

Skill shortages



In recent years, concern has grown at the difficulty experienced by some Australian employers in finding enough appropriately skilled staff.

Skill shortages can occur when there is either a reduction in the availability of skilled labour, an increased demand for skilled labour, or both. Causes of an inadequate supply include low unemployment; a reduction in the number of potential workers entering or completing training; workers leaving due to relatively unattractive pay or other working conditions; and increases in the number of workers retiring as the population ages. Demand for skilled labour may arise due to new goods and services being produced, and new technology and techniques being introduced.¹ A major driver of skill shortages in Australia in recent years has been sustained economic growth², which has resulted in increased demand for skilled staff in high-growth industries.

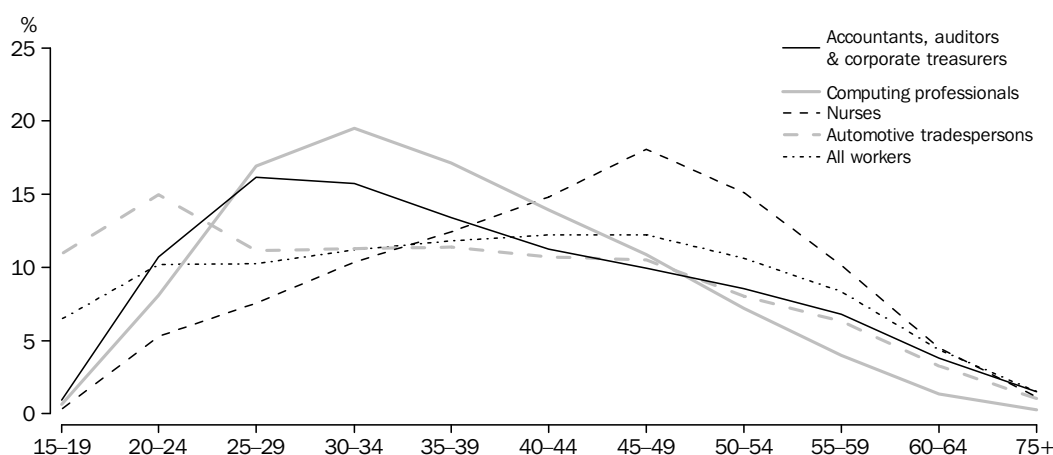
Even though skill shortages have become more pronounced in Australia, some people are unable to find employment, while others wish to work longer hours. However, these people do not necessarily have the skills required for particular jobs.

Skill shortages may increase as an increasing proportion of the population retire, unless measures introduced to address these shortages are successful.³ The proportion of Australia's population who are of traditional working age (15–64 years) is projected to decline over the next fifty years, from 67% in June 2004 to between 57% and 59% in 2051.⁴ While the participation rate for older people may increase over this time, this is unlikely by itself to raise overall labour force participation to a level which meets expected demands.

Skill shortages can be more severe in regional areas, as can be seen with recent difficulties in recruiting and retaining health professionals in these areas.⁵ As demand rises, incomes offered to people with skills in demand may rise accordingly. This can adversely affect individual businesses, but it can also contribute to meeting demand for people with these skills.⁶

Skill shortages can have a significant impact on business productivity. For instance, in the Building and construction industry, there has been a shift in recent years toward greater ownership and management of public infrastructure by large construction

Age profiles of selected occupations



Work...Skill shortages

contractors. This has resulted in greatly increased demand for project managers: difficulties in recruitment and retention of staff with project management skills has affected the cost and timeliness of projects.⁷

A number of ways of addressing skill shortages have been proposed or are already being implemented. The Skilled Stream of Australia's Immigration program has been used to draw workers from overseas who are skilled in in-demand occupations.⁸ Within Australia, changes in education and training have been made or are being considered, such as the introduction of the New Apprentice system and other aspects of the Vocational Education and Training System.⁹ Other measures include taking steps to remove barriers to work for older Australians¹⁰ and people with disabilities¹¹; and offering incentives for people to relocate to areas where skill shortages are being experienced.¹²

How skill shortages are identified

There are a range of indicators of possible skill shortages including measures of unemployment, job vacancy advertisements, wage and salary growth, and employer surveys.

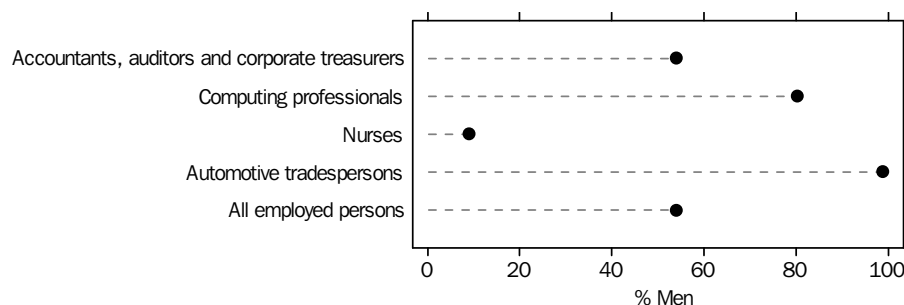
The Department of Employment, Education and Workplace Relations conducts the Survey of Labour Demand (SOLD) to gain an indication of hard-to-fill jobs.¹³

The SOLD measures the level of vacancies for a range of occupations. Four occupations which the SOLD Vacancy Reports identify as hard to fill are Accountants, auditors and corporate treasurers; Automotive tradespersons; Computing professionals; and Nurses. This article uses Census data to look at the characteristics of people who in 2006 were working in these 4 occupations. The article also looks at the characteristics of people who are qualified to work in one of these occupations.

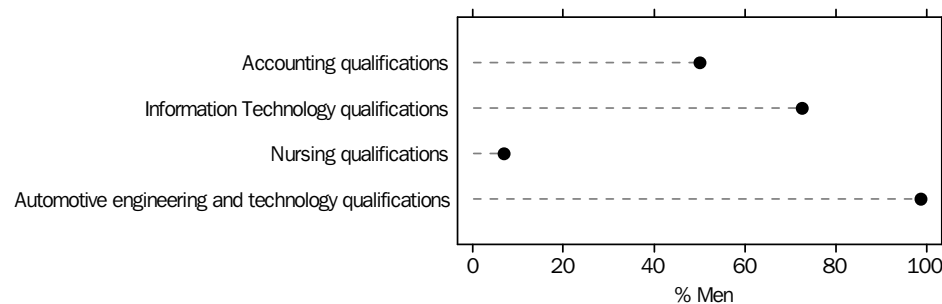
Accountants, auditors and corporate treasurers and corporate treasurers

In the 2006 Census, 135,300 persons reported their occupation as Accountants, auditors and corporate treasurers. This was an increase of 17% since 2001. The highest concentrations of people working in this occupation group lived in the inner and middle suburbs of major capital cities.

Proportion of men(a) working in selected occupations



Proportion of men(a) with selected highest non-school qualifications



(a) Aged 15 years and over.

Accounting qualifications

Most people working as Accountants, auditors and corporate treasurers recorded Bachelor Degree as their highest level of qualification (60%). For a further 16%, their highest qualification was at Advanced Diploma, Diploma, or Certificate Level. Of workers in this profession with non-school qualifications, less than three quarters (70%) stated that Accounting was their field of highest qualification.

People with Accounting as their field of highest non-school qualification (at any level) were by no means restricted to this occupation group.

While 31% of people with this qualification worked as Accountants, auditors and corporate treasurers, some worked as Resource managers (6%), Intermediate numerical clerks (5%) and Advanced numerical clerks (4%)—occupations similar to accounting but in different broad occupation groups.

A further 20% of people with Accounting as their highest qualification were not in the labour force, and 3% were unemployed. Of those not in the labour force, 41% were aged 65 and over, 16% had children aged 0–4 and 9% were studying full-time.

A younger group with a balance of men and women

While 47% of all people working as Accountants, auditors and corporate treasurers were employed in the Business services industry in 2006, this occupation was represented across many other industries.

These included Government administration (6%), Finance (5%), Services to finance and insurance (4%) and Personal and household good wholesaling (2%).

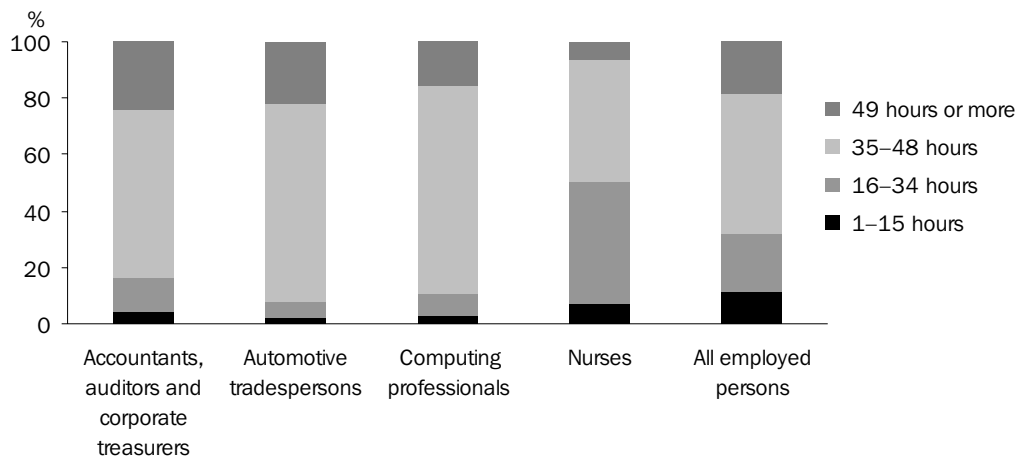
In 2006, this occupation group had a younger age profile than all employed people, with a median age of 37 years, compared with 40 years for all employed people. As well, the number of men and women were more evenly balanced than other in-demand occupations featured in this article (54% men).

According to the 2006 Census, a higher proportion of people working in this occupation group were born overseas (36%) than for all employed people (25%), and many of these overseas-born people had arrived in Australia between 2002 and 2006 (6% of all Accountants, auditors and corporate treasurers, compared with 3% of all employed people). This reflects overseas recruitment that has been undertaken to help relieve skill shortages in this occupation.⁸

Full-time work is the norm for people in this occupation group. In the week prior to the Census, the proportion of people working part-time (16%) was half that of the employed population generally (32%). Likewise, few people in this occupation group worked very few hours (4% working 1–15 hours, compared with 12% of all employed people).

Most working women with pre-school aged children work part-time: 70% in 2006. However, of this group working as Accountants, auditors and corporate treasurers, only 61% worked part-time.

Hours worked in week(a) prior to the Census



(a) Hours worked by employed people aged 15 years and over.

Automotive tradespersons

There were 116,400 people in the 2006 Census who identified their occupation as Automotive tradespersons, a 0.7% increase on 2001. Of these, 68% were Motor mechanics, with most of the rest working as Panel beaters (11%) and Vehicle painters (8%). A smaller proportion was born overseas (19%) than all employed people (25%).

Automotive engineering and technology qualifications

Many people employed as Automotive tradespersons had a Certificate, Diploma or Advanced Diploma in Automotive engineering and technology as their highest non-school qualification (45%), while 28% had a qualification at that level but in a different field, and a further 25% had no non-school qualification.

People with Automotive engineering and technology as their highest qualification were distributed across a wide range of occupations: only 29% were Automotive tradespersons; 6% were Road and rail transport drivers; 4% were Mechanical engineering tradespersons; and 3% were Intermediate sales and related workers. This suggests that a shortage of Automotive tradespersons could be partially addressed by drawing from other occupations.

As with Accounting, about one fifth of people with Automotive engineering and technology as their highest field of qualification were not in the labour force (19%). However, over half of these were aged 65 and over (53%).

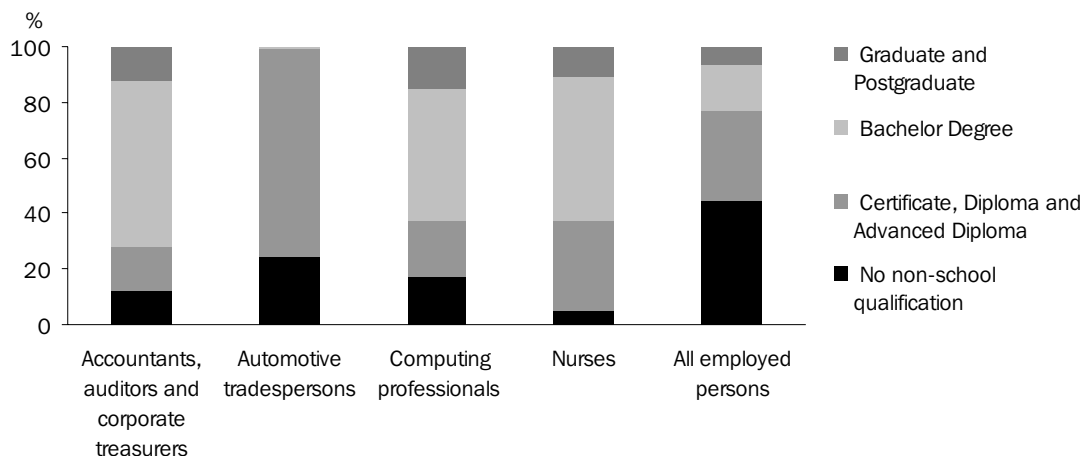
Health and safety issues may be adding to the skill shortages in this occupation. Of the 15,600 people aged 15–64 not in the labour force with Automotive engineering and technology as their field of highest qualification, 16% had a need for assistance due to disability, health or old age (see *core activity need for assistance* in Glossary). Of those aged 45–64, 18% had a need for assistance, compared with 12% of all people in that age group not in the labour force. Of those aged 15–44, 11% had a need for assistance, compared with 5% of all people in that age group not in the labour force. According to the Australian Safety and Compensation Council, this occupation experiences higher than average rates of workplace injuries and illnesses.¹⁴

Almost two thirds of Automotive tradespersons were working in the Motor vehicle retailing and services industry (65%) in 2006. However, some were in Machinery and equipment manufacturing (7%), Machinery and motor vehicle wholesaling (5%) and Road transport (4%).

Nearly all employed people in this occupation were men

In 2006, nearly all Automotive tradespersons were men (99%). However, the proportion of women in this trade has increased by 18% since 2001, albeit from a very low base. Of the 1,500 female Automotive tradespersons in 2006, 76% were working full-time compared with 53% of all employed women. Consistent with the high proportion of men in this occupation, only 8% of all Automotive tradespersons worked part-time.

Highest non-school qualification attained(a)



(a) By employed people aged 15 years and over.

This occupation had a young age profile compared with all workers in 2006: the largest number of Automotive tradespersons were aged 19 years (4,300), which reflects the entry into this occupation via apprenticeship. This was similar to 2001, when this was also the most common age for this occupation. In both censuses there were decreasing numbers at each age until the late 20s. This supports concerns expressed by government and other bodies about the need for measures such as improved career pathways to increase the proportion of apprentices who complete their apprenticeship and stay on in the trade.⁹

Computing professionals

In 2006, there were 127,400 people working as Computing professionals, a slight increase from 2001 (0.7%). People in this occupation were clustered in the ACT (4.5% of all employed people in the ACT), as well as in inner areas of the major capital cities (at around 3%). Overseas-born Australians comprised a large proportion of Computing professionals (43%, compared with 25% of all employed people). A higher than average proportion of these came to Australia in 2002 or thereafter (8% of all people working in this profession compared with 3% of all employed people), partly in response to a targeted migration program.⁸

Information Technology qualifications

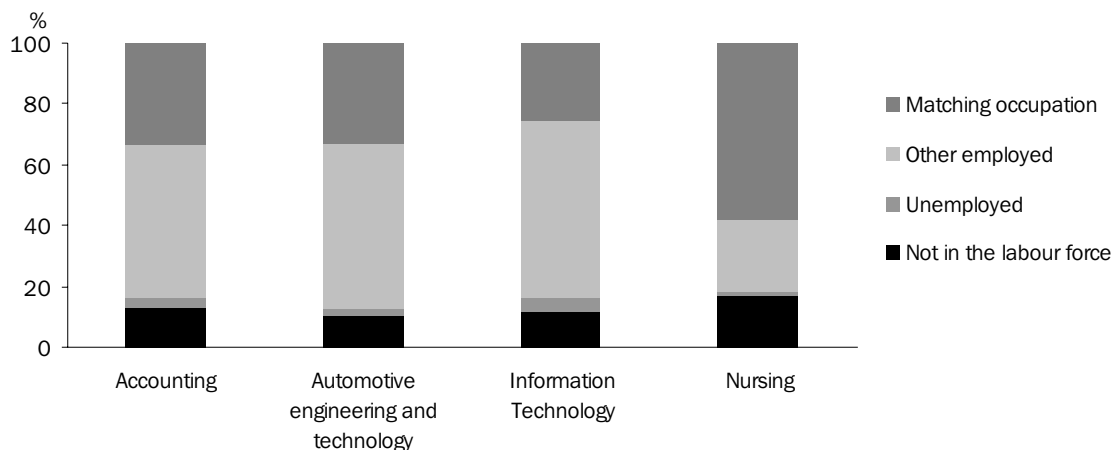
Just over a quarter (26%) of people with their highest non-school qualification in Information technology, were working as Computing professionals, with many in this profession working as Miscellaneous business and administration associate professionals (9%), Engineering, distribution and process managers (5%), Sales assistants, and Electrical and electronics tradespersons (both 3%).

Of the groups whose qualifications were in the fields associated with the 4 occupations featured in this article, people who had Information technology as their highest qualification, had the highest proportion of people in the labour force (88%). This may be associated with the relatively recent emergence of this field, resulting in fewer people of retirement age with these qualifications.

However, this group also had the highest level of unemployment (5.7% of the labour force with this field of highest qualification) of the 4 selected groups—the next highest was 3.4% for people with Accounting qualifications.

More than half of people qualified in Information technology who were unemployed had Certificate, Diploma or Advanced Diploma level qualifications (55%). It is possible that further training for these people could help to address the skill shortage in the Information technology profession.

Selected highest non-school qualifications(a), by occupation and labour force status



(a) People aged 15 to 64 years.

Computing professionals worked in many different industries

As with Accountants, auditors and corporate treasurers, Computing professionals were distributed across a wide range of industries in 2006. While 43% of these people were employed in the Business services industry (which includes Computer services), 8% worked in Government administration, 5% worked in Finance and a further 5% worked in Education.

Similar to Automotive tradespersons, Computing professionals was a young, male-dominated occupation (80% in 2006). The median age was 36 years, compared with 40 years for all employed people. Despite the small overall increase in the number of people in this group between 2001 and 2006, the number of women working as Computing professionals declined by 9%, from 27,800 to 25,200. Just 11% of people working in this occupation worked part-time.

Nurses

The number of people working as Nurses has grown rapidly since 2001, having increased by 15% to 219,800 in 2006. While Nurses are fairly evenly distributed across Australia, there was a higher proportion in parts of regional Victoria such as North Wimmera (4.5% of the census count of employed people), Ballarat City (4.1%), Warrnambool City and Greater Bendigo City Part A (each 4.0%), compared with 2.4% across Australia.

Nursing qualifications

Just over half the people with Nursing as their highest non-school qualification were employed as Nursing professionals (46% of all employed people with this non-school qualification), Carers and aides (5%) or Enrolled nurses (4%). The remainder worked in other occupations (16%), were not in the labour force (28%) or were unemployed (1.2%).

Compared with the people in the other three fields discussed in this article, people with Nursing as their highest non-school qualification were the least likely to be in the labour force (employed or unemployed). That said, those qualified in Nursing were more likely to be in the labour force than Australians overall (72%, compared with 65% of all Australians aged 15 and over). There were proportionally fewer men with Nursing qualifications who were not in the labour force (14% compared with 28% of all men).

Of Nursing-qualified people not in the labour force, 52% were aged 20–64 years, a lower proportion than all qualified people not in the labour force (59% aged 20–64 years). In this age group, 19% of Nursing-qualified people not in the labour force had children under 5 years, similar to all qualified people not in the labour force (23%).

Nurses were more likely to be recruited from overseas

In 2006, Nurses were most likely to be working in the Health and community services industries (94%), with small numbers employed in Government administration, and Business services (both 2%).

The vast majority of the nursing workforce is female—they comprised 91% of all Nurses in 2006, the same as in 2001. Of all people working as Nurses in 2006, 4.4% had arrived in Australia from overseas since 2002, compared with 3.2% of all employed people, reflecting overseas recruitment which has been undertaken to address these skill shortages.⁸

Part-time work is very common in the Nursing profession. Half of all people working in this profession worked part-time in 2006 (50%) compared with 32% of all employed people. Part-time work was more prevalent among women Nurses than all employed women (53% compared with 47%).

The Nursing profession in 2006 had an older age structure than in 2001. In 2006, nearly half of all Nurses were aged 45 and over (49%), compared with 40% in 2001. As well, only 13% of Nurses were aged under 30 in 2006, compared with 15% in 2001. The challenge to address skill shortages in this profession will increase as older nurses retire, if they are not replaced by others entering the profession, particularly as demand is likely to increase as the population ages.

Endnotes

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