



House Standing Committee on Regional Australia: Inquiry into the use of 'fly-in, fly-out' (FIFO) workforce practices in regional Australia

SUBMISSION BY THE AUSTRALIAN BUREAU OF STATISTICS August 2012

Introduction

The Australian Bureau of Statistics (ABS) is Australia's official national statistical agency. The role of the ABS is to assist and encourage informed decision-making, research and discussion within governments and the community by leading a high quality, objective and responsive national statistical service.

Identifying and responding to the information needs of governments and the community is a high priority of the ABS. The Inquiry into fly-in, fly-out (FIFO) workforce practices in regional Australia can be well informed by the appropriate use of ABS data, as well as by using other non-ABS data sets and local knowledge, such as that reflected in many of the submissions. This submission will explain how ABS data can be used for informing this Inquiry, and will also highlight some questions or issues which the ABS is currently exploring how best to address.

One of the key products the ABS is responsible for is the Census of Population and Housing (hereafter, "the Census"), from which the most common population measures are derived. This submission will briefly explain the following key population concepts and discuss their relevance to the Inquiry:

1. Enumerated population
2. Resident population
3. Working population
4. Service populations

1. Enumerated population.

The Census counts people at their place of enumeration (i.e. where they spend Census night). People counted in an area on Census night include a mix of usual residents and people who usually live elsewhere or have no usual address.

2. Resident population.

Resident population essentially refers to that population that is usually resident within a particular town, city, region, or State.

The Census asks three questions on usual residence:

- i. where the person usually lives,
- ii. where the person usually lived one year ago, and
- iii. where the person usually lived five years ago.

Where a person usually lives is defined on the 2011 Census form as “that address at which the person has lived or intends to live for a total of six months or more in 2011”. The vast majority of Australians have one home and for them this question is straight forward. However, the ABS recognises that in some circumstances this question is more difficult, such as children in shared custody, persons with holiday homes in which they spend part of the year, or a worker who lives some time in a city home and some time in a mining camp. As the Census is self-enumerated, the person decides where to locate their usual residence. The ABS is currently exploring the feasibility of a question relating to second residence in the next Census, to cater for those situations where “usual residence” does not fully capture a person’s living arrangements.

The usual resident population for an area includes everyone who gave a dwelling in the area as their usual residence. This will include a mix of people counted in the area on Census night, and people who were elsewhere in Australia on Census night.

Work is a factor influencing people’s decisions to move, and internal migration data can provide insights into the geographical distribution of regions that are experiencing notable increases or decreases in resident population. Using the Census data comparing address of usual residence 1 year ago and 5 years ago with current usual residence and place of work will illustrate the extent to which people have migrated to their place of work. For years in which there is not a Census, the ABS uses administrative data sources to estimate regional population movements, and has recently investigated the potential to provide annual internal migration estimates which would provide a better understanding of movement into and out of mining areas. See, Discussion Paper: Assessment of Methods for Developing Experimental Historical Estimates for Regional Internal Migration, Dec 2011 (ABS Cat. no.

3405.0.55.001). These estimates are scheduled to be published in the August 2012 issue of Migration Australia (ABS Cat. no. 3412.0).

Comparing the enumerated and usual resident populations:

Comparing and contrasting the size of the enumerated and usual resident populations for an area may indicate whether the effects of cyclical or seasonal employment or tourism can be seen in the enumerated population of the area on Census night. Seasonal employees (such as fruit pickers) and long distance commuters (regularly travelling to an area of work - such as people on rosters in the mining industry) may appear in the enumerated populations of certain areas, but not as usual residents of the area. The same can be the case for tourists, business travellers and anyone else away from home on Census night. As the Census is taken at one point in time, not all seasonal effects will be captured.

Locating people in their area of usual residence accounts for seasonal factors, includes people who were away from home and excludes temporary visitors. After adjustments, the resident population becomes the basis for the estimated resident population, used in deciding electoral distribution and funding for local governments. The estimated resident population is the preferred population for most purposes of government and researchers.

3. Working population.

The working population of a region is determined by the workplace address for the main job held in the week prior to Census night. The second release of Census data will occur on October 30th 2012. This data includes labour force status, workplace address, occupation and industry of employed persons, and method of travel to work. When analysed in conjunction with currently available data such as place of usual residence and dwelling type, researchers and government agencies can gain a better understanding of the workforce in a given region. As part of the data release at the end of October, analytical articles addressing issues of seasonal and service populations, including FIFO/DIDO workers, are currently in preparation. This research will present case study accounts of areas impacted by mining, seasonal migration and tourism activity.

The usefulness of Census data for informing on the working populations of particular areas may vary, depending on factors such as the characteristics of the local populations and specific issues associated

with local industries. Given that the Census is self-enumerated, the completeness of responses, such as workplace address, will also impact on the analysis which can be done.

4. Service populations.

The ABS notes that the Committee has heard testimony regarding population estimates for areas which contain a large number of non-residents accessing local services. Many communities across Australia have large non-residential populations, such as tourist destinations and agricultural areas at harvest time, as well as those mining areas with a substantial component of FIFO workers.

Australia's official population estimates distinguish between a region's "resident population" (the number of persons who have their usual address in an area) and "service population" (the number of persons who use services such as water, hospitals, and garbage collection in that area). Using this definition, FIFO-workers and other long distance commuters contribute to the service population of an area.

Service populations fluctuate more than resident populations, making their estimation more complex. For example, the number of people using litter bins in a city's CBD will be higher during the day than at night; snowfields will be more densely populated during winter than summer; and FIFO mining camps may contain many thousand more workers during the construction phase of a mine than during the extraction phase. The paper "Population Concepts" (ABS Cat. no. 3107.0.55.006) explains these issues in greater detail.

The ABS has expended considerable effort in researching how to provide better estimates of service populations, including testing new Census questions, the use of supermarket sales data and extrapolations based on the number of community resources such as ATMs. These investigations showed that there was no single strategy that could be used to capture the different varieties of service population (tourist, fly-in fly-out worker, agricultural worker etc.). Nonetheless, viable methods of estimating the fly-in fly-out mining workforce have been produced using a variety of ABS data, such as building approvals, tourist accommodation and labour force estimates and other administrative data in conjunction with the Census. Some examples of such methods are included in:

- Service Population Pilot Study, An Investigation to Assess the Feasibility of producing Service Population Estimates for Selected LGAs (Demography Working Paper 99/3). In particular

Appendix B – Estimating Components of Service Populations – Case Study 1: Fly-in/fly-out Workers in the Shire of Wiluna.

- Labour Mobility and Intentions: Western Australian, 2008 (ABS Cat. no. 6209.5)
- When ERPs Aren't Enough – a discussion of issues associated with service population estimation, 1996 (ABS Cat. no. 3112.0, Demography Working Paper 1996/4)
- Australian Social Trends: Towns of the Mineral Boom, 2006 (ABS Cat. no. 4102.0)
- Population measures: A case study, 2003 (ABS Cat. no. 1367.5)

The ABS will continue, within its available resources, to investigate ways in which service populations could be estimated. However, because of the complexities involved in measuring these populations and often the lack of relevant data, the ABS cannot produce comprehensive estimates of service populations within its existing resources. Even if additional resources were available there would be substantial methodological challenges that would need to be addressed; however additional resources would enable the ABS to contemplate providing a broader suite of measures than it is currently able to produce.

Concluding remarks

As the national statistical agency, the ABS is committed to the on-going provision of high quality population statistics, including resident, service, and working populations, and internal population migration data. These data sources are an important source for understanding populations in regions. The ABS recognises the need to continue to work with data users to support their analyses, and to improve population statistics to better meet user needs where feasible. In addition, the ABS plans to provide analysis of different population types and a number of case studies of regions using available ABS data, which will provide a useful guide for others to undertake analysis relevant to the service issues in their local region (whether that be tourism, FIFO workers or seasonal agriculture). The ABS continues to explore developing improved measures of different types of populations, but providing these measures as a matter of course is beyond the capacity of our current work program. Doing this well will require additional investment and the development of additional data sources. The ABS understands that this regional information is invaluable evidence to inform debate, policy and service delivery. With the appropriate resources, the ABS, with its data collection infrastructure and ability to integrate new data sources with existing economic and social datasets, is well positioned to fill data gaps in this field.

