



The Training and Skills Commission

# **Report on South Australia's Industry Priority Qualifications**

March 2016



Government of South Australia  
Training and Skills Commission



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Better Skills  
Better Work  
Better State

# Foreword



The Commission is pleased to present this report on South Australia's Industry Priority Qualifications (IPQs). This unique report details the extensive industry collaboration and consultation process undertaken by the Commission over the last 12 months, culminating in the identification of industry's priorities across the State economy and within 18 industry sectors; the first time this has been achieved. The level of engagement with industry stakeholders exceeded the Commission's expectations, and we acknowledge the hundreds of contributions made by industry. The scope and depth of the results achieved through this collaborative approach means this work will remain important and relevant for years to come.

These Priority Qualifications Lists are a direct reflection of industry feedback and will play an important role as one of a range of inputs used by Government to determine which Vocational Education and Training qualifications will receive publicly funded support.

South Australia needs a workforce that is innovative and adaptable but most importantly, in possession of the skills required to meet the ever-changing needs of industry and the South Australian economy. This report is a valuable tool to assist in meeting this challenge.

The detailed findings contained in this report are valuable across several domains; valuable to Government in guiding public investment in skills development, and valuable to industry to better understand and compare qualification priorities across sectors. These findings are also valuable to the Commission as they provide a platform for further exploration and policy deliberations which in turn will inform future recommendations to Government as part of our State Workforce Development Plan Skills for Future Jobs 2020, to be released at the end of 2016.

While it is acknowledged that the priorities of Government and public investment may differ from those of industry, we are encouraged by the fact that this is the first time Government will have a comprehensive understanding, informed directly by industry, of the needs of industry within the context of qualification and skills priorities.

On behalf of the Commission, we extend a sincere thank you to all contributors and respondents who participated in our consultations. It is clear that the challenges facing skills development for industry are significant, but so is the appetite from Government, industry and the community to actively pursue mutually beneficial solutions.



**Anthony Kittel**  
CHAIR



**Melinda OLeary**  
DEPUTY CHAIR

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## The Training and Skills Commission

Established in 2003, the Commission is comprised of industry, academic and community leaders. The Commission advises the Minister for Higher Education and Skills on South Australia's skills and workforce development priorities and is responsible for the regulation of the State's apprenticeship and traineeship system.

The Commission also provides independent, strategic advice on how South Australia can invest in a sustainable, highly skilled workforce particularly in key growth sectors. This advice is crucial to meeting South Australia's economic and social needs, now and into the future.

## Our Responsibilities

The Commission's responsibilities include:

- promoting and encouraging investment, equity and participation in, and access to vocational education and training (VET);
- monitoring, reporting and making recommendations to the Minister on the state of VET and workforce development in South Australia, including the expenditure of public money in these areas; and
- promoting pathways between the secondary school, VET, adult community education, and higher education sectors.

# Executive Summary

This report represents the significant findings of the Commission's Industry Priority Qualifications Survey. With 1,138 Qualifications, Skill Sets and Accredited Courses (QSCs) identified by industry as a priority, this report provides a unique opportunity for the State Government to strategically align its investment in skills development with the qualification priorities of industry.

The 'Whole of Economy' List of Priority Qualifications was informed by 850 responses to an industry designed survey, 20 half-day consultation sessions, discussion with peak employer and employee bodies and now a final revision after being available for feedback since the launch of the Interim Report on 8 December 2015. This document represents over 800 hours of consultation activity, and is arguably the most comprehensive exploration of industry demand conducted in any jurisdiction across Australia.

Across the breadth of our State's economy there are 106 QSCs identified as Highest Priority (Tier 1), 169 identified as a High Priority (Tier 2), 225 identified as a Priority (Tier 3), 639 identified as a Low Priority (Tier 4) and 2,961 QSCs that were not selected (Tier 5).

As diverse as enterprises are within our State, the results of the Commission's stakeholder consultations indicate the wide application of generic and transferable qualifications across most industry sectors. Of the 106 qualifications identified as a Tier 1 priority, approximately 50 percent are highly transferable and non-industry specific. Leadership and management, general business related qualifications, as well as work, health and safety qualifications were routinely identified as a high priority across most industry sectors.

These results are complemented by qualitative insights gathered from extensive conversations with our Industry Partners, which in turn has enabled the identification of key trends and workforce development challenges in South Australia.

These include:

- The increasing complexity of the Vocational Education and Training (VET) sector is proving difficult to understand and navigate;

- Formal training is not always the answer to the workforce development needs of industry;
- Enterprises highly value skills that increase the internal mobility and capabilities of employees;
- The Australian Qualifications Framework (AQF) and Training Packages are inconsistent and often misunderstood by many engaged in the VET system;
- Continual changes to the level of public subsidy for VET qualifications at both a State and Commonwealth level diminishes business planning capability;
- The capacity of industry to invest in skills development varies widely between sectors and sub-sectors, as well as between small and large employers;
- As diverse and unique as our State's economy is in the national context, so too are the unique needs of our regions when compared to the broader South Australian economy; and
- High growth employers have demonstrated differing needs than those employers experiencing subdued conditions.

Throughout the process of consultation the Commission has remained committed to its principles of transparency with its approach and methodology.

The final consultation phase and work of the Commission has reaffirmed the strength of this engagement, with some (though not extensive) changes in priorities that reflect additional stakeholder feedback and analysis.

The Commission is confident that the 'Whole of Economy' Priority Qualifications List now represents the best platform South Australia has ever had to guide Government investment in VET towards industry need. These qualifications have been self-identified by industry and have been considered in the context of the wider economy. Discussions with our Industry Partners and stakeholders were extensive to the point of being able to consider individual qualifications and their place in our diverse VET sector.



It is not always the case that VET qualifications are undertaken for the purposes of employment or improving business productivity. It is therefore important to understand the role that VET plays in our society in the broader context. The Commission has long provided support and analysis on the importance of the VET sector in social inclusion, and recognises the integral part that Adult Community Education (ACE) plays in providing pathways that encourage participation in work and community.

In this report, the Commission has provided suggestions on how the South Australian Government should treat the findings as well as identifying opportunities for future policy work.

That said, this report is a platform for industry as much as a blueprint for Government; one which provides better information on market demand and activity, as well as providing a tool to promote closer alignment of Government support to industry need.

As perhaps the only report of its kind – industry, government, training providers, employers and various other stakeholders now have yet another piece of the strategic puzzle, one which can respond to the question of ‘what training and skills should the Government support’?

This report, although not the complete answer, is a significant step forward and one that will provide insight into the skills needs of industry well into the future.



## Respondents

**850 respondents** completed the IPQ Survey representing employers, individuals, unions, registered training organisations and industry groups.

# Key Insights



## Employer Size

**58%** of employers surveyed identified as **micro or small businesses** with less than 20 employees.



## Qualifications

**Over 1,100 Qualifications, Skills Sets and Accredited Courses (QSCs)** were identified by industry as a priority. This is just over 25% of all available QSCs (4,103) embedded within the IPQ Survey.



## Priorities

**106 qualifications** were identified as a **top priority** for industry over the next five years, while 169 were identified as a high priority and 225 identified as a priority. The remaining 639 were identified as lower priority.



## Top Qualifications

**Generic (business-related) qualifications** were consistently identified as high priorities for industry and the SA economy. These qualifications were often considered applicable to multiple occupations and transferable across industry sectors.



## Skills Clusters

**Managerial and Leadership, Sales and Customer Service and Information and Technology** skills were ranked most highly across industry sectors by survey respondents as the skills required in the next five years.



## Key Challenges

**Reskilling will be a priority** to meet the skills and workforce needs of the future as structural change presents ongoing challenges for the South Australian economy.



## Projected Employment Growth

TaSC Interim Modelling projects employment growth of **1.1 % per annum (43,000 new jobs)** over the next five-year period.



## Regional Needs

The **Industry Priority Qualifications of State Government Regions** are very diverse and need to be better understood.



## High Growth & Small Employer Needs

**Both High Growth and Small Employers** have ranked **Marketing & Customer Engagement qualifications** as high priority.

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# 1 OVERVIEW

## Minister's Request

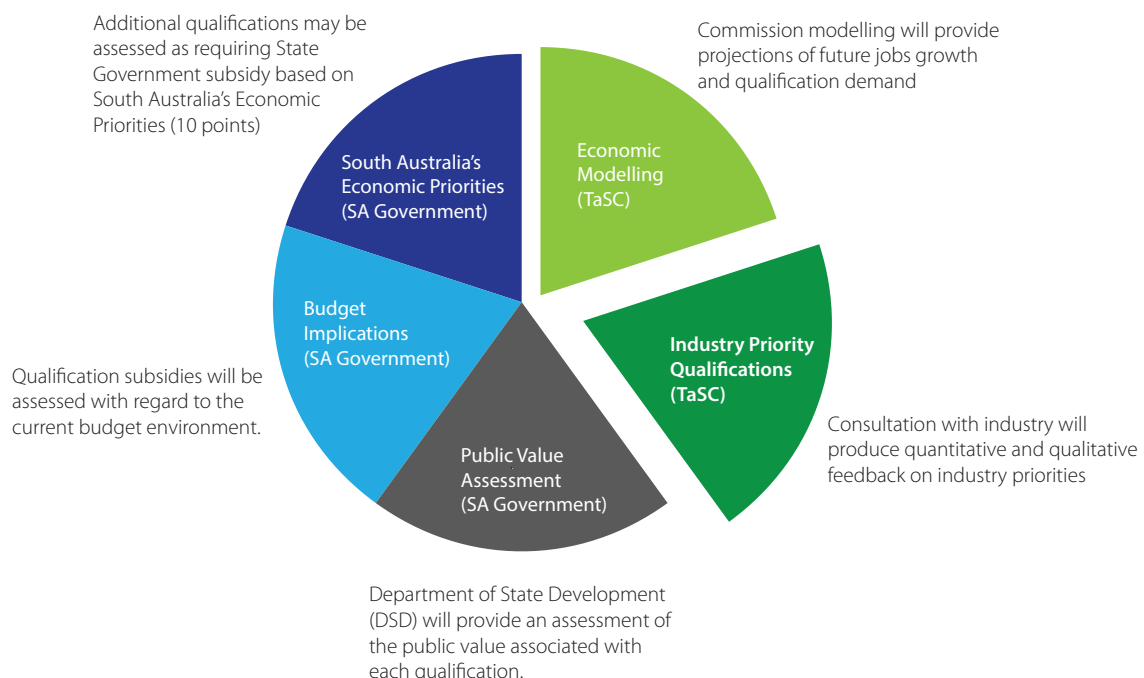
Early in 2015, the former Minister for Employment, Higher Education and Skills, the Hon Gail Gago MLC requested the Training and Skills Commission seek feedback from stakeholders to identify Priority Qualifications based on industry sectors.

The objective and outcome of this consultation includes the development of an Industry Priority Qualifications List which will be used to help guide future Government investment in training and skills development and ultimately become one of five key inputs used to inform future iterations of the Subsidised Training List (STL).

Other strategic inputs into the Government's decision-making matrix for determining the STL include:

- The Commission's independent economic modelling of demand for qualifications and job openings;
- A Department of State Development Public Value assessment;
- Budget Implications; and
- South Australia's Strategic Priorities.

**Figure 1 - Inputs to the Subsidised Training List (STL)**





## Policy Context

In April 2015 the South Australian Government released 'Work Ready' - a repositioned training, skills and employment policy aimed at redirecting Government investment to areas of greatest public benefit and strategic importance to the State's economy, ultimately towards job openings.

The Government also advised that from 1 May 2015 the current Subsidised Training List (STL) would be reduced from 900 publicly subsidised qualifications to around 700 qualifications. It is anticipated that this trend will continue as the Government seeks to further align the STL with the needs of industry and target skills areas which deliver greater social and economic benefit. The Commission anticipates this will eventuate in the STL comprising around 350 qualifications.

Currently more than \$300 million dollars of taxpayer funds are used to subsidise VET in South Australia. However, as less public funding is expected to be available for VET in future budgets, the resulting impact on training activity can be minimised through better targeted alignment of training places to strategic industry need.

In the transition from Skills for All to WorkReady, there is less flexibility in the Government's investment in training and skills development. However, the Government has advised that over time, when the pipeline of students under the Skills for All entitlement complete training activity, there will be funding available to accommodate new industry priorities.

The Commission subscribes to the notion that for training activity to be sustainable it must be better targeted to strategic industry need over the longer term. An appropriate balance must be achieved between Government, individual and industry investment in training and skills development.



## Economic Outlook

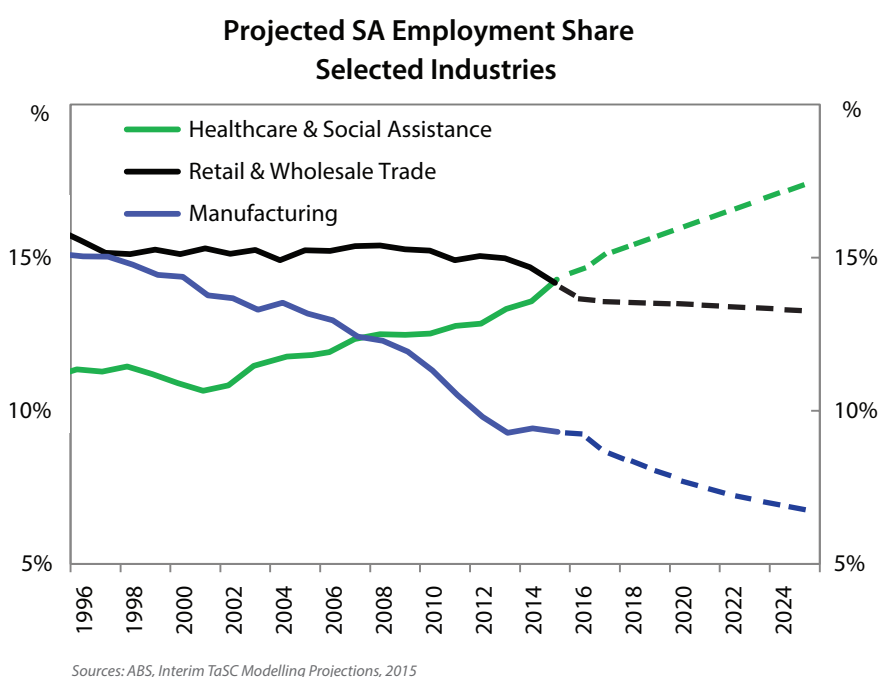
South Australia faces a challenging economic outlook over coming years, including a subdued labour market and structural changes in our industry makeup. The previously high Australian dollar had a significant impact on the competitiveness of key industries in South Australia, including manufacturing, tourism and other trade-exposed industries and the fall in commodity prices has put pressure on our mining industry to maintain revenues. These economic conditions have limited the capacity of the State Government to drive growth due to budget pressures. Business and consumer confidence remain low and annual growth in Gross State Product is expected to be subdued over coming years.

However, opportunities remain for South Australia as we look to the jobs of the future. The fall in the Australian dollar has opened new opportunities for education and agricultural exports, and the healthcare industry continues to grow as the population ages.

Other export and import-competing industries are likely to recover alongside the falling dollar and low interest rates, including advanced manufacturing and tourism. The State Government has a role in facilitating these developments by preventing skill bottlenecks and improving the infrastructure that supports these industries. In order to take advantage of future economic developments, South Australia will need a workforce with the skills for future jobs.

The South Australian economy continues to undergo rapid structural change (see Fig 2) and the Commission anticipates it moving towards the national industrial structure by 2025. Although traditional manufacturing industries have undergone significant transformation in the past, there is reason to be optimistic about specialised manufacturing; including food, advanced and high value manufacturing. The below figure demonstrates the structural change that has occurred in South Australia and the Commission's interim economic modelling.

**Figure 2 - Industry Structural Change by Employment Share - Selected Industries 1996-2025**





## South Australia's Future Skills and Workforce Needs

South Australia's workforce is changing and this is expected to continue as the move toward 'knowledge-intensive' industries progresses. Traditional industries such as manufacturing and to a lesser degree mining, previously the powerhouse employers in the State, are expected to decline in terms of employment growth over the short, medium and long-term.

Over the next five years the highest employment growth is anticipated in the following industries:

- Health Care and Social Assistance;
- Education and Training;
- Accommodation and Food Services
- Professional, Scientific and Technical Services ; and
- Transport, Postal and Warehousing.

Employment growth is evident in the more labour intensive service industries and sectors where the quality and quantity of labour becomes critically important, reducing the potential for automation. Individuals with inadequate Language, Literacy and Numeracy (LLN) skills will be faced with even higher barriers to employment. Males are particularly vulnerable, as they generally lag behind females in this skill. In addition, and perhaps not surprisingly, the Commission's research shows that males are likely to be most affected by the decline in the manufacturing and mining industries in South Australia.

The ubiquitous nature of Information and Communications Technologies (ICT) means that these skills should no longer be taught in their own right but need to be embedded in all aspects of education to ensure digital literacy skills into the future. By improving literacy and numeracy as well as ensuring excellent Science, Technology, Engineering and Mathematics (STEM) skills, more people will be equipped to participate in the digital economy.

Investing in higher qualifications will enhance employment outcomes. Over the five years to November 2019, national employment is projected to increase by 466,700 (13.1 percent) for those with Bachelor degrees or higher and by 299,000 (9.9 percent) for those with a Certificate II or III level qualifications. Employment outcomes are weaker again for those with a Certificate I or secondary education<sup>1</sup> at only 117,200 (or 6.0 percent) growth, however overall jobs growth projections identify employment opportunities for lower skilled job seekers.

Youth unemployment remains stubbornly high. While employers are looking for potential employees with relevant work experience, this is difficult to obtain without entry-level work opportunities. Entry level jobs or pathways to employment need to be created by industries, in order to both provide young people with the opportunity to work but also to create workforces that cater for future skills needs.

<sup>1</sup> - <https://cica.org.au/wp-content/uploads/Employment-Outlook-to-November-2019.pdf>

## Survey Response

The IPQ Survey received 850 responses across 18 industry sectors. Respondents were asked to identify their organisation type and industry sub-sector. Respondents who identified as employers were also asked their current number of employees, as well as how many additional employees they expected to hire in coming years. The Commission was impressed with the number of employers that responded, and particularly the fact that 58 percent of employers identified as small or micro-businesses with less than 20 employees.

By industry, responses were highest for Health Care and Social Assistance, Manufacturing and Transport, and Postal and Warehousing. Responses were lowest for Mining and Electricity, Gas, Water and Waste Services.

**Figure 3 - IPQ Survey Responses by Organisation Type and Employer Size**

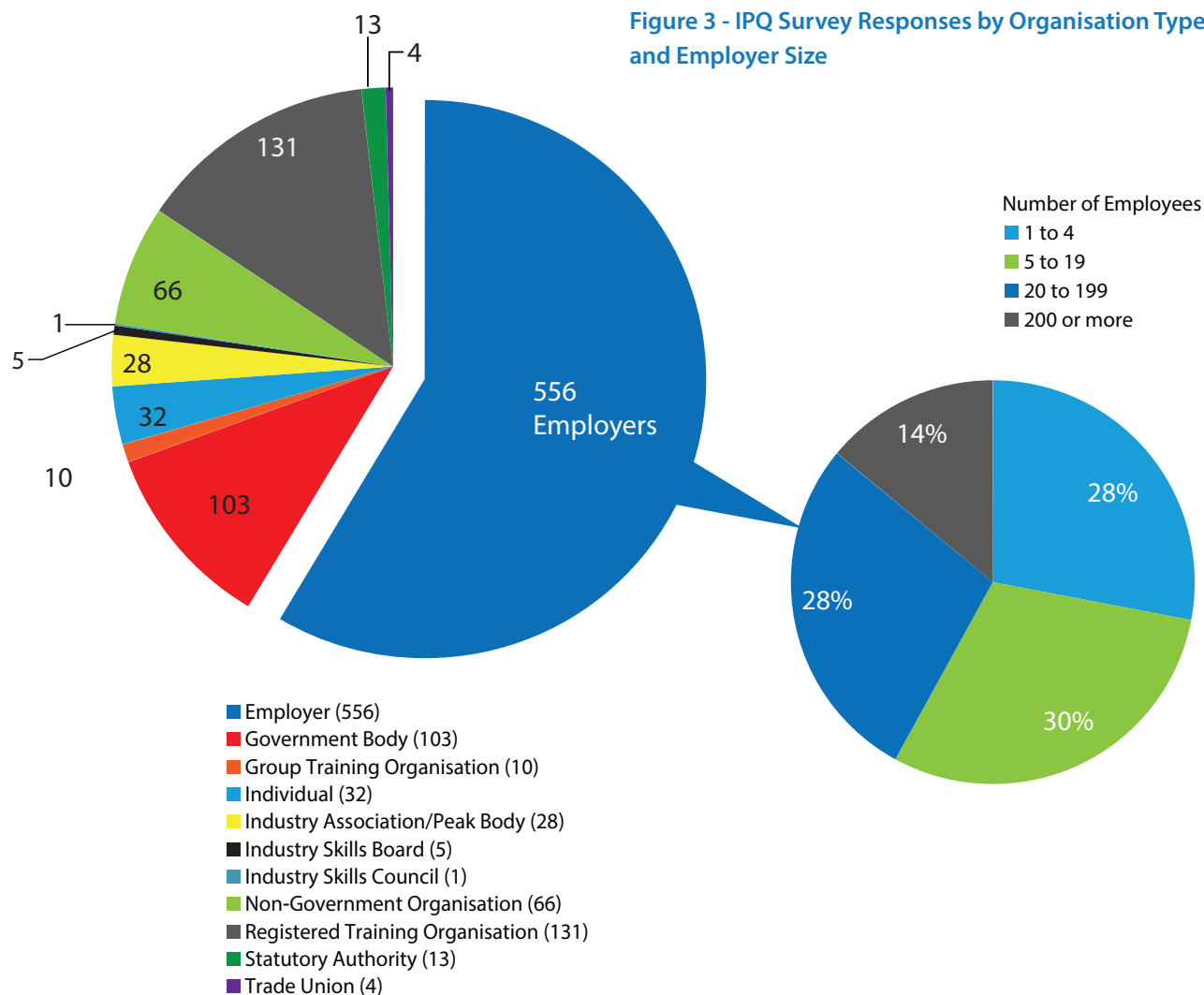
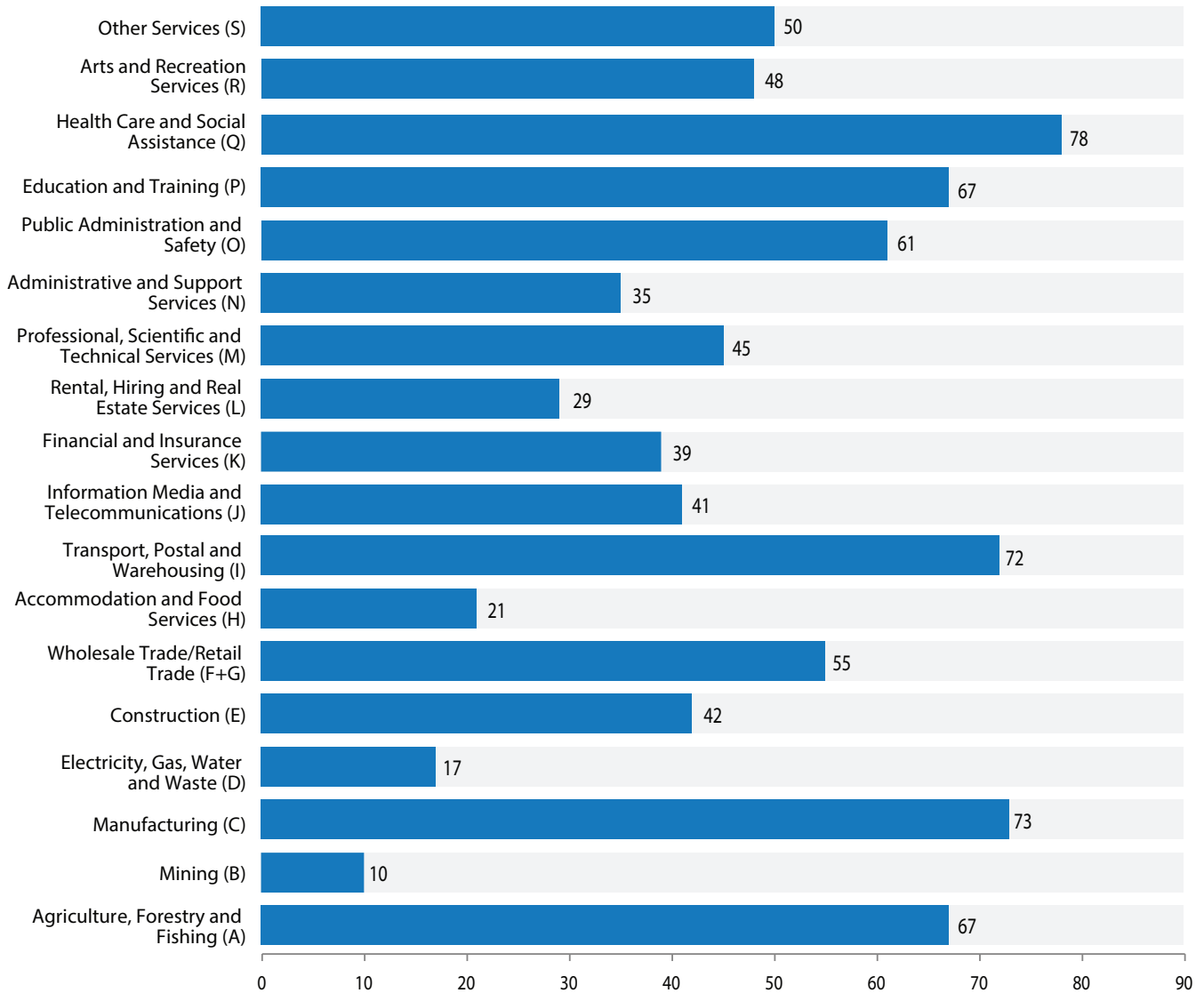


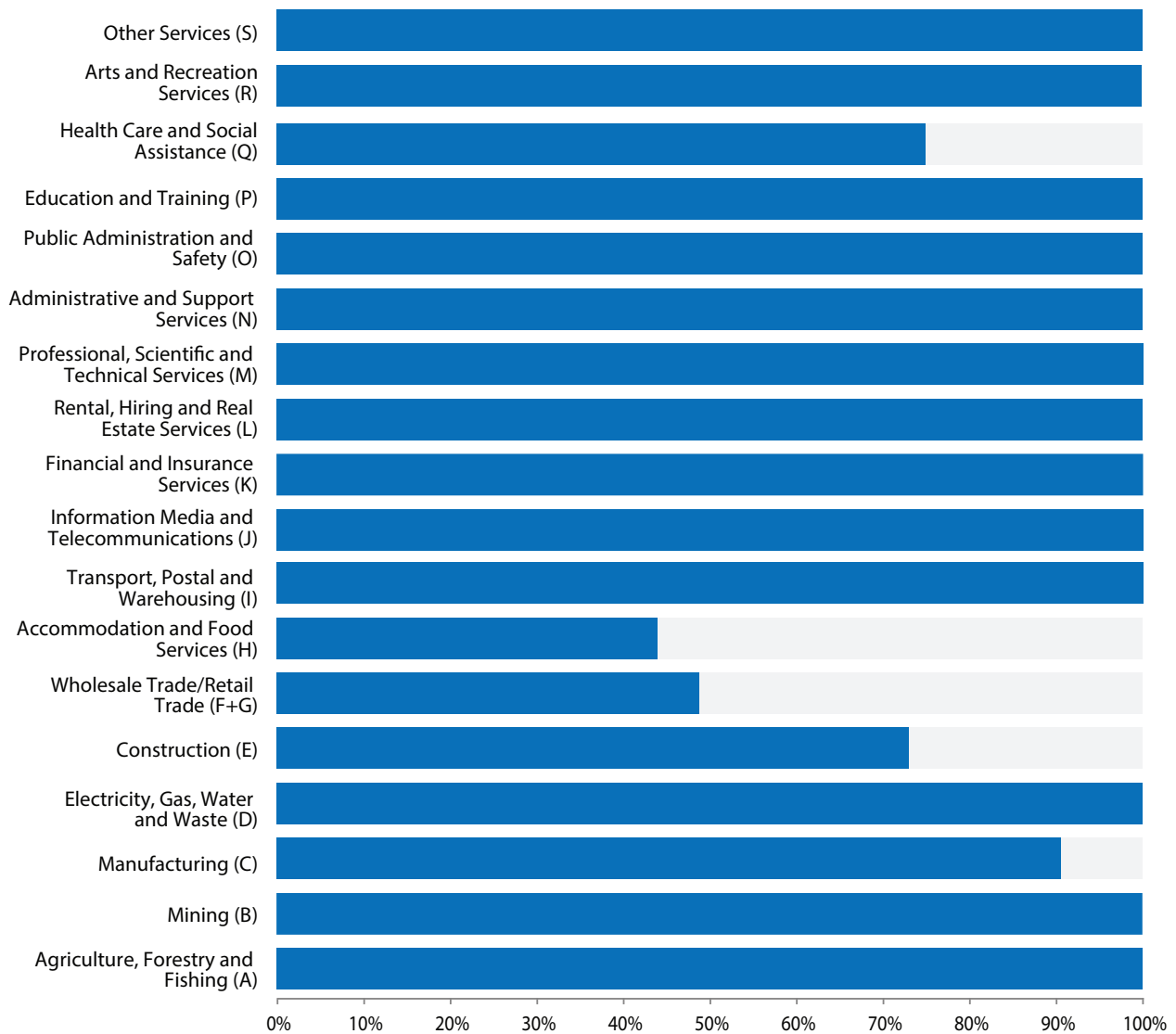
Figure 4 - IPQ Survey Responses by Industry



The Commission had an overall target of 750 responses for the IPQ Survey, which allowed individual targets to be set for each industry, based on their share of State employment. These targets were met in all but five industries. In particular, Accommodation and Food Services, and Retail and Wholesale Trade were below target. This can be partly explained by the nature of those industries, in that they each have a large employment share, but also a large number of small and micro businesses for which the

perceived value proposition of completing the IPQ Survey is lower. However, the Commission received robust industry representation from stakeholders for these industries, and is confident in the integrity of the results, given the type of organisations and the size of employers who completed the survey.

**Figure 5 - IPQ Survey Percentage Achieved of Target Responses**



## Skills Clusters

The concept of 'Skills Clusters' was introduced to determine the relative importance of generic groups of skills over the next 5-10 year period. A primary aim of this process was to encourage feedback from those survey participants who may be unable to clearly identify Qualifications, Skill Sets or Accredited Courses (QSCs) that directly correspond to their current and future skills needs. For the purpose of analysis, Skills Clusters are constructs only and are not aligned to specific QSCs.

Although the results from this component of the survey have not contributed to the prioritisation of VET qualifications, this process has enabled the Commission to profile Skills Clusters to identify emerging trends across industry sectors and the wider economy.

**Table 1 - Ranked Skills Clusters**

Skills Clusters	Ranking
Managerial & Leadership	1
Sales & Customer Service	2
Information & Technology	3
Work Health & Safety (WHS)	4
Administration & Support	5
Financial	6
Marketing & Engagement	7
Human Resources	8
Sustainability & Environmental	9
Language, Literacy & Numeracy (LLN)	10
Entrepreneurial	11

The Skills Clusters ranked most highly across industries by IPQ Survey respondents were *Managerial and Leadership*, *Sales and Customer Service*, and *Information and Technology*. These were followed by *Work Health and Safety*, which was considered the most important skill by industries recognised for higher risk of injury including Agriculture, Forestry and Fishing, Mining, Electricity, Gas, Water and Waste and Transport, Postal and Warehousing.

The *Administration and Support* Skills Cluster was ranked fifth by all respondents. *Language, Literacy and Numeracy (LLN)* and *Entrepreneurial* Skills Clusters were ranked as the highest priority by the Education and Training industry and the Arts and Recreation Services industry respectively. However, the overall ranking of these two Skills Clusters were lower across the whole of industry.

## 2 KEY CONSTRAINTS & LIMITATIONS

**ANZSIC classifications:** Consistent with its publications over a number of years, the Commission made the decision to use the Australia and New Zealand Standard Industrial Classification (ANZSIC) to aid in the segmentation and reporting of IPQ data. This allows easy comparison with other data sets to support Government decision making processes. It also allowed respondents to have a more streamlined survey experience, and permitted the creation of stakeholder groups to moderate the survey data.

During discussions with stakeholders, a consistent theme emerged that several of the ANZSIC classifications were no longer fit for purpose. Some respondents and stakeholders struggled to define certain industries and sub-sectors and had difficulty in selecting their own industry and choosing relevant qualifications. This may be due to respondent's inability to select an appropriate ANZSIC category because their business operates across multiple industries. The Commission acknowledges this limitation, but has the view that ANZSIC remains best practice for projects of this kind.

**The Australian Qualifications Framework:**

The Australian Qualifications Framework is the national policy for regulated VET. Nationally accredited training in Australia is made up of qualifications and Skill Sets (grouped into Training Packages) and Accredited Courses. The Commission made the decision to only include nationally accredited training in reporting on Industry's Priority Qualifications. This allowed respondents to choose from around 4,100 current QSCs to prioritise.

**Survey complexity:** Efforts were made to design a survey that was accessible by all organisation types; however some experience with the VET sector was required in order to fully engage with, and respond to, the survey.

**Selection Bias:** Through the validation process conducted with National Centre for Vocational Education Research (NCVER), the Commission acknowledged that the raw data collected through the IPQ Survey was likely to exhibit selection bias, where:

1. The characteristics of respondents to the survey were not representative of the total population; and
2. That as a result, qualifications identified may be weighted towards a particular sub-group.

NCVER provided suggestions for stratified sampling of sub-groups based on an identified population; this methodology was not applied retrospectively.

It should be noted that the moderation sessions with industry stakeholders, where bias resulting from employer size, sub-sector representation and RTO share were identified and addressed, is likely to have reduced the impacts of selection bias. This has been acknowledged by NCVER.

**Training Package updates:** The Commission recognises that Training Packages are constantly under review and as a consequence, results in the survey may not completely align to current or future qualifications and Training Packages. Questions in the survey referenced Training Packages as they existed at May 2015. In using the results from this survey, care should be taken to map outdated qualifications with current qualifications.

**Regional perspective:** It was not intended that the Commission's consultation process specifically address Industry Priority Qualifications from a regional perspective. However the Commission acknowledges the need for a regional understanding of industry's priorities and will seek to provide future commentary on industry's regional skills and workforce needs.



# 3 PROCESS

## Approach to Consultation

The Commission was committed to a transparent approach to consultation to identify Industry Priority Qualifications (IPQs). Every effort was made to communicate the Commission's work agenda and the approach with stakeholders, and to provide opportunity for input and feedback throughout the various phases of consultation. Stakeholder participation in the design of the consultation process was critical to maximise identification of Priority Qualifications for each industry and across the South Australian economy.

A survey was chosen as the primary method to gain feedback on IPQs. Qualitative inputs were used to complement the quantitative data from the survey. A fundamental consideration was the ability for survey participants to identify their priorities from a wide range of qualifications, rather than only those qualifications on the Subsidised Training List. The intention of this approach was to reduce bias associated with the prioritisation of qualifications based on the existing policy settings of Government.

This approach to consultation has received strong support from industry stakeholders who have partnered with the Commission to validate the methodology and results stemming from the IPQ Survey.

The Commission consulted with stakeholders representing a broad cross section of industries that included:

- Employers and Employer Groups
- Industry Associations and Representative Bodies
- Employee Associations and Representative Bodies
- Schools
- Government
- Registered Training Organisations (RTOs); and
- Group Training Organisations (GTOs).

## Validation of the Commission's approach to consultation

The Commission engaged a group of industry stakeholders to assist in designing and validating the survey methodology and to ensure that the approach to consultation was suitable for identifying Industry Priority Qualifications.



## Industry Priority Qualifications (IPQ) Survey

The IPQ Survey provided a unique opportunity for stakeholders to identify their Priority Qualifications across industry sectors. It was accessible online for four weeks from 9 September to 9 October 2015. Survey reach was enhanced through its wide distribution by the Commission's industry Partners and an extensive communications plan.

The survey was designed during the first half of 2015. The Commission sought feedback from various stakeholders on both survey structure and question design. The guiding principle in designing the survey was to make it as accessible as possible to a wide range of potential respondents, while still obtaining data detailed enough to enable the Commission to fulfil the Minister's request to identify Industry's Priority Qualifications.

A valuable feedback session was conducted over a half-day with over 20 of South Australia's high-level VET industry stakeholders that provided direct advice on necessary changes to the survey design. This also provided the Commission with general acceptance from industry that this was an achievable and valuable project to undertake.

Qualifications, Skill Sets and Accredited Courses used in the survey were obtained from training.gov.au in May 2015. Any changes to qualifications or Training Packages after that date were not included in the survey and are largely not reflected in this report.

For all relevant Qualifications, Skill Sets or Accredited Courses, respondents were asked to answer the following questions:

1. Over the next five years, for your enterprise/industry, would you describe this Qualification as N/A, Useful or Essential?
2. If the government didn't fully subsidise this Qualifications, would your enterprise/industry contribute to it?
3. Should this training only be done through an apprenticeship or traineeship?
4. In your opinion, is this Qualification only useful for a Specific Job or useful for Multiple Jobs?
5. In your opinion, is this Qualification only useful in Your industry or useful in Multiple industries?
6. In your opinion, do people in your enterprise/industry mainly use this Qualifications as Preparation for future employment (pre-vocational), A basic requirement for a job (entry level), Up-skilling for existing jobs (productivity) or Re-skilling for new jobs?

In designing the data collection process, the Commission identified several databases of industry participants, collected through years of industry consultation, who would be invited to complete the survey. Advertisements were also placed in relevant industry publications. Responses were tracked in real time and compared to State employment share stratified into industry sub-sectors. During the four weeks the survey was open, the Commission attempted to promote the survey to sub-sectors with lower response rates. This resulted in a fairly representative sample across industry sectors in our final data.

## Priority Lists

Survey results identified a list of Priority Qualifications for each industry (Output 1) and for the 'Whole of Economy' (Output 2).

Priority Tiers were established based on the level of importance assigned to qualifications by industry. The tiers were initially organised qualifications into groupings according to a numerical value derived from raw survey results. The tiers were then moderated and confirmed through consultation with industry stakeholders (see Consultation section below).

In general, qualifications in the Highest Priority Tier reflect the following attributes:

- A high response rate from industry survey respondents
- A high percentage of 'essential' classifications
- Strong qualitative support through moderation by key industry stakeholders
- Demonstrated value across a range of other indicators, including:
  - Useful across most jobs and industries
  - Strongly connected to job outcomes
  - Strongly connected with expanding industries

The following formulas were devised to assist in producing initial priority lists for the moderation process (Output 1 and 2):

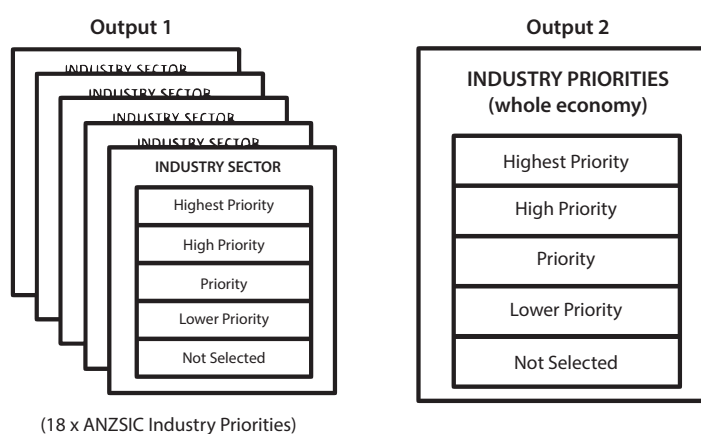
### Output 1 – Industry Priority Qualifications

To create a priority list for each industry sector:

1. Assign a score based on the number of qualifications identified as 'Essential' or 'Useful'
2. Add to the score based on the number of respondents who 'would contribute' to the training
3. Check, and if necessary adjust, for bias in:
  - a) the size of organisations that responded,
  - b) the industry sub-sector representation,
  - c) the type of organisation (e.g. training provider or employer)
  - d) non-curated qualifications<sup>2</sup>

Qualifications were then grouped into five Priority Tiers based on these scores.

**Figure 6 - Process (Output 1 and 2)**



<sup>2</sup> - For ease of use, survey respondents were initially presented with a 'curated list' of qualifications to prioritise, based on the industry they selected. Respondents were then able to select any qualification to prioritise in the following sections.

## Output 2 – Whole of Economy Priority Qualifications

To create a priority list for the Whole of Economy:

1. Assign a score to each qualification, based on their final Priority Tier in Output 1 (following moderation)
2. Adjust (+) each qualification for the quantitative number of industries that selected it.
3. Adjust (+) each qualification based on their self-identified multiple occupational applicability
4. Adjust (+) each qualification based on their self-identified multiple industry applicability
5. Adjust (+) each qualification based on their self-identified use, e.g.:
  - a. Preparation for employment – 0
  - b. Entry-level qual – 2
  - c. Upskilling – 1

6. Adjust (+) each qualification based on whether it is a self-identified Contract of Training
7. Adjust (+, -) each qualification based on their industry's projected employment growth
8. Adjust (+, -) each qualification based on their industry's current Gross State Product (GSP) to employment ratio

Qualifications were again grouped into five Priority Tiers for the 'Whole of Economy' based on these scores.

The table below summarises the Output 2 rules into four categories: industry identified priorities, applicability, link to employment outcomes, and link to GSP.

Figure 7 - Rules: Whole of Economy Priorities (Output 2)

Policy Position	Category	Variable	Impact
<b>Industry Identified Priorities</b>	Output 1 Priority Tier	One	↑↑↑↑
		Two	↑↑
		Three	↑
		Four	—
<b>Applicability</b>	Top 3 Tiers in Multiple Industries	Each additional industry	↑
	Self-identified Occupational Applicability	Useful for Multiple Jobs	↑
		Useful for a Specific Job	—
	Self-identified Industry Applicability	Useful for Multiple Industries Useful for a Specific Industry	↑ —
<b>Linked to Employment Outcomes</b>	Self-identified Reason for Training	Entry level qual	↑↑
		Up-skilling	↑
		Preparation for employment	—
	Self-identified Contracted Trade	Yes No	↑ —
<b>Linked to Gross State Product</b>	Industries Ranked by Forecast Employment Growth	Each additional ranking	↑
	Industries Ranked by Current Productivity	Each additional ranking	↑

## The Role of Stakeholders and Industry Partners

The Commission's IPQ consultation required high-level stakeholder engagement to ensure its outcomes were credible and based on genuine industry advice. Moreover, it was important that the consultation process was transparent in terms of the underlying methodology and outputs. The Commission attempted to strike a balance that facilitated engagement which was fit-for-purpose, while also ensuring that it was not over-servicing or over-consulting its key stakeholders and Industry Partners.

A framework that articulated the Commission's approach served to mitigate the risk of continual moderation and manipulation of data to achieve a specific result. In this context, the purpose of the validation process was not necessarily to moderate the results, but rather to provide context to the data inputs and create stakeholder buy-in in terms of the 'rules' and explore where 'exceptions to the rules' may need to be considered by the Commission.

It is important to note that the mathematical formula for creating the initial Priority Lists was only the first step in the process. It was not suggested that simply applying the formula to the quantitative information gathered through the Survey tool would be sufficient to adhere to the consultation and approach principles outlined above. Discussion with Industry Partners on context and possible bias as well as qualitative analysis was required to add value and produce a list of Priority Qualifications for each industry sector.

### Validation with NCVER

The Commission received input and support from NCVER to explore the data collection, rule-based criteria and validation principles that make up the methodology used to obtain Industry's Priority Qualifications.

NCVER and the Commission agreed on the following Joint Statement:

*'The Commission has engaged NCVER to validate the method used to analyse the results of the Industry Priority Qualifications (IPQ) Survey. NCVER acknowledge that in an attempt to address statistical biases and anomalies, the survey has been supplemented by qualitative input from industry bodies. Where appropriate, NCVER data sets\* have been used to supplement the Commission's quantitative analysis of the IPQ Survey results.'*

\* Total VET Activity (TVA); Employers Use and Views of the VET System



## Consultation: Industry Sector (Output 1)

The Commission held consultations with industry stakeholders representing each industry sector. The purpose of this phase of consultation was to validate and moderate (where appropriate) the initial Priority Tier assigned to each qualification through Output 1. The overarching aim was to establish a qualitative narrative to support the quantitative data underpinning the survey responses.

In total, the Commission held 20 stakeholder consultation sessions covering all 18 ANZSIC industries. The consultation sessions provided valuable qualitative assessments around the survey results, which are reflected in the industry profiles available as a separate publication to this report.

In some industry sectors, the raw survey results directly reflected industry's priorities and required very little moderation. In other sectors, bias in the results, either from sub-sector misrepresentation, weighting towards one employer size or type of respondent, or a very low response rate, resulted in Priority Tiers that were not deemed representative of the industry. In these cases, some qualifications were shifted between tiers with the reasoning for each shift documented by the Commission. Importantly, the reasons for shifting qualifications were consistent across all industries.

Stakeholders also used this opportunity to give feedback on the Commission's economic modelling, including employment growth projections for each industry.





## Consultation: Whole of Economy (Output 2)

Broad stakeholder participation in the final phase of the consultation process prior to the release of the IPQ Interim Report was critical to ensure wide industry representation and a genuine assessment of the relative priority of qualifications between industry sectors.

Following the Output 1 consultation sessions, the Commission convened a meeting with peak bodies with wide representation across many industries. These bodies included the Australian Council for Private Education and Training (ACPET), Australian Industry Group (AiGroup), Business SA and SA Unions. The purpose of this meeting was to validate the methodology and initial results for Output 2 (as described above). The methodology was widely accepted, although the Commission did make adjustments following recommendations from the peak bodies.

By applying the Output 2 methodology, the 1,138 qualifications originally identified through the IPQ Survey were ranked and divided into Priority Tiers. 105 qualifications were assigned to 'Highest Priority (Tier 1)', 146 were assigned to 'High Priority (Tier 2)' and 224 assigned to 'Priority (Tier 3)'. The remaining 663 were assigned to 'Low Priority (Tier 4)'. Any qualifications not selected through the survey (around 3,000) were assigned to 'Not Selected (Tier 5)'.

The peak bodies had an opportunity to view the qualifications in Output 2, to ensure the methodology was producing appropriate results. Very few changes were made to the overall results, and again, all changes were documented. The following moderation principles were applied when considering any changes, and reference was also made to NCVER's Total VET Activity.

### Moderation Principles

1. No qualification can be shifted more than one Priority Tier.
2. If a qualification was moderated down in the Output 1 consultation session (e.g. from Tier 1 to Tier 2) then that qualification cannot move up in moderation of Output 2
3. Qualifications that moved from Tier 1 to Tier 2 through the Output 2 methodology were individually reviewed for appropriateness.
4. Qualifications that had been prioritised as Tier 3 through the Output 1 process were not allowed to move to Tier 4 through the Output 2 calculation.

The IPQ dataset contains information on the prioritisation of QSCs in each of the 18 industry sectors, including where moderation based on the Commission's methodology has impacted on the level of priority for the 'Whole of Economy' (Output 2) List.

## Consultation: Interim Report

The *Interim Report on South Australia's Industry Priority Qualifications* was released in December 2015. Following the release of the report, stakeholders had an extended window of opportunity to provide more comprehensive feedback between 8 December 2015 and 22 February 2016.

The Commission's website provided a mechanism for online feedback, and sought specific recommendations from respondents to reprioritise qualifications into different Priority Tiers. Respondents were encouraged to comment on any QSCs that may not be represented in an appropriate tier. Respondents were asked to provide an explanation as to why a QSC may have been omitted from an appropriate tier and a rationale for why it might warrant reprioritisation. Industry participants were also able to provide general feedback through face-to-face discussions, phone calls and via email.



## 4 CHANGES FROM THE INTERIM REPORT

The Commission reviewed each recommended change against a set of criteria. For a qualification to change tier, the feedback needed to adhere to at least two of the following:

- A. Significant representation from multiple industry stakeholders (*i.e. if these stakeholders had undertaken the IPQ Survey, that qualification would have received a higher tier*)
- B. Clear demonstration of an oversight in the previous analysis based on widely perceived industry priorities and historical contexts (*i.e. lack of consideration of the practicalities of Contracts of Training, niche industry demand and regional impacts*).
- C. Strong evidence of a higher than average risk of a skills shortage (*i.e. likely economic impact due to unavailability of a skilled labour force*)
- D. Strong evidence of unidentified industry demand (*i.e. jobs growth and workforce development challenges*)
- E. Demonstration of unidentified bias in survey respondents (*i.e. size of employer, type of organisation and sub-sector representation*)
- F. Unidentified regulatory/licensing/public safety issues (*i.e. direct requirement for employment*)

Adjustments to qualifications occurred in the Industry Sector Lists (Output 1) in the first instance. Each qualification was then processed through the methodology described earlier in this chapter to determine whether it should change tier in the 'Whole of Economy' List (Output 2). This ensured the methodology was consistent with the previous process followed to obtain Industry Sector Lists (Output 1) and 'Whole of Economy' Lists (Output 2) for the *Interim Report*.

Fifty industry participants provided feedback on the *Interim Report on South Australia's Industry Priority Qualifications*. Much of the industry feedback was favourable towards the rigorous process undertaken by the Commission. Respondents provided updates to industry intelligence, commentary on the IPQ methodology, recommendations for further actions and specific recommendations for qualifications. Recommended changes were largely at the margin, reflecting small oversights in the original process.

In total, 67 qualifications received specific feedback for modifications of tiers. Of these recommendations, 47 were accepted with qualifications moving to a higher tier within Industry Sector Lists (Output 1), 13 did not satisfactorily meet the criteria for change and 4 were accepted with qualifications moving to a lower tier within Industry Sector Lists (Output 1). Additionally, 3 qualifications were adjusted following major changes to Training Packages since the initial survey was run.

The table on the following page summarises the changes made through industry representation following the launch of the Interim Report.

The first column lists the qualifications that received specific recommendations. The second and third columns list the original and updated tier for each qualification in the associated Industry Sector List (Output 1).

The fourth and fifth columns list the original and updated tier for each qualification in the 'Whole of Economy' List (Output 2) following application of the 'Whole of Economy' (Output 2) methodology.

The final column records which criteria were satisfactorily addressed as a reason to change the tier of a qualification.





**Table 2 - Qualifications Moved to Higher Tiers**

Qualifications	Original Industry Priority Tier	Updated Industry Priority Tier	Original 'Whole of Economy' Tier	Updated 'Whole of Economy' Tier	Rationale
Advanced Diploma of Community Sector Management	4	3	3	no change	B,D,E
Advanced Diploma of Electronics and Communications Engineering	4	2	4	2	B,C,D
Advanced Diploma of Oral Health (Dental Hygiene) (Accredited Course)	4	2	4	2	B,D,F
Certificate I in ElectroComms Skills	4	3	4	3	B,C,D
Certificate II in Civil Construction	3	1	2	1	A,B,D
Certificate II in Electrotechnology Studies (Pre-vocational)	4	2	4	2	B,C,D
Certificate II in Engineering Pathways	4	2	4	3	B,D
Certificate II in Meat Processing (Abattoirs)	2	1	3	2	A,B,C,D,E
Certificate II in Resources and Infrastructure Work Preparation	3	1	3	1	A,B,D
Certificate II in Underground Metalliferous Mining	2	1	2	no change	A,B,D
Certificate III in Agricultural Mechanical Technology	3	2	2	no change	B,E
Certificate III in Business Administration (Medical)	4	3	3	2	B,D
Certificate III in Business to Business Sales	5	3	3	2	B,D,E
Certificate III in Civil Construction Plant Operations	3	1	3	1	A,B,D
Certificate III in Dental Assisting	4	2	4	2	B,D,F
Certificate III in Electronics and Communications	4	2	4	2	B,C,D
Certificate III in Meat Processing (Retail Butcher)	4	1	4	1	A,B,C,D,E
Certificate III in Meat Processing (Smallgoods - Manufacture)	not selected	1	not selected	2	A,B,C,D,E
Certificate III in Pork Production	4	2	4	2	A,B,C,D,E
Certificate III in Poultry Production	4	2	4	2	A,B,C,D,E
Certificate III in Underground Metalliferous Mining	3	1	3	1	A,B,D
Certificate III in Vertebrate Pest Management	4	3	4	3	B,D,E
Certificate III in Wine industry Operations	3	2	3	2	D,E
Certificate IV in Arts Administration	3	2	3	no change	B,D
Certificate IV in Building and Construction (Estimating)	3	2	3	2	C,D
Certificate IV in Building and Construction (Site Management)	3	2	3	2	C,D
Certificate IV in Building and Construction (Trade Contracting)	4	3	4	3	C,D
Certificate IV in Dental Assisting	4	2	4	2	B,D,F
Certificate IV in Electronics and Communications	4	2	4	3	B,C,D
Certificate IV in Embalming	not selected	3	not selected	3	B,E
Certificate IV in English Proficiency	3	2	2	no change	B,E
Certificate IV in Fitness	4	2	4	2	A,B,D
Certificate IV in Horticulture	3	2	3	2	B,E
Certificate IV in Massage Therapy Practice	4	3	4	3	B,D
Certificate IV in Production Horticulture	3	2	3	2	B,E
Certificate IV in Volunteer Program Coordination	4	3	4	3	B,D,E
Diploma of Aromatherapy	4	3	4	3	B,D
Diploma of Electronics and Communications Engineering	4	3	4	3	B,C,D
Diploma of Fitness	not selected	2	not selected	2	A,B,D
Diploma of Outdoor Recreation	3	2	3	2	A,B,D
Diploma of Practice Management	3	2	3	2	B,D
Diploma of Reflexology	4	3	4	3	B,D
Diploma of Remedial Massage	4	3	4	3	B,D
Diploma of Sport and Recreation Management	not selected	3	not selected	3	A,B,D
Skill set (SIS) - Abseiling Instructor Single Pitch (natural Surfaces)	4	3	4	3	B,D
Skill set (SIS) - Bushwalking Guide Uncontrolled Environment	4	3	4	3	B,D
Skill Set (SIS) - Mountain Bike Instructor (Intermediate Environment)	4	3	4	3	B,D

**Table 3 - Qualifications Moved to Lower Tiers**

Qualifications	Original Industry Priority Tier	Updated Industry Priority Tier	Original 'Whole of Economy' Tier	Updated 'Whole of Economy' Tier	Rationale
Certificate I in Retail Service	2	3	2	no change	B,D
Certificate II in Emergency Medical Service First Response	1	2	1	no change	A,B,D
Certificate II in Engineering	2	3	2	no change	B,D
Certificate III in Mine Emergency Response and Rescue	1	2	1	2	A,B,D

**Table 4 - Qualifications Updated due to Training Package Changes**

**Qualifications**

Certificate IV in Aromatherapy (removed)
Certificate III in Individual Support (merged)
Certificate IV in Ageing Support

**Table 5 - Qualifications Reviewed - No Adjustment**

**Qualifications**

Certificate I in Engineering
Certificate II in Community Pharmacy
Certificate II in Horticulture
Certificate II in Rural Operations
Certificate III in Agriculture
Certificate III in Rural Operations
Certificate III Retail Baking (Bread)
Certificate III Retail Baking (Cake and Pastry)
Certificate IV in Accounting
Certificate IV in Building and Construction (Contract Administration)
Certificate IV in Building and Construction (Specialist Trades)
Diploma of Agribusiness Management
Diploma of Library and Information



## 5 FURTHER ANALYSIS

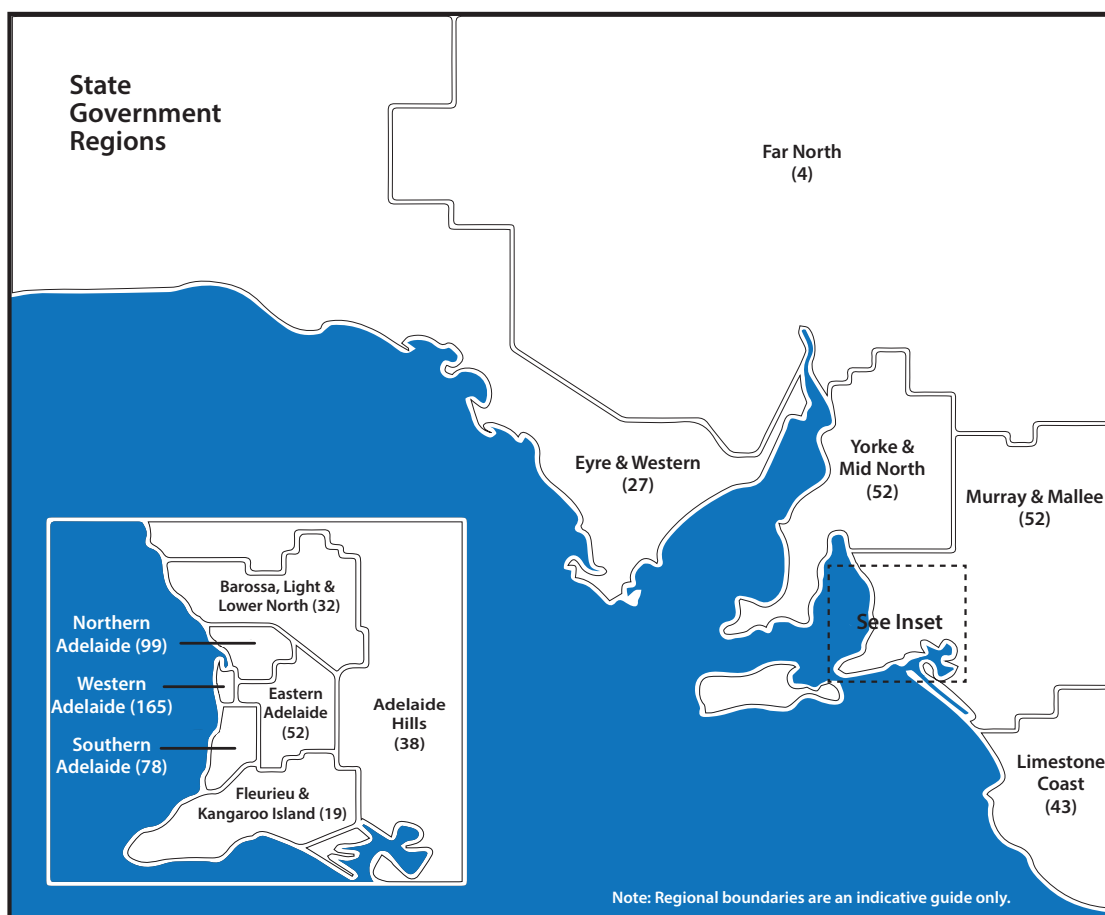
### Regional Perspectives (Postcode Analysis)

While the IPQ consultation process was not designed as a tool for establishing regional skills priorities, the Commission has been able to extract regionally identifiable responses and examine the results of the IPQ Survey from a regional perspective.

It should be noted that this analysis is only a starting point for the Commission to conduct a fuller exploration of regional industry skills needs. The Commission acknowledges the importance of this future work and the need for greater engagement with regional industry leaders in order to develop a regional understanding of industry priorities. Further commentary on industry's regional skills and workforce needs will be provided as this work progresses.

Through a post code analysis of the 850 responses received, the Commission can start to get an understanding of the divergence in qualification priorities of each region. Although insufficient to draw conclusions around the specific needs of our regions, this simple analysis is presented to support the Commission's long-held view against the universality of policies to support training and skills development.

Figure 8 - IPQ Responses by State Government Region



The number of responses based on State Government Regions (SGR) was statistically valid, with the exception of the Far North and Fleurieu and Kangaroo Island. Based on these results, the Commission identified regional variations in terms of Skills Cluster Priorities and Top 40 Priority Qualifications across each SGR.

It is interesting to note that the difference in Skills Cluster Priorities between each region is as significant as the variation in Skills Cluster Priorities for each industry sector.

In addition, the Top 40 Priority Qualifications of each SGR compared to the Top 40 Priority Qualifications varied by between 10 and 35 percent with an average 18 percent difference across all SGRs.

**Table 6 - Skills Cluster Priorities - by State Government Region**

Skills Clusters	All Respondents	Adelaide Hills	Barossa, Light & Lower North	Eastern Adelaide	Eyre and Western	Far North	Fleurieu and Kangaroo Island	Limestone Coast	Murray and Mallee	Northern Adelaide	Southern Adelaide	Western Adelaide	Yorke & Mid North
Managerial & Leadership	1	1	2	1	6	10	5	3	1	1	2	2	2
Sales & Customer Service	2	6	3	2	3	7	1	4	7	2	3	3	4
Information & Technology	3	4	4	3	5	2	3	1	2	5	1	4	3
Work Health & Safety (WHS)	4	8	1	7	1	1	4	2	4	4	5	1	1
Administration & Support	5	7	6	4	2	4	2	6	3	3	4	5	6
Financial	6	3	5	5	4	3	6	8	6	7	8	7	5
Marketing & Engagement	7	2	7	6	7	6	7	5	8	6	7	6	7
Human Resources	8	5	9	8	8	5	9	9	5	8	9	10	9
Sustainability & Environmental	9	9	8	11	9	8	11	7	9	10	10	8	8
Language, Literacy & Numeracy (LLN)	10	10	10	10	11	11	8	10	11	9	11	9	10
Entrepreneurial	11	11	11	9	10	9	10	11	10	11	6	11	11

It stands to reason that as we seek to disaggregate industry sectors in order to better understand our economy in the context of skills and workforce development, the same should be applied to South Australia's regional skills and workforce priorities.

The Commission is committed to giving our diverse regions a voice and will work with our Industry Partners and broader stakeholders to clearly define their priorities this year within the framework of this report on South Australia's Industry Priority Qualifications.

## High Growth Employer Perspectives

The IPQ Survey asked respondents to identify their current number of employees as well as plans for future employment growth (over the next five years). This has allowed the Commission to isolate the responses of 'High Growth' employers, to identify their skills needs in contrast to the whole of South Australia.

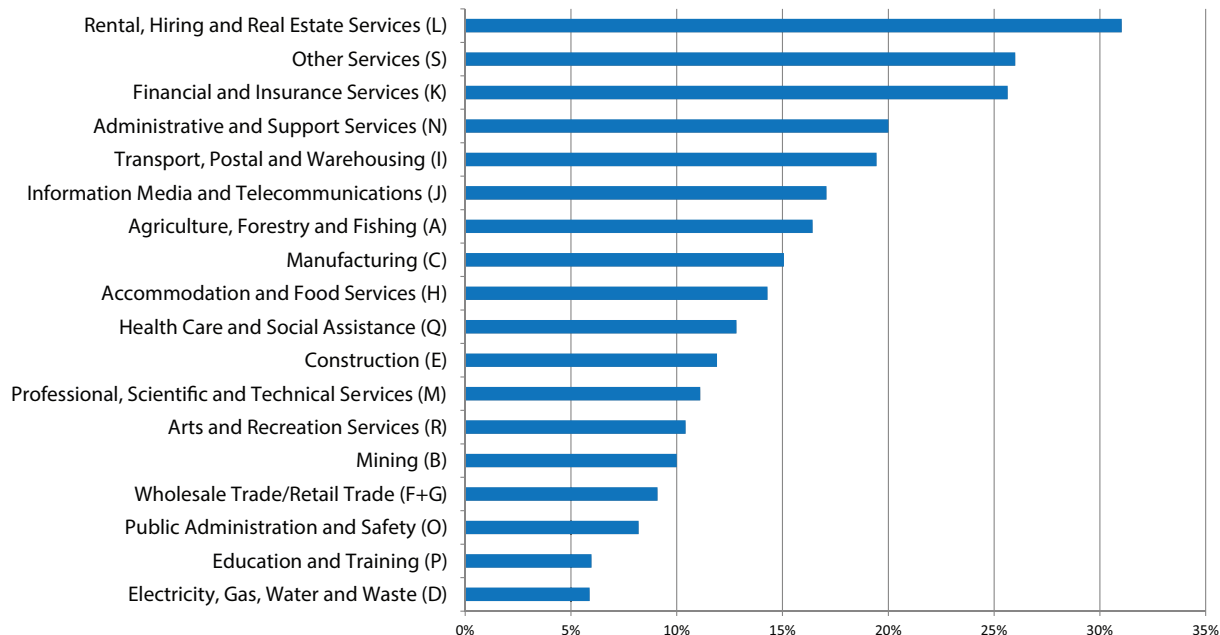
High Growth employers were identified using the methodology in Table 7.

**Table 7 - Methodology for Identifying High Growth Employers**

Current Employment	Predicted Employment Growth (5 years)			
	1-5	6-15	16-50	50+
1 to 4 Employees	✓	✓	✓	✓
5 to 19 Employees		✓	✓	✓
20 to 199 Employees			✓	✓
200 or more Employees				✓

✓ = High Growth Employer

**Figure 9 - IPQ 'High Growth' Survey Responses by Industry and Percentage of Total Industry Responses**



123 respondents were identified as High Growth employers, which is around 15 percent of total respondents. By industry, *rental, hiring and real estate*, *other services* and *financial and insurance services* had the highest percentage of High Growth employers (31 percent, 26 percent and 26 percent, respectively).

**Table 8 - Skills Cluster Rankings - High Growth Employers**

Skills Clusters	High Growth Responses	All Responses	Compare
Managerial & Leadership	1	2	↔
Sales & Customer Service	2	1	↔
Administration & Support	3	5	↑
Information & Technology	4	3	↓
Work Health & Safety (WHS)	5	4	↓
Marketing & Engagement	6	7	↑
Financial	7	6	↓
Human Resources	8	8	↔
Sustainability & Environmental	9	9	↔
Entrepreneurial	10	11	↑
Language, Literacy & Numeracy (LLN)	11	10	↓

Skills Cluster rankings shared some divergence in comparison to the overall rankings with *administration and support* skills being the most significant difference (moving up two places in terms of importance).

### High Growth Respondents - Top 50 Qualifications

The top 50 qualifications for High Growth respondents were almost identical to the top 50 qualifications for all respondents (unadjusted for industry representation), with only two qualifications differing between the lists. Similar to the overall results, the top qualifications were almost exclusively related to Business, Management and Work Health & Safety.

High Growth respondents were almost twice as likely to be willing to contribute to training that Government did not fully subsidise. They were marginally more likely to use qualifications for upskilling, and marginally less likely to use qualifications for pre-vocational or reskilling reasons.

Marketing and Customer Engagement were considerably higher priorities for High Growth employers.



**Table 9 - Top 50 Qualifications - High Growth Respondents vs All Respondents by Difference**

<b>Qualifications</b>	<b>High Growth Rank</b>	<b>All Respondents Rank</b>	<b>Difference</b>
Advanced Diploma of Marketing	14	45	31
Diploma of Marketing	19	43	24
Certificate III in Driving Operations	28	49	21
Certificate III in Customer Engagement	24	42	18
Certificate IV in Customer Engagement	30	48	18
Certificate IV in Marketing	10	27	17
Certificate IV in Business Sales	29	39	10
Certificate III in Recordkeeping	13	21	8
Certificate II in Customer Engagement	39	47	8
Diploma of Business Administration	8	15	7
Certificate II in Business	11	16	5
Certificate II in Emergency Medical Service First Response	20	25	5
Certificate III in Business	4	7	3
Advanced Diploma of Program Management	27	30	3
Advanced Diploma of Leadership and Management	7	9	2
Certificate III in Business Administration	1	2	1
Advanced Diploma of Work Health and Safety	16	17	1
Diploma of Purchasing	34	35	1
Certificate IV in Leadership and Management	3	3	0
Diploma of Project Management	12	12	0
Diploma of Business	18	18	0
Diploma of Financial Services	33	33	0
Certificate IV in Work Health and Safety	2	1	-1
Certificate III in Work Health and Safety	5	4	-1
Diploma of Leadership and Management	6	5	-1
Diploma of Human Resources Management	15	14	-1
Diploma of Website Development	41	40	-1
Certificate III in Information, Digital Media and Technology	21	19	-2
Certificate IV in Purchasing	31	29	-2
Diploma of Work Health and Safety	9	6	-3
Advanced Diploma of Graphic Design	49	46	-3
Certificate IV in Human Resources	17	13	-4
Advanced Diploma of Business	26	22	-4
Certificate III in Financial Services	43	38	-5
Certificate II in Financial Services	46	41	-5
Certificate IV in Bookkeeping	40	34	-6
Certificate IV in Financial Services	44	37	-7
Certificate III in Accounts Administration	36	28	-8
Certificate I in Information, Digital Media and Technology	45	36	-9
Certificate IV in Business	22	10	-12
Certificate IV in Small Business Management	32	20	-12
Diploma of Accounting	35	23	-12
Advanced Diploma of Accounting	38	26	-12
Certificate IV in Accounting	37	24	-13
Certificate IV in Project Management Practice	25	11	-14
Certificate IV in Business Administration	23	8	-15
Certificate II in Information, Digital Media and Technology	47	32	-15
Certificate IV in Training and Assessment	50	31	-19



## Small Employer Perspectives

58 percent of employers who responded to the IPQ Survey self-identified as micro or small businesses (1 to 4 employees or 5 to 19 employees, respectively). The following section contrasts the skills needs of small employers with all employers, as identified through the IPQ Survey.

Employer business sizes are based on Australian Bureau of Statistics (ABS) classifications. (see Table 10)

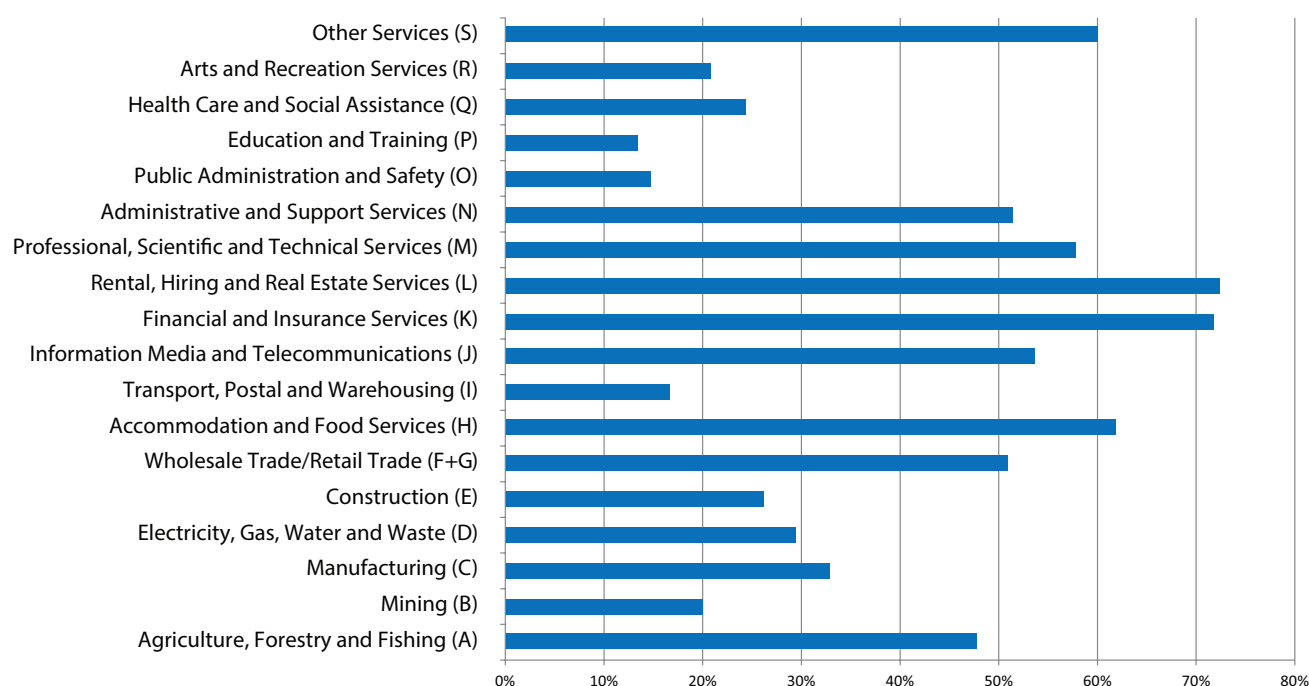
319 respondents were identified as micro or small employers, which is around 38 percent of total respondents. By industry, Rental, Hiring and Real Estate and Financial and Insurance Services had the highest percentage of Micro and Small employers, at over 70 percent in each.

The following regions had over 50 percent of their total respondents identify as small or micro employers: Fleurieu and Kangaroo Island, Limestone Coast, Yorke and Mid North and Far North. Northern Adelaide had the lowest percentage, at 30 percent.

**Table 10 - Classification of Employer Business Sizes (ABS)**

Current Employment	Business Classification
1 to 4 employees	Micro Business
5 to 19 employees	Small Business
20 to 199 employees	Medium Business
200 or more employees	Large Business

**Figure 10 - IPQ Survey Responses - Micro and Small Employers by Industry and Percentage of Total Responses**





Skills Cluster rankings shared some divergence in comparison to the rankings for all employers with *Entrepreneurship* identified as more important for micro and small employers, and *Managerial and Leadership* and *Work Health and Safety* identified as less important.

A comparison of specific qualifications with all employers confirms the contrast in Skills Cluster rankings.

Engagement, marketing, small business and information technology qualifications ranked much higher on the list of top 50 qualifications for Micro and Small Employers (unadjusted for industry representation).

Management, Leadership, Human Resources, Work Health and Safety and Advanced Business qualifications ranked much lower.

Micro and Small Employers were much more likely to be willing to contribute to essential training that Government did not fully subsidise. Marketing and Customer Engagement were considerably higher priorities for small and micro employers.

**Table 11 - Skills Cluster Rankings - Micro and Small Employers**

Skills Clusters	Micro & Small Employer Responses	All Employer Responses	Compare
Sales & Customer Service	1	1	↔
Administration & Support	2	3	↑
Information & Technology	3	4	↑
Managerial & Leadership	4	2	↓
Marketing & Engagement	5	6	↑
Financial	6	7	↑
Work Health & Safety (WHS)	7	5	↓
Entrepreneurial	8	10	↑
Human Resources	9	8	↓
Sustainability & Environmental	10	9	↓
Language, Literacy & Numeracy (LLN)	11	11	↔



**Table 12 - Top 50 Qualifications - Micro and Small Employers vs All Employers by Difference**

Qualifications	High Growth Rank	All Respondents Rank	Difference
Certificate III in Customer Engagement	15	40	25
Certificate II in Customer Engagement	18	43	25
Certificate IV in Business Sales	5	26	21
Certificate IV in Marketing	11	29	18
Certificate IV in Small Business Management	8	24	16
Certificate IV in Customer Engagement	29	45	16
Certificate III in Recordkeeping	10	25	15
Certificate I in Information, Digital Media and Technology	24	37	13
Certificate II in Information, Digital Media and Technology	25	38	13
Diploma of Financial Services	20	31	11
Certificate III in Engineering - Fabrication Trade	38	49	11
Certificate IV in Bookkeeping	22	32	10
Certificate IV in Financial Services	23	33	10
Certificate II in Business	6	14	8
Certificate III in Information, Digital Media and Technology	14	22	8
Certificate II in Financial Services	31	39	8
Diploma of Website Development	36	44	8
Advanced Diploma of Marketing	39	47	8
Certificate III in Financial Services	28	35	7
Diploma of Marketing	34	41	7
Certificate III in Micro Business Operations	45	50	5
Certificate III in Business	4	7	3
Certificate III in Accounts Administration	27	30	3
Certificate IV in Purchasing	33	36	3
Certificate IV in Accounting	16	18	2
Certificate IV in Business	17	19	2
Certificate III in Work Health and Safety	1	2	1
Certificate III in Business Administration	2	3	1
Certificate II in Emergency Medical Service First Response	7	8	1
Certificate IV in Work Health and Safety	3	1	-2
Diploma of Accounting	19	17	-2
Certificate IV in Business Administration	13	10	-3
Certificate IV in Leadership and Management	9	4	-5
Advanced Diploma of Accounting	26	21	-5
Diploma of Purchasing	48	42	-6
Diploma of Work Health and Safety	12	5	-7
Advanced Diploma of Work Health and Safety	21	9	-12
Diploma of Business	35	23	-12
Advanced Diploma of Business	42	27	-15
Diploma of Business Administration	30	13	-17
Certificate IV in Project Management Practice	20	37	-17
Diploma of Leadership and Management	6	32	-26
Advanced Diploma of Leadership and Management	11	41	-30
Certificate IV in Human Resources	12	46	-34



## Training Provider Influence

The Commission was initially concerned with the possible influence training providers may have on the results of the IPQ Survey. Therefore, a conscious effort was made to explore that influence with moderators and industry stakeholders.

Extensive analysis on the influence of training providers across all sectors demonstrated minimal influence on the prioritisation of qualifications when compared to all respondents.

However, it was noted that stakeholders regularly suggested that many training providers participating in the Commission's IPQ consultation had a good understanding of the needs of employers through strong links to industry.



## 6 INTENDED USE

The Commission will share this data with appropriate Government agencies, however is conscious of it being used appropriately and in the context of its intended purpose.

Advice on how to interpret the results from the Commission's Report on South Australia's Industry Priority Qualifications has been provided in the following section.

It is the Commission's view that the process of identifying IPQs should be undertaken on an infrequent basis, given that industry priorities are unlikely to vary significantly in the short to medium term.

Moreover, the results from the IPQ Survey are not intended to directly inform (the level of) publicly subsidised training activity. Rather, it is one of many inputs to the Subsidised Training List (STL) (see Figure 1). However, the Commission acknowledges that this is the first time that the Government will have a comprehensive understanding of industry's VET priorities.

Although the volume of activity for each qualification was identified using NCVER's Total VET Activity (TVA), that data did not form part of the Commission's methodology for producing Output 1 or Output 2. The Commission's dataset on Industry's Priority Qualifications will also provide a useful contrast to the NCVER Total VET Activity (TVA), and may allow for an in depth analysis of variations between student and industry demand in order to better understand the complexity of VET utilisation in South Australia.

The qualifications included in the IPQ Survey were obtained from training.gov.au (as at May 2015). Several training packages have been updated since that time. Therefore, care should be taken to map outdated qualifications to more recent qualifications when using this data.

The Commission appreciates that any funding decision-making matrix is likely to include consideration of whether a qualification is appropriately accommodated in the private fee-for-service market. However, the data collected on 'If the government didn't fully subsidise this Qualification, my enterprise/industry would contribute to it', was only solicited to understand qualification priorities and was not designed to give an indication of industry or employers insights on whether a particular qualification should be publicly subsidised.

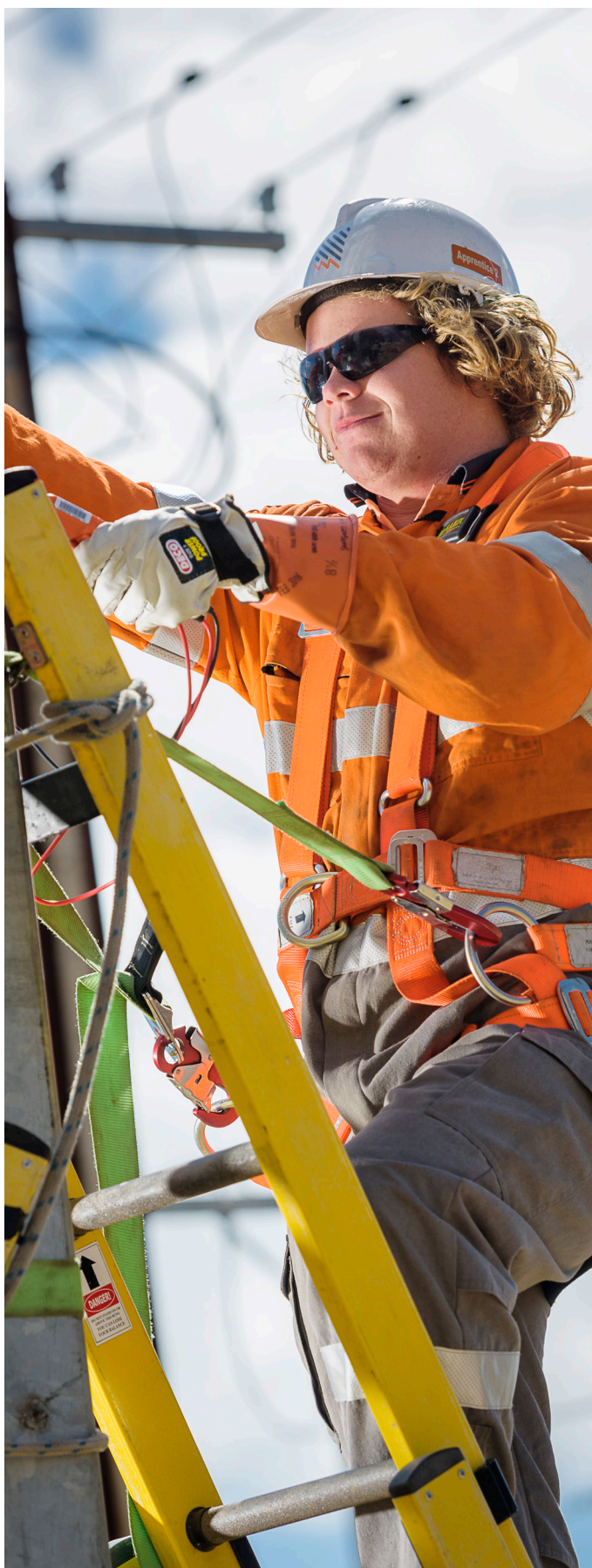
It is also recommended that decision-makers consider the factors that may influence willingness to pay, including:

- Historical funding of qualifications;
- Cost of qualifications;
- Relative benefit attributed to qualification attainment; and
- Industry sub sector, employer size and regional divergences.

The Commission's consultation process highlighted that in the main the prioritised VET qualifications of industry closely reflect the level of future job openings forecast by the Commission. However, this raises the question of how employment outcomes can be measured and matched to a supply driven policy approach.

The principle aim of any model designed to assist in the allocation of funded training places should be industry-informed in order to ensure public investment is targeted to skill development of greatest industry benefit, and in turn, the State's workforce objectives. A demand driven system, informed by intelligence about industry demand for qualifications, is necessary to appropriately align training with employment expectations.





A large share of Funded Training Places (FTP's) is attached to a relatively small share of vocational qualifications. In this context, the Government is not reaping the maximum benefit from its skills investment in a demand-driven VET system (i.e. 80 percent of the Government's investment is allocated to 20 percent of VET qualifications). An industry-informed demand-driven system with quality controls will help to ensure alignment between student and industry demand for qualifications and adequate supply of job-ready graduates.

It is the Commission's view that the quantum of publicly funded training places should be based on the anticipated industry demand for qualifications, driven principally by the skilling requirements of new entrants (to fill job openings resulting from expansion and replacement demand) and the skilling requirements of the existing workforce (to align skills with changing industrial and occupational needs).

Determining appropriate funding levels aligned to industry demand for qualifications is dependent on strengthening partnerships for the purposes of planning and implementation between Government, industry and the wider community. The Commission has previously recommended in its *'Skills for Future Jobs 2014'* report to strengthen quality controls of funding a demand driven system by identifying high performing training providers with demonstrable links to industry.

It is the Commission's expectation that this report will inform the decisions of Government on the release of the July 2016 STL.

The Commission will provide further policy analysis and recommendations in its next Five-Year Workforce Development Plan, *'Skills for Future Jobs 2020'*, which will be released in late 2016.

## 7 FURTHER CONSIDERATIONS

It is recommended that the following considerations are made with reference to the prioritisation of qualifications:

### **Proliferation of qualifications**

Of a total 4,100 Qualifications, Skill Sets and Accredited Courses (QSC's) around 1,100 were identified as a priority by survey respondents (reflected in IPQ Tiers). The non-identification of around 3,000 qualifications provides evidence that there is an over-proliferation of VET qualifications, but may also highlight the difficulty in navigating the complexities of the Australian Qualifications Framework (AQF). Moreover, the results of this survey suggest that a large number of VET qualifications are not considered a priority by industry. For example, there were a significantly low proportion of qualifications identified as a priority (1,138 out of a possible 4,100 QSCs).

### **Stakeholder consultation on the funding of VET qualifications**

The vast majority of qualifications identified as a priority through the consultation process closely align to those qualifications currently receiving public funding on the Subsidised Training List (STL). Around 80 percent of VET qualifications that appeared in one of the top three Priority Tiers were also eligible for public subsidy on the current STL. Indeed, the reduction in the number of VET qualifications eligible for public funding on the STL to around 350 qualifications will be difficult to achieve in isolation, as the process is largely an industry dynamic. Future stakeholder consultation may benefit from establishing the need for a qualification on the STL (using prioritisation as a significant weighting) in the first instance, rather than using the current STL as the basis for consultation.

### **Willingness to pay**

Different industries have a different ability to pay for training. The same may be said for sub-sectors within an industry and the size and growth expectations of employers.

### **Skill Sets**

The Commission acknowledges that the current policy settings of the State Government primarily do not support public subsidy of Skill Sets. However, 224 Skill Sets were identified as a priority by survey respondents, including 29 Skills Sets that were identified as a Tier 1, Tier 2 or Tier 3 Priority by industry.

### **Accredited and Non-Accredited Qualifications**

The Commission is aware of the importance of non-accredited and accredited qualifications delivered in the Adult Community Education (ACE) sector that promote engagement and pathways to further training and employment. Separate work is currently being undertaken by the Commission to explore the public value contribution and economic benefits stemming from the transition from ACE to accredited and non-accredited training.

### **Pre-vocational Qualifications**

While this report does not specifically consider pre-vocational qualifications, the Commission acknowledges the important role of pre-vocational skills in preparing individuals for further study and employment. The results from this survey suggest that a separate framework is necessary to separate those qualifications that provide vocational skills and those that are preparatory for further learning pathways. It is anticipated that this will bolster the legitimacy of pre-vocational qualifications through better targeting State Government funding in this area.



## **Language, Literacy and Numeracy (LLN)**

The Commission is surprised by the low priority given to LLN for both qualifications priorities and Skills Clusters. Over the past three years all regional consultations, industry roundtables and stakeholder engagements undertaken by the Commission have explicitly included LLN as a topic of discussion. Stakeholders provided the following reasons for the low prioritisation of LLN skills:

- Industry does not view LLN as their responsibility, but rather a strategic priority and funding responsibility of government;
- Basic LLN is the responsibility of the schooling sector and not that of the VET sector; and
- Given the current subdued employment outlook, employers are provided with greater choice and will naturally support engaging a workforce that already has the required level of LLN skills.

Consequently, it is recommended that the Government give due consideration to the importance of foundation and LLN skills when making public value assessments to determine funding allocations. LLN will remain an ongoing strategic focus for the Commission.

## **Highly transferrable / non industry specific qualifications**

Generic or non-industry specific qualifications that are highly transferrable across industries and occupations are generally identified as a high priority across all industries. The public value assessment of these types of qualifications will need to balance many facets including: willingness to pay, supporting an adaptable workforce and innovative responses to structural change amongst many others.

## **Regional specificity**

Based on all the evidence collected and representations from stakeholders, it is suggested that a regional perspective of industry's priorities is required. Our regions are arguably as diverse in nature as South Australia is compared to the national economy, and therefore, needs to be thoroughly investigated at a local level.

## 8 NEXT STEPS

The Office of the Training and Skills Commission has now completed the feedback component of the IPQ consultation. All documents, datasets and tools will remain available to access on the Commission's website at [www.tasc.sa.gov.au](http://www.tasc.sa.gov.au).

In accordance with the Commission's commitment to transparency, and to support any future feedback, the full list of QSCs identified by industry, is also accessible via the Commission's website.

The findings of this report will be provided to Government for further consideration and is expected to make a significant contribution to future skills and training priorities.

As previously discussed, the Commission has identified a number of policy questions that have arisen from this extensive consultation work. These considerations have been grouped into the follow topics:

- Proliferation of qualifications;
- Stakeholder consultation on the funding of VET qualifications;
- Willingness to pay;
- Skill Sets;
- Accredited and Non-Accredited Qualifications;
- Pre-vocational Qualifications;
- Language, Literacy and Numeracy (LLN);
- Highly transferable/ non industry specific qualifications; and
- Regional specificity

The Commission has now produced eight stand-alone Five-Year Workforce Development Plans - the most recent being '*Skills for Future Jobs 2014*'. In the next iteration, due for release at the end of 2016, the Commission will seek to address many of the questions raised throughout this process.

## 9 INDUSTRY PRIORITY QUALIFICATIONS (WHOLE OF ECONOMY)

One of the challenges in creating a 'Whole of Economy' List (Output 2) was balancing the priorities of multiple and diverse industry sectors.

The Commission devised a formula (see Section 3) that brought together all of the individual industry priorities from Output 1. Using this formula, each industry was initially weighted the same; for example, a priority 1 in industry A was given the same value as a priority 1 in industry B. The formula used other factors to establish overall priorities, including applicability of qualifications across multiple jobs and industries and projected employment growth for each industry.

In response to feedback received from industry stakeholders on the methodology for Output 2, the Commission also added current industry productivity to the formula. Stakeholders explained that some industries had low employment share in the economy, but had a much higher share of GSP contribution.

The majority of Tier 1 Priority Qualifications for each industry in Output 1 were also identified as a Tier 1 Priority in Output 2 for the 'Whole of Economy', with approximately 25 percent of qualifications identified as a Tier 1 Priority in Output 1 moving down in the 'Whole of Economy' List.



**Table 13 - Whole of Economy (Output 2) Priority Qualifications List**

## Whole of Economy - Output 2

### Tier 1 (Highest Priority)

#### Advanced Diploma

Advanced Diploma of Accounting  
Advanced Diploma of Creative Product Development

#### Diploma

Diploma of Early Childhood Education and Care  
Diploma of Financial Services  
Diploma of Graphic Design  
Diploma of Human Resources Management  
Diploma of Nursing (Enrolled-Division 2 nursing)  
Diploma of Property Services (Agency Mgt)  
Diploma of Retail Management  
Diploma of Vocational education and training  
Diploma of Website Development  
Diploma of Work Health and Safety

#### Certificate IV

Certificate IV in Accounting  
Certificate IV in Bookkeeping  
Certificate IV in Business Sales  
Certificate IV in Financial Services  
Certificate IV in Health Administration  
Certificate IV in Information Technology  
Certificate IV in Information Technology Networking  
Certificate IV in Language, Literacy & Numeracy  
Assessment & Training (Accredited Course)  
Certificate IV in Leadership and Management  
Certificate IV in Library, Information and Cultural Services  
Certificate IV in Local Government (Regulatory Services)  
Certificate IV in Mental Health  
Certificate IV in Property Services (Real Estate)  
Certificate IV in Retail Management  
Certificate IV in Small Business Management  
Certificate IV in Sport and Recreation  
Certificate IV in Teaching English to Speakers of  
Other Languages (TESOL) (Acc. Course)  
Certificate IV in Training and Assessment  
Certificate IV in Visual Arts  
Certificate IV in Work Health and Safety  
Certificate IV in Youth Work

#### Certificate III

Certificate III in Accounts Administration  
Certificate III in Air-conditioning and Refrigeration  
Certificate III in Aquaculture  
Certificate III in Aquatics  
Certificate III in Bricklaying/Blocklaying  
Certificate III in Business  
Certificate III in Business Administration  
Certificate III in Carpentry  
Certificate III in Civil Construction  
Certificate III in Civil Construction Plant Operations  
Certificate III in Commercial Cookery  
Certificate III in Community Services Work  
Certificate III in Customer Engagement  
Certificate III in Data and Voice Communications  
Certificate III in Driving Operations  
Certificate III in Early Childhood Education and Care  
Certificate III in Electrotechnology Electrician  
Certificate III in Engineering - Composites Trade  
Certificate III in Engineering - Electrical/Electronic Trade

Certificate III in Engineering - Fabrication Trade  
Certificate III in Engineering - Mechanical Trade  
Certificate III in Engineering - Production Systems  
Certificate III in Engineering - Technical  
Certificate III in ESI - Power Systems - Dist'n Overhead  
Certificate III in Financial Services  
Certificate III in Food Processing  
Certificate III in Hairdressing  
Certificate III in Harvesting and Haulage  
Certificate III in Health Administration  
Certificate III in Health Services Assistance  
Certificate III in Horticulture  
Certificate III in Hospitality  
Certificate III in Individual Support  
Certificate III in Information, Digital Media & Technology  
Certificate III in Instrumentation and Control  
Certificate III in Irrigation  
Certificate III in Live Production and Services  
Certificate III in Local Government (Regulatory Services)  
Certificate III in Logistics  
Certificate III in Meat Processing (Retail Butcher)  
Certificate III in Papermaking Operations  
Certificate III in Plumbing  
Certificate III in Production Horticulture  
Certificate III in Property Services (Agency)  
Certificate III in Recordkeeping  
Certificate III in Retail Baking (Combined)  
Certificate III in Retail Operations  
Certificate III in Retail Supervision  
Certificate III in Roof Plumbing  
Certificate III in Sawmilling and Processing  
Certificate III in Surface Extraction Operations  
Certificate III in Underground Metalliferous Mining  
Certificate III in Work Health and Safety

#### Certificate II

Certificate II in Aboriginal or Torres Strait Islander Cultural Arts  
Certificate II in Agriculture  
Certificate II in Business  
Certificate II in Civil Construction  
Certificate II in Driving Operations  
Certificate II in Electrotechnology (Career Start)  
Certificate II in Emergency Medical Service First Response  
Certificate II in Engineering - Production Technology  
Certificate II in Health Support Services  
Certificate II in Hospitality  
Certificate II in Information, Digital Media & Technology  
Certificate II in Kitchen Operations  
Certificate II in Logistics  
Certificate II in Maritime Operations (Coxswain Gr1 Near Coastal)  
Certificate II in Maritime Operations (Marine Engine  
Driver Gr 3 Near Coastal)  
Certificate II in Resources & Infrastructure Work Preparation  
Certificate II in Retail Services  
Certificate II in Surface Extraction Operations  
Certificate II in Warehousing Operations

#### Skill Set

Skill Set (MAR) - Safety Training Certification Skill Set  
Skill Set (MAR) - Shipboard Safety Skill Set

## Whole of Economy - Output 2

### Tier 2 (High Priority)

#### Advanced Diploma

Advanced Diploma of Business  
Advanced Diploma of Conveyancing  
Advanced Diploma of Electronics and Communications Engineering  
Advanced Diploma of Engineering  
Advanced Diploma of Graphic Design  
Advanced Diploma of Hospitality  
Advanced Diploma of Leadership and Management  
Advanced Diploma of Management (HR)  
Advanced Diploma of Nursing (Enrolled/Division 2 nursing)  
Advanced Diploma of Oral Health (Dental Hygiene) (Accredited Course)  
Advanced Diploma of Work Health and Safety

#### Diploma

Diploma of Accounting  
Diploma of Agribusiness Management  
Diploma of Agriculture  
Diploma of Arboriculture  
Diploma of Business Administration  
Diploma of Community Services (Case Mgt)  
Diploma of Database Design and Development  
Diploma of Engineering - Advanced Trade  
Diploma of Events  
Diploma of Finance and Mortgage Broking Mgt  
Diploma of Financial Planning  
Diploma of Fitness  
Diploma of Horticulture  
Diploma of Hospitality  
Diploma of Information Technology  
Diploma of Information Technology Networking  
Diploma of Insurance Broking  
Diploma of Leadership and Management  
Diploma of Live Production and Technical Services  
Diploma of Marketing  
Diploma of Outdoor Recreation  
Diploma of Practice Management  
Diploma of Production Horticulture  
Diploma of Project Management  
Diploma of Software Development  
Diploma of Sport Development  
Diploma of Training Design and Development  
Diploma of Visual Merchandising

#### Certificate IV

Certificate IV in Ageing Support  
Certificate IV in Agriculture  
Certificate IV in Allied Health Assistance  
Certificate IV in Banking Services  
Certificate IV in Beauty Therapy  
Certificate IV in Building and Construction (Estimating)  
Certificate IV in Building and Construction (Site Management)  
Certificate IV in Business  
Certificate IV in Business Administration

Certificate IV in Child, Youth and Family Intervention  
Certificate IV in Commercial Cookery  
Certificate IV in Community Services Work  
Certificate IV in Companion Animal Services  
Certificate IV in Computer Systems Technology  
Certificate IV in Dental Assisting  
Certificate IV in Disability  
Certificate IV in Electrical - Instrumentation  
Certificate IV in Electrical - Renewable Energy  
Certificate IV in Engineering  
Certificate IV in English Proficiency  
Certificate IV in Fitness  
Certificate IV in Hairdressing  
Certificate IV in Horticulture  
Certificate IV in Hospitality  
Certificate IV in Human Resources  
Certificate IV in Information Technology Support  
Certificate IV in Live Production and Technical Services  
Certificate IV in Logistics  
Certificate IV in Marketing  
Certificate IV in Outdoor Recreation  
Certificate IV in Papermaking Operations  
Certificate IV in Production Horticulture  
Certificate IV in Programming  
Certificate IV in Project Management Practice  
Certificate IV in Purchasing  
Certificate IV in Renewable Energy  
Certificate IV in Train Driving  
Certificate IV in Transport and Logistics (Road Transport Heavy Vehicle Driving Instruction)  
Certificate IV in Veterinary Nursing  
Certificate IV in Web-Based Technologies  
Certificate IV in Wool Classing

#### Certificate III

Certificate III in Agricultural Mechanical Technology  
Certificate III in Agriculture  
Certificate III in Allied Health Assistance  
Certificate III in Automotive Diesel Engine Technology  
Certificate III in Automotive Electrical Technology  
Certificate III in Automotive Sales  
Certificate III in Beauty Services  
Certificate III in Business Administration (Education)  
Certificate III in Business Administration (Medical)  
Certificate III in Business to Business Sales  
Certificate III in Cabinet Making  
Certificate III in Carpentry and Joinery  
Certificate III in Catering Operations  
Certificate III in Community Pharmacy  
Certificate III in Concreting  
Certificate III in Dental Assisting  
Certificate III in Drilling Oil/Gas (On shore)  
Certificate III in Drilling Operations  
Certificate III in Electronics and Communications  
Certificate III in English Proficiency



## Whole of Economy - Output 2

### Tier 2 (High Priority)

#### Certificate III (cont...)

Certificate III in Fitness  
Certificate III in Furniture Making  
Certificate III in Gas Fitting  
Certificate III in Gas Supply Industry Operations  
Certificate III in Health Support Services  
Certificate III in Insurance Broking  
Certificate III in Maritime Operations (Marine Engine Driver Grade 2 Near Coastal)  
Certificate III in Maritime Operations (Master up to 24 metres Near Coastal)  
Certificate III in Meat Processing (Boning Room)  
Certificate III in Meat Processing (Meat Safety)  
Certificate III in Meat Processing (Slaughtering)  
Certificate III in Meat Processing (Smallgoods - Manufacture)  
Certificate III in Mine Emergency Response & Rescue  
Certificate III in Mobile Plant Technology  
Certificate III in Outdoor Recreation  
Certificate III in Painting and Decorating  
Certificate III in Police Studies (Accredited Course)  
Certificate III in Pork Production  
Certificate III in Poultry Production  
Certificate III in Printing and Graphic Arts (Digital Printing)  
Certificate III in Printing and Graphic Arts (Graphic Prepress)  
Certificate III in Printing and Graphic Arts (Print Finishing)  
Certificate III in Resource Processing  
Certificate III in Retail Baking (Bread)  
Certificate III in Retail Baking (Cake and Pastry)  
Certificate III in Rural Operations  
Certificate III in Sawdoctoring  
Certificate III in Shearing  
Certificate III in Spoken and Written English  
Certificate III in Sport and Recreation  
Certificate III in Sterilisation Services  
Certificate III in Timber Truss and Frame Design and Manufacture  
Certificate III in Tourism  
Certificate III in Wall and Ceiling Lining  
Certificate III in Warehousing Operations  
Certificate III in Waste Driving Operations  
Certificate III in Wine Industry Operations

#### Certificate II

Certificate II in Arboriculture  
Certificate II in Automotive Sales  
Certificate II in Automotive Servicing Technology  
Certificate II in Community Services  
Certificate II in Construction  
Certificate II in Construction Pathways  
Certificate II in Drilling Oil/Gas (On shore)  
Certificate II in Drilling Operations  
Certificate II in Electrotechnology Studies (Pre-Voc)  
Certificate II in Engineering  
Certificate II in Financial Services  
Certificate II in Fishing Operations  
Certificate II in Food Processing  
Certificate II in Horticulture  
Certificate II in Meat Processing (Abattoirs)  
Certificate II in Metal Roofing and Cladding  
Certificate II in Nail Technology  
Certificate II in Production Horticulture  
Certificate II in Road Transport Yard Operations (Freight Handler)  
Certificate II in Rural Operations  
Certificate II in Security Operations  
Certificate II in Shearing  
Certificate II in Spoken and Written English  
Certificate II in Underground Metalliferous Mining

#### Certificate I

Certificate I in AgriFood Operations  
Certificate I in Engineering  
Certificate I in Retail Services

#### Skill Set

Skill Set (FPI) - Skill set for a forestry log truck driver  
Skill Set (FPI) - Skill set for a forwarder operator  
Skill Set (FPI) - Skill set for a loader operator  
Skill Set (SIT) - Food Safety Supervision



## Whole of Economy - Output 2

### Tier 3 (Priority)

#### Advanced Diploma

Advanced Diploma of Agribusiness Management  
Advanced Diploma of Agriculture  
Advanced Diploma of Building and Construction (Mgt)  
Advanced Diploma of Community Sector Mgt  
Advanced Diploma of Dance (Elite Performance)  
Advanced Diploma of Dental Prosthetics  
Advanced Diploma of Electrical - Engineering  
Advanced Diploma of Engineering Technology - Electrical  
Advanced Diploma of Events  
Advanced Diploma of Forest Industry Sustainability  
Advanced Diploma of Horticulture  
Advanced Diploma of Live Production and Mgt Services  
Advanced Diploma of Marketing  
Advanced Diploma of Process Plant Technology  
Advanced Diploma of Program Management  
Advanced Diploma of Screen and Media  
Advanced Diploma of Visual Arts

#### Diploma

Diploma of Aeroskills (Avionics)  
Diploma of Aeroskills (Non-Destructive Testing)  
Diploma of Air-conditioning and Refrigeration Engineering  
Diploma of Aquaculture  
Diploma of Aromatherapy  
Diploma of Arts (Professional Writing)  
Diploma of Aviation Maintenance Management (Avionics)  
Diploma of Beauty Therapy  
Diploma of Building and Construction (Building)  
Diploma of Building and Construction (Management)  
Diploma of Building Design  
Diploma of Business  
Diploma of Child, Youth and Family Intervention  
Diploma of Community Services Coordination  
Diploma of Conservation and Land Management  
Diploma of Counselling  
Diploma of Dance (Elite Performance)  
Diploma of Dental Technology  
Diploma of Education Support  
Diploma of Electrical Engineering  
Diploma of Electronics & Communications Engineering  
Diploma of Engineering - Technical  
Diploma of Engineering Drafting (Accredited Course)  
Diploma of Food Processing  
Diploma of Holiday Parks and Resorts  
Diploma of Information Technology Systems Administration  
Diploma of International Business  
Diploma of Library and Information Services  
Diploma of Logistics  
Diploma of Loss Adjusting  
Diploma of Music  
Diploma of Pulp and Paper Process Management

Diploma of Purchasing  
Diploma of Reflexology  
Diploma of Remedial Massage  
Diploma of Salon Management  
Diploma of Screen and Media  
Diploma of Sound Production  
Diploma of Sport & Recreation Management  
Diploma of Surface Operations Management  
Diploma of Sustainability  
Diploma of Travel and Tourism  
Diploma of Veterinary Nursing (Emergency and Critical Care)  
Diploma of Youth Work

#### Certificate IV

Certificate IV in Advertising  
Certificate IV in Aeroskills (Avionics)  
Certificate IV in Aged Care  
Certificate IV in Air-conditioning and Refrigeration Servicing  
Certificate IV in Aquaculture  
Certificate IV in Arts Administration  
Certificate IV in Building and Construction (Building)  
Certificate IV in Building and Construction (Contract Administration)  
Certificate IV in Building & Construction (Trade Contracting)  
Certificate IV in Building and Construction (Specialist Trades)  
Certificate IV in Community Pharmacy  
Certificate IV in Community Services (Information, advice and referral)  
Certificate IV in Community Services Advocacy  
Certificate IV in Competitive Systems and Practices  
Certificate IV in Correctional Practice  
Certificate IV in Customer Engagement  
Certificate IV in Electrical - Data and Voice Communications  
Certificate IV in Electrotechnology - Systems Electrician  
Certificate IV in Electronics and Communications  
Certificate IV in Embalming  
Certificate IV in Food Processing  
Certificate IV in Forest Operations  
Certificate IV in Holiday Parks and Resorts  
Certificate IV in Home and Community Care  
Certificate IV in Home Sustainability Assessment  
Certificate IV in International Trade  
Certificate IV in Legal Services  
Certificate IV in Leisure and Health  
Certificate IV in Local Government  
Certificate IV in Local Government (Operational Works)  
Certificate IV in Local Government Administration  
Certificate IV in Manufacturing Technology  
Certificate IV in Maritime Operations (Marine Engine Driver Grade 1 Near Coastal)  
Certificate IV in Maritime Operations (Master up to 35 metres Near Coastal)

## Whole of Economy - Output 2

### Tier 3 (Priority)

#### Certificate IV contd.....

Certificate IV in Massage Therapy Practice  
Certificate IV in Meat Processing (Meat Safety)  
Certificate IV in Meat Processing (Quality Assurance)  
Certificate IV in Mediation  
Certificate IV in Metalliferous Mining Operations (Underground)  
Certificate IV in Patisserie  
Certificate IV in Photo Imaging  
Certificate IV in Plumbing and Services  
Certificate IV in Printing and Graphic Arts  
Certificate IV in Refrigeration and Air-conditioning Systems  
Certificate IV in Resource Processing  
Certificate IV in Sound Production  
Certificate IV in Surface Extraction Operations  
Certificate IV in Timber Truss and Frame Manufacture  
Certificate IV in Transport and Logistics (Road Transport Car Driving Instruction)  
Certificate IV in Volunteer Program Coordination  
Certificate IV in Warehousing Operations

#### Certificate III

Certificate III in Aeroskills (Mechatronics)  
Certificate III in Aircraft Life Support and Furnishing  
Certificate III in Aircraft Surface Finishing  
Certificate III in Animal Studies  
Certificate III in Animal Technology  
Certificate III in Automotive Body Repair Technology  
Certificate III in Automotive Refinishing Technology  
Certificate III in Civil Construction Plant Operations  
Certificate III in Community Activity Programs  
Certificate III in Competitive Systems and Practices  
Certificate III in Conservation and Land Management  
Certificate III in Correctional Practice  
Certificate III in Dance  
Certificate III in ESI - Power Systems - Transmission Overhead  
Certificate III in Events  
Certificate III in Fire Protection  
Certificate III in Fisheries Compliance  
Certificate III in Forest Growing and Management  
Certificate III in Furniture Removal  
Certificate III in Holiday Parks and Resorts  
Certificate III in Information and Cultural Services  
Certificate III in Joinery  
Certificate III in Light Vehicle Mechanical Technology  
Certificate III in Local Government  
Certificate III in Manufactured Mineral Products  
Certificate III in Meat Processing (General)  
Certificate III in Micro Business Operations  
Certificate III in Mining Exploration  
Certificate III in Patisserie  
Certificate III in Paving  
Certificate III in Personal Injury Management  
Certificate III in Plant Baking

Certificate III in Printing and Graphic Arts (Printing)  
Certificate III in Printing and Graphic Arts (Sacks and Bags)  
Certificate III in Process Manufacturing  
Certificate III in Pulping Operations  
Certificate III in Roof Tiling  
Certificate III in Security Operations  
Certificate III in Shopfitting  
Certificate III in Solid Plastering  
Certificate III in Steelfixing  
Certificate III in Stevedoring  
Certificate III in Surveying and Spatial Information Services  
Certificate III in Technical Production  
Certificate III in Timber Manufactured Products  
Certificate III in Vertebrate Pest Management  
Certificate III in Visual Arts  
Certificate III in Wall and Floor Tiling  
Certificate III in Water Operations  
Certificate III in Wood Panel Products  
Certificate III in Wool Clip Preparation

#### Certificate II

Certificate II in Aboriginal and Torres Strait Islander Visual Arts Industry Work  
Certificate II in Aboriginal Language/s  
Certificate II in Aircraft Line Maintenance  
Certificate II in Animal Studies  
Certificate II in Applied Language  
Certificate II in Aquaculture  
Certificate II in Automotive Electrical Technology  
Certificate II in Automotive Tyre Servicing Technology  
Certificate II in Community Pharmacy  
Certificate II in Customer Engagement  
Certificate II in Drainage  
Certificate II in Education and Skills Development  
Certificate II in Engineering Pathways  
Certificate II in Furniture Removal  
Certificate II in Hairdressing  
Certificate II in Holiday Parks and Resorts  
Certificate II in Irrigation  
Certificate II in Live Production and Services  
Certificate II in Local Government  
Certificate II in Manufacturing Technology  
Certificate II in Process Manufacturing  
Certificate II in Process Plant Operations  
Certificate II in Public Safety (Firefighting and Emergency Operations)  
Certificate II in Rail Infrastructure  
Certificate II in Retail Make-Up and Skin Care  
Certificate II in Skills for Work and Vocational Pathways  
Certificate II in Sustainable Energy (Career Start)  
Certificate II in Visual Arts  
Certificate II in Water Operations  
Certificate II in Wine Industry Operations  
Certificate II in Wool Handling

## Whole of Economy - Output 2

### Tier 3 (Priority)

#### Certificate I

Certificate I in Animal Studies  
Certificate I in Construction  
Certificate I in ElectroComms Skills  
Certificate I in Hospitality  
Certificate I in Information, Digital Media & Technology  
Certificate I in Logistics  
Certificate I in Textiles Clothing and Footwear  
Certificate I in Tourism (Australian Indigenous Culture)  
Certificate I in Transport and Logistics (Pathways)  
Certificate I in Warehousing Operations  
Certificate I in Work Preparation (Community services)

#### Skill Set

Skill Set (BSB) - Basic Customer Engagement Skill Set  
Skill Set (CUA) - Acting Performance Skill Set  
Skill Set (CUA) - Dance Teaching Skill Set  
Skill Set (CUA) - Festivals and Events Skill Set  
Skill Set (CUA) - Lighting Live Performance Skill Set  
Skill Set (CUA) - Props Making Skill Set  
Skill Set (CUA) - Set Construction Skill Set  
Skill Set (FPI) - Skill Set for a boom delimber operator  
Skill Set (FPI) - Skill Set for forest and wood product innovation for leaders  
Skill Set (FPI) - Skill Set for forest and wood product innovation for managers  
Skill Set (FPI) - Skill Set for supporting forest and wood products innovation  
Skill Set (ICP) - Digital Fundamentals Skill Set  
Skill Set (SIS) - Abseiling Instructor Single Pitch (Natural Surfaces)  
Skill Set (SIS) - Bushwalking Guide Uncontrolled Environment  
Skill Set (SIS) - Climbing Instructor (Natural Surfaces) Top Rope  
Skill Set (SIS) - Cycle Tour Guide On-Road (Overnight and Extended Tours)  
Skill Set (SIS) - Kayaking Instructor Flat Water  
Skill Set (SIS) - Mountain Bike Instructor (Intermediate Environment)  
Skill Set (SIT) - Product Development for International Markets  
Skill Set (UET) - Refresher - Perform CPR  
Skill Set (UET) - Refresher - Perform EWP Rescue and CPR  
Skill Set (UET) - Refresher - Perform Pole Top Rescue  
Skill Set (UET) - Refresher - Perform Rescue from a Live LV Panel and CPR

## Whole of Economy - Output 2

### Tier 4

#### Graduate Certificate/Diploma

Graduate Certificate in Community Services  
Practice (Statutory child protection)  
Graduate Certificate in Digital Education  
Graduate Certificate in Environmental Mgt  
Graduate Certificate in Instrumental Analysis  
Graduate Certificate in Leadership Diversity  
Graduate Certificate in Management (Learning)  
Graduate Certificate in Sustainable Operations  
Graduate Diploma of Adult Language, Literacy  
and Numeracy Practice  
Graduate Diploma of Art and Play  
Applications in Therapy  
Graduate Diploma of Community Sector Mgt  
Graduate Diploma of Engineering  
Graduate Diploma of Family Dispute Resolution  
Graduate Diploma of Management (Learning)  
Graduate Diploma of Portfolio Management  
Graduate Diploma of Relationship Counselling  
Graduate Diploma of Strategic Leadership

#### Advanced Diploma

Advanced Diploma of Advertising  
Advanced Diploma of Applied Fashion Design  
and Technology  
Advanced Diploma of Arts (Professional Writing)  
Advanced Diploma of Automated Systems  
Maintenance Engineering  
Advanced Diploma of Aviation (Flight Instruction)  
Advanced Diploma of Ayurveda  
Advanced Diploma of Building Surveying  
Advanced Diploma of Computer Systems Engineering  
Advanced Diploma of Computer Systems Technology  
Advanced Diploma of Conservation and Land  
Management  
Advanced Diploma of Deployment Logistics  
Advanced Diploma of Disability  
Advanced Diploma of Industrial Electronics and  
Control Engineering  
Advanced Diploma of Instrumentation and  
Control Engineering  
Advanced Diploma of International Business  
Advanced Diploma of Laboratory Operations  
Advanced Diploma of Maritime Operations  
(Marine Engineering Class 2)  
Advanced Diploma of Maritime Operations  
(Master Unlimited)  
Advanced Diploma of Music  
Advanced Diploma of Network Security  
Advanced Diploma of Policing (Accredited Course)  
Advanced Diploma of Property Services (Asset and  
Facility Management)  
Advanced Diploma of Public Safety  
(Community Safety)

Advanced Diploma of Public Safety  
(Emergency Management)  
Advanced Diploma of Sound Production  
Advanced Diploma of Telecommunications  
Network Engineering  
Advanced Diploma of Travel and Tourism

#### Diploma

Diploma of Aboriginal and Torres Strait Islander  
Visual Arts Industry Work  
Diploma of Advertising  
Diploma of Aeroskills (Mechanical)  
Diploma of Animal Technology  
Diploma of Applied Fashion Design and Technology  
Diploma of Applied Geosciences (Accredited Course)  
Diploma of Automotive Technology  
Diploma of Aviation (Flight Instructor)  
Diploma of Aviation (Instrument Flight Operations)  
Diploma of Aviation Maintenance Management  
(Mechanical)  
Diploma of Avionic Engineering  
Diploma of Banking Services Management  
Diploma of Business (Governance)  
Diploma of Community Development  
Diploma of Community Services (Alcohol & other drugs)  
Diploma of Community Services (Alcohol, other drugs  
and mental health)  
Diploma of Community Services (Financial counselling)  
Diploma of Community Services (Mental health)  
Diploma of Community Services Work  
Diploma of Competitive Systems and Practices  
Diploma of Correctional Administration  
Diploma of Costume for Performance  
Diploma of Credit Management  
Diploma of Customer Engagement  
Diploma of Digital and Interactive Games  
Diploma of Digital Media Technologies  
Diploma of Disability  
Diploma of Drilling Oil & Gas (On shore)  
Diploma of Drilling Operations  
Diploma of Electrical and Refrigeration and  
Air-conditioning  
Diploma of Employment Services  
Diploma of Engineering Technology - Refrigeration  
and Air-conditioning  
Diploma of English Proficiency  
Diploma of Enterprise Architecture Practice  
Diploma of Environmental Monitoring & Technology  
Diploma of Family Intake and Support Work  
Diploma of Financial Markets  
Diploma of Food and Wine Management  
(Accredited Course)  
Diploma of Food Science and Technology  
Diploma of Furniture Design and Technology  
Diploma of General Insurance



## Whole of Economy - Output 2

### Tier 4

#### Diploma

Diploma of Government  
Diploma of Government (Human Resources)  
Diploma of Government (Management)  
Diploma of Government (Project Management)  
Diploma of Industrial Electronics and Control Engineering  
Diploma of Instrumentation and Control Engineering  
Diploma of Interactive Digital Media  
Diploma of Irrigation Management  
Diploma of Laboratory Technology  
Diploma of Landscape Design  
Diploma of Legal Services  
Diploma of Leisure and Health  
Diploma of Local Government  
Diploma of Local Government (Health & Environment)  
Diploma of Local Government (Planning)  
Diploma of Maritime Operations (Marine Engineering Class 3 Near Coastal)  
Diploma of Maritime Operations (Master up to 500 GT or Master 80 metres)  
Diploma of Maritime Operations (Master up to 80 metres Near Coastal)  
Diploma of Motorsport Technology  
Diploma of Organic Farming  
Diploma of Parks and Gardens Management  
Diploma of Personal Injury Management  
Diploma of Pest Management  
Diploma of Photo Imaging  
Diploma of Plumbing and Services  
Diploma of Population Health  
Diploma of Pork Production  
Diploma of Printing and Graphic Arts  
Diploma of Process Plant Technology  
Diploma of Property Services (Asset and Facility Management)  
Diploma of Public Safety (Community Safety)  
Diploma of Public Safety (Emergency Management)  
Diploma of Quality Auditing  
Diploma of Scenery and Set Construction  
Diploma of School Age Education and Care  
Diploma of Security and Risk Management  
Diploma of Spatial Information Services  
Diploma of Specialist Make-up Services  
Diploma of Surveying  
Diploma of Sustainable Operations  
Diploma of Systems Analysis and Design  
Diploma of Underground Metalliferous Mining Management  
Diploma of Veterinary Nursing (General Practice)  
Diploma of Viticulture  
Diploma of Water Operations  
Diploma of Well Servicing Operations  
Diploma of Youth Justice

#### Certificate IV

Certificate IV in Aboriginal and Torres Strait Islander Mentoring  
Certificate IV in Aboriginal and/or Torres Strait Islander Primary Health Care Practice  
Certificate IV in Aboriginal or Torres Strait Islander Cultural Arts  
Certificate IV in Advanced Baking  
Certificate IV in Advanced Jewellery Manufacture  
Certificate IV in Agribusiness  
Certificate IV in Alcohol and Other Drugs  
Certificate IV in Applied Fashion Design & Technology  
Certificate IV in Auslan  
Certificate IV in Automotive Body Repair Technology  
Certificate IV in Automotive Electrical Technology  
Certificate IV in Automotive Management  
Certificate IV in Automotive Mechanical Diagnosis  
Certificate IV in Aviation (Commercial Pilot Aeroplane Licence)  
Certificate IV in Ayurvedic Lifestyle Consultation  
Certificate IV in Broadcast Technology  
Certificate IV in Building Design Drafting  
Certificate IV in Business (Governance)  
Certificate IV in Career Development  
Certificate IV in Civil Construction Operations  
Certificate IV in Civil Construction Supervision  
Certificate IV in Community Development  
Certificate IV in Community Recreation  
Certificate IV in Conservation and Land Management  
Certificate IV in Costume for Performance  
Certificate IV in Credit Management  
Certificate IV in Custom-made Footwear  
Certificate IV in Dance  
Certificate IV in Design  
Certificate IV in Digital and Interactive Games  
Certificate IV in Digital Media Technologies  
Certificate IV in Drilling Oil & Gas (On shore)  
Certificate IV in Driving Operations  
Certificate IV in Education Support  
Certificate IV in Electrical - Air-conditioning Split Systems  
Certificate IV in Electrical - Fire Protection Control Systems  
Certificate IV in Employment Services  
Certificate IV in Energy Management and Control  
Certificate IV in Engineering Drafting  
Certificate IV in Environmental Monitoring & Technology  
Certificate IV in ePublishing  
Certificate IV in ESI - Network Systems  
Certificate IV in ESI - Power Systems Substations  
Certificate IV in Funeral Services  
Certificate IV in Gas Supply Industry Operations  
Certificate IV in General Insurance  
Certificate IV in Government  
Certificate IV in Government (Court Services)

## Whole of Economy - Output 2

### Tier 4

#### Certificate IV contd.....

Certificate IV in Government (Investigation)  
Certificate IV in Government (Procurement and Contracting)  
Certificate IV in Government (Project Management)  
Certificate IV in Government (Statutory Compliance)  
Certificate IV in Guiding  
Certificate IV in Hyperbaric Operations (Acc. Course)  
Certificate IV in Hyperbaric Operations (Diver Medical Technician) (Acc. Course)  
Certificate IV in Indigenous Leadership  
Certificate IV in Interactive Digital Media  
Certificate IV in Irrigation  
Certificate IV in Laboratory Techniques  
Certificate IV in Large Scale Wind Generation - Electrical  
Certificate IV in Local Government (Health & Environ't)  
Certificate IV in Local Government (Land Mgt)  
Certificate IV in Local Government (Planning)  
Certificate IV in Make-up  
Certificate IV in Meat Processing (General)  
Certificate IV in Medical Practice Assisting  
Certificate IV in Mind Body Medicine  
Certificate IV in Mobile Crane Operations  
Certificate IV in Motorsport Technology  
Certificate IV in Music  
Certificate IV in Operating Theatre Technical Support  
Certificate IV in Pastoral Care  
Certificate IV in Pathology  
Certificate IV in Personal Injury Management  
Certificate IV in Pharmaceutical Manufacturing  
Certificate IV in Policing (Accredited Course)  
Certificate IV in Process Plant Technology  
Certificate IV in Property Services (Operations)  
Certificate IV in Public Safety (Leadership)  
Certificate IV in Rail Safety Management  
Certificate IV in Recreational Vehicles  
Certificate IV in Residential Drafting (Acc. Course)  
Certificate IV in School Age Education and Care  
Certificate IV in Screen and Media  
Certificate IV in Security and Risk Management  
Certificate IV in Social Housing  
Certificate IV in Spatial Information Services  
Certificate IV in Sport Coaching  
Certificate IV in Sterilisation Services  
Certificate IV in Stevedoring Operations  
Certificate IV in Surveying  
Certificate IV in Sustainable Operations  
Certificate IV in Systems Analysis and Design  
Certificate IV in Telecommunications Network Engineering  
Certificate IV in Traffic Operations  
Certificate IV in Travel and Tourism  
Certificate IV in Vehicle Loss Assessing  
Certificate IV in Well Servicing Operations  
Certificate IV in Women's Education  
Certificate IV in Youth Justice

#### Certificate III

Certificate III in Aboriginal and/or Torres Strait Islander Primary Health Care  
Certificate III in Agriculture (Dairy Production)  
Certificate III in Applied Fashion Design & Technology  
Certificate III in Arboriculture  
Certificate III in Auslan  
Certificate III in Automotive Administration  
Certificate III in Automotive and Marine Trimming Technology  
Certificate III in Automotive Drivetrain Technology  
Certificate III in Automotive Glazing Technology  
Certificate III in Automotive Underbody Technology  
Certificate III in Bicycle Workshop Operations  
Certificate III in Boating Services  
Certificate III in Broadcast Technology  
Certificate III in Business Administration (Legal)  
Certificate III in Captive Animals  
Certificate III in Cemetery & Crematorium Operations  
Certificate III in Cleaning Operations  
Certificate III in Clothing Production  
Certificate III in Commercial Seed Processing  
Certificate III in Companion Animal Services  
Certificate III in Computer Systems Equipment  
Certificate III in Construction Crane Operations  
Certificate III in Construction Waterproofing  
Certificate III in Demolition  
Certificate III in Dental Laboratory Assisting  
Certificate III in Design Fundamentals  
Certificate III in Diesel Fuel Technology  
Certificate III in Education Support  
Certificate III in Electric Passenger Train Guard  
Certificate III in Electrical Fitting  
Certificate III in Employment Services  
Certificate III in Engineering (Service Technician Portable Fire Equipment - Chubb)  
Certificate III in ESI - Power Systems - Distribution Cable Jointing  
Certificate III in Farriery  
Certificate III in Floristry  
Certificate III in Food Processing (Sales)  
Certificate III in Footwear Production  
Certificate III in Forklift Technology  
Certificate III in Funeral Operations  
Certificate III in Furniture Finishing  
Certificate III in General Education for Adults  
Certificate III in Glass and Glazing  
Certificate III in Gravedigging  
Certificate III in Guiding  
Certificate III in Heavy Commercial Trailer Technology  
Certificate III in Heavy Commercial Vehicle Mechanical Technology  
Certificate III in Indigenous Cultural Heritage Assessment (Indigenous Archaeological Foundations)  
Certificate III in Indigenous Land Management  
Certificate III in International Trade  
Certificate III in Jewellery Manufacture

## Whole of Economy - Output 2

### Tier 4

#### Certificate III

Certificate III in Laboratory Skills  
Certificate III in Landscape Construction  
Certificate III in Local Government (Health and Environment)  
Certificate III in Locksmithing  
Certificate III in Manufacturing Technology  
Certificate III in Marine Technology  
Certificate III in Maritime Operations  
Certificate III in Maritime Operations (Integrated Rating)  
Certificate III in Meat Processing (Rendering)  
Certificate III in Media  
Certificate III in Mercantile Agents  
Certificate III in Mobile Crane Operations  
Certificate III in Motorcycle Mechanical Technology  
Certificate III in Music  
Certificate III in Non-Emergency Client Transport  
Certificate III in Nutrition and Dietetic Assistance  
Certificate III in Outdoor Power Equipment  
Certificate III in Outdoor Power Equipment Technology  
Certificate III in Parks and Gardens  
Certificate III in Pathology  
Certificate III in Pest Management  
Certificate III in Pharmaceutical Manufacturing  
Certificate III in Plumbing (Mechanical Services)  
Certificate III in Polymer Processing  
Certificate III in Population Health  
Certificate III in Printing and Graphic Arts (Graphic Design Production)  
Certificate III in Printing and Graphic Arts (Ink Manufacture)  
Certificate III in Printing and Graphic Arts (Multimedia)  
Certificate III in Printing and Graphic Arts (Screen Printing)  
Certificate III in Process Plant Operations  
Certificate III in Property Services (Operations)  
Certificate III in Public Safety (Firefighting and Emergency Operations)  
Certificate III in Rail Customer Service  
Certificate III in Rail Signalling  
Certificate III in Recreational Vehicle Manufacture  
Certificate III in Recreational Vehicle Service and Repair  
Certificate III in Renewable Energy - ELV  
Certificate III in Rigging  
Certificate III in Scaffolding  
Certificate III in Scenery and Set Construction  
Certificate III in Security Equipment  
Certificate III in Signage  
Certificate III in Social Housing  
Certificate III in Soft Furnishing  
Certificate III in Sport Career Oriented Participation  
Certificate III in Sports Turf Management  
Certificate III in Stonemasonry (Monumental/Installation)  
Certificate III in Sugar Milling Industry Operations

Certificate III in Surface Preparation and Coating Application  
Certificate III in Telecommunications  
Certificate III in Telecommunications Cabling  
Certificate III in Telecommunications Fixed Wireless Installation  
Certificate III in Terminal Train Driving  
Certificate III in Timber and Composites Machining  
Certificate III in Timber Merchandising  
Certificate III in Travel  
Certificate III in Upholstery  
Certificate III in Watch and Clock Service and Repair  
Certificate III in Weed Management  
Certificate III in Well Servicing Operations  
Certificate III in Women's Education

#### Certificate II

Certificate II in Aboriginal and/or Torres Strait Islander Primary Health Care  
Certificate II in Active Volunteering  
Certificate II in Aeroskills  
Certificate II in Applied Fashion Design & Technology  
Certificate II in Asian Cookery  
Certificate II in Auslan  
Certificate II in Automotive Administration  
Certificate II in Automotive Air Conditioning Technology  
Certificate II in Automotive Body Repair Technology  
Certificate II in Automotive Braking System Technology  
Certificate II in Automotive Cooling System Technology  
Certificate II in Automotive Driveline System Technology  
Certificate II in Automotive Steering and Suspension System Technology  
Certificate II in Automotive Studies (Pre-vocational)  
Certificate II in Automotive Underbody Technology  
Certificate II in Automotive Vocational Preparation  
Certificate II in Automotive/Metal Fabrication (Pre-Vocational)  
Certificate II in Bicycle Mechanical Technology  
Certificate II in Boating Services  
Certificate II in Cleaning Operations  
Certificate II in Community Activities  
Certificate II in Competitive Systems and Practices  
Certificate II in Conservation and Land Management  
Certificate II in Creative Industries (Media)  
Certificate II in Data and Voice Communications  
Certificate II in Dry Cleaning Operations  
Certificate II in Engineering (Service Technician Portable Fire Equipment - Chubb)  
Certificate II in English Proficiency  
Certificate II in ESI - Asset Inspection  
Certificate II in ESI - Powerline Vegetation Control  
Certificate II in Fire Alarms Servicing  
Certificate II in Food Processing (Sales)  
Certificate II in Furniture Finishing  
Certificate II in Furniture Making  
Certificate II in Government

## Whole of Economy - Output 2

### Tier 4

#### Certificate II contd.....

Certificate II in Indigenous Leadership  
Certificate II in Information and Cultural Services  
Certificate II in Landscaping  
Certificate II in Laundry Operations  
Certificate II in Manufactured Mineral Products  
Certificate II in Meat Processing (Meat Retailing)  
Certificate II in Millinery  
Certificate II in Music  
Certificate II in National Broadband Network Cabling  
(Electricity Supply Industry Assets)  
Certificate II in National Broadband Network  
Construction  
Certificate II in Outdoor Power Equipment Technology  
Certificate II in Outdoor Recreation  
Certificate II in Parks and Gardens  
Certificate II in Pharmaceutical Manufacturing  
Certificate II in Population Health  
Certificate II in Printing and Graphic Arts (General)  
Certificate II in Production Nursery  
Certificate II in Rail Customer Service  
Certificate II in Remote Construction Maintenance  
Certificate II in Resource Processing  
Certificate II in Retail Baking Assistance  
Certificate II in Retail Nursery  
Certificate II in Sampling and Measurement  
Certificate II in Security Assembly and Set-up  
Certificate II in Shunting  
Certificate II in Split Air-conditioning and Heat  
Pump Systems  
Certificate II in Sport and Recreation  
Certificate II in Sport Coaching  
Certificate II in Sports Turf Management  
Certificate II in Stevedoring  
Certificate II in Sugar Milling Industry Operations  
Certificate II in Surveying and Spatial Information  
Services  
Certificate II in Technical Security  
Certificate II in Technical Support  
Certificate II in Telecommunications  
Certificate II in Telecommunications Cabling  
Certificate II in Telecommunications Digital  
Reception Technology  
Certificate II in Tourism  
Certificate II in Underground Coal Mining  
Certificate II in Well Servicing Operations  
Certificate II in Women's Education

#### Certificate I

Certificate I in Access to Vocational Pathways  
Certificate I in Active Volunteering  
Certificate I in Agri-Food (Pathways)  
Certificate I in Automotive Manufacturing  
Certificate I in Automotive Vocational Preparation  
Certificate I in Business  
Certificate I in Conservation and Land Management

Certificate I in Creative Industries  
Certificate I in Education and Skills Development  
Certificate I in English Proficiency  
Certificate I in Food Processing  
Certificate I in Furnishing  
Certificate I in Maritime Operations (General Purpose  
Hand Near Coastal)  
Certificate I in Process Manufacturing  
Certificate I in Resources and Infrastructure Operations  
Certificate I in Skills for Vocational Pathways  
Certificate I in Spoken and Written English  
Certificate I in Sport and Recreation

#### Skill Sets

Skill Set (AHC) - Advanced Chemical Spray Application Skill Set  
Skill Set (AHC) - Agricultural Chemical Skill Set  
Skill Set (AHC) - Carbon Farming Initiative Advisor Skill Set  
Skill Set (AHC) - Carbon Farming Initiative Business Skill Set  
Skill Set (AHC) - Carbon Farming Initiative Soil or  
Biochar Project Implementer Skill Set  
Skill Set (AHC) - Carbon Farming Initiative Vegetation  
Project Implementer Skill Set  
Skill Set (AHC) - Carbon Farming Initiative Waste and  
Manure Management Project Implementer Skill Set  
Skill Set (AHC) - Farm Business Management Skill Set  
Skill Set (AHC) - Irrigation Agronomist Skill Set  
Skill Set (AHC) - Irrigation Manager Skill Set  
Skill Set (AHC) - Recognise Aboriginal Cultural Sites Skill Set  
Skill Set (AUR) - Advanced Body Repair Skill Set  
Skill Set (AUR) - Advanced Body Repair Welding Skill Set  
Skill Set (AUR) - Advanced Vehicle Refinishing Skill Set  
Skill Set (AUR) - Battery Electric Vehicle Diagnosis and  
Repair Skill Set  
Skill Set (AUR) - Battery Electric Vehicle Inspection and  
Servicing Skill Set  
Skill Set (AUR) - Hybrid Electric Vehicle Inspection and  
Servicing Skill Set  
Skill Set (AUR) - Vehicle Air Conditioning Service,  
Retrofit, and Repair Skill Set  
Skill Set (AUR) - Vehicle Refrigerant Recovery Skill Set  
Skill Set (AVI) - Aerobatic Pilot Skill Set  
Skill Set (AVI) - Aviation Operator Skill Set  
Skill Set (BSB) - Aspiring Supervisor Skill Set  
Skill Set (BSB) - Cloud Computing and Digital Skills for  
Business Skill Set  
Skill Set (BSB) - Copyright Skill Set  
Skill Set (BSB) - Design Fundamentals Skill Set  
Skill Set (BSB) - Governance Induction Skill Set  
Skill Set (BSB) - Innovation Leadership Skill Set  
Skill Set (BSB) - Innovation Practice Skill Set  
Skill Set (BSB) - Intellectual Property Strategic  
Management Skill Set  
Skill Set (BSB) - Key Management Skill Set  
Skill Set (BSB) - Managing Innovation Skill Set  
Skill Set (BSB) - Service Management Skill Set  
Skill Set (BSB) - Small Business ATSI Corporate  
Governance Skill Set

## Whole of Economy - Output 2

### Tier 4

#### Skill Sets

Skill Set (BSB) - Small Business Contracting Skill Set	Skill Set (CHC) - Palliative approach skill set - plan and provide care
Skill Set (BSB) - Small Business Financial Management Skill Set	Skill Set (CHC) - Problem gambling skill set
Skill Set (BSB) - Small Business Home-Based Business Skill Set	Skill Set (CHC) - Quality systems skill set for aged and community care sector
Skill Set (BSB) - Small Business Intellectual Property Skill Set	Skill Set (CHC) - Working with families skill set
Skill Set (BSB) - Small Business Marketing Skill Set	Skill Set (CPC) - Lead a building, construction or plumbing and services team
Skill Set (BSB) - Team Leader Skill Set	Skill Set (CPP) - Perform Applied Engineering Surveying Skill Set
Skill Set (BSB) - Trade Mark Skill Set	Skill Set (CPP) - Perform Basic Spatial Drafting Skill Set
Skill Set (BSB) - Workforce Development Implementation Skill Set	Skill Set (CPP) - Perform Monitoring Centre Operations Skill Set
Skill Set (BSB) - Workforce Planning and Development Skill Set	Skill Set (CUA) - Sound Skill Set
Skill Set (CHC) - Assessment, Carer Support and Respite Coordination skill set	Skill Set (CUA) - Vision Systems Skill Set
Skill Set (CHC) - Basic foot care skill set - community services focus	Skill Set (CUF07) - Community Broadcasting Administration Skill Set
Skill Set (CHC) - Basic foot care skill set - health focus	Skill Set (CUL) - Deliver Public Programs Skill Set
Skill Set (CHC) - Case management skill set	Skill Set (CUL) - Manage Collections Skill Set
Skill Set (CHC) - Chronic disease self management skill set	Skill Set (CUL) - Organise and Access Collections Skill Set
Skill Set (CHC) - Client-oriented service delivery skill set	Skill Set (CUL) - Prepare Exhibitions Skill Set
Skill Set (CHC) - Community sector team leadership skill set	Skill Set (CUL) - Preventive Preservation and Conservation Skill Set
Skill Set (CHC) - Dementia support skill set - planning and coordination	Skill Set (CUV) - Preparatory Skill Set for Professional Graphic Design Practice
Skill Set (CHC) - Dementia support skill set - service delivery	Skill Set (CUV) - Preparatory Skill Set for Professional Photo Imaging Practice
Skill Set (CHC) - Disability work skill set - active support of clients with a disability	Skill Set (FDF) - Cellar Door Sales Induction
Skill Set (CHC) - Disability work skill set - behaviour support	Skill Set (FDF) - Cellar Hand Induction
Skill Set (CHC) - Disability work skill set - disability support in employment	Skill Set (FDF) - Chemical Handling Certification
Skill Set (CHC) - Early childhood skill set	Skill Set (FDF) - Confined Space
Skill Set (CHC) - Education support work skill set	Skill Set (FDF) - Food Safety
Skill Set (CHC) - Family support services work skill set - coordination	Skill Set (FDF) - Forklift Operations
Skill Set (CHC) - Family support services work skill set - provide support	Skill Set (FDF) - Hand Pruning Induction
Skill Set (CHC) - Financial literacy education skill set	Skill Set (FDF) - Irrigation
Skill Set (CHC) - High support and complex care skill set - aged care	Skill Set (FDF) - Manual Handling
Skill Set (CHC) - Leisure and recreation skill set - planning and delivery	Skill Set (FDF) - Risk Management
Skill Set (CHC) - Leisure and recreation skill set - program support	Skill Set (FDF) - Trellis Management
Skill Set (CHC) - Literacy tutor skill set	Skill Set (FDF) - Wine Evaluation
Skill Set (CHC) - Medication assistance skill set	Skill Set (HLT) - Aboriginal and/or Torres Strait Islander Aged Care Skill Set
Skill Set (CHC) - Mental health skill set - including recognise individuals at risk	Skill Set (HLT) - Aboriginal and/or Torres Strait Islander Family Health Skill Set
Skill Set (CHC) - Oral health care skill set - to work with Aboriginal and/or Torres Strait Islander people	Skill Set (HLT) - Allied health assistance - community rehabilitation skill set
	Skill Set (HLT) - Allied health assistance - nutrition and dietetics skill set
	Skill Set (HLT) - Allied health assistance - occupational therapy skill set
	Skill Set (HLT) - Allied health assistance - physiotherapy skill set
	Skill Set (HLT) - Allied health assistance - speech pathology skill set
	Skill Set (HLT) - Client safety skill set
	Skill Set (HLT) - Food safety supervision skill set - for community services and health industries



## Whole of Economy - Output 2

### Tier 4

#### Skill Sets

Skill Set (HLT) - Infection control skill set	Skill Set (SIS) - Climbing Guide (Natural Surfaces) Top Rope
Skill Set (HLT) - Oral health care skill set - personal client support (community services)	Skill Set (SIS) - Climbing Instructor (Artificial Surfaces) Top Rope
Skill Set (HLT) - Oral health care skill set - personal client support (health)	Skill Set (SIS) - Kayaking Guide Flat Water
Skill Set (HLT) - Oral health care skill set - to work with aged care clients	Skill Set (SIT) - Customer Service
Skill Set (ICT) - Application Development Specialist Skill Set	Skill Set (SIT) - Essential Business Skills for a Restaurant Manager
Skill Set (ICT) - Basic Application Development Programmer Skill Set	Skill Set (SIT) - Mentoring and Supervision
Skill Set (ICT) - Basic Open Cabling Registration Skill Set	Skill Set (SIT) - Product Sales for International Markets
Skill Set (ICT) - Certified Technician or Technology Specialist - Infrastructure Configuration Skill Set	Skill Set (SIT) - Sommelier
Skill Set (ICT) - National Broadband Network Advanced Linesworker/Installer Skill Set	Skill Set (SIT) - Visitor Information Services
Skill Set (ICT) - Wireless LAN and IP Network installation Skill Set	Skill Set (TAE) - Address Foundation Skills in Vocational Practice Skill Set
Skill Set (MAR) - Fast Rescue Craft Operations Skill Set	Skill Set (TAE) - Assessor Skill Set
Skill Set (MAR) - Marine Radio Operator's VHF and HF Skill Set	Skill Set (TAE) - Enterprise and Industry Engagement Skill Set
Skill Set (MAR) - Transmit and receive information by marine radio	Skill Set (TAE) - Enterprise Trainer - Mentoring Skill Set
Skill Set (MSA) - Confined space work team	Skill Set (TAE) - Enterprise Trainer - Presenting Skill Set
Skill Set (MSA) - High pressure water jetting operator	Skill Set (TAE) - Enterprise trainer and assessor Skill Set
Skill Set (MSA) - Leading Hand/Supervisor	Skill Set (TAE) - Workplace supervisor
Skill Set (MSA) - License to operate a standard boiler	Skill Set (TLI) - Access and Move a Track Vehicle Within a Defined Worksite Skill Set
Skill Set (MSA) - License to operate an advanced boiler	Skill Set (TLI) - Accessing the Rail Corridor Skill Set
Skill Set (MSA) - Trade Measurement Verification (Complex Measuring Instrument)	Skill Set (TLI) - Control Rail Traffic Through Worksite Skill Set
Skill Set (MSA) - Trade Measurement Verification (Limited Weighing Instrument)	Skill Set (TLI) - Coordinate Multiple Work Groups Skill Set
Skill Set (MTM) - Carcase Trimming (Specifications Trim - Knife) Skill Set	Skill Set (TLI) - Furniture Removal Pre-Packer Skill Set
Skill Set (MTM) - Meat Packer (Boning Room) Skill Set	Skill Set (TLI) - Furniture Removal Team Leader Skill Set
Skill Set (MTM) - Transport Livestock Skill Set	Skill Set (TLI) - Handsignaller Skill Set
Skill Set (RII) - Work Zone Traffic Control - Supervisor Skill Set	Skill Set (TLI) - Integrated Logistics Support Inventory Controller Skill Set
Skill Set (RII) - Work Zone Traffic Control - Traffic Controller Skill Set	Skill Set (TLI) - Integrated Logistics Support Management Skill Set
Skill Set (RII) - Work Zone Traffic Control Guidance Plan	Skill Set (TLI) - Introduction to the Waste Industry Skill Set
Skill Set (SIF) - Safe Exhumation of Burial Sites	Skill Set (TLI) - Logistics Inventory Controller Skill Set
Skill Set (SIF) - Safe Gravedigging	Skill Set (TLI) - Mentoring Skill Set
Skill Set (SIR) - Coaching and Mentoring	Skill Set (TLI) - Mobile Crane Operations Supervisor Skill Set
Skill Set (SIR) - Human Resources Management	Skill Set (TLI) - Rail Operations Safeworking Skill Set
Skill Set (SIR) - Management	Skill Set (TLI) - Road Safety Skill Set
Skill Set (SIR) - Marketing	Skill Set (TLI) - Stevedoring Crane Operations Skill Set
Skill Set (SIR) - Sales	Skill Set (TLI) - Stevedoring Reefer Skill Set
Skill Set (SIR) - Stock Control	Skill Set (TLI) - Stevedoring Ship Mounted Crane Operations Skill Set
Skill Set (SIS) - Abseiling Instructor Single Pitch (Artificial Surfaces)	Skill Set (TLI) - Stevedoring Team Leader Skill Set
Skill Set (SIS) - Bushwalking Guide Controlled Environment	Skill Set (UEE) - Commissioning and Servicing
Skill Set (SIS) - Challenge Ropes Course Manager (High Ropes)	Skill Set (UEE) - Data Communications - ACMA 'Open' Cabling Provider
	Skill Set (UEE) - Data Communications - ACMA Restricted Telecommunications Cabling Registration
	Skill Set (UEE) - Data Communications - Install and Modify Performance Data Communication Optical Fibre Cabling
	Skill Set (UEE) - Data Communications - Install and Modify Performance Data Communication Structured Cabling
	Skill Set (UEE) - Data Communications - Install Below Ground Communication Cables

## Whole of Economy - Output 2

### Tier 4

#### Skill Sets

- Skill Set (UEE) - Data Communications - Premises  
Cabling for NBN Rollout
- Skill Set (UEE) - Refrigeration-Air Conditioning - Design  
Hydrocarbon Refrigeration Systems
- Skill Set (UEE) - Refrigeration-Air Conditioning - Install  
and Commission Hydrocarbon Refrigeration  
Systems
- Skill Set (UEE) - Refrigeration-Air Conditioning - Service  
and Repair Hydrocarbon Refrigeration and  
Air Conditioning Systems
- Skill Set (UEE) - Sustainable - Designer of Grid  
Connected Photovoltaic Systems
- Skill Set (UEE) - Sustainable - Designer-Installer of Grid  
Connected Photovoltaic Systems
- Skill Set (UEE) - Sustainable - Installer of Grid Connected  
Photovoltaic Systems
- Skill Set (UET) - Apply Access Procedures to Work On  
or Near Electrical Network Infrastructure
- Skill Set (UET) - Refresher - Apply ESI Safety Rules,  
Codes of Practice and Procedures for Work  
On or Near Electrical Apparatus
- Skill Set (UET) - Refresher - Perform Tower Rescue  
and Provide First Aid
- Skill Set (UET) - Refresher - Testing of connections  
to low voltage electricity networks
- Unit of Competency (TLI) - Licence to operate a  
boom-type elevating work platform  
(boom length 11 metres or more)
- Unit of Competency (TLI) - Licence to operate a  
forklift truck
- Course in Aboriginal Cultural Education
- Course in Certified Infant Massage Instruction
- Course in Electrician - Minimum Australian Context Gap
- Course in Indigenous Mentoring
- Course in Preliminary Spoken and Written English

## Appendix A: Economic Modelling

*The results from the IPQ survey were moderated with reference to the Commission's Interim Economic Modelling. This Appendix provides an overview of the modelling process.*

### Overview

Projecting the future of the South Australian economy inevitably involves uncertainty. To better understand the significance of this uncertainty, the projections for economic growth and structural change have been derived using sensitivity tests around a baseline. In the short term, the baseline is informed by Department of Planning Transport and Infrastructure (DPTI) projections of adult population growth and State Treasury projections for employment growth, Gross State Product (GSP) growth, and the unemployment rate. In the longer term, the baseline relies on a combination of DPTI projections of adult population growth, State Treasury unemployment rate projections and Commonwealth Treasury participation rate and productivity growth projections.

The sensitivity analysis involves the variations from the baseline listed below.

- **Improved:** Deviation from the current baseline with the economy returning to full employment and with the participation rate rising as older workers stay engaged in the workforce and youth unemployment begins to fall. This sensitivity assumes significant job creation in the new industries for South Australia alongside productivity growth exceeding recent trends.
- **Subdued:** Deviation from the current baseline in a manner generally consistent with prevailing trends of rising unemployment, falling participation and subdued productivity growth. This sensitivity assumes South Australia continues to struggle to attract business investment, secure export markets or find other sources of new employment. It may also represent a failure at a political level to deal with structural and technological change in the economy.

## Economic Assumptions

The table below provides the broad macroeconomic assumptions for the baseline and sensitivity tests over the period 2014-15 to 2024-25.

**Table 14 - Key Macroeconomic Assumptions - Annual Average Growth Rates**

Key Macroeconomic Variables	History (15yrs)	Previous 2014 BASELINE		Current 2015 BASELINE		Current 2015 SUBDUED		Current 2015 IMPROVED	
		Short term	Long term	Short term	Long term	Short term	Long term	Short term	Long term
		(to 2017-18)	(to 2024-25)	(to 2019-20)	(to 2024-25)	(to 2019-20)	(to 2024-25)	(to 2019-20)	(to 2024-25)
South Australia									
Adult Population	1.0%	1.0%	1.0%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%
Labour Force	1.2%	0.8%	0.8%	0.9%	0.9%	0.7%	0.7%	1.1%	1.1%
Employment	1.23%	0.6%	1.0%	1.1%	1.0%	0.7%	0.8%	1.3%	1.3%
Unemployment	0.2%	4.7%	0.1%	-1.9%	-1.4%	-0.1%	0.1%	-2.7%	-2.1%
Participation Rate*	62.1%	62.5%	62.8%	62.1%	62.0%	61.5%	61.0%	62.8%	63.5%
Unemployment Rate*	6.9%	6.9%	5.2%	6.0%	5.5%	6.7%	6.5%	5.7%	5.0%
Gross State Product	2.4%	2.2%	2.6%	2.2%	2.3%	1.7%	1.8%	2.9%	2.8%
Productivity	1.1%	1.6%	1.5%	1.1%	1.3%	1.0%	1.0%	1.5%	1.5%

\*For the participation rate and unemployment rate, end of the period rates are shown as opposed to average annual growth rates.

Between 2014-15 and 2019-20, it is estimated that Gross State Product (GSP) in South Australia will grow by at least 2.2 percent a year, but may grow by as much as 2.9 percent a year if the Australian economy experiences strong growth, particularly as the effects of the weaker dollar flow through. This 2.2 percent projected average growth rate is comparable to the GSP projection presented in our 2014 Plan (noting that current projections represent a further two years of data) as well as South Australia's historical growth rate. The current baseline has slightly weaker growth in the longer term than previously projected.

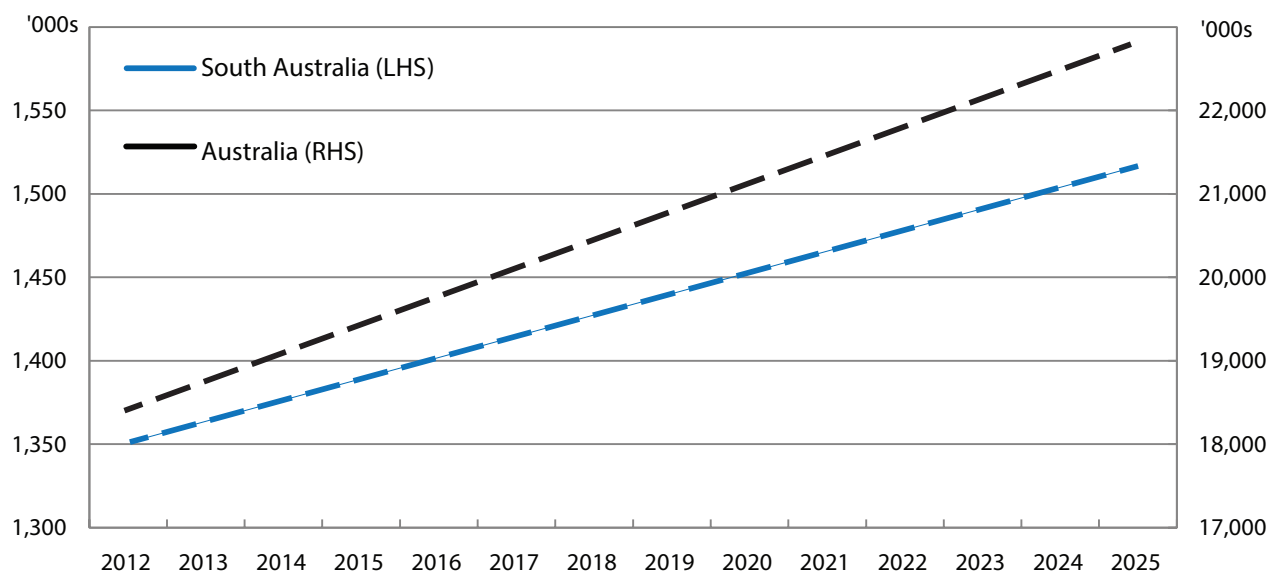
The improvement in the baseline unemployment rates since the 2014 Plan reflects an assumption that South Australia is progressing through the contractionary phase of the business cycle.



## Population growth

The adult population aged 15 years and over in South Australia is predicted to increase to more than 1.5 million people by 2025, or annual average growth of 0.9 percent, according to projections from DPTI. This compares to an average annual growth rate of 1.6 percent for all of Australia according to the Australian Bureau of Statistics (ABS), reaching a total adult population of almost 23 million people by 2025.

**Figure 11 - Adult (15+) Population Growth Projections, 2014-15 to 2024-25**

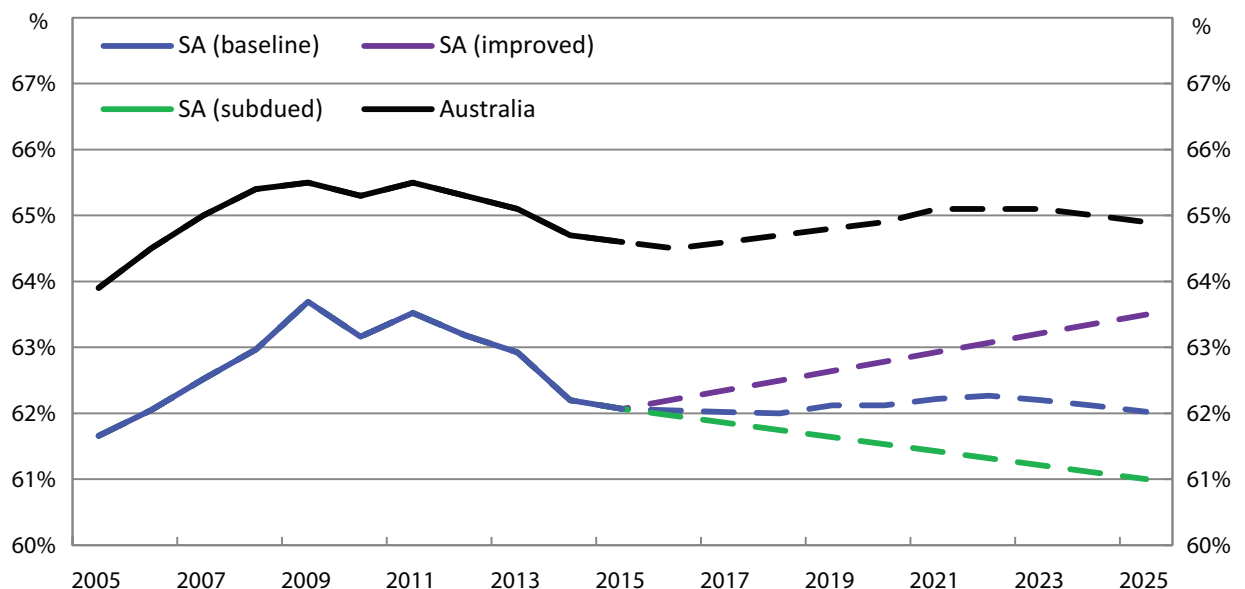


Sources: ABS (Series B); DPTI (medium series)

## Labour force participation

Labour force participation rates vary under each of our sensitivity tests. Participation rates are obtained from State Treasury unemployment rate and employment growth projections, DPTI adult population projections, and Commonwealth projections in the Intergenerational Report, adjusted for South Australia.

**Figure 12 - Labour Force Participation Projections, 2014-15 to 2024-25**



Sources: Commonwealth Treasury Intergenerational Report; internal calculations

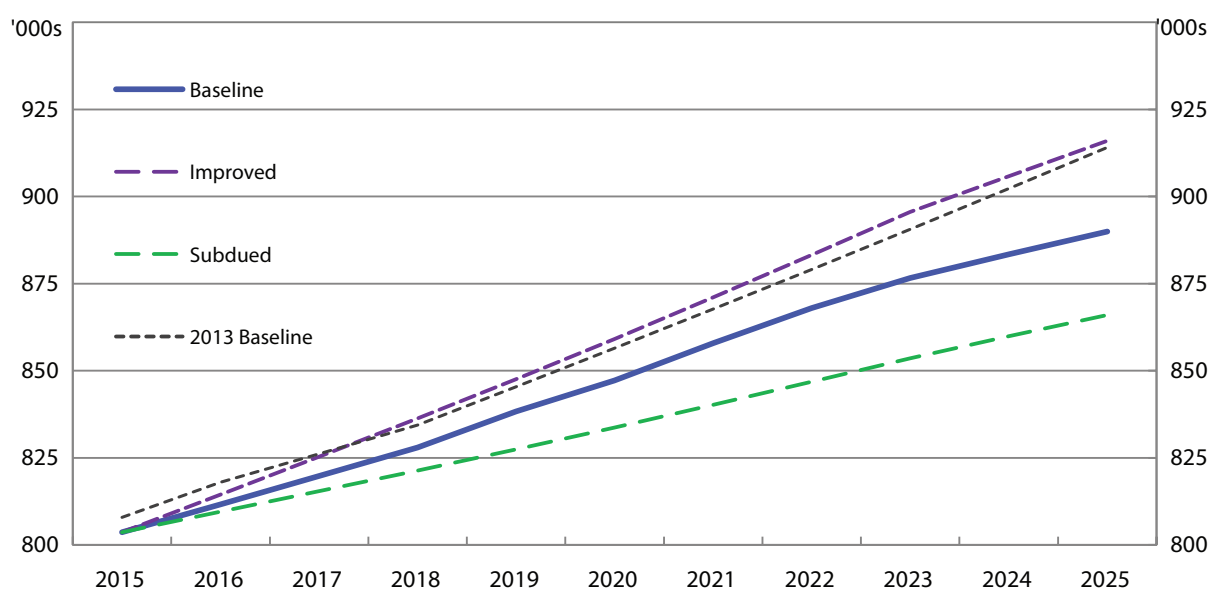
Under our baseline projection the participation rate in South Australia hovers at around 62 percent, and is consistently around 3 percentage points below the national participation rate. Our improved and subdued sensitivities project the participation rate to vary from the baseline, underpinned by assumptions on the nature of the future workforce.

## Employment growth

It is estimated that growth in the South Australian economy will increase employment by almost 43,000 jobs over the five-year period 2014-15 to 2019-20.

Over the 10-year period 2014-15 to 2024-25, the baseline projection is that growth in the South Australian economy will create 86,000 new jobs, but with an upper possibility of as many as 112,000 new jobs. Compared with our 2014 projections, employment growth is projected to be slightly weaker, particularly in the outer years.

**Figure 13 - Employment Growth Projections, 2014-15 to 2024-25**



Employment projections in the baseline are consistent with State Treasury projections in the shorter term and are derived from our participation rate and unemployment rate projections for the outer years. Employment projections vary under each of our sensitivity tests in accordance with different participation rate and unemployment rate projections. Under our baseline, the unemployment rate slowly recovers to 5.5 percent as South Australia emerges from a contractionary period.

This expansion is emphasised in our improved scenario, with stronger employment growth as unemployment falls to 5 percent alongside increasing participation. In our subdued scenario, employment growth is weaker as the participation rate falls with the retirement of baby boomers and unemployment remains stubbornly high as South Australia struggles to transition to the new economy.

## Industry growth

Employment growth projections by industry are informed by historical trends and a variety of public and private sources, including through our extensive consultation work with industry. This year, as part of our IPQ Output 1 consultation sessions, we obtained valuable feedback from industry stakeholders regarding the future of employment for each industry.

Under our baseline projections the industry structure of South Australia would see an economy more reliant on Health Care and Social Assistance, Education and Training, and Professional, Scientific and Technical Services, but less reliant on the Manufacturing industry sector.

Compared with our previous projections, Agriculture, Forestry and Fishing, and the Food and Accommodation Services industry sectors obtain a higher industry share, largely as a result of the lower Australian dollar, while the Mining industry deteriorates on the back of low commodity prices.

**Table 15 - Projected Industry Shares**

Industries	Current Share	Previous		Current	
		2014 BASELINE		2015 BASELINE	
		Short term	Long term	Short term	Long term
South Australia					
Agriculture, Forestry and Fishing	5.4%	3.9%	3.5%	5.2%	5.1%
Mining	1.6%	1.5%	1.5%	1.5%	1.3%
Manufacturing	8.9%	7.5%	5.7%	7.4%	6.6%
Electricity, Gas, Water and Waste Services	1.3%	1.1%	0.9%	1.3%	1.3%
Construction	7.5%	7.6%	7.9%	7.3%	7.0%
Retail and Wholesale Trade	13.6%	14.7%	14.0%	13.5%	13.2%
Accommodation and Food Services	6.6%	6.2%	5.8%	6.9%	7.1%
Transport, Postal and Warehousing	4.8%	4.6%	4.6%	4.9%	5.0%
Information Media and Telecommunications	1.5%	1.6%	1.5%	1.4%	1.4%
Financial and Insurance Services	2.7%	2.8%	2.9%	2.7%	2.6%
Rental, Hiring and Real Estate Services	1.4%	1.7%	1.6%	1.4%	1.3%
Professional, Scientific and Technical Services	6.5%	6.3%	7.1%	6.6%	6.9%
Administrative and Support Services	3.3%	3.1%	3.1%	3.3%	3.3%
Public Administration and Safety	6.0%	6.6%	6.4%	5.9%	5.8%
Education and Training	8.1%	9.1%	9.9%	8.5%	8.9%
Health Care and Social Assistance	14.9%	16.1%	18.3%	16.3%	17.7%
Arts and Recreation Services	1.8%	1.6%	1.6%	1.8%	1.8%
Other Services	4.0%	3.9%	3.7%	3.9%	3.8%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Note: 'Current Share' represents existing shares in June 2015.

Short-term in the previous update was 2012-13 to 2017-18; long-term in the previous update was 2012-13 to 2024-25.

Short-term in the current update is 2014-15 to 2019-20; long-term in the current update is 2014-15 to 2024-25.

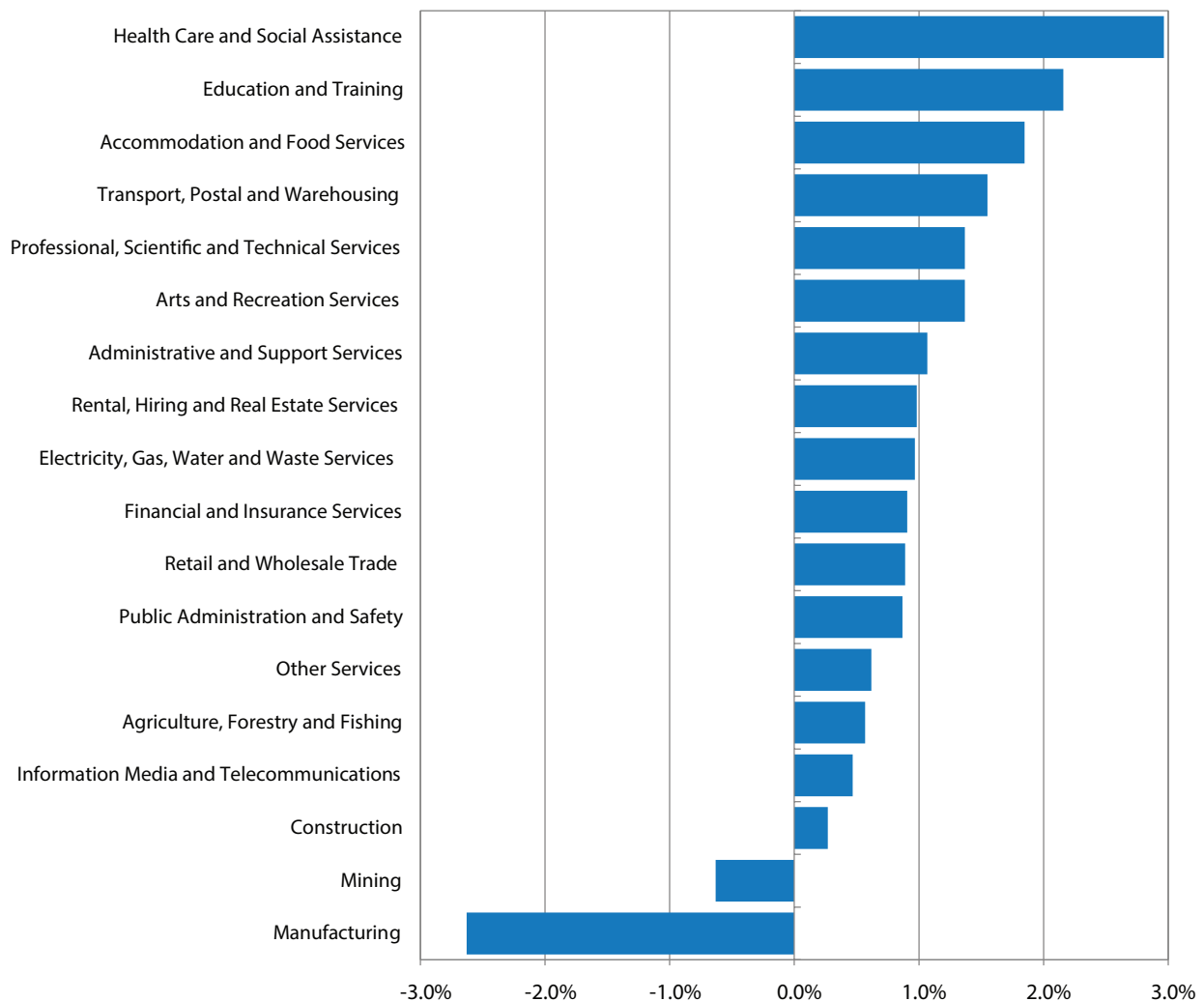


By industry, Health Care and Social Assistance is expected to experience the fastest annual growth rates, with Education and Training also expected to record strong growth. Manufacturing is expected to continue to decline. Note that our industry growth rates are adjusted to conform to our overall macroeconomic assumptions.

**Figure 14 - Projected Growth Rates By Industry**

### Industry Employment Growth Projections, 2014-15 to 2019-20

Baseline Scenario, Average Annual Growth Rates



Sources: ABS; CEET; DEA; DIAC; TaSC; author's calculations

## Number of VET qualifications

In *Skills for Future Jobs 2014*, Commission modelling projected future industry demand for new qualifications. This report presents the qualification demand projections from the 2014 report.

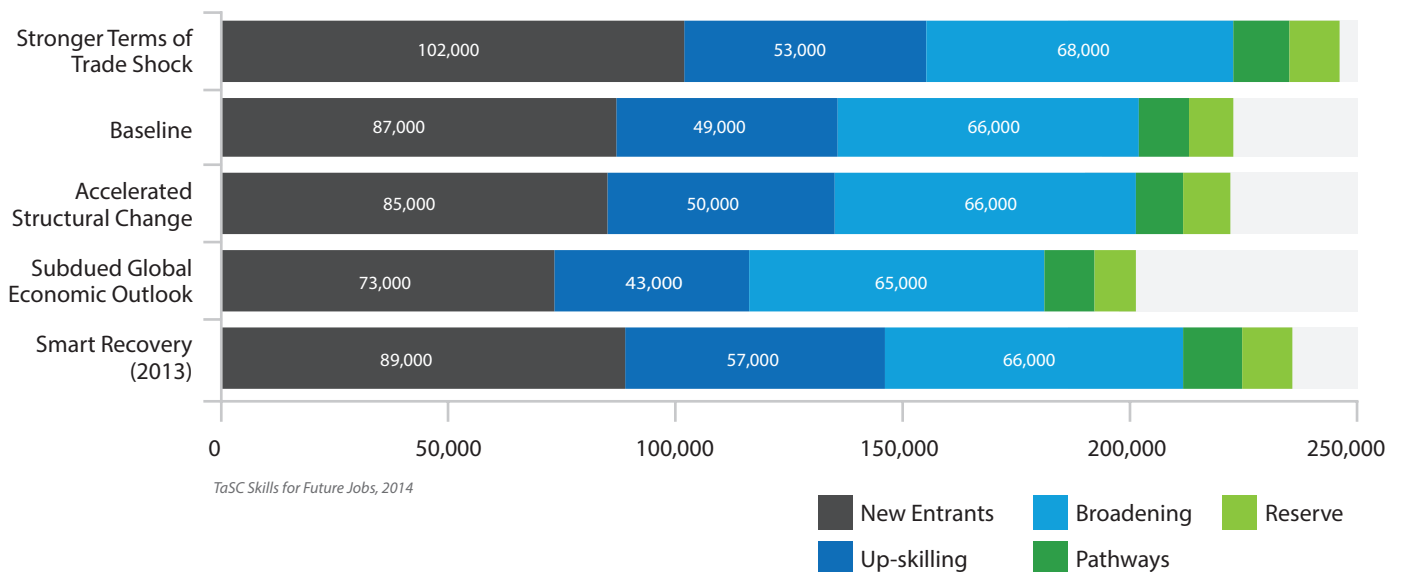
The future demand for new qualifications is a function of the number of job openings and the changing qualification needs of employees over the period (or skills deepening). The projections for each of these components were used to determine the demand for new qualifications by each of the five groups of workers (or potential workers) listed below:

- Skilling requirements of new entrants (to fill job openings resulting from employment growth and replacement demand).
- Upskilling of existing workers (completing a qualification at a higher level than their current highest level qualification).

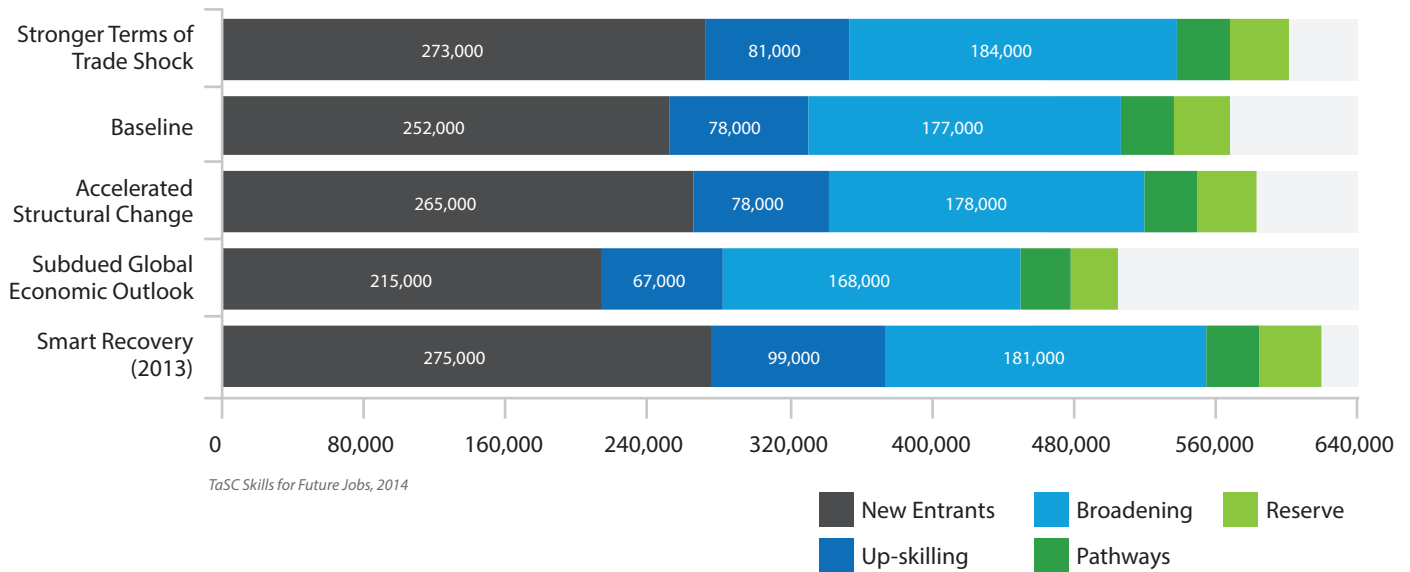
- Existing workers gaining a qualification at an equivalent or lower level (referred to as 'skills broadening').
- Demand by people needing to undertake lower level qualifications before they can attain the higher-level qualifications needed by industry (i.e. 'pathways' demand).
- Demand by people who are not employed and who represent a necessary reserve capacity (that is, reserve labour force demand).

The 2014 Plan provided three alternative scenarios in addition to the baseline scenario.

**Figure 15 - Total Demand for New Qualifications, 2012-13 to 2017-18**



**Figure 16 - Total Demand for New Qualifications, 2012-13 to 2024-25**

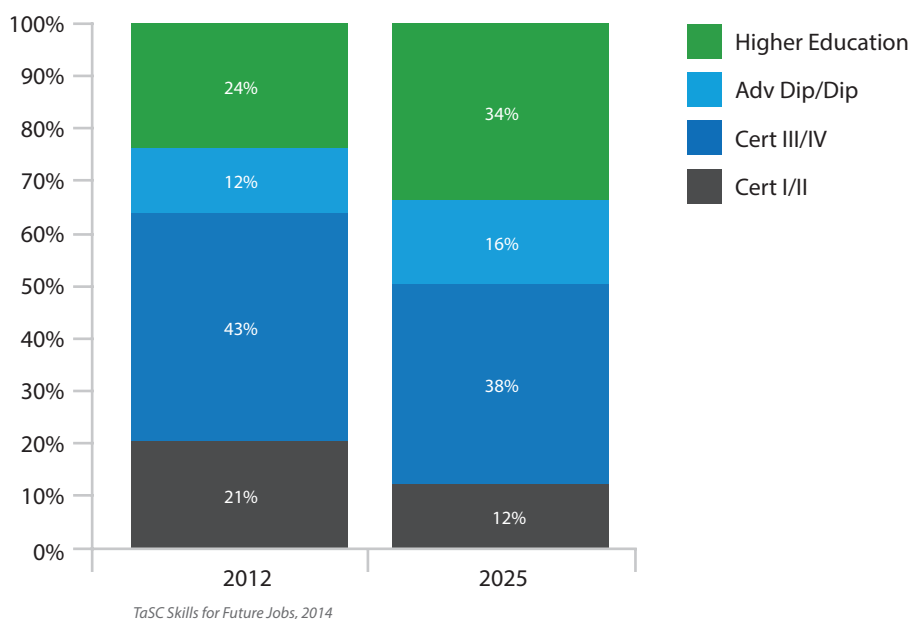


## Level of qualification

New entrant demand for qualifications is influenced not only by the number of job openings, but also the corresponding need for qualifications that enable these new entrants to be appropriately qualified for the job openings on offer. It is assumed that the qualification

profile of younger workers better reflects today's qualification requirements to enter each occupation. Therefore, the qualification demands of new entrants for each occupation are derived by combining the number of job openings with qualification profiles but with weightings favouring the younger workers.

**Figure 17 - The Changing Qualification Profile, 2012 to 2025**



## Appendix B: List of Industry Partners

### IPQ Stakeholders - Industry Partners

ACPET (Australian Council for Private Education and Training)  
Adelaide Training and Employment Centre (ATEC)  
Aged & Community Services SA & NT  
AiGroup (Australian Industry Group)  
Australian Manufacturing Workers' Union (AMWU)  
Australian Medical Association (AMA) (SA)  
Arts SA  
Association of Independent Schools of South Australia (AISSA)  
Australian Maritime & Fisheries Academy (AMFA)  
BUSINESS SA (South Australia's Chamber of Commerce and Industry)  
Catholic Education South Australia  
Construction Industry Training Board  
Department for Education and Child Development (DECD)  
Early Childhood Australia (ECA) SA  
Energy & Resources - Department of State Development (DSD)  
Festival Adelaide  
Food Tourism and Hospitality (FTH) Industry Skills Advisory Council  
Forestworks ISC  
Hender Consulting  
Housing Industry Association (HIA)  
HP Enterprise Services  
Local Government Association (LGA) SA  
Logging Investigation and Training Association Inc.  
Master Builders Association of South Australia  
Master Plumbers Association of South Australia  
Maxima Group  
MINTRAC  
OneFortyOne Plantations  
Primary Industry Skills Council SA  
Recreation SA  
Real Estate Institute of South Australia (REISA)  
Resource and Engineering Skills Alliance (RESA)  
SA Freight Council  
SA Tourism Industry Council (SATIC)  
SA UNIONS  
South Australian Chamber of Mines and Energy (SACOME)  
South Australian Council of Social Services (SACOSS)  
Shop, Distributive & Allied Employees' Association (SDA) SA & NT Branch  
Service Skills SA  
Sport SA  
TAFE SA  
The Lucas Group  
The Water Industry Alliance  
Transport Distribution Training SA (TDTSA)  
Transport Training Solutions  
Transport Workers Union (TWU) SA/NT Branch



## Appendix C: Abbreviations and Acronyms

Abbreviation	Description
ABS	Australian Bureau of Statistics
ACE	Adult Community Education
ACELG	Australian Centre of Excellence for Local Government
AISC	Australian Industry and Skills Committee
AQF	Australian Qualification Framework
CALD	Culturally and Linguistically Diverse
FTL	Funded Training List
DPTI	Department of Planning, Transport and Infrastructure
GSP	Gross State Product
GTO	Group Training Organisation(s)
ICT	Information Communication Technologies
IPQ	Industry Priority Qualification(s)
LLN	Language, Literacy and Numeracy
NCVER	National Centre for Vocational Education Research
QSCs	Qualifications, Skill Sets and Accredited Courses
RTO	Registered Training Organisation(s)
STEM	Science, Technology, Engineering and Maths
STL	Subsidised Training List
TVA	Total VET Activity (NCVER data)
VET	Vocational education and training
WHS	Work Health and Safety



**Government of South Australia**  
Training and Skills Commission

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Disclaimer: The material contained in this report has been developed by the Training and Skills Commission and was informed through a detailed survey of industry and consultations with key industry partners and groups. The information contained in this report does not necessarily reflect the views of the Government of South Australia or the Department of State Development, or indicate any commitment to a particular course of action.

The information contained in the report is provided in good faith and all reasonable care has been taken in its preparation. The Training and Skills Commission recommends users exercise care in interpreting this report and carefully evaluate the relevance of the material for their purpose and where necessary obtain appropriate advice specific to their particular circumstances.

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Images have been supplied by the Department of State Development and the South Australian Tourism Commission.

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