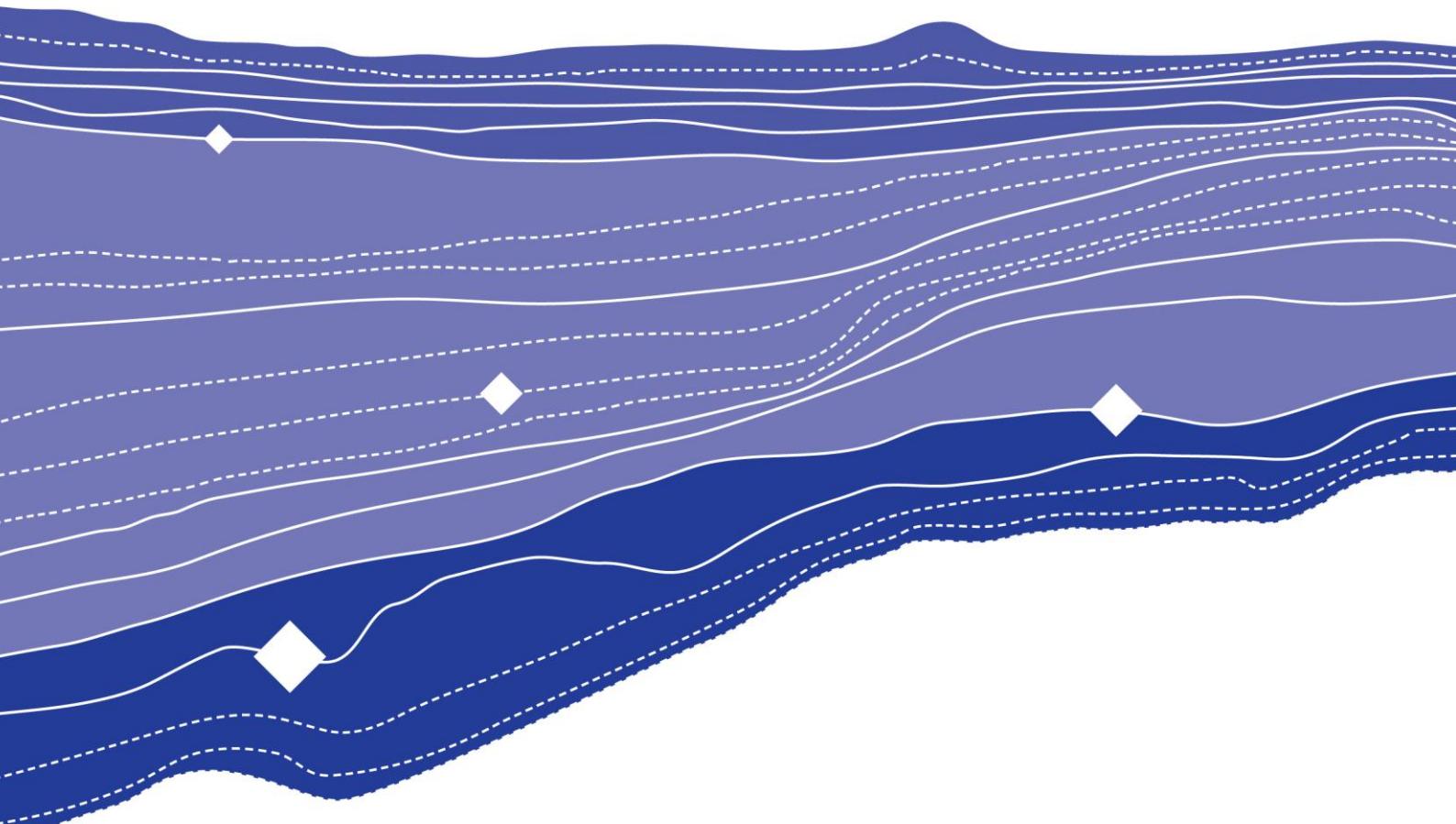




Australian Government



***Skill Shortages
Australia***

2012-13

Department of Education, Employment and Workplace Relations

Prepared by Labour Market Research and Analysis Branch
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PREFACE

The six monthly *Skill Shortages, Australia* publication provides information about the Australian labour market and reports on the results of ongoing skill shortage research undertaken by the Department of Education, Employment and Workplace Relations (DEEWR) through its national and state/territory offices.

This publication is based on research undertaken during 2012-13, which included contact with more than 5500 employers, and is current at the end of June 2013. The research is based on a Survey of Employers who have Recently Advertised (SERA) and consideration of an array of quantitative and qualitative data, as well as consultation with key industry and occupational associations. The focus of the research is professional and trade occupations. Further information about the methodology as well as lists of skill shortages are published at deewr.gov.au/skillshortages.

This edition of *Skill Shortages, Australia* provides high-level summaries of research, but includes links to more detailed analysis. This allows more detailed examination of particular labour markets without the confines of a formatted publication, and provides an opportunity for more timely releases of results. The department's state and territory skill shortage lists, occupation cluster reports and individual occupational reports complement this publication.

This report brings together data from a range of sources, as listed under [data sources](#). In addition to the results of the skill shortage survey work, other major sources are the Australian Bureau of Statistics (ABS), Department of Innovation (DIICCSRTE), Graduate Careers Australia (GCA) and the National Centre for Vocational Education Research (NCVER).

The department's skill shortage research has been undertaken continuously over the past three decades. While some occupational labour markets are cyclical, responding relatively quickly to changes in economic conditions, in some skilled occupations shortages have been relatively persistent, even during periods in which the economy has been slowing.

Ratings of shortage reflect employers' recruitment experience for average experienced workers (noting that the level of experience varies across occupations). Definitions of the ratings can be found in the [technical notes](#).

Skill shortages can coexist with relatively high levels of unemployment and sometimes shortages are restricted to experienced workers or those who have specialist skills. Shortages can result from a number of factors including low levels of training, high levels of wastage, changes in technology, increasing demand for new skills within an occupation and locational mismatch, where workers who have the skills are not in close proximity to the employers seeking those skills.

EXECUTIVE SUMMARY

- *Skill shortages are not a key issue in the Australian labour market.*
 - *Employers have less difficulty recruiting than they have at any time over the past six years.*
 - *The Australian Chamber of Commerce and Industry Survey of Investor Confidence does not rank ‘availability of qualified applicants’ in its top 10 constraints on investment in 2013.*
- *There are very few skill shortages.*
 - *About 29 per cent of assessed occupations were in shortage in 2012-13, down from 84 per cent in 2007-08.*
- *The slowdown in the Mining industry, generally softer national labour market conditions and higher university training numbers have resulted in applicants facing stronger competition for jobs. This is especially true for new graduates.*
 - *A number of vacancies were withdrawn after advertising in 2012-13 due to low business activity levels (this is especially notable in building and engineering).*
 - *Increased training for a number of professions, particularly health, has led to some saturation of the labour market at the entry level.*
 - *For technicians and trades occupations, flat Australian Apprenticeship numbers may constrain new supply when activity levels recover.*
- *Unfilled vacancies generally require very specific skills and experience.*
- *The most notable occupations in which employers had unfilled vacancies were*
 - *resource-related occupations (employers often attract multiple qualified workers for these vacancies and despite the slowdown in mining, few meet their expectations of skill and experience)*
 - *automotive trades (these shortages have been persistent over the last few decades and, in part, reflect low levels of remuneration and poor career paths)*
 - *food trades (shortages in some of these trades coexist with relatively large fields of candidates, with employers often having specialist skill needs which are not met by applicants’ experience).*

SKILL SHORTAGE OVERVIEW

Skill shortages in brief

The DEEWR skill shortage research has two components which provide different kinds of intelligence about the labour market for skilled workers.

- The first comes from the discussions with employers and recruitment professionals. This information is largely anecdotal but across the more than 5500 contacts, there is some consistent commentary about key issues.
- The second is the quantifiable data about employers' recruitment experiences, including the proportion of vacancies filled, number of applicants and suitable applicants. This provides an historical comparison and allows analysis across states/territories and occupations.

Intelligence from discussions

Demand for skilled workers is relatively soft, and some employers have withdrawn vacancies due to low levels of activity or lack of funding. This is especially the case in the building and engineering sectors but also in some state government health agencies.

- Consistent with this, there is no urgency about filling vacancies in some sectors. A number of employers have become more selective, deciding to wait for the 'perfect' candidate rather than take one of the many qualified applicants they attract for their vacancies.

The easing in skill shortages reflects a number of factors, including

- generally softer labour market conditions
- higher training numbers (including for health professions and engineers)
- the slowdown in the Mining industry (and the return of workers to their home states).

There is now some surplus labour capacity in the professions (this is evident in both the quantitative and qualitative information gathered in the research).

- Some professionals are underemployed (some apply for lower skilled positions, and employer comments suggest some are working short hours but want full-time employment).
- Some registered nurse, dentist, pharmacist, medical imaging professional, accountant and engineering graduates experience difficulty gaining initial employment
 - In a number of health and teaching occupations graduate numbers exceed entry level jobs, and in some health fields there are inadequate Professional Development Year (PDY) or registration year positions.
- Graduate Careers Australia (GCA) data suggest graduates face some initial difficulty gaining employment. Graduate employment outcomes weakened between 2008 and 2012 (down by 9.1 percentage points)¹. There are concerns for people coming out of university, with GCA suggesting they need to work a bit harder to find a job and may not get their preferred job².

¹ GCA, *GradStats*, various issues. Data for the proportion of bachelor degree graduates who are available for full-time work who find full-time employment within four months of graduating). Data reflect outcomes for students graduating the previous year (so 2008 data are for 2007 graduates).

² Australian Financial Review, *Job prospects for fresh grads stay flat*, 17 July 2013

A number of employers across both professions and trades indicate they do not recruit newly qualified workers due to their inability to provide the required supervision.

Many employers did not consider applicants who had completed short courses to have the level of skill needed for trade vacancies, even though some of these were at the certificate III level. They indicated that an apprenticeship is the strongly preferred training method.

- This was particularly evident for hairdressing, food trades and construction trades.

A number of employers in the eastern states noted that they have received interest in their vacancies from significant numbers of workers who have returned after working in the resources sector. This reflects lower activity levels in that industry and the completion of the construction phase of many projects (with a move to the less intensive operations phase).

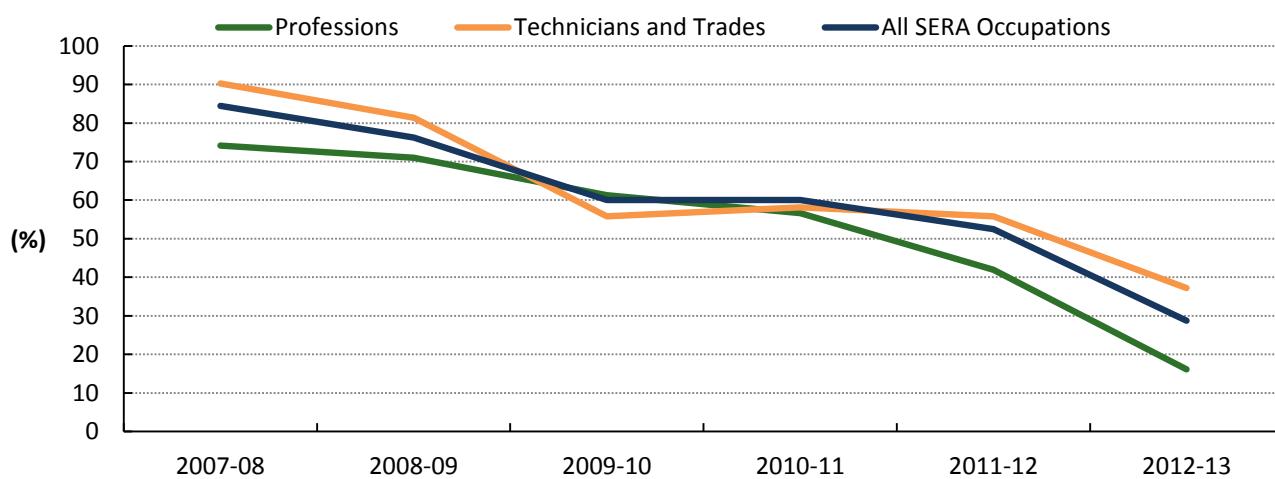
- Some employers noted many of these workers have unrealistic perceptions about pay and conditions which employers are unable or unwilling to meet.
- Employers sometimes consider these workers as being unsuitable (although they could ably do the job required) believing they would stay in their employment as they are just 'between resource sector jobs'.

What the numbers tell us

Employers are generally recruiting skilled workers without significant difficulty and skill shortages are less pronounced now than they have been at any time over the past six years.

- Just 29 per cent of assessed occupations were in shortage in 2012-13³, down from 84 per cent in 2007-08.

Figure 1: Proportion of occupations in shortage¹, Professions, technicians and trades and all SERA occupations, 2007-08 to 2012-13 (%)



Source: DEEWR Skill Shortage Research

Note: Based on the set of around 80 occupations which have been assessed annually as part of the DEEWR skill shortage research program between 2007-08 and 2012-13.

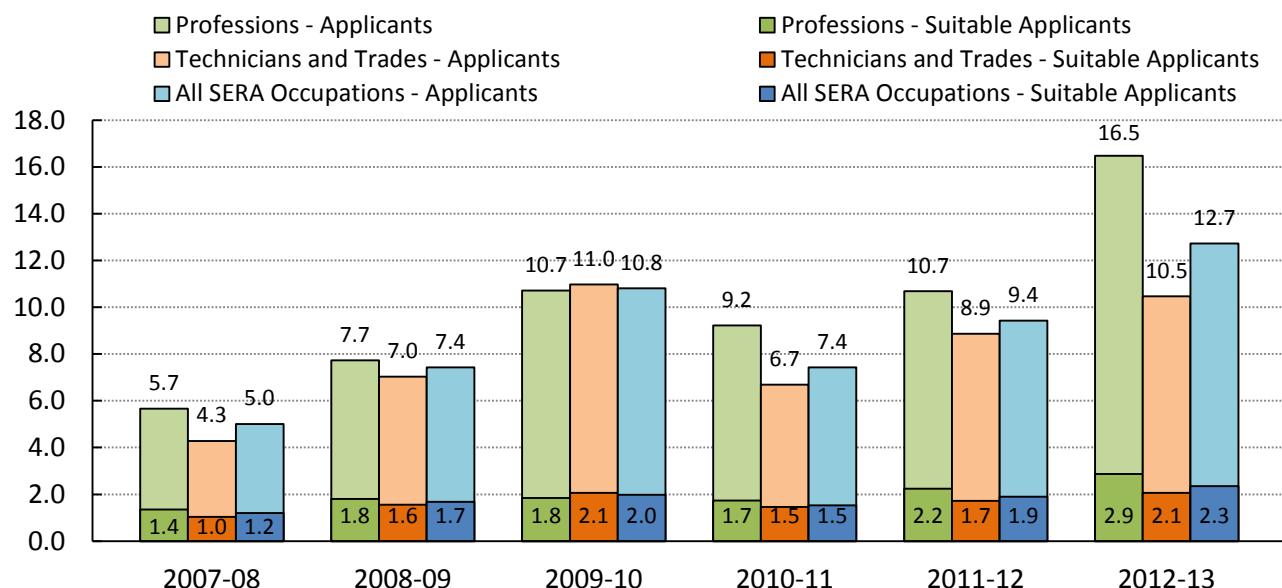
Shortages are restricted to a small number of occupations and unfilled vacancies are generally for workers who have very specific skills and experience.

Twenty four occupations are assessed as being in national shortage (7 managers and professionals, 16 technicians and trades workers plus child care worker). Full details are included in the [Skill Shortage List Australia](#).

³ This proportion is based on approximately 80 occupations which have been assessed each year since 2007-08.

- Qualified applicants in many skilled occupations face strong competition for available vacancies and there is a surplus of workers in some labour markets.
- Large numbers of workers who hold relevant qualifications are regarded by employers as being unsuitable for their vacancies (reasons include lack of experience or specialist skills and poor communication skills).
- There were 2.3 suitable applicants on average for each vacancy (compared with 1.2 in 2007-08) and 70 per cent of vacancies were filled (compared with 49 per cent).

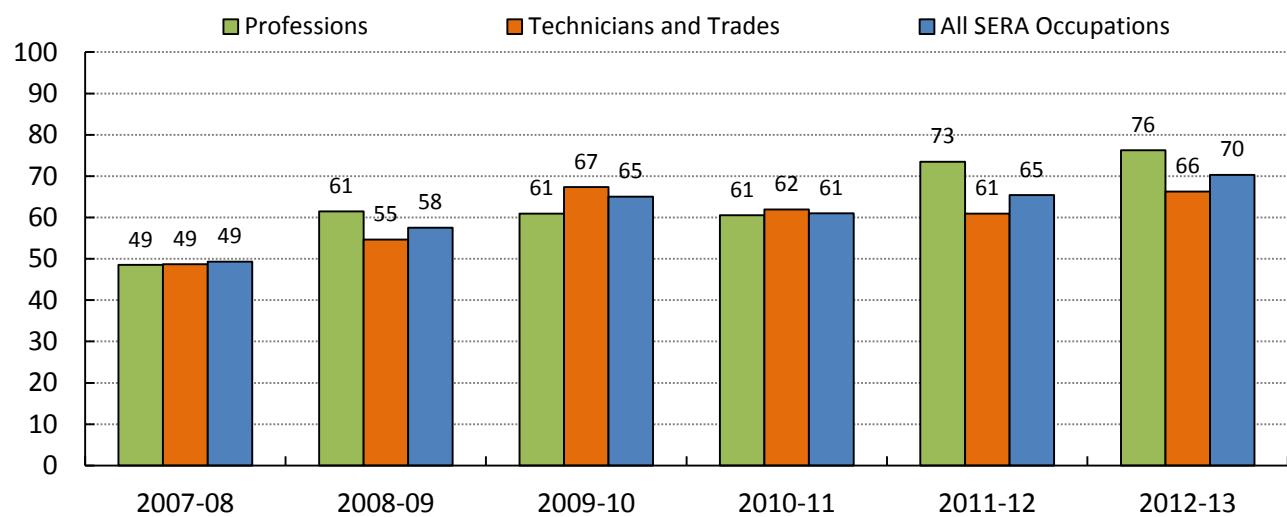
Figure 2: Average number of applicants and suitable applicants per vacancy for professions, technicians and trades, and all SERA occupations, 2007-08 to 2012-13 (no.)



Source: DEEWR Survey of Employers who have Recently Advertised

Vacancies for professions were more readily filled than those for technicians and trades (Figure 3). Between 2007-08 and 2012-13, there was a 27 percentage point rise in the proportion of professional vacancies filled compared with a rise of 17 percentage points for technicians and trades worker vacancies.

Figure 3: Proportion of vacancies filled for professions, technicians and trades, and all SERA occupations, 2007-08 to 2012-13 (%)



Source: DEEWR Survey of Employers who have Recently Advertised

Professions

Nationally, shortages in the professions are evident only for six occupations, all of which are in the resources or health sector. These are

- mining engineer (excluding petroleum), petroleum engineer and geophysicist
- sonographer, optometrist and physiotherapist.

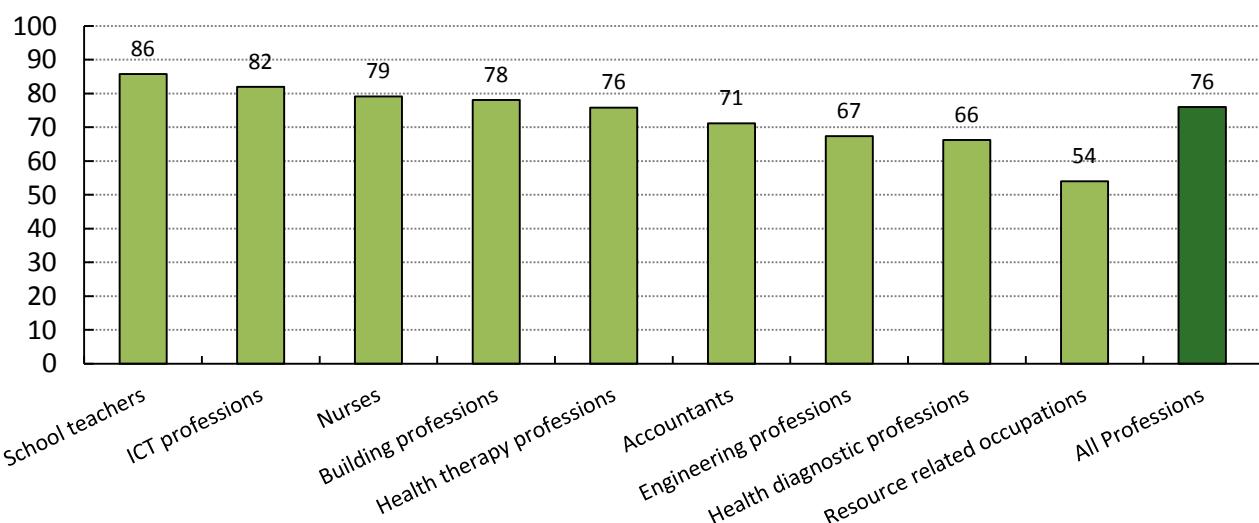
A number of persistent shortages have eased, particularly in the engineering and health professions. This is, in part, due to an increase in training.

- The survey results and employer comments suggest that the number of graduates is adequate for most professions, and in some there may be a surplus of graduates.
- The number of domestic students commencing university increased strongly over the five years to 2012 in a number of fields of education⁴, suggesting that new supply to some professions is likely to rise further in the short to medium term.
 - For Engineering and Related Technologies, commencements increased by 31.4 per cent or 4700 and completions increased by 24.6 per cent or 2000.
 - For Health, commencements increased by 43.5 per cent or 18,800 and completions were up by 37.9 per cent or 9700.

There are larger numbers of applicants and suitable applicants for professional vacancies than there are for technician and trades worker vacancies, and a higher proportion of professional vacancies are filled (Figure 2 and 3).

- Figure 2 shows that there have been significant rises in both the number of applicants and suitable applicants per professional vacancy since 2007-08, with employers now attracting large fields of candidates and having the choice of multiple suitable applicants.
- The largest proportions of vacancies filled were for school teachers, ICT professions and nurses, but the largest numbers of qualified applicants were for accountants, engineering professions and ICT professions (Figure 4 and 5).

Figure 4: Proportion of vacancies filled, Professions, 2012-13 (%)



Source: DEEWR Survey of Employers who have Recently Advertised

Note: Nurses and resource related occupations include some skilled occupations which are not professions (ANZSCO major group 2).

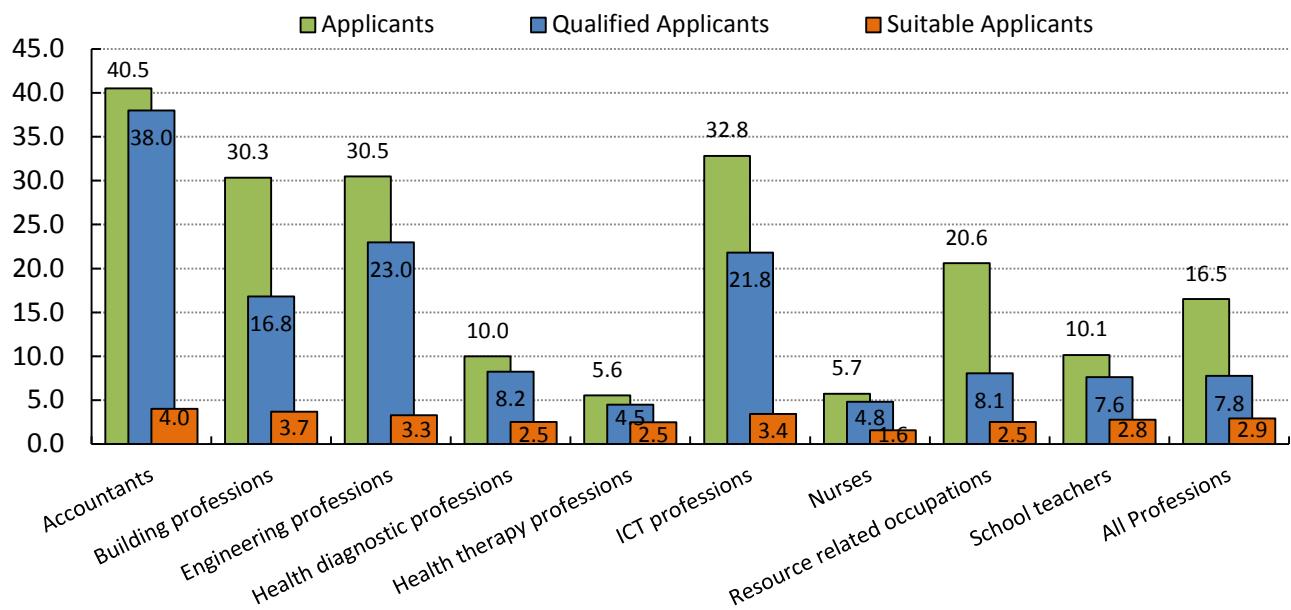
⁴ DIICCSRTE, *Students: Selected Higher Education Statistics, Award Course Completions and Full Year: Commencing Students*, various issues

The vast majority of applicants for professional vacancies are considered by employers to be unsuitable. Despite this, there are relatively large numbers of suitable applicants vying for positions as accountants, building professionals, ICT professionals and engineers.

- In addition, many unsuitable applicants hold relevant qualifications. Examples are accountant (where there was an average of 38.0 applicants per vacancy who held relevant qualifications but just 4.0 on average were regarded by employers as being suitable) and for engineering professions there were 23.0 qualified applicants per vacancy, 19.7 of whom, on average, were regarded as being unsuitable. Reasons for unsuitability include lack of experience and poor communication skills.

Detailed graphs for each of the profession clusters is available in the chapter [Skill shortages by occupation cluster](#).

Figure 5: Average number of applicants, qualified applicants and suitable applicants per vacancy, Professions, 2012-13 (no.)



Source: DEEWR Survey of Employers who have Recently Advertised

Note: Building professions, engineering professions, nurses and resource related occupations include a small number of skilled occupations which are not professions (ANZSCO major group 2).

Technicians and trades

Nationally, shortages are evident for

- airconditioning and refrigeration mechanic and electronic equipment trades worker
- arborist
- automotive electrician, motor mechanic (general), panelbeater and vehicle painter
- chef/cook, baker, pastrycook and butcher and smallgoods maker
- hairdresser
- mine deputy
- roof tiler
- sheetmetal trades worker and metal machinist (first class).

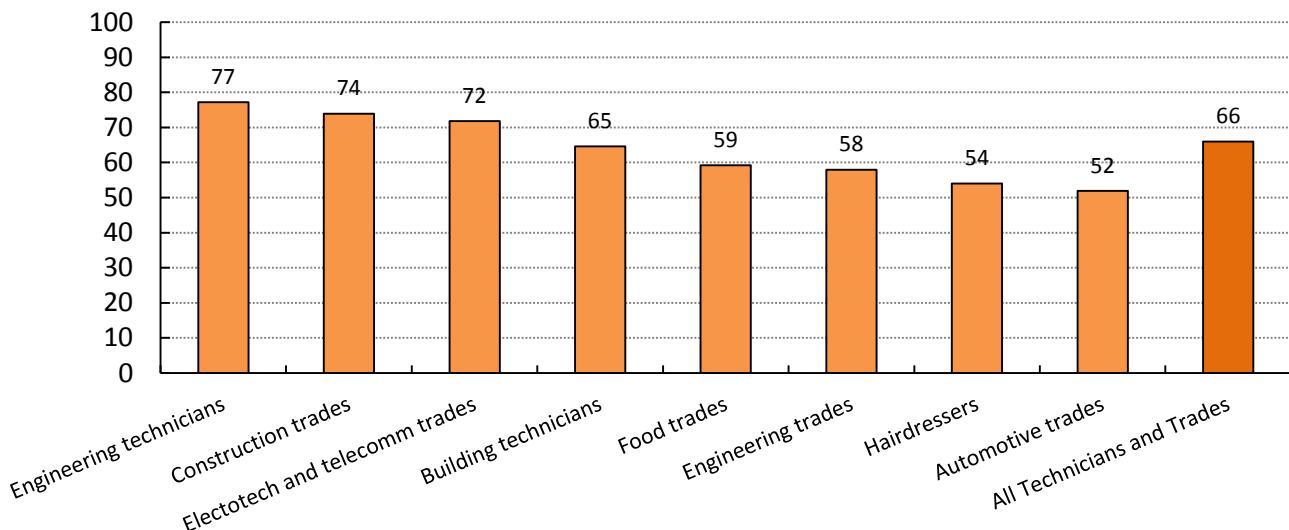
The labour market for technicians and trades workers is tighter than that for professionals, with employers recruiting technicians and trades workers attracting, on average, smaller fields of applicants and fewer suitable applicants per vacancy (Figure 2). Consequently, they also filled a lower proportion of their surveyed vacancies than those recruiting for professions (Figure 3).

- As is the case for professionals, the vast majority of applicants for technician and trades worker vacancies are considered by employers to be unsuitable.

While some shortages have abated as a result of the softer labour market, employers and industry groups have raised concern about the declining numbers of apprentices and trainees in some trades.

- While there has been an overall increase in the number of commencements for technicians and trades workers over the five years to 2012 (up by 13.8 per cent or 11,500), there has been a pronounced fall for construction trades (down by 25.1 per cent or 5500)⁵. Automotive trades have also fallen (down up 4.6 per cent or 1000).
- Continued falls in the number of people commencing an apprenticeship or traineeship in construction and automotive trades are likely to place pressure on the supply of skilled workers when demand recovers.

Figure 6: Proportion of vacancies filled, Technicians and trades, 2012-13 (%)



Source: DEEWR Survey of Employers who have Recently Advertised

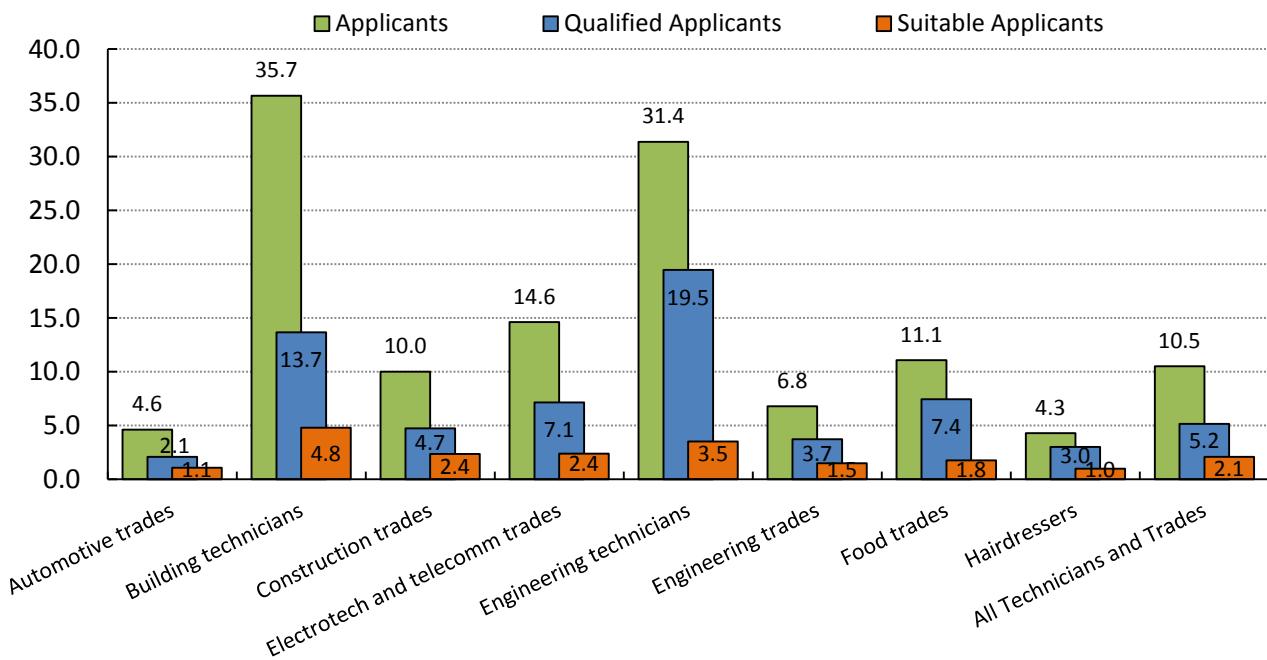
Automotive trades workers continue to be the most difficult to recruit (Figure 6), and long standing shortages persist. These trades attract small numbers of applicants and there are just 1.1 suitable applicants per vacancy overall.

Applicants for both building and engineering technician jobs, however, face strong competition for vacancies with relatively large numbers of suitable applicants.

- The construction trades labour market is also marked by some surplus capacity, as low levels of Construction activity has constrained demand for these workers.

⁵ NCVER, *Apprentices and Trainees*, December 2012, estimates

Figure 7: Average number of applicants, qualified applicants and suitable applicants per vacancy, Technicians and trades, 2012-13 (no.)



Source: DEEWR Survey of Employers who have Recently Advertised

Detailed graphs for each of the technician and trade clusters is available in the chapter [Skill shortages by occupation cluster](#).

States and territories

Recruitment of skilled workers is hardest in the Northern Territory, with employers filling 60 per cent of their surveyed vacancies. By contrast, employers in South Australia have little difficulty filling their vacancies for skilled workers (84 per cent of surveyed vacancies filled).

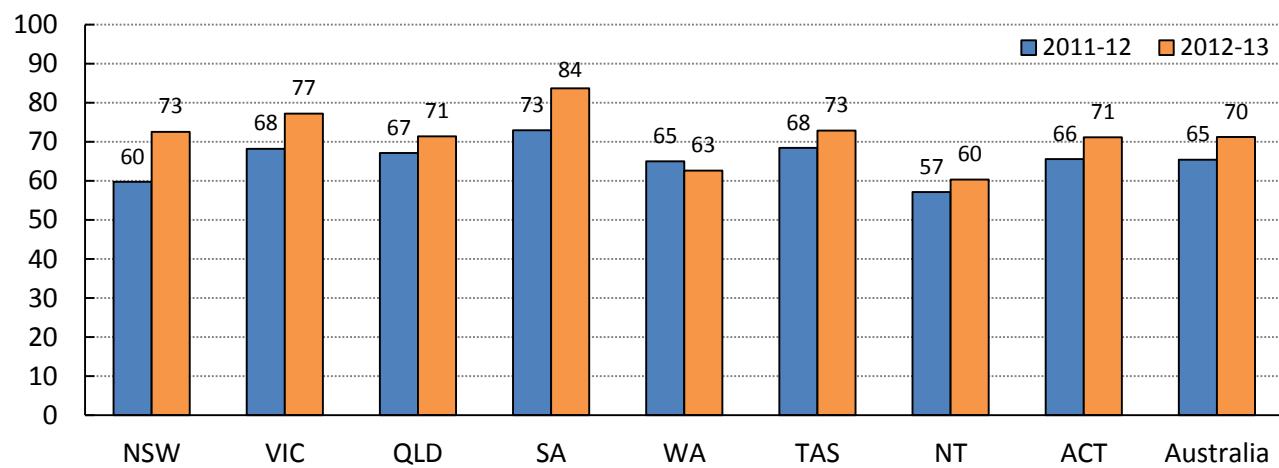
Employers in almost all state and territories experienced less difficulty recruiting skilled workers in 2012-13 than they did in 2011-12 (Figure 8 and 9).

- Results were mixed in Queensland and Western Australia. Employers in Queensland attracted slightly fewer suitable applicants per vacancy but filled a higher proportion of vacancies than they did the previous year. In Western Australia, employers filled slightly fewer vacancies but attracted larger fields of suitable applicants compared with 2011-12.

Employers in the most populous states attracted the largest fields of candidates, but the highest numbers of suitable applicants per vacancy were in Victoria, Queensland and South Australia.

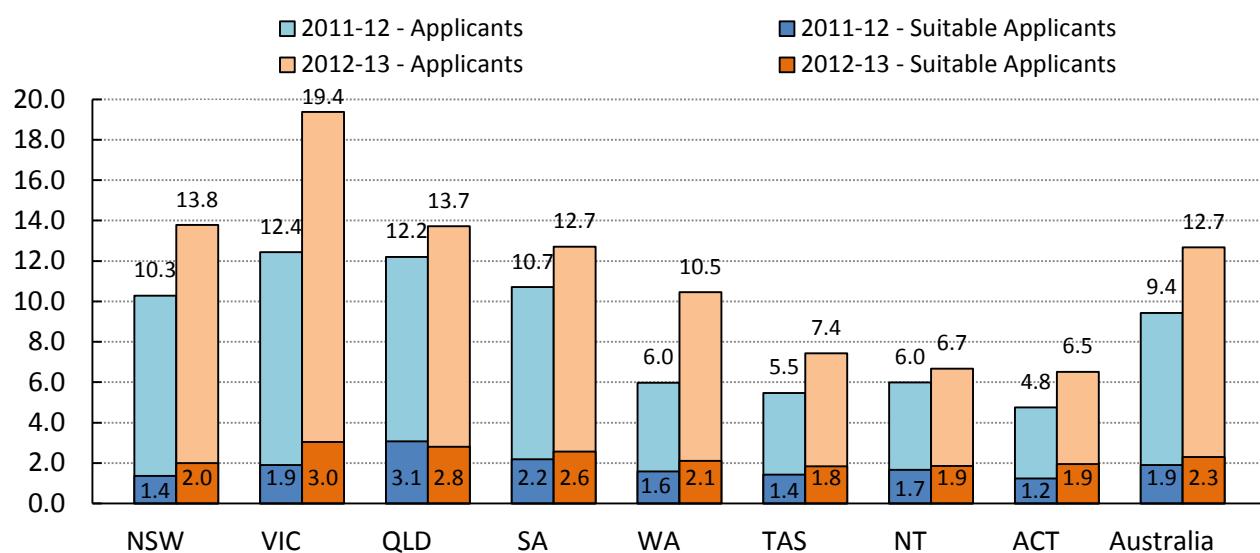
Detailed graphs for each state and territory are available in Appendix 1 [Time Series Charts for States and Territories](#)

Figure 8: Proportion of vacancies filled by state and territory and Australia, 2011-12 and 2012-13 (%)



Source: DEEWR Survey of Employers who have Recently Advertised

Figure 9: Average number of applicants and suitable applicants per vacancy by state and territory and Australia, 2011-12 and 2012-13 (no.)



Source: DEEWR Survey of Employers who have Recently Advertised

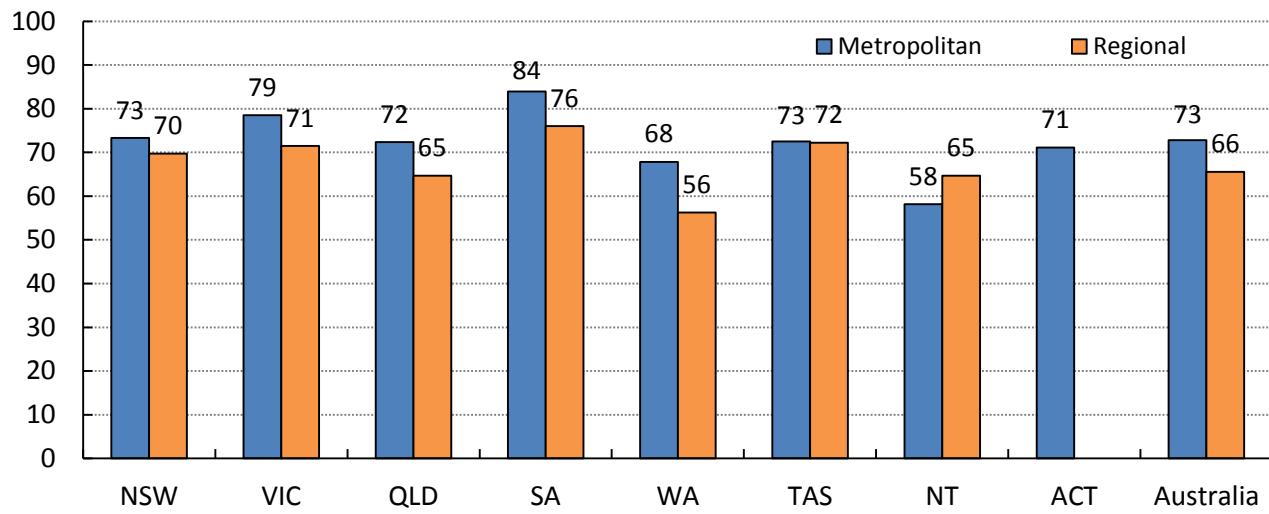
Metropolitan and regional locations⁶

Recruitment of skilled workers is generally harder in regional locations than in metropolitan areas.

- Regional employers filled 66 per cent of their surveyed vacancies in 2012-13 and attracted 2.0 suitable applicants per vacancy, compared with 73 per cent of metropolitan vacancies filled and 2.5 suitable applicants per vacancy (Figure 10 and 11).
- The most notable occupations for which recruitment was harder for employers in regional areas were nurses, health diagnostic professionals and automotive trades.

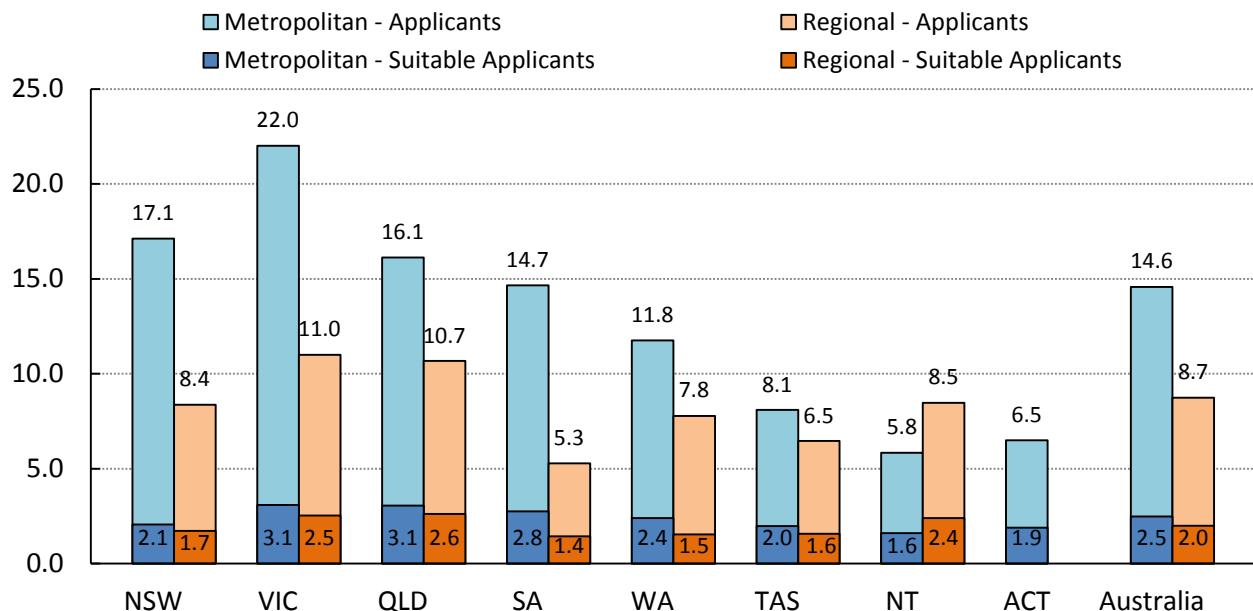
⁶ Metropolitan includes state and territory capital cities, regional covers all other locations.

Figure 10: Proportion of vacancies filled by state and territory and Australia, Metropolitan and regional locations, 2012-13 (%)



Source: DEEWR Survey of Employers who have Recently Advertised

Figure 11: Average number of applicants and suitable applicants per vacancy by state and territory and Australia, Metropolitan and regional locations, 2012-13 (no.)



Source: DEEWR Survey of Employers who have Recently Advertised

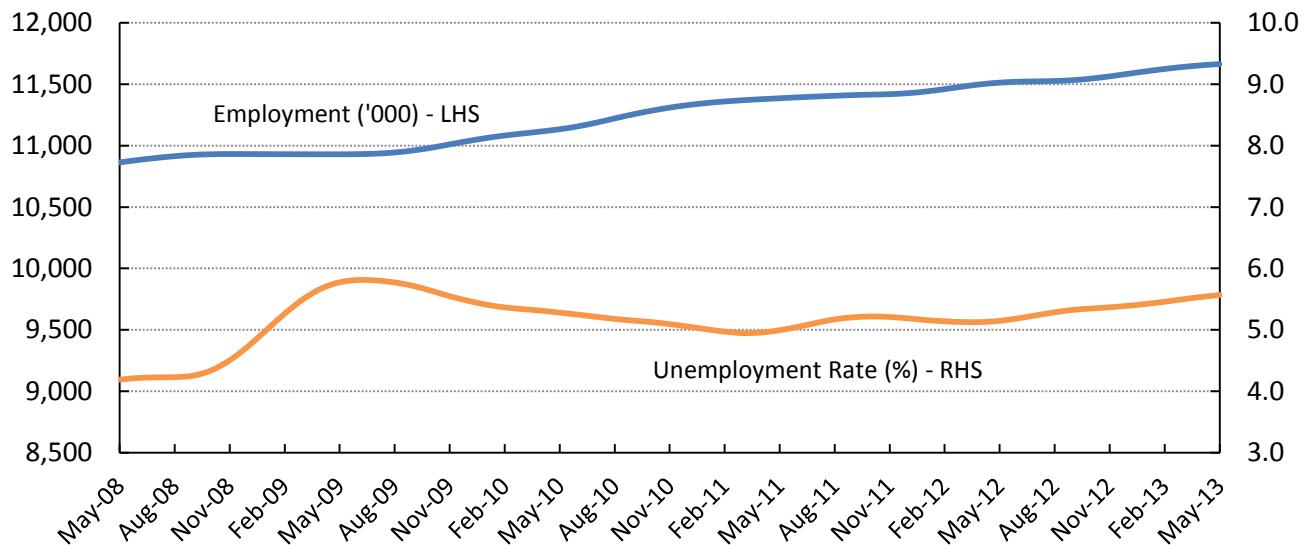
LABOUR MARKET OVERVIEW

Employment trends

ABS Labour Force Survey⁷ data for May 2013 show national employment increased by almost 151,100 (or 1.3 per cent) over the year to more than 11.6 million, a record high.

- The unemployment rate has increased slightly over this period but remains relatively low at 5.6 per cent at May 2013.

Figure 12: Employment ('000) LHS and unemployment rate (%) RHS, Australia, May 2008 to May 2012

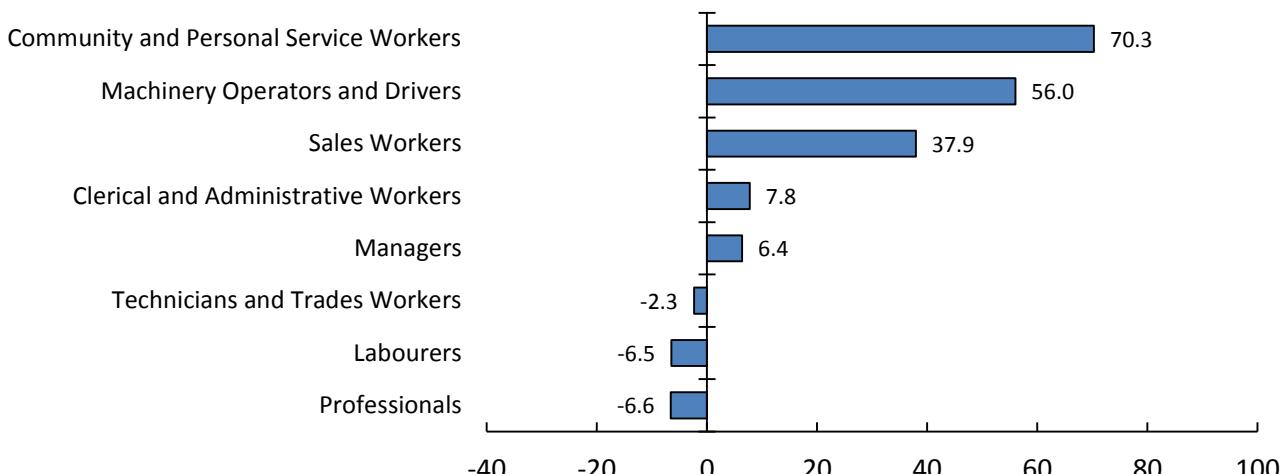


Source: ABS Labour Force Survey, trend

Occupational change

In the year to May 2013⁸, employment increased in five of the eight occupation major groups. The largest number of new jobs was for community and personal service workers (70,300), however, the strongest growth in percentage terms was for machinery operators and drivers (up by 7.5 per cent).

Figure 13: Employment change, Occupation major group, year to May 2013 ('000)



Source: ABS Labour Force Survey, DEEWR trend

⁷ ABS, Labour Force Survey, trend

⁸ ABS, Labour Force Survey, DEEWR trend

Professionals remains the largest employing group (more than 2.5 million as at May 2013), followed by technicians and trades workers (nearly 1.7 million as at May 2013). It is notable, though, that employment fell in both these groups over the year, consistent with the softer labour market for skilled workers.

Industry change

Employment increased in 10 of the 19 industries over the year to May 2013. The largest gains were recorded in Transport, Postal and Warehousing (up by 46,100), Health Care and Social Assistance (44,300), and Accommodation and Food Services (43,800).

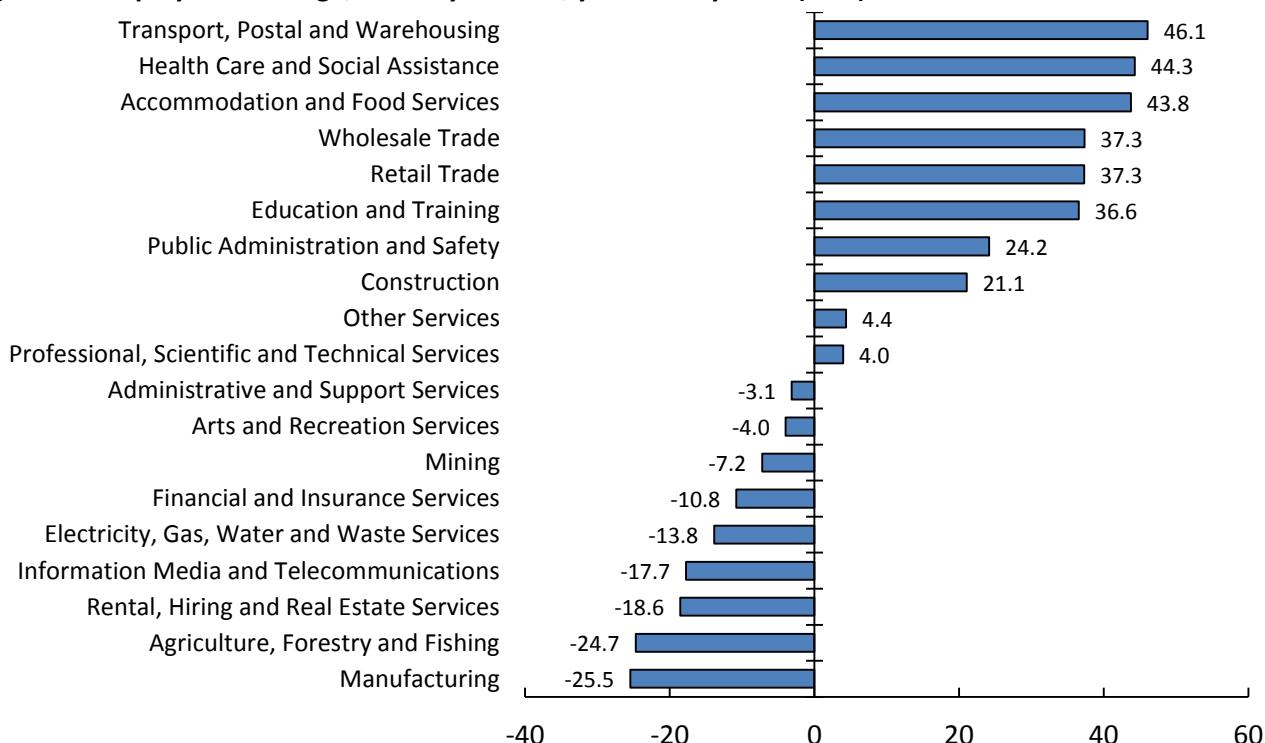
- In percentage terms, the strongest gains were recorded for Wholesale Trade (up by 9.2%), Transport, Postal and Warehousing (8.4%), and Accommodation and Food Services (5.7%).
- While employment in Transport, Postal and Warehousing has grown strongly over the year this represents a recovery from the decline of 35,600 (or 6.1%) recorded over the year to May 2012, rather than reflecting strong ongoing growth in the industry. In fact, employment in the industry has not yet recovered to its pre-GFC level (604,700 in February 2009).

By contrast, the largest decreases were recorded in Manufacturing (down by 25,500) and Agriculture, Forestry and Fishing (24,700).

- The strongest falls were in Electricity, Gas, Water and Waste Services (down by 8.9%), Rental, Hiring and Real Estate Services (8.6%), and Information Media and Telecommunications (7.7%).

Employment in the Mining industry declined by 7200 (or 2.7 per cent) over the year to May 2013, the industry's first annual decline since November 2009. The softening of employment conditions in the industry reflects, in part, the completion of large projects as mines transition from a construction phase to a less labour intensive operational phase. In addition, decreased demand from China and lower commodity prices have resulted in weaker confidence and the deferral of a number of major resource projects.

Figure 14: Employment change, Industry division, year to May 2013 ('000)



Source: ABS Labour Force Survey, DEEWR trend

Trends in vacancies

The DEEWR Internet Vacancy Index⁹ (IVI) shows there was a 22.0 per cent fall in the level of advertised vacancies over the year to May 2013. The IVI is now at its lowest level since the series began in January 2006.

- Over the year to May 2013, advertised vacancies fell in all states and territories, with the strongest decline recorded in Western Australia (down by 37.6 per cent).
- Vacancy levels declined for all occupation major groups over the year to May 2013, with the strongest fall recorded for Machinery Operators and Drivers (down by 29.6 per cent).

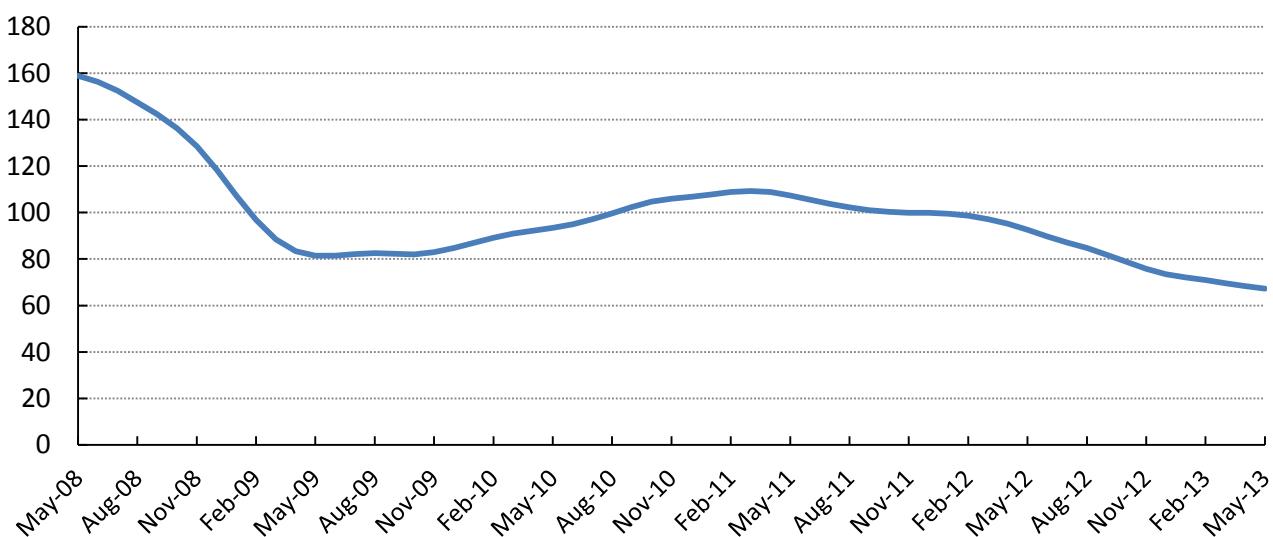
The IVI for skilled occupations fell by 27.3 per cent over the year to May 2013 (Figure 15).

- Vacancy levels fell by 27.1 per cent for professionals and 27.8 per cent for technicians and trades workers over the year to May 2013.

Education professionals was the only skilled occupation cluster that recorded an increase (up by 10.8 per cent).

- Among the professions, the strongest falls were recorded for science professionals and veterinarians (down by 77.7 per cent), followed by engineers (59.8 per cent).
- For technicians and trades, the strongest falls were for automotive and engineering trades (down by 38.0 per cent) and engineering, ICT and science technicians (37.2 per cent).

Figure 15: Skilled Internet Vacancy Index, May 2008 to May 2013 (January 2006 = 100)



Source: DEEWR Internet Vacancy Index, trend

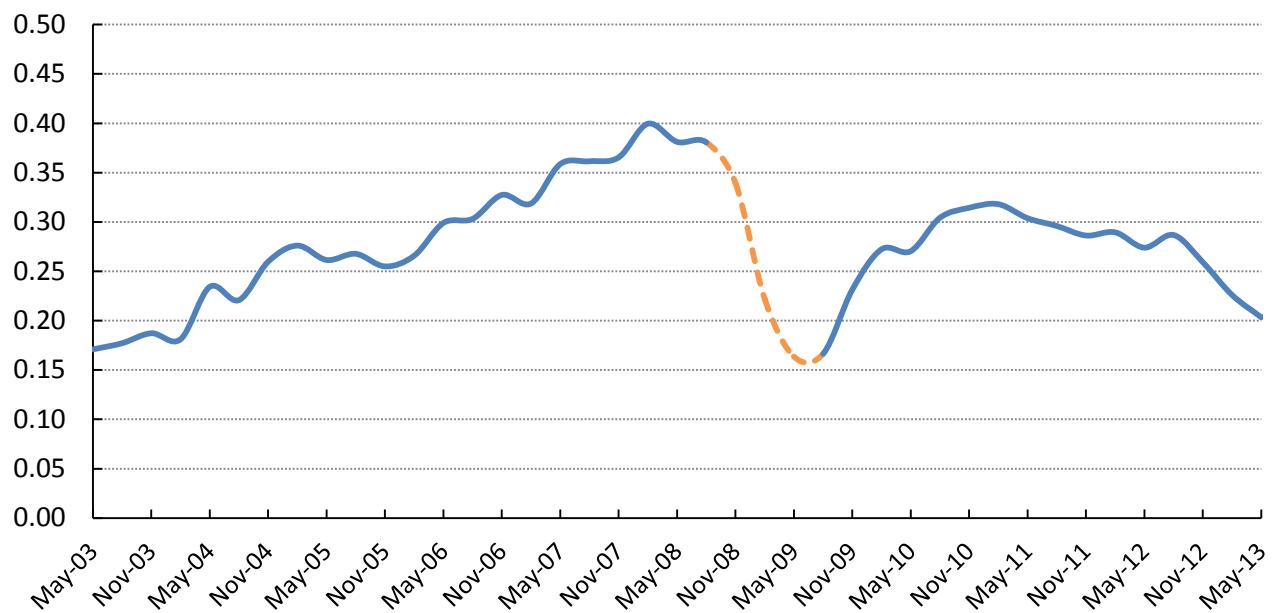
Note: Skilled vacancies comprise the ANZSCO major groups of professionals and technicians and trades workers.

⁹ DEEWR, *Internet Vacancy Index*, May 2013, trend

The ratio of ABS job vacancies to the ABS estimate of unemployment (a traditional measure of labour market tightness) stood at 0.20 in May 2013, compared with 0.27 in May 2012.

- The ratio remains below its recent peak of 0.40 in February 2008, and is similar to levels recording during the global financial crisis (Figure 16).

Figure 16: ABS job vacancies per unemployed person, May 2003 to May 2013



Sources: DEEWR Calculated using ABS Labour Force Survey and ABS Job Vacancies, seasonally adjusted

Note: Job vacancy data between August 2008 and August 2009 (inclusive) have been estimated by DEEWR as the ABS did not collect job vacancy data for this period.

Training trends

In 2012, there were around 934,000 domestic students enrolled with a higher education provider¹⁰ and more than 1.9 million domestic students in the public vocational education and training system¹¹.

There was strong growth overall in the number of students studying through higher education and vocational education and training between 2007 and 2012 (Figure 17).

- The number of domestic students enrolled in a higher education award course increased by 22.8 per cent.
- The number of students undertaking a training package at the certificate III or higher qualification level increased by 52.3 per cent.

Growth was recorded over the five years to 2012 in most fields of education.

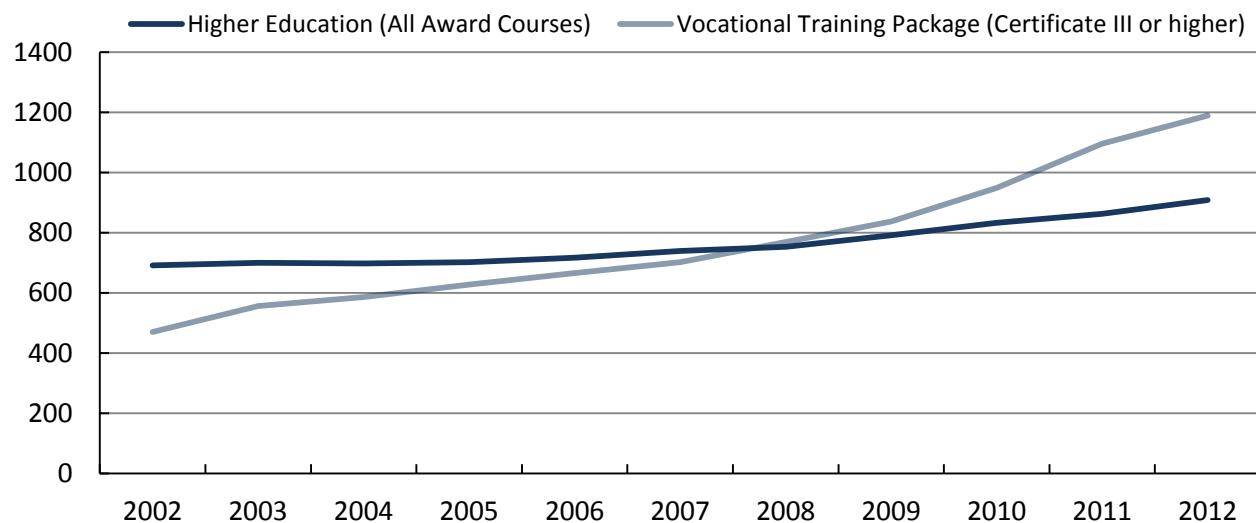
- For both higher education and vocational training packages at the certificate III or higher level, the strongest growth in enrolments was for Health (42.9 per cent and 327.8 per cent, respectively).
- Other fields of education with strong growth in both training sectors include Architecture and Building, Creative Arts, Engineering and Related Technologies, Natural and Physical Sciences and Society and Culture.

¹⁰ DIICCSRTE, *Students: Selected Higher Education Statistics, Full Year: All Students*, various issues, some time series data extracted through uCube 10 July 2013

¹¹ NCVER, *Students and Courses*, 2012, some time series data extracted through VOCSTATS 18 July 2013

Note: Data are only for publicly funded vocational education and training providers.

Figure 17: Enrolments, Higher education and vocational education and training, Domestic students, 2002 to 2012 ('000s)



Sources: DIICCSRTE Higher Education Student Data Collection and NCVER Students and Courses

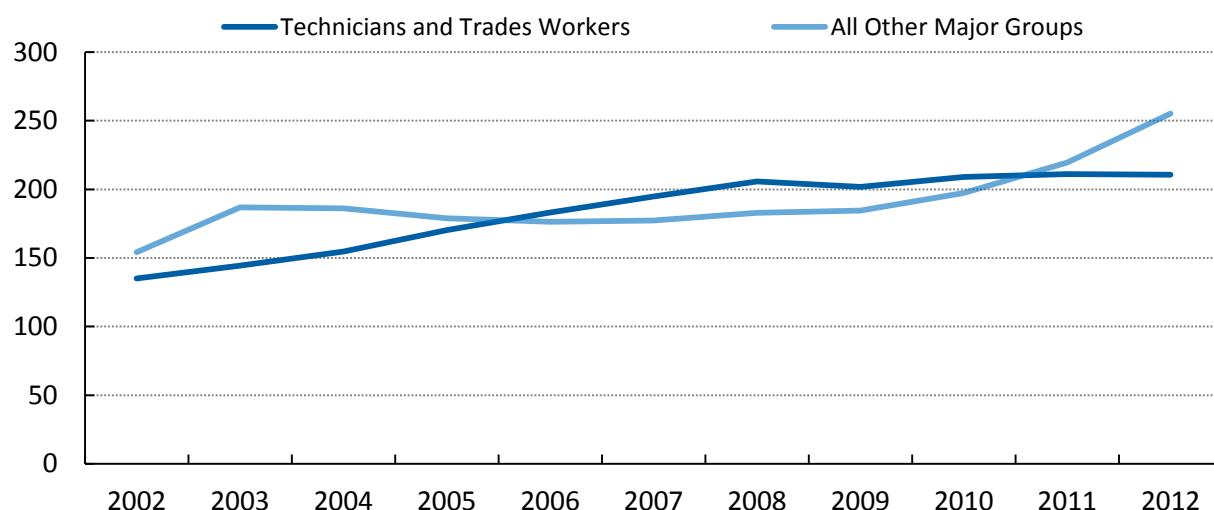
Note: Higher education data exclude enabling and non-award courses. Vocational education data have been restricted to those undertaking a training package at certificate III level or higher.

While apprenticeships and traineeships make up a relatively small proportion of the vocational education and training system, they are the main training pathway for a number of occupations (particularly trades).

- The number of apprentices and trainees in-training at the certificate III or higher level increased by 25.2 per cent over the five years to 2012, to approximately 466,000.
- Apprentices and trainees in-training for technicians and trades make up nearly half of all those undertaking an apprenticeship or traineeship.

Growth in apprenticeships and traineeships has been slow for technicians and trades workers, with the number in-training at the certificate III or higher level increasing by just 8.1 per cent between 2007 and 2012¹² (Figure 18).

Figure 18: Apprentices and Trainees In-Training, Technicians and trades workers and other major groups, 2002 to 2012 ('000s)



Sources: NCVER Apprentices and Trainees, Estimates

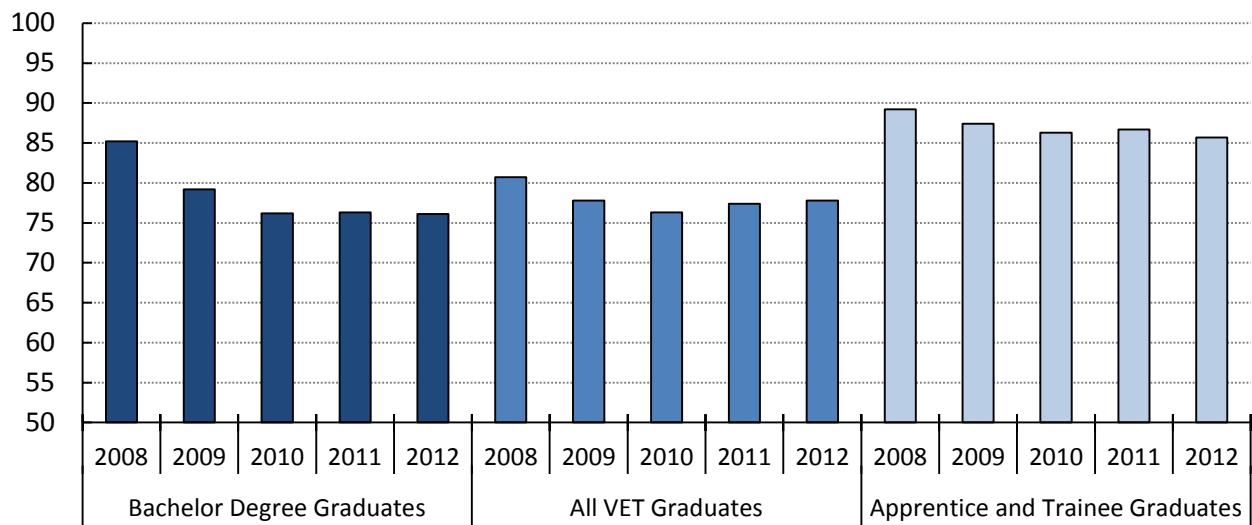
Note: Apprentices and Trainees have been restricted to those undertaking a training package at the certificate III level or higher.

¹² NCVER, Apprentices and Trainees, December 2012, estimates

Employment outcomes for graduates, although remaining strong, have weakened slightly over the last five years (Figure 19).

- In 2012, 76.1 per cent of bachelor degree graduates, who are available for full-time work, found full-time employment within four months of graduating. The proportion fell by 9.1 percentage points between 2008 and 2012¹³.
- In 2012, 77.8 per cent of all vocational education and training graduates and 85.7 per cent of those who undertook their training as part of an apprenticeship or traineeship were employed (full-time or part-time) six months after completing their training. The proportion has fallen by 2.9 percentage points for all vocational education and training graduates and 3.5 percentage points for apprentice and trainee graduates when compared with 2008¹⁴.

Figure 19: Proportion of graduates in employment, Bachelor degree graduates, all vocational education and training graduates and apprentice and trainee graduates, 2008 to 2012 (%)



Sources: GCA Graduate Destinations Survey and NCVER Student Outcomes Survey

Note: Employment outcomes are for bachelor degree graduates four months after completing their studies (working full-time as a proportion of those available for full-time employment) and for vocational education and training and apprentice and trainee graduates six months after completing their training (working full-time or part-time as a proportion of all graduates).

13 GCA, *GradStats*, various issues

14 NCVER, *Student Outcomes*, various issues, data combined for two survey periods

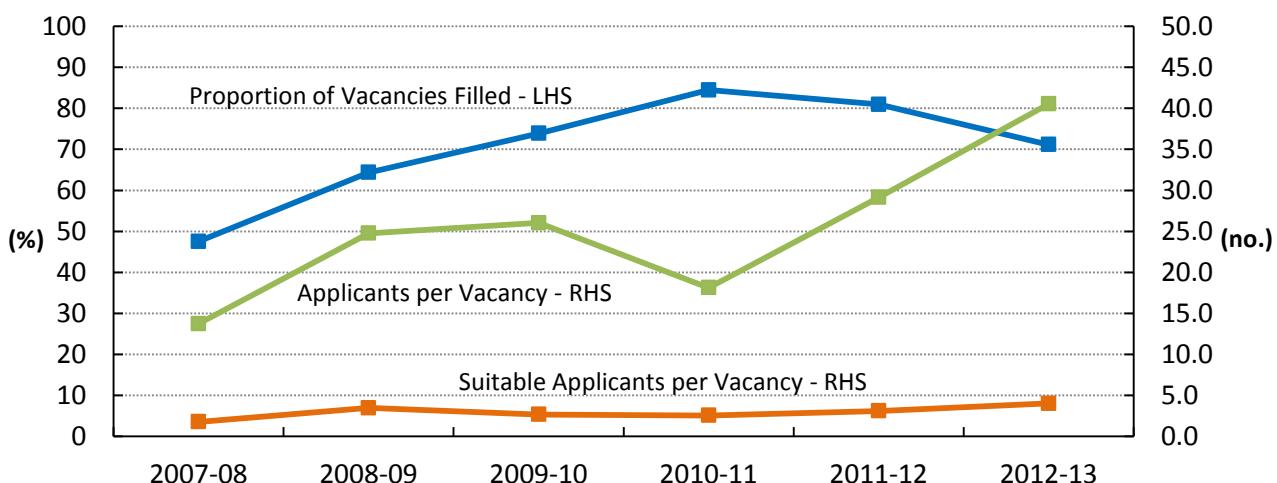
SKILL SHORTAGES BY OCCUPATION CLUSTER

Accountants¹⁵

Occupations in cluster	Rating	Number of years in shortage, 5 years to 2012-13
2211 Accountants	No shortage	0

- Employers attracted 40.5 applicants per vacancy on average, 38.0 of whom were degree qualified accountants. Employers considered 4.0 applicants per vacancy to be suitable (this compares with 29.1 applicants and 3.1 suitable applicants in 2011-12).
- Employers generally sought bachelor degree qualified accountants with Chartered Accountants or CPA qualifications and a minimum of five years of experience.
- Employers often had specific requirements for the kind of experience and skill sets, such as experience in local government accounting or working with particular accounting software, and they did not generally need to compromise to fill vacancies.
- Data from Graduate Careers Australia¹⁶ show that 79.9 per cent of accounting bachelor degree graduates were in full-time employment (of those available for full-time employment four months after graduation) in 2012, down by 8.7 percentage points compared with 2008.

Figure 20: Proportion of vacancies filled (%), average number of applicants and suitable applicants per vacancy (no.), Accountants, 2007-08 to 2012-13



Source: DEEWR Survey of Employers who have Recently Advertised

- Employers filled 71 per cent of surveyed vacancies in 2012-13 (a slight fall compared with 81 per cent filled in 2011-12).
 - The majority of employers who did not fill their vacancies attracted qualified applicants who did not have specific skills, experience, or qualities the employers sought.

More information is available in the detailed reports for accountants at [Occupational reports - Accountants](#).

¹⁵ Findings based on research undertaken in the June quarter 2013.

¹⁶ GCA, *GradStats*, 2012.

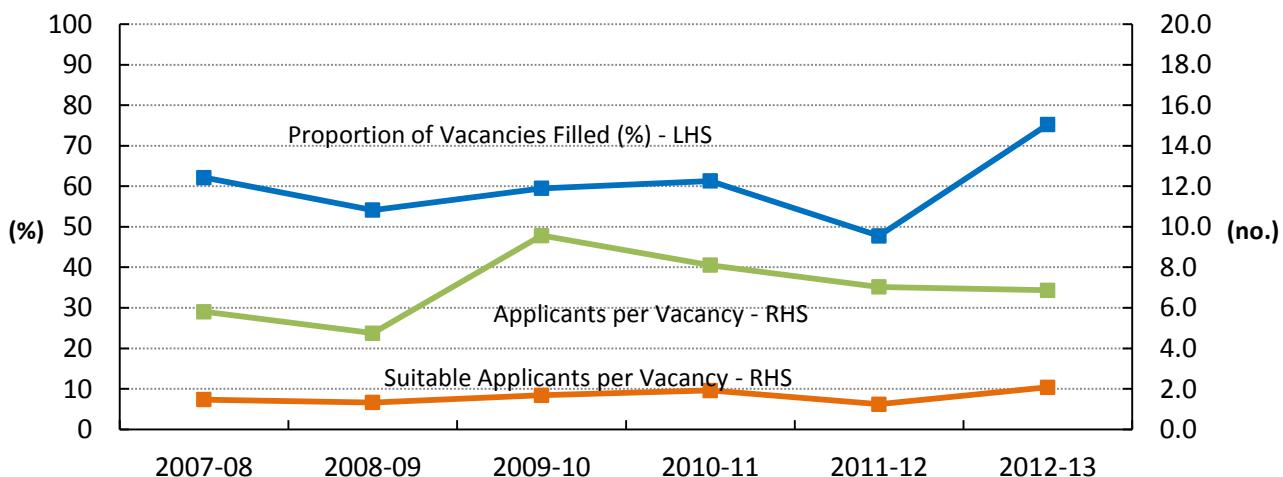
Agriculture and horticulture occupations¹⁷

Occupations in cluster	Rating	Number of years in shortage, 5 years to 2012-13
Agricultural occupations		
121 (part) Farm Managers	No shortage	0*
2341-11,12 Agricultural Scientist/Consultant	No shortage	4
3111-11 Agricultural Technician	No shortage	1*
3612-11 Shearer	No shortage	2
Horticultural trades		
3622-12 Arborist	Shortage	5
3622-13 Landscape Gardener	No shortage	3
3624-11 Nurseryperson	No shortage	0

*Occupation has not been assessed continuously over the past 5 years

- The occupations in this cluster are diverse but are grouped together as they relate to agricultural and horticultural activities.
- Shortages across the group have been patchy over the past decade, but there was a marked easing in 2012-13 with only abortist in shortage.
- In 2012-13, there was a marked change in the recruitment experiences of employers compared with 2011-12, with surveyed employers finding it easier to fill their positions.

Figure 21: Proportion of vacancies filled (%), average number of suitable applicants per vacancy (no.), Agriculture and horticulture occupations, 2007-08 to 2012-13



Source: DEEWR Survey of Employers who have Recently Advertised

Note: Occupational coverage varies over the time series.

More information is available in the detailed reports for the cluster at [Occupational reports – Agriculture and horticulture occupations](#).

¹⁷ Findings based on research undertaken in December quarter 2012.

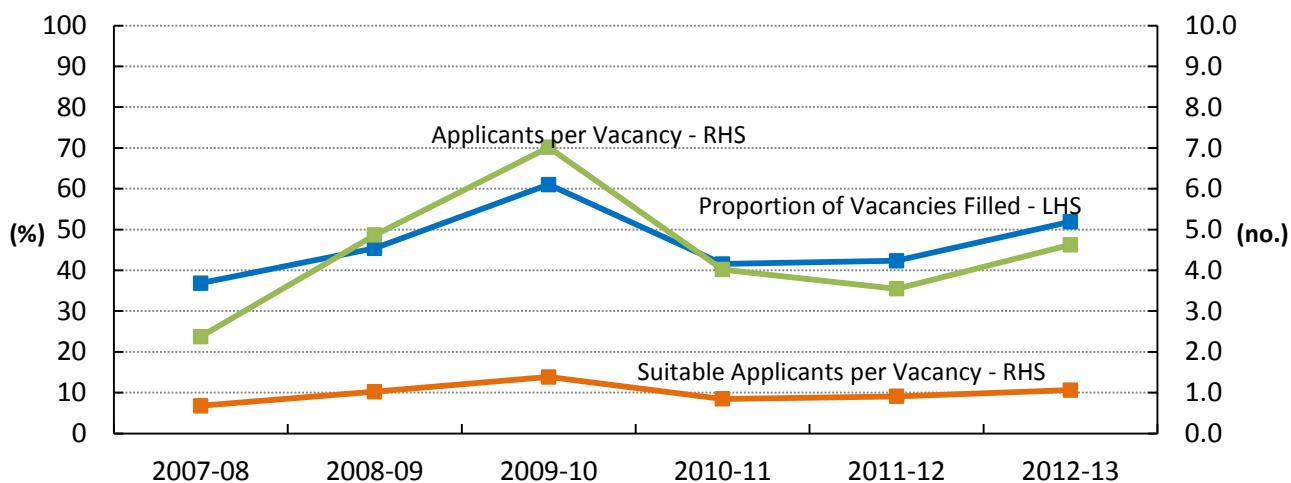
Automotive trades¹⁸

Occupations in cluster	Rating	Number of years in shortage, 5 years to 2012-13
3211-11 Automotive Electrician	Shortage	5
3212-11,12,13 Motor Mechanic	Shortage	5
3212-14 Small Engine Mechanic	No shortage	1*
3241-11 Panelbeater	Shortage	5
3243-11 Vehicle Painter	Shortage	5

*Occupations have not been assessed continuously over the past 5 years

- In 2012-13 shortages present for a decade continued, despite declining employment of automotive trades workers.
 - The supply of suitable applicants was constrained by a plateau in apprenticeship and traineeship completions.
 - Shortages are likely to persist as the factors which contribute to recruitment and retention difficulties (including relatively low remuneration) are likely to continue.
- Employers in states and territories where there is strong competition from the resources sector continued to have greater difficulty filling vacancies than employers in other states, although the labour market for automotive trades in Queensland and Western Australia eased over the year to 2012-13.
- Employers' recruitment difficulties varied by occupation, with vacancies for automotive electricians significantly more difficult to fill than those for other occupations in the cluster.

Figure 22: Proportion of vacancies filled (%), average number of applicants and suitable applicants per vacancy (no.), Automotive trades, 2007-08 to 2012-13



Source: DEEWR Survey of Employers who have Recently Advertised

Note: Occupational coverage varies over the time series.

More information is available in the detailed reports for the cluster at [Occupational reports – Automotive trades](#).

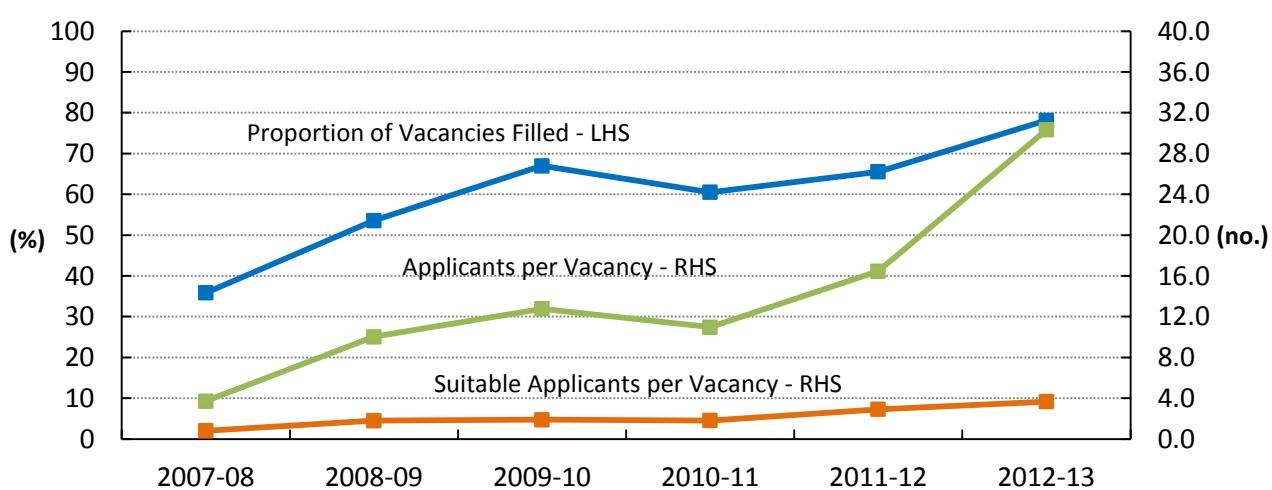
¹⁸ Findings based on research undertaken in the September quarter 2012, with the exception of small engine mechanic which was assessed in February 2013.

Building professions, and architectural and building technicians¹⁹

Occupations in cluster	Rating	Number of years in shortage, 5 years to 2012-13
1331-11 Construction Project Manager	No shortage	1
Building professions		
2321-11 Architect	No shortage	0
2322-12 Surveyor	No shortage	4
2326-11 Urban and Regional Planner	No shortage	0
2332-13 Quantity Surveyor	No shortage	4
Architecture and building technicians		
3121-11 Architectural Draftsperson	No shortage	0
3121-12 Building Associate	Recruitment difficulty for those with experience in mid-tier civil engineering projects	0
3121-14 Construction Estimator	No shortage	3

- The labour market for building professionals, and architectural and building technicians is affected by weak demand and surplus supply in most occupations.
 - Competition is strong for available vacancies with employers attracting record high numbers of applicants and suitable applicants per vacancy.
 - Employers of building professionals recruited with greater ease than those for architectural and building technicians.
- Widespread shortages are not evident, but employers recruiting for building associates with experience on mid-tier civil engineering construction projects experienced some difficulty recruiting.

Figure 23: Proportion of vacancies filled (%), average number of applicants and suitable applicants per vacancy (no.), Building managers and professions, 2007-08 to 2012-13

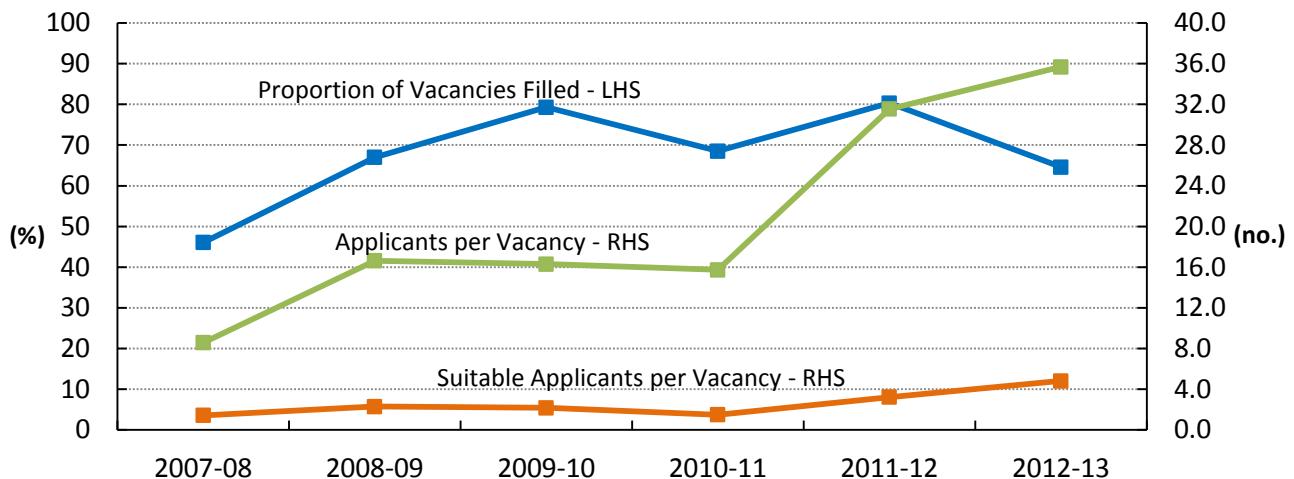


Source: DEEWR Survey of Employers who have Recently Advertised

Note: In 2007-08, the series excludes construction project manager and includes landscape architect.

¹⁹ Findings based on research undertaken in the June quarter 2013.

Figure 24: Proportion of vacancies filled (%), average number of applicants and suitable applicants per vacancy, Architectural and building technicians, 2007 to 2012



Source: DEEWR Survey of Employers who have Recently Advertised

Note: In 2007-08, the series excludes construction estimator.

- The weakness in demand for these occupations reflects low activity levels in building construction, which have contributed to declining vacancy levels and low business sentiment.

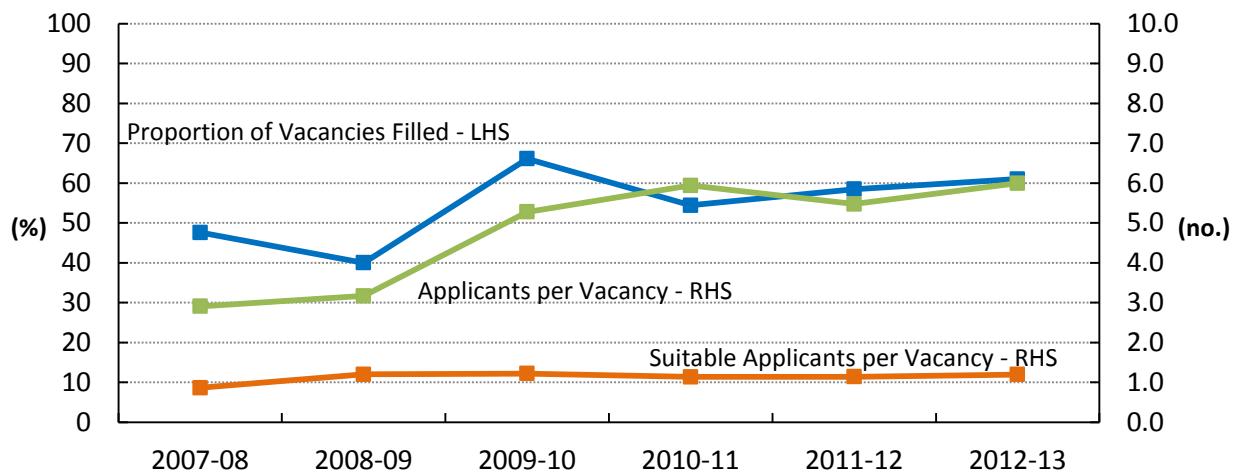
More information is available in the detailed reports for the cluster at [Occupational reports – Building professions, and architectural and building technicians](#).

Child care occupations²⁰

Occupations in cluster	Rating	Number of years in shortage, 5 years to 2012-13
1341-11 Child Care Centre Manager	No shortage	4
4211-11 Child Care Worker	Shortage (particularly for diploma qualified workers)	5

- An increasing number of children are accessing early childhood education and care services each year, raising the demand for early childhood workers. At the same time, child care reforms under the National Quality Framework (NQF) have placed a focus on increasing the quality of the child care workforce through raising the number of qualified staff.
- In 2012-13, the labour market for child care centre managers eased, and for the first time since 1995, significant national shortages are not evident.
 - Although shortages are not widespread, some employers experienced difficulty recruiting child care centre managers for out-of-school hours care.
- Shortages of child care workers have been evident over the longer term, and employers continue to experience difficulty recruiting child care workers who have appropriate qualifications and experience.
- Although training numbers are rising, strong employment growth and high levels of replacement demand suggest shortages are likely to persist for child care workers over the next few years.

Figure 25: Proportion of vacancies filled (%), average number of applicants and suitable applicants per vacancy (no.), Child care occupations, 2007-08 to 2012-13



Source: DEEWR Survey of Employers who have Recently Advertised

More information is available in the detailed reports for the cluster at [Occupational reports – Child care occupations](#).

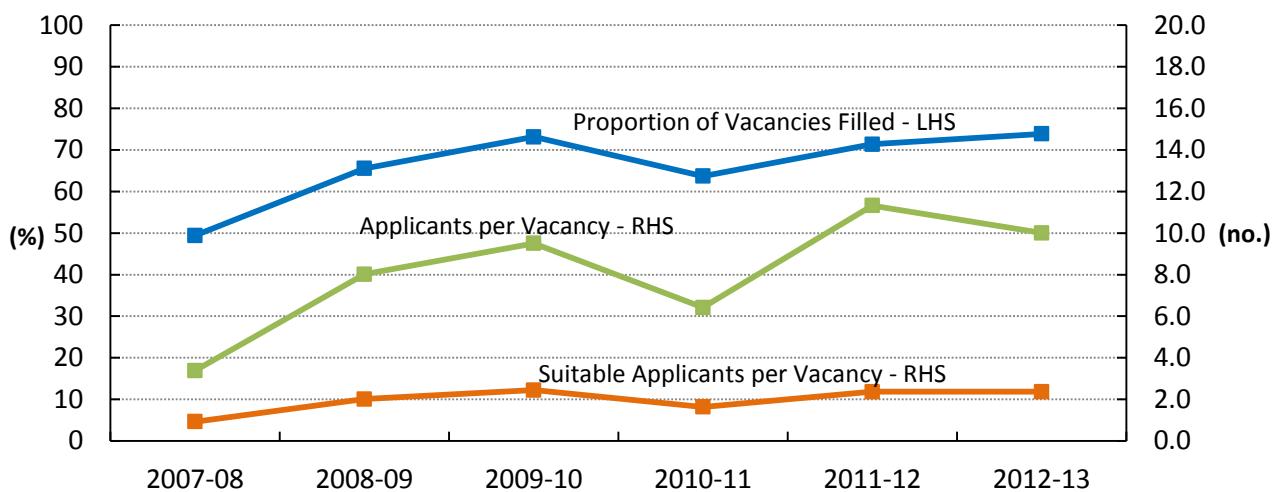
²⁰ Findings based on research undertaken in the second half of 2012.

Construction trades²¹

Occupations in cluster	Rating	Number of years in shortage, 5 years to 2012-13
3311-11 Bricklayer	No shortage	2
3311-12 Stonemason	No shortage	4
3312 Carpenters and Joiners	No shortage	1
3321-11 Floor Finisher	Recruitment difficulty for floor sanders	2
3322-11 Painting Trades Worker	No shortage	1
3331-11 Glazier	Regional shortage	3
3332-11 Fibrous Plasterer	No shortage	1
3332-12 Solid Plasterer	No shortage	1
3333-11 Roof Tiler	Shortage	5
3334-11 Wall and Floor Tiler	No shortage	1
3341 Plumbers	No shortage	3
3941-11 Cabinetmaker	No shortage	3

- The labour market for construction trades continued to be marked in 2012-13 by weak demand and surplus supply in most trades.
- Applicants for vacancies in some construction trades face strong competition for positions, with recruiting employers attracting relatively large numbers of suitable applicants.
 - Only one of the 12 trades assessed (roof tiler) is in shortage, compared with all trades in 2007-08 and 2008-09.

Figure 26: Proportion of vacancies filled (%), average number of applicants and suitable applicants per vacancy (no.), Construction trades, 2007-08 to 2012-13



Source: DEEWR Survey of Employers who have Recently Advertised

Note: Occupational coverage varies over the time series.

More information is available in the detailed reports for the cluster at [Occupational reports – Construction trades](#).

²¹ Findings based on research undertaken in the December quarter 2012 and the June quarter 2013. Ratings as at the June quarter 2013.

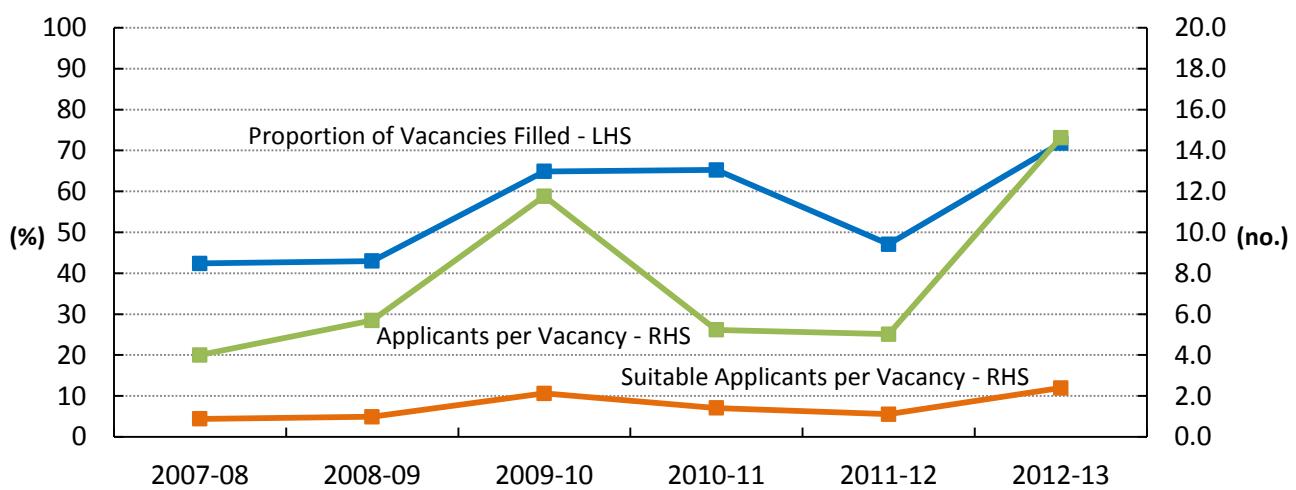
Electrotechnology and telecommunications technicians and trades²²

Occupations in cluster	Rating	Number of years in shortage, 5 years to 2012-13
3132-11 Radiocommunications Technician	No shortage	1*
3132-14 Telecommunications Technical Officer or Technologist	No shortage	0*
3411-11 Electrician (General)	No shortage	2
3411-13 Lift Mechanic	No shortage	2*
3421-11 Airconditioning and Refrigeration Mechanic	Shortage	5
3423-13 Electronic Equipment Trades Worker	Shortage	4
3424 Telecommunications Trades Workers	No shortage	1*

*Occupation has not been assessed continuously over the past 5 years

- This cluster covers a diverse range of occupations. There is some overlap between occupations and it is common for employers to seek workers who hold dual-trade qualifications (for example, an open electrical licence and telecommunications qualification).
- Widespread shortages are not evident for this cluster, although shortages persist for airconditioning and refrigeration mechanics and electronic equipment trades workers.
 - The labour market for electricians eased in 2012-13 reflecting subdued activity in Construction, with employers attracting larger fields of suitable applicants (2.4 on average per vacancy compared with 1.1 in 2011-12).

Figure 27: Proportion of vacancies filled (%), average number of applicants and suitable applicants per vacancy (no.), Electrotechnology and telecommunications technicians and trades, 2007-08 to 2012-13



Source: DEEWR Survey of Employers who have Recently Advertised

Note: Occupational coverage varies over the time series. The series excludes telecommunications technical officer or technologist.

More information is available in the detailed reports for the cluster at [Occupational reports – Electrotechnology and telecommunications technicians and trades](#).

²² Findings based on research undertaken between August and December 2012, with the exception of telecommunications technical officer or technologist which was undertaken in the first half of 2013.

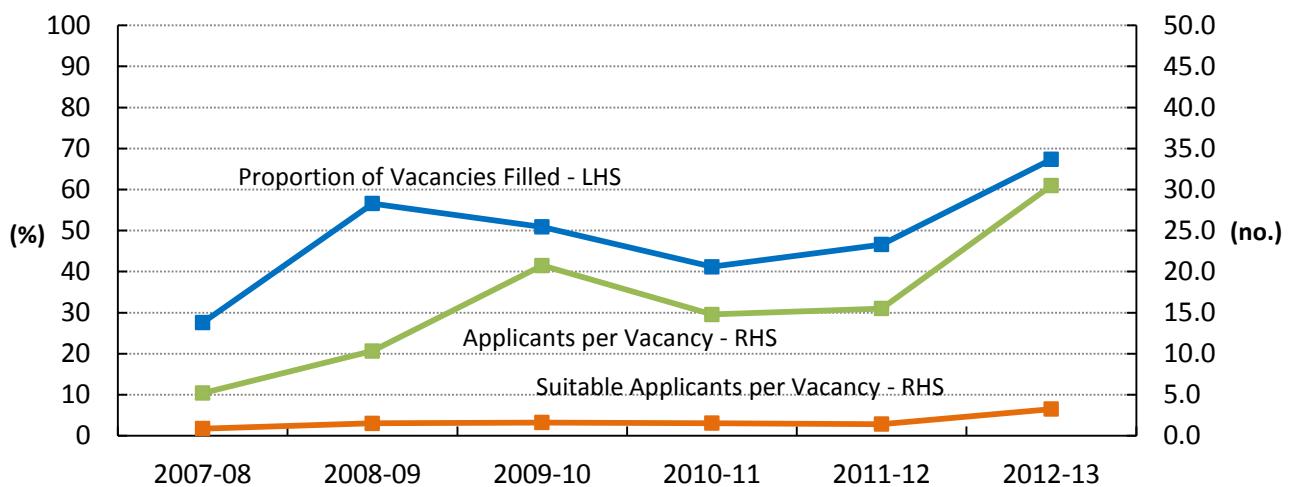
Engineering professions and technicians²³

Occupations in cluster	Rating	Number of years in shortage, 5 years to 2012-13
1332-11 Engineering Manager	No shortage	3
Engineering professions		
2331-11 Chemical Engineer	No shortage	1
2332 Civil Engineering Professionals (excluding Quantity Surveyor)	No shortage	4
2333-11 Electrical Engineer	No shortage	4
2335-12 Mechanical Engineer	No shortage	3
2336-11 Mining Engineer (excluding Petroleum)	Shortage	5
2336-12 Petroleum Engineer	Shortage	4
Engineering technicians		
3122 Civil Engineering Draftspersons and Technicians	No shortage	3
3123 Electrical Engineering Draftspersons and Technicians	No shortage	2

- There has been a marked easing in this labour market and shortages (which had been evident for some years) have abated. Shortages are now limited to mining engineer (excluding petroleum) and petroleum engineer.
 - The easing of shortages is likely to be a result of a slowdown in key employing industries, as well as higher training numbers.
 - A number of surveyed employers noted that they attracted larger fields of candidates, and in some jurisdictions engineers were relocating as a result of reduced demand.
 - Some vacancies were put on hold or withdrawn after advertising, with employers deciding not to proceed with recruitment.
- There was a significant increase in the proportion of vacancies filled in 2012-13 (up by 20 percentage points for engineering managers and professionals and engineering technicians compared with 2011-12).
- There was also greater competition for available vacancies in 2012-13, with a significant increase in the average number of applicants and suitable applicants per vacancy compared with 2011-12.
 - A large number of applicants held relevant qualifications, but most did not meet the very specific skills and experience required by employers.
 - Employers were generally looking for candidates with several years experience working in the same specialisation and sector as the vacancy.

²³ Findings based on research undertaken in the June quarter 2013.

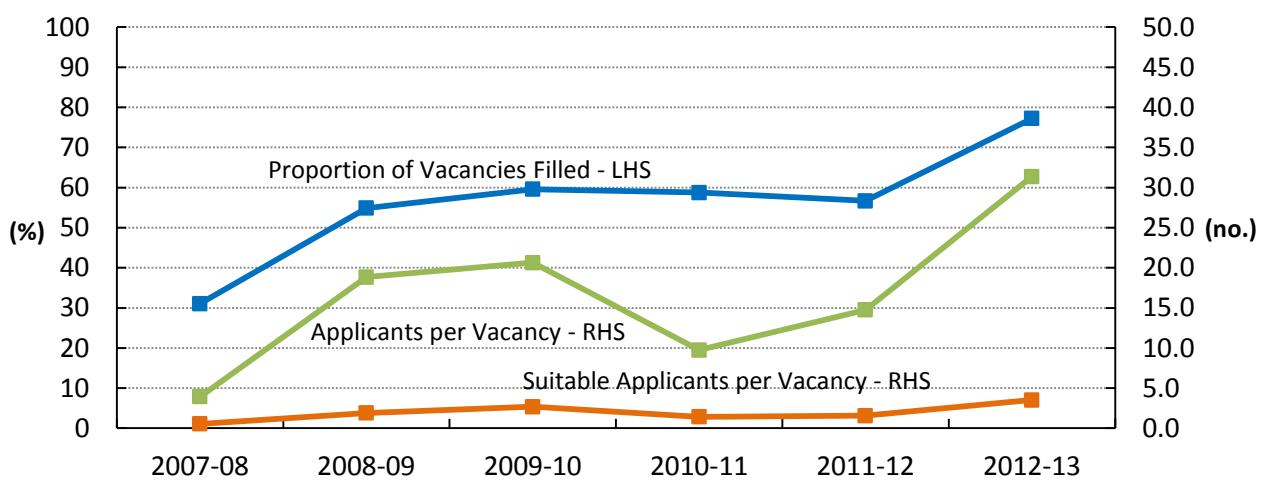
Figure 28: Proportion of vacancies filled (%), average number of applicants and suitable applicants per vacancy (no.), Engineering managers and professions, 2007-08 to 2012-13



Source: DEEWR Survey of Employers who have Recently Advertised

Note: Occupational coverage varies over the time series.

Figure 29: Proportion of vacancies filled (%), average number of applicants and suitable applicants per vacancy (no.), Engineering technicians, 2007-08 to 2012-13



Source: DEEWR Survey of Employers who have Recently Advertised

Note: Between 2007-08 and 2009-10, the series included electronic engineering draftspersons and technicians and mechanical engineering draftspersons and technicians.

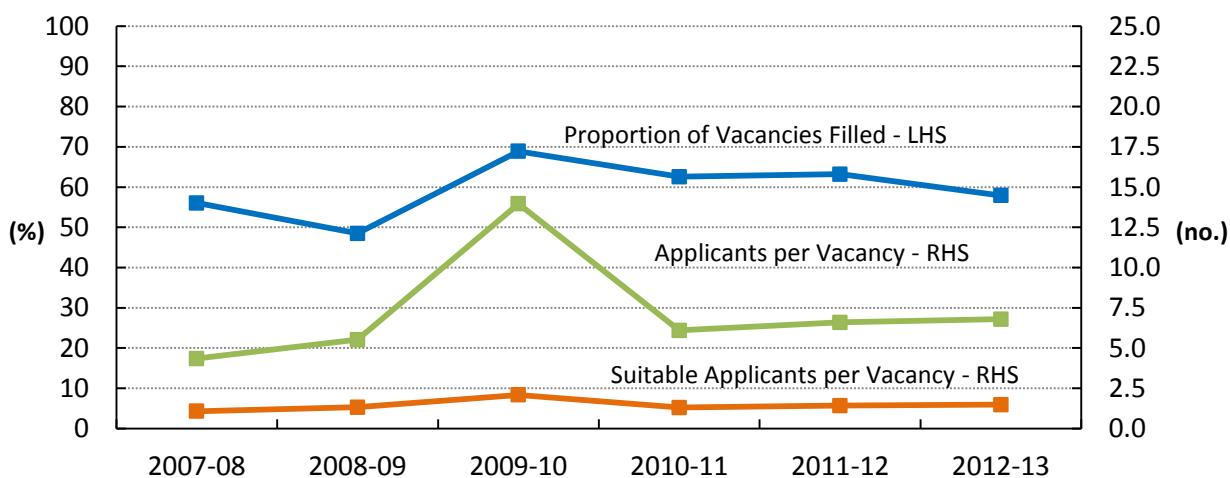
More information is available in the detailed reports for the cluster at [Occupational reports - Engineering professions and technicians](#).

Engineering trades²⁴

Occupations in cluster	Rating	Number of years in shortage, 5 years to 2012-13
3222-11 Sheetmetal Trades Worker	Shortage	5
3223-11 Metal Fabricator	No shortage	2
3223-13 Welder (First Class)	No shortage	1
3231-11 Aircraft Maintenance Engineer (Avionics)	No shortage	3
3231-12 Aircraft Maintenance Engineer (Mechanical)	No shortage	2
3232-11,12,13 Fitter	Regional shortage	2
3232-14 Metal Machinist (First Class)	Shortage	4

- The engineering trades labour market is complex, with recruitment experiences varying markedly depending on the occupation, location and industry. Shortages are patchy and few of these trades are in national shortage.
 - Although fewer engineering trades were in shortage in 2012-13 than in 2011-12, employers filled a lower proportion of their vacancies overall, as a result of a fall in the proportion of vacancies filled for sheetmetal trades workers, fitters and metal machinists.
 - Employers in Western Australia and the Northern Territory filled small proportions of their vacancies compared with employers in other states and territories.
 - Resources sector employers tended to be very prescriptive about the required skills and experience, while some employers in other sectors indicated that they had to compromise on the qualifications and/or experience they desired in order to fill positions.

Figure 30: Proportion of vacancies filled (%), average number of applicants and suitable applicants per vacancy (no.), Engineering trades, 2007-08 to 2012-13



Source: DEEWR Survey of Employers who have Recently Advertised

Note: Between 2007-08 and 2011-12, the series included locksmith and toolmaker.

More information is available in the detailed reports for the cluster at [Occupational reports – Engineering trades](#).

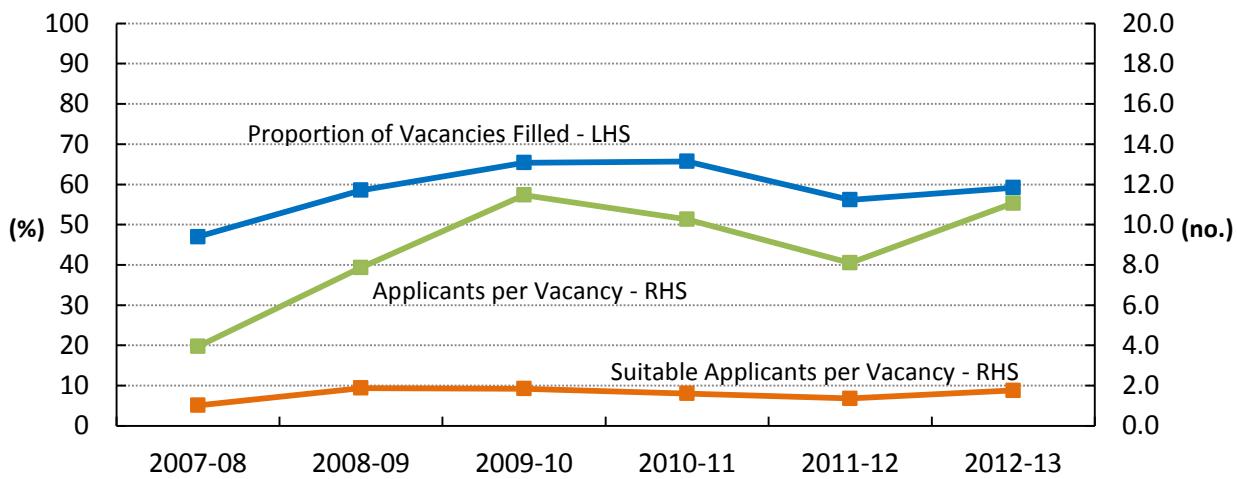
²⁴ Findings based on research undertaken in the September quarter 2012.

Food trades²⁵

Occupations in cluster	Rating	Number of years in shortage, 5 years to 2012-13
3511-11 Baker	Shortage	5
3511-12 Pastrycook	Shortage	4
3512-11 Butcher or Smallgoods Maker	Shortage	5
3513-11,3514-11 Chef/Cook	Shortage	5

- Shortages of food trades have been persistent over most of the past decade and employers continued to experience difficulty recruiting in 2012-13, although the labour market eased slightly compared with 2011-12.
- Wastage (people leaving the occupation for which they trained) is an issue for the food trades.
 - Employers suggested that factors which contribute to recruitment and retention difficulties include relatively low remuneration (median earnings are considerably lower than the all occupations average), undesirable working hours and difficult working conditions (for example, lifting and working with flour dust).
- A large proportion of qualified applicants for vacancies were considered by employers to be unsuitable. Employers suggested a lack of transferability of skills between workplaces contributes to difficulty filling vacancies with suitably skilled workers.
- Shortages for these occupations are likely to persist, particularly for specialist workers, as the factors which contribute to recruitment and retention difficulties are likely to continue.

Figure 31: Proportion of vacancies filled (%), average number of applicants and suitable applicants per vacancy (no.), Food trades, 2007-08 to 2012-13



Source: DEEWR Survey of Employers who have Recently Advertised

More information is available in the detailed reports for the cluster at [Occupational reports – Food trades and hospitality occupations](#).

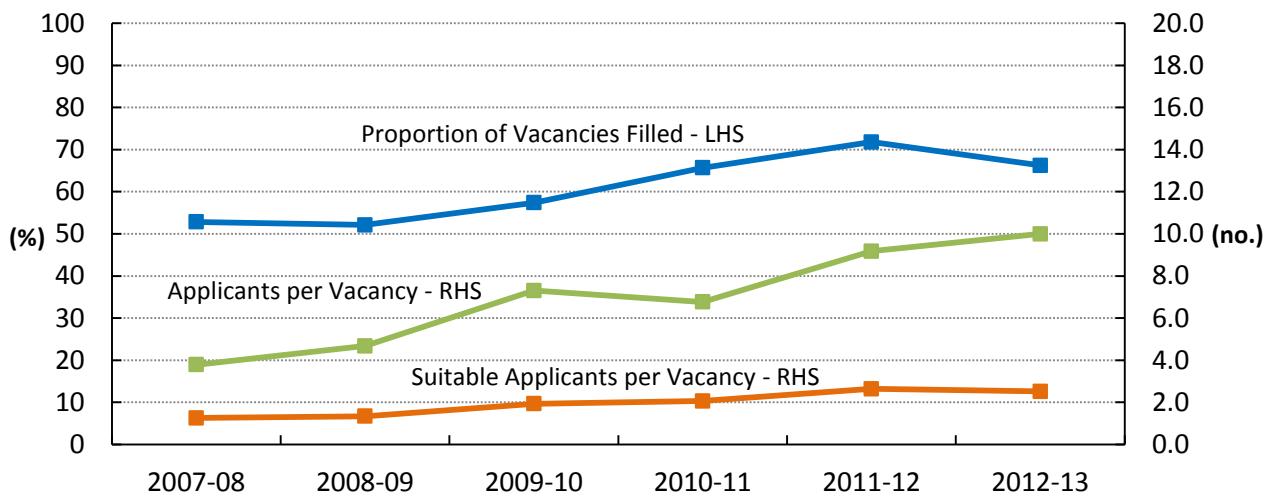
²⁵ Findings based on research undertaken in September quarter 2012.

Health diagnostic professions²⁶

Occupations in cluster	Rating	Number of years in shortage, 5 years to 2012-13
2346-11 Medical Laboratory Scientist	No shortage	0
2512-11 Medical Diagnostic Radiographer	No shortage	2
2512-12 Medical Radiation Therapist	No shortage	1
2512-14 Sonographer	Shortage	5
2514-11 Optometrist	Shortage	5
2515-11,13 Hospital and Retail Pharmacist	No shortage	1
2523-12 Dentist	No shortage	1

- Historically, shortages were widespread in the health diagnostic professions and in 2006-07, when the labour market was particularly tight, shortages were evident in nearly all occupations.
- Since then, however, stronger training numbers, softer conditions and cuts in the public health sector has led to an easing in the labour market for a number of these occupations and national shortages are now only evident in two occupations, sonographer and optometrist.
- Future supply may be constrained by limited training opportunities, with a number of employers and industry groups commenting that the number of training placements is not sufficient to meet the increasing supply of graduates.
 - This is particularly evident for sonographers, dentists and medical diagnostic radiographer.
- Demand for health diagnostic professionals is expected to remain strong as the Australian population ages and developments in medical technology expand health care options.

Figure 32: Proportion of vacancies filled (%), average number of applicants and suitable applicants per vacancy (no.), Health diagnostic professions, 2007-08 to 2012-13



Source: DEEWR Survey of Employers who have Recently Advertised

More information is available in the detailed reports for the cluster at [Occupational reports – Health professions](#).

²⁶ Findings based on research undertaken in April quarter 2013.

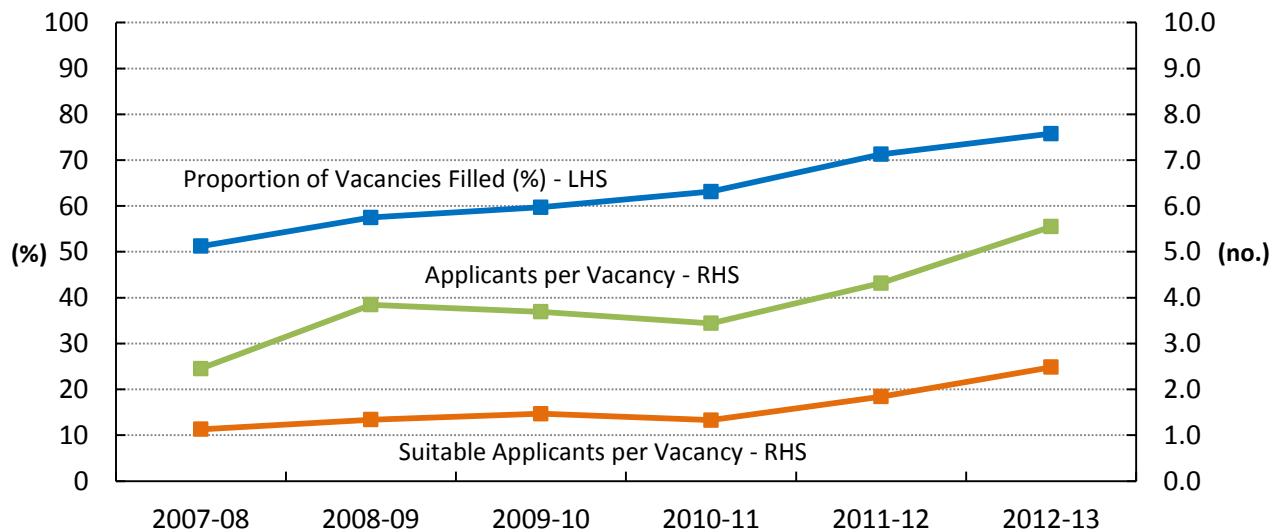
Health therapy professions²⁷

Occupations in cluster	Rating	Number of years in shortage, 5 years to 2012-13
2524-11 Occupational Therapist	No shortage	1
2525-11 Physiotherapist	Shortage	4
2526-11 Podiatrist	No shortage	3
2527-11 Audiologist	Regional shortage	2*
2527-12 Speech Pathologist	No shortage	2

*Occupation has not been assessed continuously over the five year period

- There has been a marked easing in this labour market over the last year, due to both an increase in training numbers and cutbacks to some public health staffing. Employers recruiting in 2012-13 filled a much larger proportion of their vacancies and attracted more suitable applicants than they have over the last five years.
- National shortages are now only evident for physiotherapists although regional employers of audiologists had some difficulty filling vacancies in 2012-13.
- A number of contacts and industry groups expressed concern regarding training placements for recent graduates, with increasing numbers of graduates competing for a limited number of training places.
- Demand for health therapy professionals is expected to be strong as the Australian population ages.

Figure 33: Proportion of vacancies filled (%), average number of applicants and suitable applicants per vacancy (no.), Health therapy professions, 2007-08 to 2012-13



Source: DEEWR Survey of Employers who have Recently Advertised

More information is available in the detailed reports for the cluster at [Occupational reports – Health professions](#).

²⁷ Findings based on research undertaken in April quarter 2013.

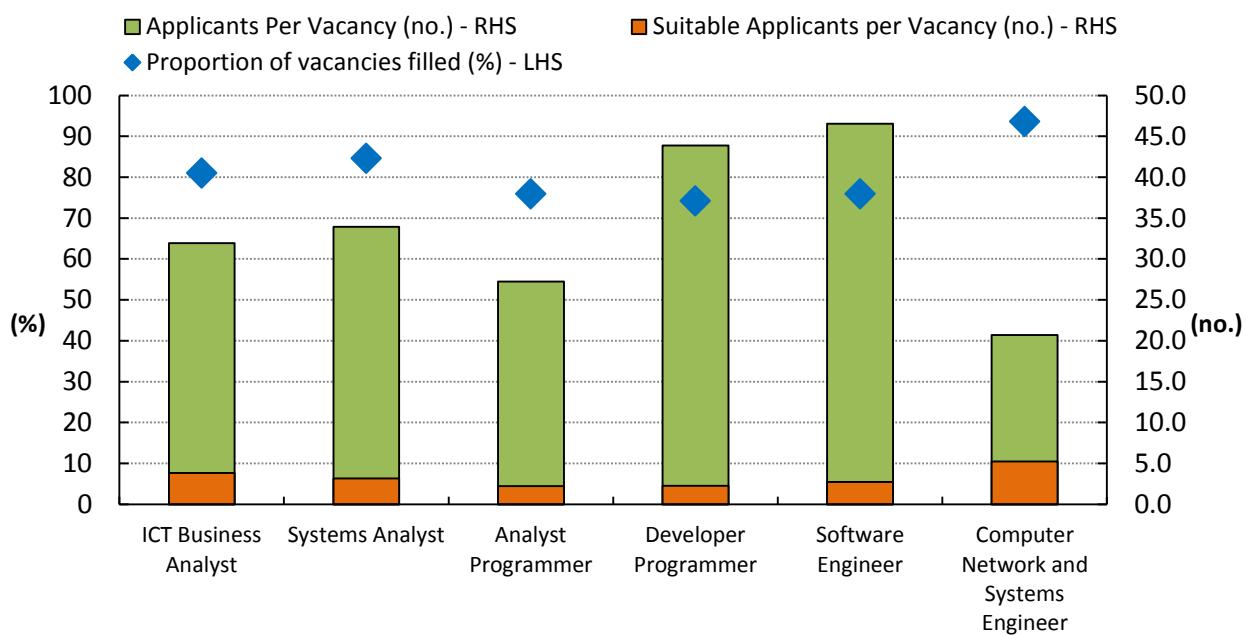
ICT professions²⁸

Occupations in cluster	Rating	Number of years in shortage, 5 years to 2012-13*
2611-11 ICT Business Analyst	No shortage	
2611-12 Systems Analyst	No shortage	
2613-11 Analyst Programmer	No shortage	
2613-12 Developer Programmer	No shortage	
2613-13 Software Engineer	No shortage	
2631-11 Computer Network and Systems Engineer	No shortage	
2633 Telecommunications Engineering Professionals	No shortage	

* Occupations have not been previously been assessed

- Demand for ICT professionals is subdued and employers have little difficulty recruiting workers who meet their skill level expectations.
 - Employers attracted a strong response to advertised vacancies.
 - Competition from qualified applicants for available vacancies is robust. In addition to the suitable applicants, there were large numbers of applicants who held relevant qualifications but were considered by employers to be unsuitable.

Figure 34: Proportion of vacancies filled (%), average number of applicants and suitable applicants per vacancy (no.), ICT professions, 2012-13



Source: DEEWR Survey of Employers who have Recently Advertised

More information is available in the detailed reports for the cluster at [Occupational reports – ICT professions](#).

²⁸ Findings based on research undertaken between January and May 2013.

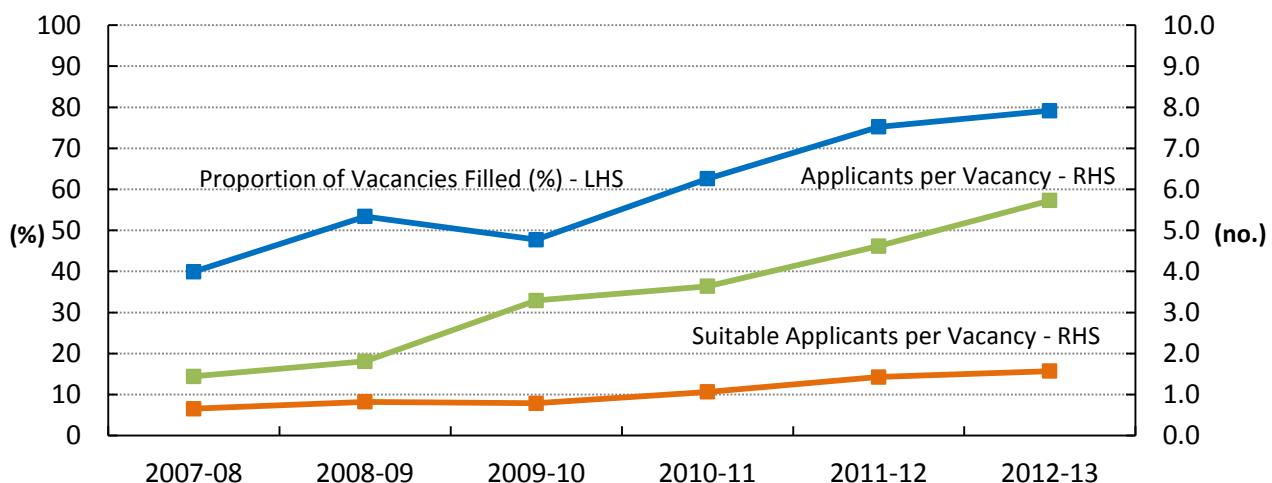
Nurses²⁹

Occupations in cluster	Rating	Number of years in shortage, 5 years to 2012-13
1342-12 Nursing Clinical Director	No shortage	0*
2541-11 Midwife	Regional recruitment difficulty for midwives who hold dual registration as a registered nurse	4
2544 Registered Nurses	Recruitment difficulty for those with experience in particular nursing specialisations, including aged care, community based, mental health and remote area nursing	3
4114-11 Enrolled Nurse	No shortage	4

*Occupation has not been assessed continuously over the past 5 years

- The labour market for nurses has eased considerably over the last few years, with employers experiencing significantly less difficulty recruiting in 2012-13. Surpluses of new graduates now coexist with locational shortages of experienced nurses.
 - National shortages are no longer evident and recruitment difficulties are confined to particular specialisations and to specific locations.
 - Employers in regional areas had less success recruiting nurses than those in metropolitan areas. Despite the ready availability of nurses to fill vacancies generally, employers in some places (such as inland locations in New South Wales, the Wheatbelt of Western Australia and more remote locations in Tasmania and the Northern Territory) experienced significant difficulty recruiting experienced workers.

Figure 35: Proportion of vacancies filled (%), average number of applicants and suitable applicants per vacancy (no.), Nurses, 2007-08 to 2012-13



Source: DEEWR Survey of Employers who have Recently Advertised

Note: Series excludes nursing clinical director.

More information is available in the detailed reports for the cluster at [Occupational reports – Nurses](#).

²⁹ Findings based on research undertaken in the June quarter 2012.

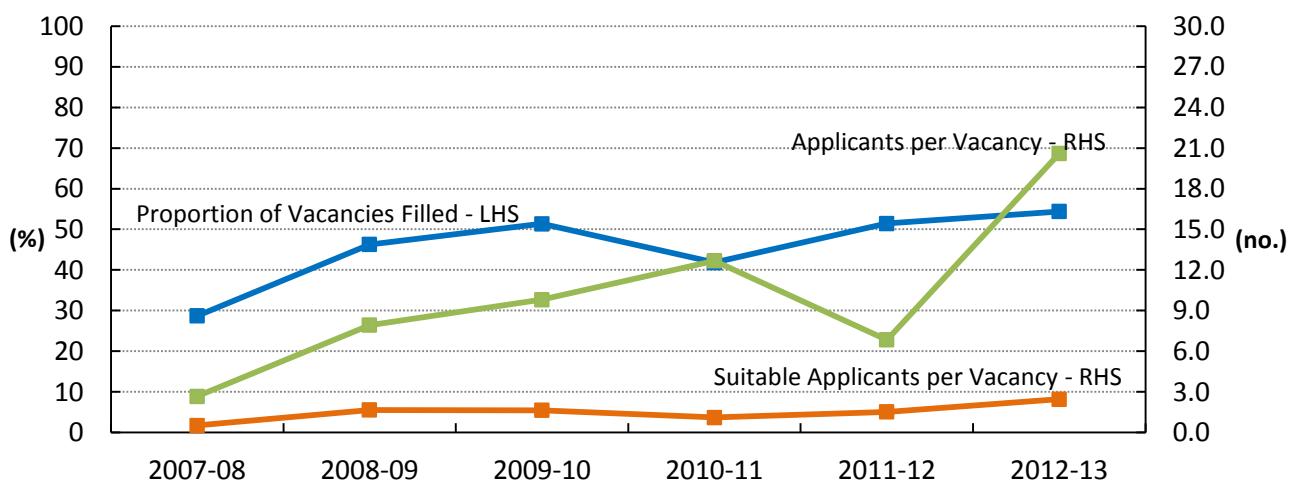
Resource related occupations³⁰

Occupations in cluster	Rating	Number of years in shortage, 5 years to 2012-13
1335-13 Production Manager (Mining)	Shortage	5
2336-11 Mining Engineer (excluding Petroleum)	Shortage	5
2336-12 Petroleum Engineer	Shortage	4
2344-11 Geologist	Regional shortage	4
2344-12 Geophysicists	Shortage	2*
2349-12 Metallurgist	No shortage	0*
3129-12 Metallurgical or Materials Technician	No shortage	0
3129-13 Mine Deputy	Shortage	3
7122-11 Driller	No shortage	1*

*Occupation has not been assessed continuously over the past 5 years

- Strong competition for available positions from qualified applicants coexists with shortages of experienced workers.
 - The average number of applicants per vacancy increased from 6.8 in 2011-12 to 20.6 in 2012-13. While just 2.5 were considered by employers to be suitable, this was a marked rise compared with the average of 1.5 suitable applicants per vacancy in 2011-12.
 - Despite the increase in suitable applicants, employers filled around half (54 per cent) of their surveyed vacancies.
 - The low proportion of vacancies filled can be attributed to the ongoing difficulty recruiting for senior and specialised roles, particularly in Western Australia (where the majority of vacancies were concentrated).

Figure 36: Proportion of vacancies filled (%), average number of applicants and suitable applicants per vacancy (no.), Resource related occupations, 2007-08 to 2012-13



Source: DEEWR Survey of Employers who have Recently Advertised

Note: Occupational coverage varies over the time series.

More information is available in the detailed reports for the cluster at [Occupational reports – Resource related occupations](#).

³⁰ Findings based on research undertaken in April quarter 2013.

Teachers³¹

Occupations in cluster	Rating	Number of years in shortage, 5 years to 2012-13
2411-11 Early Childhood (Pre-Primary School) Teacher	Recruitment difficulty for positions in the child care sector	4
2412-13 Primary School Teacher	No shortage	0
2414-11 Secondary School Teacher	No shortage	0
2415-11 Special Needs Teacher	No shortage	1
2493-11 Teacher of English to Speakers of Other Languages	No shortage	0*

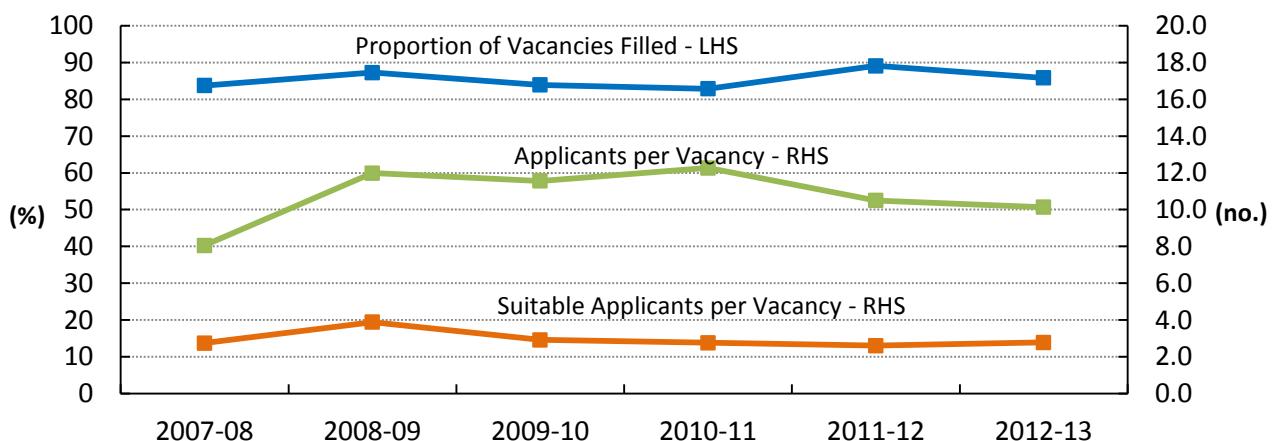
* Occupation has not been previously assessed in the current time series

- Most labour markets for school teachers are adequately supplied. The research is based on a survey of employers (across the government, Catholic and independent school sectors³²) who had recently advertised vacancies for teachers, and includes consultation with state and territory government education agencies.
- Surveyed employers experienced little difficulty recruiting teachers, generally attracting multiple suitable applicants and filling all but a relatively small proportion of vacancies.
 - State and territory government education authorities who were contacted for this research confirmed that there are generally adequate supplies of school teachers, with a substantial number of teachers on standby lists for positions.
 - As in previous years, employers recruiting for early childhood (pre-primary school) teachers in child care centres reported difficulty recruiting degree qualified staff and some vacancies remained unfilled or the employers had to compromise to fill them.
- DEEWR skill shortage research for secondary school teachers indicates that, although more than 90 per cent of surveyed vacancies across the government and non-government school sectors were filled, some employers have recently experienced difficulty recruiting in specific subject areas, particularly senior mathematics and science, and in some locations.

³¹ Findings based on research undertaken between February and April 2013.

³² The majority of surveyed vacancies are for the non-government sector, as a number of state and territory education departments only fill positions from applicant registers, and vacancies are not separately advertised. However, input from state and territory education departments is reflected in the qualitative research.

Figure 37: Proportion of vacancies filled (%), average number of applicants and suitable applicants per vacancy (no.), School teachers, 2007-08 to 2012-13



Source: DEEWR Survey of Employers who have Recently Advertised

Note: Data primarily reflect vacancies for non-government schools. The series excludes Teachers of English to Speakers of Other Languages.

More information is available in the detailed reports for the cluster at [Occupational reports – Teachers](#).

Other occupations³³

Occupations	Rating	Number of years in shortage, 5 years to 2012-13
Professions		
2212-13 External Auditor	No shortage	*
2245-12 Valuer	No shortage	*
2342-11 Chemist	No shortage	*
2347-11 Veterinarian	No shortage	2
2513-11 Environmental Health Officer	No shortage	*
2513-12 Occupational Health and Safety Advisor	No shortage	*
2713-11 Solicitor	No shortage	*
Technicians and Trades		
3113 Primary Product Inspectors	No shortage	*
3911-11 Hairdresser	Shortage	5

*Occupation has not been assessed continuously over the past 5 years

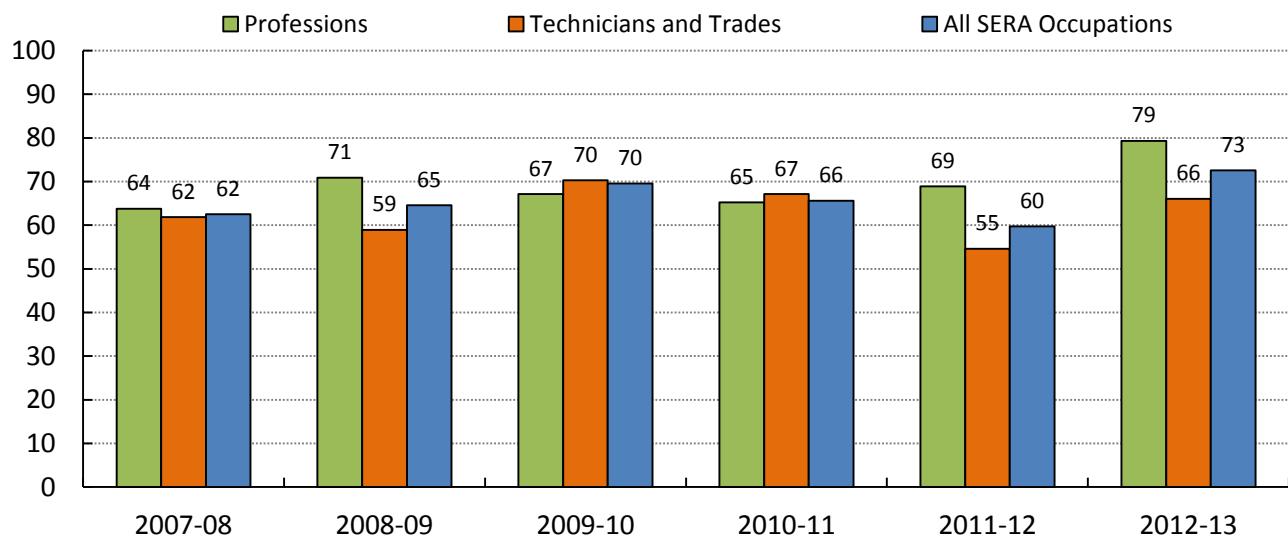
- The above occupations were also assessed in 2012-13 as part of DEEWR's skill shortage research program.
- Individual occupational reports are available for these occupations at [Occupational skill shortages information](#).

³³ Findings based on research undertaken in 2012-13. Date of assessment varies depending on occupation.

APPENDIX 1: TIME SERIES CHARTS FOR STATES AND TERRITORIES

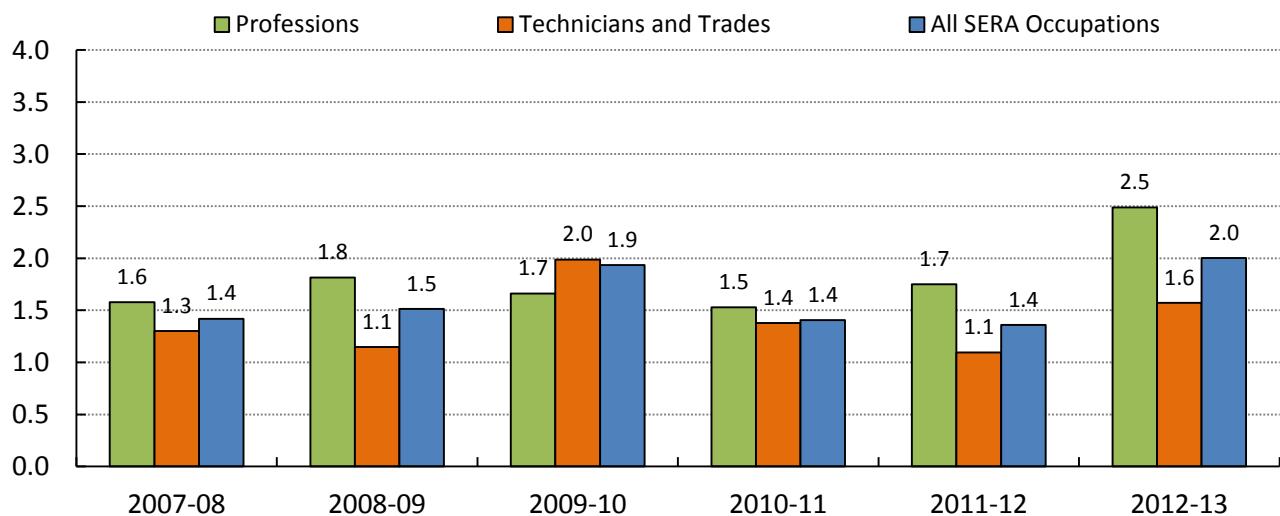
New South Wales

Figure 38: Proportion of vacancies filled for professions, technicians and trades, and all SERA occupations, New South Wales, 2007-08 to 2012-13 (%)



Source: DEEWR Survey of Employers who have Recently Advertised

Figure 39: Average number of suitable applicants per vacancy for professions, technicians and trades, and all SERA occupations, New South Wales, 2007-08 to 2012-13 (no.)

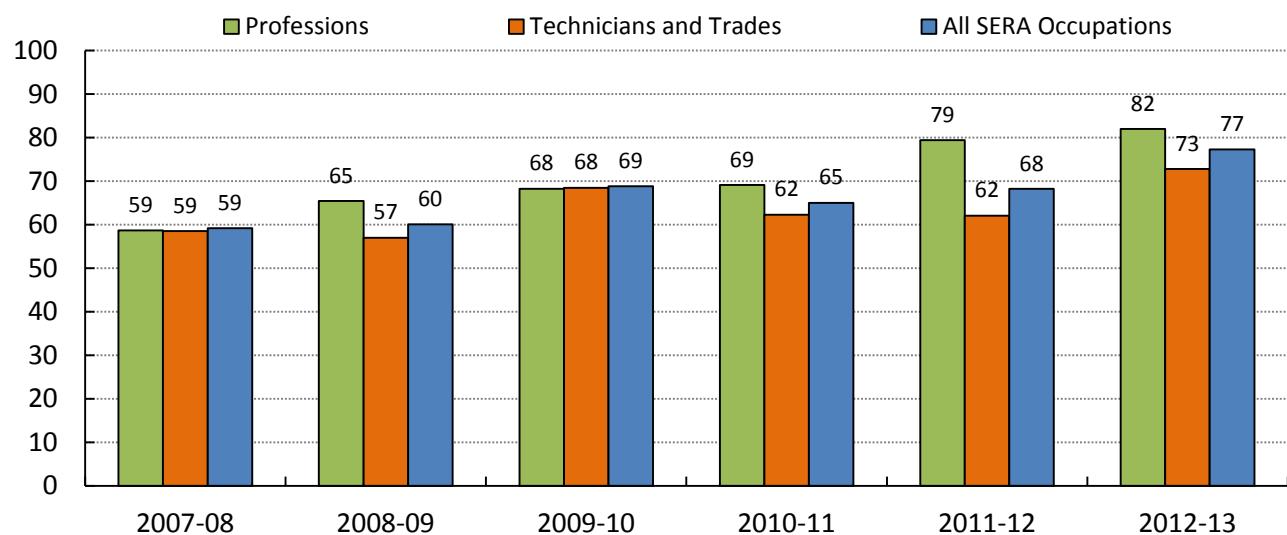


Source: DEEWR Survey of Employers who have Recently Advertised

More information is available in the detailed reports for the state at [New South Wales skill shortage research reports](#).

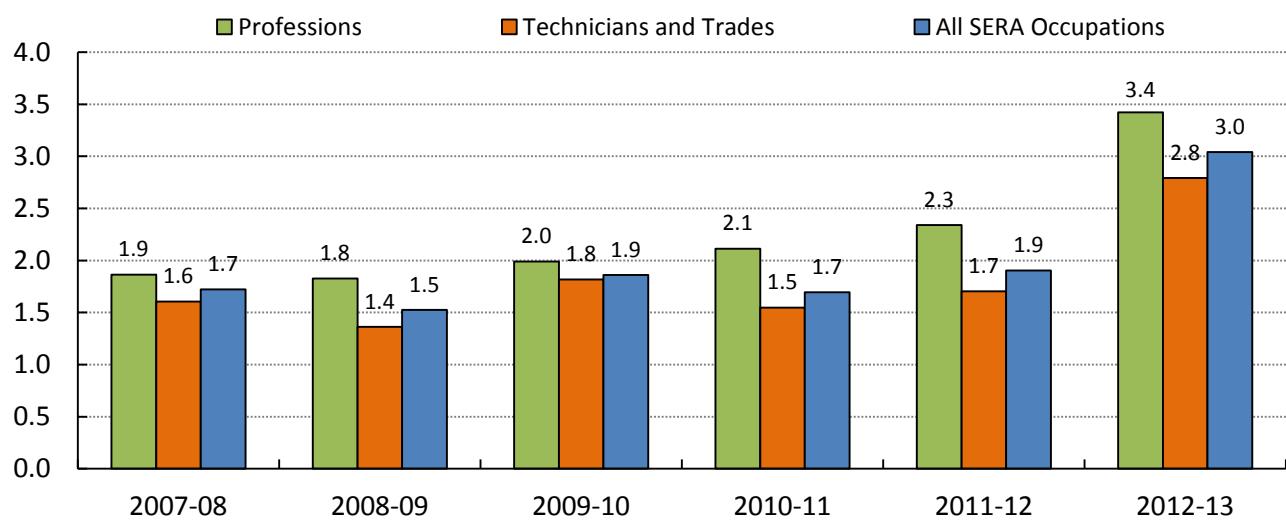
Victoria

Figure 40: Proportion of vacancies filled for professions, technicians and trades, and all SERA occupations, Victoria, 2007-08 to 2012-13 (%)



Source: DEEWR Survey of Employers who have Recently Advertised

Figure 41: Average number of suitable applicants per vacancy for professions, technicians and trades, and all SERA occupations, Victoria, 2007-08 to 2012-13 (no.)

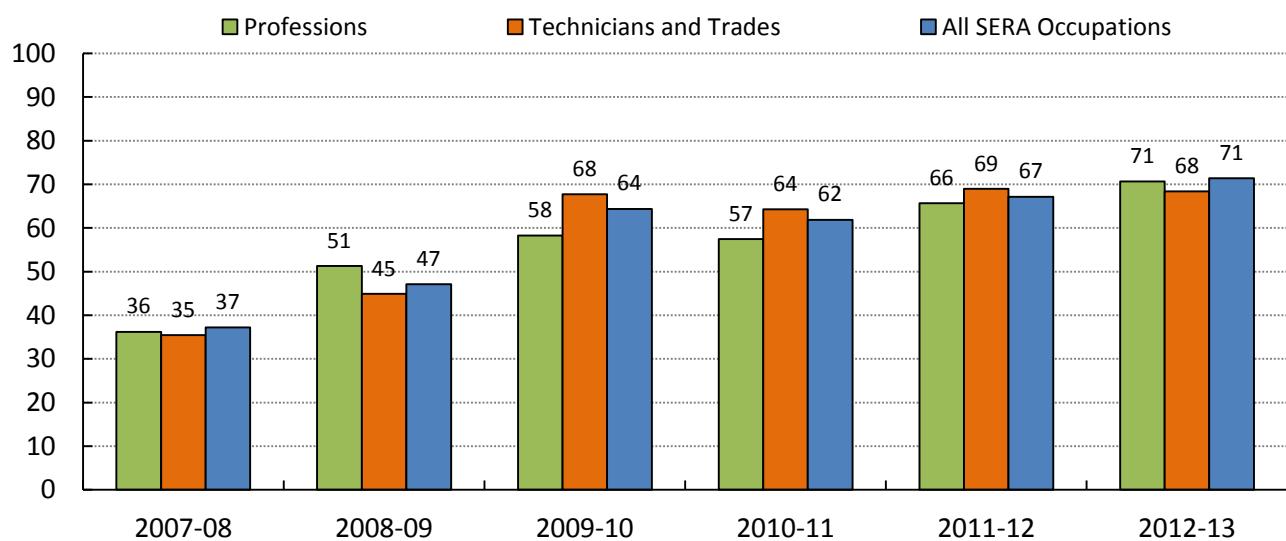


Source: DEEWR Survey of Employers who have Recently Advertised

More information is available in the detailed reports for the state at [Victorian skill shortage research reports](#).

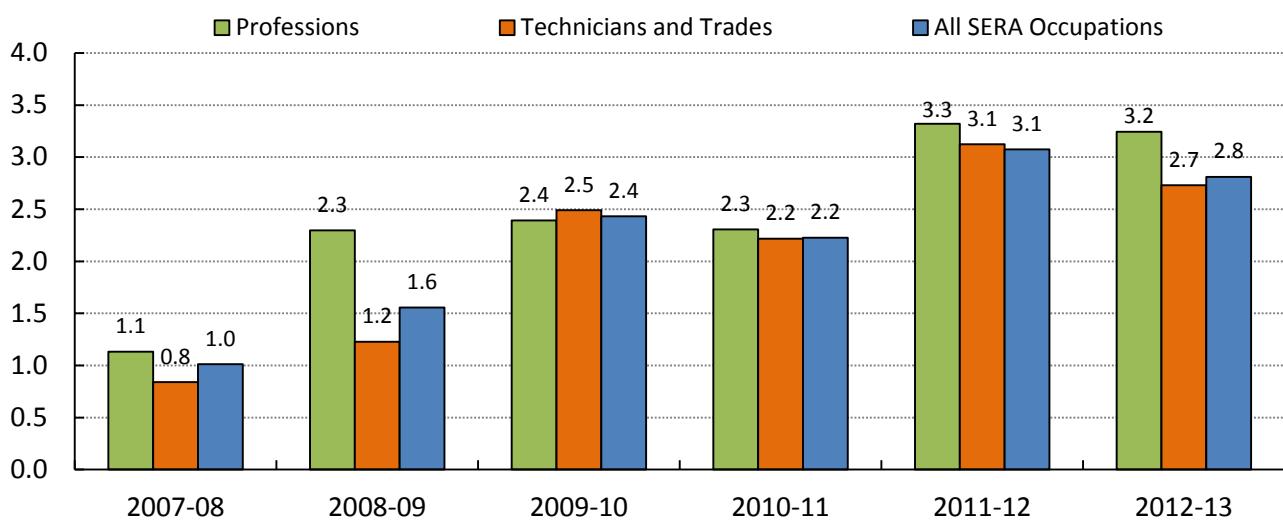
Queensland

Figure 42: Proportion of vacancies filled for professions, technicians and trades, and all SERA occupations, Queensland, 2007-08 to 2012-13 (%)



Source: DEEWR Survey of Employers who have Recently Advertised

Figure 43: Average number of suitable applicants per vacancy for professions, technicians and trades, and all SERA occupations, Queensland, 2007-08 to 2012-13 (no.)

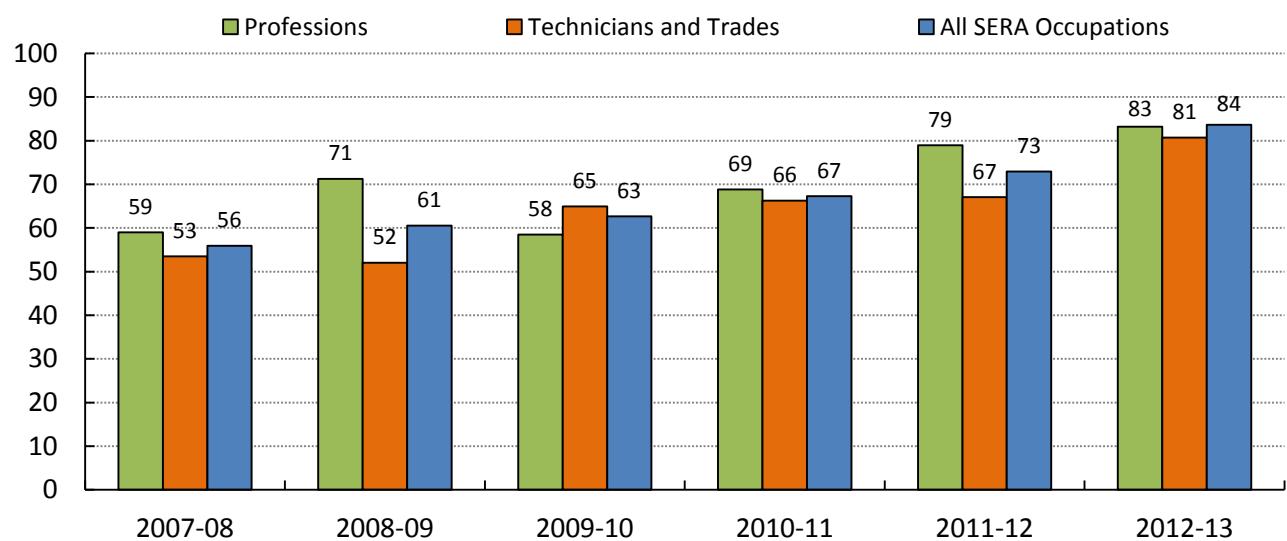


Source: DEEWR Survey of Employers who have Recently Advertised

More information is available in the detailed reports for the state at [Queensland skill shortage research reports](#).

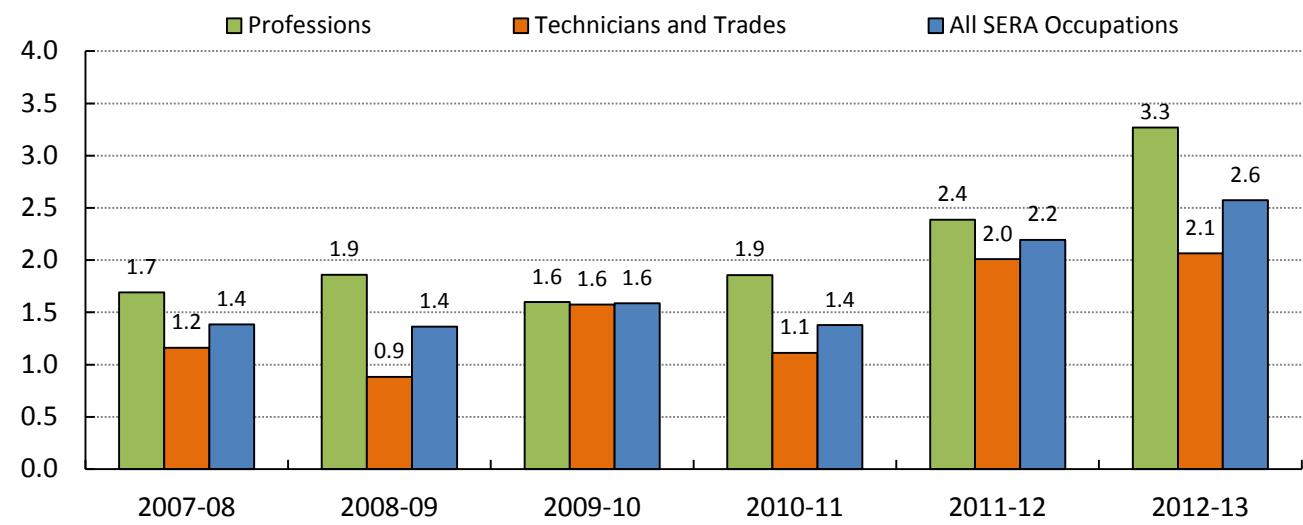
South Australia

Figure 44: Proportion of vacancies filled for professions, technicians and trades, and all SERA occupations, South Australia, 2007-08 to 2012-13 (%)



Source: DEEWR Survey of Employers who have Recently Advertised

Figure 45: Average number of suitable applicants per vacancy for professions, technicians and trades, and all SERA occupations, South Australia, 2007-08 to 2012-13 (no.)

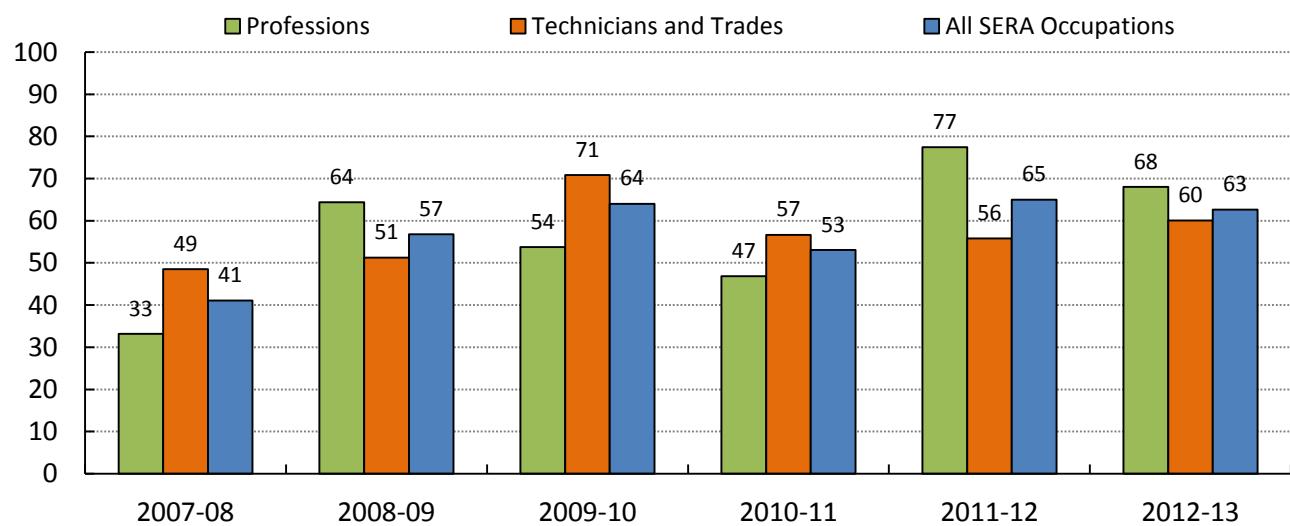


Source: DEEWR Survey of Employers who have Recently Advertised

More information is available in the detailed reports for the state at [South Australian skill shortage research reports](#).

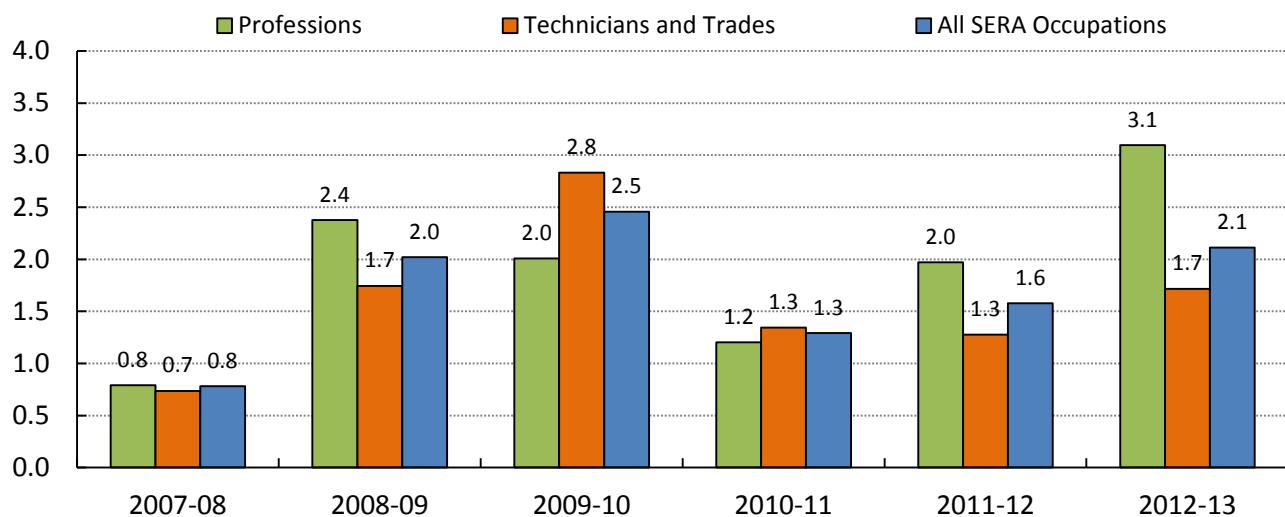
Western Australia

Figure 46: Proportion of vacancies filled for professions, technicians and trades, and all SERA occupations, Western Australia, 2007-08 to 2012-13 (%)



Source: DEEWR Survey of Employers who have Recently Advertised

Figure 47: Average number of suitable applicants per vacancy for professions, technicians and trades, and all SERA occupations, Western Australia, 2007-08 to 2012-13 (no.)

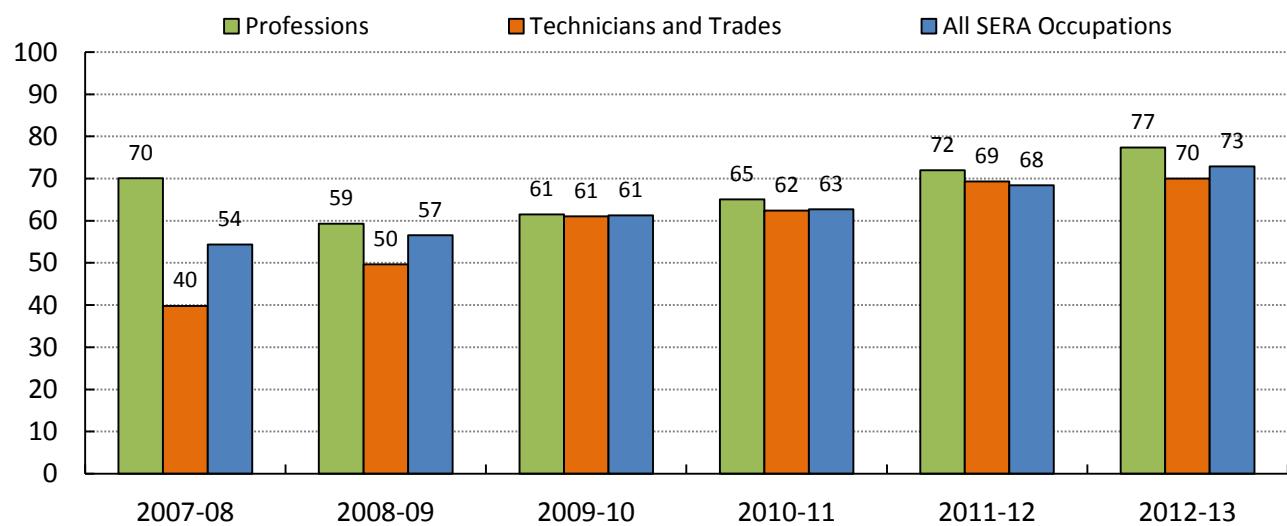


Source: DEEWR Survey of Employers who have Recently Advertised

More information is available in the detailed reports for the state at [Western Australian skill shortage research reports](#).

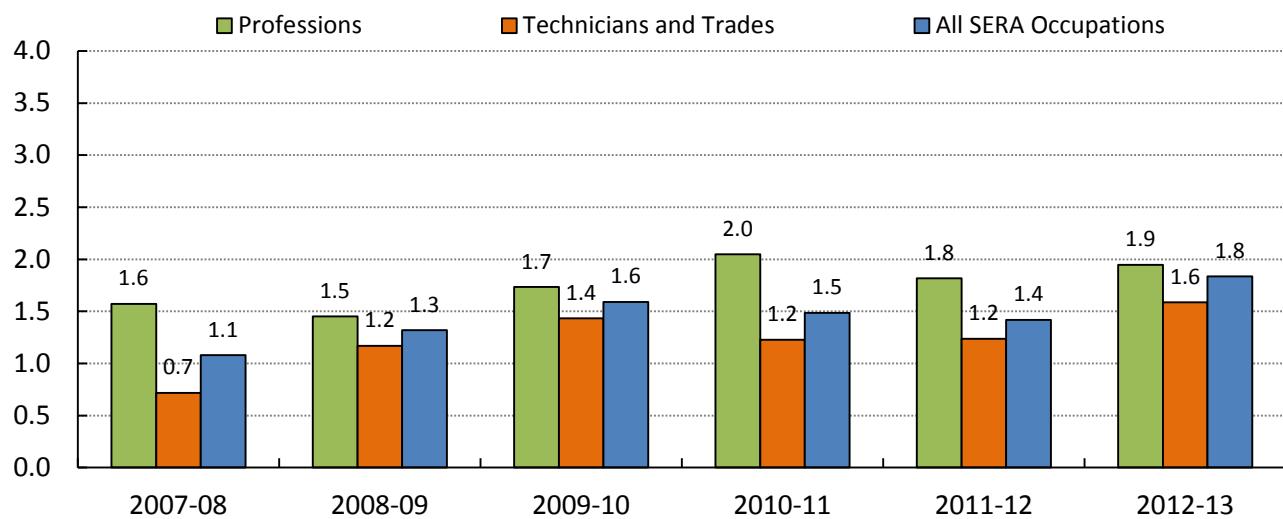
Tasmania

Figure 48: Proportion of vacancies filled for professions, technicians and trades, and all SERA occupations, Tasmania, 2007-08 to 2012-13 (%)



Source: DEEWR Survey of Employers who have Recently Advertised

Figure 49: Average number of suitable applicants per vacancy for professions, technicians and trades, and all SERA occupations, Tasmania, 2007-08 to 2012-13 (no.)

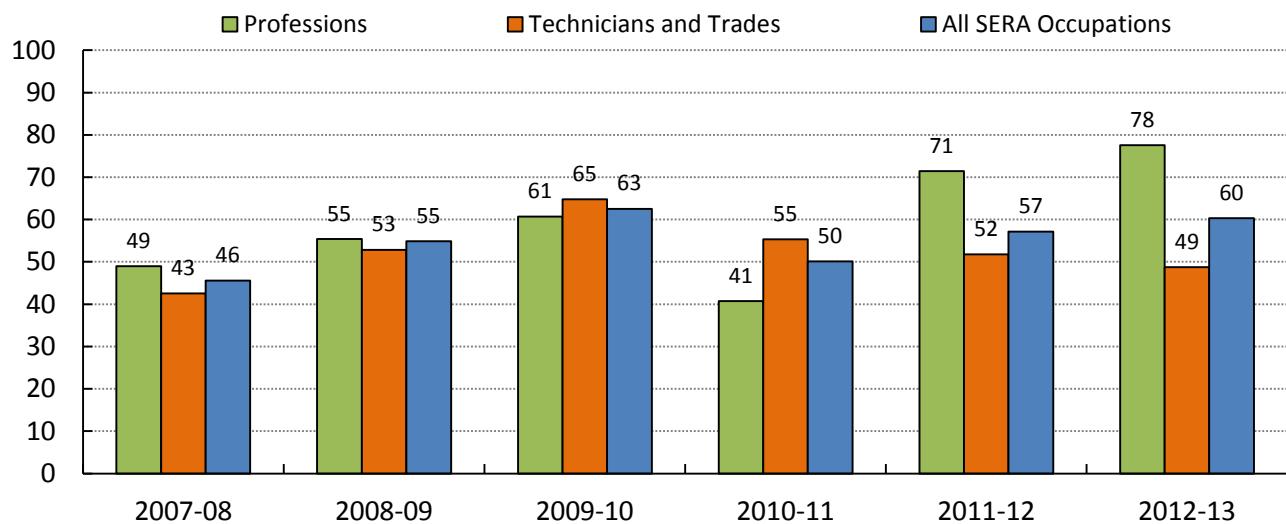


Source: DEEWR Survey of Employers who have Recently Advertised

More information is available in the detailed reports for the territory at [Tasmanian skill shortage research reports](#).

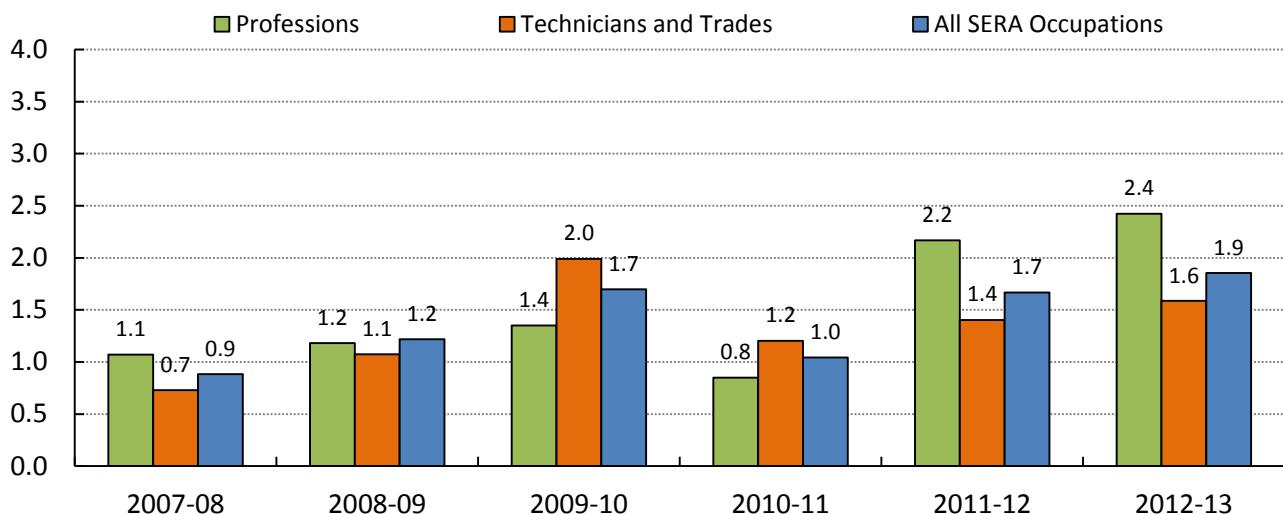
Northern Territory

Figure 50: Proportion of vacancies filled for professions, technicians and trades, and all SERA occupations, Northern Territory, 2007-08 to 2012-13 (%)



Source: DEEWR Survey of Employers who have Recently Advertised

Figure 51: Average number of suitable applicants per vacancy for professions, technicians and trades, and all SERA occupations, Northern Territory, 2007-08 to 2012-13 (no.)

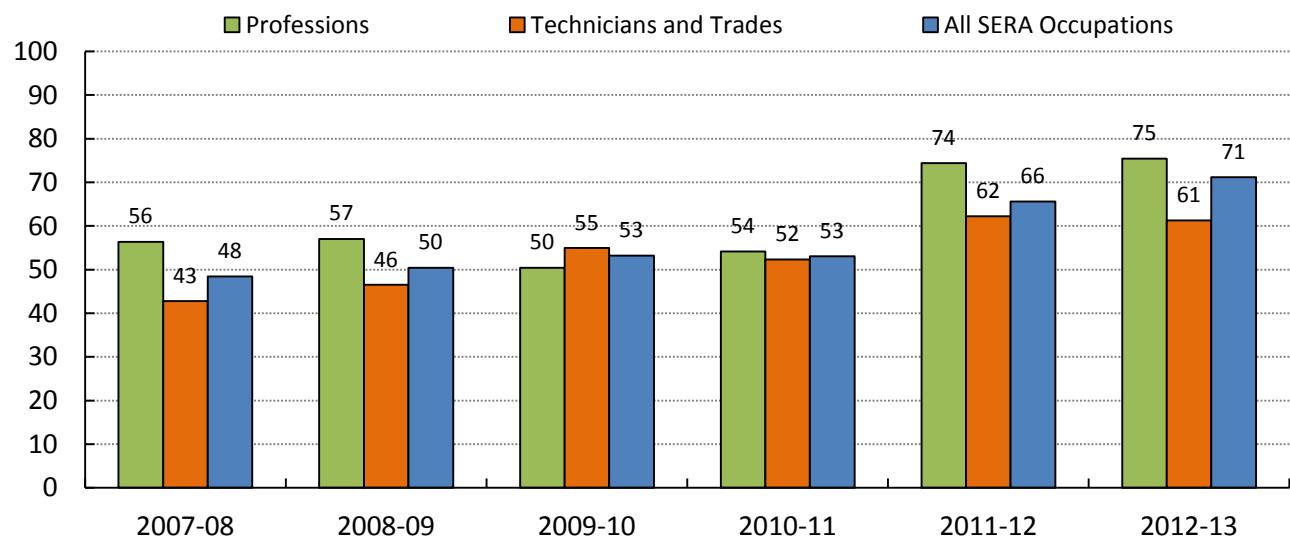


Source: DEEWR Survey of Employers who have Recently Advertised

More information is available in the detailed reports for the territory at [Northern Territory skill shortage research reports](#).

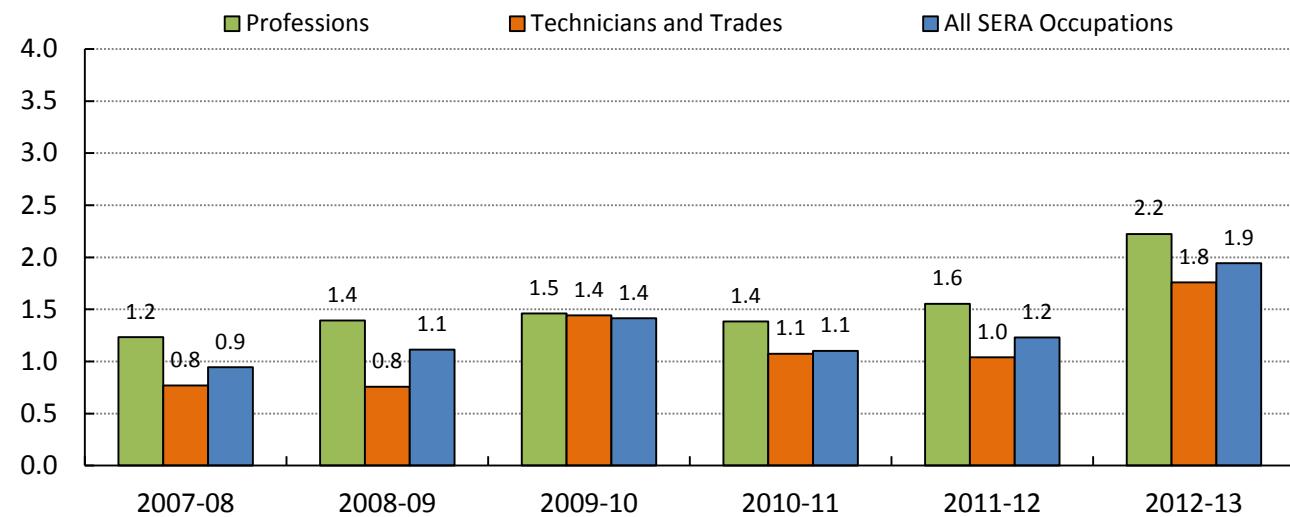
Australian Capital Territory

Figure 52: Proportion of vacancies filled for professions, technicians and trades, and all SERA occupations, Australian Capital Territory, 2007-08 to 2012-13 (%)



Source: DEEWR Survey of Employers who have Recently Advertised

Figure 53: Average number of suitable applicants per vacancy for professions, technicians and trades, and all SERA occupations, Australian Capital Territory, 2007-08 to 2012-13 (no.)



Source: DEEWR Survey of Employers who have Recently Advertised

More information is available in the detailed reports for the territory at [Australian Capital Territory skill shortage research reports](#).

APPENDIX 2: TECHNICAL NOTES

Occupations in DEEWR's skill shortage research are defined according to the Australian and New Zealand Standard Classification of Occupations (ANZSCO). However, the occupation clusters presented in this publication are not necessarily aligned with ANZSCO groups.

DEEWR assigns skill shortage ratings to occupations based on the results of SERA, as well as consideration of a range of labour market indicators. Ratings are for Australia as a whole, unless it is indicated that they apply to metropolitan or regional areas only.

Note that DEEWR determines whether occupations are filled six weeks after advertising for professions and associates, and four weeks for trades.

Companion publications for states and territories are published at www.deewr.gov.au/skillshortages.

Occupations are assigned the following ratings:

- *Shortage*: Skill shortages exist when employers are unable to fill or have considerable difficulty filling vacancies for an occupation, or significant specialised skill needs within that occupation, at current levels of remuneration and conditions of employment, and reasonably accessible location.
- *Recruitment Difficulty*: Recruitment difficulties occur when some employers have difficulty filling vacancies for an occupation. There may be an adequate overall supply of skilled workers but some employers are unable to attract and recruit sufficient, 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.
- *No Shortage*: Research has not identified widespread significant difficulty filling vacancies. This does not mean individual employers in some locations or those seeking specialised skills will readily fill their vacancies.

APPENDIX 3: DATA SOURCES

Australian Bureau of Statistics, [Labour Force Survey, Detailed – Electronic Delivery, Australia](#), May 2013 (some data are DEEWR trended)

Australian Bureau of Statistics, *Job Vacancies, Australia*, May 2013

Department of Education, Employment and Workplace Relations, Internet Vacancy Index, May 2013 (some data available in the monthly [Vacancy Report](#))

Department of Education, Employment and Workplace Relations, [Employment Projections to November 2017](#), 2013

Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education, [Students: Selected Higher Education Statistics, Full Year](#), various issues (some time series data extracted through uCube)

Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education, *Award Course Completions: Selected Higher Education Statistics*, various issues

Graduate Careers Australia, [GradStats](#), various issues

National Centre for Vocational Education Research, [Apprentices and Trainees](#), December 2012 (some time series data extracted through VOCSTATS)

National Centre for Vocational Education Research, [Student Outcomes](#), various issues

National Centre for Vocational Education Research, [Students and Courses](#), 2012 (some time series data extracted through VOCSTATS)

