



Australian Government
Department of Employment

Department of Employment Submission

Productivity Commission Inquiry –
Data Availability and Use
July 2016

Who we are and what type of data we hold

The Department of Employment is responsible for policies and programmes that foster a productive and competitive labour market. These policies and programmes assist job seekers into work, meet employer needs and increase Australia's workforce participation. The department also facilitates jobs growth through policies that promote fair, productive and safe workplaces.

The department owns or manages a variety of data holdings. Over 30 separate databases and derived datasets were identified in a recent data stocktake. Much of our data holdings are administrative and transactional in nature in order to support the programmes we administer. They often contain sensitive information about job seekers, for example: demographics, referrals, commencements and outcomes; as well as payment transactions (such as claims for service and outcome fees, or wage subsidies). There are also data holdings relating to Australian businesses, including wage related details, insolvencies and other commercially confidential material.

Our derived datasets are created to monitor, evaluate, analyse and model data in order to provide advice to Government on the impact of policies and programmes.

We also manage data collected by other Government agencies such as the Department of Social Services, the Department of Human Services and the Department of the Prime Minister and Cabinet. We are supported by the Shared Services Centre for various functions and it manages some of our data on our behalf.

How we use and share data

The use of data is integral to the work of the department in assisting us to deliver on our core functions of policy development, programme delivery, research and programme evaluation.

The department has been active in sharing a significant amount of data for many years across government agencies and with the public. A number of our datasets have been made available via data.gov.au. Specific examples are outlined below.

Workplace Agreements Database

We maintain the Workplace Agreements Database, which records wage increases and conditions data for all federal enterprise agreements made since 1991. The Workplace Agreements Database contains information on over 140,000 enterprise agreements, and is a unique and valuable resource in the field of workplace relations.

Data from the Workplace Agreements Database is made available to external stakeholders in a number of ways: we publish a quarterly report of wage increases data on the department's website; we invite stakeholders to request Workplace Agreements Database data at any time; and we have recently released the entire Workplace Agreements Database dataset publicly. Access to this particular data will be advertised on the department's website, and users will be able to download an application form and submit it to the department. This approach enables the Department to maintain a relationship with stakeholders, to more easily monitor (as observers, rather than

regulators) any publications using our data, and to be readily on hand to respond to any issues or queries that arise.

Research and Evaluation Database

The Research and Evaluation Database (RED) is a comprehensive collection of information on recipients of Australian Government payments. The RED is built and maintained by the department and is constructed from episodic events of all income support payments (excluding Department of Veterans' Affairs payments) from 1 July 1998. The RED includes information on recipients' payment history, benefits and employment services received, as well as details of income, activity requirements, partners, children, demographic information and other personal circumstances.

Labour Market Information Portal

The department publishes an array of information about the labour market via the Labour Market Information Portal at www.lmip.gov.au. The range of products publically available provides information about industries, occupations and skill shortages. Data includes which industries and occupations have the largest number of jobs, where the new jobs will be over the next five years and where there are skill shortages.

Fair Entitlements Guarantee Database

The Fair Entitlements Guarantee database includes a range of information about insolvent entities and employees who were made redundant and have had their employment entitlements paid under the Fair Entitlements Guarantee safety net due to liquidation or bankruptcy of their employer. Entity information includes industry, location and size of employer, company directors and insolvency practitioners connected with the entity. Employee information includes industry, location, gender, re-employment details (at the time of claim). The data is commonly shared with other agency regulators such as Australian Tax Office and Australian Securities and Investment Commission to support compliance activity addressing corporate behaviour. The data is also made available for academic research associated with non-payment of employment entitlements in insolvency.

Our approach to promoting increased data use and sharing

The department supports the findings of the Department of the Prime Minister and Cabinet's *Public Sector Data Management Report* (2015) that improved availability of reliable data, combined with the tools to use it, can create new economic opportunities through development of new products and services. It can also enhance consumer and business outcomes, better inform decision-making and policy development and foster greater efficiency and innovation in the economy.

We have adopted a proactive approach to data use and data sharing in the department in order to build our evidence base to support our core functions of policy development and service delivery.

We are implementing an *Evaluation, Research and Evidence Framework 2015-2020* to ensure the department's investment in evaluation and research supports evidence-based policy and maximises the use of our evidence base. The Framework has identified data management as a priority area, with the goal of establishing and implementing a programme of projects that improve data quality, accessibility and capability.

In addition, we are developing a department-wide Data Management Strategy in order to ensure we are implementing best practice in relation to data management and to guide our future investment in data capabilities, including technological advancements and workforce capabilities. The department is also working to improve on its level of specialist data analytics expertise and is sponsoring staff members to undertake a Postgraduate Course in Applied Data Analytics at the Australian National University, a course specifically designed in collaboration with the Australian Public Service for its staff.

While the department has strong capability in the use of data, a number of projects are currently underway to further strengthen this. Examples of current projects we are progressing to improve our use of data include: adopting new tools for data analytics to enable real time analysis of data; making this available to our funded employment service providers so that they can see the same data; and enhancing metadata, with a data dictionary, for our employment services data so that it can be shared more broadly and analysed more easily based on a common knowledge of the data.

There are opportunities to enhance the utility and analytical capability of our data by linking our data, employment services data particularly, with other data sources. We are working with other Government departments on data linkage projects. A further area to explore would be data on services provided by states and territories (for example housing, health, training and education). This kind of data linkage will help better understand job seekers' circumstances, behaviour and outcomes.

Opportunities and Challenges

Our proactive approach to data use and sharing is largely driven by the opportunities it presents for future policy design and programme delivery. We would like to be more proactive in engaging with external stakeholders, as greater interaction and consultation might change some of our approaches to the information we collect or the way we collect and compile information. This would make it easier for external stakeholders to access and use our data in a way that fits their purpose.

Impact investing initiatives such as social impact bonds are a strong example of how governments have been able to use greater data sharing with the private sector to test new approaches to systemic problems. These initiatives rely on government agencies and service providers having access to accurate data, particularly to inform the calculation and measurement of costs to government in delivering public services. A number of states have established or are establishing social impact bond initiatives which require this type of data to underpin accurate financial modelling.

The department is working with CSIRO Data 61 to investigate a new long term labour market forecasting model for jobs, skills and "outsourced tasks" demand. The current scoping study is looking at the feasibility of combining big data and traditional data to rapidly identify perturbations in the labour market.

Greater use and sharing of data also presents a range of challenges to the department.

The protection of privacy and security within legislative frameworks can, at times, limit the department's ability to use and share data. For example, there are specific protected information provisions contained in the Social Security Law, which go beyond the Privacy Legislation and Privacy Principles, which set a high threshold for allowing the use and reuse of protected information.

Resources involved in preparing our data for re-use and sharing is a challenge for the department. The challenge is in the time it takes staff to prepare, clean and de-identify the data for external use. For example, one of our key data holdings, employment services data, is contained in a transactional database, which was not constructed for research purposes. We are currently developing a prototype data dictionary for this data, to be implemented going forward. However this particular solution will not be retrospectively applied to the system due to prohibitive costs. Over time, as the system is refreshed, we can apply the data dictionary, and we estimate this project may take around five years.

Machinery of government changes also present challenges in terms of data management over the longer term. Data access may be lost when a function transfers from the department and often complex access agreements require lengthy negotiation thereafter to reinstate access. When functions are supported by IT infrastructure this also requires complex arrangements to ensure business continuity. The implications of this is that significant resources are invested in re-establishing basic data management practices, such as putting in place new procedures and protocols, as well as technical and service delivery solutions, rather than on value-add projects to improve our use of data.

Data acquisition itself, which is necessary to support our core functions, also presents challenges. In addition to the IT investment required, it is necessary to assess the costs and benefits across multiple, sometimes competing agendas. Other considerations include the ongoing need to reduce red tape and streamline service delivery for our customers, which can result in certain processes no longer occurring and the data no longer being internally collected. In the future the department recognises the need to be more creative in considering other sources of data and exploring partnerships to draw on a broader pool of already available data or when considering new data acquisition.

Contact details

If you would like to discuss elements of this submission please contact Ms Debbie Mitchell, Acting Workplace Relations Programmes Group Manager and the department's Data Champion