



**Australian Government**  
**Jobs and Skills Australia**

# 2023 Skills Priority List

Key Findings Report

September 2023



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# Introduction

## Overview

The Skills Priority List (SPL), produced by Jobs and Skills Australia, provides a detailed view of occupations in shortage and the anticipated future demand for occupations in Australia. The SPL is released annually as a point-in-time assessment of the labour market and serves as a valuable tool that can inform policymakers towards aligning policies and strategies with the current demand of the labour market.

Occupations within the scope of the SPL are those defined in the Australian and New Zealand Standard Classification of Occupations (ANZSCO) at the six-digit level and Skill Levels 1 to 4. The focus is on these skill level occupations due to their strong link to post-secondary school education and training. Occupations identified as being in shortage year-on-year in the SPL may warrant further considerations in the national skills system context.

The definition used for occupation shortages listed in the SPL is:

- An occupation is in shortage when employers are unable to fill or have considerable difficulty filling vacancies for an occupation or cannot meet significant specialised skill needs within that occupation, at current levels of remuneration and conditions of employment and in reasonably accessible locations.

Based on this definition the primary measure of an occupation shortage is the ability of employers to fill vacancies (fill rate).

Evidence used to assess occupation shortages ranges from data modelling, statistical analysis of the labour market, employer surveys and broad stakeholder engagement with various groups. These stakeholder groups include peak bodies, industry groups, professional associations, unions, and regional representative bodies in the Australian labour market. Input and feedback are also sought from federal and state and territory governments and Jobs and Skills Councils. This collective body of evidence is used to estimate the fill rates of occupations and ascertain the likelihood of occupations in shortage.

Jobs and Skills Australia is extremely appreciative of the time, effort, and expertise that many stakeholders provided to enhance the quality of this analysis. The advice and insights provided by stakeholders has been invaluable in determining a final list of occupations in shortage in 2023. This was particularly true for occupations where other evidence available to Jobs and Skills Australia was limited or this evidence was providing mixed signals. The well-considered advice of stakeholders has provided guidance and clarity on the most accurate ratings for the relevant occupations. For other occupations, stakeholder insights were valuable as a reinforcement to Jobs and Skills Australia's initial evidence and analysis (of either shortage or no shortage), helping to increase our levels of confidence in the relevant assessments.

Further details of the methodology for the 2023 SPL can be found in the 2023 Skills Priority List methodology paper.<sup>1</sup>

The Key Findings Report provides a high-level overview of 2023 SPL results. The report also presents results through various lens to assist readers to interpret the 2023 SPL outcomes. Important or emerging themes from the 2023 SPL outcomes are also discussed.

## **Supporting the national skills system**

The national skills system is about matching jobs and skills to workforce needs through a dynamic and interconnected network that extends across the entire population. This system is instrumental in facilitating employees to find work, develop their skills and achieve improved wages and conditions. The system aids employers in satisfying their skills requirements and making the most of present and future opportunities.

The SPL, along with other sources of intelligence, can help inform the national skills system by identifying skill shortages and the factors contributing to these shortages. This information informs skills provision from sources such as Vocational Education and Training (VET), higher education and migration.

## **Current state of the labour market**

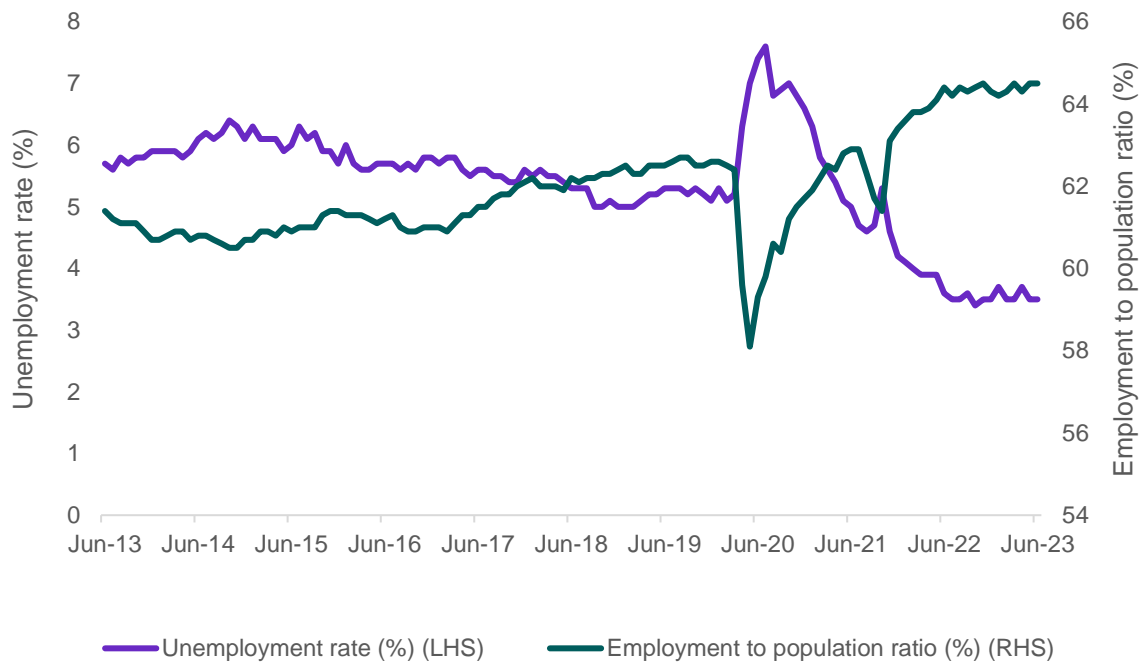
Over the 2022–23 year, the headline indicators have pointed to continued tightness in labour market conditions. As of June 2023, the total number of employed people increased by 409,900 persons over the past year, while the unemployment rate remained historically low at 3.5%. The employment-to-population ratio was high and at 64.5%, suggesting that employers were having to compete more intensely for available talent (Figure 1).<sup>2</sup>

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<sup>1</sup> Jobs and Skills Australia, *2023 Skills Priority List Methodology Paper*.

<sup>2</sup> Australian Bureau of Statistics, *Labour Force, Australia*, June 2023, seasonally adjusted.

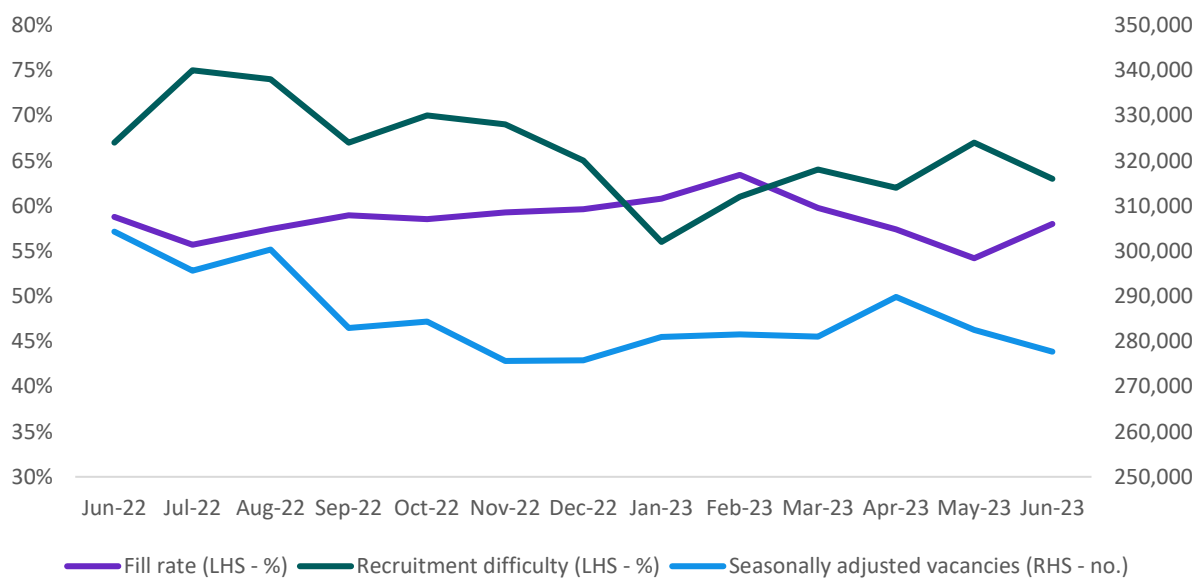
**Figure 1: Unemployment rate and employment-to-population ratio, 2013 to 2023**



Source: Australian Bureau of Statistics, *Labour Force, Australia*, June 2023, seasonally adjusted.

While overall trends point to continued tight conditions, there are some indications the labour market may be easing. Jobs and Skills Australia’s Recruitment Experiences and Outlook Survey recorded a fall in recruitment activity and reduced employer expectations to increase staff compared to a year ago. The demand for workers measured by the Internet Vacancy Index, while remaining historically high at 276,400 job advertisements in June 2023, fell by 8.9% compared with a year ago (Figure 2).

**Figure 2: Fill rate, recruitment difficulty rate and internet vacancies, 2022 to 2023**



Source: Jobs and Skills Australia, *Survey of Employers who Recently Advertised, Recruitment Experiences and Outlook Survey*.

The percentage of occupation vacancies advertised filled by employers (the fill rate) remained low, though increased from July 2022 to February 2023.<sup>3</sup> The estimated average fill rate in the labour market has decreased from 73% in 2021 to 65% in 2023. The sustained growth in full-time employment over the year, coupled with a low rate of underemployment, show a greater workforce utilisation and less capacity of supply to meet additional demand.

The tight labour market conditions and trends are manifesting in skills shortages as employers contend with constrained levels of candidates that are suitable to fill job vacancies. This has materialised as occupation shortages across the labour market.

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<sup>3</sup> As measured by the Survey of Employers who have Recently Advertised (SERA).

# 2023 Skills Priority List

## Key findings

The 2023 SPL shows that 36% of occupations were in national shortage (332 out of 916), about 5 percentage points higher than 2022 (31% of occupations) (Figure 3).<sup>4</sup> The rise in shortages reflects the cumulative impacts of recruitment challenges, stemming from a persistently tight labour market which began tightening from late 2021.

Inputs (both quantitative and qualitative) used to determine the 2023 SPL ratings were primarily, though not entirely, gathered during the 2022–23 financial year. Similar inputs used to determine the 2022 SPL ratings were primarily gathered during the 2021–22 financial year. As a result of this approach, the 2023 SPL inputs reflect a slightly tighter labour market than that for the 2022 SPL inputs (where some of the COVID-19 influences on the labour market, particularly in the first half of 2021–22, had a minor impact).

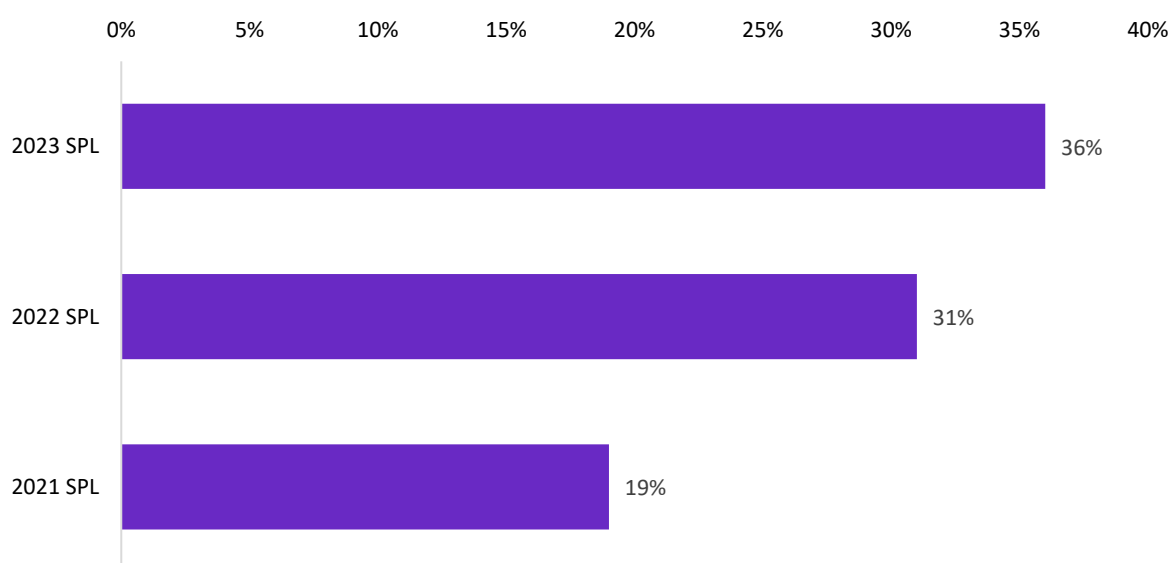
The cumulative effect of supply side constraints over the past 12 to 24 months that can lead to backlogs in consumer demand, waitlist for services and the like. Unsurprisingly this cumulative effect on the ability of businesses to deliver the goods and services that consumers are demanding has been more readily observed, particularly in stakeholder feedback, throughout the 2023 SPL assessments than it was the case in 2022.

Taking these two factors together helps illustrate why the number of occupations in shortage in 2023 has increased (when compared to 2022). Data over more recent months has suggested slight improvements in both fill rates and the number of applicants per vacancy, suggesting that the period captured over the 2023 assessment period was essentially a 'peak' in the labour market tightness. The large rise in occupations in shortage from 2021 to 2022 (19% in 2021 as compared to 31% in 2022) was due to the subdued labour market conditions during the COVID-19 pandemic followed by labour market tightening in the era of post-lockdowns with easing restrictions.

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<sup>4</sup> The 31% shortage rating for 2022 is reflective of the published 2022 SPL based on the 2021 version of ANZSCO. This differs slightly from the 32% shortage reported in Figure 4 (for all occupations), based on the latest 2022 version of ANZSCO. Note that all analyses from Figure 4 onwards utilise the 2022 ANZSCO version.

**Figure 3: Proportion of occupations in shortage in the 2021, 2022 and 2023 SPLs**



Source: Jobs and Skills Australia, *Skills Priority List, 2021–2023*.

Comparisons with the 2022 SPL show that there were 66 occupations newly in shortage in 2023 but not in shortage in 2022. Most of the new shortages were concentrated among high-skilled Professionals.<sup>5</sup>

There were also 266 occupations (or 29%) that were in shortage in both 2022 and 2023 SPLs. Among them, 47% were Professionals occupations, mostly related to health, engineering, information communication technology (ICT) and science roles. Another 33% were Technicians and Trades Workers occupations.<sup>6</sup>

Across all three SPLs published from 2021 to 2023, 138 occupations were in shortage each year. For these occupations Professionals occupations made up 40% (55 out of 138), while Technicians and Trades Workers occupations comprised 49% (67 out of 138).<sup>7</sup>

There were 8 occupations where the shortages were confined to regional areas only.<sup>8</sup> Half of these were Professionals occupations, reflecting the unique labour market characteristics that are observed in each state and territory. There were additional occupations in shortage or regional shortage that were not the case at the national level. These details are summarised in Appendix E.

At the major occupation group, Figure 4 shows shortages were most pronounced in the Technicians and Trades Workers category, with 50% of these occupations assessed as being in shortage (102 out of 205 occupations assessed). Professionals were close behind, with 48% of these occupations in shortage (157 out of 327 occupations assessed). Occupations in shortage was also prevalent in Community and Personal Service Workers (24%), Machinery Operators and Drivers (34%), and Labourers (36%).<sup>9</sup>

<sup>5</sup> The full list of occupations newly in shortage in 2023 are in Appendix B.

<sup>6</sup> The full list of occupations in shortage across both 2022 and 2023 SPL are in Appendix A.

<sup>7</sup> The full list of occupations in shortage across all three SPLs are in Appendix D.

<sup>8</sup> The full list of occupations in regional shortage only are in Appendix F.

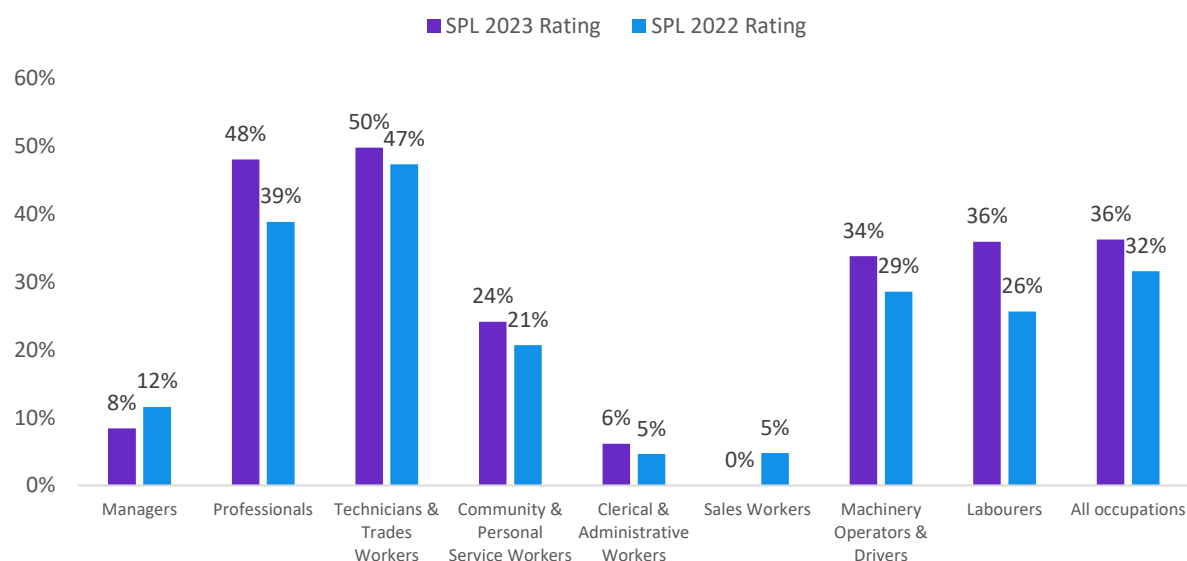
<sup>9</sup> Many Labourer occupations are out of scope of the SPL as they are at Skill Level 5.



The percentage of occupations in shortage fell for Managers occupations (from 12% to 8%) and Sales Workers occupations (from 5% to 0%).

Fill rates were high for both Managers and Sales Workers, providing evidence that employers were able to find suitably skilled workers to fill vacant positions. Compared to 2022, the overall fill rate for Sales Workers increased to 75% (from 67%). For Managers, the overall fill rate was unchanged from 2022 but remained well above the economy-wide average, at 76%. For both these occupation groups, the number of suitable applicants per vacancy increased to 3.6 for Managers and 3.0 for Sales Workers in 2023, from 3.2 and 2.4 respectively in 2022.

**Figure 4: Occupations in shortage in the 2022 and 2023 SPLs, by Major Occupation Group**



Source: Jobs and Skills Australia, *Skills Priority List*, 2021–2023.

The outcomes suggest that shortages are not simply caused by either high demand growth or weak flow of skilled workers into occupations; rather the interaction of both forces is what matters.

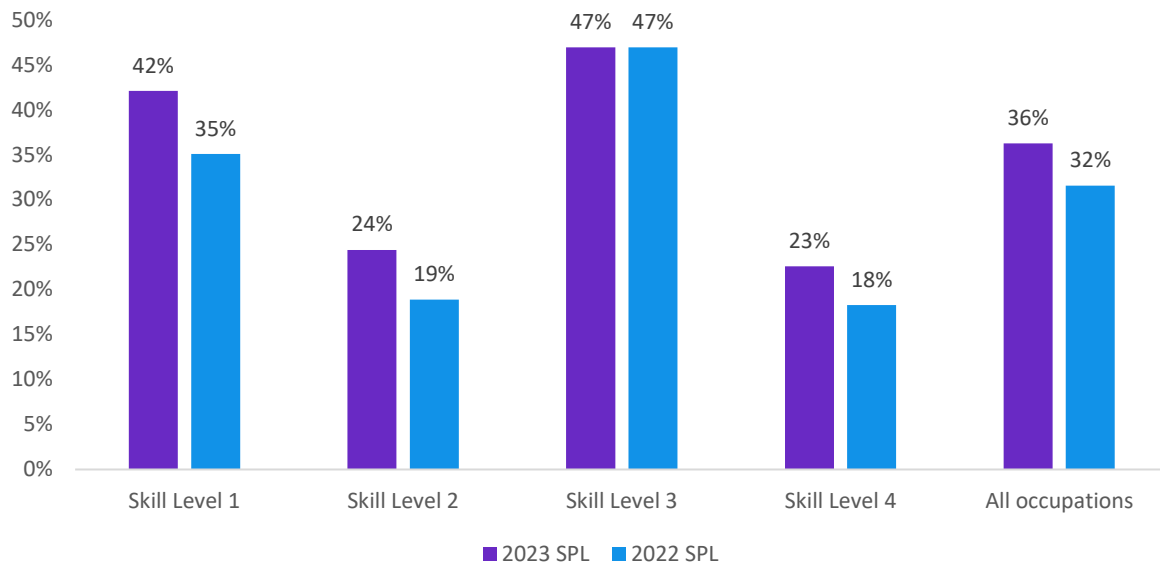
Figure 5 shows that the percentage of occupations in shortage in 2023 across Skill Levels 1, 2 and 4 increased when compared to 2022, while the percentage of Skill Level 3 occupations in shortage remained stable.<sup>10</sup>

Occupations with VET as the primary pathway to the labour market had a large percentage of occupations in shortage. Almost half of Skill Level 3 occupations (47%) – which typically require a Certificate III/IV – were in shortage. One in four Skill Level 2 occupations were also in shortage. In addition, 42% of Skill Level 1 occupations, which usually require a Bachelor degree or higher, were in shortage.

The results demonstrate that both the VET and higher education sectors have an integral part to play in alleviating shortage pressures.

<sup>10</sup> The Australian Bureau of Statistics provides information on the concept of Skill Levels as part of its [Conceptual basis of ANZSCO](#) advice.

**Figure 5: Proportion of occupations in shortage in the 2022 and 2023 SPL, by Skill Level**



Source: Jobs and Skills Australia, *Skills Priority List*, 2021–2023.

# Skill shortages by major occupation groups

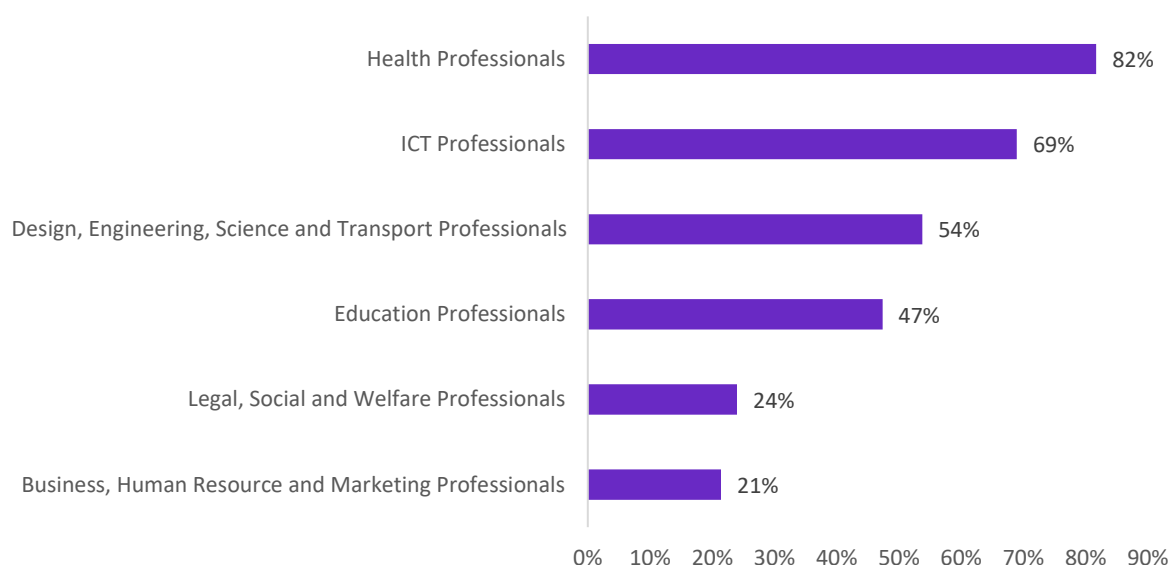
## Professionals occupations

Almost half (or 48%) of Professionals group occupations were in shortage in 2023, compared to 39% in 2022.

The higher proportion of Professionals group occupations in shortage in 2023 was largely driven by Health Professionals and ICT Professionals. As Figure 6 highlights, more than four in five Health Professionals occupations (or 82%) were in shortage, while almost seven in ten ICT Professionals (69%) were in shortage.

Increasing demand for health services arising from the ageing of the population and the strains added to the sector during the COVID-19 pandemic and growth in digitalisation across the economy, may have resulted in demand in these sectors outpacing the supply of suitably skilled workers.

**Figure 6: Proportion of occupations in shortage in 2023 SPL, by Professionals occupation sub-group**



Source: Jobs and Skills Australia, *Skills Priority List*, 2023.

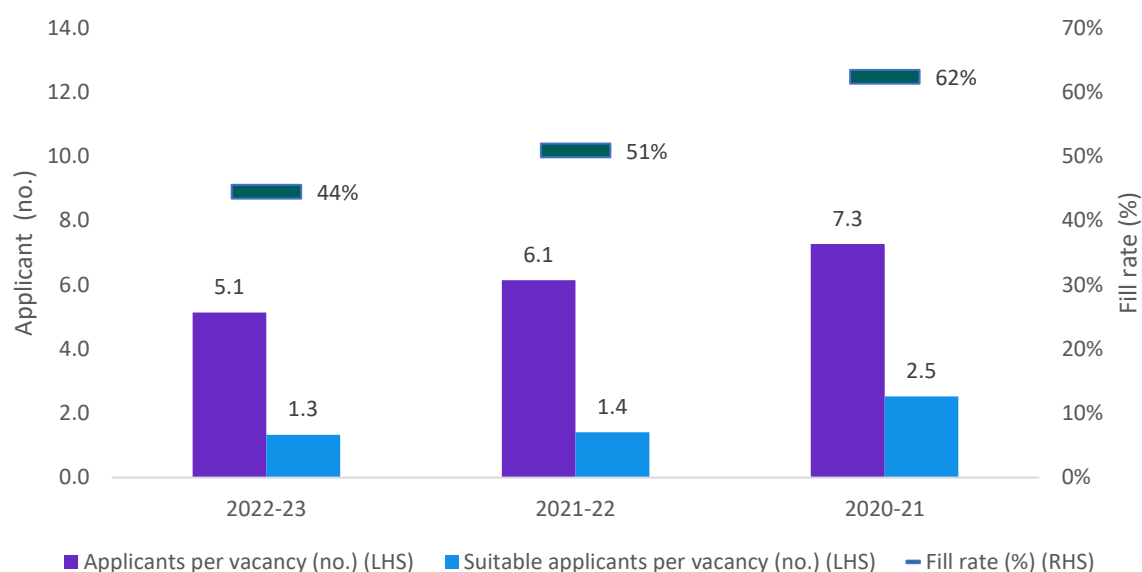
Shortages for Health Professionals were far-reaching. All medical practitioner occupations, Registered Nurse occupations and many medical specialists, diagnostic professionals and allied health professionals were found to be in shortage.

Skill shortages appear to be acute in the health sector especially compared to other Professionals occupations. Figure 7 shows that the fill rate for Health Professionals for the 2023 SPL period was 44% and there were 1.3 suitable applicants per vacancy. This was much lower than the average fill rate of around 60% and 2.3 suitable applicants per vacancy

respectively for the 2022–23 financial year. These were both lower than those in 2022 and continued the downward trend of the last two years. Particularly low fill rates from the Survey of Employers who have Recently Advertised (SERA) were recorded for General Practitioners (15%), Psychiatrists (20%), Speech Pathologists/Speech Language Therapists (21%) and Sonographers (26%), suggesting that shortages were even more acute in these occupations.

A common thread among shortages in Professionals occupations, including specific occupations mentioned above, is that they require high levels of skill, qualification, and experience. This is evidenced by SERA data indicating a lack of specific skills or experience being the most common reason for which applicants were found unsuitable.

**Figure 7: Proportion of vacancies filled (%) and suitable applicants per vacancy (no.) for Health Professionals, 2020–21, 2021–22 and 2022–23 financial years**



Source: Jobs and Skills Australia, *Survey of Employers who Recently Advertised*, 2020-2023.

## Technicians and Trades Workers occupations

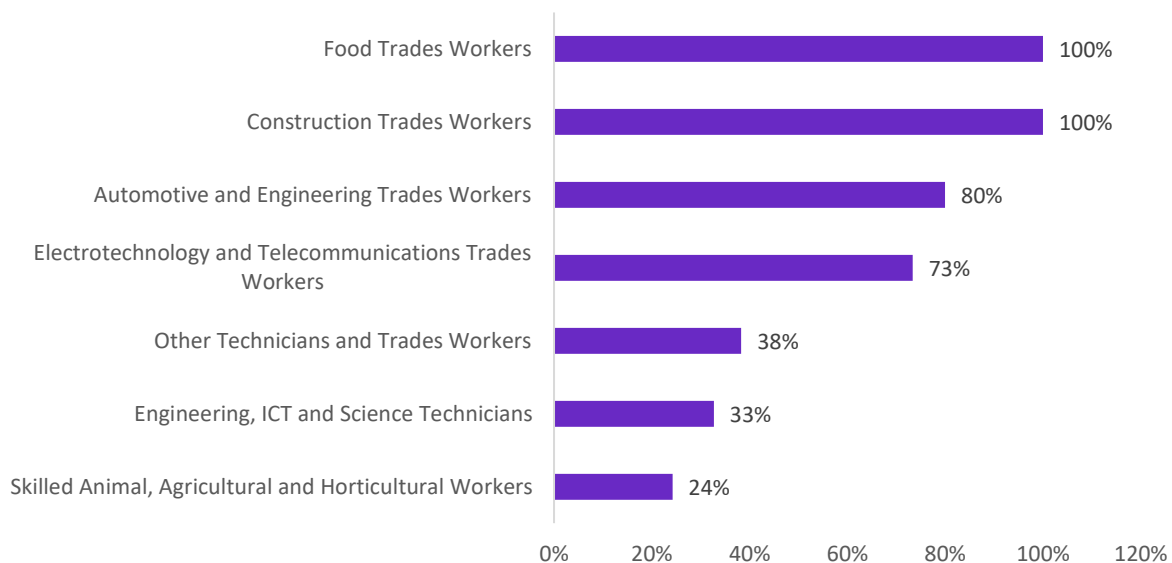
Shortages were most common for Technicians and Trades Workers, with half of them in shortage. Compared to 2022, this was a 3 percentage points increase.

As shown in Figure 8, all occupations in the Construction Trades Workers and Food Trades Workers groups were in shortage, along with 80% of Automotive and Engineering Trades Workers occupations.

All occupations in the Construction Trades Workers category are in persistent shortage. This implies tight labour market conditions simply exacerbate shortage issues that appear to be chronic in the sector.

Even if the construction sector was to see a significant downturn, many construction roles would likely still be in shortage. The fill rates for construction-related occupations are often among the lowest in the labour market and have declined significantly from 54% in the 2020–21 financial year to 29% in 2022–23 (Figure 9). Further the number of both qualified and suitable applicants per vacancy have also declined during the same period.

**Figure 8: Proportion of occupations in shortage on 2023 SPL, by Technicians and Trades Workers occupation sub-group**

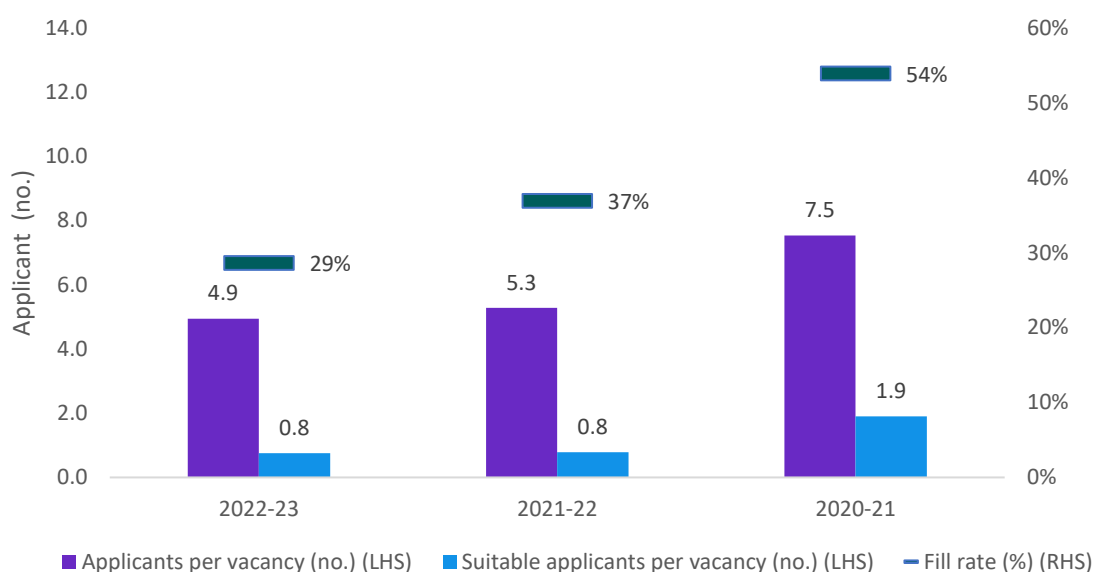


Source: Jobs and Skills Australia, *Skills Priority List*, 2023.

Shortages are also apparent across other trades outside of the construction sector. All five of the largest employing non-construction trades occupations were in shortage – Chef, Motor Mechanic (General), Fitter (General), Hairdresser and Metal Fabricator.

Data from the SERA shows that the number of suitable applicants per vacancy for construction and the non-construction occupations was around or below the average for all occupations of 2.3 for the 2022–23 financial year. Lack of experience, qualifications, or registration were the most common reasons for which employers considered applicants unsuitable.

**Figure 9: Proportion of vacancies filled (%) and suitable applicants per vacancy (no.) for Construction Trades Workers, 2020–21, 2021–22 and 2022–23 financial years**



Source: Jobs and Skills Australia, *Survey of Employers who Recently Advertised*, 2020–2023.

## Community and Personal Service Workers occupations

The proportion of Community and Personal Services Workers occupations in shortage grew to 24% in 2023, an increase from 21% in 2022.

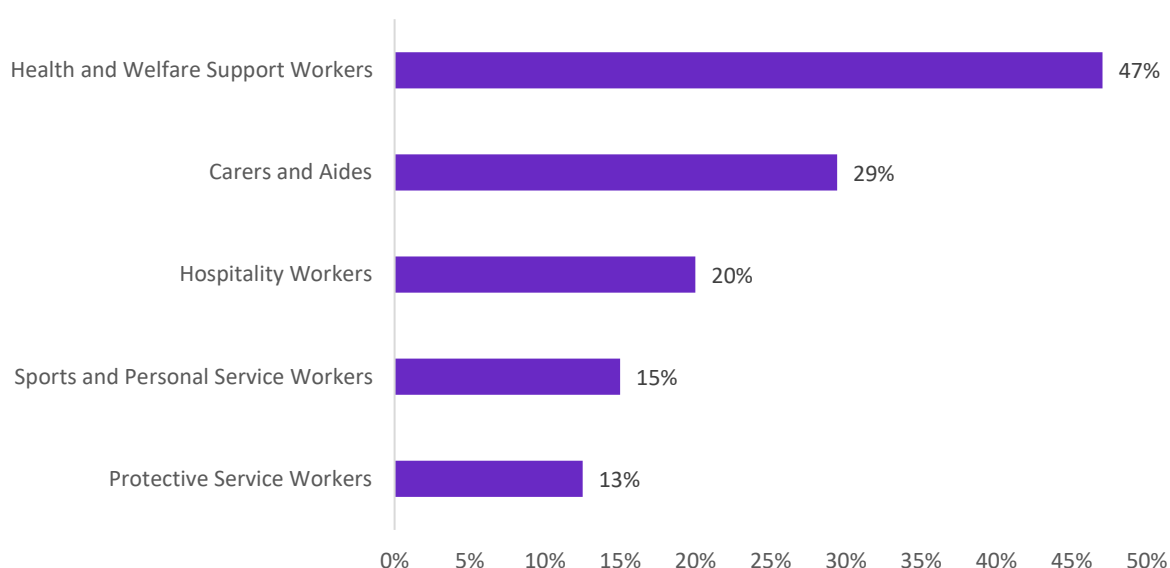
As with the Health Professionals category discussed previously, shortages for Community and Personal Service Workers in the health, care and support sectors are considerable (Figure 10).

In the Health and Welfare Support Workers sub-group, Enrolled Nurse, Ambulance officer, Diversional Therapist and Residential Care Officer were all found to be in shortage. Among Carers and Aides, Aged or Disabled Carer, Child Care Worker and Personal Care Assistant remained in shortage, while Nursing Support Worker and Out of School Hours Care Worker fell into shortage in 2023.

Aged or Disabled Carer, Personal Care Assistant and Child Care Worker have been in shortage across all three SPLs from 2021 to 2023. Historical analysis shows Child Care Worker was in shortage as far back as the late 2000s, implying that long-term solutions may be necessary to alleviate skill shortages within this occupation.

With Australia's ageing population and the difficulty in automating many care-related tasks, the demand for health and care workers is likely to only increase further into the future.

**Figure 10: Proportion of occupations in shortage on 2023 SPL, by Community and Personal Service Workers occupation sub-group**



Source: Jobs and Skills Australia, *Skills Priority List*, 2023.

Low staff retention stemming from poor working conditions could be a factor driving skill shortages in the care sector. A 2021 Committee for Economic Development of Australia (CEDA) report, *Duty of Care: Meeting the Aged Care Workforce Challenge*, and a 2022 update of the report found that progress in resolving shortages in the care sector are mainly held back by wages, working hours, a lack of career progression, poor training outcomes, and negative public perceptions of the industry.

## Other occupation groups

There was a slight increase in the percentage of Machinery Operators and Drivers occupations in shortage, from 29% in 2022 to 34% in 2023. This was primarily driven by Mobile Plant Operators occupations, with 88% of such occupations in shortage, including Excavator Operator, Agricultural and Horticultural Mobile Plant Operator, Loader Operator and Earthmoving Plant Operator (General).

While 36% of Labourer occupations were found to be in shortage, many occupations in this category are not included in the SPL as they are at Skill Level 5 and therefore typically do not require any tertiary qualifications. Only 29% of Labourers occupations fit the scope of the SPL. Within this group, Labourers occupations in shortage were mostly related to the Construction and Agricultural industries (including Cotton Farm Worker, Sugar Cane Farm Worker, and Livestock Husbandry Worker).

Data from the SERA shows employers of Machinery Operators and Drivers and Labourers typically valued experience over qualifications, with more than 75% of employers requiring applicants with experience, while only around half required applicants with a relevant qualification. The implication of these preferences expressed by employers is that a lack of workers with relevant on-the-job-experience could be a more important driver of shortages for these occupation groups than a lack of workers with relevant technical training.

# Additional 2023 SPL insights

## Many large employing occupations are in shortage

The implications of skill shortages across the Australian labour market can be seen by analysing the top 20 largest employing occupations that were in shortage. These occupations comprise a diverse range of occupations and sectors, including health, aged care, education, construction, and food services (Table 1). Many, though not all, of these occupations have also been identified in previous Jobs and Skills Australia analysis of the top 20 occupations in demand nationally (which also uses data sources such as internet job vacancies and projected employment growth data).

Included in Table 1 are the percentages of males and females employed in each occupation, sourced from 2021 Australian Bureau of Statistics (ABS) Census data. This shows that most occupations in shortage are also those which have a heavy gender skew, which will be elaborated in the next section.

Based on the 2021 ABS Census data, the top 20 employing occupations in shortage represent 22% of all people employed in occupations within the scope of the SPL (there are 916 such occupations).

In 2023, the four largest occupations found to be in shortage were Aged or Disabled Carer, Retail Manager (General), Primary School Teacher, and Secondary School Teacher. Based on the 2021 Census data, these occupations made up 8% (or 731,800 people) of total employment in occupations within the scope of the SPL. Given the relatively large share of employment in these occupations, addressing skill shortages among these occupations is vital given their importance in the economy and the downstream effects caused by shortages in these occupations.

The largest occupations rated as newly in shortage in the 2023 SPL included Sales and Marketing Manager, Waiter, and Solicitor. The main drivers of these results included decreases in fill rates of these occupations and employers receiving fewer suitable and qualified applicants per vacancy, as reflected in the SERA data. Consequently, filling these positions became more challenging for employers compared to the previous year.

The largest occupations that have been in persistent shortage since 2021 include Aged or Disabled Carer, Electrician (General), Child Care Worker and Carpenter. The reason for the persistence is likely to be multifaceted, including the qualifications attained from education and training sectors, working conditions, pay, government policies and regulations relating to these occupations. Solutions to skill shortages in these occupations are likely to be long-term and holistic.



**Table 1: Top 20 largest employing occupations in shortage in 2023 SPL**

2022 ANZSCO Code	ANZSCO description	Years in shortage (from 2021 to 2023)	Males employed (%) (2021 Census)	Females employed (%) (2021 Census)	Total employed (2021 Census)
423111	Aged or Disabled Carer	3	23.3%	76.7%	227,500
142111	Retail Manager (General)	2	49.8%	50.2%	183,500
241213	Primary School Teacher	2	14.9%	85.1%	164,900
241411	Secondary School Teacher	2	37.8%	62.2%	155,900
733111	Truck Driver (General)	2	95.6%	4.4%	148,400
341111	Electrician (General)	3	97.9%	2.1%	128,300
421111	Child Care Worker	3	3.2%	96.8%	123,800
131112	Sales and Marketing Manager	1	58.3%	41.7%	119,700
331212	Carpenter	3	99.0%	1.0%	104,900
351311	Chef	3	72.8%	27.2%	90,500
431511	Waiter	1	25.6%	74.4%	86,900
321211	Motor Mechanic (General)	3	98.1%	1.9%	79,300
271311	Solicitor	1	45.7%	54.3%	69,700
323211	Fitter (General)	3	97.9%	2.1%	68,500
133111	Construction Project Manager	3	86.0%	14.0%	64,900

2022 ANZSCO Code	ANZSCO description	Years in shortage (from 2021 to 2023)	Males employed (%) (2021 Census)	Females employed (%) (2021 Census)	Total employed (2021 Census)
225113	Marketing Specialist	2	37.4%	62.6%	64,500
261313	Software Engineer	3	84.4%	15.6%	54,300
391111	Hairdresser	3	16.2%	83.8%	53,600
253111	General Practitioner	3	52.3%	47.7%	48,700
133112	Project Builder	3	95.2%	4.8%	47,800

Source: Jobs and Skills Australia, *Skills Priority List, 2021–2023*; ABS, *2021 Census of Population and Housing*.

## Gender-skew in occupations could be impacting shortages

National employment by gender is almost even (52% male and 48% female), but significant workforce gender skews exist for some occupations.

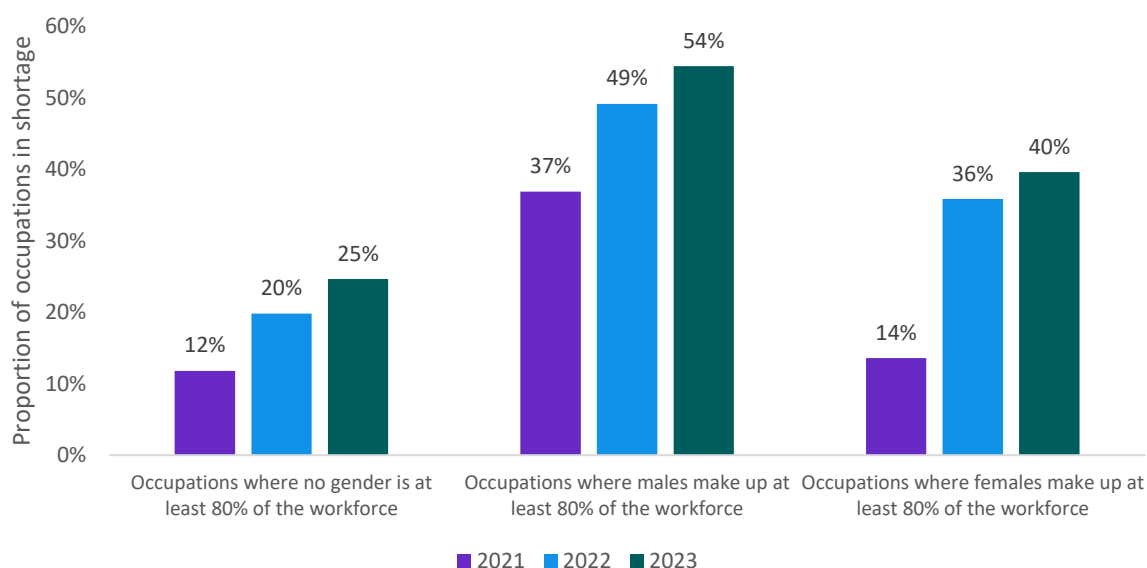
Analysis of the 2023 SPL outcomes shows that occupations that have a strong gender imbalance were more likely to be in shortage. Some 54% of occupations where males make up at least 80% of the workforce were found to be in shortage (Figure 11).

40% of occupations where females make up at least 80% of the workforce were found to be in shortage. These were concentrated in certain health related occupations such as Registered Nurses, and early education and care-based occupations within Community and Personal Service Workers.

In contrast, 25% of occupations with less systematic gender skew were in shortage. Occupations that are not in shortage are more likely to have a workforce that is at least 20% of both genders, compared to occupations that are in shortage. These tended to be occupations among Managers and Professionals.

Looking across 2021 to 2023 SPLs, gender imbalance appears entrenched with a high percentage of occupations with a workforce that was at least 80% males or at least 80% females. Further the likelihood of a skills shortage for both male and female-dominated occupations has grown over the past three years.

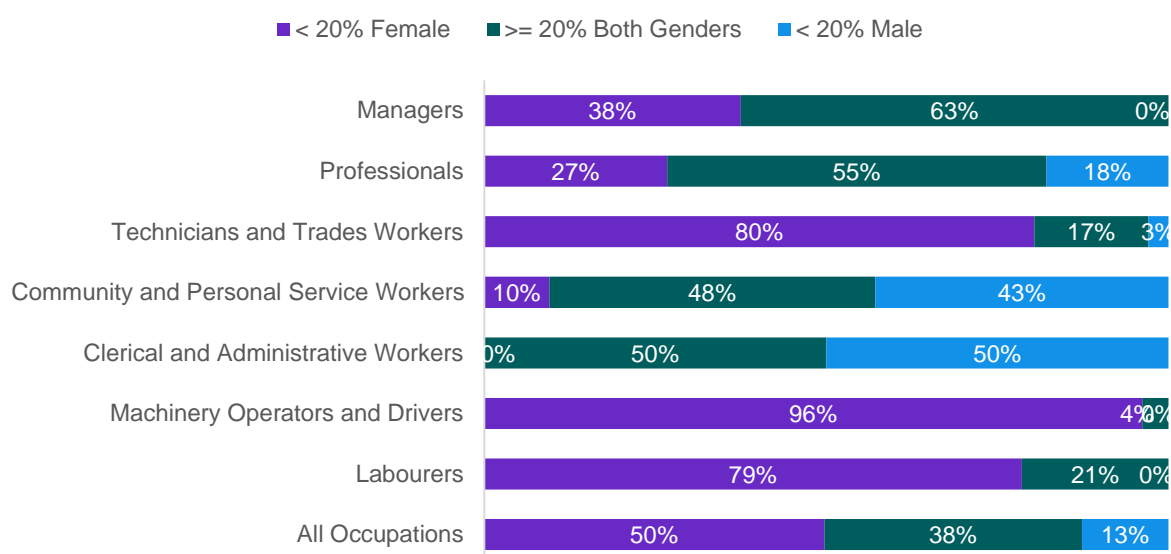
**Figure 11: Proportion of gender-imbalanced occupations that were in shortage in the 2021–2023 SPL**



Source: Jobs and Skills Australia, *Skills Priority List, 2021–2023*; ABS, *2021 Census of Population and Housing*.

When considering only the occupations that were found to be in shortage in the 2023 SPL, half of these had a workforce that was more than 80% males. Those with a large gender skew towards men included many occupations within the Machinery Operators and Drivers, Labourers and Technicians and Trade Workers major groups (Figure 12).

**Figure 12: Gender breakdown of 2023 SPL occupations in shortage by major group**



Source: Jobs and Skills Australia, *Skills Priority List, 2021–2023*; ABS, *2021 Census of Population and Housing*.

Gender analysis of the top 20 largest occupations in shortage indicates that 8 occupations have a workforce that is more than 80% male workers. Conversely only 3 of these occupations have a workforce that has more than 80% females (Table 1).

Table 1 highlighted within the top 20 occupations in shortage (by level of employment), the largest male representations in the workforce were for Carpenter (99%), Motor Mechanic (General) (98%), Fitter (General) (98%), and Electrician (General) (98%). On the other hand, the largest female representations in the workforce were for Child Care Worker (97%), Primary School Teacher (85%), and Hairdresser (84%).

A heavily gender skewed workforce may therefore be artificially constraining the labour supply – increasing the likelihood of a skills shortage. Improving the gender imbalance of occupations may be a way to address skill shortages in these areas of the labour market.

## Fill rates are a good proxy for skill shortages

The 2023 SPL results can be categorised into four groups, based on the relationship between an occupation’s applicants per vacancy and the fill rate (Figure 13).<sup>11</sup>

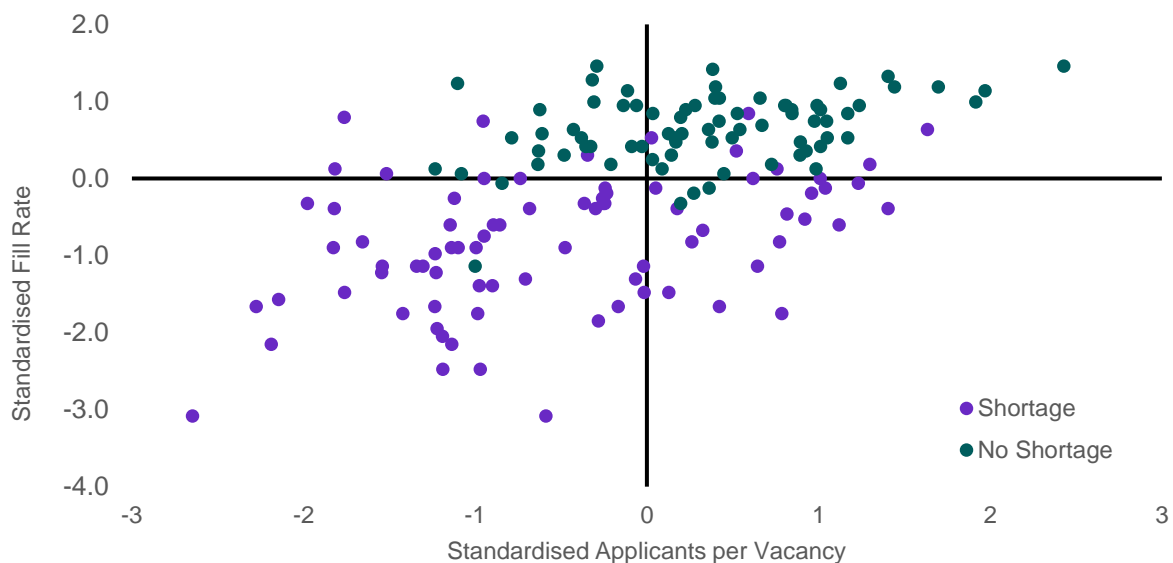
- Quadrant One (top left) comprises occupations with high fill rates and low applicants per vacancy.
- Quadrant Two (top right) includes occupations with high fill rates and high applicants per vacancy.

<sup>11</sup> To assist with visualising the groupings the data has been transformed onto a logarithmic scale and then standardised. This was done as the raw data in each quadrant tended to bunch in a few particular areas, making it more difficult to identify individual occupations.

- Quadrant Three (bottom right) contains occupations with low vacancy fill rates and high applicants per vacancy.
- Quadrant Four (bottom left) consists of occupations with low vacancy fill rates and low applicants per vacancy.

As the data is standardised, high fill rates are represented by figures above zero along the vertical axis. Similarly, high applicants per vacancy are represented by figures above zero along the horizontal axis. Figures below zero along the vertical and horizontal axis would then reflect low fill rates and applicants per vacancy respectively.

**Figure 13: Standardised applicants per vacancy (no.) and fill rate (no.), by shortage status in the 2023 SPL**



Source: Jobs and Skills Australia, *Skills Priority List 2023; Survey of Employers who Recently Advertised (SERA)*, 2022-23 financial year.

The analysis demonstrates that occupations in shortage are predominantly in Quadrant Four – where both fill rates and applicants per vacancy are lower than for many other occupations. Within this quadrant employers’ difficulty with filling vacancies could be due to available workers not having the relevant skills or qualifications and a shortfall in the supply of skilled or qualified workers. Some (though not all) occupation groups observed within this quadrant are Health Professionals, Health and Welfare Support Workers, Carers and Aides, Construction Trades Workers, and Electrotechnology and Telecommunications Trades Workers.

Education Professionals lie on the boundary of Quadrants One (top left) and Four (bottom left). This is likely due to the occupation having fill rates (actual and unstandardised) that may give a mixed initial signal as to whether a shortage exists or not. But significant stakeholder feedback, including broader data analysis and research suggest that these occupations have high turnover. With a fill rate around the threshold level and high turnover, the occupation is very much in shortage. Education Professionals are also critical roles which have a high sensitivity to understaffing. The fill rate outcome for this occupation may be due to employers needing to hire workers to keep schools running.

Occupations in shortage also tend to be in Quadrant Three (bottom right), where fill rates are low despite the high number of applicants per vacancy. This may suggest that employers are

not willing to hire from the pool of applicants as they are seeking additional qualifications, skills, or experience. This group includes Design, Engineering, Science and Transport Professionals, Engineering, ICT and Science Technicians, Business, Human Resource and Marketing Professionals and Construction Managers. For these occupations, employers may be seeking more skills and experience pertaining to client relations, project management, critical thinking, communication, and teamwork among others. SERA data supports this view, showing the proportion of employers requiring specific skills for these occupation groups (43%) is higher than the overall average (32%).

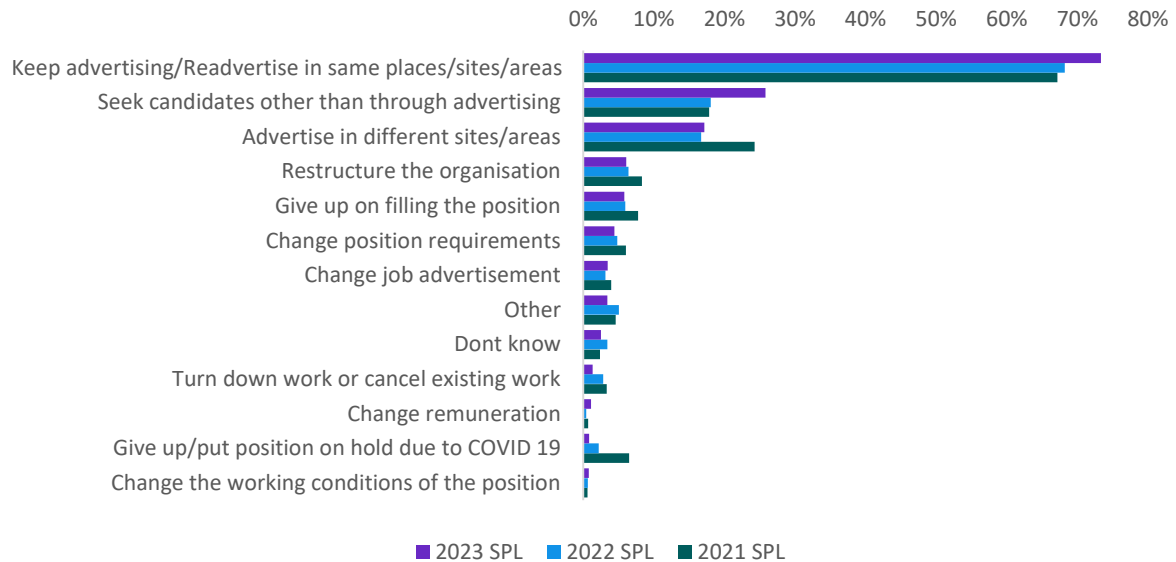
In contrast, occupations not in shortage primarily fall in Quadrant Two (top right). The analysis therefore aligns with economic intuitions, where employers will be more likely to fill their vacancies if the supply of skilled labour is large compared to the demand and vice versa.

## Employers rarely adjust wages to fill vacancies

SERA data reveals that many employers continue advertising in the same place in response to unfilled vacancies over a course of a year. In the 2023 SPL period, 73% of employers reported that they undertook this action when they did not fill a vacancy (Figure 14).

Employers also commonly sought applicants through different channels, such as word of mouth (26%) or advertising in different places (17%). These three actions were the most common in each of the SPL periods from 2021 to 2023.

**Figure 14: Employer responses to unfilled vacancies (proportion of employers with unfilled vacancies) in the 2021, 2022 and 2023 SPL**



Source: Jobs and Skills Australia, *Skills Priority List*, 2021–2023.

Over the three years from 2021 to 2023, few employers changed remuneration in response to skill shortages. In the 2023 SPL period, around 1% of employers adjusted remuneration to attract suitably skilled workers to fill vacancies. This was slightly more compared to 2022 (0.4%). The results are consistent with research undertaken by the Reserve Bank of

Australia, which shows limited evidence that firms raised wages in response to firm-wide or job-level skill shortages, at least in the short-term.<sup>12</sup>

Few employers (around 1%) changed the working conditions over 2021 to 2023 SPL periods. The outcomes are generally mirrored when analysing employer responses to unfilled vacancies by major employer groups.

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<sup>12</sup> Leal H (2019), [Firm-level insights into skills shortages and wages growth](#), RBA (Reserve Bank Australia), accessed 4 September 2022; Agarwal N, Bishop J (2023), *Do firms respond to skill shortages with wages increases?* (Unpublished presentation), RBA (Reserve Bank Australia), accessed 4 September 2022.

# Appendices

## Appendix A: Occupations in shortage in both 2022 and 2023

There are 266 occupations assessed as being in shortage (either in nationally or regional shortage nationally) in both 2022 and 2023.

2022 ANZSCO Code	Occupation title
121311	Apiarist
133111	Construction Project Manager
133112	Project Builder
133211	Engineering Manager
142111	Retail Manager (General)
221213	External Auditor
221214	Internal Auditor
222113	Insurance Broker
225113	Marketing Specialist
225411	Sales Representative (Industrial Products)
232212	Surveyor
233111	Chemical Engineer
233112	Materials Engineer
233211	Civil Engineer
233212	Geotechnical Engineer
233213	Quantity Surveyor
233214	Structural Engineer
233215	Transport Engineer
233311	Electrical Engineer
233411	Electronics Engineer



2022 ANZSCO Code	Occupation title
233512	Mechanical Engineer
233513	Production or Plant Engineer
233611	Mining Engineer (excluding Petroleum)
233612	Petroleum Engineer
233915	Environmental Engineer
233999	Engineering Professionals nec <sup>13</sup>
234111	Agricultural Consultant
234114	Agricultural Research Scientist
234115	Agronomist
234212	Food Technologist
234411	Geologist
234412	Geophysicist
234413	Hydrogeologist
234711	Veterinarian
234912	Metallurgist
241111	Early Childhood (Pre-primary School) Teacher
241213	Primary School Teacher
241411	Secondary School Teacher
241511	Special Needs Teacher
241512	Teacher of the Hearing Impaired
241513	Teacher of the Sight Impaired
241599	Special Education Teachers nec
242211	Vocational Education Teacher / Polytechnic Teacher
251211	Medical Diagnostic Radiographer
251212	Medical Radiation Therapist

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<sup>13</sup> Not elsewhere classified.

2022 ANZSCO Code	Occupation title
251214	Sonographer
251411	Optometrist
251511	Hospital Pharmacist
251513	Retail Pharmacist
251912	Orthotist or Prosthetist
251999	Health Diagnostic and Promotion Professionals nec
252312	Dentist
252411	Occupational Therapist
252511	Physiotherapist
252611	Podiatrist
252712	Speech Pathologist / Speech Language Therapist
253111	General Practitioner
253112	Resident Medical Officer
253211	Anaesthetist
253311	Specialist Physician (General Medicine)
253312	Cardiologist
253313	Clinical Haematologist
253314	Medical Oncologist
253315	Endocrinologist
253316	Gastroenterologist
253317	Intensive Care Specialist
253318	Neurologist
253321	Paediatrician
253322	Renal Medicine Specialist
253323	Rheumatologist
253324	Thoracic Medicine Specialist

2022 ANZSCO Code	Occupation title
253399	Specialist Physicians nec
253411	Psychiatrist
253511	Surgeon (General)
253512	Cardiothoracic Surgeon
253513	Neurosurgeon
253514	Orthopaedic Surgeon
253515	Otorhinolaryngologist
253516	Paediatric Surgeon
253517	Plastic and Reconstructive Surgeon
253518	Urologist
253521	Vascular Surgeon
253911	Dermatologist
253912	Emergency Medicine Specialist
253913	Obstetrician and Gynaecologist
253914	Ophthalmologist
253915	Pathologist
253917	Diagnostic and Interventional Radiologist
253999	Medical Practitioners nec
254111	Midwife
254212	Nurse Researcher
254411	Nurse Practitioner
254412	Registered Nurse (Aged Care)
254413	Registered Nurse (Child and Family Health)
254414	Registered Nurse (Community Health)
254415	Registered Nurse (Critical Care and Emergency)
254416	Registered Nurse (Developmental Disability)

2022 ANZSCO Code	Occupation title
254417	Registered Nurse (Disability and Rehabilitation)
254418	Registered Nurse (Medical)
254421	Registered Nurse (Medical Practice)
254422	Registered Nurse (Mental Health)
254423	Registered Nurse (Perioperative)
254424	Registered Nurse (Surgical)
254425	Registered Nurse (Paediatrics)
254499	Registered Nurses nec
261112	Systems Analyst
261211	Multimedia Specialist
261212	Web Developer
261311	Analyst Programmer
261312	Developer Programmer
261313	Software Engineer
261314	Software Tester
261315	Cyber Security Engineer
261316	DevOps Engineer
261317	Penetration Tester
262114	Cyber Governance Risk and Compliance Specialist
262115	Cyber Security Advice and Assessment Specialist
262116	Cyber Security Analyst
262117	Cyber Security Architect
262118	Cyber Security Operations Coordinator
263111	Computer Network and Systems Engineer
263112	Network Administrator
263113	Network Analyst

2022 ANZSCO Code	Occupation title
263211	ICT Quality Assurance Engineer
263213	ICT Systems Test Engineer
272311	Clinical Psychologist
272312	Educational Psychologist
272313	Organisational Psychologist
272399	Psychologists nec
311112	Agricultural and Agritech Technician
311312	Meat Inspector
312113	Building Inspector
312114	Construction Estimator
312211	Civil Engineering Draftsperson
312212	Civil Engineering Technician
312511	Mechanical Engineering Draftsperson
312512	Mechanical Engineering Technician
312912	Metallurgical or Materials Technician
321111	Automotive Electrician
321211	Motor Mechanic (General)
321212	Diesel Motor Mechanic
321213	Motorcycle Mechanic
321214	Small Engine Mechanic
322112	Electroplater
322113	Farrier
322114	Metal Casting Trades Worker
322211	Sheetmetal Worker
322311	Metal Fabricator
322312	Pressure Welder

2022 ANZSCO Code	Occupation title
322313	Welder (First Class) (Aus) / Welder (NZ)
323111	Aircraft Maintenance Engineer (Avionics)
323112	Aircraft Maintenance Engineer (Mechanical)
323113	Aircraft Maintenance Engineer (Structures)
323211	Fitter (General)
323212	Fitter and Turner
323213	Fitter-Welder
323214	Metal Machinist (First Class)
323313	Locksmith
323411	Engineering Patternmaker
323412	Toolmaker
324111	Panelbeater
324211	Vehicle Body Builder
324212	Vehicle Trimmer
324311	Vehicle Painter
331111	Bricklayer
331112	Stonemason
331211	Carpenter and Joiner
331212	Carpenter
331213	Joiner
332111	Floor Finisher
332211	Painter
333111	Glazier
333211	Plasterer (Wall and Ceiling)
333212	Renderer (Solid Plaster)
333311	Roof Tiler

2022 ANZSCO Code	Occupation title
333411	Wall and Floor Tiler
334112	Airconditioning and Mechanical Services Plumber
334113	Drainer
334114	Gasfitter
334115	Roof Plumber
334116	Plumber (General)
334117	Fire Protection Plumber
341111	Electrician (General)
341112	Electrician (Special Class)
342111	Airconditioning and Refrigeration Mechanic
342211	Electrical Linesworker / Electrical Line Mechanic
342212	Technical Cable Jointer
342313	Electronic Equipment Trades Worker
342315	Electronic Instrument Trades Worker (Special Class)
342411	Cabler (Data and Telecommunications)
342412	Telecommunications Cable Jointer
342413	Telecommunications Linesworker / Telecommunications Line Mechanic
342414	Telecommunications Technician
351111	Baker
351112	Pastrycook
351211	Butcher or Smallgoods Maker
351311	Chef
351411	Cook
361112	Horse Trainer
361311	Veterinary Nurse
362411	Nurseryperson

2022 ANZSCO Code	Occupation title
362511	Arborist
362512	Tree Worker
362711	Landscape Gardener
363214	Senior Piggery Stockperson
391111	Hairdresser
392111	Print Finisher
392112	Screen Printer
393311	Upholsterer
394112	Cabinet Maker
394113	Furniture Maker
394211	Furniture Finisher
394212	Picture Framer
394213	Wood Machinist
399914	Optical Mechanic
399916	Plastics Technician
399918	Fire Protection Equipment Technician
399999	Technicians and Trades Workers nec
411211	Dental Hygienist
411212	Dental Prosthetist
411213	Dental Technician
411214	Dental Therapist
411311	Diversional Therapist
411411	Enrolled Nurse
411715	Residential Care Officer
421111	Child Care Worker
423111	Aged or Disabled Carer



2022 ANZSCO Code	Occupation title
423313	Personal Care Assistant
442217	Security Officer
451111	Beauty Therapist
451412	Tour Guide
451612	Travel Consultant
452312	Gymnastics Coach or Instructor
452315	Swimming Coach or Instructor
511111	Contract Administrator
599111	Conveyancer
711211	Industrial Spraypainter
711514	Plastics Production Machine Operator (General)
712111	Crane, Hoist or Lift Operator
712211	Driller
712212	Miner
721111	Agricultural and Horticultural Mobile Plant Operator
721112	Logging Plant Operator
721211	Earthmoving Plant Operator (General)
721213	Bulldozer Operator
721214	Excavator Operator
721215	Grader Operator
721216	Loader Operator
721911	Aircraft Baggage Handler and Airline Ground Crew
721912	Linemarker
721914	Railway Track Plant Operator
721915	Road Roller Operator
721916	Streetsweeper Operator

2022 ANZSCO Code	Occupation title
721999	Mobile Plant Operators nec
731211	Bus Driver
733111	Truck Driver (General)
821412	Home Improvement Installer
821711	Construction Rigger
821712	Scaffolder
821713	Steel Fixer
821714	Structural Steel Erector
821911	Crane Chaser
831211	Meat Boner and Slicer
831212	Slaughterer
842315	Piggery Farm Worker
899411	Motor Vehicle Parts and Accessories Fitter (General)

## Appendix B: Occupations in shortage in 2023 that were not in shortage in 2022

There are 66 occupations assessed as being in shortage (either in shortage nationally or regional shortage nationally) in 2023 but were not in shortage in 2022.

2022 ANZSCO Code	Occupation title
131112	Sales and Marketing Manager
133612	Procurement Manager
141999	Accommodation and Hospitality Managers nec
221113	Taxation Accountant
222311	Financial Investment Adviser
223112	Recruitment Consultant
223113	Workplace Relations Adviser
224111	Actuary
224912	Liaison Officer
225499	Technical Sales Representatives nec
231111	Aeroplane Pilot
231113	Flying Instructor
231199	Air Transport Professionals nec
231212	Ship's Engineer
232111	Architect
232214	Other Spatial Scientist
232412	Illustrator
232413	Multimedia Designer
232511	Interior Designer
232611	Urban and Regional Planner
233511	Industrial Engineer
233911	Aeronautical Engineer
233912	Agricultural Engineer

233913	Biomedical Engineer
233914	Engineering Technologist
233916	Naval Architect / Marine Designer
234116	Aquaculture or Fisheries Scientist
234313	Environmental Research Scientist
241311	Middle School Teacher / Intermediate School Teacher
251213	Nuclear Medicine Technologist
251311	Environmental Health Officer
252711	Audiologist
253918	Radiation Oncologist
254211	Nurse Educator
271311	Solicitor
272511	Social Worker
311113	Animal Husbandry Technician
311114	Aquaculture or Fisheries Technician
311115	Irrigation Designer
311215	Pharmacy Technician
311412	Earth Science Technician
312111	Architectural Draftsperson
312913	Mine Deputy
362712	Irrigation Technician
392211	Graphic Pre-press Trades Worker
399111	Boat Builder and Repairer
399112	Shipwright
399513	Light Technician
399516	Sound Technician
411111	Ambulance Officer
421114	Out of School Hours Care Worker

423312	Nursing Support Worker
431511	Waiter
451711	Flight Attendant
521212	Legal Secretary
599612	Insurance Loss Adjuster
711515	Reinforced Plastic and Composite Production Worker
711516	Rubber Production Machine Operator
712213	Shot Firer
712918	Train Controller
731311	Train Driver
731312	Tram Driver
821611	Railway Track Worker
842211	Cotton Farm Worker
842217	Sugar Cane Farm Worker
842314	Livestock Husbandry Worker

## Appendix C: Occupations not in shortage in 2023 that were in shortage in 2022

There are 23 occupations not in shortage in 2023 but were in shortage in 2022.

2022 ANZSCO Code	Occupation title
132511	Research and Development Manager
139916	Quality Assurance Manager
139917	Regulatory Affairs Manager
141311	Hotel or Motel Manager
141411	Licensed Club Manager
142114	Hair or Beauty Salon Manager
261111	ICT Business Analyst
261399	Software and Applications Programmers nec
262111	Database Administrator
322111	Blacksmith
322115	Metal Polisher
323314	Precision Instrument Maker and Repairer
362313	Sports Turf Trades Worker
362611	Gardener (General)
363311	Shearer
363312	Wool Classer
399913	Optical Dispenser / Dispensing Optician
411716	Youth Worker
423211	Dental Assistant
511112	Program or Project Administrator
611211	Insurance Agent
721212	Backhoe Operator
721913	Paving Plant Operator

## Appendix D: Occupations in persistent shortage in 2021 to 2023

There are 138 occupations in shortage (either in shortage nationally or regional shortage nationally) in 2021, 2022 and 2023.

2022 ANZSCO Code	Occupation title
133111	Construction Project Manager
133112	Project Builder
133211	Engineering Manager
221213	External Auditor
221214	Internal Auditor
232212	Surveyor
233211	Civil Engineer
233212	Geotechnical Engineer
233213	Quantity Surveyor
233214	Structural Engineer
233215	Transport Engineer
233311	Electrical Engineer
233512	Mechanical Engineer
233611	Mining Engineer (excluding Petroleum)
233612	Petroleum Engineer
234111	Agricultural Consultant
234114	Agricultural Research Scientist
234115	Agronomist
234411	Geologist
234412	Geophysicist
234413	Hydrogeologist
234711	Veterinarian
234912	Metallurgist

2022 ANZSCO Code	Occupation title
241111	Early Childhood (Pre-primary School) Teacher
251214	Sonographer
251411	Optometrist
251511	Hospital Pharmacist
251513	Retail Pharmacist
252411	Occupational Therapist
252511	Physiotherapist
252611	Podiatrist
252712	Speech Pathologist / Speech Language Therapist
253111	General Practitioner
253112	Resident Medical Officer
253211	Anaesthetist
253312	Cardiologist
253314	Medical Oncologist
253411	Psychiatrist
253511	Surgeon (General)
253911	Dermatologist
253913	Obstetrician and Gynaecologist
253914	Ophthalmologist
253915	Pathologist
253917	Diagnostic and Interventional Radiologist
254111	Midwife
261211	Multimedia Specialist
261312	Developer Programmer
261313	Software Engineer
261315	Cyber Security Engineer
261316	DevOps Engineer



2022 ANZSCO Code	Occupation title
262114	Cyber Governance Risk and Compliance Specialist
262115	Cyber Security Advice and Assessment Specialist
262116	Cyber Security Analyst
262117	Cyber Security Architect
262118	Cyber Security Operations Coordinator
272311	Clinical Psychologist
272312	Educational Psychologist
272313	Organisational Psychologist
311112	Agricultural and Agritech Technician
311312	Meat Inspector
312211	Civil Engineering Draftsperson
312212	Civil Engineering Technician
321111	Automotive Electrician
321211	Motor Mechanic (General)
321212	Diesel Motor Mechanic
321213	Motorcycle Mechanic
321214	Small Engine Mechanic
322113	Farrier
322114	Metal Casting Trades Worker
322211	Sheetmetal Worker
322311	Metal Fabricator
322312	Pressure Welder
322313	Welder (First Class) (Aus) / Welder (NZ)
323111	Aircraft Maintenance Engineer (Avionics)
323112	Aircraft Maintenance Engineer (Mechanical)
323113	Aircraft Maintenance Engineer (Structures)
323211	Fitter (General)

2022 ANZSCO Code	Occupation title
323212	Fitter and Turner
323213	Fitter-Welder
323214	Metal Machinist (First Class)
323313	Locksmith
324111	Panelbeater
324311	Vehicle Painter
331111	Bricklayer
331112	Stonemason
331211	Carpenter and Joiner
331212	Carpenter
331213	Joiner
332111	Floor Finisher
332211	Painter
333111	Glazier
333211	Plasterer (Wall and Ceiling)
333212	Renderer (Solid Plaster)
333311	Roof Tiler
333411	Wall and Floor Tiler
334112	Airconditioning and Mechanical Services Plumber
334113	Drainer
334114	Gasfitter
334115	Roof Plumber
334116	Plumber (General)
334117	Fire Protection Plumber
341111	Electrician (General)
341112	Electrician (Special Class)
342111	Airconditioning and Refrigeration Mechanic

2022 ANZSCO Code	Occupation title
342211	Electrical Linesworker / Electrical Line Mechanic
342212	Technical Cable Jointer
342411	Cabler (Data and Telecommunications)
342412	Telecommunications Cable Jointer
342413	Telecommunications Linesworker / Telecommunications Line Mechanic)
342414	Telecommunications Technician
351111	Baker
351112	Pastrycook
351211	Butcher or Smallgoods Maker
351311	Chef
351411	Cook
362411	Nurseryperson
362511	Arborist
362512	Tree Worker
362711	Landscape Gardener
391111	Hairdresser
393311	Upholsterer
394112	Cabinet Maker
394113	Furniture Maker
394211	Furniture Finisher
394213	Wood Machinist
411311	Diversional Therapist
411411	Enrolled Nurse
421111	Child Care Worker
423111	Aged or Disabled Carer
423313	Personal Care Assistant

2022 ANZSCO Code	Occupation title
721111	Agricultural and Horticultural Mobile Plant Operator
721211	Earthmoving Plant Operator (General)
721213	Bulldozer Operator
721214	Excavator Operator
721215	Grader Operator
721216	Loader Operator
721912	Linemarker
721915	Road Roller Operator

## Appendix E: Occupations in shortage in a state/territory but not in shortage nationally

Tasmania (TAS) and the Australian Capital Territory (ACT) did not engage with Jobs and Skills Australia during the development of the 2023 Skills Priority List (SPL) to the extent of the other states and territories. As a result occupation ratings for TAS and ACT generally mirror national occupation ratings except where they have fewer than 25 workers and less than 3% of the total national workers as per the ABS Census 2021. There are additional criterions that are applied when a jurisdiction does not provide sufficient feedback. Please refer to the 2023 SPL Methodology Paper for additional information.

2022 ANZSCO Code	Occupation title	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
111111	Chief Executive or Managing Director							S	
111211	Corporate General Manager							S	
121111	Aquaculture Farmer	R							
121312	Beef Cattle Farmer	S							
121313	Dairy Cattle Farmer	R		R					
121316	Horse Breeder	S							
121318	Pig Farmer	S							
121321	Poultry Farmer	S							
121322	Sheep Farmer	R							
121323	Mixed Cattle and Sheep Farmer	R							
121399	Livestock Farmers nec	R							

2022 ANZSCO Code	Occupation title	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
121511	Cotton Grower	R							
121512	Grain, Oilseed, Pulse or Pasture Grower / Field Crop Grower	R							
121513	Sugar Cane Grower	R							
121599	Broadacre Crop Growers nec			R					
121611	Flower Grower	R							
121612	Fruit Grower	S							
121613	Nut Grower	S							
121614	Production Nursery Grower	R							
121616	Vegetable Grower (Aus) / Market Gardener (NZ)	R							
121699	Horticultural Crop Growers nec	S							
121711	Broadacre Crop and Livestock Farmer	S							
121799	Mixed Production Farmers nec	S		R					
131113	Advertising Manager		S						
132111	Corporate Services Manager							S	
132211	Finance Manager							S	
132311	Human Resource Manager					S		S	

2022 ANZSCO Code	Occupation title	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
132411	Policy and Planning Manager							S	
132511	Research and Development Manager							S	
133411	Manufacturer	S		S		S			
133512	Production Manager (Manufacturing)							S	
133611	Supply and Distribution Manager							S	
134111	Child Care Centre Manager					S			
134211	Medical Administrator / Medical Superintendent	S				S		S	
134212	Nursing Clinical Director				S	S			
134213	Primary Health Organisation Manager				S	S			
134214	Welfare Centre Manager					S			
134299	Health and Welfare Services Managers nec				R	S		S	
134311	School Principal					S			
135112	ICT Project Manager							S	
135199	ICT Managers nec			S				S	
139911	Arts Administrator or Manager		S						
139912	Environmental Manager		S	S					

2022 ANZSCO Code	Occupation title	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
139913	Laboratory Manager		S						
139915	Sports Administrator		S						
139916	Quality Assurance Manager							S	
139999	Specialist Managers nec		S					S	
141111	Cafe or Restaurant Manager							S	
141211	Caravan Park and Camping Ground Manager	S							
141311	Hotel or Motel Manager					S		S	
149112	Fitness Centre Manager							S	
149211	Call or Contact Centre Manager		S						
149212	Customer Service Manager							S	
149311	Conference and Event Organiser					S		S	
149911	Boarding Kennel or Cattery Operator	S	S						
149912	Cinema or Theatre Manager		S						
149915	Equipment Hire Manager		S						
149999	Hospitality, Retail and Service Managers nec		S					S	
211499	Visual Arts and Crafts Professionals nec				S				



2022 ANZSCO Code	Occupation title	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
212112	Media Producer (excluding Video)				S				
212311	Art Director (Film, Television or Stage)				S				
212312	Director (Film, Television, Radio or Stage)				S				
212313	Director of Photography				S				
212314	Film and Video Editor				S			S	
212315	Program Director (Television or Radio)				S				
212316	Stage Manager	S							
212317	Technical Director	S			S				
212318	Video Producer				S				
221111	Accountant (General)							S	
223111	Human Resource Adviser							S	
223311	Training and Development Professional							S	
224114	Data Analyst	S			S				
224115	Data Scientist					S			
224713	Management Consultant							S	
224911	Electorate Officer		S						

2022 ANZSCO Code	Occupation title	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
224913	Migration Agent / Immigration Consultant		S						
224914	Patents Examiner		S						
224999	Information and Organisation Professionals nec		S						
225112	Market Research Analyst			R					
225115	Digital Marketing Analyst	S							
225213	ICT Sales Representative							S	
231112	Air Traffic Controller		S						
231114	Helicopter Pilot							S	
231213	Ship's Master			S				S	
231214	Ship's Officer	S							
232411	Graphic Designer							S	
234312	Environmental Consultant							S	
234314	Park Ranger							S	
234399	Environmental Scientists nec	S		S				S	
234513	Biochemist			S					
234514	Biotechnologist			S					

2022 ANZSCO Code	Occupation title	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
234517	Microbiologist				S				
234599	Life Scientists nec			S					
234611	Medical Laboratory Scientist							S	
242111	University Lecturer							S	
249111	Education Adviser		S						
249112	Education Reviewer		S						
251111	Dietitian			R				S	
251312	Occupational Health and Safety Adviser							S	
251412	Orthoptist				S	S			
251911	Health Promotion Officer							S	
252111	Chiropractor					S			
252112	Osteopath					S			
254311	Nurse Manager					S			
261111	ICT Business Analyst							S	
263212	ICT Support Engineer							S	
263311	Telecommunications Engineer	S							

2022 ANZSCO Code	Occupation title	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
263312	Telecommunications Network Engineer	S							
272112	Drug and Alcohol Counsellor				S	S		S	
272113	Family and Marriage Counsellor					S			
272199	Counsellors nec							S	
272314	Psychotherapist				S				
272412	Interpreter					S			
272413	Translator					S			
272499	Social Professionals nec							S	
272613	Welfare Worker							S	
311214	Operating Theatre Technician				S				
311299	Medical Technicians nec				S				
311311	Fisheries Officer	S							
311413	Life Science Technician	S							
312112	Building Associate							S	
312116	Surveying or Spatial Science Technician			R					
312199	Architectural, Building and Surveying Technicians nec			S					

2022 ANZSCO Code	Occupation title	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
312312	Electrical Engineering Technician		S						
312412	Electronic Engineering Technician				S	S			
312911	Maintenance Planner							S	
312914	Other Draftsperson		S						
312999	Building and Engineering Technicians nec		S	S					
313112	ICT Customer Support Officer							S	
313113	Web Administrator			S					
313199	ICT Support Technicians nec							S	
322111	Blacksmith	S							
322115	Metal Polisher	S							
323215	Textile, Clothing and Footwear Mechanic	S							
323299	Metal Fitters and Machinists nec		S						
323311	Engraver		S						
323312	Gunsmith		S						
323315	Saw Doctor		S						
323316	Watch and Clock Maker and Repairer		S						

2022 ANZSCO Code	Occupation title	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
342311	Business Machine Mechanic							S	
361111	Dog Handler or Trainer	S							
361113	Pet Groomer	S							
361115	Kennel Hand	S							
361116	Track Rider	S			S				
361199	Animal Attendants and Trainers nec	S							
362611	Gardener (General)					S		S	
363111	Aquaculture Supervisor	S							
363114	Horticultural Supervisor or Specialist	S							
363115	Senior Broadacre Crop and Livestock Farm Worker	S							
363116	Senior Broadacre Crop Farm Worker	S							
363211	Senior Beef Cattle Station Worker	S							
363212	Senior Cattle and Sheep Farm Worker	S							
363213	Senior Dairy Cattle Farm Worker	S							
363215	Senior Sheep Farm Worker	S							
363299	Senior Livestock Farm Workers nec	S							

2022 ANZSCO Code	Occupation title	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
363311	Shearer	S							
363312	Wool Classer	S							
392311	Printing Machinist					S			
399212	Gas or Petroleum Operator				S				
399611	Signwriter							S	
399913	Optical Dispenser / Dispensing Optician							S	
411412	Mothercraft Nurse				S				
411511	Aboriginal and Torres Strait Islander Health Worker				S	S		S	
411611	Massage Therapist							S	
411711	Community Worker							S	
411713	Family Support Worker			R				S	
422111	Aboriginal and Torres Strait Islander Education Worker				S				
422116	Teachers' Aide							S	
423211	Dental Assistant							S	
423411	Child or Youth Residential Care Assistant					S			
423413	Refuge Worker					S			

2022 ANZSCO Code	Occupation title	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
431111	Bar Attendant							S	
431112	Barista							S	
431411	Hotel Service Manager					S			
441211	Emergency Service Worker				R	S			
441212	Fire Fighter					S			
442111	Prison Officer							S	
451411	Gallery or Museum Guide					S			
451611	Tourist Information Officer		S						
451899	Personal Service Workers nec				S				
452111	Fitness Instructor							S	
452215	Outdoor Adventure Instructor	S							
452299	Outdoor Adventure Guides nec	S							
452311	Diving Instructor (Open Water)			R					
452318	Dog and Horse Racing Official	S							
452413	Jockey	S		S					
511112	Program or Project Administrator	S			S				



2022 ANZSCO Code	Occupation title	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
512211	Health Practice Manager				R	S			
531111	General Clerk							S	
541111	Call or Contact Centre Team Leader		S						
541211	Information Officer		S						
542111	Receptionist (General)							S	
542112	Admissions Clerk		S		S				
542113	Hotel or Motel Receptionist		S			S		S	
542114	Medical Receptionist							S	
551111	Accounts Clerk							S	
551211	Bookkeeper							S	
552311	Bookmaker		S						
552312	Insurance Consultant		S						
552313	Money Market Clerk		S						
552314	Statistical Clerk		S						
591112	Production Clerk			S					
591116	Warehouse Administrator							S	

2022 ANZSCO Code	Occupation title	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
599212	Court Bailiff or Sheriff (Aus) / Court Collections Officer (NZ)	S							
599411	Human Resource Clerk		S						
599999	Clerical and Administrative Workers nec							S	
611311	Sales Representative (Building and Plumbing Supplies)		S						
611312	Sales Representative (Business Services)		S					S	
611313	Sales Representative (Motor Vehicle Parts and Accessories)		S						
611314	Sales Representative (Personal and Household Goods)		S						
611399	Sales Representatives nec		S						
612112	Property Manager					S		S	
621311	Motor Vehicle or Caravan Salesperson		S		S				
621312	Motor Vehicle Parts Interpreter / Automotive Parts Salesperson		S		S			S	
621411	Pharmacy Sales Assistant					S			
621511	Retail Supervisor							S	
639911	Other Sales Support Worker		S						
711999	Machine Operators nec				S				
712912	Bulk Materials Handling Plant Operator				S				

2022 ANZSCO Code	Occupation title	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
712917	Railway Signal Operator			S		S			
721212	Backhoe Operator	S			S				
721311	Forklift Driver							S	
721913	Paving Plant Operator				S				
731111	Chauffeur		S						
731112	Taxi Driver		S					S	
731199	Automobile Drivers nec		S						
731212	Charter and Tour Bus Driver		S						
731213	Passenger Coach Driver		S						
733112	Aircraft Refueller		S						
733113	Furniture Removalist		S						
733114	Tanker Driver		S	S					
733115	Tow Truck Driver		S						
741111	Storeperson							S	
821411	Building Insulation Installer		S						
842214	Grain, Oilseed, Pulse and Pasture Farm Worker (Aus) / Field Farm Worker (NZ)	S							

2022 ANZSCO Code	Occupation title	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
842222	Vineyard Worker	R							
842311	Beef Cattle Farm Worker	S							
842312	Cattle and Sheep Farm Worker	S							
842313	Dairy Cattle Farm Worker	S							
842316	Poultry Farm Worker	S							
842317	Sheep Farm Worker	S							
843411	Pest Control Technician	S							
899211	Deck Hand	S		S				S	
899212	Fishing Hand	S							
899415	Tyre Fitter				S				

## Appendix F: Occupations where there is a regional shortage only at national level

2022 ANZSCO Code	Occupation title
142111	Retail Manager (General)
224912	Liaison Officer
232611	Urban and Regional Planner
234313	Environmental Research Scientist
251311	Environmental Health Officer
431511	Waiter
721111	Agricultural and Horticultural Mobile Plant Operator
721112	Logging Plant Operator