

Civil, Structural, Transport Engineer		Victoria
ANZSCO Code: 2332-11, 14, 15	March 2009	
Labour market rating:	Civil - Recruitment Difficulty Structural – Shortage, Transport – No Shortage	
Comment: Recruitment difficulties experienced by employers in the water industry; Shortage of structural engineers with local experience and knowledge of Australian Standards		

Occupational demand

ABS 2006 census data indicate there are 2909 Civil Engineers employed in Victoria with approximately a third of these working in Architectural, Engineering and Technical Services. Approximately three quarters of the 653 Structural Engineers employed in Victoria also work in this industry. In 2006 there were 779 Transport Engineers employed in Victoria with over half working in State and Local Government. ABS State and Regional Indicators for Victoria (March quarter 2009) indicate the total value of engineering construction activity (work) done during the December quarter 2008 increased by 5.8 per cent from the September quarter 2008. The “Victorian Transport Plan”, outlined in the 2009-10 Victorian Budget, will invest \$3 billion for new rail lines and stations, as well as more than \$990 million for new roads.

Occupational supply

Entry to these professions is generally through a four year Bachelor of Engineering (Civil), and studies in the speciality areas can be integrated in the mid to final years and enhanced with further postgraduate studies. Commencements in entry level Civil Engineering courses have risen steadily; from 299 in 2003 to 518 in 2007. Completions have remained steady with a slight increase in 2007 to 278 completions compared with 227 in 2003. Sixty eight per cent of employed Structural Engineers hold a Bachelor degree; 62 per cent for Civil Engineers and 59 per cent for Transport Engineers. On average 15 per cent of Civil, Structural and Transport engineers have postgraduate qualifications. Supply to the profession from net migration in 2007-08 was 173 Civil Engineers (including transport engineers) similar to that in 2006-07. No data were available for structural engineers.

Employer and industry comments/current labour market

DEEWR’s survey found that approximately 76 per cent of civil engineer vacancies were filled with an average of 6.5 applicants per vacancy. Vacancies for structural and transport engineers were difficult to source reflecting the smaller labour market in Victoria for these professions, so employers were cold canvassed. Three quarters of surveyed structural engineer vacancies and over half of transport engineer vacancies were filled, with an average of 16 and 7 applicants per vacancy respectively. On average there was less than one suitable applicant per vacancy across all three occupations. Most employers sought qualified engineers with a minimum of two years local experience, and knowledge of Australian Standards. Because of this requirement, many applicants from overseas were not considered suitable. Regional employers had greater difficulty attracting suitable applicants across all three engineering disciplines with the majority of positions remaining unfilled.

Contacts in the water industry seeking civil engineers had difficulty finding people with industry-specific experience. From the small number of surveyed contacts seeking structural engineers, most indicated they had few local applicants and a high level of interest from overseas. Few applicants met their selection criteria in regard to local experience, indicating a shortage for this profession.

A small number of employers seeking transport engineers received suitable applicants but could not complete the recruitment process within the survey timeframe or failed to come to agreement with the successful candidate. As such the filled rate did not accurately reflect employers’ experiences. Employers indicated some redundancies in local consultancies had increased local supply, and that there are few transport engineering companies so competition is limited. Consequently, most vacancies for transport engineers were filled relatively easily, except for local government positions.

Labour market outlook

There is no evidence that there will be any changes to the labour market for the next 6 months.