

ASAC Submission to the Productivity Commission Inquiry on Data Availability and Use

Introduction

1 The Australian Statistics Advisory Council (ASAC) believes that significant costs can be saved over time, and the quality of information available to decision makers enhanced, by improving the availability and use of data within and across all levels of government in Australia. This submission is presented by me, as Chair of ASAC, and reflects views consistently expressed over my nine year term as Chairperson of ASAC.

About ASAC

2 ASAC was established by the *Australian Bureau of Statistics Act 1975*¹ to oversee the coordination of the official statistical system in Australia. It is the key advisory body to the Minister and the Australian Bureau of Statistics (ABS) on statistical service operations, intended in the legislation to provide oversight across all official statistics, inclusively but not exclusively the ABS. This includes “the improvement, extension and coordination of statistical services provided for public purposes”.

3 Reflecting Commonwealth-State agreements, state and territory governments are represented on ASAC by senior officials nominated by their Premier/Chief Minister. Other Council members are appointed by the Commonwealth Minister to represent a broad cross-section of perspectives – covering government, business, academic and community interests (Attachment A).

General concerns

4 For years, ASAC has been concerned with inefficiencies and waste of government resources arising from suboptimal development and use of official (i.e. government) data. This includes duplication of data collection that places unnecessary burden on businesses and the broader community; inadequate standardisation of data that leads to lack of evidential comparability and further duplication; and opportunity costs of limited administrative data use to inform policy making. Overall, Australia’s information and statistical system is not being used optimally to inform decisions.

5 In this regard, ASAC welcomes the Australian Government’s Public Data Policy Statement² and strongly supports the Government’s request to investigate the benefits and costs of increasing the availability and use of public and private data by Australian individuals and businesses by the Productivity Commission.

6 ASAC has led activities over the last decade to confront issues facing Australia’s statistical system, including many of the ‘Recurring data themes raised in other Commission Reports’ highlighted in the Issues Paper (p8, Box 2). For example, ‘Non-standardised datasets’ was a main finding from a quality assessment of the key statistics and datasets in the ASAC-led initiative, Essential Statistics for Australia (ESA). The ESA initiative was developed to identify and effectively prioritise critical datasets (and gaps) across all levels of government. The issue of non-standardised datasets was further highlighted by users and producers of government statistics as one of the top

¹ Australian Bureau of Statistics Act 1975, Part III , <<https://www.legislation.gov.au/Details/C2012C00137>>

² Australian Government, 2015, *Australian Government Public Data Policy Statement*, <<https://www.dpmc.gov.au/resource-centre/data/australian-government-public-data-policy-statement>>

three barriers underpinning production and use of official statistics during a follow-up initiative to identify and understand Essential Statistical Infrastructure.³

7 In addition, ASAC shared concerns expressed frequently by the Chairman of the COAG Reform Council, Mr Paul McClintock AO, concerning gaps and comparability across jurisdictions and the suboptimal use of administrative data. As a consequence, ASAC worked with the COAG Reform Council to co-host a high-level workshop: *Driving productivity and reform: Improving the efficiency and effectiveness of Australia's official statistics*. This workshop gave rise to developmental work on a National Statistics Policy to cover all official statistics (at the three levels of government); together with a situational analysis of Australia's statistical system (led by Mr David Borthwick AO PSM).⁴ The report from the analysis made a number of broad recommendations regarding better management and use of government data across the statistical system to unlock the potential of data, which are reflected in the basic propositions of this submission.

Key Issues

1. Duplication and uncoordinated data collection resulting in unnecessary burden and suboptimal use of data

8 ASAC has long noted a tendency for government agencies to address gaps in data for decision-making by introducing new, ad hoc collections for a single purpose without reference to existing data or data collection processes, or the potential to frame the response to enhance broader statistical analysis. This has four major implications:

- i. It places unnecessary burden on business, households and the broader community by duplicating effort in collection and wasting government resources. There are numerous examples of agencies allocating large sums to the conduct of household surveys when ABS collects similar information already, or in discussion could modify future collections to meet any perceived need.
- ii. It demonstrates a lack of coordination and collaboration across governments resulting in inefficiency. In 2009, the Australian Government established the Statistical Clearing House (SCH) to be the mandatory central clearance point for business surveys that are run, funded, or conducted on behalf of the Australian Government, to reduce the load on business and improve government coordination. The clearance applies to all Commonwealth Government surveys approaching 50 or more businesses. However there is still no equivalent authority over-seeing household collections, nor are state and territory governments covered under this mandate.
- iii. It fails to acknowledge the potential of these new collections, appropriately developed, to overcome broader data gaps; improve standards, definitions and classifications; and increase data sharing to build a cohesive and integrated national statistical ecosystem.
- iv. Disaggregated efforts to develop new data limit potential for broader statistical purposes such as statistical data integration; and lead to the suboptimal use of scarce technical expertise that exists (eg in ABS), for developing statistical solutions to inform complex policy issues.

9 ASAC firmly believes that before any major new survey or administrative data developments are approved, all levels of government should be encouraged to consult with the ABS in its role as

³ ABS 2016, 1395.0 - *Essential Statistical Assets for Australia, 2015*
<<http://www.abs.gov.au/ausstats/abs@.nsf/mf/1395.0>>

⁴ Borthwick, D. 2014, *Situational Analysis of the National Statistical System*, Report to ASAC's Crisp Revisited Reference Group 11 November 2014

Australia's central statistical authority. Advice should be sought on what data may already exist; what data is needed; how that data may be collected; and how the data may be developed with an eye to broader statistical and research purposes. ABS advice should also be sought on the technical and quality aspects of the data under development, and the burden that could be avoided by leveraging existing data or existing infrastructure such as ABS collection activities.

10 ASAC is a firm supporter of data initiatives across all levels of government. However, they need to be undertaken with recognition of the larger system to encourage consistency and optimise the value of the data for broader public and private sector use.

2. Suboptimal levels of statistical and analytical capability resulting in underutilisation of data

11 It is critical to build statistical and analytical capability (both individual technical skill and organisational capacity) within all levels of government to overcome the suboptimal practices highlighted above and maximise efficient and effective production and use of data to inform decisions. Key areas of concern for ASAC arising from a lack of statistical and analytical capability include:

- i. Misuse of data and statistics - the *UN Fundamental Principles of Statistics*⁵ and the UK Statistics Authority *Code of Practice for Official Statistics*⁶ both draw attention to the misuse of data and statistics in supporting a cause and highlight the role of official statisticians to raise issues of concern. There is real potential for the ABS to assume statistical leadership in this area given the right authorising environment, including assessing the quality of statistical use and inference in a similar manner to the UK central statistical agency (the Office for National Statistics). The Australian Statistician should be mandated to raise issues of concern that might arise with relevant Heads of Agencies regarding statistical methodology, data analysis and valid application of statistics.
- ii. Under-investing in the priorities for, and quality of, data - Governments could do more to ensure they are investing in the collection of priority and quality data, its fitness for purpose and its appropriate use by adopting and enabling similar principles to those mentioned above. The ASAC led ESA initiative was developed in consultation with Australian and State/Territory governments to identify 74 essential statistical assets and assess the quality of the underpinning datasets. This process provides a prioritisation framework e.g. ABS uses ESA to inform its Forward Work Program prioritisation. However, ESA could be used so much more effectively across the national statistical system to identify data assets that do not meet quality standards or could be identified as priority information gaps. There is growing evidence that governments are committed to addressing issues of data priority and quality, as seen by the establishment of the Data Champions network within the Australian Government.
- iii. Under-utilisation of data – across all levels of government there is a lack of capability to analyse data which results in not making full use of data that already exists. This includes both the technical data analytical skills of employees and the use of systems and processes located within agencies. Suggested strategies to enhance capability might include promoting the need for data analysis skills as part of education e.g. in Bachelor degrees; deliberate recruitment of employees into government with data skills; agency examination of data

⁵ General Assembly 2014, 68/261. *Fundamental Principles of Official Statistics*
<<http://unstats.un.org/unsd/dnss/gp/FP-NEW-e.pdf>>

⁶ UK Statistics Authority 2009, *Code of Practice for Official Statistics*
<<https://www.statisticsauthority.gov.uk/archive/assessment/code-of-practice/code-of-practice-for-official-statistics.pdf>>

stores and the analytical skill and resource required to maximise the use of data for a range of purposes; and a deliberate move by governments to work in partnership with others to utilise and develop skills – e.g. with academia or with ABS.

- iv. Utilising the ABS more – legislation mandates, in part, that ABS' role should be to coordinate the statistical activities of official bodies in order to:
 - a. Avoid duplication; ensure compatibility; and enable maximum use of official statistics and the infrastructure for collecting official statistics
 - b. Formulate statistical standards for use by official bodies
 - c. Provide advice and assistance to official bodies in relation to statistics
 - d. Engage with international organisations to optimise harmonisation of Australian and official statistics with international standards, definitions etc.

The ABS is widely recognised for its technical expertise, data management expertise and statistical capability. In an era of decentralised data and statistical production, governments across Australia could take advantage of this and reaffirm the role of ABS in providing assistance and support on data analysis and statistical matters as a Centre of Excellence to maximise the production and use of government data. It is acknowledged that this would require additional resources but with positive cross-benefit outcomes which would help to eliminate current waste and unnecessary burden on businesses and the community.

- v. Progressing data integration for statistical and research purposes - as a Centre of Excellence, the ABS is well positioned to support evidence-based approaches to complex economic and social policy issues through use of its infrastructure, its public trust and its confidentiality provisions to link administrative datasets. This capability is already being demonstrated through projects such as the Multi Agency Data Integration Project (MADIP) which has shown current legislation, regulation and process barriers can be effectively overcome to realise the potential of public data assets. However, there is a need to continue initiating projects such as MADIP which capitalise on ABS expertise and infrastructure within and across jurisdictions to help overcome current real and perceived barriers across Australia relating to privacy; data access and sharing arrangements; and statistical standards which are inhibiting effective data integration at this point in time. ASAC acknowledges that MADIP partners aspire to MADIP being a cross-jurisdictional opportunity.
- vi. Application of statistical standards - standardisation of metadata, classifications and privacy legislation across jurisdictions will improve comparability and coherence. ASAC has previously highlighted the issues in this regard e.g. limitations of crime statistics in the Report on Government Services (RoGS) due to inconsistent definitions, classifications and counting rules.

3. Insufficient governance arrangements for the statistical system in Australia resulting in inefficient practices

12 The ABS Act (1975)⁷ provides ABS with a central role in coordination, collection, compilation and dissemination of data by official bodies across Australia. However, this is not supported by broader governance arrangements for the national statistical system as a whole. Good data governance generates a better understanding of data that may already exist and defines the process to follow in establishing data collections and using data. Establishing and adhering to data governance arrangements will reduce siloed initiatives as agencies seek to capitalise on the work of

⁷ Australian Bureau of Statistics Act 1975, Part II, Section 6 ,
<<https://www.legislation.gov.au/Details/C2012C00137>>

others, minimise reporting burden or develop collections that can be used for broader purposes. The need for good governance is more crucial than ever given the proliferation of agencies that produce or could contribute to nationally significant datasets and official statistics.

13 Currently, most data production occurs in agency silos. Datasets are frequently not comparable or shared across official bodies despite the availability of enabling technology. Nor are they developed with collateral benefits for broader analytical purposes. This arises from a lack of awareness and understanding of what others may already need or be doing. Data governance arrangements applicable across all jurisdictions would work to raise the desired understanding and act as an incentive by offering a more efficient way of operating. The implications of a lack of governance have been highlighted in many recent reviews including the Situational Analysis of the National Statistical System in 2014⁸, the Australian Public Service Commission Capability Review of ABS⁹ in 2014; and the Public Sector Data Management initiative¹⁰ undertaken by the Department of Prime Minister and Cabinet in 2015. The solution requires renewed commitment by all governments and agencies to consider the value and benefits of official, coordinated arrangements to maximise the availability and use of quality data to inform government decisions.

14 There is growing recognition across all levels of government that data is a strategic asset, however flaws in governance must be addressed in an objective and holistic way to maximise the benefit for public good. For example:

- i. addressing the need for greater clarity and standardisation across privacy legislation in jurisdictions, with the aim of balancing privacy concerns with the benefits of improved data availability through data integration
- ii. agreeing and resourcing high value datasets (such as the 74 Essential Statistical Assets developed through consultation with governments) to support public decision-making but also incorporating the management of high value private sector data such as scanner, telecommunications and satellite data.

15 There is a number of encouraging jurisdictional data initiatives underway. For example Tasmania's Stats Matter is a long term strategy to build Tasmanian Government statistical assets and capability; NSW Data Analytics Centre serves as a data sharing platform between NSW government agencies; the Queensland Government utilises governance arrangements supported by existing legislation, the Statistical Returns Act 1896, to facilitate use of data internal to government and for access by external organisations. However, these initiatives are limited to their jurisdiction and do not always consider the needs of the wider statistical system and the value to be gained nationally. Similarly, the Prime Minister and Cabinet Public Sector Data Management project and MADIP currently focus on data issues from the perspective of the Australian government's needs.

16 While these initiatives are underway, they are occurring in a piecemeal fashion with little consideration of the benefits that stand to be realised for Australia by a more coordinated approach across the statistical system. There needs to be more work done at a national level to ensure the maximum utilisation of public data in Australia by government partners – and governance is key to enabling this. The benefits would not be confined to effective use of data. Enhanced and effective governance of the statistical system would reduce current resource waste, unnecessary reporting burden on businesses and the community, and optimise future spending on data initiatives.

⁸ Borthwick, D. 2014, *Situational Analysis of the National Statistical System*, Report to ASAC's Crisp Revisited Reference Group 11 November 2014

⁹ APSC 2014, *Capability Review: Australian Bureau of Statistics*, <<http://www.apsc.gov.au/publications-and-media/current-publications/capability-review-abs>>

¹⁰ Australian Government, Dept. Prime Minister and Cabinet 2015, *Public Sector Data Management*, <https://www.dpmc.gov.au/sites/default/files/publications/public_sector_data_mgt_project.pdf>

General Recommendations

17 To address the key issues inhibiting data availability and use, our key recommendation is that governments should work through data governance arrangements as a priority for investment:

1. All governments should work towards establishing governance arrangements for the statistical system, providing coordinating arrangements for data initiatives which highlight both opportunities for, and the obligations of, all parties. This should include recognition of ABS statistical and analytical capability to underpin initiatives; and the opportunity to capitalise on the infrastructure, trust, independence, legislation and effectiveness of ABS to maintain privacy going forward in the age of data integration and big data use.
2. A parallel initiative could be to draw these governance arrangements together by further developing a formal National Statistics Policy involving agreement across all jurisdictions, drawing on initial efforts previously led by ASAC. Such a policy would seek to facilitate a holistic approach to national statistics and data across all jurisdictions so that they can be compared, integrated, and tell a coherent story. It would build the trust of users and suppliers to optimise the use of administrative data for statistical purposes. It should encourage consistent rules to govern data sharing, linking, and access for statistical and research purposes. It would minimise duplication and waste of resources, and encourage datasets to be adequately archived and documented to support further statistical and research use.
3. The Inquiry provides an opportunity to agree the need for stronger alignment with, and application of, the *UN Fundamental Principles of Official Statistics* by all levels of government in Australia. This should include further discussion and agreement between the Commonwealth and states and territories to maximise the development of administrative data for official statistical purposes through sharing and statistical data integration. In addition to the *UN Fundamental Principles of Official Statistics*, the OECD's *Recommendation on Good Statistical Practice*¹¹ is also applicable to the ABS and Australia's national statistical system. The *Recommendation* is the first legal instrument concerning statistics, and reflects the fact that the quality of statistics is fundamental for the quality of evidence-based analytical work. Whilst not legally binding, practice accords the *Recommendation* great moral force as representing the political will of member countries including Australia. The *Recommendation* was adopted in late 2015, and reports on its implementation will be made regularly to the OECD Council.

18 The Inquiry should also consider the following actions and recommendations:

1. That Commonwealth and state and territory agencies should review their existing data holdings and share these findings, with a view to understanding where further work is required to establish data priorities and quality, and statistical standards and classifications.
2. As agencies undertake data initiatives to support policy and evaluation, they look beyond current siloes and individual agency need and draw on the capability present in the ABS to ascertain what data is needed; what data may already exist; and the appropriate approach to achieve maximum benefits for the broader information and statistical system whilst

¹¹ OECD 2015, *Recommendation of the OECD Council on Good Statistical Practice*, <<http://acts.oecd.org/Instruments/ShowInstrumentView.aspx?InstrumentID=331&InstrumentPID=380&Lang=en&Book=False>>

meeting agency requirements.

3. That the Australian Statistician be empowered to raise issues of statistical concern with relevant Heads of Agencies arising from the misuse of data and statistics.
4. That governments actively seek to enhance the analytical and statistical capability of employees and agency capacity by enhancing resources; by incorporating data analysis skills into selection criteria for relevant positions; examining where analytical skill and enhanced processes could be incorporated to maximise data for a range of purposes; and seeking partnerships to enhance capability.
5. That ABS should be resourced to deepen its legislated role on statistical matters to provide technical and other advice and support in data collection, integration and analysis as a Centre of Excellence.

19 ASAC acknowledges that the issues and recommendations raised in this submission would require increased resources and time. However, they would also address existing, unnecessary wastage and opportunity costs which could be diverted to enhance Australia's statistical system. Given the significance of data to the quality of decision making in all sectors of the economy and Australian society, provision of enhanced data resources should have priority in consideration of government initiatives.

20 In summary, ASAC would welcome recommendations by the Productivity Commission that enable new approaches to reduce duplication; reduce reporting burden; increase access to data; standardise definitions for improved comparability; and improve sharing and use of existing administrative data at all levels of government. New approaches will enhance productivity and improve policy making for a better Australia.

21 I would be very happy to elaborate on any of the points made.

Geoff Allen

Chairperson, Australian Statistics Advisory Council

26 July 2016

Attachment A

AUSTRALIAN STATISTICS ADVISORY COUNCIL: membership as at 26/07/16

<u>NAME</u>	<u>POSITION</u>	<u>ROLE & ORGANISATION</u>	<u>REPRESENTATION</u>
Mr Geoff ALLEN AM	Chair	Director, ACIL Allen Consulting	Community
Mr David KALISCH	Member (<i>Ex-officio</i>) Australian Statistician	Australian Statistician, ABS	Australian Bureau of Statistics
Dr Luci ELLIS	Member	Head of Financial Stability Department, Reserve Bank of Australia	Business
Mr Nigel RAY PSM	Member	Deputy Secretary, Macroeconomic Group. The Treasury	Australian Government
Mr Stephen WALTERS	Member	Chief Economist, Australian Institute of Company Directors	Community
Professor Deborah COBB-CLARK	Member	Professor of Economics, University of Sydney	Academic
Ms Lisa GROPP	Member	Chief Economist, Business Council of Australia	Business
Professor Judith SLOAN	Member	Honorary Professorial Fellow, Melbourne Institute of Applied Economic and Social Research (University of Melbourne)	Academic
Vacant (pending appointment)	Member		New South Wales Government
Mr Mark JOHNSTONE	Member	Acting Deputy Secretary, Victorian Department of Treasury and Finance	Victorian Government
Vacant (pending appointment)	Member		Queensland Government
Mr Chris MCGOWAN	Member	Executive Director, Intergovernmental Relations and Emergency Management, South Australian Department of Premier and Cabinet	South Australian Government
Mr Kurt SIBMA	Member	Acting Director, Performance and Evaluation, Western Australian Department of Treasury	Western Australian Government
Mr Anton VOSS	Member	Deputy Secretary, Economic & Financial Policy, Tasmanian Department of Treasury and Finance	Tasmanian Government
Ms Kathy GOTH	Member	Director, Economic and Financial Analysis Branch, Australian Capital Territory Chief Minister, Treasury and Economic Development Directorate	Australian Capital Territory Government
Mr Craig GRAHAM	Member	Acting Deputy Under Treasurer, Northern Territory Department of Treasury and Finance	Northern Territory Government