





# Labour Market Update

December 2023

## Contents<sup>1</sup>

Executive Summary	2
Labour market summary – September quarter 2023	3
The national scene	3
Groups outside the labour force – potential sources of labour supply?	6
Wages: a story of variability in growth between different indicators	7
Demand for labour	8
Ease of filling jobs nationally	9
Vacancy rates remain high	10
In focus: Views from employers	11
How are the states and territories faring?	12
State and territory labour market outcomes	12
The regions	14
Recruitment difficulty in the regions	15
In focus: Using the Regional Labour Market Indicator (RLMI) to assess a region's relative labour market strength	17
Labour market conditions across industries and occupations	21
Employment by industry	21
Recruitment difficulty among industries	23
Industries in focus	24
Skill levels	25
Occupational breakdown	26
Internet vacancy growth is subdued	28
Recruitment difficulty	29
Top 20 occupations in demand	30
Skills Priority List 2023: current state of skills shortages	31
Skills shortages remains elevated	31
New and persistent shortages in 2023	31
Ease of filling jobs – by occupation and skill level	32
Regional areas face pronounced skills shortages	34
In focus: Regional skills pressure case study, Retail Managers	35
Jobs and Skills Australia resources	37
Appendix A	38
Explainer: ABS and JSA trend series comparison	38

<sup>&</sup>lt;sup>1</sup> The data in this document largely reflect the latest September month and quarter and were current as of 31 November 2023.

## **Executive Summary**

Labour market conditions have remained tight over the September 2023 quarter, though there are signs that the resilience of the labour market seen over the past two years could be weakening.

While the unemployment rate remains low, a shift towards part-time employment growth and a reduction in hours worked could be signalling a turning point in the broader labour market. This is further backed up by signs of easing in labour demand, as seen in Jobs and Skills Australia's Internet Vacancy Index (IVI) and Recruitment Experiences and Outlook Survey (REOS), which both show that recruitment activity is tapering off.

Compositionally, employment continues to shift towards jobs that are commensurate with some level of post-secondary school qualification (Skill Level 1 to 4 jobs) and away from jobs that do not require such a qualification (Skill Level 5 jobs). Over the year to August 2023, around 88% of total employment growth was in occupations that typically require post-school qualifications, reflecting the importance of both the higher education and Vocational Education and Training (VET) systems to growing a high-skilled Australian workforce. Around 60% of total employment growth over this period was in Skill Level 2 to Skill Level 4 occupations (where VET qualifications are the primary pathway).

Further reflecting this shift to higher skilled jobs, the Professional, Scientific and Technical Services industry has recorded 14 consecutive quarters of employment growth, reaching a record high of 1,301,300 people employed in August 2023. Over the year, employment in this industry increased by 42,000 workers (or 3.3%).

While levels of recruitment difficulty experienced by employers has continued to moderate, employers are generally still experiencing challenges finding suitably skilled workers to fill vacant positions. This is evidenced by a lack of improvement in the likelihood of filling an advertised role, and a fall in the average number of applicants and suitable applicants — key elements of Jobs and Skills Australia's assessment of skills shortages.

These issues are more pronounced for employers in regional and remote areas, who historically face greater difficulties in recruitment and more acute skills pressures for critical roles, particularly for higher skilled roles. Importantly, new work undertaken by Jobs and Skills Australia has sought to provide a simple yet statistically robust assessment of a region's current labour market strength at the Statistical Area 4 level. The new 'Regional Labour Market Indicator (RLMI)' brings together a range of indicators to provide useful information and context on labour market conditions in regional and remote areas, as well as for capital cities. The RLMI highlights that many regional and remote areas not only exhibit greater levels of recruitment difficulty for employers, but they also have below average or poor labour market outcomes from the jobseeker's perspective. These findings illustrate the additional challenges faced in many regional areas by both employers and jobseekers.

The release of the 2023 Skills Priority List by Jobs and Skills Australia demonstrates the persistence of skills shortages in recent years. In 2023, 36% of assessed occupations were in shortage (up from 31% in 2022), with the increase largely stemming from challenges recruiting in a tight labour market. Aged or Disabled Carers, Electricians (General), Child Care Workers and Carpenters are the largest occupations to have persistently been in shortage since 2021.

## Labour market summary – September quarter 2023

Labour market conditions eased slightly over the September quarter 2023, with a shift away from full-time employment towards part-time jobs growth that became more evident over the period. Against the softer backdrop, aggregate hours worked declined gradually, while the unemployment rate ticked up, albeit modestly. While a turning point in the labour market appears to have been reached, underlying conditions remain reasonably tight.

Employment	Full-time employment	Part-time employment	Hours worked	Underemployment rate	Unemployment rate	Participation rate
14,111,200	9,806,400	4,304,800	1,929.7 million hours	6.4%	3.6%	66.7%
<b>个</b> 0.5%	↓ 0.5%	↑ 2.9%	<b>↓</b> 0.8%	↓ 0.1% pts	↑ 0.1% pts	↓ 0.1% pts

Table 1: Key labour market indicators, September 2023 and change since June 2023

Source: Australian Bureau of Statistics (ABS), Labour Force, Australia, September 2023, seasonally adjusted data.

## The national scene

ABS Labour Force Survey data show that seasonally adjusted **employment** increased by 69,200 (or 0.5%) over the September quarter 2023, marginally down from the growth of 0.6% recorded in the previous quarter.

• The majority of the rise in employment over the quarter was due to an increase in female employment (up by 46,000 or 0.7%), while male employment rose more modestly (up by 23,200 or 0.3%) over the period.

The recent easing in the pace of employment growth has occurred in conjunction with a shift away from full-time jobs growth, towards part-time employment. To illustrate, **full-time employment** decreased by 53,200 (or 0.5%) in the September quarter 2023, compared with a rise of 0.5% recorded in the June quarter 2023.

• The contraction in full-time jobs growth has been more pronounced for women over the September quarter, down by 0.6%, compared with strong growth of 1.1% recorded in the previous quarter. Male full-time employment also declined over the period (by 0.5%), compared with growth of 0.2% in the previous quarter.

By contrast, **part-time employment** increased strongly, by 122,400 (or 2.9%) over the September quarter, compared with a more modest rise of 0.9% recorded over the previous quarter. It is also worth noting that this is the first time that annual growth in part-time employment (3.7%) has outpaced full-time employment growth (2.5%) since July 2021.

Against the softer backdrop, **aggregate hours** worked decreased by 15.8 million hours (or 0.8%) over the quarter, essentially reversing the increase of 15.1 million hours (or 0.8%) recorded in the previous quarter (Figure 1). While the aggregate hours worked series can be volatile, the annual rate of growth in the series has eased considerably, from its recent peak of 10.3% in January 2023 (significantly higher than the 3.6% increase in employment at that time), to its current rate of 2.9% (equivalent to the pace of annual employment growth).



Figure 1: Annual change in employment and aggregate hours worked (%), September 2018 to September 2023

Source: ABS, Labour Force, Australia, September 2023, seasonally adjusted data.

As an initial response to a labour market downturn, businesses often reduce staff hours rather than laying off workers. Employers are also more likely to hoard labour when labour market conditions are still relatively tight and when considerable uncertainty is apparent around the extent and duration of any decline in activity. Figure 2, below, illustrates the recent rise in the part-time share of employment, from 29.8% in June 2023, to 30.5% in September 2023, as well as the decline in aggregate hours worked (although hours worked remain 14.7% above the recent trough recorded in January 2022).

Figure 2: Part-time employment share (%) and aggregate hours worked, September 2003 to September 2023



Source: ABS, Labour Force, Australia, September 2023, seasonally adjusted data.

The **underemployment rate** also decreased over the quarter, by 0.1 percentage points, to 6.4% in September 2023. That said, it has risen by 0.5 percentage points since its recent trough of 5.8% recorded in February 2023, equating to an additional 90,300 people joining the underemployment pool.

Significantly, the underemployment rate has been consistently above the unemployment rate for the past two decades. As illustrated in Figure 3, the underemployment rate and unemployment rate tend to diverge during labour market downturns.





Source: ABS, Labour Force, Australia, September 2023, seasonally adjusted data.

It is also worth noting that there has been an increase in the number of additional hours preferred (or not worked) by underemployed workers over the quarter, of 0.8 million (or 7.0%), to 11.9 million hours in August 2023 (latest available data), which is likely to indicate a recent rise in spare capacity in the labour market.

The **unemployment rate** also increased slightly, from 3.5% in June 2023, to 3.6% in September 2023, although it remains close to 50-year lows. Over the same period, the participation rate decreased marginally, by 0.1 percentage points, to 66.7% in September, below the record high of 67.0% recorded in August 2023.

- The male unemployment rate decreased by 0.1 percentage points over the quarter, to 3.4% in September 2023, although this occurred in conjunction with a 0.4 percentage point decline in the participation rate for men, to 71.0% in September 2023.
- The female unemployment rate increased by 0.3 percentage points over the period, to 3.7% in September 2023, although this was associated with a 0.2 percentage point rise in the participation rate for women, to an equal record high of 62.7% in September 2023.

Labour market conditions for **youth** (persons aged 15 to 24 years) were also reasonably subdued over the quarter, with the level of youth employment increasing by a modest 1,300 (or 0.1%) over the period (below the more robust growth of 13,700 or 0.6% in the previous quarter).

• Importantly, full-time employment for the cohort decreased significantly (by 27,600 or 2.7%) over the September quarter.

The youth unemployment rate increased by 0.2 percentage points over the quarter, to 8.0% in September 2023, while the youth participation rate decreased by 1.3 percentage points, to 69.8%.

Against the backdrop of a softening in the pace of employment growth, **long-term unemployment (LTU)** increased over the three months to September 2023, by 7,300 (or 7.2%), to stand at 108,000 (Figure 4).

- Female LTU increased by 6,000 (or 14.8%) over the three months to September 2023, to stand at 47,000.
- Male LTU also rose over the period, by 1,300 (or 2.1%), to 61,100 in September 2023.

Figure 4: Long-term unemployment and annual employment growth, September 2003 to September 2023



Source: ABS, Labour Force, Australia, Detailed, September 2023 for long-term unemployment; ABS, Labour Force, Australia, September 2023 for annual employment growth. All data are seasonally adjusted.

### Groups outside the labour force – potential sources of labour supply?

The ABS produces a suite of measures to help assess progress towards more inclusive full employment and provide a sense of excess capacity, as well as other potential sources of labour supply. The latter captures employment outcomes for groups more likely to face barriers to work that contribute to structural underutilisation.

In addition to the underemployed and unemployed measures, the ABS produces data for those are not in the labour force who state they want to work but face barriers that preclude them from participating in the labour market. For instance, the latest ABS Barriers and Incentives to Labour Force Participation Survey showed that, in the June quarter 2023, there were 806,100 people aged 18 to 75 years who did not have a job and wanted to work who were not in the labour force (around 60% of whom were women).

While this cohort stated a preference to work more hours, 30.9% (or 249,100) cited 'illness, injury or disability affected participation' as a barrier to joining the labour force in the June quarter 2023.

• Of these, the majority (60.0% or 149,300) cited a 'long-term health condition or disability affected participation'.

A further 16.8% (or 135,400) cited 'studying or training affected participation' as a barrier to entering the labour force, while 15.4% (or 124,100) cited 'caring for children affected participation' and 9.3% (or 74,800) cited 'no jobs in locality, line of work, or problems with access to transport'.

With respect to barriers to participation for women,

- 31.4% (or 151,000) cited 'illness, injury or disability'
- 20.4% (or 98,300) cited 'caring for children, and
- 15.6% (or 75,200) cited 'studying or training'.

Clearly, while these groups state a preference to work, many would require a significant change in their personal circumstances or policy/program intervention, before they may be able to enter the labour force and secure employment.

### Wages: a story of variability in growth between different indicators

The most recent Wage Price Index for the September 2023 quarter showed wages growth of 1.3% for the quarter, and 4.0% through the year. This was the highest quarterly rise recorded in the 26-year history of the series, and the highest rate of annual growth since March 2009 — affected in part by the Fair Work Commission's annual wage review decision which took effect from 1 July 2023. The 2023-24 Federal Budget showed Treasury's forecast for nominal growth in the Wage Price Index is 4% through the year to June 2024.

It is important to note that the Wage Price Index does not reflect the impact on overall wages of job mobility, such as movements towards more highly-skilled jobs, or movement of workers from lower-productivity firms to higher-productivity firms. Alternative measures of wage growth seek to reflect job mobility in different ways, leading to different measures of wages growth.

For example, ABS National Accounts data can be used to calculate Average Earnings on National Accounts (AENA). AENA is designed to measure the average level of labour cost per employee and is measured as total compensation of employees divided by the total number of employees — irrespective of whether employees have changed jobs or stayed in the same job. The most recent National Accounts data showed annual growth in AENA of 5.9% for the year to June 2023.

Over the year to May 2023 (latest data available), an increase in Average Weekly Ordinary Time Earnings (AWOTE) of 3.9% was recorded. The increase in AWOTE over the year to May 2023 was the second largest increase since the 5.3% recorded over the year to May 2013 (only behind the 4.8% recorded over the year to May 2020, when low paid jobs were particularly impacted during the lockdowns early in the COVID-19 pandemic). The strength of this increase was reflected across a variety of cohorts and sectors, such as gender, public and private sector, industry and states and territories.

A recent addition to published data sources with respect to measures of wages growth is the SEEK Advertised Salary Index (ASI). This measures the growth in advertised salaries for jobs posted on SEEK, an online jobs board in Australia (adjusted to remove the effects of compositional changes in jobs being advertised). As this data measures growth in advertised salaries for advertised jobs, it does not reflect wages growth for workers who remain in their existing job and may not reflect the actual wage paid. Nonetheless, it offers additional insight into the wages that employers are offering when trying to attract new workers. The SEEK ASI for September 2023 showed annual growth in advertised salaries of 4.8% for the year, with quarterly growth of 1.5% for June 2023 to September 2023.

## **Demand for labour**

Results from Jobs and Skills Australia's September 2023 Recruitment Experience and Outlook Survey (REOS) confirm a labour market softening, with the proportion of employers recruiting falling by 2 percentage points over the quarter. The recruitment rate is now 10 percentage points lower than the peak of 58% recorded in the June quarter of 2022.





Source: Jobs and Skills Australia, Recruitment Experiences and Outlook Survey, September 2023.

Additionally, monthly job advertisements have been gradually declining and are below their mid-2022 peak. Jobs and Skills Australia's Internet Vacancy Index (IVI) shows that there has been an overall decrease in recruitment activity over the quarter to September 2023, with job advertisements 1.1% (or 3,000 job advertisements) lower than in June 2023 (Figure 6). Over the year to September 2023, internet job advertisements decreased by 11,800 (or 4.1%). That said, the level of job advertisements nationally remains significantly elevated compared to pre-COVID-19 levels.



Figure 6: Internet Vacancy Index job advertisements and unemployment rate, January 2006 to September 2023

Source: ABS, Labour Force Australia, September 2023, seasonally adjusted data; Jobs and Skills Australia, Internet Vacancy Index, September 2023, seasonally adjusted data.

<sup>2</sup>00<sub>6</sub><sup>2</sup>00<sub>7</sub><sup>2</sup>00<sub>9</sub><sup>2</sup>0<sub>10</sub><sup>2</sup>0<sub>11</sub><sup>2</sup>0<sub>12</sub><sup>2</sup>0<sub>13</sub><sup>2</sup>0<sub>15</sub><sup>2</sup>0<sub>15</sub><sup>2</sup>0<sub>16</sub><sup>2</sup>0<sub>17</sub><sup>2</sup>0<sub>18</sub><sup>2</sup>0<sub>19</sub><sup>2</sup>0<sub>20</sub><sup>2</sup>0<sub>21</sub><sup>2</sup>0<sub>22</sub><sup>2</sup>0<sub>23</sub>

Seasonally adjusted unemployment rate (%)

Seasonally adjusted job advertisements

50,000

0

2%

1%

Recent trends in ABS Job Vacancies Survey data reflect a stronger decline in recruitment activity. The most recent ABS data estimated 390,400 job vacancies in the August 2023 quarter, representing a decrease of 37,900 job vacancies (or 8.9%) over the quarter, following a decline of 70,000 (or 15.2%) over the year. Vacancy numbers, though, are at high levels historically with this decline coming from a near series peak recorded in mid-2022.

## Ease of filling jobs nationally

While recruitment and demand moderates, filling advertised roles continues to pose a challenge for businesses. According to the September 2023 quarter data from Jobs and Skills Australia's Survey of Employers who have Recently Advertised (SERA), the percentage of advertised occupation vacancies filled (the "fill rate") increased by 1 percentage point to 63% compared to the previous quarter. However, the fill rate has remained low, hovering around 63% for the past six months (Figure 7).

Other data indicate a slight improvement in the recruitment challenge, with the recruitment difficulty rate dropping from 63% in June 2023 to 59% in September 2023. This positive sign has coincided with a fall in the number of internet vacancies.

The above suggests that despite some softening in labour market conditions, and while there are some positive signs, employers are still experiencing challenges finding suitably skilled workers to fill vacant positions.





Source: Jobs and Skills Australia, Survey of Employers who have Recently Advertised, September quarter 2023; Jobs and Skills Australia, Recruitment Experiences and Outlook Survey, September 2023; Jobs and Skills Australia, Internet Vacancy Index, September 2023.

Another indicator that highlights that skill shortage pressures persist relate to the number of job applicants, and number of suitable applicants, per vacancy. While the average number of applicants per vacancy has generally been increasing over the year, the average number of suitable applicants per vacancy has dropped to 2.4 in the quarter (Figure 8).





### Vacancy rates remain high

Australia's labour market has maintained high levels of job advertisements across the states and territories, as well as low rates of unemployment and near-record high rates of labour force participation.

The vacancy rate (job vacancies as a share of employment) can be a useful indicator of underlying labour market dynamism. As illustrated in Figure 9, the IVI vacancy rate can be a sensitive leading indicator of changing conditions, with declines associated with the Global Financial Crisis, the end of the mining boom and the first COVID-19 shock evident (including the later Delta-wave) and preceding changes in the unemployment rate. Noting that the two series have converged and are tracking closely, it remains to be seen if the current slight downward direction in the IVI vacancy rate will manifest in higher unemployment rates. Nevertheless, the IVI vacancy rate remains high, at around 1.9% in September 2023, well above the low of 0.5% recorded in April 2020.





Source: ABS, Labour Force Australia, September 2023, seasonally adjusted data; Jobs and Skills Australia, Internet Vacancy Index, September 2023, seasonally adjusted data.

Source: Jobs and Skills Australia, Survey of Employers who have Recently Advertised, 2022 - 2023.

### In focus: Views from employers

While most of the information collected through Jobs and Skills Australia's *Recruitment Experiences and Outlook Survey* is quantitative in nature, useful qualitative information is obtained from employers about their recruitment experiences that goes unseen. A selection of employer quotes from various industries recruiting for a variety of occupations are presented below. While these are not representative of every industry or region and relate to different time periods, they do provide some insight into recent recruitment experiences and sentiment. Going forward, Jobs and Skills Australia will be expanding its research to gain employee and job seeker perspectives on the labour market.

#### Retail Trade employer, May 2023, Perth

*"I would like another 5 people if I could get them but it's unlikely, therefore, I've stopped looking."* 

#### Accommodation and Food Services employer September 2023, Regional QLD

"Most of our hospitality jobs are filled with backpackers as there are no other applicants, so we are continuously recruiting."

#### Construction employer, March 2023, Regional NSW

"All our recruitment is done via word of mouth."

#### Manufacturing employer, September 2023, Sydney

*"When looking for the Graphic Designer, we didn't advertise, we knew the person and approached them directly."* 

Source: Jobs and Skills Australia, Recruitment Experiences and Outlook Survey, 2023.

# How are the states and territories faring?

## State and territory labour market outcomes

Employment rose in 5 out of 8 jurisdictions over the September quarter 2023, with the largest increase recorded in Western Australia (up by 30,400 or 2.0%), followed by Victoria (up by 15,000 or 0.4%) — see Table 2.

• Notably, however, *full-time employment decreased* in 6 jurisdictions over the period, with the largest decline recorded in Queensland (down by 33,200 or 1.6%), followed by Victoria (down by 29,000 or 1.1%).

All jurisdictions, except Tasmania (4.2%) and the Northern Territory (4.1%), recorded an unemployment rate below 4.0% in September 2023. New South Wales and Western Australia both recorded the lowest unemployment rate, of 3.3%, in September 2023.

The Australian Capital Territory recorded the highest participation rate, of 73.2% in September 2023, while Tasmania recorded the lowest participation rate, of 63.0%.

	Employn	nent ('000)		Unemple rate		Participation rate (%)		
	September 2023	Quart chan ('000)	-	September 2023	Quarterly change (% pts)	September 2023	Quarterly change (% pts)	
New South Wales	4,366.4	-2.6	-0.1	3.3	0.4	65.9	-0.2	
Victoria	3,652.6	15.0	0.4	3.5	-0.2	67.2	-0.4	
Queensland	2,853.0	-0.5	0.0	3.9	0.3	66.2	-0.4	
South Australia	956.7	9.2	1.0	3.7	-0.4	64.3	0.0	
Western Australia	1,564.0	30.4	2.0	3.3	-0.3	68.7	0.5	
Tasmania	291.2	1.7	0.6	4.2	0.6	63.0	0.6	
Northern Territory	138.0	0.0	0.0	4.1	0.7	73.1	0.3	
Australian Capital Territory	266.3	2.2	0.8	3.9	0.0	73.2	0.0	
Australia	14,111.2	69.2	0.5	3.6	0.1	66.7	-0.1	

Table 2: Key labour market indicators by state and territory, September 2023

Source: ABS, Labour Force, Australia, September 2023, seasonally adjusted data.

That said, there is some variation in recruitment activity across the states. Results from the REOS show that quarterly **recruitment activity** has decreased across all states between the September quarter 2022 and the September quarter 2023 apart from Western Australia (Figure 10), albeit different levels of activity continue to be observed across the jurisdictions.

In the September quarter 2023, Western Australia (55%) had the highest quarterly recruitment rate, while Victoria (43%) had the lowest rate and the largest decline (17 percentage points) relative to a year ago (September quarter 2022).



Figure 10: Recruitment rate by state, (proportion of employers currently recruiting or who recruited in the past month), September quarter 2022 to September quarter 2023

Source: Jobs and Skills Australia, Recruitment Experiences and Outlook Survey, September 2023. Note: Data for Australian Capital Territory and Northern Territory are unavailable due to small sample sizes.

Additionally, quarterly **recruitment difficulty** has reduced across all states with the largest fall occurring in Western Australia — falling by 24 percentage points since the September quarter 2022 — to 51% in the September quarter 2023, also the lowest rate of recruitment difficulty of all the states (Figure 11).

The highest level of recruitment difficulty in the September quarter 2023 was observed in Victoria and Queensland (both 62%).



Figure 11: Recruitment difficulty rate by state, September quarter 2022 to September quarter 2023

Source: Jobs and Skills Australia, Recruitment Experiences and Outlook Survey, September 2023. Note: Data for Tasmania, Australian Capital Territory and Northern Territory are unavailable due to small sample sizes.

## The regions

In line with the easing in labour market conditions at the national level, the pace of employment growth in the capital cities and rest of state areas has softened in recent months, increasing by 60,900 (or 0.6%) and 36,500 (or 0.8%), respectively, over the September quarter 2023.

The unemployment rate in the capital cities fell by 0.2 percentage points over the quarter, to 3.7% in September 2023, while it also declined in the rest of state areas, by 0.1 percentage points, to 3.3%. That said, the participation rate in the capital cities and rest of state areas also decreased over the same period (both down by 0.1 percentage points), to 68.6% and 63.6%, respectively (Table 3).

	Ca	pital cities	i -	Rest of states			
	September	September 2023Quarterly change (*000)		September	Quarterly change		
	2023			2023	('000)	(%)	
Employment ('000)	9,581.5	60.9	0.6	4,463.5	36.5	0.8	
Unemployment rate (%)	3.7	-	-0.2 pts	3.3	-	-0.1 pts	
Participation rate (%)	68.6	-	-0.1 pts	63.3	-	-0.1 pts	

Table 3: Key labour market indicators by capital cities and rest of state areas, September 2023

Source: ABS, Labour Force, Australia, Detailed, September 2023, 6-month averages of original estimates.

Once again, there has been some variation in monthly recruitment activity between capital cities and rest of state areas. Figure 12 shows that the monthly recruitment rate for rest of state areas peaked at 62% in July 2022. For capital cities the most recent high occurred some months later, reaching 58% in October 2022. The September 2023 recruitment rate for both capital cities and rest of state areas has eased and now sits below the 2022 rates. The recruitment rate of 49% for capital cities is 9 percentage points lower than September 2023. The September 2023 recruitment rate for rest of state areas (also 49%) has fallen to below most levels experienced since September 2020 and is 8 percentage points lower than September 2022.





Source: Jobs and Skills Australia, Recruitment Experiences and Outlook Survey, September 2023. Note: Disaggregated data is not publishable for January of each year; hence relevant data points have been joined by a dotted line. From June 2020 to October 2022, there was significant growth in internet vacancies in both capital cities and across rest of state areas. Vacancies, though, have declined from this series high over the past year, but advertisements in rest of state areas have remained more buoyant than their capital city counterparts.

Recent Jobs and Skills Australia analysis has highlighted a contraction in recruitment activity in capital cities compared to twelve months ago. This has been paralleled by far smaller declines outside capital cities. Figure 13 shows that from the low observed in June 2020, recruitment activity in capital cities increased by 248.2% (or 158,500 job advertisements) and 215.5% (or 55,400) in rest of state areas, to peak in October 2022. Since then, recruitment activity in capital cities has decreased by 10.5% (or 23,300) and 3.2% (or 2,600) in rest of state areas by September 2023.





Source: Jobs and Skills Australia, Internet Vacancy Index, September 2023, 3-month average data.

## **Recruitment difficulty in the regions**

Record high levels of recruitment difficulty occurred in both capital cities and rest of state areas during mid-2022 (Figure 14). Recruitment difficulty peaked in rest of state areas at 77% in July 2022, while in capital cities, the monthly recruitment difficulty rate peaked at 75% of recruiting employers in August 2022.

In September 2023 the recruitment difficulty rate for employers in rest of state areas was 2 percentage points lower over the year to stand at 66%. The fall in difficulty in capital cities has been more pronounced, decreasing by 10 percentage points over the year to 56% in September 2023.





Source: Jobs and Skills Australia, Recruitment Experiences and Outlook Survey, September 2023. Note: The recruitment difficulty rate is the proportion of recruiting employers who report having difficulty filling advertised roles. Disaggregated data is not publishable in January of each year; hence relevant data points have been joined by a dotted line.

At a more detailed level, the recruitment difficulty rate varies by capital cities and rest of state areas. For each region, Figure 15 shows the regional variation observed over the past 12 months. In general, at similar rates of recruitment, rest of state areas experience higher levels of difficulty. For example, Rest of Victoria is a relatively low recruiter (53%) and has high recruitment difficulty (74%) while Greater Melbourne has a lower difficulty rate (68%) at a similar rate of recruitment.

Figure 15: Rates of recruitment and recruitment difficulty by region (12 months to September 2023)



Source: Jobs and Skills Australia, Recruitment Experiences and Outlook Survey, September 2023.

Perhaps unsurprisingly, recruitment difficulty rates generally tend to increase the further they are away from population hubs. Figure 16 shows recruitment difficulty as recorded in the 12 months to September 2023, for each Statistical Area Level 4 region and Greater Capital City area. The higher recruitment difficulty rates in more remote areas are explained by tighter labour market conditions, with increased challenges finding qualified staff. This is likely further exacerbated in some areas due to their industry composition, with a focus on mining or agriculture, and the consequent need for specialised skills.



Figure 16: Recruitment difficulty rates, 12 months to September 2023 – heatmap of SA4 regions, and Greater Capital City areas

Source: Jobs and Skills Australia, Recruitment Experiences and Outlook Survey, September 2023. Results for rest of state SA4's are indicative only due to small sample sizes for some regions.

## In focus: Using the Regional Labour Market Indicator (RLMI) to assess a region's relative labour market strength<sup>2</sup>

#### Background

Jobs and Skills Australia has been developing a new indicator to assess and compare the relative labour market strength of regions at the Statistical Area Level 4 (SA4) level. A composite indicator, the RLMI, brings together several partial indicators of spare labour market capacity to provide a simple yet statistically robust assessment of a region's current labour market strength, relative to the national average. A strong labour market is characterised by a high rate of employment, where employment opportunities are available to all who want to work.

<sup>&</sup>lt;sup>2</sup> Jobs and Skills Australia acknowledges the contributions of Jeff Borland, Matt Nolan (e61), the Reserve Bank of Australia and Treasury, for their useful advice and direction on this project.

Importantly, the RLMI's purpose aligns with the Australian Government's approach to consider a broader range of labour market indicators, including of labour market utilisation, to measure progress towards sustained and inclusive full employment, as outlined in *Working Future: The Australian Government's White paper on Jobs and Opportunities.*<sup>3</sup>

#### Factors used to assess labour market performance

The RLMI standardises (using a z-score) 5 factors, that can be grouped into broader measures of labour supply, demand and utilisation, and combines them into a single index score.<sup>4</sup> The factors included in the RLMI are:

- The **working age employment rate** one of the most commonly used indicators for understanding conditions in the labour market and is a key measure of strength. It provides an insight into the extent to which available labour (some individual's personal circumstances may prevent them from participating in the labour market) is being used and is unaffected by voluntary changes in labour force participation.
- The **unemployment rate**, along with the employment rate, is one of the most commonly used indicators for understanding conditions in the labour market and is a key measure of spare capacity. It provides insights into the availability of unused labour that is willing and available for work.
- The **JobSeeker income support rate** is a reliable measure of spare capacity in the labour market and is an important complement to other measures of spare capacity. It is a combination of the JobSeeker payment and Youth Allowance (other) payment (as a proportion of the working age population). These payments are designed to provide financial assistance to support those looking for working, including those who may be working part-time.
- The **underemployment rate**<sup>5</sup> takes a broad view of underutilisation by measuring the share of the labour force that is employed, but not fully utilised in terms of the amount of work people would like. It is an important complement to the unemployment rate in assessing how much spare capacity could be called upon in adapting to labour market strength and weakness.
- The vacancy fill rate<sup>5</sup> is a key measure of unmet demand for labour. A low fill rate indicates that the demand for labour is not matched by the supply of labour from workers. This may be due to a lack of suitable applicants or high search costs that reduce labour market matching efficiency. Poorer-performing regions experience more difficulty filling vacant positions, despite having a higher availability of unused labour willing and available to work.

It is important to note that each factor's influence in assessing a region's current labour market strength reflects a combination of considerations including its uniqueness and data quality. Also, the RLMI does not seek to indicate how well a region's potential skills and capabilities are being utilised, nor its labour market resilience or adaptability. A different purpose would lead to different choices of key indicators.

<sup>&</sup>lt;sup>3</sup> <u>Working Future: The Australian Government's White Paper on Jobs and Opportunities</u> was released on 25 September 2023.

<sup>&</sup>lt;sup>4</sup> Broadly speaking, regions with a low overall combined index score have relatively stronger current labour market conditions than regions with a high overall combined index score.

<sup>&</sup>lt;sup>5</sup> Despite the factor's relevance to labour market performance, it has a low overall influence in assessing a region's current labour market strength as it is only measured at the Greater Capital City Statistical Area level (given data quality issues with this factor when disaggregated at the SA4 level).

## Conditions vary between regions despite the current strength of the national labour market

Using the RLMI, regions are grouped into 5 categories of relative labour market strength:

- 'strong'
- 'above average'
- 'average'
- 'below average' and
- 'poor'.

In November 2023, around 45% of regions (or 39 SA4's out of 87) were rated either 'strong' or 'above average' (Figure 17). By comparison, around 20% of regions (or 16 SA4's) were rated 'poor'.

Stronger-performing regions tend to have larger populations that are concentrated in major cities. Indeed, almost half the working age population (48%) reside in the 39 SA4's rated either 'strong' or above average', 31 of which are located in major cities. By contrast, only 11% of the working age population reside in the 16 SA4's rated 'poor', with almost half of these located in outer-regional or remote areas.

#### Figure 17: RLMI ratings of labour market strength, November 2023



#### **Regions in focus**

To cite an example of how a poorly performing region is rated, the SA4 of Wide Bay (in Queensland) has a low working age employment rate, a high unemployment rate and a high proportion of the working age population in receipt of JobSeeker income support. This combined with a low vacancy fill rate and high underemployment rate contributed to a combined index score of 7.7 for the region which resulted in a 'poor' rating (Table 4).

By contrast, the high working age employment rate, low unemployment rate and low proportion of the working age population on JobSeeker income support in the SA4 of Sydney – Northern Beaches gave the region a combined index score of -6.2 which resulted in a 'strong' rating for the region.

	Combined index score*	Working age employment rate (%)	Unemployment rate (%)	JobSeeker income support rate (%)	Vacancy fill rate (%)	Underemployment rate (%)
		Reg	ions rated 'strong	•		
Sydney - Northern Beaches (NSW)	-6.2	84.0	1.7	1.4	58.6	5.7
Melbourne - Outer East (Vic.)	-4.5	82.6	2.3	2.9	58.5	6.1
Moreton Bay - South (Qld.)	-2.9	81.1	3.8	3.5	68.0	6.5
'strong' average		81.6	2.8	2.4	60.2	5.9
		Re	gions rated 'poor'			
Adelaide - North (SA)	3.2	73.5	4.4	7.4	67.1	7.7
Wide Bay (Qld.)	7.7	67.8	6.3	8.9	58.6	6.9
Northern Territory - Outback (NT)	12.5	70.4	4.4	22.6	48.4	3.8
'poor' average		70.5	4.6	9.1	57.3	6.4

## Table 4: A snapshot of some strong and poorly rated regions and the factors that contribute to the ratings, November 2023

Source(s): ABS, Labour Force, Australia, Detailed, September 2023, 6-month averages of original estimates. Services Australia Administrative Data, March 2023. ABS, Labour Force, Australia, Detailed, September 2023, monthly original data. Jobs and Skills Australia, Survey of Employers who have Recently Advertised (SERA), September 2023 and ABS, Labour Force, Australia, DataLab, August 2023, 6-month averages of original estimates.

\*Broadly speaking, regions with a low overall combined index score have relatively stronger current labour market conditions than regions with a high overall combined index score.

# Labour market conditions across industries and occupations

The industry and occupation employment data in the below analysis are sourced from ABS, Labour Force, Australia, Detailed, August 2023 and trended by Jobs and Skills Australia. The skill level data have also been trended by Jobs and Skills Australia, while total employment data have been trended by the ABS. The Jobs and Skills Australia trend is designed to extract longer term cycles and trends within a series. This means that Jobs and Skills Australia's series will be significantly less susceptible to noise compared to the ABS series but will have a greater tendency to miss shorter term trends and movements.<sup>6</sup>

## **Employment by industry**

Employment increased in 14 industries and declined in five over the year to August 2023. Health Care and Social Assistance; Construction; and Manufacturing made the largest contributions to employment growth over the year. The largest falls in employment over the year were recorded in Agriculture, Forestry and Fishing; Other Services; and Administrative and Support Services.





Source: ABS, Labour Force, Australia, Detailed, August 2023, data trended by Jobs and Skills Australia.

<sup>&</sup>lt;sup>6</sup> See <u>Appendix A</u> for more detailed information on the differences between the ABS and Jobs and Skills Australia trend approach.

#### Table 5: Employment by industry ('000)<sup>7</sup>

Industry	Empl	oyed	Annual to Aug		Five-year change to Aug 2023	
maustry	Aug 2023 ('000)	Aug 2022 ('000)	('000)	(%)	('000)	(%)
Agriculture, Forestry and Fishing	303.8	312.8	-9.1	-2.9	-27.0	-8.2
Mining	301.1	288.3	12.8	4.4	64.7	27.4
Manufacturing	917.8	869.4	48.4	5.6	-6.0	-0.7
Electricity, Gas, Water and Waste Services	165.1	160.9	4.1	2.6	16.8	11.3
Construction	1,332.6	1,251.9	80.7	6.4	153.7	13.0
Wholesale Trade	377.7	371.2	6.6	1.8	1.0	0.3
Retail Trade	1,359.7	1,325.2	34.5	2.6	82.1	6.4
Accommodation and Food Services	934.9	924.1	10.8	1.2	43.4	4.9
Transport, Postal and Warehousing	726.9	698.3	28.6	4.1	80.4	12.4
Information Media and Telecommunications	185.7	189.3	-3.5	-1.9	-21.3	-10.3
Financial and Insurance Services	544.2	544.8	-0.7	-0.1	104.1	23.6
Rental, Hiring and Real Estate Services	222.9	222.2	0.7	0.3	9.8	4.6
Professional, Scientific and Technical Services	1,301.3	1,259.2	42.0	3.3	238.5	22.4
Administrative and Support Services	419.0	422.9	-3.8	-0.9	-3.9	-0.9
Public Administration and Safety	926.8	888.6	38.2	4.3	123.5	15.4
Education and Training	1,158.1	1,138.8	19.3	1.7	131.8	12.8
Health Care and Social Assistance	2,156.5	2,049.5	107.1	5.2	481.2	28.7
Arts and Recreation Services	248.3	241.0	7.3	3.0	8.2	3.4
Other Services	527.1	535.4	-8.2	-1.5	30.7	6.2
TOTAL EMPLOYMENT	14,123.3	13,705.3	418.0	3.1	1,512.9	12.0

Source: ABS, Labour Force, Australia, Detailed, August 2023, data trended by Jobs and Skills Australia and the ABS.

- Reflecting continued economic growth and a tight labour market, employment in Australia reached a record high in the August 2023 quarter<sup>8</sup>, and employment in 11 of the 19 broad industry groups reached record highs over the same period:
  - Health Care and Social Assistance (2,156,500, up by 107,100 or 5.2% over the year)
  - Construction (1,332,600, up by 80,700 or 6.4% over the year)
  - Professional, Scientific and Technical Services (1,301,300, up by 42,000 or 3.3% over the year)
  - Public Administration and Safety (926,800, up by 38,200 or 4.3% over the year)

<sup>&</sup>lt;sup>7</sup> Industry data are trended by Jobs and Skills Australia. Total employment data are trended by the ABS. Jobs and Skills Australia and ABS trending methodologies differ, and industry data do not sum to total employment figures. See <u>Appendix A</u> for more details.

<sup>&</sup>lt;sup>8</sup> Jobs and Skills Australia trended quarterly industry employment data is available for the August 1986 quarter onwards.

- Retail Trade (1,359,700, up by 34,500 or 2.6% over the year)
- Transport, Postal and Warehousing (726,900, up by 28,600 or 4.1% over the year)
- Education and Training (1,158,100, up by 19,300 or 1.7% over the year)
- Mining (301,100, up by 12,800 or 4.4% over the year)
- Arts and Recreation Services (248,300, up by 7,300 or 3.0% over the year)
- Electricity, Gas, Water and Waste Services (165,100, up by 4,100 or 2.6% over the year)
- Rental, Hiring and Real Estate Services (222,900, up by 700 or 0.3% over the year).

### **Recruitment difficulty among industries**

The selected industries in Figure 19 show that recruitment difficulty fell for all major industry Divisions over the year to September quarter 2023. Employers in the Accommodation and Food Services industry had experienced the greatest easing in recruitment difficulty pressures, having fallen by 29 percentage points since September quarter 2022 and now has the smallest proportion of employers experiencing recruitment difficulty (40%).

The one industry to not follow the downward trend in recruitment difficulty was Health Care and Social Assistance, which experienced no change over the year. In the September quarter 2023, it also had the largest proportion of employers experiencing recruitment difficulty (71%). Manufacturing also continues to have a high proportion of employers experiencing recruitment difficulty and was 69% in the September quarter. That said, this is 10 percentage points lower than September quarter 2022.



## Figure 19: Quarterly recruitment difficulty rate by industry, (proportion of recruiting employers), September quarter 2022 to September quarter 2023

Source: Jobs and Skills Australia, Recruitment Experiences and Outlook Survey, September 2023. \* Interpret with caution due to low sample size.

## **Industries in focus**

#### **Health Care and Social Assistance**

Employment grew by 107,100 (or 5.2%) over the year to August 2023. This is the continuation of a long-term trend of sustained employment growth in this industry over the past two decades.

At a sub-industry level, Social Assistance Services was a key driver of growth over the past year, with employment increasing by 90,000 (or 14.8%). Strong employment growth in social assistance services may be influenced by an increased demand for various social services linked to the negative mental health effects of the COVID-19 pandemic and ensuing lockdowns, and ongoing demand for and increased attendance hours at childcare centres.

Strong employment growth was also recorded over the year to August 2023 for the Medical and Other Health Care Services sub-industry, increasing by (46,900 or 7.3%). Growth in this sub industry may be attributed to increased demand for a range of health care and medical services and continued healthcare spending by federal and state governments during and after the COVID-19 pandemic, with 2022-23 healthcare expenditure constituting 16.8% of the Australian Government's total expenditure over the period.

#### **Professional, Scientific and Technical Services**

This industry has recorded 14 consecutive quarters of employment growth, reaching a record high of 1,301,300 people employed in August 2023. Over the year, employment increased by 42,000 workers (or 3.3%). Annual employment growth in this industry's workforce was largely due to a rise in Computer System Design and Related Services (up by 16,600 or 5.1%), Architectural, Engineering and Technical Services (up by 8,200 or 2.8%) and Legal and Accounting Services (up by 8,100 or 2.6%).

#### **Employment by detailed industry**

More detailed data show that 124 of the 214 detailed sectors across all industries (or 57.9%) recorded an increase in employment over the year to August 2023. Notably, 129 (or 60.3%) of the detailed industry sectors recorded an increase in employment over the last five years. Over the **year** to August 2023:

- The **largest increases** in employment were in *Other Social Assistance Services* (up by 61,400 or 13.7%), followed by *Cafes, Restaurants and Takeaway Food Services* (up by 18,400 or 2.7%) and *Allied Health Services* (up by 18,300 or 6.5%).
- The **largest falls** in employment were in *Residential Care Services* (down by 24,800 or 10.8%), followed by *School Education* (down by 12,800 or 2.1%) and *Sheep, Beef Cattle and Grain Farming* (down by 5,000 or 3.7%).

Over the five years to August 2023:

- The **largest increases** in employment were in *Other Social Assistance Services* (up by 231,700 or 82.8%), followed by *Hospitals* (up by 109,000 or 24.0%) and *Computer System Design and Related Services* (up by 100,400 or 41.8%).
- The **largest falls** in employment were in *Residential Care Services* (down by 43,900 or 17.6%), followed by *Travel Agency and Tour Arrangement Services* (down by 16,400 or 36.7%) and *Telecommunications Services* (down by 15,700 or 16.6%).

## **Skill levels**

Employment increased in all five Skill Level groups over the year to August 2023. Skill Level 1 occupations (commensurate with a Bachelor Degree or higher) recorded the largest increase in employment over the year, up by 135,100 or 2.9% (Table 6). Skill Level 5 occupations (Certificate I or secondary education) recorded the smallest increase, up by 48,500 or 2.4%.

	Emp	Employed		Annual change to Aug 2023		hange to 023
Skill Levels	Aug 2023 ('000)	Aug 2022 ('000)	('000)	(%)	('000)	(%)
Skill Level 1 Occupations	4,842.5	4,707.4	135.1	2.9	861.0	21.6
Skill Level 2 Occupations	1,734.4	1,675.3	59.1	3.5	198.4	12.9
Skill Level 3 Occupations	2,104.8	2,033.7	71.1	3.5	80.1	4.0
Skill Level 4 Occupations	3,396.0	3,275.5	120.5	3.7	322.3	10.5
Skill Level 5 Occupations	2,036.0	1,987.5	48.5	2.4	26.4	1.3
TOTAL EMPLOYMENT	14,123.3	13,705.3	418.0	3.1	1,512.9	12.0

#### Table 6: Employment by skill levels ('000)<sup>9</sup>

Source: ABS, Labour Force, Australia, Detailed, August 2023, data trended by Jobs and Skills Australia, and ABS.

The shift towards higher skill levels in recent years continues the long-term trend as the workforce becomes more highly educated and employment has transitioned towards services-based industries. Over the five years to August 2023, the share of total employment accounted for by Skill Level 1 occupations increased by 2.8 percentage points to 34.3% in August 2023, while the share of total employment accounted for by Skill Level 5 occupations has fallen by 1.5 percentage points to 14.4%.

Additionally, Figures 20a and 20b show that in September 2023, more employers had difficulty recruiting for higher skilled occupations (70% for Skill Level 1 to 3 occupations) than those with vacancies for lower-skilled occupations (50% for Skill Level 4 and 5 occupations). Notably, since mid-2022, there has been a decreasing trend in difficulty for lower-skilled occupations, in parallel with a decreasing level of internet vacancies as recorded by Jobs and Skills Australia's Internet Vacancy Index.

<sup>&</sup>lt;sup>9</sup> Skill Level data are trended by Jobs and Skills Australia. Total employment data are trended by the ABS. Jobs and Skills Australia and ABS trending methodologies differ, and Skill Level data do not sum to total employment figures. See <u>Appendix A</u> for more details.



## Figure 20 (a-b): Monthly recruitment difficulty rate and Internet Vacancy Index job advertisements by skill level of occupation, September 2020 to September 2023

Source: Jobs and Skills Australia, Recruitment Experiences and Outlook Survey, September 2023; Jobs and Skills Australia, Internet Vacancy Index, September 2023.

Note: Disaggregated data is not publishable in January of each year; hence relevant data points have been joined by a dotted line.

## **Occupational breakdown**

Employment increased in all eight major occupation groups over past year, as well as over the five years to August 2023.

Over the year to August 2023:

The largest increases in employment were recorded for *Professionals* (up by 129,700 or 3.7%), *Community and Personal Service Workers* (up by 83,900 or 5.6%) and *Technicians and Trades Workers* (up by 54,500 or 2.9%).

Over the five years to August 2023:

• The **largest increases** in employment were recorded for *Professionals* (up by 643,400 or 21.4%), *Managers* (up by 288,100 or 18.6%), and *Community and Personal Service Workers* (up by 248,300 or 18.6%).

Table 7: Employment by major occupation group ('000)<sup>10</sup>

Occuration	Emp	loyed		Annual change to Aug 2023		hange to 023
Occupation	Aug 2023 ('000)	Aug 2022 ('000)	('000)	(%)	(000)	(%)
Managers	1,837.6	1,806.9	30.7	1.7	288.1	18.6
Professionals	3,654.8	3,525.0	129.7	3.7	643.4	21.4
Technicians and Trades Workers	1,938.6	1,884.1	54.5	2.9	122.9	6.8
Community and Personal Service Workers	1,582.1	1,498.3	83.9	5.6	248.3	18.6
Clerical and Administrative Workers	1,824.2	1,773.9	50.3	2.8	99.0	5.7
Sales Workers	1,146.1	1,110.8	35.3	3.2	22.3	2.0
Machinery Operators and Drivers	908.7	884.4	24.3	2.7	65.2	7.7
Labourers	1,226.9	1,191.2	35.7	3.0	8.0	0.7
TOTAL EMPLOYMENT	14,123.3	13,705.3	418.0	3.1	1,512.9	12.0

Source: ABS, Labour Force, Australia, Detailed, August 2023, data trended by Jobs and Skills Australia.

#### Employment by detailed occupation

More detailed data show that 224 of the 358 detailed occupations (or 62.6%) recorded an increase in employment over the year to August 2023. Similarly, 234 (or 65.4%) of the detailed occupations recorded an increase in employment over the past five years.

Over the **year** to August 2023:

- The **largest increases** in employment were recorded for *Aged and Disabled Carers* (up by 17,300 or 6.3%), followed by *Registered Nurses* (up by 14,600 or 4.6%), and *Retail Managers* (up by 13,000 or 5.4%).
- The **largest falls** in employment were for *Checkout Operators and Office Cashiers* (down by 5,200 or 3.7%), followed by *Office Managers* (down by 4,700 or 3.4%) and *Commercial Cleaners* (down by 4,000 or 2.6%).

Over the five years to August 2023:

- The **largest increases** in employment were recorded for *Aged and Disabled Carers* (up by 111,500 or 61.2%), followed by *Sales Assistants (General)* (up by 62,100 or 12.2%) and *Registered Nurses* (up by 50,600 or 17.8%).
- The **largest falls** in employment were for *Checkout Operators and Office Cashiers* (down by 18,200 or 11.7%), followed by *Sales Representatives* (down by 13,300 or 15.7%) and *Keyboard Operators* (down by 11,200 or 18.8%).

<sup>&</sup>lt;sup>10</sup> Occupation group data are trended by Jobs and Skills Australia. Total employment data are trended by the ABS. Jobs and Skills Australia and ABS trending methodologies differ, and occupation group data do not sum to total employment figures. Refer to <u>Appendix A</u> for more information.

Table 8: Occupations with the largest increases in employment over the year to August 2023('000)

	Skill	Emp	loyed		change g 2023	Five-yea to Auc	r change a 2023
Occupation	Level <sup>11</sup>	Aug 23 ('000)	Aug 22 ('000)	('000)	(%)	('000)	(%)
Aged and Disabled Carers	4	293.5	276.2	17.3	6.3	111.5	61.2
Registered Nurses	1	333.9	319.3	14.6	4.6	50.6	17.8
Retail Managers	2	255.4	242.4	13.0	5.4	23.8	10.3
Management and Organisation Analysts	1	107.1	98.0	9.1	9.3	37.5	53.8
Software and Applications Programmers	1	166.5	158.2	8.4	5.3	45.1	37.2
ICT Managers	1	88.8	80.6	8.2	10.2	30.1	51.2
Electricians	3	179.6	171.9	7.7	4.5	28.4	18.8
Child Carers	3	154.9	147.4	7.5	5.1	10.4	7.2
Education Aides	4	123.7	116.6	7.2	6.2	25.0	25.3
Sales Assistants (General)	5	572.0	565.0	7.0	1.2	62.1	12.2

Source: ABS, Labour Force, Australia, Detailed, August 2023, data trended by Jobs and Skills Australia.

#### Table 9: Occupations with the largest falls in employment over the year to August 2023 ('000)

	Skill	Emp	loyed	Annual change to Aug 2023		Five-year change to Aug 2023	
Occupation	Level <sup>11</sup>	Aug 23 ('000)	Aug 22 ('000)	('000)	(%)	('000)	(%)
Checkout Operators and Office Cashiers	5	137.2	142.5	-5.2	-3.7	-18.2	-11.7
Office Managers	2	131.2	135.9	-4.7	-3.4	-6.9	-5.0
Commercial Cleaners	5	149.9	153.9	-4.0	-2.6	-6.2	-4.0
Livestock Farmers	1	81.6	85.5	-3.9	-4.6	-1.0	-1.2
Bookkeepers	3	92.5	95.6	-3.1	-3.2	-11.0	-10.7
Bus and Coach Drivers	4	37.8	40.8	-3.0	-7.4	-5.9	-13.5
Keyboard Operators	4	48.2	50.6	-2.4	-4.8	-11.2	-18.8
Mixed Crop and Livestock Farmers	1	25.5	27.5	-2.0	-7.3	-3.5	-11.9
Graphic and Web Designers, and Illustrators	1	52.0	53.8	-1.9	-3.5	-5.3	-9.2
Crop Farmers	1	35.7	37.5	-1.9	-5.0	-6.6	-15.6

Source: ABS, Labour Force, Australia, Detailed, August 2023, data trended by Jobs and Skills Australia.

#### Internet vacancy growth is subdued

Over the quarter to September 2023, recruitment activity decreased across five Major Occupation groups. Despite this, there was growth for Technicians and Trades Workers (up 1.3% or 500 job advertisements) while small increases were recorded for Community and Personal Service Workers (up 0.3% or 80) and Sales Workers (up 0.1% or 20). The strongest decrease was recorded for Labourers (down 4.8% or 840).

<sup>&</sup>lt;sup>11</sup> Skill Level 1 is commensurate with a Bachelor degree or higher qualification; Skill Level 2 is commensurate with an Advanced Diploma or Diploma; Skill Level 3 is commensurate with a Certificate IV or III (including at least 2 years' on-the-job training); Skill Level 4 is commensurate with a Certificate II or III; Skill Level 5 is commensurate with a Certificate I or secondary education.

The August occupational IVI vacancy ratio shows the breadth of demand relative to employment with only Managers, Machinery Operators and Drivers and Labourers recording values below the all-occupation average for September 2023 (1.9%). The IVI vacancy rate remains high, well above the recent low of 0.5% recorded in April 2020 and above the average recorded over the decade preceding the pandemic (1.5%).

	Sept. 2023 ('000)	Quarterly change	Quarterly change (%)	IVI vacancy ratio Aug. 2023 (%)
Managers	30,600	-720	-2.3%	1.7%
Professionals	82,200	-780	-0.9%	2.3%
Technicians and Trades Workers	37,600	500	1.3%	2.0%
Community and Personal Service Workers	30,300	80	0.3%	1.9%
Clerical and Administrative Workers	40,600	-930	-2.2%	2.3%
Sales Workers	20,400	20	0.1%	1.9%
Machinery Operators and Drivers	14,400	-390	-2.6%	1.6%
Labourers	16,800	-840	-4.8%	1.4%
ALL OCCUPATIONS	272,900	-3,00	-1.1%	1.9% (Sept. 2023)

 Table 10: Change in internet advertisements, and IVI vacancy ratios, for Major Occupation

 Groups (online job advertisements as a proportion of employment)

Source: ABS, Labour Force Australia Detailed, August 2023, original data; ABS, Labour Force Australia, September 2023, seasonally adjusted data; Jobs and Skills Australia, Internet Vacancy Index, September 2023, seasonally adjusted data.

### **Recruitment difficulty**

The recruitment difficulty experienced by employers looking to fill different occupations has fallen across all categories since the September quarter 2022. Regardless of this easing of recruitment difficulty, 75% of employers recruiting for Technicians and Trade Workers had trouble recruiting in the September quarter 2023. Employers looking for Professionals also found it difficult to fill their vacancies, with 68% reporting recruitment difficulty in the September quarter 2023 (a fall of 6 percentage points from September quarter 2022).

Over the same period, 43% of employers looking to recruit Clerical and Administrative Workers experienced recruitment difficulty (a fall of 12 percentage points since the September quarter 2022), while 48% of employers recruiting for Labourers found it difficult (a fall of 26 percentage points since the September quarter 2022).



## Figure 21: Quarterly recruitment difficulty rate by major Occupation Group (proportion of recruiting employers), September quarter 2022 to September quarter 2023

Source: Jobs and Skills Australia, Recruitment Experiences and Outlook Survey, September 2023.

## Top 20 occupations in demand

Jobs and Skills Australia produces and regularly updates a list of the top 20 occupations in demand. The list is based on the occupations determined to be in shortage from the 2023 Skills Priority List. Of the occupations determined to be in shortage, occupations are then sorted by whether they have significant vacancies, have a large number of employees, are persistently in shortage and demonstrate a reasonable level of future demand. These top 20 occupations have then been categorised using the skills shortage typology (Table 11).

Classification of skills shortage	Top 20 occupations in demand
Longer training gap Few qualified applicants per vacancy, bachelor degree, Certificate IV or apprenticeship required	<ul> <li>Early Childhood (Pre-primary School) Teachers</li> <li>Occupational Therapists</li> <li>Physiotherapists</li> <li>Registered Nurses</li> <li>Solicitors</li> <li>Social Workers</li> <li>Metal Fitters and Machinists</li> <li>Electricians</li> </ul>
Shorter training gap Few qualified applicants per vacancy, Certificate I to III or less required	Retail Managers
Suitability gap Many qualified applicants per vacancy, but few suitable applicants per qualified applicant	<ul> <li>Advertising, Public Relations and Sales Managers</li> <li>Construction Managers</li> <li>Advertising and Marketing Professionals</li> <li>Civil Engineering Professionals</li> </ul>
Retention gap Above average job mobility (below average rates of retention), potentially reinforced by low number of total new applicants per vacancy	<ul> <li>Human Resource Professionals</li> <li>Chefs</li> <li>Child Carers</li> <li>Aged and Disabled Carers</li> </ul>

Table 11: Top 20 occupations in demand by shortage type, 2023

Source: Jobs and Skills Australia, Skills Priority List, 2023. The skills shortage typology is based on a conceptual framework developed by Professor Sue Richardson, in *What is a skill shortage?* (NCVER, 2007). For more information on how Jobs and Skills Australia has applied the framework, see *Towards a National Jobs and Skills Roadmap* (Jobs and Skills Australia, 2023). Note: There are 3 occupations in the top 20 occupations in demand – General Practitioners and Resident Medical Officers, Software and Applications Programmers, and Motor Mechanics – which are yet to be categorised. Additional analysis required as they may fall in more than one skills shortage category.

# Skills Priority List 2023: current state of skills shortages

## Skills shortages remains elevated

Jobs and Skills Australia analysis of current skills shortages shows that 36% of occupations were in national shortage (332 out of 916) in 2023, about 5 percentage points higher than 2022 (31% of occupations, Figure 22)<sup>12</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.

Data over 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 a peak in labour market tightness.



Figure 22: Proportion of occupations in shortage in the 2021, 2022 and 2023 Skills Priority Lists (SPLs)

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

## New and persistent shortages in 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 the high-skilled Professionals occupation group.

There were 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>&</sup>lt;sup>12</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 23 (for all occupations), based on the latest 2022 version of ANZSCO. Note that all analyses from Figure 4 onwards utilise the 2022 ANZSCO version.

Major group	Description	Occupations in persistent shortage	Percentage of major group
1	Managers	3	3%
2	Professionals	55	17%
3	Technicians and Trades Workers	67	33%
4	Community and Personal Service Workers	5	6%
7	Machinery Operators and Drivers	8	10%

#### Table 12: Persistent shortage since 2021 in ANZSCO major occupation groups

Source: Jobs and Skills Australia

Note: the number of occupations assessed has changed for each SPL. This reflects both changes in the Australian and New Zealand Standard Classification of Occupations (ANZSCO) framework and the inclusion of skills shortage assessments for 'not elsewhere classified' (nec) occupations in both the 2022 and 2023 SPL assessments.

Across all three SPLs published from 2021 to 2023, 138 occupations were in shortage in 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).

There were 8 occupations where the shortages were confined to regional areas only. Half of these were Professionals occupations, reflecting the unique labour market characteristics that are observed in different areas.

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.

## Ease of filling jobs - by occupation and skill level

At the major occupation group, 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) in the 2023 SPL (Figure 23).<sup>13</sup> 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>14</sup>

<sup>&</sup>lt;sup>13</sup> Jobs and Skills Australia, Skills Priority List 2023

<sup>&</sup>lt;sup>14</sup> Many Labourer occupations are out of scope of the SPL as they are at Skill Level 5.



Figure 23: Occupations in shortage in the 2022 and 2023 SPLs, by major Occupation Group

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

Figure 24 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>15</sup>





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

Occupations with Vocation Education and Training (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. Further, 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>&</sup>lt;sup>15</sup> The Australian Bureau of Statistics provides information on the concept of Skill Levels as part of its <u>Conceptual</u> <u>basis of ANZSCO</u> advice.

## Regional areas face pronounced skills shortages

Skill shortages are particularly acute in regional areas, especially for the highly skilled. The share of employers reporting location as a reason for recruitment difficulty increased with remoteness. In Very Remote areas, more than 80% of employers believed the reason they did not receive many applicants was because of the job location and over 40% of employers had a suitable applicant not take a job offer because of the location.

This poses an additional challenge in addressing skills shortages in large remote and regional areas such as the Northern Territory and Western Australia. In the Northern Territory, 55% of employers who had few applicants and 25% of employers with an unfilled vacancy listed location as the reason. In Western Australia, these figures were 36% and 20%, respectively (Figure 25).

Figure 25: Location as a reason for receiving few applicants or for a vacancy remaining unfilled, remoteness areas, 2023



Source: Jobs and Skills Australia analysis of SERA data, 2023

# In focus: Regional skills pressure case study, Retail Managers

A regional shortage for Retail Managers was identified in Jobs and Skills Australia's 2023 Skills Priority List.<sup>16</sup> IVI results suggest demand for Retail Managers underwent a shift through the COVID-19 recovery. Occupations in the Retail Trade industry experienced unprecedented growth in job advertisements during the recovery from the COVID-19 shock. However, unlike other large employing occupations in this industry, demand for Retail Managers has been sustained at a historically elevated level through 2023.

The increase in online job advertisements may indicate employers are seeking to attract a larger proportion of high-skill workers for customer-facing roles in response to industry level structural changes accelerated by the pandemic.

Over the decade to February 2020, monthly job advertisement counts for Retail Managers exhibited a flat trend while following the seasonal demand fluctuations for retail workers. During the COVID-19 shock, recruitment activity for Retail Managers reached a series low of 880 job advertisements. Vacancies seeking Retail Managers broke out of the historical bounds through the COVID-19 recovery period, increasing more than five-fold to reach a series high in March 2023 before declining slightly (by 5.1%) to 4,400 job advertisements in September 2023 (Figure 26).





Source: Jobs and Skills Australia, Internet Vacancy Index, September 2023, unpublished 3-month average data.

The recent shift in demand is particularly pronounced in rest of state areas. While online recruitment activity mirrored the stability observed in the national picture over the decade preceding the pandemic, recent growth outstripped that recorded in capital cities.

Over the five years to September 2023, online job advertisements for Retail Managers increased by 149.9% in rest of state areas compared with 37.5% in capital cities.

<sup>&</sup>lt;sup>16</sup> Jobs and Skills Australia, <u>2023 SPL Key Findings Report</u>, 2023.

<sup>&</sup>lt;sup>17</sup> According to the Australian Bureau of Statistics' <u>Census 2021</u>, the top five employing occupations in Retail Trade includes Sales Assistants (General), Checkout Operators and Cashiers, Shelf Fillers, Storepersons and Pharmacy Sales Assistants (excludes Retail Managers, which is the second largest employing occupation in this industry).

Other large employing occupations in Retail Trade recorded similar growth in vacancies following the COVID-19 shock. However, this level of demand has not continued. Over the year to September 2023, vacancies for Sales Assistants (General), the largest employing occupation in Retail Trade<sup>18</sup>, declined by 17.2%. Declines in online job advertisements over this period were recorded for other major occupations in Retail Trade including Checkout Operators and Office Cashiers (down by 60.0%), Shelf Fillers (59.4%), Storepersons (19.2%) and Pharmacy Sales Assistants (55.3%). Online job advertisements for Retail Managers, in contrast, increased by 1.9% over this period.

Long-forecasted structural changes to the Retail Trade industry, potentially accelerated by the COVID-19 shock, create expanding role demands for customer-facing workers.<sup>19</sup> This may offer a plausible explanation for the increased demand for Retail Managers. Retailers are increasingly using big data to manage their businesses, with Retail Managers expected to use data analytics to better understand and shape pre-purchasing decisions, build post-purchase loyalty and to make data-driven decisions about how best to allocate resources and staffing. Increasing expectations of the 'retail experience' requiring a value-add for customers now more accustomed to the convenience of online shopping, amplify emotional labour demands. Managers are required to navigate the digital transformation of the retail workplace, with increased automation requiring strategic leadership to develop systems of reskilling and upskilling of the workforce.

<sup>&</sup>lt;sup>18</sup> Australian Bureau of Statistics, <u>Employment by Occupation (OCCP) and Industry of Employment (INDP) 2021</u> [Census TableBuilder], 2021.

<sup>&</sup>lt;sup>19</sup> B Lipton, A Vromen, S Rutledge-Prior, L Good, R Cooper and M Foley, <u>*Technology and skills in the future of retail work: Summary of findings*</u>, University of Sydney Business School and Australian National University, 2022, doi: 10.25910/87xj-bx49.

# Jobs and Skills Australia resources

Key data, resources and reports can be found on the Jobs and Skills Australia website: <a href="https://www.jobsandskills.gov.au/">https://www.jobsandskills.gov.au/</a>

Resource	Publication notes	
Internet Vacancy Index		
The Internet Vacancy Index (IVI) is a monthly count of online job advertisements compiled by Jobs and Skills Australia.	The Vacancy Report is published on the third Wednesday of the month.	
Recruitment Experiences and Outlook Survey Survey of at least 1000 employers each month to find out about their experience when recruiting staff.	The Recruitment Insights Report is published on the third Tuesday of the month, while regular special topic Spotlight reports are also published monthly.	
Skill Shortages Analysis Skills shortage analysis including the annual Skills Priority List (SPL) and reports on Skills Shortages.	The SPL is released annually (around September), while the Skills Shortage Quarterly provides quarterly insights.	
Small Area Labour Markets (SALM)		
Estimates of unemployment and the unemployment rate at the Statistical Area Level 2 (SA2) and Local Government Area (LGA) level	SALM data are released quarterly.	
Australian Skills Classification		
Explores the connections between skills and jobs.		
Jobs and Skills Atlas Provides an overview of the labour market at national, state and regional level by occupations, skills and industries.	Atlas will be updated with the data for the previous month, by the last Friday of every month.	
Employment Region Dashboards and Profile		
Monthly Labour Market Dashboards, Recruitment Trends and Employer Needs Profiles, and Industry Profiles.		
Nowcast of Employment Region and Occupation (NERO)		
Experimental dataset providing information on employment in 355 occupations across 88 regions in Australia.	NERO data will be updated monthly.	
International Labour Market Update	The <u>September 2023 report</u> is currently available.	
Provides key labour market data for Australia and selected overseas countries and country groups.		

## **Appendix A**

## **Explainer: ABS and JSA trend series comparison**

As part of the detailed Labour Force Survey (LFS), the Australian Bureau of Statistics (ABS) releases original series of occupation and industry employment data to ANZSCO 4-digit and ANZSIC 3-digit level. The ABS also releases seasonally adjusted and trend series' of employment, but only at the ANZSIC 1-digit industry level. Due to the sample size of the Labour Force Survey, smaller sized industries and occupations can contain a significant amount of volatility in the original data released by the ABS. To remove some of the noise from the ABS original data for reporting purposes, JSA produces trend series for industry and occupation data down to ANZSCO 4-digit and ANZSIC 3-digit level.

The JSA ANZSIC 1-digit level trend series will differ from the ABS's ANZSIC 1-digit level trend series. Both the JSA and ABS trend series are constructed using filter-based methods for trend estimation. The ABS uses a Henderson 7-term moving average filter whereas JSA utilises a Hodrick Prescott Filter (HPF). Compared to the ABS Henderson methodology, the HPF used by JSA is designed to extract longer term cycles and trends within a series. This means that JSA's series will be significantly less susceptible to noise compared to the ABS series but will have a greater tendency to miss shorter term trends and movements. Additionally, JSA's series will be slower to react to any recent changes in trend that occur but will still capture these in subsequent quarters through historical revisions. Neither series is necessarily more accurate nor reliable than the other, but rather they are designed to extract different types of signals from the data. We would generally recommend the ABS trend series when interested in quarterly movements but keeping alert to the possibility of incorrect signals due to noise, and the JSA trend series for longer term movements.

The following examples demonstrates some of the differences between these series.





Source: ABS, Labour Force, Australia, Detailed, August 2023, original estimates, data trended by the ABS, and data trended by Jobs and Skills Australia.

In the Wholesale Trade series above, volatility related to sample size issues in the LFS causes the estimates of employment in the original data to move up to +/-10% from quarter to quarter.

Given the relative standard error of the data, magnitude of the movements and frequency of directional change it is unlikely that these quarterly shifts reflect real labour market movements but rather are just a function of statistical variability or noise. The ABS trend series reflects these movements to a significant extent and there is a danger that reporting quarterly movements will reflect noise and not a real labour market trend. However, the ABS series is adept at capturing rapid changes in trend and large shocks to employment such as the drops which occurred around the year 2000.

The JSA trend series better reflects long-term trends such as the increase in employment between 2002 and 2010 with very minimal change in gradient. It should be noted that the quarterly changes in the JSA series simply reflect the longer-term growth rate and would not necessarily be a good reflection of the movement in each quarter specifically. Whilst the JSA series is better at removing noise it is not as effective at capturing rapid changes in trend, evident with the drop in employment around 2000 where the JSA series transitions over a 3-year period rather than reflecting the more rapid drop that appears to have occurred.

#### Example 2: Construction industry (ANZSIC 1-digit) series comparison

It should be noted that when analysing the most recent quarter it can often be possible that neither series is effectively capturing a recent change in trend. To get a better understanding of current conditions it can be helpful to look for other indicators where possible. A good example of this is in the Construction industry.



Figure 28: Comparison of ABS original and trend data, and JSA trend data - Construction

Source: ABS, Labour Force, Australia, Detailed, August 2023, original estimates, data trended by the ABS, and data trended by Jobs and Skills Australia.

Other economic indicators suggest that the Construction industry may be experiencing uncertain conditions after strong growth since 2021. While infrastructure projects continue to contribute to growth in the industry, dwelling investment has declined by 5% over the past year, with easing demand particularly for residential construction.

While there has been a decrease in the original data for the latest quarter, the ABS series has only plateaued and the JSA series is still maintaining the growth trend. This reflects the somewhat limited capacity of the LFS to identify changes in labour market conditions quickly, even at a highly aggregated level. The difference in responsivity between the series reflects the ABS series greater sensitivity to recent data points.