

# **Overview of demand for managers, professionals and technicians: Tasmania – June 2009**

## **Economic Background**

Total employment in Tasmania fell by 2.0 per cent over the 2008-09 financial year, compared with growth of 4.1 per cent in the 2007-08 financial year. The long-term annual average rate of employment growth in Tasmania is 1.2 per cent. In addition to a fall in employment growth, Tasmania also experienced rises in unemployment in 2008-09, with the unemployment rate rising from 4.1 per cent in July 2008, to 4.8 per cent in July 2009. Labour force participation rates have also fallen over the year, from 62.3 per cent in July 2008, to 60.7 per cent in July 2009. Following several years of strong employment growth in Tasmania, the economic climate changed quite suddenly in the latter part of 2008, as a result of the local impact of the global recession. The mining industry and the manufacturing industry were among those to be affected earliest, and to a greater extent than some other industries. From September 2008 to July 2009, employment in Tasmania fell in each consecutive month, although there were some signs in mid-2009 that declines in employment may be slowing.

The Tasmanian State Budget for 2009-10 has forecast employment to fall in 2009-10 by a further two per cent, with a return to growth not predicted until 2011-12 at a modest 0.75 per cent. Unemployment is forecast to reach seven per cent in 2009-10, and to peak at 8.75 per cent over the following two years.

The fastest growing industries in Tasmania over the five years to 2009 have been construction, which has grown by 71.7 per cent, with finance and insurance, and the wholesale trade both up by 48.1 per cent. Government administration and defence grew by 35.9 per cent, while property and business services grew by 29.9 per cent, health and community services grew by 26.9 per cent, and education was up by 19.9 per cent. The industries which experienced the largest falls in employment were transport and storage, which declined by 14.6 per cent, manufacturing, down by 12.1 per cent, and mining down by 9.5 per cent.

## **13 Specialist Managers**

The two occupations researched in this group were Production Manager (Mining), and Engineering Manager. Demand for Production Managers (Mining) is largely driven by the level of activity in the mining industry, which in turn is usually influenced by trends in international commodity prices. Even though activity in the mining sector slowed significantly from the latter part of 2008 onwards, industry sources suggested that it would still be difficult to recruit to highly skilled professional positions. This is largely due to the fact that there were skill shortages across a range of occupations prior to the downturn, and these experiences are still fresh in the minds of employers, who are trying to retain staff they know would be difficult to replace. Demand for Engineering Managers varies according to their industry of employment. According to ABS 2006 Census data, the manufacturing industry is the largest employer of Engineering Managers. Total employment in the manufacturing industry has fallen in recent years (see above), and in fact employment in manufacturing in Tasmania has been in long-term decline for many years. This is largely due to forces like competition from countries such as China where wages and overall production costs are much lower, the steady reductions in tariffs, the moving off-shore of some manufacturing plants, and greater flexibility in current workforces. In addition, technological developments have increased productivity, but this often results in reductions in employment levels.

## **23 Design, Engineering, Science and Transport Professionals**

Quantity Surveyors, Civil, Electrical, Mechanical and Electronic Engineers were researched under this classification. Demand for Civil Engineers and Quantity Surveyors is linked to levels of construction in both the domestic and commercial sectors. Tasmania has experienced a significant increase in construction activity since about 2001 which has generated demand for a range of skills and occupations. This in turn, has resulted in a range of skill shortages across the State. The major demand for Electrical Engineers is in the electricity generation and supply industries, and Tasmania's hydro-electric schemes require particular skill sets in the power generation field. The linking of Tasmania's electricity grid to the national system, and the general increase in economic activity over the last five to seven years has increased demand for Electrical Engineers. The main employing industry for Mechanical Engineers in Tasmania is the manufacturing industry. Even though total employment in manufacturing has been declining for some years in Tasmania, most of the jobs which have been lost have been at the lower end of the skill range. Skilled engineers and trades people are still in demand due to their critical roles in maintaining the manufacturing plant and designing and installing new equipment and processes aimed at improving productivity.

## **24 Education (and related) Professionals**

The occupations researched under this category were Early Childhood (Pre-primary School) Teachers, Primary School Teachers, Secondary School Teachers, Special Needs Teachers and Student Counsellors (ANZSCO 272115).

Demand for Education Professionals is driven by demographic forces, such as the number of school age children in the community, and also by government policy on class sizes, in that the smaller the class size, the greater the number of teachers required. The long-term trend for school age populations has been moving downwards for many years in Tasmania. For example, in June 2008, the number of 5 to 11 year olds in Tasmania was 24.0 per cent lower than it was in 1971. At the same time the number of 12 to 16 year olds was 14.6 per cent lower than it was in 1971. The 5 to 11 year old age group are those most likely to attend primary school of course, while the 12 to 16 year old group are those most likely to attend secondary school.

Tasmania has a relatively high percentage of School Teachers over 45 years of age, with 55 per cent of secondary teachers in this age group. Despite falling numbers of school age children, the ageing workforce is likely to result in increases in demand for teachers over the next five to ten years, as retiring teachers need to be replaced. The situation is somewhat different for Secondary Teachers, compared with Primary and Pre-primary School Teachers, in that there are differences in supply and demand in different subject areas. For example recruiting mathematics and science teachers to regional areas has proven difficult in recent times, but teachers of other subject areas have generally been in balance.

The demand for Special Needs Teachers is influenced by the number of children attending schools with a physical or mental disability. Generally speaking, these teachers are an additional resource provided to schools on the basis of how many students with special needs are enrolled.

The demand for Student Counsellors or psychologists (often called guidance officers in Tasmania) is also driven by the number of students who have particular learning needs or behavioural difficulties. In August 2009, there has been considerable media debate about supply

issues surrounding school psychologists, particularly in relation to the public system. These mainly revolve around the current requirement for school counsellors to hold dual psychologist and teaching registrations.

## **25 Health Professionals**

The occupations in this groups that were researched were registered nurses in a variety of specialisations, including Midwives and Registered Nurses (Mental Health), Pharmacists, and Occupational Therapists. Demand for these occupations is driven by a set of complex interactions between such factors as demographic profile, in that older age groups tend to use health services more frequently, and levels of government funding allocated which dictates the amount of money to create positions in particular fields. The take up of private health insurance is also an influence in terms of creating demand in the private sector, but also a low take up rate is likely to increase demand in the public sector. In addition, 2006 Census data show that the average age of nurses in Tasmania was 45.7 years, which suggests that replacement of the existing workforce will be an additional demand factor in the coming years.

Demand for Pharmacists varies between Retail Pharmacists and Hospital Pharmacists. Demand for Retail Pharmacists is driven by factors like opening hours, the frequency of conditions requiring medication in the community, and increasingly, the size of the female pharmacy workforce. Industry sources have advised that the increasing feminisation of the pharmacy workforce in recent years has led to increased turnover due to women temporarily leaving work to raise families. This factor is also an influence in relation to demand for Occupational Therapists. At the last Census, 91.0 per cent of all Occupational Therapists were female.

## **27 Legal, Social and Welfare Professionals**

Solicitor was the only occupation researched this year under this category. Demand for Solicitors is subject to a variety of factors although in a buoyant economy, commercial and property transactions increase demand for their services. Crime rates and divorce rates also indicate demand for legal services. Generally speaking, supply of Solicitors through the education system is sufficient to meet demand in Tasmania, with the exception of regional areas like the north-west or east coasts.

## **3 Technicians (formerly Associate Professionals)**

The occupations included in this group were Metallurgical or Materials Technicians, Mine Deputies, Architectural Draftspersons, Civil Engineering Draftspersons and Technicians, Electrical Engineering Draftspersons and Technicians, Electronic Engineering Draftspersons and Technicians, and Mechanical Engineering Draftspersons and Technicians.

Demand for the first two occupations listed is linked to mining activity, which has declined over the last six to 12 months. As a result industry sources report that they would have little difficulty recruiting these occupations at present. Both occupations are very small in Tasmania indicating low demand.

Architectural, and Civil Engineering Draftspersons and Technicians, and to some extent Electrical Draftspersons and Technicians, are generally employed in construction related activities. Although residential building approvals slowed somewhat in the second half of 2008, government infrastructure spending, particularly in the education sector is expected to boost

activity from the second half of 2009 onwards. This is likely to increase demand for occupations servicing the building industry.

Electronic and Mechanical Draftspersons and Technicians are primarily employed in engineering design and consultancy roles in Tasmania, and service industries like electrical supply and power and manufacturing. There are very low numbers employed in Tasmania, and shortages are primarily caused by supply-side issues.