



CONSTRUCTION



Government of South Australia
Training and Skills Commission

www.tasc.sa.gov.au

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.

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Anthony Kittel
CHAIR

A handwritten signature in white ink, appearing to read 'Melinda OLeary'.

Melinda OLeary
DEPUTY CHAIR

Our Members



Mr Anthony Kittel (Chair)
Chief Executive Officer, REDARC Electronics



Ms Melinda OLeary (Deputy Chair)
Nova Systems



Mr Adrian Smith
Managing Director, Rheinmetall Defence



Ms Adrienne Nieuwenhuis
Director, Office of Strategic Programs, Chancellery,
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Mr Jamie Newlyn
SA Branch Secretary, Maritime Union of Australia



Ms Kylie Heneker
Government Relations and Communications
Professional



Ms Lindsay Palmer
Former Member of Parliament, School Principal
and Industry Consultant



Mr Rob Bonner
Director, Operations & Strategy, Australian Nursing
& Midwifery Federation (SA Branch)



Mr Stephen Myatt
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Deputy Members



Ms Deb Black
Alternative dispute resolution specialist



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National Coordinator: Skills, Training & Apprenticeships
with the Australian Manufacturing Workers' Union



Professor John Buchanan
Principal Advisor, Research Impact at the
University of Sydney Business School



Dr Karleen Thornton
Nursing Director, Northern Adelaide Local Health
Network

The Training and Skills Commission

The Commission, established in 2003 and later reformed in 2008, is comprised of industry, academic and community leaders with responsibility for advising the Minister for Higher Education and Skills on skills and workforce development priorities for South Australia and regulation of our 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 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.

This report should be read in conjunction with the full Report on South Australia's Industry Priority Qualifications available at: www.tasc.sa.gov.au



Respondents

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



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.

Key Insights



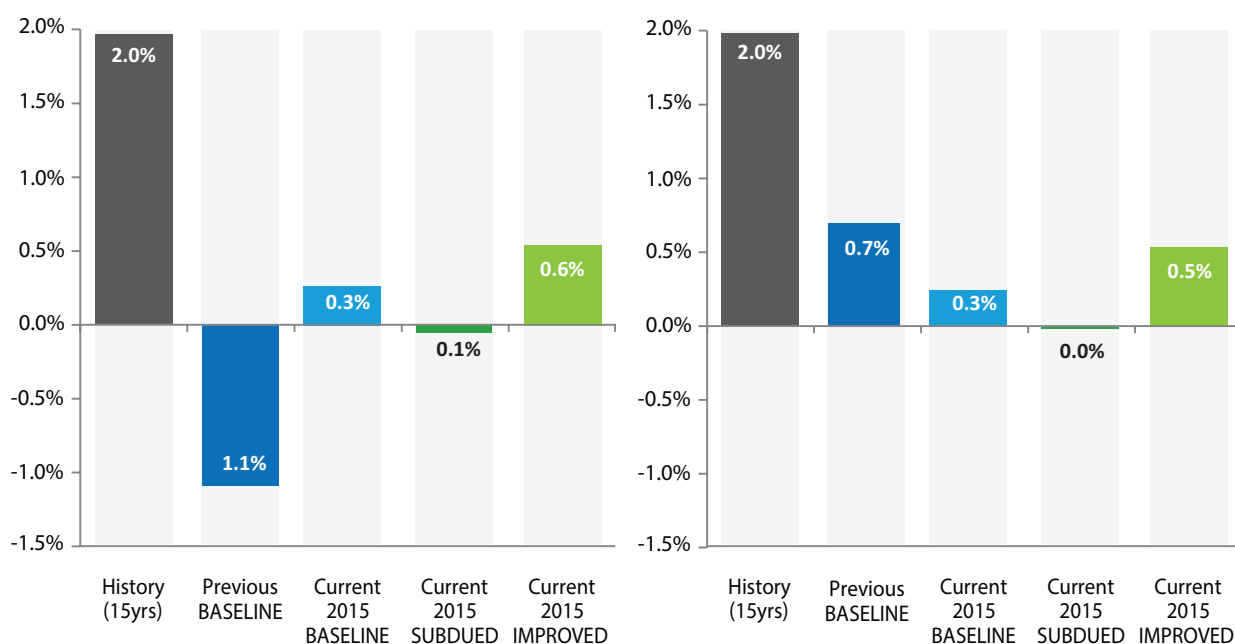
Construction

Employment Outlook

According to the Commission's interim modelling, employment in the Construction industry is projected to increase 0.3 percent a year over the next five (5) years under the baseline scenario. This compares with a rate of growth over the past 15 years of 2.0 percent per annum.

Over the long-term (2014-15 to 2024-25), the industry is expected to record continued employment growth below the State average. As a result, its share of the State's employment is projected to decline from 7.5 percent to 7.0 percent.

**Figure 1 - Construction, Average Annual Employment Change
2014-15 to 2019-20 and 2014-15 to 2024-25**



Source: Interim TaSC Economic Modelling, 2015

Industry Outlook

In June 2014, the Commonwealth Department of Employment identified Construction as the third largest employing industry in Australia, with around 1,025,000 workers or 8.8 percent of total employment. Strong employment growth is expected nationally over the next few years, particularly for services such as building structures, installation, heavy and civil engineering, land development and site preparation.¹

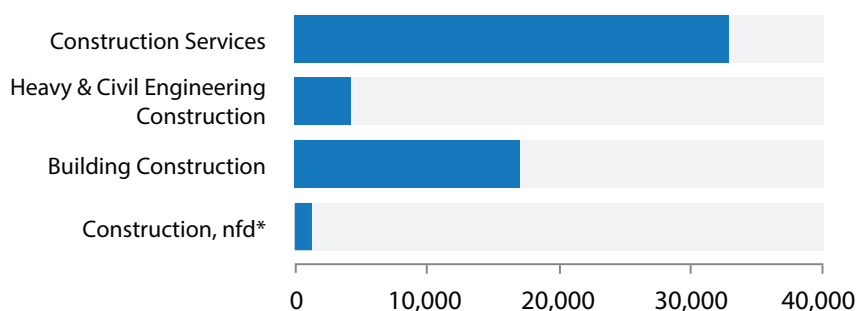
In South Australia, employment in the Construction industry has declined by around 5 percent over the past five years and currently employs just over 60,000 workers.² The industry, which includes businesses in residential and non-residential construction, continues to face an unsteady future as it mirrors both the broader and local economies. Despite some promising housing indicators, the recent collapse of a number of building firms is concerning.³ The lower level of activity in the resources sector coupled with higher than average unemployment and weak business and consumer confidence is also of concern.

New housing approvals have been broadly unchanged in South Australia over the past few years, despite a dip in early 2015.⁴ Dwelling commencements have also picked up in recent quarters. Both series have returned to long term averages following a significant slowdown in 2012.⁵ While new private construction in South Australia is up from five years ago, alterations and additions are down. The irregular market is putting pressure on profit margins.

The South Australian Government's 2014-15 Major Development Directory details 326 projects worth \$94.7 billion underway or in the pipeline. This is positive news for an industry concerned about commercial construction activity following the completion of the new Royal Adelaide Hospital (RAH).

South Australia's Coordinator General has the regulatory capacity to declare projects valued over \$3 million to be of economic significance, and to be assessed by the independent Development Assessment Commission (DAC) rather than local councils, allowing a smoother passage for planning approval. This change, along with State Government reductions in stamp duty on commercial property from 2018 is designed to stimulate the sluggish local Construction industry.

Figure 2 - Construction, Employment by Sub-Sector



Source: Australian Bureau of Statistics, Census of Population and Housing, 2011

1 - Department of Employment, 2015 Australian Jobs, Australian Government

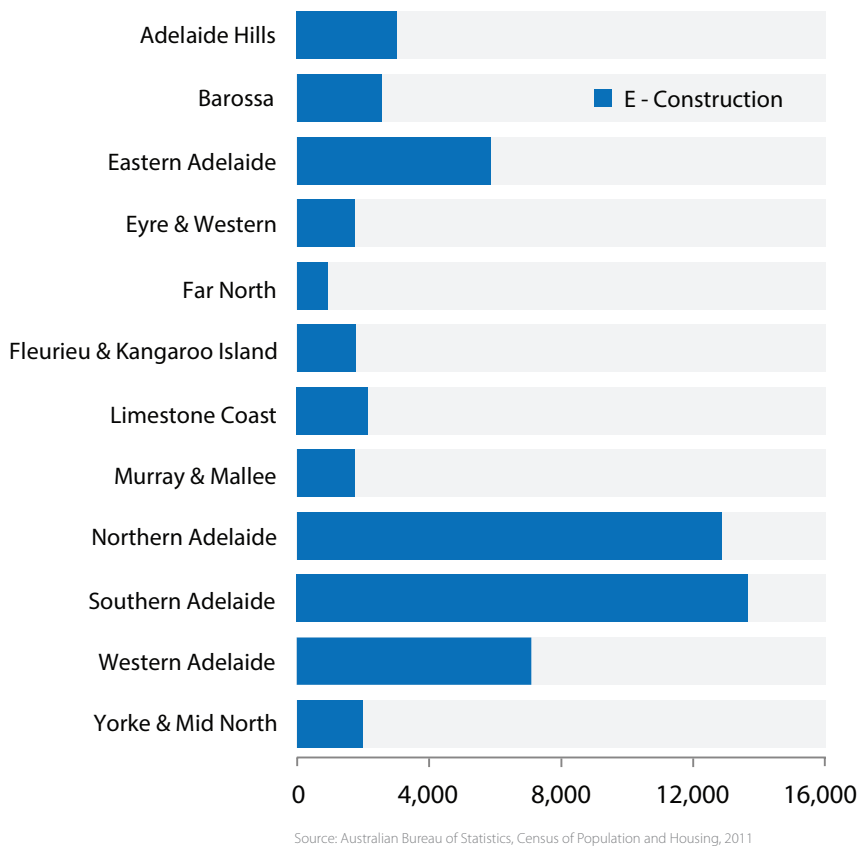
2 - Australian Bureau of Statistics, Catalogue No. 6291, Labour Force, Australia, Detailed, <http://www.abs.gov.au/ausstats/abs@/mf/6291.0.55.001>

3 - <https://sourceable.net/sa-Construction-sector-in-crisis-as-another-builder-collapses/>

4 - http://issuu.com/crowtherblaynemediaspecialists/docs/2015_master_builders_sa_builder_mag_2505e1a6a78632?e=12823049/12034091

5 - Ibid

Figure 3 - Construction, Employment by Region



Skills needs

Survey respondents ranked the Managerial and Leadership skills cluster as having the highest importance, followed by the Work Health and Safety (WHS) and then the Financial skills clusters. These are important skills in this industry and the recent abrupt closures of a number of South Australian Construction companies gives weight to the importance of management and leadership and financial skills.

Entrepreneurial and Marketing and Engagement skills clusters were ranked of lowest importance by the Construction Survey respondents.

Table 1 - Construction, Ranked Skills Clusters

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

Workforce development themes and issues

The Construction Industry workforce has declined along with the contraction in Industry activity. Recent Apprenticeship data shows a fall in Apprentices in the Construction Industry since 2010, from 56,000 to 43,100 in 2014. Around 30,000 construction workers retire from the industry each year. Masters Builders SA believes that these trends could impact billions of dollars in investment, and place pressure on the industry to recruit skilled foreign workers⁶.

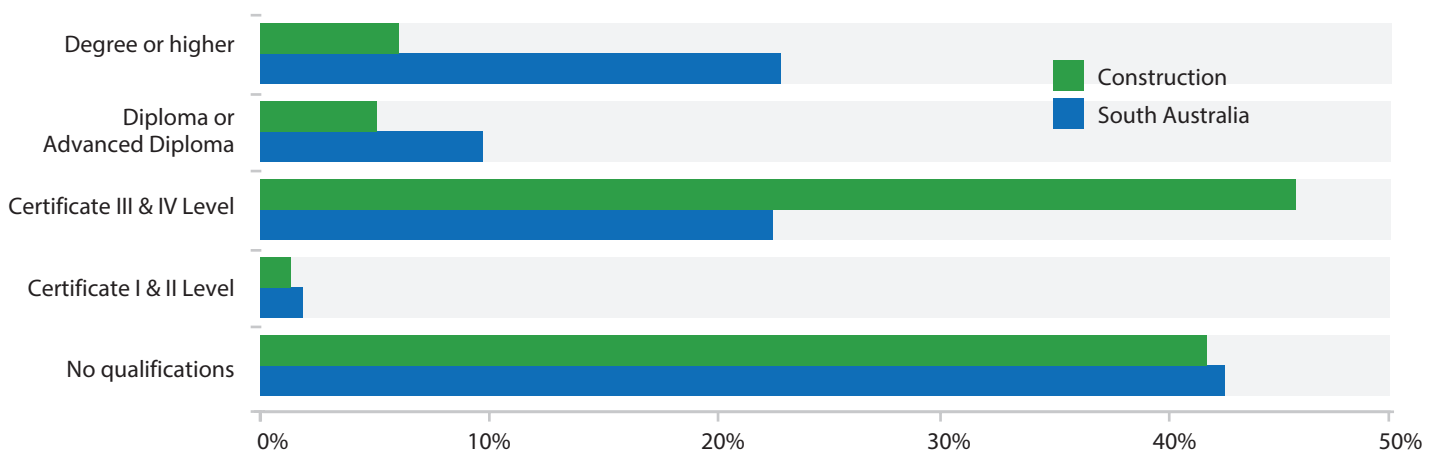
Attraction and retention of Apprentices is more difficult when the industry is experiencing subdued business sentiment and soft residential activity. Higher activity levels together with low Apprenticeship numbers may result in the re-emergence of skills shortages across construction trades.

Certificate III and Certificate IV remain the most popular qualifications, as they are closely linked to Apprenticeships and Traineeships and the building trades. At February 2014, 42.5 percent of the workforce was aged 34 years and under compared to all industries with 38.7 percent⁷.

As baby boomers retire from the Construction Industry, suitable skilled mentors and role models may be harder to find. Reduced Apprentice numbers, difficulties in recruitment and the retirement of baby boomers, may result in fewer tradespeople in the future when demand is expected to rise. This may encourage employers to adopt more flexible work practices and recruit those considered as marginalised in the labour market.

Recent trends into Smart ICT in the design and planning of infrastructure indicate that using tools like Building Information Modelling (BIM) and Project Team Integration (PTI) is expected to bring dividends by allowing greater sharing of information and closer collaboration. Uptake isn't widespread, particularly amongst small sub-contractors and sole traders who are generally slower to adopt new ways to work.

Figure 4 - Construction, Employment Share by Post-School Qualification Level



Source: Australian Bureau of Statistics, Census of Population and Housing, 2011

6 - http://issuu.com/crowtherblaynemedia/specialists/docs/2015_master_builders_sa_builder_mag_2505e1a6a786327e=12823049/12034091

7 - <http://www.cpsisc.com.au/resources/CPSISC/Industrypercent20Snapperpercent20Shot/Constructionpercent20Industrypercent20Snapshot.pdf>

Industry Priority Qualifications

The Construction Industry received a total of 42 responses to the Survey. This was slightly below the target number of responses for this Industry, although the distribution by organisational type was satisfactory. The sub-sector distribution showed underrepresentation from Construction Services.

This Industry was spread across employer sizes. Around half of employers reported likely additions to staff in the short to medium-term.

Stakeholders made a moderate number of changes to qualifications. In particular, qualifications identified as trades were given a higher priority.

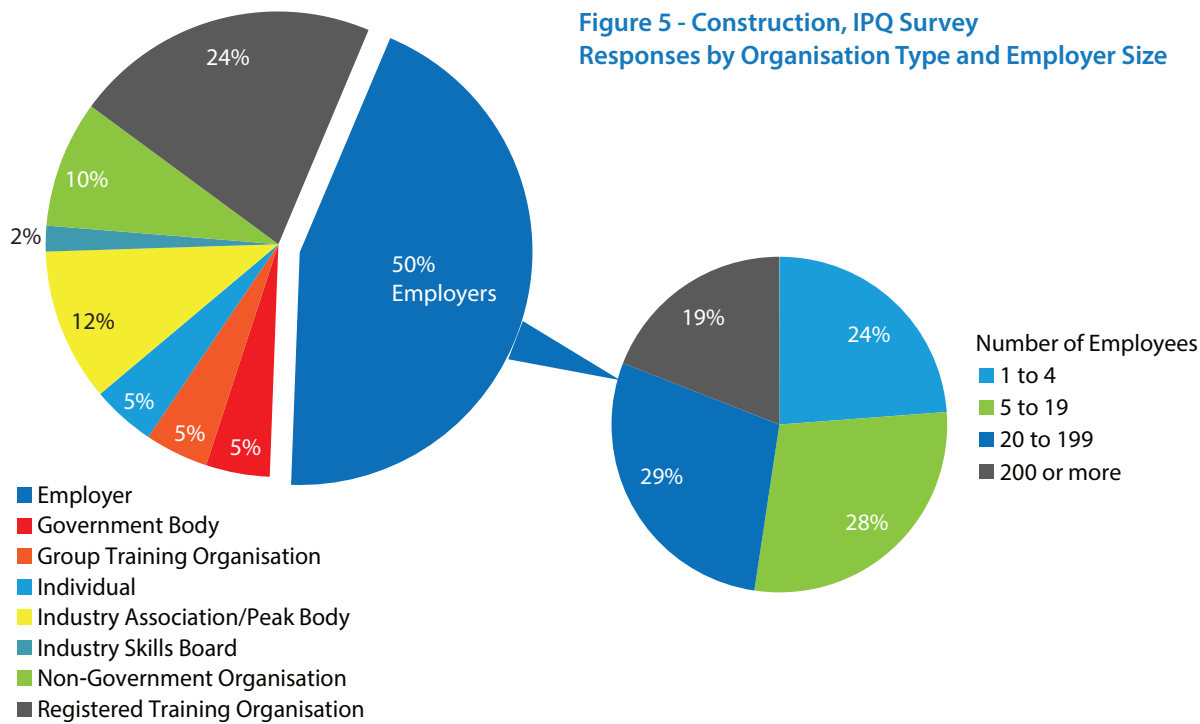


Table 2 - Construction, Prioritised Qualifications

Construction

Tier 1 (Highest Priority)

Certificate IV in Work Health and Safety
Certificate III in Bricklaying/Blocklaying
Certificate III in Carpentry
Certificate III in Plumbing
Certificate III in Roof Plumbing

Tier 2 (High Priority)

Diploma of Building and Construction (Building)
Diploma of Work Health and Safety
Certificate IV in Building & Construction (Building)
Certificate IV in Building & Construction (Estimating)
Certificate IV in Building and Construction
(Site Management)
Certificate IV in Leadership and Management
Certificate IV in Plumbing and Services
Certificate IV in Project Management Practice
Certificate III in Concreting
Certificate III in Gas Fitting
Certificate III in Painting and Decorating
Certificate III in Wall and Ceiling Lining
Certificate II in Civil Construction
Certificate II in Construction
Certificate II in Construction Pathways
Certificate II in Metal Roofing and Cladding

Tier 3 (Priority)

Advanced Diploma of Building and Construction
(Management)
Diploma of Building and Construction (Management)
Diploma of Engineering Drafting (Accredited Course)
Diploma of Leadership and Management
Diploma of Project Management
Certificate IV in Building and Construction
(Contract Administration)
Certificate IV in Building & Construction
(Specialist Trades)
Certificate IV in Building and Construction
(Trade Contracting)
Certificate IV in Business Administration
Certificate IV in Small Business Management
Certificate III in Carpentry and Joinery
Certificate III in Civil Construction
Certificate III in Civil Construction Plant Operations
Certificate III in Fire Protection
Certificate III in Joinery
Certificate III in Paving
Certificate III in Roof Tiling
Certificate III in Shopfitting
Certificate III in Solid Plastering
Certificate III in Steelfixing
Certificate III in Wall and Floor Tiling
Certificate III in Work Health and Safety
Certificate I in Construction

A full list of **Tier 4** (Low Priority) Industry Prioritised
Qualifications are available in the IPQ Dataset
www.tasc.sa.gov.au



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.

A full copy of the Report on South Australia's Industry Priority Qualifications can be accessed electronically at:
www.tasc.sa.gov.au

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

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