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Information sourced from the Australian Government Jobs 2016 Guide
There are 19 broad industry sectors in Australia and 16 of these industries are expected to increase their employment over the next five years. Health Care and Social Assistance is expected to provide the largest contribution (250,200 new jobs or one in every 5 new jobs), followed by Professional, Scientific and Technical Services (173,000), Education and Training (121,700) and Accommodation and Food Services (98,800). Together, these four industries are projected to provide around half of all new jobs.

Where are the new jobs?

Over the five years to November 2015, more than 700,000 jobs were created. The largest growth was in:

- Health Care and Social Assistance (up by 256,600)
- Professional, Scientific and Technical Services (173,000)
- Education and Training (88,100)
- Retail trade (66,100)

### Employment by Industry

<table>
<thead>
<tr>
<th>Industry</th>
<th>Employment</th>
<th>Part-time</th>
<th>Female</th>
<th>Part-time</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodation and Food Services</td>
<td>239,100</td>
<td>116,300</td>
<td>43,300</td>
<td>47,200</td>
<td>23,200</td>
</tr>
<tr>
<td>Professional and Support Services</td>
<td>270,500</td>
<td>141,500</td>
<td>50,300</td>
<td>54,000</td>
<td>27,000</td>
</tr>
<tr>
<td>Agriculture, Forestry and Fishing</td>
<td>92,000</td>
<td>31,500</td>
<td>5,500</td>
<td>5,900</td>
<td>1,600</td>
</tr>
<tr>
<td>Arts and Recreation Services</td>
<td>114,400</td>
<td>51,000</td>
<td>13,300</td>
<td>13,800</td>
<td>6,700</td>
</tr>
<tr>
<td>Construction</td>
<td>137,200</td>
<td>68,000</td>
<td>18,000</td>
<td>18,500</td>
<td>9,500</td>
</tr>
<tr>
<td>Education and Training</td>
<td>328,600</td>
<td>163,000</td>
<td>44,300</td>
<td>48,800</td>
<td>23,000</td>
</tr>
<tr>
<td>Electricity, Gas, Water and Waste Services</td>
<td>103,500</td>
<td>41,500</td>
<td>9,000</td>
<td>9,400</td>
<td>2,500</td>
</tr>
<tr>
<td>Energy, Water and Waste Services</td>
<td>133,100</td>
<td>64,400</td>
<td>15,800</td>
<td>16,300</td>
<td>7,500</td>
</tr>
<tr>
<td>Financial and Insurance Services</td>
<td>146,800</td>
<td>68,700</td>
<td>17,800</td>
<td>18,300</td>
<td>9,500</td>
</tr>
<tr>
<td>Information Media and Telecommunications</td>
<td>123,300</td>
<td>61,500</td>
<td>15,300</td>
<td>15,800</td>
<td>7,900</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>256,700</td>
<td>128,200</td>
<td>35,300</td>
<td>36,800</td>
<td>17,800</td>
</tr>
<tr>
<td>Mining</td>
<td>267,400</td>
<td>133,300</td>
<td>34,700</td>
<td>36,200</td>
<td>17,800</td>
</tr>
<tr>
<td>Other Services</td>
<td>168,600</td>
<td>84,200</td>
<td>22,000</td>
<td>23,500</td>
<td>11,500</td>
</tr>
<tr>
<td>Top Occupations</td>
<td>2,973,600</td>
<td>1,440,300</td>
<td>380,300</td>
<td>395,300</td>
<td>196,300</td>
</tr>
<tr>
<td>All industries</td>
<td>3,554,000</td>
<td>1,691,800</td>
<td>381,000</td>
<td>396,500</td>
<td>197,000</td>
</tr>
</tbody>
</table>

### Health Care and Social Assistance Industry Sector Overview

Health Care and Social Assistance is Australia’s largest employing industry and one of the strongest growing. Its over 1.5 million workers account for 13% of national employment.

Over the five years to November 2015, employment grew by 20.3% (or 256,600). New jobs were created in all subsectors, but most were in Medical and Other Health Care Services (up by 142,100) with Social Assistance Services also adding a significant number (75,800).

Over the five years to November 2020, employment is expected to increase in the Health and Social Assistance industry by 250,200 (or 16.4%).

### Employment Projections

<table>
<thead>
<tr>
<th>Employment Profile</th>
<th>Employment Nov 2015</th>
<th>5 year change to Nov 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part-time Female</td>
<td>45%</td>
<td>31%</td>
</tr>
<tr>
<td>Female</td>
<td>32%</td>
<td>24%</td>
</tr>
<tr>
<td>Aged 15 to 24 years</td>
<td>10%</td>
<td>16%</td>
</tr>
<tr>
<td>Aged 25 to 44 years</td>
<td>43%</td>
<td>39%</td>
</tr>
<tr>
<td>Aged 45 years or older</td>
<td>34%</td>
<td>34%</td>
</tr>
<tr>
<td>Regional</td>
<td>34%</td>
<td>34%</td>
</tr>
</tbody>
</table>

### Top 5 Occupations

- Registered Nurses: 238,600
- Child Carers: 117,400
- Nursing Support and Personal Care Workers: 85,800
- Receptionists: 85,500
- Aged and Disabled Carers: 128,700

The health and care assistance workforce provides opportunities for people from all backgrounds and workloads, however, it is largely female dominated and there are good opportunities for part-time employment.

Workers in the Health Care and Social Assistance industry are generally highly skilled. At least four in five workers have completed post-school study and 44% have a bachelor degree or higher qualification, reflecting the requirements for entry to many of the major occupations in this sector. A high proportion of workers are Professionals (almost twice the national average).

### Sources

ABF, Labour Force (trend and annual averages of original data); ABS, Education and Work; Department of Employment, Industry Employment Projections

**Australian Industry Employment Overview**

**Health Care and Social Assistance Industry Sector Overview**

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**Note:** Employment data includes people who work at least one hour in the reference week and those who did not work any hours but worked in the year to November 2015.

**Note:** Total employment figures are based on fallow employees in full-time and part-time employment situations.

**Note:** Part-time and full-time employment data are based on full-year and part-year work activity patterns at time of counting.

**Note:** Any changes or comparisons in employment figures are made using calendar years or financial years, unless otherwise stated.
How do I use the Matrix on page 6?

Information in the Occupation Matrix is as up-to-date as possible, but the labour market can change quickly and conditions vary by location and sector. These data can be highly variable, and should be used with caution.

The Matrix gives information about the labour market aspects of occupations, which is useful background. More detailed information for each occupation is available on the Job Outlook website (joboutlook.gov.au).

Employment and training decisions should be based on a balanced assessment of all relevant issues, including

Titres in the Matrix are arranged in alphabetical order and some are duplicated to make them easier to find. Similar occupations may also be clustered together with their titles reversed, for example Secondary School Teacher is listed under Teacher, Secondary School. The relevant occupation major group is listed in brackets after each title.

Key Occupation

M Managers
P Professionals
TT Technicians and Traders Workers
CP Community and Personal Service Workers
CA Clerical and Administrative Workers
SW Sales Workers
MO Machinery Operators and Drivers
L Laborers

Employment and Employment Change

The Employment information gives the total number of people employed in the occupation at November 2014. It includes both full-time and part-time workers.

Employment Change shows the change in the number employed as well as the percentage change in employment over the five years to November 2014. Employment change refers to levels of employment increasing or decreasing.

Unemployment

The Unemployment Rate is the number of unemployed persons as a percentage of the labour force (employed plus unemployed). Unemployment is presented in three categories: below average, average and above average. These categories are based on the occupation’s average Unemployment Rate over 2014 relative to the average across ‘all occupations’.

An occupation may have high unemployment but also be experiencing shortages for particular skills. Occupational Unemployment Rates do not reflect underutilised skills (such as an Accountant working as a Clerk, Accounting), and does not include first job seekers or those who have not worked in the past two years.

Employment Profile – Part-time Employment Share

This column shows the proportion of workers who work part-time. The information uses the ABS definition of part-time, which is working less than 35 hours per week.

Employment Profile – Female

This shows the proportion of those employed in the occupation who are female.

Employment Profile – Median Age

The median age is expressed in years for all workers (part-time and full-time). The half workers are younger than this age and half are older.

Employment Profile – Median Earnings

Median weekly earnings uses five categories.

Key Median Weekly Earnings

$ ≤ $920

$921 to $1,080

$1,081 to $1,300

$1,301 to $1,700

$1,701 +

Median weekly earnings are before tax and are for full-time workers. The median earnings ranges are for all ages and levels of experience. They are indicative only and cannot be used to determine what a worker will actually earn.

These estimates do not provide any guidance about the number of job seekers in each occupation. Although there may be a large number of job openings, there may be an even larger numbers of job seekers. Occupations with small numbers of job openings may offer better prospects for suitably skilled applicants.

data sources

ABCC, Labour Force, ABS, Employee Earnings, Benefits and Trade Union Membership; Calculated from Department of Employment, Occupations Employment Projections and ABS, Labour Mobility
Which industries will have the most new jobs over the next five years?

Many industries are projected to increase their employment over the next five years, with the exception of Agriculture, Forestry and Fishing, Manufacturing and Mining.

The industries projected to grow most strongly are Health Care and Social Assistance (up by 16.4%), Professional, Scientific and Technical Services (14.8%), Education and Training (13%) and Accommodation and Food Services (12%).

Share of Projected Employment Growth by Industry Share – Nov 2015 to Nov 2020 (% of total growth)

Education and employment

More young people are undertaking post-school education

The number of young people undertaking tertiary study has increased over the past 10 years. Young people comprise on average 61% of university enrolments. People who hold higher level qualifications generally have better labour market outcomes and higher earnings than those who have not studied after leaving school.

For Australians who do not hold post-school qualifications

• unemployment rates are markedly higher
• participation rates are relatively low, especially for those who did not study beyond Year 10 (56.7%, the lowest rate).

Graduate employment outcomes

University graduates in the labour market

While higher level qualifications ultimately improve employment prospects, employment outcomes for students immediately after graduation have weakened in recent years. Graduate Careers Australia’s (GCA) data show that in 2015, 67.4% of bachelor degree and 82.9% of masters degree graduates who were available for full-time work had found full-time employment within four months of completing their studies.

Employed full-time four months after graduation

Bachelor degree graduates | Masters degree graduates
--- | ---
2015 | 67.4% | 82.9%
2014 | 66.3% | 83.4%
2013 | 66.5% | 82.0%
2012 | 68.0% | 83.8%
2012 | 69.1% | 84.4%

Sources: GCA, Graduate Destinations

Labour market outcomes by highest level of educational attainment, working-age population

- Bachelor degree or higher
- Advanced diploma/ diploma
- Certificate III and IV
- Year 12
- Year 11
- Year 10 or below

Unemployment Rate - LHS (%) | Participation Rate - RHS (%)
It is impossible to predict the future but to help us to understand possible futures for jobs and employment markets in Australia over the coming twenty years, towards 2035, a new report, Tomorrow's Digitally Enabled Workforce – megatrends and scenarios for jobs and employment in Australia over the next twenty years, has been released.

A brief summary of some key issues is presented on this page.

Megatrends
The report identifies Megatrends, or major changes that will shape business and policy. The Megatrends most relevant to labour market change are:
- growth in computing power, connectivity, data volumes and artificial intelligence
- changing employment markets and organisational structures
- the era of the entrepreneur
- divergent demographics
- continued growth of the service sector.

Implications
These Megatrends will affect the ways in which people manage their careers (and those of their children), the manner in which companies manage their workforces and how governments regulate and manage the labour market. A number of key issues are highlighted, including the following:
- Education and training is becoming more important. There will be increasingly fewer jobs in the service sector of the economy which do not require skills and/or post-school qualifications.
- New capabilities are needed for new jobs of the future. Lifelong education and training is required for Australians of all ages to meet the needs of new and different jobs and employment models.
- Digital literacy is needed alongside numeracy and literacy. Australians will need to be literate, numerate and digitally literate. These capabilities will be basic requirements for most jobs.
- The importance of Science, Technology, Engineering, and Mathematics (STEM) will change. STEM skills are likely to be needed in many of the better paid jobs of the future.
- New aptitudes and mindsets will be needed to handle a dynamic labour market. In tomorrow’s job market adaptability, resilience, buoyancy and entrepreneurial capabilities will be of increasing importance.
- Tapered retirement models will become more common. There is a need to develop tapered (and other new) retirement models that productively harness the skills of older workers and ensure positions are available for younger labour market entrants.

An historic level of change
There are several factors creating unique conditions, such as rapid advances in, and adoption of, digital technology:
- The full impact of growth in computing power, device connectivity, data volumes and artificial intelligence is yet to be felt within Australia’s labour market.
- The Internet is at the early stages of growth. In 2006 there were 2 billion smart connected devices, in 2015 there were 15 billion and by 2020 there will be 200 billion. Australia has high rates of internet access and mobile connectedness. This is likely to increase in regional areas.
- Internet access is growing globally. There will be increased competition for jobs that can be performed online.
- Rapid advances are being made in artificial intelligence.
- Cloud computing has arrived, enabling lean start-ups connecting diverse groups of workers.

Demographic change
- In the next decade Australia’s workforce will be older and more culturally diversified.
- Nearly one in five Australians is expected to be over 65 years old in 2035.
- More than 80% of migrants arriving each year are of working-age, while only 54% of the residents are of working-age.
- Mental ill-health is prevalent in the Australian population including in workers.
- Higher education enrolments are increasing and so are the costs.
- Online education is likely to continue to complement university. Free learning opportunities are increasing and more widely available.

Task automation
Task automation, or the extent to which robots and software will be able to do the work of humans, affects jobs. There is, however, a great deal of uncertainty about how much jobs will become automated.
- High automation is where the vast majority of human tasks are performed by robots. This creates job opportunities, and requires skills, that are very different from those that exist today.
- Low automation is where just some job tasks become automated, but many do not. In this future, the jobs and skills required are not too much different from now.

New jobs
Workers with a mix of technical skills and interpersonal aptitudes will have the best prospects for meaningful work. Jobs involving creativity, complex judgement, advanced reasoning, social interaction and emotional intelligence are likely to grow in the decades ahead, and are less likely to be affected by advances in automation and artificial intelligence.

The report presents six examples of new jobs that may be created in the coming years:
- Big Data Analysts
- Complex Decision Support Analysts
- Remote Controlled Vehicle Operators
- Customer Experience Experts
- Personalised Preventative Health Helpers
- Online Chaperones (managing risks with identity theft, reputational damage, social media bullying and internet fraud).
contact details and further information

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