A snapshot in time

The Australian labour market and COVID-19

1 July 2020
A snapshot in time

The Australian labour market and COVID-19
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A snapshot in time: The Australian labour market and COVID-19
The nature of work in Australia is changing and the skills an employer requires in an employee today are fundamentally different to what they looked for a decade ago.

Australia’s capacity to grow, compete and thrive in a global economy has become dependent on employers and individuals being able to access and use the right skills at the right time. Now more than ever, Australia needs a trusted training system that can deliver workers with high quality, relevant skills that can support rapid upskilling and reskilling in growth areas.

The National Skills Commission (NSC) is a critical new part of Australia's economic infrastructure, providing expert advice and national leadership on the Australian labour market, current and future skills needs and workforce development issues.

As we deal with COVID-19 and the impact on the economy, now more than ever, we need to understand what is happening in the labour market, the structural shifts that will occur and the skill and re-training needed to get people into jobs.

The NSC, led by our Interim Commissioner Adam Boyton, is working to ensure we are properly targeting areas of need in our economy through contemporary labour market forecasting and engaging with industry. Reliable labour market forecasting will help us to provide a pipeline of skilled workers for industry and ensure national labour market priorities are met, including from developing technologies.

The Government recognises the critical importance of vocational education and training (VET) to meet the changing needs of Australia’s modern economy. The NSC’s research and analysis draws on current and emerging data sources as well as cutting-edge analytic techniques to ensure Australia’s labour market analysis capability is high quality and drives a more responsive and modern VET sector.

This work will provide long-term benefits for employers, students and workers, by providing independent expert advice and national leadership on the state of the Australian labour market, current and future skills needs and workforce development.

Skills are fast becoming the new currency of labour market activity, able to provide employers, workers, students and policymakers with a wealth of useful guidance.

Detailed and timely skills analysis and information has the potential to allow education providers to offer VET courses better tailored to the current and future workforce needs of employers, with students then gaining highly relevant qualifications leading to rewarding and sustainable careers.

Data from the NSC will also ensure our National Careers Institute is able to provide students with the most accurate and comprehensive data on where jobs will be and what skills and qualifications they need to get them. It will help close skills gaps and provide confidence to employers, students, tertiary educators and Australian governments that we are investing in the right skills at the right time. This is essential to prepare Australians for the workforce opportunities of today and tomorrow.

The NSC is an exciting and substantial addition to Australia’s economic infrastructure. After we complete our reform journey, Australians will be assured in their own skills journey. The innovative use of new data sources and advanced data analytic techniques will support the NSC in being a trusted source of sophisticated labour market information, analysis and forecasting.

Senator the Hon Michaelia Cash
Minister for Employment, Skills, Small and Family Business
The National Skills Commission (NSC) has come into being at a critical and pivotal time.

Late last year when stakeholders were invited to co-design the NSC there was an overwhelming call for an independent national body to revitalise the skills sector, to provide new leadership on skills and workforce development to meet the needs of Australia’s economy.

None of us could have anticipated just how radically different the economic landscape would be just six months later. While much of the discussion then focused on skills gaps, we are now instead needing to think about managing skills surpluses and retraining options for unemployed workers as we deal with our first recession in nearly 30 years.

This report — the first for the NSC — speaks to that massive shock our labour market is experiencing. Much of the data presented will come as no surprise. The impact of COVID-19 has been immense. However, there are also some glimmers of hope, acknowledged by the OECD last month when it noted that Australia’s economic resilience was greater than most.

Of course, Australia is still in its early days of recovery. That said, more businesses than we would have expected just months ago have plans to hire workers. And while the share of businesses that are citing skill shortages as a constraint on their hiring plans is small, there are some businesses ready to hire now who need workers with skills that are not there at the moment. We need to make sure that as the recovery progresses, skills shortages don’t hold us back.

There are also a large number of Australians with job-ready skills looking for work. An important part of the NSC’s work will be to identify pathways into jobs where skills can be transferred, as well as reskilling and upskilling opportunities that can open new prospects for job seekers.

This report details some of the work already underway by the NSC to improve and consolidate Australia’s skills forecasting capability with the future in mind — that is, with an eye to the new and emerging jobs and skills workers will need.

While some of our work is in its infancy, it nonetheless has the potential to provide the evidence and analysis needed for meaningful reform to our education and training system, the backbone of a strong and prosperous future Australia.

Initiatives such as JEDI — the Jobs and Education Data Infrastructure project — and the potential benefits of ‘nowcasting’ are two examples of how we are looking at ways to harness new approaches and technologies to provide a better understanding of current, and future, skills needs.

I look forward to working with you to shape an NSC that becomes an enduring, critical part of Australia’s economic infrastructure — now as we deal with COVID-19 and the impact on the economy, and also into the future.

Adam Boyton
Interim National Skills Commissioner
Executive summary

A time of major change

COVID-19 has radically affected Australia’s labour market.

We have seen an unprecedented fall in employment, a dramatic drop in hours worked, a significant increase in underemployment, a record number of people leaving the labour force, and job vacancies falling to the lowest level in over a decade. Young people and women have been disproportionately affected, some industries have fared better than others, and capital cities have generally felt the impact more deeply than regional areas.

Thousands of jobs have been lost and the lives of many Australians greatly altered. Despite this, Australia is still doing better than most other nations in terms of economic resilience.

Details are in Part 1.

Using data to inform recovery

As we start recovering from the effects of the COVID-19 pandemic, there will be challenges and difficult times ahead. But there will also be opportunities. We can hasten recovery by understanding where jobs are growing, and ensuring our workforce has the necessary skills for those jobs.

This requires a deep understanding of which sectors, industries, occupations, groups in our society and regions have been, and might continue to be, affected by the economic shock from COVID-19. We need this data and evidence to shape our recovery, and our education and training system, so Australians are prepared for the modern workplace.

The NSC will work to ensure skill shortages don’t act as a handbrake on growth as businesses begin hiring again. Analysing the impact of COVID-19 will help identify where there is growth and what jobs are demand. Matching workers to those jobs in this uncertain and evolving environment will require the ability to quickly identify skills needs and retrain people. The focus on skilling, re-skilling or upskilling displaced workers will be essential to open new prospects for job seekers and drive the recovery of the jobs market and our economy.

Details are in Part 2.

The NSC’s future labour market focus

The NSC is developing a range of information, resources and tools to support Australia’s economic recovery from COVID-19. Over the coming year, the NSC will focus on determining skills shortages and surpluses, assessing the nature of labour market recovery, analysing structural shifts and identifying current and emerging skills needs.

In this way, the NSC will develop a rich and granular picture of Australia’s labour market to help us build the skilled, resilient and adaptable workforce we need now, and for the years ahead.
A shock to the market

835,100 RECORD FALL in employment between March and May

181.8 MILLION DECLINE in monthly hours worked between March and May

769,600 EMPLOYED PEOPLE worked zero hours for economic reasons in April

623,600 PEOPLE left the labour force between March and May

7.1% UNEMPLOYMENT RATE up from 5.2% in March to 7.1% in May

503,500 MORE PEOPLE underemployed between March and May

17 OF 19 INDUSTRIES recorded falls in employee jobs

61% OF BUSINESSES registered or intended to register for JobKeeper

YOUNG PEOPLE AND WOMEN most affected

CAPITAL CITIES and some COASTAL AREAS appear harder hit

SIGNS OF RECOVERY, gradual increase in business confidence, job advertisements and recruiting

Source: Australian Bureau of Statistics (ABS), Labour Force, Australia, May 2020
Part 1
Labour market impact

Note: the data in this report are accurate at the time of writing (19 June 2020).

1.1 Using data to inform recovery

While the impact of COVID-19 on the labour market has been significant, some data indicate early signs of stabilisation and a small increase in the number of employers looking to hire.

Survey data collected from businesses across Australia not only provide insight into current working environments and the impact COVID-19 has had on staffing levels and recruitment, but also the changes businesses expect to see in the coming months and what will impact on their return to business as usual.

The NSC will use ongoing accumulation and analyses of these data to inform policy development and to help support Australia’s economic and labour market recovery from COVID-19.
1.2 Significant initial impacts on the Australian labour market

Employment and unemployment

The latest available Australian Bureau of Statistics (ABS) Labour Force Survey figures show employment contracted by 227,700 in May 2020, following a decline of 607,400 in April — the largest monthly decline on record. Over the month, full-time employment fell by 89,100 (or 1.0 per cent), while part-time employment declined by 138,600 (or 3.7 per cent).

The working age (persons aged 15–64) employment to population ratio\(^1\) fell by 1.3 percentage points in May 2020, to 69.8 per cent, the lowest rate recorded since July 2003. Since March 2020, prior to the shutdown of non-essential services and the introduction of trading restrictions, the working age employment to population ratio has fallen by 4.7 percentage points.

Table 1: Labour market indicators, May 2020

<table>
<thead>
<tr>
<th></th>
<th>May 2020</th>
<th>Monthly change</th>
<th>Change between March and May 2020</th>
<th>Annual change</th>
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<tr>
<td></td>
<td>('000)</td>
<td>(%)</td>
<td>('000)</td>
<td>('000)</td>
</tr>
<tr>
<td>Employment ('000)</td>
<td>12,154.1</td>
<td>-227.7</td>
<td>-835.1</td>
<td>-695.6</td>
</tr>
<tr>
<td>Full-time employment ('000)</td>
<td>8540.0</td>
<td>-89.1</td>
<td>-325.1</td>
<td>-237.9</td>
</tr>
<tr>
<td>Part-time employment ('000)</td>
<td>3614.1</td>
<td>-138.6</td>
<td>-510.1</td>
<td>-457.7</td>
</tr>
<tr>
<td>Unemployment ('000)</td>
<td>927.6</td>
<td>85.7</td>
<td>211.5</td>
<td>219.2</td>
</tr>
<tr>
<td>Unemployment rate (%)</td>
<td>7.1</td>
<td>0.7 pts</td>
<td>1.9 pts</td>
<td>1.9 pts</td>
</tr>
<tr>
<td>Participation rate (%)</td>
<td>62.9</td>
<td>-0.7 pts</td>
<td>-3.1 pts</td>
<td>-3.2 pts</td>
</tr>
<tr>
<td>Underemployment ('000)</td>
<td>1711.5</td>
<td>-109.5</td>
<td>503.5</td>
<td>552.3</td>
</tr>
<tr>
<td>Underemployment rate (%)</td>
<td>13.1</td>
<td>-0.7 pts</td>
<td>4.3 pts</td>
<td>4.5 pts</td>
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Source: ABS, Labour Force, Australia, May 2020 (Cat. No. 6202.0), seasonally adjusted data

The unemployment rate rose by 0.7 percentage points over the month, to 7.1 per cent in May, the highest rate recorded since October 2001 and well above the 5.2 per cent recorded in March 2020.

As in April, the significant decline in employment in May did not translate into a similar increase in unemployment because a large number of people left the labour force (142,000), pushing the participation rate down by 0.7 percentage points, to 62.9 per cent, the lowest rate recorded since January 2001.

The ABS has advised that if the 623,600 people who left the labour force over the last two months had actually moved into unemployment, the unemployment rate would have risen to 11.3 per cent in May 2020.

The Reserve Bank has suggested that the negative impact of COVID-19 on the labour market will be evident for some time to come, with the unemployment rate forecast to reach 10 per cent in the June quarter 2020, before declining to 8½ per cent in the June quarter 2021.

While Treasury has forecast the unemployment rate to rise to 10 per cent (or 1.4 million unemployed) in the June quarter 2020, Treasury Secretary, Steven Kennedy, stated on 9 June at the Senate Select Committee on COVID-19 that the unemployment rate would be in the order of 8 per cent in September 2020.

\(^1\) The proportion of persons aged 15–64 years who are employed.
**Hours worked**

The number of monthly hours worked in all jobs declined by 12.1 million hours over the month, to 1604.7 million hours in May 2020, and has fallen by 181.8 million hours (or 10.2 per cent) since March 2020. It is important to note that whenever there is a disruption to the economy, the early impacts are usually most evident in the ABS monthly hours worked data. Businesses often reduce hours worked as an early response to a labour market shock, to prevent people from losing their jobs, particularly if there is uncertainty about the duration of the economic downturn.

Indeed, at the onset of the Global Financial Crisis (the lead-up to which had been marked by a period of significant skill shortages), firms refrained from cutting jobs they had fought hard to fill and instead hoarded labour, by reducing their employees' hours of work. For example, over the first six months following September 2008, employment fell by 7,800 (or 0.1 per cent), while hours worked declined by 24.1 million hours (or 1.6 per cent).

In April 2020, there was a significant increase in the number of people who worked zero hours due to economic reasons (defined as people who were either stood down, had insufficient work or no work available), with 769,600 working zero hours due to economic reasons, compared with just 76,900 in March 2020.

**Underemployment**

The ABS defines underemployed workers as those aged 15 years and over who are not fully employed and want, and are available to start, more hours of work. The underemployed comprise:

- part-time workers (worked less than 35 hours per week) who want, and are available to start, work with more hours
- full-time workers who worked part-time hours in the Labour Force Survey reference week for economic reasons (that is, they were stood down or insufficient work was available).

Not surprisingly, underemployment surged between March and May in line with the significant reduction in hours worked that resulted from the shutdown of non-essential services and trading restrictions. In addition, a number of people worked fewer hours due to school closures and child care responsibilities during April and May.

Indeed, the level of underemployment increased sharply, by 503,500 over the two months to May 2020, to 1,711,500. The underemployment rate increased by 4.3 percentage points over the two months, to 13.1 per cent in May 2020.

The increase in underemployment between March and May was due, entirely, to a large increase in the number of underemployed full-time workers who worked part-time hours for economic reasons (up by 617,600 to stand at 728,400). The number of underemployed part-time workers, on the other hand, fell by 102,500, to 968,700.

Reflecting the impact of COVID-19 on hours worked, underemployed full-time workers' share of total underemployment rose significantly, from 9.2 per cent in March 2020, to 42.6 per cent in May 2020.

Prior to April, underemployed part-time workers had comprised at least 90 per cent of total underemployment in each month since monthly data became available (in July 2014).

**Long-term unemployment**

While long-term unemployment fell by 47,400 (or 26.8 per cent), to 129,600 in April 2020, the decline was driven by the large number of people who left the labour force. It is likely that some individuals who were long-term unemployed in March 2020, particularly those with long-term health conditions, mature age people or parents who were looking after their children due to school closures, were unable to search for work in April 2020 as a result of COVID-19. In addition, mutual obligations contingencies were in place during this period.

Looking beyond the April 2020 result, it is likely that long-term unemployment will rise considerably in the medium-term, as it did following the Global Financial Crisis, especially if the unemployment rate reaches the Reserve Bank's forecast of 10 per cent in the June quarter 2020.

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2 Latest available detailed data on those working zero hours at time of writing.
3 Hereafter referred to as 'underemployed full-time workers'.
4 Latest available long-term unemployment data at time of writing.
Impacts on businesses and Single Touch Payroll (STP)

The ABS Weekly Payroll Wages and Jobs in Australia publication is part of a suite of new products released to provide up-to-date information on the impact of COVID-19 on people and businesses in Australia. The publication includes ‘employee jobs’ figures compiled from Australian Taxation Office (ATO) data for businesses using the STP system.

Approximately 99 per cent of ‘substantial employers’ (20 or more employees) and around 80 per cent of ‘small employers’ (those with 19 or fewer employees) are currently reporting through STP. As a result, not all jobs in the Australian labour market are captured with these estimates and data will differ from job and wages figures published in other ABS releases.

It should also be noted that STP data are not directly comparable with Australia’s official employment and unemployment estimates from the ABS Labour Force Survey. The monthly survey release will continue to be the most reliable and authoritative source of information on developments in the Australian labour market.

The weekly payroll jobs data show that 17 of the 19 industries recorded falls in employee jobs between 14 March 2020 (when Australia recorded its 100th case of COVID-19) and 30 May 2020 (the latest available data at the time of printing).

Chart 1: Percentage change in employee jobs between 14 March and 30 May 2020

The Accommodation and Food Services industry recorded the largest fall in employee jobs over the period (down by 29.1 per cent), followed by Arts and Recreation Services (down by 26.3 per cent) and Information Media and Telecommunications (down by 10.5 per cent), reflecting the large impact COVID-19 related restrictions have had on these industries.

The Financial and Insurance Services (up by 0.5 per cent) and Electricity, Gas, Water and Waste Services (up by 0.4 per cent) industries recorded increases in employee jobs over the period.
The Manufacturing industry recorded the smallest fall in employee jobs over the period (down by 4.0 per cent) followed by Wholesale Trade (4.1 per cent) and Public Administration and Safety (4.3 per cent). The relatively smaller impact on employee jobs within these industries likely reflects the sustained demand for essential services provided by these industries during the pandemic.

The weekly payroll jobs data show the labour market is undergoing significant structural shifts in a very short period because of COVID-19 and related restrictions. The share of employee jobs accounted for by the Health Care and Social Assistance industry increased (up by 0.4 percentage point) between week ending March 14 and May 30, followed by Financial and Insurance Services; Professional, Scientific and Technical Services; and Manufacturing (all up by 0.3 percentage points).

By contrast, the share of employee jobs accounted for by the Accommodation and Food Services industry fell (down by 1.7 percentage points) between March 14 and May 30, followed by Arts and Recreation Services (down by 0.3 percentage points) and Administrative and Support Services (down by 0.2 percentage points).

Chart 2: Share of employee jobs by industry for week ending 14 March and week ending 30 May 2020

Source: ABS, Weekly Payroll Jobs and Wages in Australia, Cat. No. 6160.0.55.001, week ending 30 May 2020
Uptake of the JobKeeper Payment scheme

The ABS Business Impacts of COVID-19, April 2020 survey found 61 per cent of businesses had registered or were intending to register for the JobKeeper Payment scheme (see Chart 3). This proportion was highest for businesses in the Construction industry (80 per cent) and for the Accommodation and Food Services industry (76 per cent).

Of all businesses, 44 per cent reported their decision to continue to employ staff was influenced by the announcement of the scheme.

Chart 3: Businesses registered or intending to register for the JobKeeper Payment scheme, by selected industries

Source: ABS, Business Indicators, Business Impacts of COVID-19, April 2020 (Cat. No. 5676.0.55.003), original data

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5 ABS, Business Indicators, Business Impacts of COVID-19, April 2020. This survey was conducted between 22 and 28 April 2020.
1.3 Demographic impacts

Youth impact

Young people are particularly vulnerable during periods of economic and labour market softness, as they tend to have fewer skills and less experience than their prime-age counterparts. Accordingly, they are often the first to be retrenched by employers in times of economic difficulty. In addition, those who have never worked before will face similar challenges securing a foothold in the labour market as they, too, are competing with more highly skilled competitors.

Chart 4: Annual full-time youth employment growth and youth unemployment rate

To illustrate, labour market conditions for youth deteriorated significantly at the onset of the Global Financial Crisis in September 2008 and had only partially recovered around mid-2017. In the past, youth have responded to such adverse labour market conditions and economic slowdowns by remaining in full-time education for longer.

The impact of COVID-19 on young people has been unprecedented. Youth employment decreased by 102,900 in May, following on from a record decrease of 226,200 in April. Young people accounted for around 45 per cent of the total decline in employment in May, despite comprising just 16 per cent of the population. As a consequence, the youth employment to population ratio fell by 9.9 percentage points between March and May, to 50.5 per cent, its lowest rate since the inception of the monthly ABS Labour Force Survey in February 1978.

Against the backdrop of a sharp contraction in employment, the youth unemployment rate increased significantly in May 2020 (up by 2.0 percentage points, to 16.1 per cent), well above the 11.6 per cent recorded in March 2020 and more than double the rate recorded for all people (of 7.1 per cent). This equated to an additional 26,700 young people becoming unemployed in May 2020.

It is worth noting that 282,000 youth have left the labour force over the last two months. If those young people who left the labour force between March and May had actually moved into unemployment over the period, the youth unemployment rate would have risen to 26.8 per cent in May 2020.
Over the two months to May, the youth underemployment rate increased by 2.6 percentage points, to 21.7 per cent in May 2020, well above the 13.1 per cent recorded for all people.

The hours worked data from the ABS Labour Force Survey show that youth recorded the largest fall (in percentage terms) in actual hours worked of all age cohorts in April 2020 (latest available data). Actual hours worked in all jobs for youth declined by 25.7 per cent in April, compared with a fall of 13.8 per cent for those aged 25–54 and 12.5 per cent for those aged 55 and over.

While youth always fare poorly in any economic downturn, the cohort has been particularly hard-hit as they are overrepresented in industries heavily affected by COVID-19, such as Accommodation and Food Services, Retail trade and Arts and Recreation Services. For instance, 46.8 per cent of employment in the Accommodation and Food Services industry comprised people aged 15–24 years, while 25.0 per cent of those employed in Arts and Recreation Services were youth. This compares with 15.1 per cent of youth who are employed in all industries.

**While youth always fare poorly in any economic downturn, the cohort has been particularly hard-hit as they are overrepresented in industries heavily affected by COVID-19 …**
Gender impact

Employment for women continued to fall in May, by 117,700 (or 2.0 per cent), following on from the largest monthly decline on record in April (of 328,000 or 5.3 per cent). Male employment also decreased, by 110,000 (or 1.7 per cent), following the record fall of 279,400 (or 4.1 per cent) in April.

While females comprised 46.9 per cent of total employment in May 2020, they have accounted for 53.4 per cent of the decrease in employment over the last two months.

Table 2: Key labour market indicators by gender, May 2020

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<th>Monthly change</th>
<th>Change between March and May 2020</th>
<th>Annual change</th>
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<td></td>
<td>('000)</td>
<td>(‘000) (%)</td>
<td>(‘000) (%)</td>
<td>(‘000) (%)</td>
</tr>
<tr>
<td><strong>Female</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment</td>
<td>5698.9</td>
<td>-117.7 (-2.0)</td>
<td>-445.7 (-7.3)</td>
<td>-327.8 (-5.4)</td>
</tr>
<tr>
<td>Unemployment</td>
<td>425.4</td>
<td>54.1 (14.6)</td>
<td>92.6 (27.8)</td>
<td>99.6 (30.6)</td>
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<td>Unemployment rate (%)</td>
<td>6.9 -</td>
<td>0.9 pts</td>
<td>1.8 pts</td>
<td>1.8 pts</td>
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<tr>
<td>Participation rate (%)</td>
<td>57.8 -</td>
<td>-0.6 pts</td>
<td>-3.4 pts</td>
<td>-3.0 pts</td>
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<tr>
<td>Underemployment</td>
<td>863.5</td>
<td>-68.4 (-7.3)</td>
<td>174.9 (25.4)</td>
<td>197.3 (29.6)</td>
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<tr>
<td>Underemployment rate (%)</td>
<td>14.1 -</td>
<td>-1.0 pts</td>
<td>3.5 pts</td>
<td>3.6 pts</td>
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<tr>
<td><strong>Male</strong></td>
<td></td>
<td></td>
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<tr>
<td>Employment</td>
<td>6455.2</td>
<td>-110.0 (-1.7)</td>
<td>-389.4 (-5.7)</td>
<td>-367.8 (-5.4)</td>
</tr>
<tr>
<td>Unemployment</td>
<td>502.2</td>
<td>31.6 (6.7)</td>
<td>118.9 (31.0)</td>
<td>119.6 (31.2)</td>
</tr>
<tr>
<td>Unemployment rate (%)</td>
<td>7.2 -</td>
<td>0.5 pts</td>
<td>1.9 pts</td>
<td>1.9 pts</td>
</tr>
<tr>
<td>Participation rate (%)</td>
<td>68.1 -</td>
<td>-0.8 pts</td>
<td>-2.7 pts</td>
<td>-3.4 pts</td>
</tr>
<tr>
<td>Underemployment</td>
<td>848.0</td>
<td>-41.2 (-4.6)</td>
<td>328.6 (63.3)</td>
<td>355.0 (72.0)</td>
</tr>
<tr>
<td>Underemployment rate (%)</td>
<td>12.2 -</td>
<td>-0.4 pts</td>
<td>5.0 pts</td>
<td>5.3 pts</td>
</tr>
</tbody>
</table>

Source: ABS, Labour Force, Australia, May 2020 (Cat. No. 6202.0), seasonally adjusted data

Part-time employment for women declined by 304,300 (or 10.8 per cent) between March and May 2020, while full-time employment decreased by 141,400 (or 4.2 per cent). Over the same period, part-time employment for men declined by 205,800 (or 15.6 per cent), while full-time employment fell by 183,600 (or 3.3 per cent).

The decrease in female employment between March and May, however, did not translate to a similar increase in female unemployment. This was due to 353,200 women leaving the labour force, pushing down their participation rate, by 3.4 percentage points, to 57.8 per cent in May 2020, the lowest rate recorded since April 2007. The decline in the labour force for men was slightly less stark, with 270,500 males leaving the labour force in the last two months, resulting in a 2.7 percentage point decline in their participation rate, to 68.1 per cent, the lowest rate on record.
Women accounted for 56.6 per cent of the decline in the total labour force between March and May. This was due, in large part, to women having a far greater likelihood of taking on caring responsibilities, resulting from school closures, as well as being predominantly employed in industries negatively affected by COVID-19 (such as Accommodation and Food Services).

The fourth ABS Household Impacts of COVID-19 Survey, 12–15 May 2020, found that women were almost three times more likely than men (46 per cent compared with 17 per cent) to have stayed at home to look after children full-time on their own during the pandemic.

Data from the ABS Labour Force Survey show that the number of monthly hours worked in all jobs for females rose slightly in May, up by 4.5 million hours (or 0.7 per cent), following a record decline of 88.9 million hours (or 12.0 per cent) in April. Males recorded a decrease of 16.6 million hours (or 1.7 per cent) in monthly hours worked in May, following a record fall of 80.8 million hours (or 7.7 per cent) in April.

The number of employed women who stated that they worked fewer hours than usual increased by 1,066,900 (or 64.6 per cent) over the month, to 2.7 million in April 2020. This compares with an increase of 945,700 (or 49.6 per cent) for males, to almost 2.9 million. While there was a large increase in both men and women who worked fewer hours than usual for economic reasons in April 2020 (that is, there was no work, not enough work available or they were stood down), women recorded a larger increase (up by 694,500 or 346.6 per cent) than men (up by 643,600 or 240.6 per cent).

The number of women who were employed but did not work due to economic reasons, increased by 397,200 (or 1,173.5 per cent) over the month, to 431,000 in April 2020, compared with a rise of 295,500 (or 686.0 per cent) for men, to 338,600.

The number of underemployed women has increased by 174,900 (or 25.4 per cent) over the last two months, to stand at 863,500 in May 2020. While men recorded a much sharper rise in underemployment over the same period (up by 328,600 or 63.3 per cent), to 848,000, their underemployment rate (of 12.2 per cent) remains lower than that of women (14.1 per cent in May 2020).

6 Latest available detailed data on hours worked at time of writing.
1.4 Regional impact

Disaggregated data from the ABS Labour Force Survey illustrate that labour market conditions in the Capital Cities have been more adversely affected than the Rest of State areas because of COVID-19. The level of employment in Capital Cities areas fell by 437,800 (or 4.8 per cent) in April 2020\(^7\), compared with a fall of 141,900 (or 3.6 per cent) in the Rest of State areas.

Table 3: Monthly change in labour market indicators, Capital Cities and Rest of State areas, April 2020

<table>
<thead>
<tr>
<th></th>
<th>Capital Cities</th>
<th>Rest of State</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>April</td>
<td>Monthly change</td>
</tr>
<tr>
<td>Employment ('000)</td>
<td>8599.1</td>
<td>-437.8</td>
</tr>
<tr>
<td></td>
<td>(%)</td>
<td>-4.8</td>
</tr>
<tr>
<td>Unemployment ('000)</td>
<td>605.1</td>
<td>58.7</td>
</tr>
<tr>
<td></td>
<td>(%)</td>
<td>10.8</td>
</tr>
<tr>
<td>Unemployment rate (%)</td>
<td>6.6</td>
<td>-0.9 pts</td>
</tr>
<tr>
<td>Participation rate (%)</td>
<td>65.1</td>
<td>-2.8 pts</td>
</tr>
<tr>
<td>Youth (15–24) unemploy (%)</td>
<td>14.6</td>
<td>1.9 pts</td>
</tr>
</tbody>
</table>

Source: ABS, Labour Force, Detailed — Electronic Delivery, April 2020 (Cat. No. 6291.0.55.001), original data

\(^7\) Latest available detailed ABS Labour Force Survey data at time of writing.
The unemployment rate across the Capital Cities increased by 0.9 percentage points over the month, to 6.6 per cent in April 2020. In the Rest of State areas, the unemployment rate rose by 0.3 percentage points over the period, to 5.6 per cent. The gap between the unemployment rate in Capital Cities and Rest of State areas (of 1.0 percentage point) is the largest recorded since the series began in October 1998.

In addition, the participation rate in the Capital Cities decreased by 2.8 percentage points in April 2020, to 65.1 per cent. In the Rest of State areas, the participation rate fell by 2.1 percentage points over the month, to 60.7 per cent in April 2020.

In almost every state, labour market conditions in the Capital Cities appear to have been more adversely affected, due to COVID-19, than their Rest of State counterparts.

Chart 8: Employment (index) and unemployment rate in Capital Cities and Rest of State areas, April 2019 to April 2020

Source: ABS, Labour Force, Detailed — Electronic Delivery, April 2020 (Cat. No. 6291.0.55.001), original data
As shown in Chart 9, an exception to this was Queensland, where the decline in the working age (people aged 15–64) employment to population ratio in Brisbane (down by 3.6 percentage points) was less than in Rest of Queensland (down by 3.8 percentage points).

Chart 9: Monthly change in employment rate for people aged 15–64, April 2020

![Chart 9](image)

Source: ABS, Labour Force, Detailed — Electronic Delivery, April 2020 (Cat. No. 6291.0.55.001), original data

It is worth noting, however, that data at the Capital City/Rest of State level can mask particular pockets of disadvantage that can occur within a Capital City or Rest of State area. Labour market data in original terms at the ABS Statistical Area Level 4 (SA4) can also exhibit extreme volatility and need to be viewed with considerable caution.

That said, these data can be combined with other indicators (such as the change in Single Touch Payroll (STP) employee jobs and the rise in the jobactive caseload) to shed light on the specific regions that have experienced the most significant deterioration in labour market conditions since the onset of the COVID-19 pandemic.

Capital Cities and some Coastal Areas appear harder hit than the Rest of State areas because of COVID-19.
As shown in Table 4, Capital Cities and Rest of State areas have both been negatively affected by COVID-19.

Notably, some of the most negatively affected SA4s are located in coastal areas that have a high reliance on tourism or have an ageing population (such as the Gold Coast, Richmond – Tweed, Sunshine Coast and Cairns). In addition, a number of other SA4s are located in Victoria, which has been particularly hard-hit by the shutdown of non-essential services and ongoing outbreaks of COVID-19 cases.

It is also worth noting that, to some extent, every SA4 has experienced a deterioration in labour market conditions. For instance, Sydney – Baulkham Hills and Hawkesbury has been one of the least affected SA4s, due to the COVID-19 pandemic, yet recorded a 4.8 per cent decline in employee jobs over the period from 14 March 2020 (when Australia recorded its 100th COVID-19 case), to 30 May 2020.

Considerable uncertainty surrounds the labour market outlook at the regional level. SA4s that have been the most adversely affected by COVID-19 (to date) may not continue to be as heavily affected in the future, as the flow-on effects begin to impact more notably on other industries that were previously less affected by physical distancing measures and the shutdown of essential services.

Moreover, as restrictions are eased across Australia, any region that suffers an outbreak of COVID-19 cases could potentially experience a greater deterioration in labour market conditions relative to the rest of Australia, adding further uncertainty to the labour market outlook.

### Table 4: Statistical Area Level 4s (SA4s) with a significant deterioration in labour market conditions

<table>
<thead>
<tr>
<th>SA4</th>
<th>State</th>
<th>Change in employee jobs (%)</th>
<th>Change in jobactive caseload as a proportion of the labour force (%)</th>
<th>Monthly change in employment (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>14 March to 30 May</td>
<td>15 March to 14 June</td>
<td>April 2020</td>
</tr>
<tr>
<td>Sydney – City and Inner South</td>
<td>NSW</td>
<td>-10.6</td>
<td>5.2</td>
<td>-7.0</td>
</tr>
<tr>
<td>South East</td>
<td>Tas</td>
<td>-10.5</td>
<td>7.9</td>
<td>-3.9</td>
</tr>
<tr>
<td>Melbourne – North West</td>
<td>Vic</td>
<td>-9.4</td>
<td>7.8</td>
<td>-5.2</td>
</tr>
<tr>
<td>Melbourne – North East</td>
<td>Vic</td>
<td>-9.0</td>
<td>6.1</td>
<td>-7.6</td>
</tr>
<tr>
<td>Gold Coast</td>
<td>Qld</td>
<td>-8.8</td>
<td>9.2</td>
<td>-6.9</td>
</tr>
<tr>
<td>Richmond – Tweed</td>
<td>NSW</td>
<td>-8.6</td>
<td>9.3</td>
<td>-6.1</td>
</tr>
<tr>
<td>Melbourne – West</td>
<td>Vic</td>
<td>-8.4</td>
<td>7.1</td>
<td>-4.2</td>
</tr>
<tr>
<td>Sydney – Inner South West</td>
<td>NSW</td>
<td>-8.2</td>
<td>7.5</td>
<td>-7.8</td>
</tr>
<tr>
<td>Cairns</td>
<td>Qld</td>
<td>-7.9</td>
<td>8.0</td>
<td>0.1</td>
</tr>
<tr>
<td>Sunshine Coast</td>
<td>Qld</td>
<td>-7.6</td>
<td>8.6</td>
<td>-1.1</td>
</tr>
<tr>
<td>Australia</td>
<td></td>
<td>-7.5</td>
<td>5.9</td>
<td>-4.6</td>
</tr>
</tbody>
</table>

1 Source: ABS, Weekly Payroll Jobs and Wages in Australia, week ending 30 May 2020 (Cat. No. 6160.0.55.001)
2 Source: Department of Education, Skills and Employment, jobactive caseload and ABS, Labour Force, Detailed — Electronic Delivery, April 2020 (Cat. No. 6291.0.55.001), 12-month averages of original estimates
3 Source: ABS, Labour Force, Detailed — Electronic Delivery, April 2020 (Cat. No. 6291.0.55.001), original data

Please note that where possible, data for Australia are in seasonally adjusted terms
1.5 Near-term outlook for the labour market

Gradual return of confidence

Since the restrictions started easing, the NSC’s COVID-19 survey of businesses has found employers are becoming more certain about the future and intended to rehire staff they had previously stood down or let go. Many credited the JobKeeper Payment scheme and other government support as being crucial to their survival during this period. However, many employers also had concerns about:

- the need to balance staff numbers and hours carefully to manage current workloads and costs
- the need for continued government support
- staff health including mental health
- lower demand for products and services, lower turnover and emerging cash flow problems
- for some, difficulties securing stock and supply chain problems
- challenges due to closed borders and travel restrictions
- difficulties placing new apprentices/those in training.
Recruitment survey results

Expected staff changes in the coming months

Since March, the NSC has conducted an ongoing survey to assess the impacts of COVID-19 on businesses and their staffing levels. The survey is administered by telephone for a cross-section of businesses across Australia.

For the week ending 22 May 2020, 16 per cent of businesses expected to increase staff numbers, well above the 2 per cent recorded in the two weeks ending 17 April 2020 (see Chart 10). Of the businesses expecting to increase staff, around half had registered or were intending to register for the JobKeeper Payment scheme. These businesses are therefore likely to be expecting to re-engage staff who were previously stood down.

The proportion of businesses expecting to decrease staff numbers in the coming months remains low (4 per cent in the week ending 22 May 2020), having declined significantly from a peak of 28 per cent in the week ending 3 April 2020.

Chart 10: Expected staff changes in the coming months

Across different industries, Accommodation and Food Services has the highest proportion of businesses expected to increase staff in the coming months (31 per cent). This is likely to reflect the gradual easing of the lockdown restrictions. By contrast, a low proportion of businesses in Professional, Scientific and Technical Services expect to increase staff numbers in the coming months (7 per cent) (see Chart 11).
Chart 11: Staffing expectations in the coming months, selected industries

<table>
<thead>
<tr>
<th>Industry</th>
<th>Increase</th>
<th>Remain the same</th>
<th>Decrease</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodation and Food Services</td>
<td>31%</td>
<td>47%</td>
<td>4%</td>
<td>18%</td>
</tr>
<tr>
<td>Health Care and Social Assistance</td>
<td>23%</td>
<td>71%</td>
<td>0%</td>
<td>7%</td>
</tr>
<tr>
<td>Construction</td>
<td>11%</td>
<td>70%</td>
<td>10%</td>
<td>9%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>10%</td>
<td>72%</td>
<td>6%</td>
<td>11%</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>9%</td>
<td>80%</td>
<td>5%</td>
<td>7%</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>9%</td>
<td>71%</td>
<td>7%</td>
<td>14%</td>
</tr>
<tr>
<td>Professional, Scientific and Technical Services</td>
<td>7%</td>
<td>82%</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>All Industries</td>
<td>14%</td>
<td>70%</td>
<td>5%</td>
<td>11%</td>
</tr>
</tbody>
</table>

Proportion of businesses

Source: NSC, Impacts of COVID-19 on Businesses survey, businesses surveyed in the four weeks to 22 May 2020

Returning to pre-COVID-19 business conditions

As part of its Business Impacts of COVID-19, May 2020 survey, the ABS asked businesses what else, apart from easing government restrictions, would be required to enable a return to pre-COVID-19 business conditions. The most common response was ‘Increased or returning customer demand’ (35 per cent), with only 13 per cent wanting further government support (see Chart 12).

Chart 12: Requirements to return to pre-COVID-19 business conditions

Source: ABS, Business Indicators, Business Impacts of COVID-19, May 2020 (Cat. No. 5676.0.55.003), original data

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8 ABS, Business Indicators, Business Impacts of COVID-19, May 2020 (Cat. No. 5676.0.55.003). This survey was conducted between 13 and 22 May 2020.
The impact of the COVID-19 pandemic on the number of jobs advertised has been severe. Across the three job boards monitored in the Internet Vacancy Index (IVI), in seasonally adjusted terms, there were 91,400 newly lodged job advertisements in May 2020. The number of job advertisements lodged increased by 21,700 (or 31.1 per cent) over the month but remained down by 87,800 (or 49.0 per cent) over the year to May 2020.

Chart 13: IVI time series

Source: NSC, IVI, Seasonally adjusted and Trend
The Internet Vacancy Index (IVI)

The monthly IVI is the only source to provide a consistent time series of online job advertisements published monthly at detailed levels of occupations and regions in Australia.

The IVI is based on a count of online job advertisements newly lodged on SEEK, CareerOne and Australian JobSearch during the month. Duplicate advertisements are removed before the IVI job advertisements are coded to occupations based on the Australian and New Zealand Standard Classification of Occupations (ANZSCO) and 37 best fit regions across the states and territories. The data is seasonally adjusted, trended and then indexed (January 2006 = 100).

The IVI does not reflect the total number of job advertisements in the labour market as it does not include jobs advertised through other online job boards, employer websites, or in newspapers. Nor does it take account of vacancies filled using informal methods such as word of mouth.

NSC research shows that around one fifth of vacancies are not advertised, with employers instead using informal networks, or selecting from job seekers who have directly approached them about job opportunities.
Job advertisements by region

Over the year to May 2020, job advertisements decreased across all states and territories. Victoria recorded the strongest decline (down by 56.5 per cent), followed by New South Wales (53.5 per cent), Tasmania (50.6 per cent), Queensland (42.6 per cent) and South Australia (37.4 per cent).

Over the same period, in three month moving average terms, job advertisements decreased across all 37 IVI regions. The decline in job advertisements was stronger on average in capital cities (50.9 per cent) compared with regional areas (33.1 per cent).

Job advertisements by occupation

Job advertisements increased in all eight broad occupational groups in the month of May, however, the strongest increases were recorded for Sales Workers (up by 70.8 per cent), followed by Community and Personal Service Workers (52.6 per cent) and Managers (46.5 per cent).

Falls were recorded in all occupational groups over the year to May 2020. The strongest falls were recorded for Clerical and Administrative Workers (down by 58.7 per cent), followed by Sales Workers (56.2 per cent) and Managers (55.2 per cent).

All 48 detailed occupational groups recorded falls in job advertisements. The largest decrease was recorded for General-Inquiry Clerks, Call Centre Workers, and Receptionists (down by 7410 job advertisements), followed by Business, Finance and Human Resource Professionals (6190), Corporate Managers (5790), Information and Communication Technology Professionals (5600) and Sales Assistants and Salespersons (4570).

Other measures of job advertisements

The uptick in job advertisements recorded in the May 2020 IVI data, is in line with similar labour market indicators:

- According to the ANZ Job Advertisement Series, in seasonally adjusted terms, the total number of jobs advertised in major metropolitan newspapers and on the internet (based on data from SEEK and Australian JobSearch) increased by 0.5 per cent in May 2020.
- According to the SEEK Employment Report, in seasonally adjusted terms, the number of jobs advertised on SEEK increased by 39.7 per cent during May 2020.

Where to get more IVI information

The IVI is published on the Labour Market Information Portal. Products include data files of the IVI along with the Vacancy Report, which documents and analyses each month’s release.

Data visualisations of the IVI are also available via the Labour Market Information Portal Tableau channel.
1.6 Jobs in demand

Since early April, the NSC has conducted the Jobs in Demand employer survey. The survey is based on employer contacts in five major employing industries — Manufacturing, Wholesale trade, Retail trade, Transport, Postal and Warehousing, and Health Care and Social Assistance. Around 5700 employers, who were seeking to fill around 3500 vacant positions, were interviewed between 7 April and 12 June 2020.

Positively, the proportion of businesses recruiting is increasing, in line with the easing of COVID-19 restrictions. Just 7.7 per cent of business were recruiting at the start of April 2020. This has now risen for seven consecutive weeks, to 23.9 per cent in the week ending 12 June 2020. Recruitment activity has increased across all surveyed industries compared with the start of April.

Chart 15: Proportion of employers recruiting

Recruitment trends have varied across the states and territories. The Northern Territory had the highest recruitment rate (29 per cent of employers recruiting) followed by the Australian Capital Territory (23 per cent). Notably, the lowest recruitment rates tended to be in the larger states. New South Wales had the lowest recruitment rate (14 per cent), followed by Victoria and Western Australia (both 15 per cent).

The most commonly mentioned occupations that employers have been recruiting for since 7 April 2020 include retail sales assistants, truck drivers, child carers, receptionists, managers and registered nurses.

Despite relatively low recruitment rates and an increase in the number of job seekers since the start of COVID-19, around 30 per cent of recruiting employers were having (or expected to have) difficulty filling their vacancies. ‘Lack of applicants’ was the most common reason (mentioned by 44 per cent of employers having difficulty recruiting), followed by ‘applicants lack experience’ (27 per cent), the ‘location’ of the vacancy and ‘applicants lack technical skills’ (both 20 per cent).
Employers were also asked about the technical skills they were looking for in applicants — that is, the abilities and knowledge needed to perform specific tasks. The skills in greatest demand were often directly linked to the job role, highlighting again the importance of relevant experience when applying for jobs and the vital role of workplace experience during training. The technical skills most commonly mentioned included: assisting and caring for others; customer and personal service; operating vehicles, mechanised devices, or equipment; controlling machines and processes; and selling or influencing others.

For more information on the Jobs in Demand employer survey, and further labour market information relating to COVID-19, see the Labour Market Information Portal (LMIP) at https://lmip.gov.au/. The Jobs Hub (https://www.dese.gov.au/covid-19/jobs-hub) website also provides an up-to-date list of some of the businesses and organisations currently hiring and how to contact them if you are looking for work, as well as the latest information on jobs by location.

The skills in greatest demand were often directly linked to the job role, highlighting again the importance of relevant experience when applying for jobs …
The importance of data to aid recovery

- **Varied support** needed through stages of recovery
- **Matching skills and jobs** critical in changing market
- **Skills transferability** requires increased focus
- **JEDI** provides intelligence on skills needs
- **Australian skills classification** builds skills profiles
- **Around 600** skills profiles developed
- **Skills profiles** comprise core competencies, specialised tasks and technology tools
Part 2
Matching skills and jobs post-COVID-19

2.1 Understanding skills needs critical for economic recovery

The labour market has experienced major disruption and while signs of recovery are emerging, uncertainty remains around when demand will pick up and what jobs will be most in demand.

Matching workers to jobs in this uncertain and evolving environment will require the ability to quickly identify skills needs and retrain people for jobs that are in demand.

More than ever, the focus on skilling and re-skilling displaced workers will be essential to the recovery of the jobs market and our economy.

Improved efforts on job matching and connecting job seekers with job opportunities through an increased focus on skills transferability and mid-career change will help get people back into jobs.

Identifying training options that can link to a variety of jobs provides a degree of insurance against uncertainty during such periods of rapid labour market change. New machine learning techniques, such as those used by the Jobs and Education Data Infrastructure project (JEDI, see 2.2) make this sort of analysis possible. These techniques can also identify additional training needed to open up new employment options for people seeking new jobs, and to identify pathways to new employment opportunities that take advantage of a job seeker’s existing skills.

Gradual recovery will require diverse support

Australia’s economy and jobs market will take time to rebound from the impacts of COVID-19 and will require varied support throughout the stages of economic recovery.

Businesses in some industries most severely affected by the restrictions, such as retail and hospitality, are gradually reopening and transitioning to new ways of working. However, many businesses in the arts and recreation are still on hold, while tourism and travel are likely to be significantly affected for some time yet. There is also evidence that the impacts are yet to flow through to some businesses. For example, construction (housing in particular) and manufacturing businesses are reporting fewer orders and projects in the pipeline9. That said, governments introducing or bringing forward infrastructure projects, and the new HomeBuilder program supporting jobs in the residential construction sector, will help the construction industry remain an important source of jobs for Australians now and into the future. Many businesses will need to continue to adapt their business models, approaches and ways of working. This may also include developing new products and services.

While there will be some significant changes in the jobs market, health care and social assistance will continue to be the largest employing industry across the country. Retail, accommodation and food services, education and training, and manufacturing industries will continue to provide many jobs, even if some of these jobs need to change to meet future needs. The professional and technology sector has shown resilience through the impacts of COVID-19 and there is evidence it could grow in importance and provide greater employment opportunities in the future. Overall, at the time of writing, there are some initial signs that business confidence and the jobs market may soon start to improve as a result of positive health outcomes, government assistance and the gradual easing of restrictions.

In the longer-term, Australia’s labour market recovery depends on many factors, including responses to future outbreaks of the COVID-19 virus, the demand for products and services, investment and broader global conditions.

2.2 Matching skills and jobs — an introduction to JEDI

JEDI is a flagship NSC project that will deliver world-leading intelligence on skills needs.

By harnessing the best and widest range of labour market, skills and education data available, JEDI can identify what skills from a person’s current or previous employment can transfer to different jobs that use similar skills. It also identifies skill gaps between the different jobs recommended before showing VET courses available to fill the gap.

Using data science, JEDI is pioneering a new approach to skills-based labour market analysis that is helping:

- people planning their career and exploring study options
- businesses looking at their workforce plan
- training providers designing courses.

JEDI also provides a single comprehensive source of up-to-date information enabling the NSC to provide relevant, timely and accessible information to better understand the needs of a changing economy.
Building skills profiles with the Australian Skills Classification

As part of the JEDI project, the NSC (and its forerunners in the Department) has developed a data-driven Australian Skills Classification. It enables exploration of the connections and transferability within, and between, jobs and qualifications.

So far, around 600 skills profiles have been developed for occupations in the Australian labour market. For each of these jobs, the classification presents core competencies, specialised tasks and technology tools.

Figure 1: The make-up of skills profiles

So far, around 600 skills profiles have been developed for occupations in the Australian labour market.
2.3 Core competencies — importance of a set of base transferable skills

What is a core competency?

Core competencies are the basic building blocks common across most occupations and industries. They describe a set of non-specialist skills gained in early life and schooling and provide a base to further develop skills and specialties. Popular terms for these include ‘foundation skills’, ‘common skills’, ‘soft skills’, ‘core skills’ and ‘employability skills’.

Understanding the importance of core competencies in jobs is particularly important for young people, who are yet to develop other specialist skills required for different occupations.

As part of the Australian Skills Classification work, the NSC identified 10 core competencies required for every occupation in Australia.

Table 5: Australian Skills Classification core competencies

<table>
<thead>
<tr>
<th>Competency</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teamwork</td>
<td>Working effectively with others and personally connecting with others for work and learning.</td>
</tr>
<tr>
<td>Initiative and innovation</td>
<td>Taking on responsibilities and challenges, being able to start up and carry out projects and generating options to cope with changes.</td>
</tr>
<tr>
<td>Planning and organising</td>
<td>Developing specific goals and plans to prioritise, organise and complete work and learning.</td>
</tr>
<tr>
<td>Oral communication</td>
<td>Talking to others to convey information effectively, giving full attention to what other people are saying and understanding the conversation.</td>
</tr>
<tr>
<td>Digital literacy</td>
<td>Identifying and using technology (including hardware and software) confidently, creatively and critically.</td>
</tr>
<tr>
<td>Reading</td>
<td>Interpreting, comprehending and interacting with written words.</td>
</tr>
<tr>
<td>Writing</td>
<td>Communicating effectively in writing as appropriate for the needs of the audience.</td>
</tr>
<tr>
<td>Problem solving</td>
<td>Identifying problems and reviewing related information to develop and evaluate options and implement solutions.</td>
</tr>
<tr>
<td>Learning</td>
<td>Understanding the implications of new information for both current and future problem-solving and decision-making.</td>
</tr>
<tr>
<td>Numeracy</td>
<td>Understanding numbers and using mathematics to solve problems.</td>
</tr>
</tbody>
</table>

Source: NSC analysis
The purpose of identifying core competencies

Core competencies are highly desired by employers. A 2019 survey of employers asked about the importance of personal skills, which are a key component of employability skills. The survey results indicated that 75 per cent of employers considered personal skills to be as important, if not more important, than specialist skills\(^\text{10}\).

Core competencies developed from previous jobs can also be applied to other jobs. To help inform this understanding, the Australian Skills Classification shows the importance of each core competency across different occupations in the Australian labour market. A rating scale for the importance of each of the core competencies is currently being refined and measure descriptions for the scale are being developed.

Analysis in action: core competencies heat map

Figure 2 shows how important each core competency is in some of the largest employing occupations in Australia\(^\text{11}\). The colours compare the level of importance of each skill across occupations. The rank (1 to 10) indicates the importance of each core competency within an occupation. For example, for Truck Drivers, planning and organisation is the most important core competency, whereas for Sales Assistants, the most important core competency is teamwork. Registered Nurses have high importance for 70 per cent of the core competencies, whereas core competencies are less important (but still necessary) for Commercial Cleaners.

Figure 2: Importance of core competencies across 10 largest employing occupations

<table>
<thead>
<tr>
<th>Core competencies</th>
<th>Checkout Operators and Office Cashiers</th>
<th>Receptionists</th>
<th>Commercial Cleaners</th>
<th>Accountants</th>
<th>Truck Drivers</th>
<th>Aged and Disabled Carers</th>
<th>Retail Managers</th>
<th>Registered Nurses</th>
<th>General Clerks</th>
<th>Sales Assistants</th>
<th>General Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teamwork</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>10</td>
<td>8</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Initiative and Innovation</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>6</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Planning and organising</td>
<td>7</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Oral communication</td>
<td>2</td>
<td>5</td>
<td>4</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Digital literacy</td>
<td>5</td>
<td>1</td>
<td>9</td>
<td>1</td>
<td>9</td>
<td>10</td>
<td>6</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Reading</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>7</td>
<td>3</td>
<td>6</td>
<td>9</td>
<td>6</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Writing</td>
<td>9</td>
<td>7</td>
<td>8</td>
<td>5</td>
<td>6</td>
<td>5</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Problem solving</td>
<td>10</td>
<td>9</td>
<td>7</td>
<td>8</td>
<td>5</td>
<td>8</td>
<td>5</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Learning</td>
<td>8</td>
<td>8</td>
<td>5</td>
<td>9</td>
<td>7</td>
<td>7</td>
<td>10</td>
<td>9</td>
<td>9</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Numeracy</td>
<td>3</td>
<td>10</td>
<td>10</td>
<td>4</td>
<td>10</td>
<td>9</td>
<td>8</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

Importance: Low, Medium, High

Source: NSC analysis


\(^{11}\) Top 10 largest employing occupations based on ABS Labour Force survey, Detailed, Quarterly, February 2020, (Cat. No. 6291.0.55.003).
2.4 Specialised tasks

What is a specialised task?
A specialised task is a work activity a person undertakes specific to a job. These are specialist tasks required to be performed for specific jobs, and expressed in the way employees and employers talk about how work is done in the workplace.

The purpose of identifying specialised tasks
The Australian Skills Classification identifies specialised tasks for around 600 occupations in the Australian labour market in a way that allows these tasks to be compared across different occupations. This information identifies how specialised tasks in one job can be transferred to another — enabling specialised tasks gaps to be identified. These gaps could be met by multiple pathways such as learning on the job, short courses or accredited training.

Transferability of specialised tasks
Understanding the transferability of specialised tasks is important for students and workers at all stages of their career. It can open people’s eyes to other jobs that might use their skills and help them choose education and training pathways that align to their interests and areas of demand into the future.

Figure 3 shows how the specialised skills a Beauty Therapist has, such as client assistance and record management, can transfer to a Youth Worker. These are called transferable skills: the building blocks to help a person move to a new, higher paid job projected to grow. However, to transition to a new role, some specific skills gaps need to be addressed. Youth Workers also usually require a qualification such as a Certificate IV in Youth Work or a Diploma of Youth Work.

Having successfully attained the skills necessary to become a Youth Worker, multiple career pathways open up. These pathways include jobs in community care, allied health and human care, community justice and safety and other social professions.

Figure 3: Transferable skills between Beauty Therapist and Youth Worker (VET)

Source: NSC analysis
2.5 Digital literacy and technology tools

What is a technology tool?

A technology tool is software that enables a person to perform tasks related to an occupation. We use technology tools to perform many tasks in our daily lives including using the internet, sending emails, texts or instant messages, and connecting remotely with video conferencing.

Technology tools range from those more basic and commonly used, such as search engines and email, to highly specialised and occupation-specific tools like computer aided design (CAD) and accounting software.

The Australian Skills Classification provides a list of technology tools used across different occupations. Of the top 20 most commonly used technology tools across all jobs in the Australian economy, the most demanded is data base user interface and query software, which is used in more than 40 per cent of jobs (see Chart 17). This software accesses information stored in a data base and includes the use of a worker using online search engines, a librarian cataloguing books, or a postal delivery driver requesting a list of delivery locations.

Chart 17: Top 20 most demanded software technology tools across all jobs in the Australian economy

<table>
<thead>
<tr>
<th>Technology Tool</th>
<th>% of use across all occupations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data base user interface and query</td>
<td>43%</td>
</tr>
<tr>
<td>Word processing</td>
<td>34%</td>
</tr>
<tr>
<td>Spreadsheet</td>
<td>34%</td>
</tr>
<tr>
<td>Electronic mail</td>
<td>32%</td>
</tr>
<tr>
<td>Office suite</td>
<td>31%</td>
</tr>
<tr>
<td>Enterprise resource planning (ERP)</td>
<td>27%</td>
</tr>
<tr>
<td>Project management</td>
<td>26%</td>
</tr>
<tr>
<td>Presentation</td>
<td>23%</td>
</tr>
<tr>
<td>Accounting</td>
<td>22%</td>
</tr>
<tr>
<td>Operating system</td>
<td>21%</td>
</tr>
<tr>
<td>Graphics or photo imaging</td>
<td>20%</td>
</tr>
<tr>
<td>Medical</td>
<td>20%</td>
</tr>
<tr>
<td>Internet browser</td>
<td>20%</td>
</tr>
<tr>
<td>Calendar and scheduling</td>
<td>18%</td>
</tr>
<tr>
<td>Human resources</td>
<td>17%</td>
</tr>
<tr>
<td>Customer relationship management (CRM)</td>
<td>17%</td>
</tr>
<tr>
<td>Web page creation and editing</td>
<td>17%</td>
</tr>
<tr>
<td>Financial analysis</td>
<td>16%</td>
</tr>
<tr>
<td>Document management</td>
<td>15%</td>
</tr>
<tr>
<td>Time accounting</td>
<td>15%</td>
</tr>
</tbody>
</table>

Source: NSC analysis
Of the around 600 occupations within the skills classification, more than 75 per cent have at least one technology tool relevant to the occupation. Even for occupations that require limited use of technology tools in day-to-day work, they still are an important part of performing tasks in that job successfully.

The most used technology tools for a Truck Driver (see Figure 4) demonstrate that even though the primary task is driving a truck, technology tools support Truck Drivers to more efficiently and effectively perform other tasks, such as managing inventory and route planning.

**Figure 4: Technology tools used by Truck Drivers**

<table>
<thead>
<tr>
<th>Technology tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory management software</td>
</tr>
<tr>
<td>Data base user interface and query software</td>
</tr>
<tr>
<td>Industrial control software</td>
</tr>
<tr>
<td>Materials requirements planning logistics and supply chain software</td>
</tr>
<tr>
<td>Office suite software</td>
</tr>
<tr>
<td>Route navigation software</td>
</tr>
<tr>
<td>Spreadsheet software</td>
</tr>
</tbody>
</table>

Source: NSC analysis

Given the constant evolution of technology and the many occupations that now rely on these tools to perform tasks in a productive manner, use of technology tools will continue to grow and be a key part of participating successfully in the labour market.

**Example: How JEDI can assist hospitality workers**

The hospitality sector was significantly affected by COVID-19 due to restrictions, such as social distancing, imposing on their operations. Many workers across this sector are looking for new jobs.

Like all jobs, those in hospitality require a mix of core competencies, specialised tasks and technology tools. JEDI can identify skills that hospitality workers have and illustrate how they can transfer to other jobs. For example, a Waiter could transfer their existing skills and experience to jobs such as Bar Attendants and Baristas, Pharmacy Sales Assistants, Information Officers and ICT Sales (see Figure 5).

By identifying transferable skills and skills gaps, we can also identify what job would be the easiest for a Waiter to transition into: a Bar Attendant or Barista. While this may be an easier transition, jobs for Bar Attendants and Baristas are not currently in demand. However, Information Officer jobs are currently more in demand, though require additional skills such as invoice processing, computer skills and problem-solving. While Information Officers do not require formal qualifications, the skills gaps could be bridged through courses such as a Certificate III in Customer Engagement, or possibly even through on-the-job training.
Figure 5: Potential job transition options for a Waiter with a skills comparison

Source: NSC analysis
The NSC’s future focus on the labour market

Over the next 12 months, the NSC will build on its initial research to develop an in-depth understanding of current and future labour market conditions and skills needs.

The NSC will use both traditional and new data sources and techniques such big data and machine learning approaches, as well as more traditional economic and skills analysis.

Key research areas of focus for the NSC will include:

- assessing the nature of labour market recovery
- determining skills shortages or surplus
- analysing the structural shifts that are occurring in the labour market
- identifying current, emerging and future skills needs.

The NSC is currently undertaking CGE (computable general equilibrium) scenario modelling to provide a picture of what the labour market will look like — including by regions and occupations — as we continue to recover from the COVID-19 shock. This modelling will help inform the NSC’s work in determining likely labour market needs.

Reflecting the significant uncertainties involved in forecasting and modelling at the current point in time, the NSC’s work will be supplemented by analysis of real-time data and surveys of employers.

During the initial stage of the economy’s recovery from COVID-19 we will also continue to survey employers about jobs in demand and future staffing expectations.

The NSC will continue to publish the monthly IVI, which provides a consistent time series of online job advertisements published monthly at detailed levels of occupations and regions in Australia.

Linking the work above to the JEDI project will mean the NSC will be able to present a picture of the labour market that extends from sectors and occupations to specific skills and training needs.

This, combined with innovative approaches such as ‘Nowcasting’ and new tools created through JEDI will — over time — enable the NSC to develop robust intelligence on Australia’s labour market, our workforce, and current and emerging skills needs.

The NSC will also engage with industry, education and training providers and other stakeholders to ensure this work has a ‘real world’ focus and is relevant.

Overall it is designed to help lay the foundations to build a modern education and training system that prepares Australia and Australians for the challenges of today and tomorrow.
Introducing Nowcasting

To complement existing labour market analysis, the NSC will develop an innovative Nowcasting capability. Nowcasting will enable analysis of labour market trends in near real-time to provide a more timely, accurate and granular view of what is happening in the labour market by harnessing traditional and new sources of data:

- Nowcasting bridges the gap between the collection and release of traditional macroeconomic data, which often arrives with a substantial time lag. This lag means it is often difficult to discern what is happening in the present — this is particularly critical during events like COVID-19.
- The current COVID-19 shock has had a sharp impact on the labour market, with a large rise in unemployment, underemployment (reduced hours of work), loss of income and delays in the study to work transition for many young Australians.
- Nowcasting the labour market in near real-time will facilitate a better targeted and more effective policy response that can help alleviate the specific issues facing job seekers in the short-to medium-term and return them to work.

Annual State of the Skills report

The NSC’s work will culminate in an annual State of the Skills report.

The report will consolidate and strengthen labour market and skills needs analysis, providing an independent and trusted source of information about what is happening in the Australian labour market now and into the future.

This report will be a resource for:

- business and training providers to draw on to inform workforce planning
- the National Careers Institute to assist individuals to make informed decisions about learning, training and work pathways
- students to make informed decisions about their future, based on better information about their job prospects and incomes
- Australian governments, as a robust basis for policy development.
Real-time analysis will inform decisions

By using real-time labour market research and analysis to inform governments, education providers, businesses and individuals, Australia will be better equipped to respond to economic changes and supply the skills that are in demand — the key to our recovery and growth.

The NSC has begun this analysis by using real-time job advertisement data from analytics software company, Burning Glass Technologies.

As a sample case, the NSC examined two occupations that were adversely affected by COVID-19 and saw a decline in job advertisements: Hairdressers and Sales Representatives. By comparing the number of job advertisements each week for these occupations, early trends in recovery rates can be seen.

While demand for Sales Representatives has risen since its low point in late April, the demand for Hairdressers has increased at a much faster rate, with more job ads in the final week of May than any other point in 2020.

Chart 18: Occupations with large annual decreases in job advertisements, May 2020

As government restrictions continue to ease, real-time labour market information will help identify the occupations experiencing a slow recovery. It will also give an indication of the occupations in high demand requiring more skilled workers.
Appendix 1: Resources for job seekers

While many jobs across Australia have been adversely affected by COVID-19, some areas of the economy have seen an increase in demand. This includes jobs in the health and care sectors, transport, logistics and some areas of retail, mining and mining services, manufacturing, agriculture and government sectors, among others.

To support job seekers in this rapidly changing economy, the government has developed new resources to help link employers and job seekers.

**Job Outlook website**

Job Outlook ([www.joboutlook.gov.au](http://www.joboutlook.gov.au)) is the Australian Government’s online guide to occupations and trends in the labour market. The detailed information and tools on Job Outlook have been supporting people to make decisions about job search, study or training for more than 20 years.
Job Outlook website (continued)

Designed to educate, inform, inspire and enable, Job Outlook assists people at all ages and all stages in their working life to find jobs that match their interests, experience and skillset. In addition to supporting career exploration, Job Outlook is a trusted, reliable, and comprehensive source of information for anyone with an interest in occupations in the Australian labour market. Job Outlook has useful information on more than 1000 occupations, including job tasks, pathways, typical experience and qualifications, required skills, future prospects, and pay.

Skills Match on Job Outlook can help people identify skills from their past jobs, and to get ideas for new jobs that use their skills. Skills Match is also a useful resource to help build a résumé and provides language around skills that can be used in discussions with employers. Many people do not realise the skills they have built in one job can be useful in many other jobs and industries. Skills Match helps users explore transitions they may have not otherwise considered. Skills Match also shows the training or skills a person might need to build on to move into a new career.

Skills Match importantly includes the ability to filter new job ideas by physical demand, so people can explore careers matched to their skillset and experience, and taking into account their physical capabilities. This feature complements the detailed career information on the website. Each occupation profile includes descriptions of the typical work environment, so people can understand the likely physical or social demands they may face in different careers, including physical proximity to others.
A dedicated COVID-19 page has been added to Job Outlook to provide targeted information that can help people who have been affected by the pandemic.

As the jobs in demand change and our economy recovers, it is vitally important that people looking for work understand their skills and job preferences. This is especially the case when the future direction of the jobs market is uncertain. The Future Outlook page on Job Outlook provides general information about the future of the labour market. This page has been updated to reflect the current uncertainty.

The Future Outlook page provides information about key industries likely to maintain strong employment levels. This page also encourages flexibility and self-driven job and career search by providing information to support identification of transferable skills, and assisting users to explore their work preferences. Through its linkages to the content on Job Outlook, this page helps people understand:

- the jobs available now and in the future
- the skills needed for jobs that interest them
- their interests and how they like to work.
Jobs Hub

Jobs Hub (https://www.dese.gov.au/covid-19/jobs-hub) enables people to search jobs in demand by location and connect directly to a job vacancy on the Department of Education, Skills and Employment website. It helps job seekers by identifying jobs that require similar skill sets and experience to the job they originally searched for, broadening their pool of job opportunities.

For example, by identifying the mix of core competencies and specialised skills of an Advertising and Sales Manager (see Chart 19), Jobs Hub is able to then show jobs with current vacancies that have similar skills such as Sales Representative, ICT Sales Professional, ICT Manager, Contract and Program Administrators and Health and Welfare Managers.

Chart 19: Specialised skills of an Advertising and Sales Manager

Source: Burning Glass Technologies, NSC analysis

Jobs Hub enables people to search jobs in demand by location and connect directly to a job vacancy on the Department of Education, Skills and Employment website.
Once the transferable skills have been identified to move from one job to another, skills gaps can then be identified along with the reskilling and upskilling that will be required.
Chart 20 demonstrates what skills would be needed to transition from an Advertising and Sales Manager to an ICT Manager.

Chart 20: Transferable skills and skills gap (Advertising and Sales Manager and ICT Manager)

The NSC is working towards being able to match skills gaps with a training course or qualification.