

***AUSTRALIA'S FUTURE LABOUR MARKET
MYTHS AND REALITIES***

FACTSHEET
**WILL ALL NEW
JOBS BE HIGH-TECH,
HIGHLY SKILLED JOBS?**

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KEY POINTS

■ Much of the public discussion of work in the future focusses on the new jobs that will be created by technologies like artificial intelligence, robotics, cyber security and data. While these types of jobs hold exciting potential, they are likely to represent a relatively small proportion of the Australian labour market.

■ Jobs growth is likely to occur in many industries and parts of the labour market, but the health, aged and child care sectors are projected to experience the most growth over the next five years.

■ Technology will require a higher level of skill and knowledge generally across the labour market. However, in the short term, Australia is expected to experience jobs growth at all skill levels.

The skills needs of the Australian labour market have progressively been increasing for some time.¹

The average increasing level of skill has been driven by multiple factors:

- » Higher levels of skill have been required in sectors to operate and manipulate new technology. For example, in mining, as processes become increasingly automated.
- » Advances in technology are biased towards skills. Over the 20th century, technological development raised demand for skilled workers, resulting in more jobs and wage premiums.²
- » Shifts in the industry composition of employment has led to stronger growth in higher-skilled jobs in industries like professional services and lowest growth in lower-skilled jobs, such as machinery operators, labourers, and clerical workers.

The services sectors dominates the Australian labour market and this is projected to continue. The number of workers in these sectors is already a sizeable proportion of the labour force and the Department of Jobs and Small Business projects these sectors will continue to grow at a faster rate than other sectors. Over the next five years, the fastest-growing sectors are projected to be health, aged care and child care (14.9 per cent), education (11.2 per cent) and professional, scientific and technical services (10.2 per cent) (*Figure 1, overleaf*).

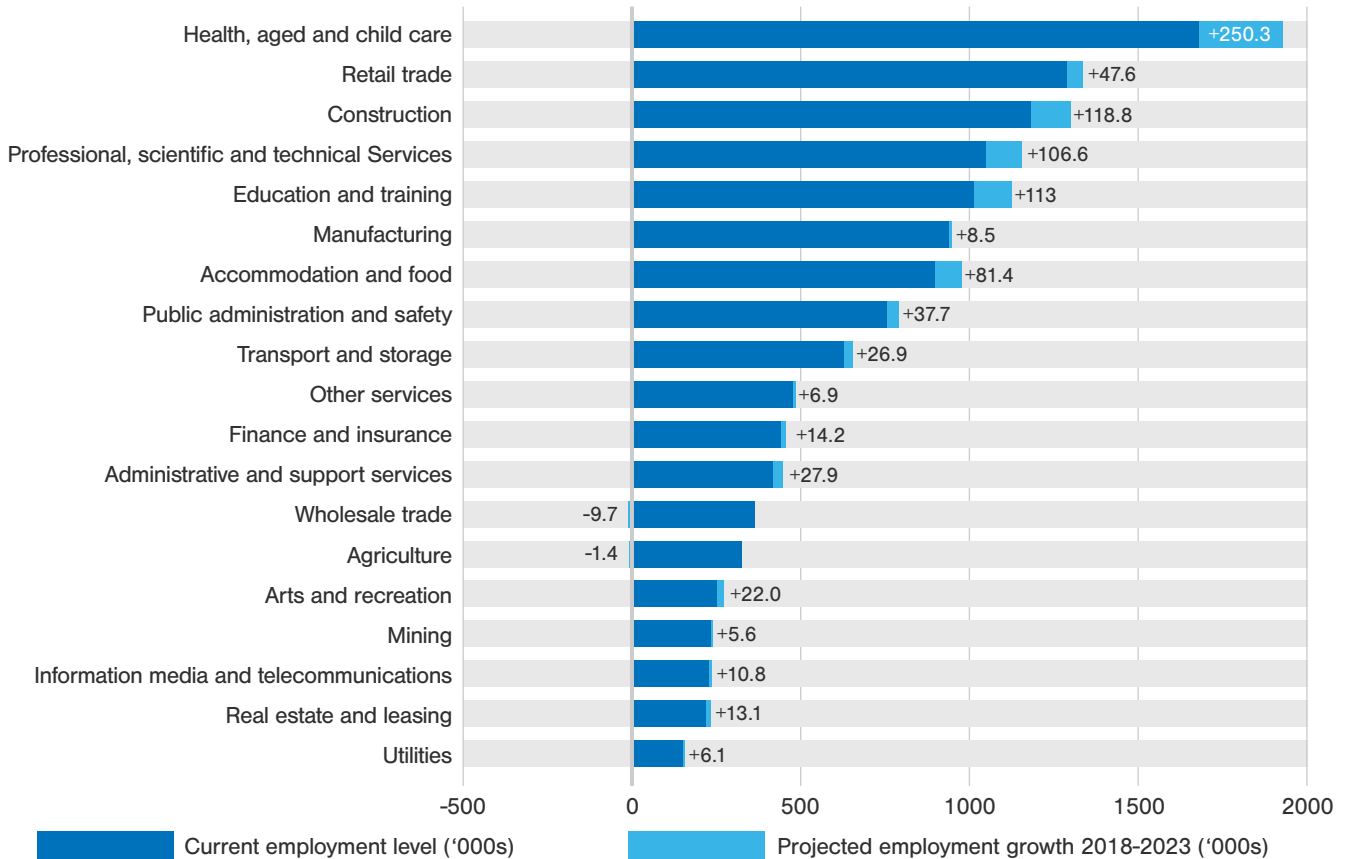
¹ R Adeney for the Reserve Bank of Australia, *Structural Change in the Australian Economy*, RBA Bulletin, 15 March 2018, <https://www.rba.gov.au/publications/bulletin/2018/mar/structural-change-in-the-australian-economy.html>

² There is some evidence that technological change in the 19th century was in fact biased against skills.

See D Acemoglu, 'Technical Change, Inequality and the Labor Market', *Journal of Economic Literature*, vol 40, no 1, March 2002.

Figure 1

Current employment levels by sector, and projected growth 2018 - 2023 (seasonally adjusted)



Source: Department of Jobs and Small Business, Industry employment projections for the five years to May 2023

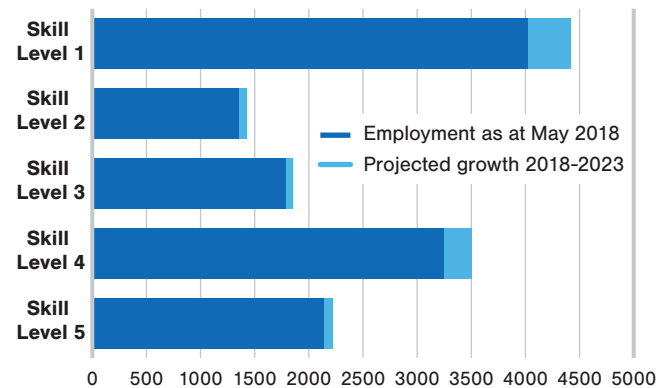
The projected growth in the health care and social assistance sector alone (an additional 250,000 people over five years) outnumbers the current size of some industries.

When we examine the projections by skill level, it is clear that there will continue to be strong growth at all skill levels – but especially the highest skill level (refer Figure 2, opposite).

Every one of the top 20 highest-employing occupations are projected to need more workers in five years' time than they employ today, even though the rates of growth will vary (see Figure 3 overleaf).

Figure 2

Projected employment growth 2018-23, by skill level (seasonally adjusted)


 Source: Department of Jobs and Small Business³

Notes: Jobs that require the highest amount of skill are Skill Level 1, the lowest Skill Level 5. See the final page for a detailed description of skill levels.

³ Department of Jobs and Small Business, Skill employment projections for the five years to May 2023

Figure 3

Top 20 highest employing occupations in Australia, 2018 and official projected highest employing occupations, 2023 (seasonally adjusted)

TOP 20 OCCUPATIONS		IN 2018	IN 2023
Occupation		# of workers	
1	Sales assistants	711,700	+11,900
2	School teachers	426,100	+45,900
3	Midwifery and nursing professionals	326,200	+59,900
4	Personal carers and assistants	301,700	+82,500
5	Accounting clerks and bookkeepers	297,200	+40,100
6	Hospitality workers	290,200	+2,900
7	Cleaners and laundry workers	281,800	+11,400
8	Managers (construction, distribution and production)	266,000	+26,900
9	Managers (retail)	233,300	+11,300
10	General clerks	231,500	+4,300
11	Accountants, auditors and company secretaries	217,900	+28,300
12	Truck drivers	209,300	+10,000
13	Food trades workers	200,000	+13,800
14	Construction and mining labourers	191,500	+18,200
15	Food preparation assistants	188,600	+20,800
16	Receptionists	182,400	+31,400
17	Managers (business administration)	179,900	+16,800
18	Managers (miscellaneous hospitality, retail and service)	176,300	+30,800
19	Social and welfare professionals	167,500	+8,600
20	Bricklayers, carpenters and joiners	165,100	+26,400
-	Business and systems analysts, and programmers	160,200	+13,300
-	Information and organisation professionals	164,200	+6,300

Source: Department of Jobs and Small Business, Occupation employment projections for the five years to May 2023

The Department of Jobs and Small Business projects the greatest growth in occupation between 2018 and 2023 will be in the following minor occupational groups:

- aged and disabled care workers (net job growth of 69,200)
- registered nurses (51,400)
- child carers (27,600)
- software and application programmers (25,500), and
- waiters (21,800).

Sales and hospitality occupations employ many people, including a large share of new entrants to the labour market. There are also large 'outflows' in workers from these industries, suggesting that many young workers begin their working lives in these industries before moving to other occupations.⁴ The strong growth in sales assistants and hospitality workers suggests there will continue to be entry-level opportunities in the labour market.

⁴ P D'Arcy, et al. for the Reserve Bank of Australia, 'Labour Market Turnover and Mobility', *RBA Bulletin*, December Quarter 2012.

WHAT ARE SKILLS LEVELS 1 TO 5?

The Australian Bureau of Statistics has assigned every job in Australia a 'Skill Level', the level of skills required to perform that job. **Skill Level 1** is the highest, **Skill Level 5** is the lowest.

■ The majority of occupations at **Skill Level 1** are in the managers and professionals occupational groups. Examples of specific jobs include: economists, dentists, production managers and livestock farmers.

■ The majority of occupations at **Skill Level 2** are spread across the managers, technicians and trades workers, community and personal service worker occupational groups. Examples of specific jobs include: retail managers, safety inspectors and ICT support technicians and paramedics.

■ The majority of occupations at **Skill Level 3** are in the technicians and trades workers occupational groups. Examples of specific jobs include: florists, cooks and plumbers.

■ The majority of occupations at **Skill Level 4** are in the sales workers, machinery operators and drivers, and labourers occupational groups. Examples of specific jobs include: visual merchandisers, delivery drivers and product quality controllers.

A small subset of roles can also be found in the community and personal service workers and clerical and administrative workers occupational groups. Examples of specific jobs include: dental assistants and bank workers.

■ The majority of occupations at **Skill Level 5** are in the sales workers, machinery operators and drivers, and labourers occupational groups. For example, sales assistants, concreters and packers are skill level five occupations.