Australia	13.3 times the size of Australia

Note: \*4 months, and then the same 4 months a year later.

## 2.1.2 Estimated Resident Population

Demographic statistics and, in particular, the Estimated Resident Population, remain a high priority. This statistical program is also the focus of risk planning and mitigation, staff prioritisation and capability development to ensure quality is sustained. This is crucial given the role these statistics play in determining the distribution of GST revenue and the number of seats in the House of Representatives for each state and territory.

With support from key stakeholders, the ABS has reviewed its methodology for compiling its population estimates and developed alternative data sources following the discontinuation of Outgoing Passenger Cards. Official population estimates have also been rebased following the 2016 Census.

### 2.1.3 Social statistics program

The ABS social statistics program over the next two years is significant. This includes in 2018–19:

- surveying households for the General Social Survey; National Aboriginal and Torres Strait Islander Health Survey (NATSIHS); the Survey of Disability, Ageing and Carers; and the Longitudinal Study of Australia's Children; and
- publication of 2017–18 National Health Survey and 2017–18 Survey of Income and Housing results.

In 2018–19, the household survey program, including the Monthly Population Survey, entails interviewing more than 360,000 households. Beyond 2018–19, the household program schedule includes the Personal Safety Survey, the National Aboriginal and Torres Strait Islander Social Survey, and the next surveys of Income and Housing and Household Expenditure.

As part of the ABS broader transformation journey, the General Social Survey and the Survey of Income and Housing will, for the first time, use e-collection of information from households enabled by the SBTP investment. Where feasible, we are looking to implement continuous collection, in place of large one-off surveys—supporting a more responsive survey program and taking into account interviewer load and availability. The General Social Survey will be the first continuous collection.

The focus of the Aboriginal and Torres Strait Islander Statistics program is to increase participation in 2021 Census, 2018–19 NATSIHS and future Aboriginal and Torres Strait Islander health and social surveys. This will improve the quality of statistics for Aboriginal and Torres Strait Islander people, particularly for small areas. This work directly supports the measurement of the Closing the Gap Refresh, as it is anticipated this agenda will have an increased local area focus over the next five years. It also allows statistics to be made available for local communities, for example through the Empowered Communities initiative.

The ABS Population and Social Statistics Advisory Group will continue to provide a strategic focus to the demographic and social statistical program.

### 2.1.4 Census

A wide range of standard products and analytical outputs have now been released from the 2016 Census covering a diverse set of social topics. Some of the more recent stories emerging from Census cover internal migration patterns, homelessness, the Aboriginal and Torres Strait Islander population, young carers, and sex and gender diversity.

Continued outputs are planned. A 1% sample basic Confidentialised Unit Record File is intended for release in late 2018. A release of the Australian Census Longitudinal Dataset is scheduled for late in 2018, combining a five per cent sample of data from the 2006, 2011 and 2016 Censuses to enable analysis of longer-term transitions.

Planning for the 2021 Census is on track and is overseen by a dedicated Executive Board including external representatives and chaired by the Australian Statistician. Significant improvements are being made in risk, privacy, cyber security, project management, communications and the design of service channels addressing the events and reviews of the issues surrounding the 2016 Census.

Consultations for new or changed content in the 2021 Census are already underway. The ABS will make a recommendation to Government in mid-2019 for 2021 Census topics. We have also commenced early engagement on the use of data for the 2021 Census. The preparations for the 2021 Census is reaching a number of other important milestones as activities build towards operational readiness tests commencing from May 2020. These tests will include our suppliers, and a major focus in 2018–19 will be the procurement of a number of suppliers to support 2021 Census operations, including for a secure, smart and simple digital service.

### 2.1.5 Adjustments to the ABS Forward Work Program

The proposed changes to the 2018–19 statistical program are at the margin, focusing on achieving minor efficiencies to address stakeholder feedback about the utility of some products. The ABS intends to consult stakeholders on the following potential changes to the program:

- user funding for the next Survey of Motor Vehicle Use, and the exploration of emerging data such as administrative and telematics data that may provide insights into the use of vehicles and the road transport network. Consideration of the potential to phase out existing surveys, such as the Survey of Motor Vehicle Use, will occur as these new sources develop;
- cease preliminary releases of *Principal Agricultural Commodities, Australia* (cat. no. 7111.0) and *Value of Principal Agricultural Commodities Produced Australia* (cat. no. 7501.0) and continue discussions with stakeholders about alternate administrative data sources to replace surveys as new sources emerge (see priority 3); and
- modifications to what is published and/or reductions in the frequency of outputs for international trade, taking into account stakeholder feedback on the utility of monthly publications.

The ABS also recognises a review of the Australian and New Zealand Standard Classification of Occupations (ANZSCO) is desirable, alongside many other desirable developments to our statistical program that also cannot be funded. As the co-owners, both the ABS and Statistics New Zealand (Stats NZ) have decided not to commit to undertaking a review of ANZSCO at this stage. A review of this nature would be labour and resource intensive (over \$4 million to fully implement) and was not assessed as highly against a range of other ABS priorities, given ABS funding constraints. Statistics New Zealand also has other higher priority activities at this time. ABS and Stats NZ will reconsider this position in coming years.



## 2.2 STRATEGIC PRIORITY TWO: TRANSFORMING THE ABS FOR THE FUTURE

### 2.2.1 Statistical Business Transformation Program (SBTP)

The Government invested \$257.7 million over five years in the ABS statistical, IT and business process infrastructure with the expectation of reducing statistical risks, delivering efficiencies of 10 per cent of the ABS appropriation and improving the data services to our customers.

The first three years of the Program have successfully delivered a range of new capabilities. These include a full suite of modern data acquisition capabilities to support more efficient data collection methods for business and household providers. Data acquisition capabilities have already been successfully employed in the 2018 Health Literacy Survey and will soon be used for large scale household surveys such as the 2019 General Social Survey. Similarly, the program has delivered new dissemination capabilities, such as the DataLab to support complex analysis of microdata, and the ABS Indicator Application Programming Interface (API) service which will soon allow approved users to electronically access key economic releases immediately on release.

The focus has now shifted to the integration of these capabilities and the transition of ABS collections. Work has commenced on the transition of a small number of pioneer collections. Based on the learnings of this early work the Program is making adjustments aimed at delivering expected benefits while carefully managing any potential statistical impact.

Over the life of the Program, ABS was expected and required to co-invest. This has been at a higher level than originally expected in response to the complexity of Program delivery and to better manage statistical risks during the transition to new statistical capabilities.

### 2.2.2 Risk management

Maturing our Risk Management Framework is critical for the period ahead. Absolute rigour is needed around our critical and strategically important projects and programs, whereas for business as usual activities where resources are constrained, discipline in the application of risk management principles will be required. The transformation program is central to this work. It will reduce statistical risk by providing reliable business processes used consistently across the range of ABS statistical activities.

### 2.2.3 Future functional model

The organisational structure of the ABS will evolve as we progress through transformation, with new infrastructure and business processes changing how we operate. Improved technology and greater automation will enable greater efficiencies, allowing for consolidation of some of the previously more resource intensive parts of the statistical program. This in turn creates greater capacity for analysis and innovation, allowing the ABS to be more responsive to customer needs.

Work occurred in 2017–18 to consider how to organise core ABS functions and capabilities more effectively and efficiently through to an optimised functional model. Gradual changes to the organisation of our program are being made. In 2018–19, structural changes are being made to the economic measurement areas, with reorganisation of program areas towards a thematic, topic-based structure that will enhance efficiencies and maintain data quality and coherence.

We have also conducted job design work to help staff prepare for change and understand their position in and contribution to the organisation. This work has also clearly demonstrated how we design roles and tasks to logically flow from the new functional model.

#### **2.2.4 Workforce strategy and capability**

The ABS Workforce Strategy 2015–19 provides an outlook to help us undertake our workforce planning, transformation, and deliver our People and Culture Transformation Goals. It identifies four key people strategies to drive high organisational performance:

- reshaping workforce capability;
- aligning staffing profile and structure to the ABS Forward Work Program;
- building a high performing culture and improving workforce diversity; and
- improving ABS leadership to drive a high performing culture.

The ABS is currently developing a five year workforce plan to support the workforce strategy by aligning the ABS staff profile, operational arrangements, capabilities and culture to support a responsive work program and transformed ABS. The aim is to ensure that we have the right people, in the right place, at the right time and in the right numbers to effectively deliver the required work program in 2018–19 and in future years.





## 2.3 STRATEGIC PRIORITY THREE: DELIVERING NEW STATISTICAL SOLUTIONS TO MAXIMISE THE VALUE OF PUBLIC DATA

### 2.3.1 Data integration and the Data Integration Partnership for Australia (DIPA) initiative

The ABS is a primary integrating authority for the Data Integration Partnership for Australia (DIPA). DIPA is a \$130.8 million investment by the Government over three years to 2019–20 and is designed to maximise the use and value of the Government's data assets. The ABS will receive \$37.7 million over the three year period to identify and build the necessary data assets and supporting infrastructure required to support our partner agencies in their access to, and analysis of, integrated datasets.

Data integration and analysis creates new insights into complex policy questions, enabling effective evaluation of government policy and expenditure, and a richer picture of the dynamics of the economy.

Signature projects exemplifying the policy relevance of data integration include the following:

- informing the National School Resourcing Board review of existing school funding models to determine the efficient allocation of \$145 billion of Commonwealth funds over the next 10 years (see Box 4);
- collaboration with the Australian Institute of Health and Welfare to develop an enduring, longitudinal linked justice dataset under the auspices of the Council of Australian Governments' *Prison to Work Report* (2016);
- informing the Department of Industry, Innovation and Science's investigation of the relationship between entrepreneurship and job creation in Australia;
- South Australian Employment Dynamics – using business datasets sourced from public administrative records to better understand aggregate employment and industry performance in South Australia;
- New South Wales Pathways – analysing how different pathways through upper secondary education, higher education and Vocational Education and Training compare in achieving educational attainment and engagement in work outcomes, considering factors such as socio-economic background and demographics, policy settings, regulatory frameworks and education and social policy programs;
- the Location Integration Capability, being developed by a partnership of Australian Government agencies, which will enable researchers to use data sets that are based on different measures of location to combine agricultural and other environmental data with social and economic information to inform policy.

#### **BOX 4: INFORMING SCHOOL FUNDING MODELS**

The Australian Government established the National School Resourcing Board (NSRB) to provide greater independent oversight over Commonwealth school funding. The NSRB asked the ABS to undertake a data linkage project to assist them to understand the socio-economic capacity of individual schools and, therefore, their capacity of the parent community to contribute financially to the running of their children's school.

The Socio-economic characteristics of school catchments project examined the feasibility of integrating national datasets to investigate different models for estimating the socio-economic characteristics of non-government school catchment areas.

The Socio-economic characteristics of school catchments project comprised elements of the following datasets:

- Student Residential Addresses, 2012;
- Australian Census of Population and Housing, 2011; and
- Personal Income Tax (PIT), 2011–2012.

The NSRB used the results of this work to make recommendations to Government.

### **2.3.2 Environmental and satellite accounts**

The ABS is supporting the Department of Energy and the Environment led National Approach to Environmental Accounting. The aim of the National Approach is to support complex decision making that involves environmental, economic and social dimensions. The strategy was endorsed by all Environment Ministers in early 2018. ABS will be delivering on priority accounting work around national land and waste accounts, as well as providing expertise on additional pilot projects.

The ABS is partnering with the Department of Infrastructure, Regional Development and Cities to produce an experimental Transport Satellite Account, due for release late in 2018. The experimental Transport Satellite Account will provide a comprehensive measure of transport services produced in the Australian economy. In addition to for-hire transport services, it will provide a measure of own-account or in-house transport services produced by businesses outside of the transport industry. The Transport Satellite Account will provide a measure of the economic contribution of transport services across the whole economy.

### **2.3.3 Alternate data sources**

The ABS is exploring the potential usefulness of emerging big data sources for use in official statistics. Some current and evolving areas of work include:

- a partnership with Geoscience Australia to explore options for using satellite data to inform land accounts;
- along with our use of transactions data from retailers, extending web scraping for the compilation of the CPI (see section 2.1); and
- use of administrative and telematics data for insights in the use of vehicles and the road transport network (see section 2.5).

International experience suggests that administrative data has a lot to offer in how we can run a more efficient and potentially more valuable Census for the Australian community. Our research is investigating the potential of this data to:

- improve the quality of Census data;
- add new information to the Census;
- reduce the cost and burden of running the Census to taxpayers; and
- provide a contingency for areas affected by a natural disaster or other emergency event at Census time.

#### **2.3.4 Communication, dissemination and microdata access**

The ABS disseminates data publicly through a number of channels, but in particular through its website. The ABS has also made a concerted effort to increase awareness and informed use of our statistics through increased engagement with media and through our social media channels. As part of the SBTP, the ABS is designing a new website to make it easier to find, understand and use ABS information. In 2018–19 the ABS will launch a beta website designed to gather feedback from customers on our new website concepts as they evolve. Through the transformation investment the ABS is also developing Application Program Interface (API) services to enable systematic access to ABS data.

The challenge for the ABS is to enable access to more detailed and bespoke data sets that meet specific stakeholders' needs which cannot be met through publicly releasing information. Safe and secure access to data is essential to maximise its public value, and the challenge for the ABS is to do so without risking confidentiality of the information. A balance is possible between the safe and effective use of microdata without compromising sensitive information.

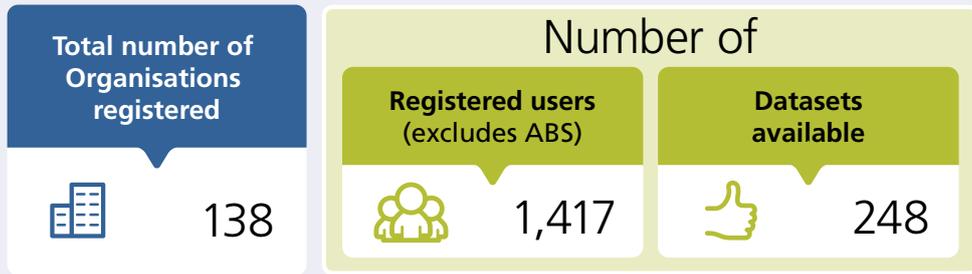
Streamlining safe access for both government and academic researchers will continue to be a focus for the ABS in 2018–19.

While TableBuilder<sup>1</sup> will remain the primary means for accessing microdata (with over 1.2 million user sessions in 2017–18), the ABS is testing new innovative solutions.

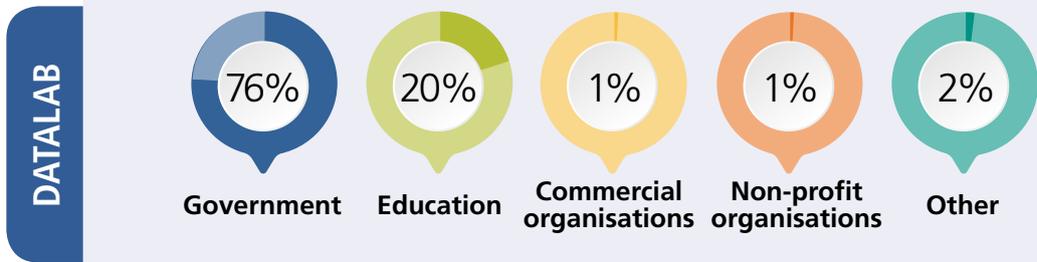
The ABS DataLab, in particular, allows customers to access detailed confidentialised data directly in their own work environment. There are currently over 760 authorised users of the ABS DataLab, with around 70% of those users being from the government sector and the remainder a combination of education, private sector and community organisations.

<sup>1</sup> TableBuilder is an online application that enables customers to interact and create customised tabular outputs from ABS data. TableBuilder features a unique confidentiality method that ensures all output data is confidentialised.

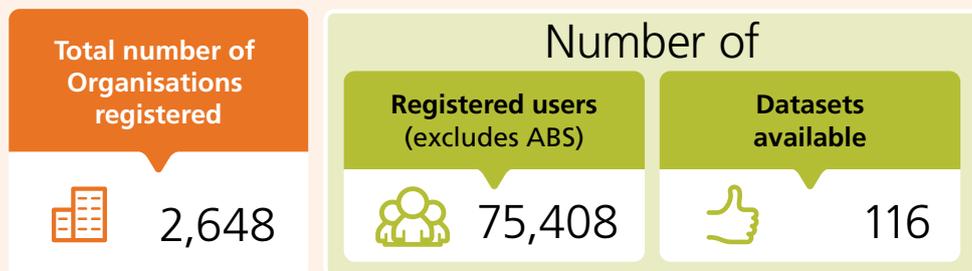
### DataLab (as at August 2018)



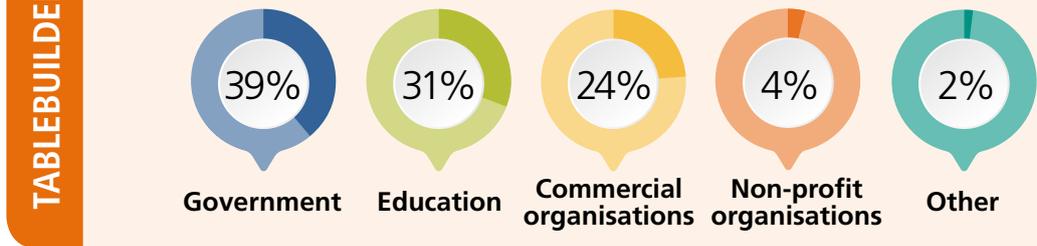
### Who is using DataLab?



### TableBuilder (as at August 2018)



### Who is using TableBuilder?





## APPENDIX 1: ABS STATISTICAL WORK PROGRAM BY COMPONENT

Elements of the ABS statistical work program are classified into four components. These are used to assist with prioritisation. This work was informed by the earlier development of the list of Essential Statistical Assets for Australia (cat. no. 1395.0), in consultation with a wide range of stakeholders.

Refer to tables below for the ABS work program classified into four components. A number of these programs and outputs are making significant use of data integration to reduce provider burden or enhance the information available.

COMPONENT	
ENABLING CAPABILITIES AND ASSETS	Essential capabilities required to deliver a quality national statistical service. These capabilities are reviewed and prioritised on an ongoing basis.
TIER 1	Statistics that are considered to be the foundation work of a national statistical organisation.
TIER 2	Important areas of statistics where there is a significant government outlay or where there is a significant public policy interest.
TIER 3	Other important statistical work that is currently undertaken to meet identified user requirements that could be deemed as falling beyond Tiers 1 and 2.

## ENABLING CAPABILITIES AND ASSETS

PROGRAM	
REGISTERS AND FRAMEWORKS	Address Register
	Business Register and Tax Data Program
	Classifications
	Data Governance and Assurance
	Data Standards and Methods
	Geospatial Standards and Methods
METHODOLOGY	Statistical Methods
	Statistical Quality Assurance
	Statistical Risk Management
	Small Domain Estimation
TRANSFORMATION	Data Integration Infrastructure
	Data Integration Research, Feasibility and Development projects
	Microdata Futures (Enhanced Microdata Access)
	Statistical Business Transformation Program
	Statistical Spatial Framework
PARTNERSHIPS AND DISSEMINATION	Partnership projects
	Statistical Services to the state and territory governments
	Customised Data Delivery
	Dissemination and Publishing
	Microdata Delivery and Access Support (including DataLab)
	Business Longitudinal Analysis Data Environment
DATA COLLECTION	Multi-Agency Data Integration Project
	Data Acquisition
	Provider Management
INTERNATIONAL RELATIONS	Survey Management
	Collaborating with international statistical agencies such as United Nations Statistical Commission and other organisations including in relation to international classifications and standards

**TIER 1**

<b>PROGRAM</b>	
NATIONAL ACCOUNTS	Quarterly and Annual statistics of Gross Domestic Product and components
	Input Output tables
INTERNATIONAL ACCOUNTS	Australia's Balance of Payments Estimates
	International Investment Statistics
	International Merchandise Trade
	International Trade in Services Statistics
BUSINESS INDICATORS	Private New Capital Expenditure and Expected Expenditure
	Quarterly Business Indicator Surveys
	Retail Trade
	Dwelling and Other Building Approvals
	Construction related gross fixed capital formation – Building Activity and Engineering Construction
	Economic Activity Survey – core
	Water Supply and Sewerage Supply/Use Survey
FINANCIAL STATISTICS	Quarterly Australian Prudential Regulation Authority and the Managed Funds Survey
	Survey of Financial Information
PUBLIC FINANCE	Government Finance Statistics
EMPLOYER STATISTICS	Survey of Average Weekly Earnings
	Major Labour Costs (irregular)
	Survey of Employee Earnings and Hours (biennial)
	Survey of Employment and Earnings
LABOUR STATISTICS	Labour Force
CENSUS OF POPULATION AND HOUSING	Census of Population and Housing
PRICES	Consumer Price Index
	Wage Price Index
	Producer Price Indexes
	International Trade Price Indexes
	Pensioner and Beneficiary Living Costs Index
DEMOGRAPHY	Estimated Resident Population
	Births and Deaths
	Indigenous Mortality
	Overseas Arrivals and Departures
LIVING CONDITIONS	Household Expenditure Survey
	Survey of Income and Housing

## TIER 2

PROGRAM	
NATIONAL ACCOUNTS	Annual productivity statistics (including annual estimates of multi-factor productivity)
	Annual State Accounts
BUSINESS INDICATORS	Mineral and Petroleum Exploration
	Economic Activity Survey – rotating (detailed industry data for National Accounts benchmarks)
	Business Characteristics Survey
	Business Demographics program
FINANCIAL STATISTICS	Housing Finance Statistics
EMPLOYER STATISTICS	Job Vacancies Survey
AGRICULTURE STATISTICS	Agricultural Census
	Rural Environment and Agricultural Commodities Survey
	Value of Agricultural Commodities Produced
ENVIRONMENT STATISTICS	Environment Accounts, including Water, Energy and Land Accounts
	Environmental Indicators Surveys (irregular)
LABOUR STATISTICS	Barriers and Incentives to Labour Force Participation
	Characteristics of Employment
	Linked Employer-Employee Database
	Quarterly Labour Account
	Retirement and Retirement Intentions
	Work Related Injuries
CENSUS OF POPULATION AND HOUSING	Australian Census Longitudinal Dataset
	Australian Census and Temporary Migrants Integrated Dataset
PRICES	Residential Property Prices Indexes
TRANSPORT AND TOURISM STATISTICS	Motor Vehicle Census
DEMOGRAPHY	Population Projections
	Regional Population Growth
EDUCATION AND TRAINING	National Schools Statistics Collection
	Survey of Education and Work
	Work Related Training and Adult Learning Survey
HEALTH AND DISABILITY STATISTICS	Causes of Death
	National Health Survey
	National Aboriginal and Torres Islander Health Survey
	Survey of Disability, Ageing and Carers
MIGRANT STATISTICS	Characteristics of Migrants
	Personal Income Tax and Migrants Integrated Dataset
REGIONAL STATISTICS	Data by Region (national regional profiles)

### TIER 3

PROGRAM	
INTERNATIONAL ACCOUNTS	Characteristics of Australian Exporters
	Survey of Foreign Currency Exposure
INDUSTRY STATISTICS	Research and Experimental Development – Business, Government, Private Non-Profit and Higher education
	Venture Capital and Later Stage Private Equity
FINANCIAL STATISTICS	Assets and Liabilities of Australian Securitisers
	Lending Finance
EMPLOYER STATISTICS	Industrial Disputes
AGRICULTURE STATISTICS	Wool Receivals, Purchases and Sales Survey
	Livestock, Poultry and Game Slaughtering
TRANSPORT AND TOURISM STATISTICS	Tourism Satellite Account
	Survey of Motor Vehicle Use
CRIME AND JUSTICE STATISTICS	National Recorded Crime Victims & Offender Statistics
	National Criminal Courts Statistics
	National Corrective Services Statistics
	Crime Victimization Survey
DEMOGRAPHY	Marriages and Divorces
EDUCATION AND TRAINING	Childhood Education and Care Survey
	Educational Outcomes
	National Early Childhood Education and Care Collection
HEALTH AND DISABILITY STATISTICS	Patient Experience Survey
	Private Health Establishments
SOCIAL CONDITIONS	Longitudinal Survey of Australian Children
	Personal Safety Survey
	General Social Survey
INTERNATIONAL RELATIONS	Indonesia Government Partnership Project
	Statistical development work in the Pacific, Fiji, Papua New Guinea and Timor-Leste



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