

Data for Economic Analysis in Australia

Summary

This paper provides insights into the sources of data commonly used by economic development organisations, including local governments, in Australia.

The paper provides insights into:

- The most important types of data sought by economic development professionals;
- The common sources of these data and the adoption of new types of data; and,
- The impact of the limited availability of government data for the measuring the effectiveness of economic development.

Findings

Measuring the impact of economic development activities is critical, as the capacity to demonstrate impacts both guides continuous improvement in the field and assists in securing resources to further growth at the local or regional scale. Economic development has many stakeholders, including elected members of council, ratepayers, governments at all levels and economic development professionals interested to learn from the success of others. There is a pressing need to develop robust metrics on the impact of economic development programs and activities. These measures are needed in order to:

- justify the expenditure of scarce public sector resources by local governments, or indeed any tier of government;
- provide an evidence base on progress towards economic development goals;
- help local government agents to better allocate funds across economic development plans by monitoring and evaluating their impacts and Return on Investment (ROI);
- assist in the management of economic development funds by assisting local governments and other economic development bodies monitor their performance, and take appropriate action;
- assist economic development practitioners select the most appropriate and effective strategies in order to achieve their economic development goals; and,
- build momentum in economic development efforts by creating knowledge of local success that can be shared with businesses, the community and other key stakeholder.

In Australia, unlike the USA, data collected by governments is considered to be the property of ‘the Crown’ (that is, of government) rather than the people and this has made access to information resources more difficult for economic development practitioners in Australia compared with some other nations.

Insights into data needs and availability amongst economic development practitioners in Australia is available through the findings of several research projects. The professional organisations Economic Development Australia (EDA) and the Victorian State Practitioners Network of Urban Enterprises undertook a review of performance measures of economic development in 2016. The review found that few data sets are freely available to local governments or other economic development organisations. The research set out key factors in the evaluation of data sets, including the need for measures that:

- respond to the objectives of local government in economic development;
- are available at minimal or no cost;
- are available annually;
- are not time consuming to process;
- consider the diverse approaches to local economic development; and,
- are comparable across various local governments.

From its survey, the authors concluded there were three overarching objectives to local economic development in local government in Victoria:

- supporting the existing business base;
- attracting new businesses and jobs; and,
- promoting liveability and sustainable communities.

The report recommended a number of high-level metrics for economic development activities within local government:

- local government expenditure on economic development as a proportion of total rates revenue;
- number and types of engagement with the existing business base;
- awareness and satisfaction with local economic development; and
- number of new businesses.

Available Data Sets

The Australian Bureau of Statistics

The ABS is a major source of data of potential value for economic development professionals in Australia. The ABS undertakes the five-yearly population Census, and also collects a range of other data of value in analysing economic performance. Many of the readily-available ABS data collections are not presented at a spatial scale of interest to local economic development professionals, as they are often published at a very broad scale.

The five yearly Census data is an important resource in the preparation of economic development strategies. For any region it provides data on:

- Population and rates of change in population;
- Occupation;
- Skills;

- The size and gender of the economically active population;
- Industry structure;
- Reliance on statutory incomes;
- Age structure and ethnicity; and,
- Household and individual income.

Census data is potentially available at a range of spatial scales and published material can be accessed through the Internet at <https://www.abs.gov.au/>. Economic development organisations also have the option of purchasing customised data or analyses from the ABS.

Australian Business Register

The Australian Business Register is a frequently used method for counting new businesses – and therefore economic growth - in a region, community or urban centre. However, there are limitations as in raw form it counts businesses that are not economically active or do not employ others. Key issues include:

- The Australian Business Register is used by most local governments to measure industry growth and decline, though most users consider it is a poor measure of firm size and growth.
 - Most users filter the data to remove trusts, remove fields that are not applicable to their region; remove non trading Australian Business Numbers (ABNs) and remove superannuation accounts and deceased estates.
 - Most local governments use consultants and third party providers to undertake this task (EDA and Urban Enterprises 2015).
 - the application of filters to this data may remove several groups of businesses of critical interest economic developers

Business Longitudinal Analysis Data Environment (BLADE)

While not currently available to economic development practitioners, the ABS's Business Longitudinal Analysis Data Environment (BLADE) is the most comprehensive firm level statistical data base in Australia. BLADE can be described as a collection of integrated, linked longitudinal data sets that was created to meet a data request from the OECD. It is not a single, static data set. It brings together ABS survey data such as the Business Characteristics Survey and the Research and Development Survey, alongside government administrative data including Australian Tax Office data on PAYG receipts, Business Income Tax, and Business Activity Statements, alongside Department of Industry, Innovation and Science data on programs and IP Australia data. BLADE is only available from 2002 to 2015, but could be extended into the future. It is possible that real-time reporting of ATO data will be introduced, and this would remove concerns about timeliness.

Access to BLADE is significantly limited, with only staff employed by the Australian statistician – directly or through secondment – able to access BLADE. BLADE holds considerable potential for economic development practitioners in the future, although the limitations on access may limit its take up. If it becomes more generally available in the future, it could evolve into a valued analytical tool.

Other Government Data Sets

Other government data sets include:

- [Australian Government Data.gov.au](#);
- [Research Data Australia](#);
- [NSW Data Analytics Centre](#);
- [Australian National Data Service](#);
- [Chief Data Analytics Officer Public Sector](#);
- [Open Data Tool Kit – SA Premier and Cabinet](#);
- [IP Government Open Data \(IPGOD\)](#);
- [National Cities Framework](#); and
- [Open Council Data](#).

Commercially provided data – REMPlan

REMPlan is one of the most commonly used analytical tools used by economic development professionals in Australia. According to its website:

REMPLAN Economy provides valuable insights into the performance of key sectors in your region's economy. Underpinned by the latest data from the Australian Bureau of Statistics (ABS), REMPLAN Economy delivers estimates of employment, output, wages & salaries, imports, exports and gross regional product for 114 industries.

Compare education, occupation and incomes for your workforce and benchmark with other regions to identify targeted opportunities for education, training and skilled migration. (<https://www.rempln.com.au/economy/> (accessed 6 Sept 2019).

REMPlan is commonly used in local governments in particular, as its non-economic components support other aspects of the work of councils. Its economic analysis modules claim capacity in modelling, the analysis of the industry and workforce, the assessment of the value of tourism and events, developing insights into businesses within their region, and identifying gaps. REMPlan makes use of Census and other data, making it more accessible for non-specialist users. It has the capacity to integrate Australian Business Register data into its operations.

Commercially provided data - Spendmapp by Geographia

Spendmapp by Geographia is a new subscription-based web platform designed to assist local government in tracking their local economy through resident and visitor spend. Spendmapp data is based on transaction data from one of Australia's major banks. A minimum subscription is 12 months with four subscriptions options available and discounts on mid-level packages for small councils (under 10,000 residents), custom set up can also be negotiated. Data is available at any one time for the previous 15 months and the data from one month becomes available in the middle of the following

month. The data available in Spendmapp may also prove useful across a number of council departments.

Spendmapp transaction data is available with location of transaction and of the card holder at the LGA or suburb level depending on the subscription package. The volume of spending by industry category is also available on most subscriptions packages. Daily spend tracking is available in the top package or as an additional feature of any package. Some packages report on the impact spending has on employment and floor space. The top package provides additional economic and population profiling and modelling. Spendmapp allows local government data in neighbouring areas to be compared, with the top locations of 'escape spend' included in reports.

Depending on the subscription package the information accessed will vary but each package allows filters to be applied to the data presented in either the map or graph and to be exported. Data sets in spreadsheet form are not available in full, only the minimum data required to plot the graphs (x and y intercepts).

While Spendmapp is in its early stages, it seems to provide data that fills a gap that local government currently has in understanding its local economy.

Commercially provided data - Neighbourlytics

Neighbourlytics provides place making reports with three types of dashboards: People, Place and Lifestyle (customised dashboard requests are considered on a case-by-case basis). The reports are produced on a 1km radius (up to 5km radius for city wide reports) based on 30 days of data, which includes but is not limited to:

- social chatter;
- online reviews; and
- ABS data

The reports produced by these dashboards can be used to understand:

- the most popular restaurants;
- neighbourhood identity; and
- activity and place.

Commercially provided data - Inside Airbnb

Inside Airbnb is an independent, non-commercial site providing free data taken from the Airbnb website. The website contains an interactive map, to which the user can apply filters to gauge the infiltration of Airbnb in the local government area. The data used to create these maps is also available for download. Currently, Sydney, Northern Rivers, Melbourne and Hobart are the only areas available in Australia. This data is not endorsed by Airbnb.

Commercially provided data - AirDNA

AirDNA is a commercial platform that provides government, commercial organisations and Airbnb hosts with Airbnb data for a fee. AirDNA data is endorsed by Airbnb and data is available for most capital cities dating back to October 2014 and elsewhere Airbnb is operating since October 2016. AirDNA has been collecting data from HomeAway and Stayz over the last 18 months and will have this available for purchase in the coming months. In some cases, AirDNA restricts to whom they provide the use of their data.

Commercially provided data - ArcGIS Online Esri Australia

ArcGIS Online by Esri Australia allows access to public data through ArcGIS Online, a cloud-based mapping platform.

References

- Economic Development Australia, Victoria Committee & Urban Enterprise 2015, *Local Government Industry Performance Monitoring and Benchmarking Survey*.
- Economic Development Australia & Urban Enterprises Victorian State Practitioners Network 2016, *Annual Performance Measures of Local Economic Development in Victoria*.
- Hansell, D & Rafi, B 2018, Firm-Level Analysis Using the ABS's Business Longitudinal Analysis Data Environment (BLADE)', *The Australian Economic Review*, vol. 51, no. 1, pp. 132-138.