

The Training and Skills Commission

SKILLS FOR FUTURE JOBS 2020 SERIES

May 2017



Government of South Australia
Training and Skills Commission

www.tasc.sa.gov.au



Better Skills
Better Work
Better State



Message from the Chair

On behalf of the Training and Skills Commission it is my pleasure to release Skills for Future Jobs 2020, the first instalment of our workforce development plan for South Australia.

Skills for Future Jobs 2020 will comprise a series of documents designed to help us better understand the skills and workforce development needs of a state which is confronting significant challenges. Through robust economic modelling, and evidence-based assessment of industry growth potential and associated future demand for skills and qualifications, this series will assist the Commission to understand these challenges and provide recommendations to Government to address them.

Documents published as part of the 2020 Series will explore significant policy issues for South Australia and provide a platform for deep engagement with industry and our stakeholders.

The 2020 Series is designed to allow the Commission to further refine its understanding of issues, and in partnership with stakeholders, present the Government with considered policy options. The Commission ultimately seeks to contribute to building a better, more vibrant South Australia where enterprise succeeds and our citizens have access to good jobs, now and into the future.

A handwritten signature in black ink, appearing to read 'Michael Boyce', written over a white background.

Michael Boyce
CHAIR

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 creating 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.

Members



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Angas Story
Coordinator of Industrial &
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Mick Tumbers
Community Representative

Aspirations of the Training and Skills Commission

The Skills for Future Jobs 2020 Series will be the eighth Workforce Development Plan for South Australia to be released by the Training and Skills Commission.

The Commission's aim in this 2020 Series is to highlight the importance of the role of education and training, and in particular the VET sector, in the State's economic and social development. Through industry-informed and evidence-based policy recommendations that enhance the underpinning policy framework of the Commission, the 2020 Series will assist South Australia to build the skilled and productive workforce that is required to position the state to capture emerging economic opportunities.

The Commission has been vigilant to the ever changing needs of the South Australian economy, however as we look over the horizon and get an understanding of the increasing rate of change in our industries we must be prepared to accept that planning must go further and be more agile than simply expanding on current trends.

As we experience a continuing shift to a more service orientated economy and significant change in the focus of our manufacturing industry, we all understand that South Australia, perhaps more so than Australia as a whole, is undergoing rapid industrial change. The Commission believes it is necessary to challenge the conceptual thinking that views industry change as simply cyclical or as moving through predictable phases of expansion and contraction. There is a major redefining of our economy occurring and in turn the needs of our workforce will alter dramatically over the coming decade. We must not only accept that this change is coming, but that it is more pronounced than previously experienced. We must accept that we cannot fully predict the impact of the changes we are about to experience and therefore must contemplate how we can best future proof our workforce for an unknown range of possible futures.

This 2020 Series looks to make policy recommendations and highlight areas of attention based on the sound assumption that planning into the future will become less certain and require more agile approaches to public policy planning.



Introduction

Skills for Future Jobs 2020 Series

Since 2003 the Training and Skills Commission has provided independent strategic advice to the Minister for Higher Education and Skills on skills and workforce development priorities for South Australia. Our formal advice will be provided through this Skills for Future Jobs 2020 Series.

The Commission's work informs the allocation of public funding in skills and workforce development, whilst promoting equity of access and participation in South Australia's VET sector.

The Commission sincerely thanks the more than 1000 individuals, businesses, associations and community bodies that have engaged with us over the last 18 months in developing this 2020 Series and looks forward to continuing and deepening engagement going forward.

This 2020 Series follows two years of change to the South Australian VET system, with the transition from Skills for All and the implementation of the WorkReady policy. The policy framework of WorkReady has shifted government investment from a focus on participation in education and training to a more direct linking of skills training to employment outcomes and potential job openings. WorkReady's prime mechanism for funding allocation, the Subsidised Training List (STL) has been influenced by the work of the Commission on mapping the skill needs of industry in South Australia. The Commission's Report to Government on Industry's Priority Qualifications, released in March 2016 and supported by significant industry collaboration and consultation, has resulted in advice to Government that directly reflects industry training needs.

The Commission looks forward to continuing to provide feedback on behalf of industry that will inform each iteration of the Subsidised Training List and the State's investment in skills development over the coming years.

This 2020 Series looks forward to 2020, acknowledging the State's economic transformation as we move away from heavy manufacturing-based industries and support the emergence of new, dynamic and exciting industries including, advanced manufacturing, defense, personal care services and innovative health research.

The Commission acknowledges that alongside this industry transformation there is a workforce

transformation which will have direct and immediate implications for skills and capacity development. The Commission's focus is to build the capacity of South Australian workers to ensure that we have the skills for now and the future.

The Commission's policy deliberations over recent years have concentrated on numerous areas including: a new state-based demand driven VET system; industry engagement best practice; supporting regional workforces; the challenges of access and participation; and the need to refocus debates on public and private provision of training to sharpen attention on high quality vocational outcomes. Further, the Commission contends there is a need for greater awareness that learning needs to occur across the spectrum of workplace, formal and community settings, and the significant implication for skills of greater and faster change in the economy and the nature of industry.

The Commission encourages input and will continue to offer opportunities for industry to engage in our policy work to ensure that the quality of the outcomes emerging from reform of the VET system meet the needs of South Australian industries, individuals and the South Australian community.

Forward Agenda

The Commission has already identified a number of topics of strategic importance to be part of the 2020 Series. Over the next two years, these topics, and those identified by our stakeholders, will form the work agenda and consultation activity of the Commission.

Apprenticeships and Traineeships

For many years now we have seen consistently decreasing commencements for apprenticeships and traineeships. Although such declines are usually accompanied with great concerns the Commission will seek to understand the impact on our workforce development priorities and provide advice as to how the State may arrest any decline that risks undersupply of critical skills. Further, the Commission will look to better define the role and purpose of apprenticeships and traineeships in our modern workforce.

Adult Community Education

The Commission has received a commissioned report from the South Australian Centre for Economic Studies to capture the value of the Government's investment in Adult Community Education (ACE). The delivery of accredited and non-accredited training in community settings is a vital component of the training and learning continuum in South Australia, providing very early engagement, foundation skills and the possibility of further training and participation for many who may not be immediately served by formal training environments. It is the expectation of the Commission that, with a robust evidence base to understand this important contribution and the significant return on investment achieved through ACE funding, this sector will see greater prioritisation within the policy and funding considerations of the Government.

Industry Priority Qualifications

The Commission broke new ground in the VET sector by working collaboratively with its industry stakeholders in designing and implementing an extensive assessment of the skills needs of industry. The Report on South Australia's Industry Priority Qualifications was a direct reflection of industry feedback and, it is hoped, will continue to be drawn upon by government as a key input to determine which VET qualifications warrant public funding support. The detailed findings contained in the report are valuable across several domains:

- valuable to Government in guiding public investment in skills development;
- valuable to industry in better understanding and comparing qualifications priorities across sectors; and,
- valuable to public policy creators in understanding the demand coming from industry.

As the State Government continues to progress TAFE SA's transition to a more commercial footing and further releases funding for publicly subsidised training investment, the Commission will actively seek to have industry self-identified priorities directly influence public expenditure where appropriate.

Strategic Industry Needs

South Australia is uniquely poised to benefit from new and emerging industries as well as innovation and diversification within established industries. The Commission will look at the differing workforce development needs of these industries and their possible interplay with our skills and workforce development system.

VET System Funding

Whilst the Commission is sensitive to the declining resources invested in the VET sector by all levels of government, high quality vocational outcomes and a sound state-based policy on skills investment will remain a priority for the Commission to explore.

The Commission's Economic Modelling

A key component of the Commission's work is the modelling of future industry demand for skilled workers. This modelling has become a foundation not only for the Commission's recommendations and policy advice, it has become invaluable in government planning, for training providers, and for individuals in career planning.

For governments the projections form a key input into determining the scope of courses and the levels to which they need to be supported through government subsidisation.

For training providers the projections provide a basis for identifying what types of qualifications will be in demand in the future.

For the broader community the projections provide some guidance as to where the jobs of the future are likely to be.

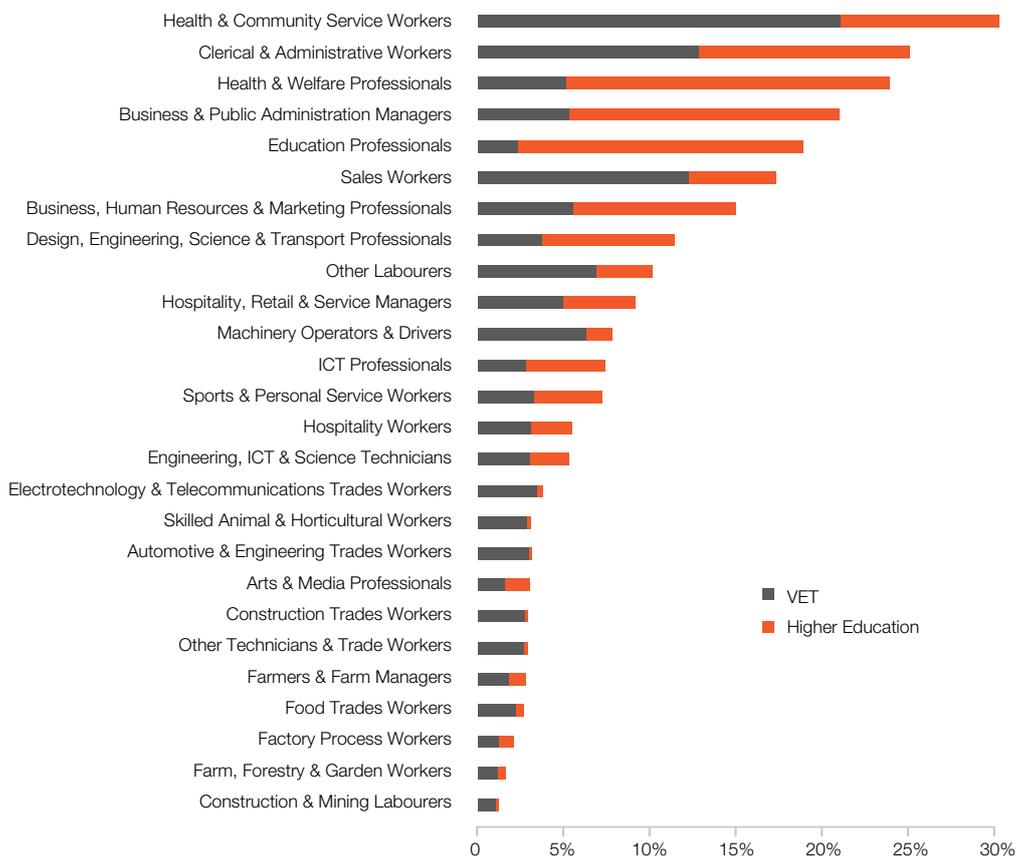
For Industry the projections give a sense of the extent and nature of potential changes in the mix of occupational demand in employment that the economy as a whole is anticipating. These projections have been informed through industry engagement with individual industry results published separately.

The Commission has maintained a strong commitment to providing these projections in a consistent and transparent manner. The detailed projections present a carefully considered view of what future employment might look like, and what qualifications will need to be delivered to meet industry demand for skills. (see Figure 1)

The Commission's latest projections set out the skill requirements for South Australia to 2020 and 2025 and provide a measure against achieving our workforce needs.

For businesses and enterprises to succeed and South Australians to have good jobs today and into the future the Commission's economic modelling and demand for qualifications provide a sound guide to the Government of South Australia and industry.

Figure 1: Total industry demand for qualifications by occupational group, VET and Higher Education, 2014-15 to 2019-20





Economic Outlook and Implications for Skills

The Commission's economic analysis provides an assessment of the employment outlook and subsequent demand for qualifications in South Australia over the period 2015-2025. The main objective is to provide useful information on skills and qualification demand to inform future policy decisions and strategies.

The analysis seeks to answer two key questions:

- What will employment look like in SA by 2025?
- What qualifications will be required to ensure industry skills demand is met?

The analysis and estimates provided in this document provide a basis for developing future training and skills policy. It is also of value to enterprises conducting workforce planning, or to individuals in career planning.

It must be remembered that the estimates are only an indication of future outcomes, and for the most part are provided at the broad macroeconomic level. They are economy wide projections that can be used to support and complement the more detailed, industry-specific analysis.



Analysis

The analysis includes two alternative sensitivity tests applied to a baseline projection. The baseline represents the expected future for employment and qualification demand, given currently available information. The two sensitivity tests include the following variations from the baseline.

Sensitivity 1: Improved economic outlook

- This represents a better than expected improvement in the SA economy, with participation and productivity increasing at a faster rate compared to the baseline, while unemployment decreases. Gross State Product (GSP) and employment growth also increase compared to the baseline.

Sensitivity 2: Subdued global economic outlook

- This represents a slower than expected economic recovery in SA, with unemployment remaining at a higher rate compared to the baseline, while participation and productivity decrease. Employment growth and GSP are also lower compared to the baseline.

Summary

- Approximately 482,000 qualifications will need to be delivered between 2015-2025 to meet industry demand for skills.
- VET qualifications account for approximately two-thirds of total qualification demand.
- Higher level qualifications continue to make up an increasing share of training activity in South Australia.
- By 2025, approximately 61 percent of workers will be expected to hold a Certificate IV level qualification or higher.
- The largest demand for qualifications is expected to come from health and community service workers.

Table 1: Annual growth rate projections by sensitivity (%)

South Australia									
Key Macroeconomic Variables	Historical 15 Years	2014 Baseline		2016 Baseline		Improved		Subdued	
		Short term	Long term	Short term	Long term	Short term	Long term	Short term	Long term
Adult Population	1.0	1.0	1.0	0.8	0.9	0.8	0.9	0.8	0.9
Labour Force	1.2	0.8	0.8	0.8	0.8	1.1	1.1	0.7	0.7
Employment	1.2	0.6	1.0	0.9	1.0	1.3	1.3	0.6	0.7
Unemployment	0.3	4.7	0.1	-0.1	-1.1	-2.9	-2.2	2.6	0.8
Participation Rate*	62.0	62.5	62.8	61.9	61.8	62.7	63.5	61.7	61.0
Unemployment Rate*	6.9	6.9	5.2	6.6	5.7	5.7	5.0	7.6	7.0
Gross State Productivity	2.3	2.2	2.6	2.0	2.2	2.9	2.8	1.7	1.8
Productivity	1.1	1.6	1.5	1.2	1.2	1.5	1.5	1.1	1.1

Historical represents 1999-2000 to 2014-15

Short term represents 2014-15 to 2019-20

Long term represents 2014-15 to 2024-25

*The participation rate and unemployment rate are for the end of the period as opposed to average annual growth rates.

Employment Outlook

The South Australian economy continues to undergo a structural shift, moving away from employment in traditional manufacturing to the provision of services and advanced manufacturing. Our ageing population along with the introduction of the NDIS is leading to strong employment growth in health care. The increasing demand for services and advanced manufacturing is driving employment growth in professional, scientific and technical occupations, with a flow on effect being strong demand for education and training, due to increasing demand for workers with higher level qualifications. Future defence projects scheduled in the state are expected to further support demand for professional and technical services.

Employment in accommodation and food services is also expected to rise, as a lower Australian dollar and increasing wealth in Asian countries make our state an attractive tourism destination, particularly in the food and wine industries.

Employment in arts and recreation services is also on the rise, with strong growth expected in occupations such as fitness instructing resulting from an increasing focus on personal health and a desire to achieve work-life balance, coupled with sufficient levels of disposable income.

Total employment in South Australia is forecast to grow by 0.9 percent per year to 2020, which compares to a national growth rate of 1.6 percent per year.

This translates to approximately 36,000 jobs being created in South Australia over the five-year period leading to 2020. Combining employment growth with the need to replace workers leaving the workforce or changing occupations, it is estimated there will be approximately 122,000 job openings over the period 2015 to 2020.

The employment projections reveal strong growth in the health care and social assistance industry, followed closely by professional, scientific and technical services. The decline in mining and manufacturing employment is expected to continue, at least in the short-term.

Strong growth expected in the health care and social assistance industry will ensure it remains the largest employer by industry sector in the state, employing approximately 17 percent of the South Australian workforce by 2025.

Some of the occupations expected to experience strong employment growth include those related to health care, such as aged and disabled care and nursing support and personal care. Strong growth in professional, scientific and technical services is expected to cause increasing demand in occupations such as building and engineering technicians, medical technicians, environmental scientists, psychologists, ICT support technicians, software and applications programmers, and education providers such as teachers, lecturers and tutors.

Table 2: Short term job openings (2014-15 to 2019-20)

Job Openings	Baseline	Improved	Subdued
Expansion Demand	36,000	55,000	24,000
Replacement Demand	86,000	87,000	86,000
Job Openings	122,000	142,000	110,000

Table 3: Top 5 projected average annual employment growth rates by industry for South Australia (%)

Industries	Historical 15 Years	Baseline		Improved		Subdued	
		Short term	Long term	Short term	Long term	Short term	Long term
South Australia							
Health Care and Social Assistance	3.7	2.4	2.5	2.9	2.8	2.1	2.2
Professional, Scientific and Technical Services	3.1	2.2	2.3	2.7	2.6	2.0	2.0
Accommodation and Food Services	1.2	2.0	2.0	2.4	2.3	1.7	1.7
Arts and Recreation Services	3.2	1.4	1.4	1.9	1.8	1.1	1.2
Education and Training	1.6	1.1	1.2	1.6	1.5	0.9	0.9
Total	1.2	0.9	1.0				

Note: Short term includes 2014-15 to 2019-20 and long term 2014-15 to 2024-25

Industry demand for new qualifications

Industry demand will require approximately 230,000 new qualifications to be delivered between 2015 and 2020.

The majority of this demand is driven by new entrants and existing workers gaining qualifications at an equivalent or lower level, representing 38 percent and 31 percent of total demand respectively. It's interesting to note that industry demand requires existing workers to gain a qualification at the same level or lower far more often than they require workers to gain a higher level qualification.

By 2025, approximately 61 percent of workers will be expected to hold a Certificate IV level qualification or higher, while around half of all workers will be required to hold a Diploma or above.

VET qualifications account for approximately two-thirds of total qualification demand, illustrating the significant importance of vocational training in meeting industry demand.

Projected strong employment growth in the health care and social assistance industry is expected to have a significant impact on the demand for qualifications in SA.

Over the period 2015 to 2020, delivering qualifications to health and community service workers and health and welfare professionals is estimated to make up 22 percent of total training activity in SA. Much of this is VET demand. To meet the skills needs for health care occupations, approximately 33,000 VET qualifications will need to be delivered, nearly double the amount of higher education qualifications (18,000).



Table 6: Total industry demand for new qualifications (2014-15 to 2019-20)

Qualification Level	Base	Improved	Subdued
Post Graduate	26,000	28,000	25,000
Bachelor degree	53,000	57,000	50,000
Advanced Diploma/Diploma	37,000	40,000	36,000
Certificate IV	27,000	29,000	26,000
Certificate III	61,000	65,000	59,000
Certificate II	25,000	26,000	25,000
Certificate I	2,000	2,000	2,000
Total	231,000	247,000	222,000

Components may not add to total due to rounding.

Conclusions

The Commission's projections support the expectation that the jobs of the future in South Australia are more likely to be service oriented and highly skilled. The growing industry demand for more highly skilled workers is leading to an increasing demand for higher level qualifications, and it is the service related industries and occupations that are expected to drive the majority of qualification demand over the next ten years.

While some occupations are expected to see a decline in overall employment, the ageing population in South Australia is feeding a substantial demand to replace workers retiring or changing occupations, meaning there are still significant job opportunities in many occupations.

The strong employment growth and demand for qualifications in health related occupations, coupled with a potential mismatch between qualification supply and demand, suggests health care occupations should be closely monitored to ensure

industry demand for skills is met by an appropriate supply. It will be important for the state's economic growth to avoid a skills shortage in this sector.

Looking to the future, the increasing demand for highly skilled workers presents a challenge in ensuring those without formal qualifications, or with only low level qualifications, are able to participate in the labour force in the future, and in a way that is meaningful to them and to the economy. There is a risk that, without adequate mechanisms to support transition, such as effective skills recognition and mapping, the declining demand for low-skilled workers will lead to a portion of the existing labour force dropping out of the labour force altogether. The subsequent negative impact not just on economic growth, but to the individuals, their families and communities these people belong to should remain a priority of Government.



Future SFFJ2020 discussion papers

Through the Skills for Future Jobs 2020 Series, the Commission will provide robust, evidence-based recommendations to the Government on a range of skills and workforce development issues currently impacting the state.

In developing a position and recommendations, the Commission will take into consideration the findings from its economic modelling projections and the industry demand for qualifications, along with industry and stakeholder consultations. It will also take into account current national and state policy matters; the VET sector and its role in enabling growth; the future nature of work and the impact on industry sectors; regional distinctions; and social inclusion.

Stay up to date and join the conversation!

Stakeholders are encouraged to participate in an ongoing conversation with the Commission as part of the development of the 2020 Series and to have input into its policy discourse around the identified topics.

Find out how you can participate at the Training and Skills Commission website:

www.tasc.sa.gov.au

Business SA supports the Training and Skills Commission in its ambitious plan to unpack the needs of our changing industry sectors on workforce development and skills. This 2020 publication highlights a great opportunity for industry to engage on critical issues of skills development, apprentices and trainees, and industry growth. In particular, the Commission's assessment of strong growth in the service economy, spanning the health, professional services, accommodation and food industry sectors demonstrates that there are good news stories for many sectors and having the right skills in this State is as important as ever before.

Nigel McBride
Business SA

The Skills for Future Jobs 2020 series provides an important insight into South Australia's workforce development priorities and a compass for public investment in skills development. SA Unions shares the Commission's aspiration for a high quality VET system that meets the needs of individuals, industries and the community. When these interests align the State benefits. We fully support a focus on aligning the demand for skills and qualifications with employment creation, now, and into the future.

Joe Szakacs
SA Unions

Having read the Skills for Future Jobs 2020 Series snapshot I am encouraged that this represents a start of a conversation about vulnerable and lower-skilled South Australian's barriers to participation in our workforce. As our economy rapidly changes it is important that those that find it most difficult to transition to new jobs are assisted. I support the exploration of underemployment trends by the Commission and look forward to future releases on Adult Community Education and emerging industries.

John Falzone
St Vincent de Paul



Disclaimer: The material contained in this document has been developed by the Training and Skills Commission with support and data provided by the Department of State Development and others. The views and recommendations do 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 this document 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 document 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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