Australian Government
Department of Employment

Industry Outlook

Construction

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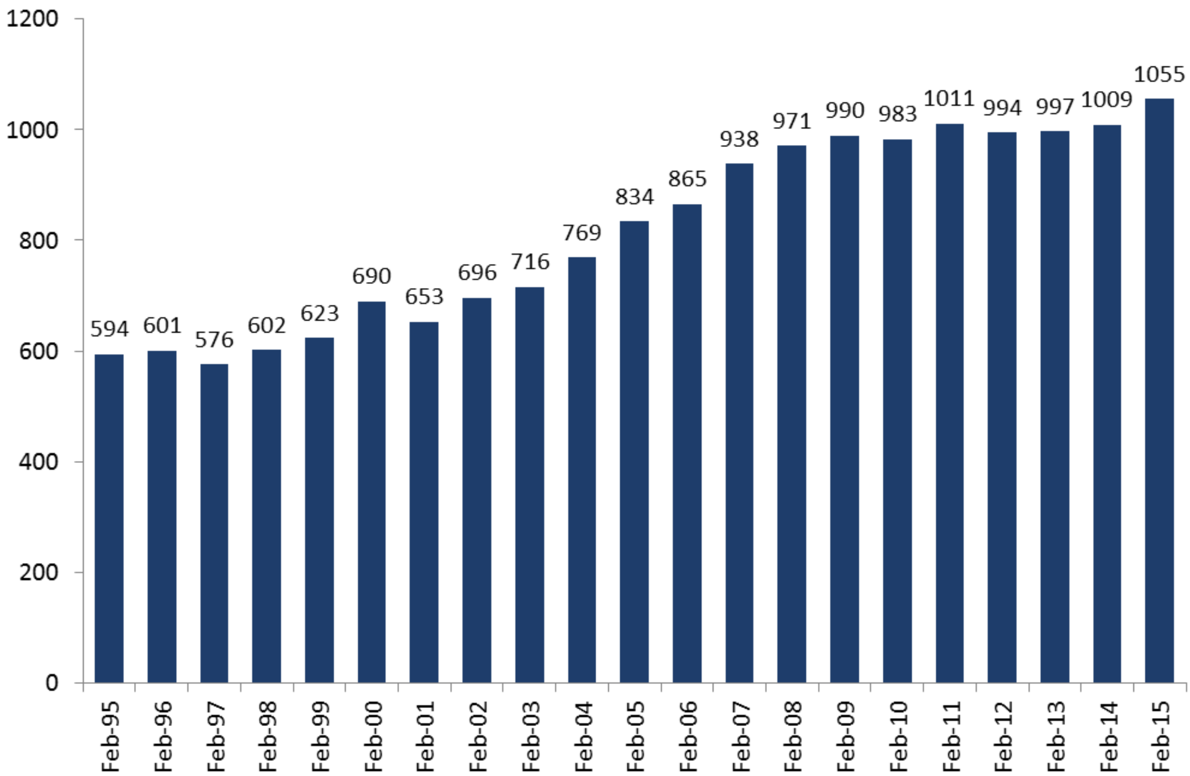
Employment

Construction is the third largest employing industry in Australia, employing 1,055,200 workers, or 9.1 per cent of total employment, as of February 2015. Over the past decade, Construction has experienced strong employment growth, with employment in the industry increasing by 221,400 (or 26.6 per cent) over the 10 years to February 2015, making it the third largest growth industry in Australia over this period. This represents a growth rate of 2.4 per cent per annum, compared with 1.8 per cent per annum recorded across all industries. This strong growth has been driven by the housing and commercial needs of an expanding population, as well as ongoing investment in public and private infrastructure.

Employment growth in Construction slowed with the onset of the Global Financial Crisis in 2008, to a rate of 0.4 per cent per annum over the five years to February 2014. More recently, however, employment growth in the industry has improved, with employment growing by 4.6 per cent (or 46,300) over the past year. This is a sign that conditions in the industry are improving in response to lower interest rates and a subsequent increase in housing prices, building approvals and building commencements.

Figure 1: Construction industry employment level ('000), February 1995 to February 2015



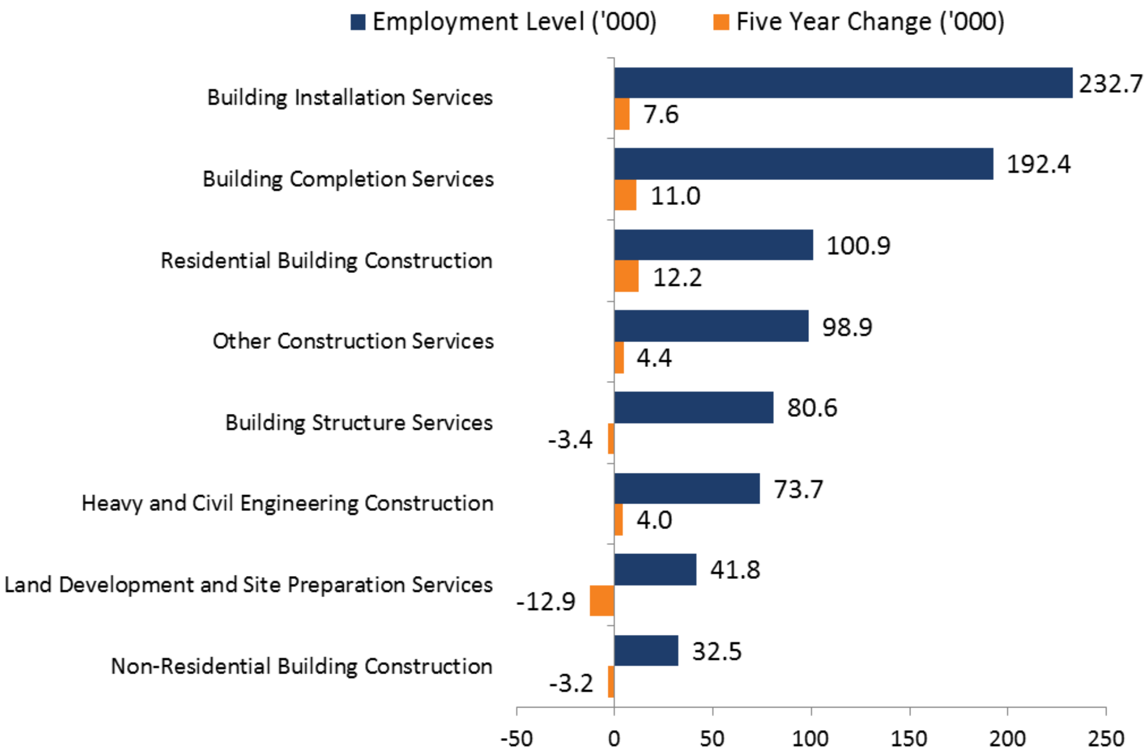
Source: ABS, *Labour Force*, *Australia*, *Detailed*, *Quarterly*, cat. no. 6291.0.55.003, trend.

Sectoral Employment

The largest contributor to employment in Construction is the Building Installation Services sector, employing 232,700 workers (or 22.8 per cent of industry employment) as at February 2015. Other large employing sectors include Building Completion Services (192,400 or 18.9 per cent), Residential Building Construction (100,900 or 9.9 per cent) and Other Construction Services (98,900 or 9.7 per cent).[1]

Over the five years to February 2015, five of the eight Construction sectors recorded an increase in employment. The Residential Building Construction sector recorded the largest sectoral growth (up by 12,200 or 13.7 per cent), with Building Completion Services also recording large growth (11,000 or 6.1 per cent). By contrast, declines over the period were recorded in Land Development and Site Preparation Services (down by 12,900 or 23.6 per cent), Building Structure Services (3,400 or 4.1 per cent) and Non-Residential Building Construction (3,200 or 9.0 per cent).

Figure 2: Employment level and five year change to February 2015, by Construction industry sector[2] ('000)



Source: ABS, *Labour Force*, *Australia*, *Detailed*, *Quarterly*, cat. no. 6291.0.55.003, Department of Employment trend.

[1] Building Installation Services includes Plumbing Services, Electrical Services, Air Conditioning and Heating Services, Fire and Security Alarm Services and Other Building Installation Services. Building Completion Services includes Plastering and Ceiling Services, Carpentry Services, Tiling and Carpeting Services, Painting and Decorating Services and Glazing Services. Other Construction Services includes Landscape Construction Services, Hire of Construction Machinery with Operator and Other Construction Services not elsewhere classified (such as waterproofing of building, and scaffolding construction).

[2] 16.2 per cent of Construction industry employment in February 2015 (or 165,200) is not shown in this chart because it was recorded as “not further defined” which is a category used by the ABS to process incomplete, non-specific or imprecise responses which cannot be coded to the most detailed level of a classification structure.

From an economic perspective, construction activity is broadly divided into residential building, non-residential building and engineering construction. Unfortunately, the employment data are not able to be split clearly according to this three-way breakdown. That said, most people employed in the two largest industry sectors of Building Installation Services and Building Completion Services will be working on residential building jobs at any particular time. In this sense, residential building generates more employment in Construction than any other type of construction activity.

Economic conditions over the past year have varied across the different types of construction. On the one hand, the value of residential construction work done has increased by 9.2 per cent over the year to December 2014 (latest available data[3]), to stand at a record high. This has been driven by historically low interest rates, with a large increase in dwelling approvals and commencements likely to provide solid support for future expansion of employment in residential building construction. However, by contrast, the value of engineering work done has fallen by 13.2 per cent over the past year, with engineering related construction activity likely to continue to weaken as the Mining boom subsides as a result of a peak in capital expenditure and the transition of new mines from a construction phase to a less labour intensive operational phase.

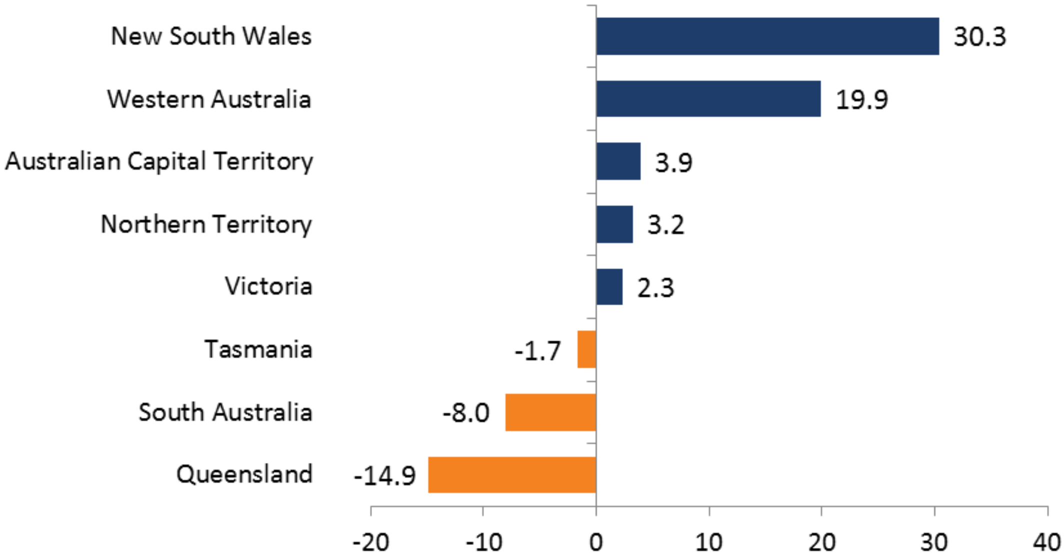
[3] ABS, *Construction Work Done*, Australia, Preliminary, December 2014, trend data, 8755.0.

Geographic Distribution

The geographic distribution of employment in the Construction industry broadly reflects the distribution of the population, with 75.3 per cent of employment in the Construction industry concentrated in New South Wales, Victoria and Queensland.

Over the five years to February 2015, New South Wales recorded the largest growth in Construction industry employment, with a rise of 30,300 (or 10.6 per cent) resulting from strong growth in the last two years of the period. While Western Australia accounts for only 14.2 per cent of Construction employment (employing 144,800 workers), over the five years to February 2015 the state accounted for one third of employment growth in the industry (19,900 workers). Over the five years to February 2015, declines in Construction industry employment were recorded in Queensland (down by 14,900 or 6.5 per cent), South Australia (8,000 or 12.3 per cent) and Tasmania (1,700 or 8.5 per cent).

Figure 3: Five year change in Construction industry employment, by State and Territory ('000)



Source: ABS, *Labour Force*, *Australia*, *Detailed*, *Quarterly*, cat. no. 6291.0.55.003, Department of Employment trend.

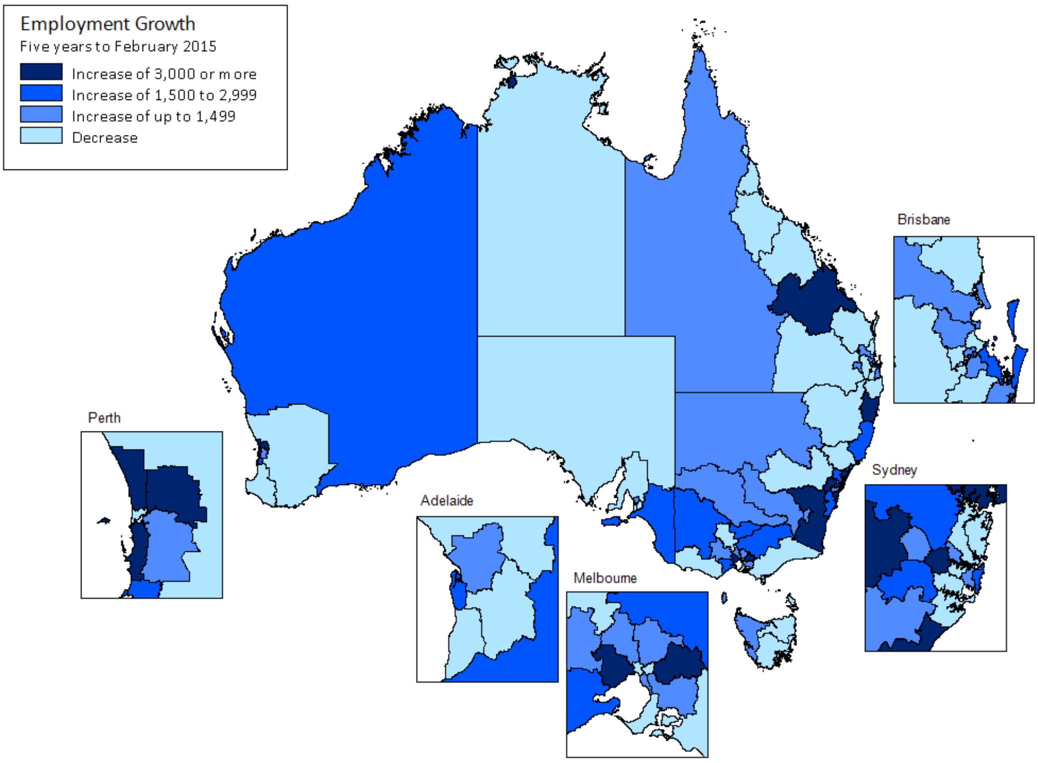
Employment growth in the Construction industry has been particularly strong in metropolitan areas[4], rising by 43,900 (or 6.8 per cent) over the five years to February 2015, with employment growth more subdued in non-metropolitan areas (up by 6,500 or 1.9 per cent). Almost half (18,600 or 42.3 per cent) of the growth in metropolitan areas over the five years to February 2015 was recorded in Greater Sydney.

At a more detailed regional level, the largest increases in Construction employment over the five years to February 2015 were recorded in Sydney – Outer West and Blue Mountains (up by 7,400), Perth - North West (6,900), Sydney – Parramatta (5,500), Melbourne - West (5,500), Perth – South West (5,100) and the Capital Region of New South Wales (4,900). By contrast, the largest decreases over the five years to February 2015 were recorded in the Queensland regions of

[4] Employment at the regional level is in four quarter average terms.

Logan – Beaudesert (down by 4,900), Wide Bay (4,300) and Brisbane – North (3,800), with large declines in Construction employment also recorded in Melbourne – Inner (3,500), Latrobe – Gippsland in Victoria (3,400) and Sydney – Sutherland (3,400).

Figure 4: Five year Construction industry employment growth, by region



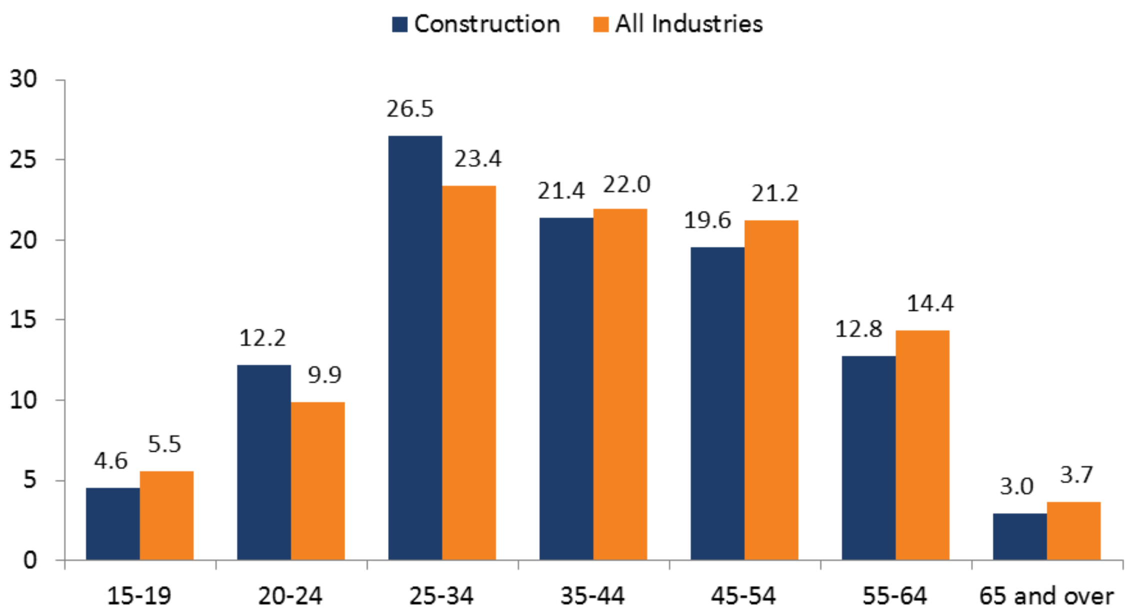
Source: ABS, *Labour Force*, *Australia*, *Detailed*, *Quarterly*, cat. no. 6291.0.55.003, four quarter average of original data.

Workforce Characteristics

Workforce Age Profile

The Construction industry has a relatively young workforce, with 43.3 per cent of workers aged 15 to 34 years, compared with 38.8 per cent across all industries. The industry is the largest employer of young full time workers, employing 152,100 or 17.7 per cent of all full time workers aged 15 to 24 years in February 2015. By contrast, older workers are underrepresented in the Construction industry, likely due to the manual labour roles dominant in the industry, with 35.4 per cent aged 45 years or over, compared with 39.3 per cent across all industries. The median age of workers in the industry was 38 years in 2014, slightly below the median age of 40 years recorded across all industries.

Figure 5: Employed persons by age, February 2015 (% share of employment)



Source: ABS, *Labour Force*, *Australia*, *Detailed*, *Quarterly*, cat. no. 6291.0.55.003, four quarter average of original data.

Notably, despite remaining dominated by younger age groups, the workforce age profile of the Construction industry has become older over the past 20 years, in line with broader demographic trends. Indeed, the share of the industry's workforce aged 55 and over has risen by 7.2 percentage points over the past two decades to stand at 15.8 per cent in February 2015.

Gender and Full Time/Part Time Status

The Construction industry has the highest share of male employment of all 19 broad industries, with male workers accounting for 88.8 per cent of the workforce (compared with 54.1 per cent across all industries) as at February 2015. Male representation is particularly high in Building Structure Services (92.6 per cent) and Building Completion Services (92.3 per cent).

In February 2015, full time employment accounted for 85.3 per cent of total employment in the industry, compared with 69.4 per cent across all industries. Furthermore, all sectors within Construction had a share of full time workers that was higher than across all industries, with Heavy and Civil Engineering Construction (92.6 per cent) and Non-Residential Building Construction (91.8 per cent) recording particularly high shares.

Males working full time account for 80.0 per cent of workers in the industry, well above the 44.8 per cent recorded across all industries.

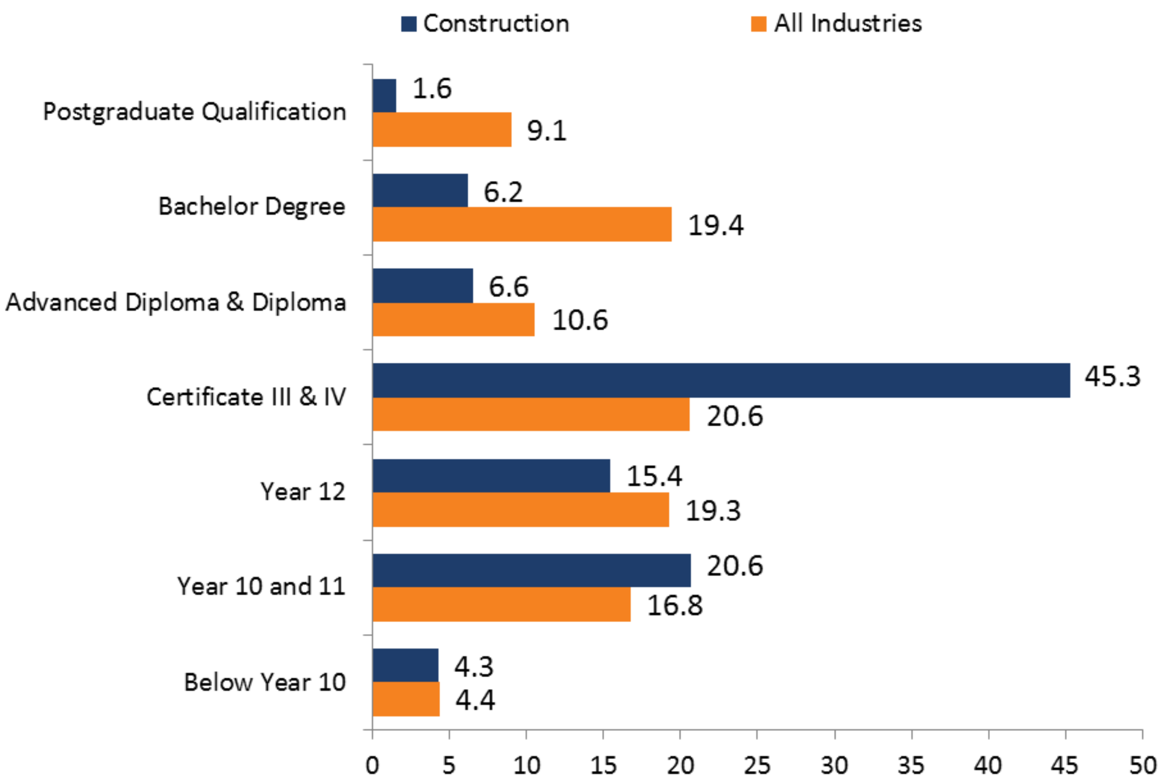
Figure 6: Full time workers as % of employed total, by gender, February 2015

Source: ABS, *Labour Force*, *Australia*, *Detailed*, *Quarterly*, cat. no. 6291.0.55.003, four quarter average of original data.

Educational Qualifications

The share of Construction industry workers who have a level of educational attainment above Year 12 or equivalent is the same as the share recorded across all industries (59.7 per cent). The critical role of trade skills in the Construction industry, however, is reflected in the 45.3 per cent share of Construction industry workers who have completed a Certificate III/IV qualification, which is significantly higher than the corresponding share across all industries (20.6 per cent). By contrast, the Construction industry's share of workers who have attained a Bachelor Degree or higher (7.8 per cent) is significantly lower than the corresponding share across all industries (28.5 per cent).

Figure 7: Highest educational attainment - share of employment (%)

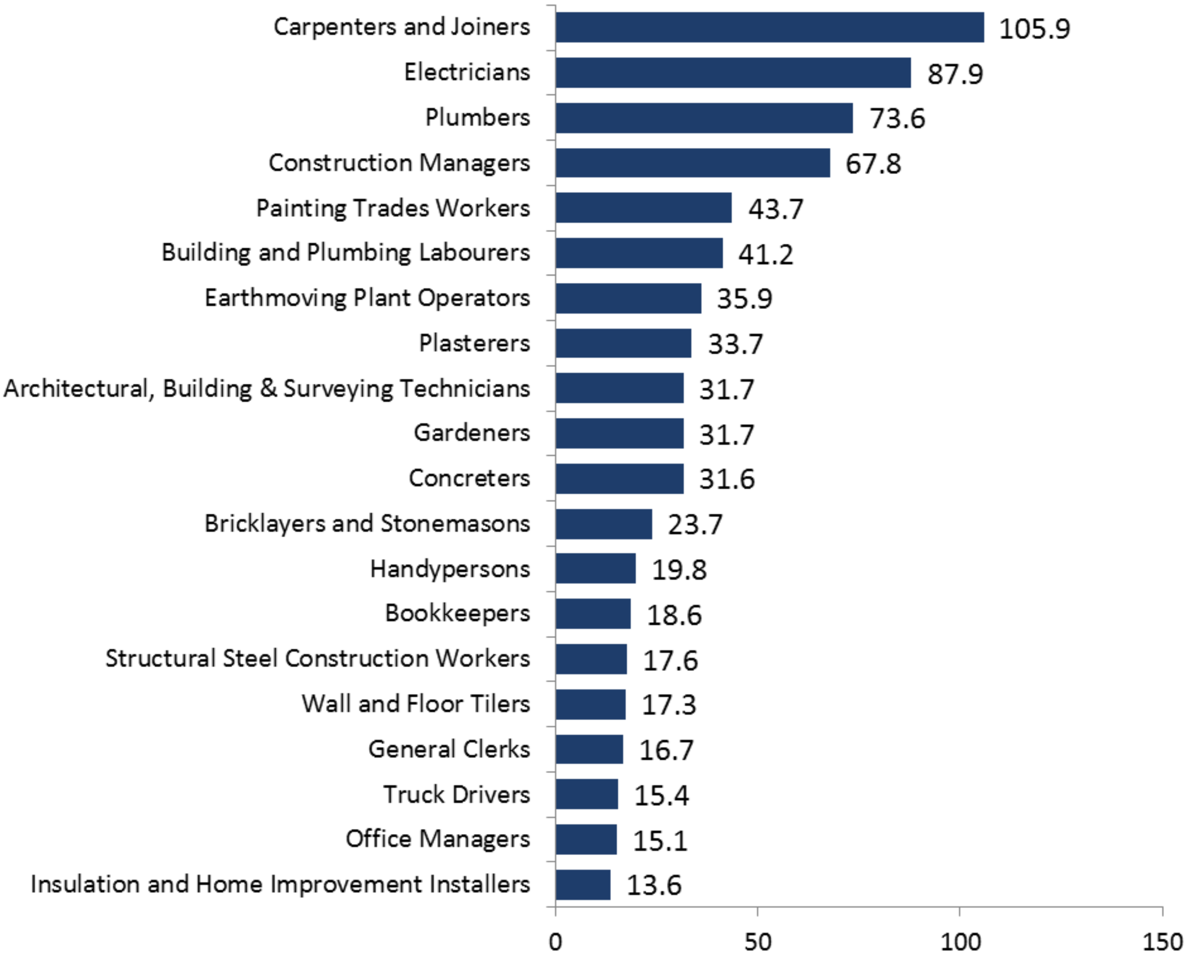


Source: ABS, *Survey of Education and Work*, 2013.

Main Employing Occupations

The three largest employing occupations in Construction in 2014 (latest available data) were Carpenters and Joiners (105,900), Electricians (87,900) and Plumbers (73,600), reflecting the importance of building trades to the Construction industry. The Construction industry's top 20 occupations also feature non-trade occupations such as Construction Managers, Building and Plumbing Labourers, Earthmoving Plant Operators, and Bookkeepers, which highlights the range of skills required by the industry.

Figure 8: Main employing occupations in the Construction industry ('000)

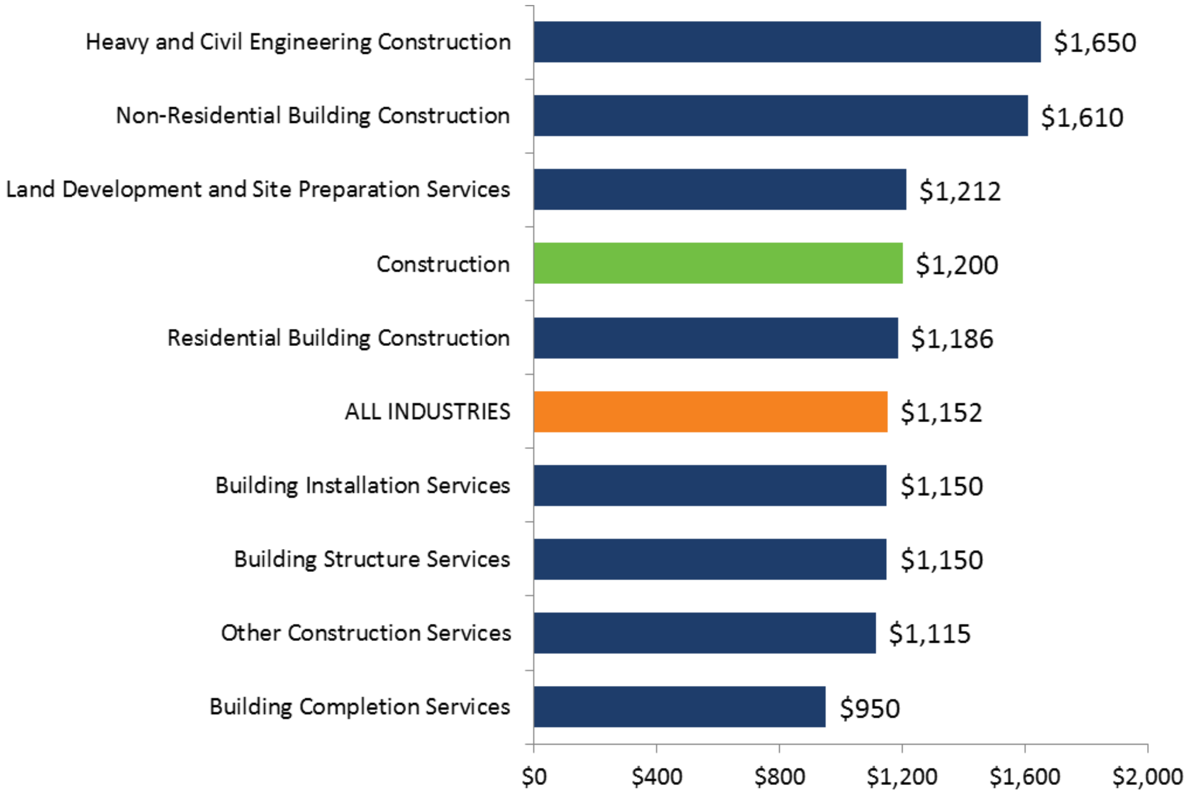


Source: ABS, *Labour Force Survey*, four quarter average, custom data request, 2014.

Earnings

Median weekly earnings for full time workers in Construction ($1,200) were above the median across all industries ($1,152) in 2013 (latest available data). The three sectors of Heavy and Civil Engineering Construction ($1,650), Non-Residential Building Construction ($1610), and Land Development and Site Preparation Services ($1,212) had median full time weekly earnings higher than the Construction industry as a whole. At the other end of the spectrum, workers employed in Building Completion Services had median weekly earnings of $950.

Figure 9: Construction industry sectors - median weekly earnings (full time and before tax)



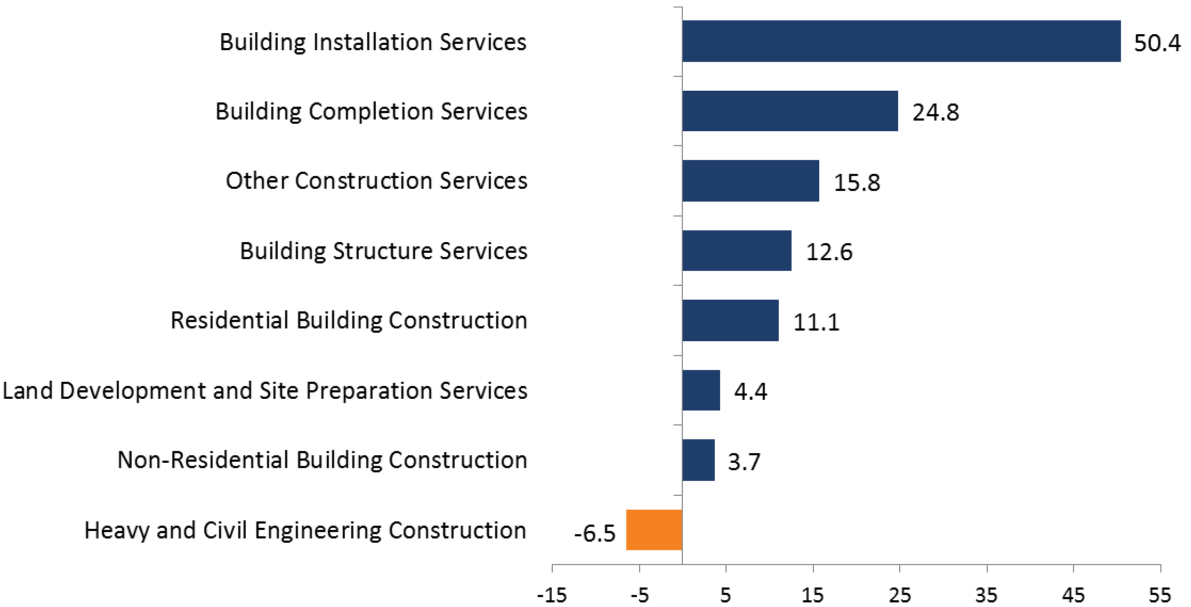
Source: ABS *Employee Earnings, Benefits and Trade Union Membership*, custom data request, August 2013.

Future Employment Prospects

Construction industry employment is projected to grow by 137,900 (or 13.0 per cent) over the five years to November 2019, well above the growth rate of 10.0 per cent projected for employment as a whole. Looking ahead, employment growth in the industry is expected to be supported by historically low interest rates, the recent strength in building approvals, and the housing needs of Australia's steadily growing population.

Employment growth over the five years to November 2019 is projected to be largest in the Building Installation Services sector (up by 50,400 or 20.7 per cent), followed by Building Completion Services (24,800 or 13.0 per cent), Other Construction Services (15,800 or 13.9 per cent) and Building Structure Services (12,600 or 16.3 per cent). Only the Heavy and Civil Engineering Construction sector is projected to record a decline over the five years to November 2019 (down by 6,500 or 8.3 per cent), with conditions in this sector expected to be constrained by weakening conditions in Mining.

Figure 10: Projected employment growth ('000) by Construction industry sector - five years to November 2019



Source: Department of Employment, *2015 Employment Projections to November 2019*.

Skill Shortages

The Department of Employment conducts ongoing research to identify skill shortages in the Australian labour market. The research focuses on skilled occupations (mainly trades and professions).

In terms of skilled occupations, the Construction industry is dominated by Trades, with large numbers of workers employed in Construction and Electrotechnology Trades, and smaller (but still significant) numbers in Engineering Trades. There are also, though, a number of Managers, Professionals and Technicians employed in this industry.

The following information refers to research for skilled occupations with significant employment in the Construction industry (more than 5,000)[5], and which were assessed by the Department in 2014 (Table 1 lists the relevant occupations). A number of other occupations which provide key skills to Construction activity have their employment base in industries such as Manufacturing or Professional, Scientific and Technical Services (for example, Cabinetmaker and Architect) and, as such, are not included in this summary.

Current Labour Market

The labour market for the Construction related occupations tightened over the year to 2014, with shortages re-emerging for a number of (mainly Trade) occupations.

- The tightening in this labour market reflects increasing activity in building construction. A number of forward indicators suggest that there are likely to be further rises in activity, which will drive demand for related occupations.[6]
- The total value of building approvals (in trend terms) rose by 0.9 per cent in March 2015, the ninth consecutive monthly rise.[7]

Almost one third of the assessed Construction related occupations were in shortage in 2014 (compared with around 20 per cent in 2013).

- While shortages are not currently widespread across the Construction labour market, demand is relatively strong for Construction Trades workers, with most of these occupations either in shortage nationally or in specific locations.
- Demand is particularly strong in New South Wales, with 85 per cent of surveyed Construction related occupations in this state either in shortage or recruitment difficulty[8].

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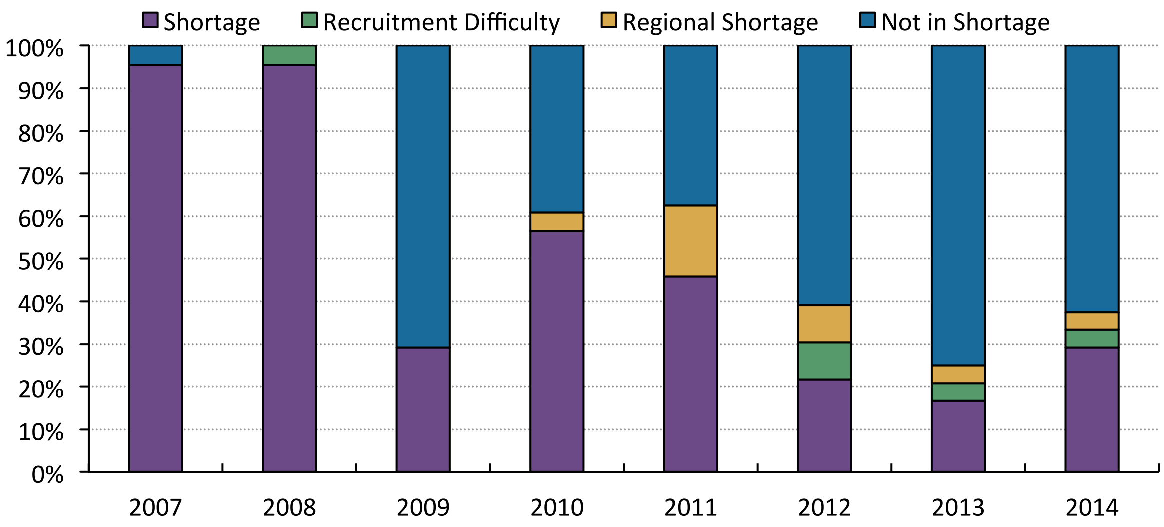
[5] ABS Labour Force Survey (four quarter average, custom request data), cat. No. 6291.0.55.003. At the Australian and New Zealand Standard Classification of Occupations (ANZSCO) 4-digit occupation level. Occupations at the 6-digit level may have fewer than 5,000 employed in the Construction industry.

[6] MBA, National Survey of Building and Construction, September 2014; HIA, HIA Trades Report, September 2014

[7] ABS, Building Approvals, Australia, March 2015, trend

[8] Recruitment difficulties occur when there may be an adequate supply of skilled workers but some employers are unable to attract and recruit suitable workers for reasons which include: specific experience or specialist skill requirements of the vacancy; differences in hours of work required by the employer and those sought by applicants; or transport issues.

Figure 11: Proportion of surveyed occupations in shortage, Construction related occupations 2007 to 2014 (% of assessed occupations)



Source: Department of Employment, *Skill Shortage Research*
Note: Based on the set of Construction related occupations which have significant employment in this industry (more than 5,000) and which have been assessed on a regular basis by the Department of Employment between 2007 and 2014.

Trades

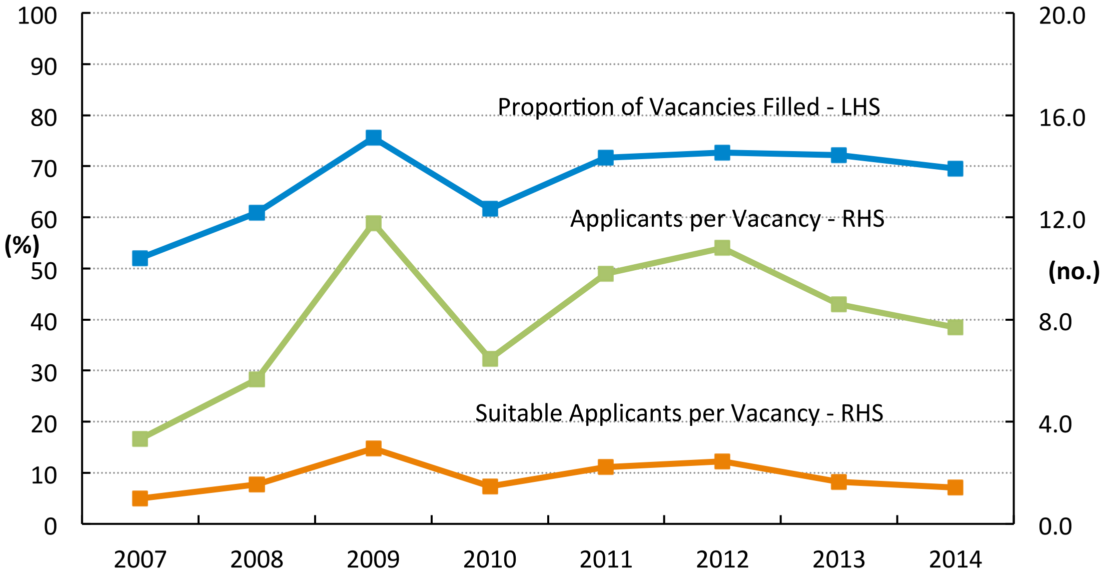
Construction Trades

Construction Trades workers dominate this industry, comprising around one third of the workforce. Furthermore, 90 per cent of Construction Trades workers are employed directly in this industry.

The labour market for Construction Trades tightened in 2014 with shortages re-emerging for a number of occupations.

- Five of the 10 Construction Trades are in national shortage (Bricklayer, Stonemason, Solid Plasterer, Roof Tiler, and Wall and Floor Tiler) compared with three in 2013 (Stonemason, Solid Plasterer and Roof Tiler).
- In addition, regional shortages are evident for Glaziers and employers nationally experience some difficulty recruiting Roof Plumbers.
- Carpenters and Joiners are the easiest Construction Trades workers to recruit, with employers generally attracting multiple suitable applicants and filling their vacancies without significant difficulty.

Figure 12: Proportion of vacancies filled, average number of applicants and suitable applicants per vacancy, Construction Trades, 2007 to 2014



Source: Department of Employment, *Survey of Employers who have Recently Advertised*

Electrotechnology Trades

There are large numbers of Electrotechnology Trades workers employed in Construction. Nearly half of all Electrotechnology Trades workers are employed in this industry.

Employers generally recruit Electrotechnology Trades workers with ease.

- In most states, Electrician vacancies were readily filled with strong fields of applicants vying for most available vacancies.
- There was a marked easing in the labour market for Airconditioning and Refrigeration Mechanics in 2014 and shortages, which had been persistent for more than a decade, abated.
- There is strong competition for advertised Electronic Instrument Trades Workers vacancies and these positions are readily filled irrespective of their location or specialisation.

Engineering Trades

While Engineering Trades workers are principally employed in the Manufacturing industry, there are nearly 25,000 Structural Steel and Welding Trades Workers, and Metal Fitters and Machinists, employed in Construction.

- The labour market for these Trades workers is patchy, reflecting soft demand from the Manufacturing and Mining sectors, but shortages of Metal Machinists re-emerged in 2014 (few of these workers, though, are employed in Construction).

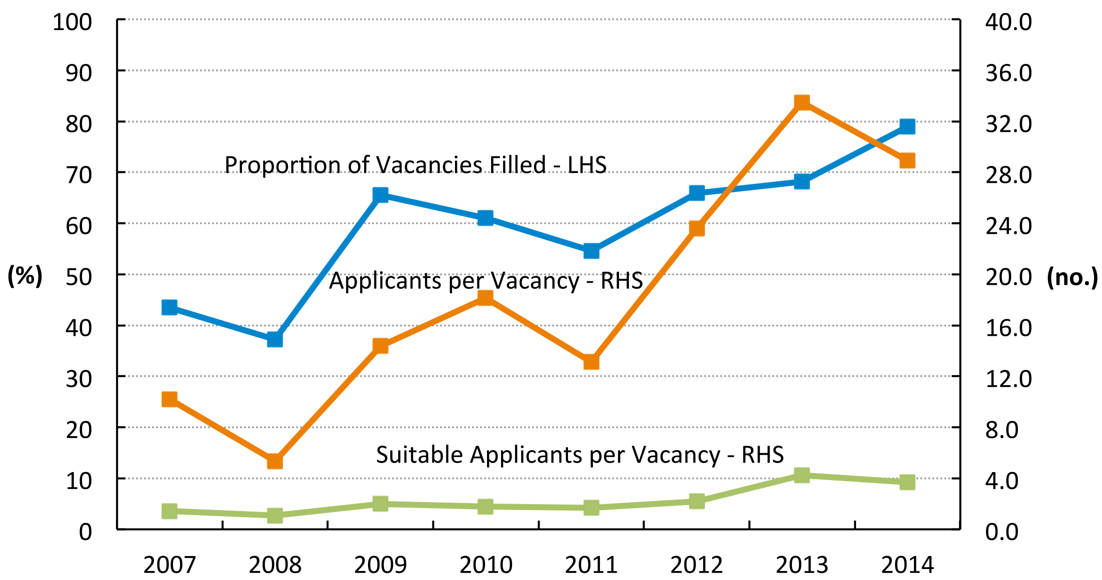
Managers, Professionals and Technicians

Despite the domination of Trade workers, a small number of other skilled occupations (managerial, professional and technician) are critical to this sector (Table 1).

Although there was some tightening in the labour market for these occupations in 2014, shortages remain limited, with widespread shortages only evident for Construction Estimators.

- Although employers of Construction Estimators generally attract large fields of applicants for the advertised vacancies, few have the required experience in the employers' specific areas of construction.
- Competition for the other occupations tends to be strong, with employers attracting large numbers of suitable applicants, especially for occupations such as Accountant and Construction Project Manager.

Figure 13: Proportion of vacancies filled, average number of applicants and suitable applicants per vacancy, Managers, Professional and Technician Occupations, 2007 to 2014



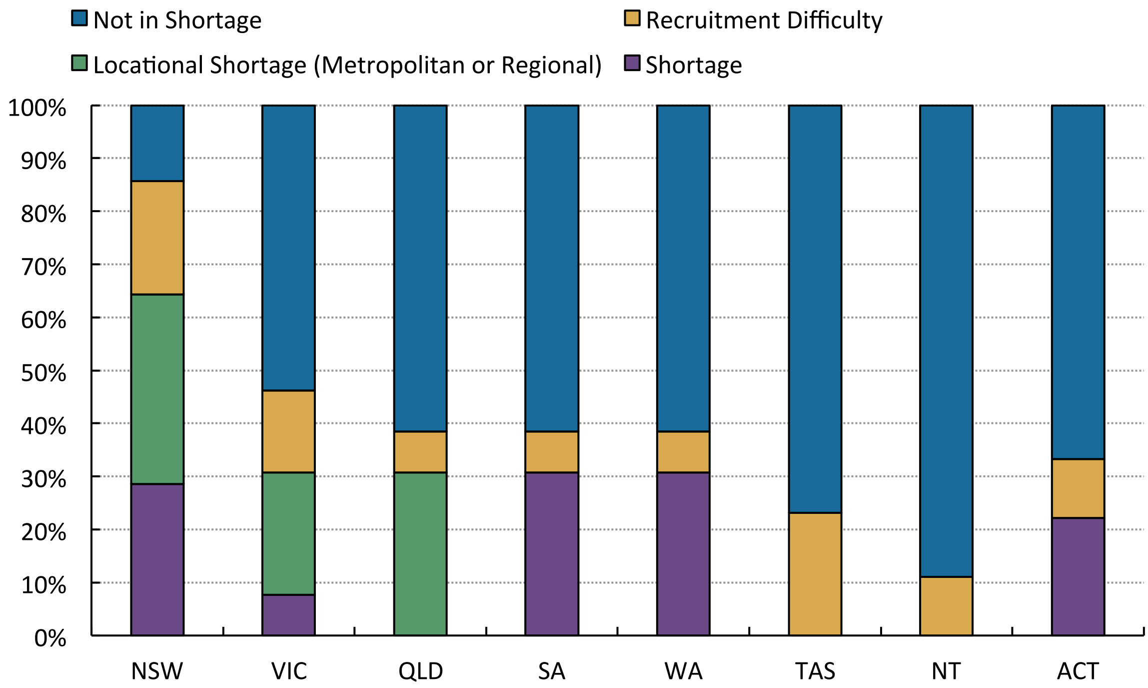
Source: Department of Employment, *Survey of Employers who have Recently Advertised*

States and Territories

Although employers in most locations recruit Construction related occupations with relative ease, employers in New South Wales have marked difficulty (Figure 14 and Table 1), consistent with stronger building construction activity in that state.

- In New South Wales, the majority of Construction related occupations are in shortage either state-wide or in particular areas, and employers in others experience some recruitment difficulty.

Figure 14: Proportion of surveyed occupations in shortage, Construction related occupations, State and Territory, 2014 (%)



Source: Department of Employment, *Survey of Employers who have Recently Advertised*