



The Training and Skills Commission

Agriculture, Forestry and Fishing

South Australia's **Industry
Priority Qualifications 2018**

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As new technologies and the demands of international markets lead to rapidly **changing skills needs**, it is vital to have up-to-date information identifying which **skills** are a **priority in each industry**.



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Foreword

The Training and Skills Commission is pleased to present this report on South Australia's industry priority qualifications. This report is the culmination of extensive industry consultation, which has resulted in a unique and valuable insight into industry's prioritisation of vocational qualifications.

The level of engagement has exceeded the Commission's expectations, and has, in no uncertain terms, contributed significantly to the quality and credibility of the findings of this report.

As new technologies and the demands of international markets lead to rapidly changing skills needs, it is vital to have up-to-date information identifying which skills are a priority in each industry. The Commission is committed to filling this need by providing high quality skills and workforce development advice.

The information in this report helps ensure the vocational training system is responsive to industry needs, and that government investment in skills and training is directed to where industry needs it most.

On behalf of the Commission, I extend a sincere thank you to all those who contributed to this report, from industry associations to individual businesses and to each and every respondent to our survey. Your commitment to getting this information right is commendable, and the expertise you bring is greatly appreciated.

It is the Commission's intent that this report contributes to shaping the significant government investment in skilling our state's workforce.



Michael Boyce

Chair

Training and Skills Commission

About the IPQ

The Industry Priority Qualification (IPQ) report outlines the prioritisation of vocational qualifications and skill sets for each industry. It draws on a survey conducted by the Training and Skills Commission in July 2018, as well as feedback from workshops held with each industry.

The survey aimed to collect as many responses as possible from each industry, and to achieve a representative sample of small, medium and large employers, as well as organisation types. Following the survey, feedback and moderation of the responses was collected from senior industry representatives.

This report is intended to inform the state government about industry's vocational qualification priorities, and to help guide the government's substantial investment in skills and training.

- The first IPQ survey was conducted in 2015 and received 850 responses.
- The 2018 survey collected 1,306 responses from 19 industry sectors.
- Feedback on the survey results was collected from industry representatives.
- The findings inform the Government's investment in skills and workforce development.
- The survey included all current training package qualifications and skill sets, and all current accredited courses that were available on the national register, training.gov.au in April 2018.
- The full IPQ data can be found at tasc.sa.gov.au/IPQ

Key findings

- Industry advised that qualifications rated as essential are fundamental to skilling the Agriculture, Forestry and Fishing workforce.
- Many priority qualifications are a basic requirement for an occupation.
- Certificate II and III level qualifications are the most common priority.
- An ageing workforce is an acute problem for the Agriculture, Forestry and Fishing sector.
- One of the main challenges faced by the industry is attracting new workers from urban areas.
- Industry is concerned about the current training system's ability to respond sufficiently quickly to changing skills needs.
- New technologies are viewed with optimism across the industry, with more an eye to increasing product ranges and volume, and subsequently increasing demand for labour, rather than reducing the size of the labour force.

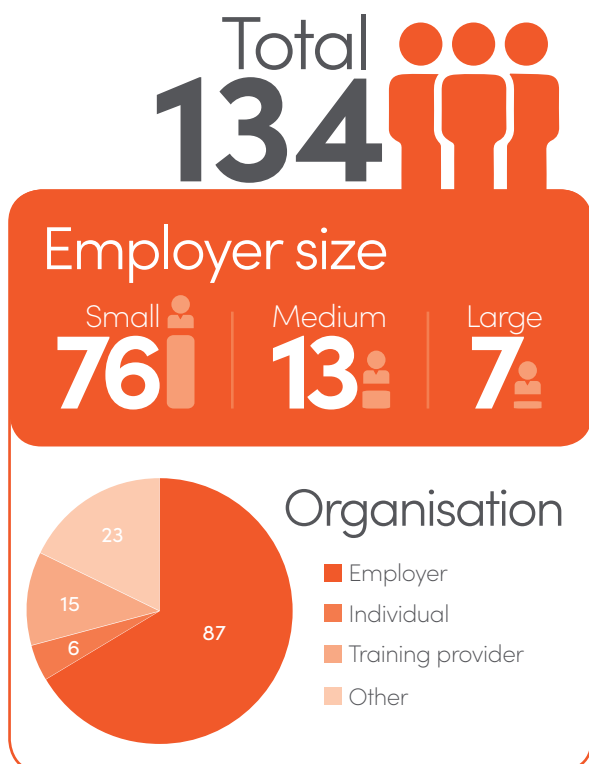
Industry priority qualifications

The Agriculture, Forestry and Fishing industry employs around 31,000 people, representing four per cent of the state's workforce. Nearly 85 per cent of those employed in the sector work in agriculture. The sector includes activities such as farming, fruit and nut growing, aquaculture, nursery production and logging.

Approximately one-in-three people working in the sector have a vocational qualification as their highest educational attainment, compared to only one-in-ten who have a higher education qualification¹. This compares to the state average of 36 per cent and 26 per cent respectively. More than half of the workforce (56%) do not hold a tertiary qualification.

Summary of survey responses

The industry priority qualifications (IPQ) survey received 134 responses from the Agriculture, Forestry and Fishing industry, representing 10 per cent of total survey responses. The survey received a good response from small employers (1-19 employees), comprising 76 responses, 13 from medium sized employers (20-199 employees) and seven from employers with 200 or more employees².



Priority qualifications

Industry priority qualifications are grouped into four levels of priority, based on the survey results and industry workshops.

- Essential
- High
- Medium
- Low

Table 1 outlines the priority qualifications for the Agriculture, Forestry and Fishing industry³.

Industry advised that qualifications rated as essential are critical for the future skills needs of the Agriculture, Forestry and Fishing industry. The Certificate III in Wine Industry Operations, for example, is used by every wine company in SA, with one of the larger wine companies putting more than 100 staff through the qualification each year.

The Diploma of Agribusiness Management is critical for the farming industry, as it develops key knowledge and skills for farm owners and managers. Similarly, companies operating in the fishing industry must have workers with small boat qualifications, such as the Certificate II in Maritime Operations (Coxswain Grade 1 Near Coastal).

Many priority qualifications are a requirement for an occupation or are necessary to maintain contracts with customers such as major supermarkets.

1 | Australian Bureau of Statistics 2018, *Census 2016*

2 | Employer size includes responses from respondents who identified as an organisation type other than employer.

3 | Low priority qualifications are not included in this report, for the full data visit tasc.sa.gov.au/IPQ

Table 1: **Qualifications by priority level**

Essential	
AHC20116	Certificate II in Agriculture
AHC20416	Certificate II in Horticulture
MAR20313	Certificate II in Maritime Operations (Coxswain Grade 1 Near Coastal)
MAR20413	Certificate II in Maritime Operations (Marine Engine Driver Grade 3 Near Coastal)
AHC21316	Certificate II in Shearing
AHC21416	Certificate II in Wool Handling
AHC30116	Certificate III in Agriculture
AHC30716	Certificate III in Horticulture
AHC32416	Certificate III in Irrigation
MAR30818	Certificate III in Maritime Operations (Marine Engine Driver Grade 2 Near Coastal)
MAR30913	Certificate III in Maritime Operations (Master up to 24 metres Near Coastal)
AHC32816	Certificate III in Rural Operations
FDF30411	Certificate III in Wine Industry Operations
MAR40613	Certificate IV in Maritime Operations (Master up to 35 metres Near Coastal)
AHC51416	Diploma of Agribusiness Management
AHC50116	Diploma of Agriculture
AHCSS00026	Advanced Chemical Spray Application Skill Set
AHCSS00027	Agricultural Chemical Skill Set
MARSS00011	Marine Radio Operator's VHF Skill Set
MARSS00008	Shipboard Safety Skill Set
High	
ACM20117	Certificate II in Animal Studies
FDF20411	Certificate II in Wine Industry Operations
BSB30415	Certificate III in Business Administration
AHC32916	Certificate III in Shearing
AHC40116	Certificate IV in Agriculture
AHC40416	Certificate IV in Horticulture
AHC41316	Certificate IV in Wool Classing
AHC50416	Diploma of Horticulture
AHCSS00028	Basic Introduction to Beekeeping Skill Set
AHCSS00030	Farm Business Management Skill Set
FDFSS00007	Food Safety
AHCSS00045	Spray Operator Skill Set
Medium	
AHC10316	Certificate I in Horticulture
AHC21216	Certificate II in Rural Operations
SFI20511	Certificate II in Seafood Processing
AHC30216	Certificate III in Agriculture (Dairy Production)
ACM30117	Certificate III in Animal Studies
ACM30517	Certificate III in Farriery
AHC32616	Certificate III in Rural Machinery Operations
AHC33016	Certificate III in Wool Clip Preparation
AHC41016	Certificate IV in Agribusiness
AHC60316	Advanced Diploma of Agribusiness Management
FDFSS00008	Forklift Operations
AHCSS00036	Irrigation Manager Skill Set
CHCSS00087	Risk Management

Qualifications by training package

Priority qualifications for the Agriculture, Forestry and Fishing industry are drawn from seven training packages:

- Animal Care and Management (ACM)
- Agriculture, Horticulture and Conservation and Land Management (AHC)
- Business Services (BSB)
- Community Services (CHC)
- Food Processing (FDF)
- Maritime (MAR)
- Seafood Industry (SFI)

Nearly two-thirds of priority qualifications belong to the Agriculture, Horticulture and Conservation and Land Management (AHC) training package, with the next highest share belonging to the Maritime (MAR) training package. This is commensurate with the large share of employment in the agriculture sector, compared to forestry and fishing.

Qualifications rated as essential are spread across just three training packages: AHC, MAR and FDF, which has just one qualification.

Figure 1: Qualifications and skill sets by priority level and training package

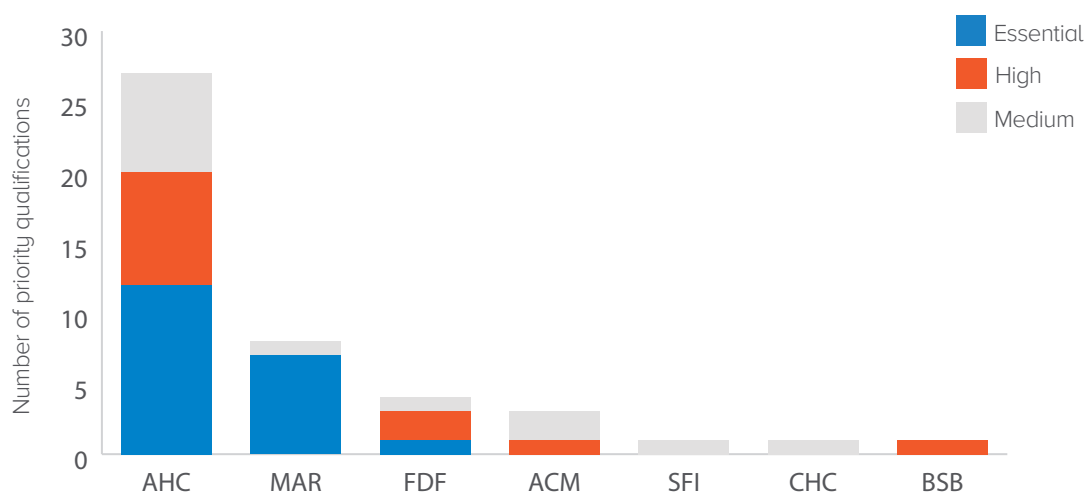
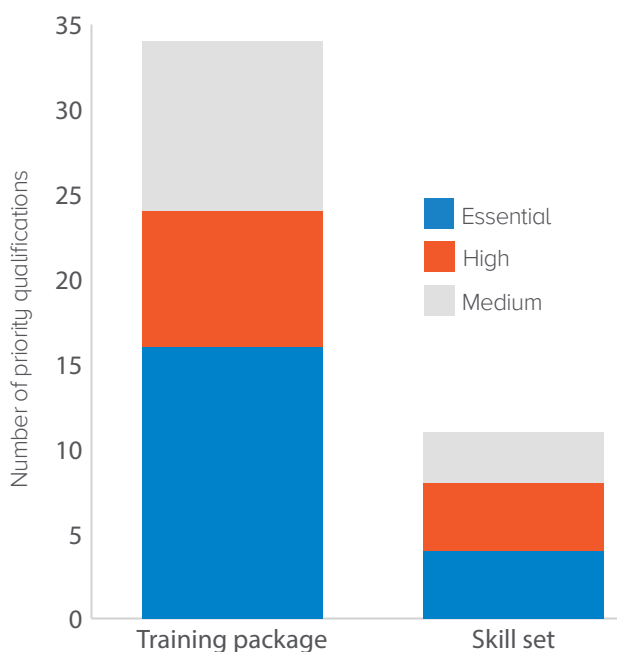


Figure 2: Qualification type by priority level



Qualification types

Nearly all priority qualifications for the Agriculture, Forestry and Fishing industry are from national training packages, including 11 skill sets, four of which are an essential priority. No accredited courses were identified in the top three priority levels.

Qualification levels

The Agriculture, Forestry and Fishing industry has a clear preference for prioritising lower level qualifications. Most are at the certificate II or III level. This corresponds with the overall qualification profile of the industry, where the most common qualification is a certificate III⁴. Less than one-third of priority qualifications are certificate IV or above.

Qualifications rated as essential are reflective of the overall distribution of qualifications, with most being certificates II or III. Certificate IV becomes the dominant qualification level among those rated as a high priority, whereas priorities shift strongly back to certificate III among medium priority qualifications.

4 | Australian Bureau of Statistics 2018, *Census 2016*.

Figure 3: **Qualification level: essential, high & medium priority**

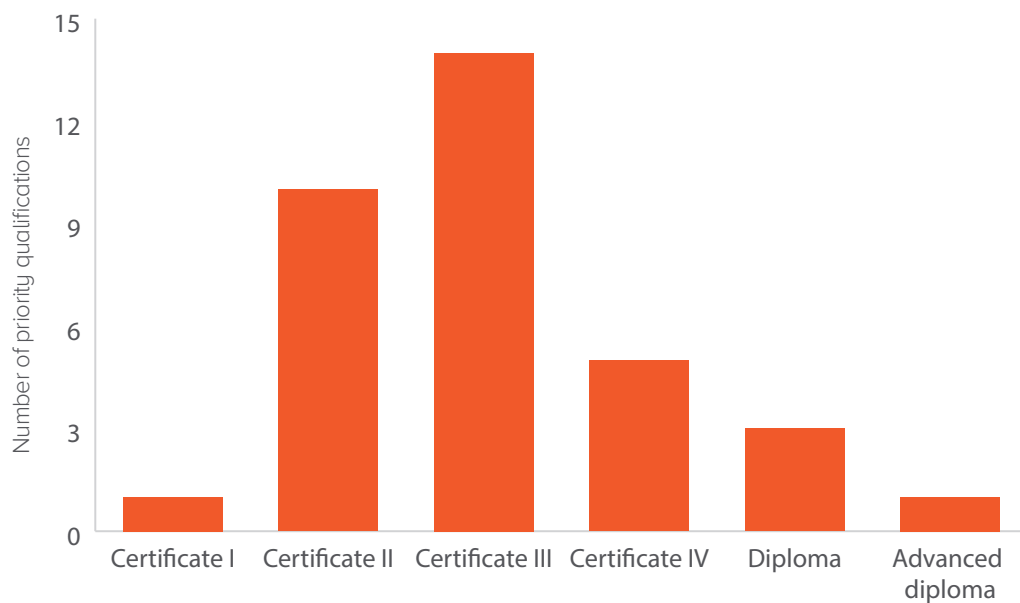
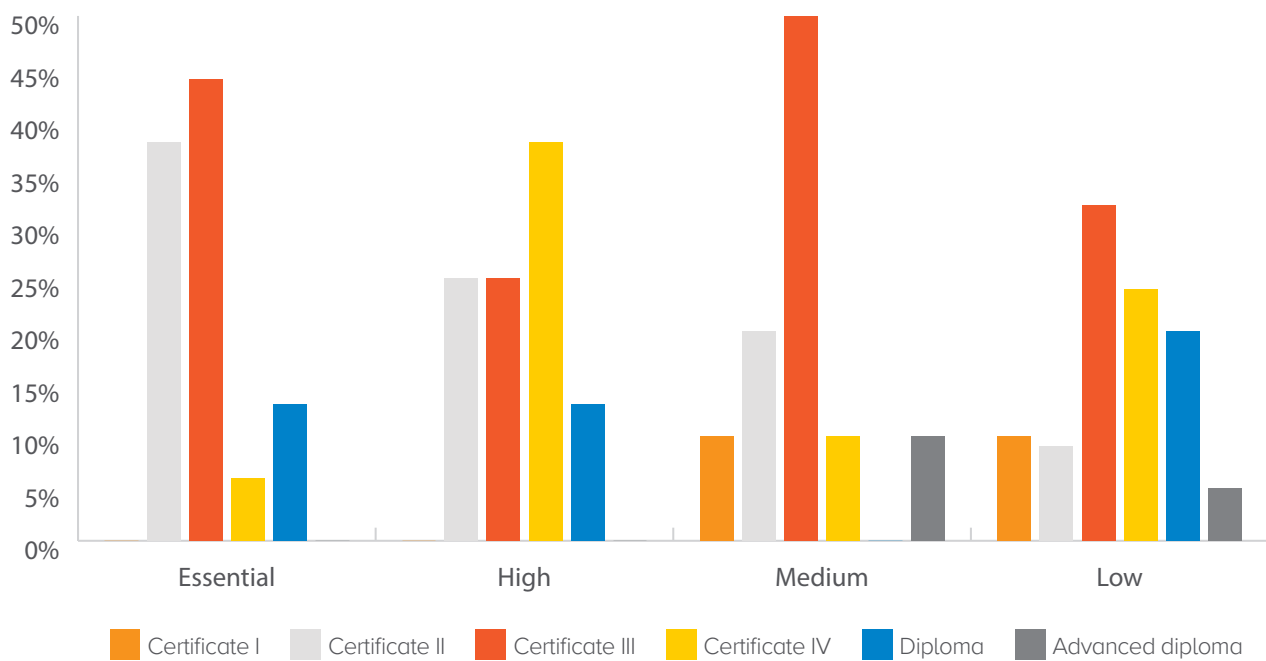


Figure 4: **Qualification level by priority ranking**



Qualification use

Qualifications can be undertaken for a variety of purposes. A student might complete a qualification to gain entry into an occupation, such as a farrier completing their Certificate III in Farriery, while others may need to complete a pathway qualification such as the Certificate I in Horticulture to prepare for taking on a higher-level qualification, such as the Certificate III in Horticulture.

Table 2 reveals industry's views on what priority qualifications are typically used for, out of three possible categories:

1. a pathway to an entry level qualification
2. an entry level qualification or basic requirement for a job
3. for upskilling.

The importance of pathway qualifications was recognised by industry, with three pathway qualifications identified as a priority. A roughly equal share of qualifications were identified as entry level or upskilling, demonstrating the importance placed on both types of skill acquisition. Several certificate IIs were classified as upskilling, whereas in most other sectors, upskilling tends to be certificate IV or higher.

Certificate II is often an entry level qualification for the Agriculture, Forestry and Fishing industry, while the Certificate III can be both entry level or upskilling, depending on the occupation. Industry stated that certificate IV is often skipped in favour of a diploma when seeking higher level skills, with the diploma often seen as a pathway to university.

The Agriculture, Forestry and Fishing industry included a similar share of entry level and upskilling qualifications in each of the top three priority levels.

Table 2: **Qualification use**

Pathway to entry level	
AHC10316	Certificate I in Horticulture
SFI20511	Certificate II in Seafood Processing
AHC21316	Certificate II in Shearing
Entry level or basic requirement for a job	
ACM20117	Certificate II in Animal Studies
MAR20313	Certificate II in Maritime Operations (Coxswain Grade 1 Near Coastal)
AHC21216	Certificate II in Rural Operations
FDF20411	Certificate II in Wine Industry Operations
AHC21416	Certificate II in Wool Handling
AHC30116	Certificate III in Agriculture
BSB30415	Certificate III in Business Administration
AHC30716	Certificate III in Horticulture
AHC32616	Certificate III in Rural Machinery Operations
AHC32916	Certificate III in Shearing
FDF30411	Certificate III in Wine Industry Operations
AHC33016	Certificate III in Wool Clip Preparation
ACM30517	Certificate III in Farriery
Upskilling	
AHC20116	Certificate II in Agriculture
AHC20416	Certificate II in Horticulture
MAR20413	Certificate II in Maritime Operations (Marine Engine Driver Grade 3 Near Coastal)
AHC30216	Certificate III in Agriculture (Dairy Production)
ACM30117	Certificate III in Animal Studies
AHC32416	Certificate III in Irrigation
AHC32816	Certificate III in Rural Operations
AHC41016	Certificate IV in Agribusiness
AHC40116	Certificate IV in Agriculture
AHC40416	Certificate IV in Horticulture
AHC41316	Certificate IV in Wool Classing
AHC51416	Diploma of Agribusiness Management
AHC50116	Diploma of Agriculture
AHC50416	Diploma of Horticulture

Workforce development

The industry workshops conducted by the Training and Skills Commission provided an opportunity to capture high level workforce development information from industry. This section summarises the feedback that was collected.

Workforce development is a constant challenge for the Agriculture, Forestry and Fishing industry. Dwindling regional populations are a major problem, contributing both to an ageing workforce and a lack of youth entering the workforce. Meanwhile, new skills constantly need to be developed to remain competitive in the global marketplace, placing pressure on both employers and training providers to keep up with the latest trends.

Unlike in any other industry, 15 per cent of the workforce is aged 65 or older. This compares to the state average of 4.4 per cent⁵. At the other end of the spectrum, only nine per cent of the industry is aged between 15 and 24, compared to a state average of 14 per cent. Regional population loss is like a train running downhill without brakes; the lack of jobs causes people to leave, which reduces demand for existing businesses, which causes more people to leave and the cycle continues. The inevitable outcome is a smaller and smaller pool of future workers to draw from.

Not surprisingly then, one of the main challenges the industry sees is attracting new workers from urban areas. Industry stated that many national projects have been run which consistently demonstrate the lack of desire for people to move to regional areas for work. In some sub-sectors such as horticulture, a large share of the workforce must be sourced from temporary migration or backpackers. This has been the case for decades.

To give just one example, the wine industry reported that around 45 per cent of wine companies have had challenges recruiting both vineyard and cellar staff. Within the wine industry, there is a vexing mismatch between labour supply and demand. In regional areas where most of the industry operates, there is often a relatively large number of unskilled, unemployed people, and yet the wine industry struggles to find workers to fill unskilled jobs. Perhaps equally disturbing is the fact that many skilled positions need to be filled by migrants, as locals continue to be drawn to work in urban areas.

Industry cited frustration with the current training system, claiming there is a mismatch between contemporary skills needs, and what is being delivered through qualifications. The rapidly changing global market requires the workforce to broaden and deepen its skills. Industry is concerned about the training system's ability to respond to these rapidly changing skills needs.

Automation and robotics have long played a role in the Agriculture, Forestry and Fishing industry. Look out over a country field today and you should not be surprised to see a self-guided tractor operating by GPS. Drones are another new technology which has been quickly and widely adopted by the sector. The upshot is that there is less concern about people losing jobs to technology. Rather, the industry sees new technology for its potential to increase production and enable larger product ranges, thereby increasing the demand for labour to support increased production.

5 | Australian Bureau of Statistics 2018, *Census 2016*.



Contributors

Thank you to all stakeholders that contributed to shaping the Industry Priority Qualifications report.

Adelaide Community Health Alliance
AFL SportsReady
Aged Care Industry Association
Agribusiness SA
AI Group
Air Conditioning Mechanical Contractors Association
Arts Industry Council of SA
ATEC Group Training
Australian Childcare Alliance SA
Australian Council for Private Education and Training
Australian Education Union (SA)
Australian Funeral Directors Association
Australian Hotels Association SA
Australian Manufacturing Workers' Union
Australian Nursing and Midwifery Federation
Australian Steel Institute
Australian Veterinary Association
Australian Workers Union
Business SA
Communications Electrical Plumbing Union
Community Accommodation and Respite Agency
Community Centres SA
Construction Industry Training Board
Defence Teaming Centre
Department for Correctional Services
Energy Skills SA
Engineers Australia
Food and Beverage Fund SA
Grain Producers SA
Health Services Union
Helping Hand Aged Care
Housing Industry Association
Independent Education Union of South Australia
Livestock SA
Master Builders SA
Master Plumbers Association
Maxima
Minda
Motor Trades Association
Murraylands Training and Employment Association

National Disability Services
National Electrical & Communications Association
Northern Adelaide State Secondary Schools Alliance
PEER
Primary Industry Skills Council SA
Property Council of Australia (SA)
Public Service Association of SA
Real Estate Employers Federation SA
Real Estate Institute of South Australia
Resources and Engineering Skills Alliance
Restaurant & Catering SA
SA Aquaculture Council
SA Country Fire Service
SA Dairy Farmers Association
SA Health
SA Road Transport Association
SA Wine Industry Association
SAPOL
Service Skills SA
Shelter SA
Shop Distributive and Allied Employees
South Australian Chamber of Mines and Energy
South Australian Independent Retailers
Sport SA
Statewide Group Training
Taxi Council
Trainee and Apprentice Placement Service
Transport Distribution Training SA
Transport Workers Union
United Voice
Volunteering SA and NT
Waste Management Association
Wildcats Fisheries SA
Youth Affairs Council of SA

For further information about industry employment, skills and workforce development please visit the Commission's website tasc.sa.gov.au to find the following resources:

- Economic Outlook
- Industry Profiles
- Regional Profiles