Changes in pricing and access arrangements for the *Job Markets Australia* online database at www.jobmarkets.com.au were introduced at the end of July, 2013. Some long-term database users have since indicated they are shifting to websites with free labour market information.

The websites usually mentioned are: http://joboutlook.gov.au

www.jobguide.deewr.gov.au

www.myfuture.edu.au

www.deewr.gov.au

www.abs.gov.au

You will notice that these websites have a government or education web address. Each has a large amount of statistical and/or qualitative information, but the statistical data on www.abs.gov.au outweigh all others. But, none of them, individually or together, will provide what the *Job Markets Australia* online database has for over 1,000 *ANZSCO* occupations.

http://joboutlook.gov.au

Job Outlook has statistical and other information on about 350 of the 358 unit group occupations in the ANZSCO Dictionary. The statistical features are very prominent, and most of these are dependant on the Australian Bureau of Statistics' Labour Force survey. Useful information is sourced from O*NET™, and the links from specific occupations to other websites having vacancy or education/training data are perhaps Job Outlook's main strength.

As for the prominence of the website's statistical features, even with averaging of the Bureau's quarterly data, the smoothed survey results are not always reliable. This is especially the case for small and relatively small occupations and for cross-tabulations and dis-aggregations in medium-sized occupations. The Bureau's advice is clear: the *Labour Force* survey "is designed primarily to provide estimates of employment and unemployment for the whole of Australia and, secondarily, for each state and territory" [*Labour Force*, *Australia*, catalogue no. 6202.0, June, 2013, Quality Declaration — Relevance, accessed online at www.abs.gov.au]. Incidentally, these aggregates are for the employed labour force as a whole (not separate occupations or components within them) and for those actively seeking work. The supplementary surveys conducted under the *Labour Force* umbrella are, however, expressly designed to produce other particular data, but seldom to the level of unit group occupations.

For reasons unknown, the Department of Education, Employment and Workplace Relations chose, more than a decade ago, to break with best practice in detailed occupational research in Australia. It opted solely for survey data instead of the counts and wealth of detail in the most recent *Census* combined with survey data to indicate changing levels and trends. The *2011 Population Census* is the most recent, of course.

It is sometimes claimed that the *Job Outlook* database has more up-to-date statistics than the *Job Markets Australia* online database because of the latter's reliance in many descriptive fields on the most recent *Census*. Notwithstanding, the current job numbers and earnings in *Job*

Markets Australia utilize the annual Labour Force and the Employee Earnings, Benefits and Trade Union Membership survey respectively. What the critics fail to realise is that the benchmarks of the Labour Force survey are changed after every Census, and that the new benchmarks from the 2011 Population Census will be introduced in February, 2014. In other words, the benchmarks still in use are based on the 2006 Population Census. It is therefore wrong-headed to claim that the statistical data in Job Outlook are always more up-to-date.

Anyway, the primary shortcoming of the Department's *Job Outlook* methodology is that it cannot avoid including a great many unreliable statistics. This is borne out by its year-in and year-out publication of median weekly full-time and total earnings by unit group occupation that have relative standard errors (RSEs) of 25% to 50% and even 50% plus. The *Some free earnings figures* paper [accessible on the Sources page of www.jobmarkets.com.au] looks at the relevant earnings for August, 2012. It reports that 121 (or 33.8%) of the 358 unit group occupations have median full-time earnings with RSEs greater than 25% and that 91 (or 25.4%) have median total earnings with such RSEs. About one in three *Job Outlook* occupations has unreliable median full-time earnings and about one in four has unreliable median total earnings. These are the All Ages totals. *Job Outlook* has no details of earnings by age-group.

www.jobguide.deewr.gov.au

Job Guide is the longest continuously-running careers resource in Australia. According to its homepage, the *Job Guide* website has information on over 500 occupations.

Occupational entries have a section called "Employment Opportunities", followed by contact details for organisations that may supply more details. The section itself is usually general and short, and the default is often no more than commentary on employing industries.

The website's strengths could be said to be its lengthy job descriptions for each occupation, distinguishing duties or career paths for specialisations within an occupation, and contact details for training providers.

The advice on the website's homepage needs to be emphasised: "Job Guide is written and produced for Year 10 students". It is designed for teenagers yet to launch their careers and yet to leave school. Job Guide is not a labour market information resource.

www.myfuture.edu.au

The *My Future* website is "for anyone who needs information to support their own or another's career planning" [sourced from the website's FAQ page, "What is this website for?"].

The website does not set out to supply any labour market information for specific occupations, although it has some papers dealing with work trends. The Labour Market Information section in each occupation has a link to an occupation in the *Job Outlook* database.

For this review, one occupation was selected at random: "Care Worker". The eight variations of titles or specialisations given in the entry for Care Worker actually pertain to three unit group occupations in the ANZSCO Dictionary. Care Worker is thus an amalgam of three ANZSCO

unit group occupations. I did not attempt to see how many other *My Future* occupations were similarly structured nor how many were one-to-one *ANZSCO* matches.

Worryingly, the *My Future* "Labour Market Information" link for Care Worker is to Aged and Disabled Carers, while the *My Future* average weekly earnings and earnings distribution figures refer to Special Care Workers. These are distinct unit group occupations.

In short, the website does not provide labour market information for specific occupations.

www.deewr.gov.au

The Department of Education, Employment and Workplace Relations' website has much content that can be described as labour market information. It has what it calls a "Labour Market Information Portal", but the homepage (a work in progress in early August, 2013) only offers "Employment Research and Statistics". Click through that to see what's on offer.

There's almost too much to digest, and I suggest going to the "Top Content" listing. The three top-listed are Skill Shortages, Regional Aspects of employer' recruitment experience, and DEEWR Leading Indicator of Employment. The most useful is probably the last.

Other useful papers and series are *Small Area Labour Markets* and the *Regional Labour Market Statistics* which reproduce the Bureau's statistics, the former with value-adding that draws on other sources. The former also gives you unemployment numbers and rates down to LGA level, while the latter has analysed aggregate labour force data for the Bureau's statistical regions. The dimensions of country regions, unlike the city regions, preclude their being seen as accessible labour markets. Aggregate and occupational group data are available, but there is no data for the 358 unit group *ANZSCO* occupations.

Apart from specific occupations cited in papers such as *Skill Shortages* (focused on skilled occupations deemed to be of economic importance), the DEEWR website does not present any in-depth, systematic labour market information for the 358 unit group occupations in the *ANZSCO Dictionary*, and certainly not for the 1,000 detailed *ANZSCOs*. The Department's flagship for unit group occupations is the *Job Outlook* database, which is reviewed briefly above, though the DEEWR website has other papers including extracts from, or re-workings of, the the *Job Outlook* database.

www.abs.gov.au

The Australian Bureau of Statistics' website has been transformed into a veritable cornucopia of statistics and information about statistics. It is the closest a government department can come to being a living national treasure.

Having collected so much data for so long from the entire adult population in the five-yearly *Census*, from more than thirty thousand households every year on rotation, and from innumerable business and other entities, the collector is giving them back freely — well, most everything is free on its website. It also gives generous permissions through its Creative Commons Attribution 2.5 Australia License.

There is a range of free statistical data for 350 unit group occupations. The *Job Outlook* website has analysed the *Labour Force* data in that regard, but there is other survey data to the same occupational level that can be sourced at no cost. You need to know what you are doing and have the time to identify and analyse the right data. Especially take note of the Bureau's advice as to which statistics are unreliable.

You can get free access to *Census* products that will generate handy cross-tabulations for unit group occupations, nationally, by State/Territory, and to a fine geographic level. The website doesn't have free data for the 1,000 detailed ANZSCO occupations.

In conclusion: the information alternatives discussed in this paper, alone or combined, cannot match the *Job Markets Australia* online database viz.

- o more than 1,000 detailed (six-digit) ANZSCO occupations covered systematically
- o the depth and consistency of the labour market and related information fields
- o the number of information fields (14 searchable and more than 25 in each occupation)
- o counts of the minimum number of regional/local jobs in each occupation, plus State/ Territory and capital city job numbers in each occupation
- the sustainable methodology that follows best occupational research practices and delivers reliable earnings by age-group and other statistics
- o acceptance by Courts and Tribunals and other jurisdictions
- use since 2004 by so many professionals writing and making recommendations about suitable employment and achievable earnings, and
- o availability on one website and in a time-efficient and easily accessible way.