TRAINING & SKILLS COMMISSION

Better Skills, Better Work, Better State

Skills for Jobs

THE TRAINING AND SKILLS COMMISSION'S
FIVE-YEAR PLAN FOR SKILLS
AND WORKFORCE DEVELOPMENT

2011

Government of South Australia
Training and Skills Commission

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Training and Skills Commission

Office of the Training
and Skills Commission

Department of
Further Education,
Employment, Science
and Technology

Level 4
11 Waymouth Street

GPO Box 320
Adelaide SA 5001

Tel: (08) 8226 3462
Fax: (08) 8226 1523

www.tasc.sa.gov.au

FOREWORD

As we release this year's plan, we are acutely aware that many South Australian businesses are struggling as a result of global economic conditions, and many workers are worried about their future.

We are also confident, however, that South Australia faces a very positive outlook, with unprecedented growth opportunities flowing from major investment in resources and infrastructure.

South Australia must continue to build on its strengths and make sure that our workforce and our workplaces are geared up for the opportunities ahead.

In our previous plans, the Commission made bold recommendations for a reformed education and training system in this state; where skilling opportunities are available to all citizens – whether it is for initial skills, retraining or second chance learning.

We are now seeing the first stages of the state government's response – *Skills for All* kicking in. It is an exciting time.

As the Commission hands over its regulatory powers to the national regulator, we can focus our efforts more intensely on making sure the suite of reforms being implemented will address the productivity and participation challenges that we are all too familiar with.

We will continue to work with the state government to ensure its significant investment under *Skills for All* is directed towards areas of industry demand and individual need. We will continue to focus on the quality of the VET system – training must provide vocational outcomes for students.

The success of the reforms will depend on the capacity of players within the system, and the tools and supporting structures in place to underpin it. We will monitor these areas closely.

The Commission has had its say, the government has responded. It is now time for industry to step up to the challenge and make the most of the opportunities that the funding and structural reforms to our VET system afford. Individuals also need to take charge of their future pathways by engaging with the *Skills for All* initiatives.

I thank everyone who has contributed to this year's plan and encourage everyone to engage with enthusiasm in the reforms as they are rolled out.

Mr Adrian Smith
CHAIR

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Appendix 2: *Industry Profiles and Priorities*
is available online at **www.tasc.sa.gov.au**

EXECUTIVE SUMMARY

The vocational education and training (VET) sector in South Australia is at a crucial point of evolution.

The government is embarking on the *Skills for All* reforms it announced in February and the extent of these reforms should not be underestimated. The transition from the current supply-led system to a demand-driven system responsive to students and industry requires a concerted effort to build capacity for all participants: students, employers, training providers, intermediaries and government agencies.

This year's plan sets out the participation challenge facing South Australia and how the *Skills for All* investment can assist in meeting this challenge. As the government embarks on its reforms, we will closely monitor the following facets of the policy which we believe are crucial to its success:

- Quality assurance mechanisms to drive the overall quality of the VET system – not only in terms of training and assessment but also course offerings that meet industry needs and provide meaningful vocational pathways for students.
- Recognition that the Adult Community Education (ACE) sector is crucial in addressing the state's participation challenge and should be developed as the fourth sector of learning. For this to happen, a whole-of-government approach is needed whereby resources are maximised and pooled so ACE can expand its reach.
- Adequately funded and integrated *learning support services* to help students achieve their learning goals and transition to work or further learning. The proposed trial under *Skills for All* should be evaluated comprehensively with a view to extending it to all who require this level of support.
- Comprehensive, high quality career development *services*, not just career information provision, so that all participants – students, jobseekers and existing workers – can make informed decisions.
- The importance of the proposed workforce development advisors who can work with enterprises, collectives of employers and clusters to identify skill needs, promote workforce development strategies and raise awareness of available training options. It is important that these advisors have access to high quality tools to assist them in this role.

The planned corporatisation of the public provider, TAFE SA, is also a significant development and one that the Commission will watch with interest. While the Commission fully supports greater contestability it also believes TAFE SA has a continuing important part to play in the sector.

From a regulatory perspective South Australia, like most other jurisdictions, has transferred regulation of both higher education and VET to the Commonwealth. The strengthened regulatory regime introduced in this state over the past few years should influence the regulatory standards nationally. The *Skills for All* preferred provider mechanism also provides an important additional tool for RTO quality management.

The 2011 plan again forecasts the demand and supply of qualifications over the five-year planning period (2009-10 to 2014-15). The Commission's modelling estimates that growth in the South Australian economy will create 69,000 new jobs. In addition, another 94,000 job openings will result from replacement demand resulting from people leaving the workforce for various reasons such as retirement.

A crucial part of forming the Commission's advice to government is its consultations with industry. Appendix 2 *Industry Profiles and Priorities* draws heavily on industry intelligence gathered through the Commission's consultations with industry advisory bodies early in the year, and its more recent follow-up discussions on changing economic conditions.

The Commission looks forward to working with government as the *Skills for All* policy reforms are rolled out over the next four years. We will watch with interest to see what impact the reforms have, in particular on:

- Raising the skill levels of South Australians.
- Supporting informed student choice.
- Driving improvements to the overall quality of the system.
- The capacity of players within the system to work effectively together.
- Supporting economic growth through productivity improvements and increased responsiveness within firms and sectors.
- Raising workforce participation and fostering a more inclusive society.

Importantly, we will continue to consult with stakeholders to identify new and emerging policy priorities which may need addressing as we navigate this new environment.

Chapter 1

INTRODUCTION

There have been significant developments in the state's VET system since the Commission released its 2010 five-year plan in September last year.

In February 2011, the government released its *Skills for All* policy – a 10-point reform program with a central focus on transforming the VET sector to a demand-driven system that is more responsive to the needs of students and business. Throughout this year the Commission has worked with DFEEST on developing various aspects of the policy as the government prepares for full implementation during 2012.

In May, the government introduced changes to the *Training and Skills Development Act 2008* that resulted in a tougher regulatory and compliance system for the VET sector. Also in 2011, all state governments (apart from Victoria and Western Australia) agreed to transfer their regulatory powers over VET and higher education to the Commonwealth. The national regulatory bodies – the Tertiary Education Quality and Standards Agency (TEQSA) and the Australian Skills Quality Authority (ASQA) – will begin operation from 2012.

The Commission is confident that many aspects of the recent amendments to the South Australian legislation, associated guidelines and quality assurance processes will feature prominently in ASQA's regulatory standards when they are developed during 2012-13. We are also confident that we are handing over an exemplary quality framework based on the regulation of higher education in South Australia.

The implementation of *Skills for All*, given the magnitude of the reforms, is the focus of this year's plan. There are various aspects the Commission comments on, including developing the ACE sector, enhancing the quality of the VET system and building capacity for all participants in the sector.

As the chair of the Economic Development Board (EDB) noted in a recent address to the Committee for Economic Development of Australia (CEDA), South Australia has 'a once in a life-time opportunity to leverage resources sector development across the value chain to maximise economic and social benefits.'[1]

The numerous upcoming mining projects will increase competition for jobs and infrastructure, and place pressure on the education and training system to deliver the critical skills required for the workforce. But elsewhere, the Commission's consultations with industry confirm that the economy is not performing as well as it was 12 months ago, with building and construction and retail both experiencing significant contractions in activity. Business confidence in South Australia and in other states has recently fallen sharply.

As well as cyclical considerations, this year's plan analyses some of the structural challenges facing South Australia, such as the participation challenge, and looks at strategies to increase labour force participation in various demographic groups. Also of particular concern to the Commission is the decline in productivity levels – an important issue that faces the nation as a whole. Research shows that there has been a lack of new productivity enhancing reforms since 2000, including necessary improvements to education and training, and improved governance of infrastructure investment.[2]

1 Raymond Spencer 2011, *Reinventing the future – SA to 2050*, CEDA, Adelaide, 3 August.

2 Saul Eslake 2011, *Productivity*, paper presented to the annual policy conference of the Reserve Bank of Australia, Sydney, 15-16 August.

The Commission commends the state government's proposed reforms under *Skills for All* and believes it will provide a sound base for the government to pursue its education and workforce participation targets. Clearly the government is making efforts to address the participation/productivity challenge, but it must continue to work with industry to build a training culture and increase employer commitment to developing and using the skills of the workforce. Although there are some South Australian companies leading in this area, the Commission notes a general lack of learning culture in Australian workplaces which needs to be addressed if we are to capitalise on the economic opportunities on the horizon.

In this year's plan, the Commission has updated its forecasts of the demand and supply of qualifications. As in previous years, it has used an update of the EDB's economic scenario from its 2009 *Economic Statement*. The 2011 scenario incorporates updated economic data as well as revisions to the size and scheduling of major projects in South Australia. It is acknowledged, however, that the scenario was developed early in 2011 before the economy started to show signs of weakening.

In its 2010 plan the Commission for the first time published a specialist occupations list. It was premised on the view that detailed workforce planning should focus on those specialist skills which are critical for an enterprise – and in turn the economy – to function, and which involve highly specialised and often lengthy training.

This year the concept of specialist occupations takes on a specific purpose, as under *Skills for All* the government has asked the Commission to provide advice on caps and incentives for the qualifications eligible for *Skills for All* funding. For example, the qualifications associated with specialist occupations in high demand areas will be a key criterion for incentives. The government has also sought advice from the Commission on which qualifications may need to be capped to prevent a misdirection of training effort.

Therefore this year the Commission has expanded its analysis of specialist occupations based on a quantitative assessment of the demand and supply of qualifications relating to the occupations on this list, augmented by consultations with industry. Also under *Skills for All*, the government for the first time will provide funding for skill sets and the Commission provides advice on those in demand following its consultations with industry.

The plan again includes a summary of main themes from the Commission's industry consultations throughout the year, including a summary of the issues for regional South Australia. The latter section draws on the outcomes of strategic planning undertaken in each State Government Region during the first half of 2011 to identify priorities and strategies to increase participation in learning and work. It also incorporates feedback from the roundtable discussions conducted at the Commission's regional meeting held in Whyalla in May 2011.

We conclude this year's plan with a section on building the capacity of the participants of the education and training system in South Australia. The Commission believes that, for the benefits of *Skills for All* reforms to be realised, they must be underpinned by concerted efforts to build the capacity of players in all parts of the system: students (and potential students), employers, training providers, intermediaries (such as industry skills advisory bodies) and government agencies.

Chapter 2

SKILLS FOR ALL: AN OPPORTUNITY TO ADDRESS THE PARTICIPATION CHALLENGE

The Commission's previous plans recommended that, in order for South Australia to meet its economic and social potential, an ambitious agenda of reform of the state's education and training system was needed.

The core elements of our recommended reform agenda included a fundamental shift from a supply-focused VET system to one driven by demands of students and industry, and a student entitlement model that enables all South Australians to gain a post-school entry level qualification, fully supported by public funding. Other key recommendations included improving pathways between schooling and the tertiary system, greater emphasis on numeracy and literacy, particularly for those with low levels of workforce participation, and encouraging better recognition, use and development of the skills of the existing workforce.

The Commission is pleased that many of its reform proposals have been picked up in the government's *Skills for All* policy paper released in February this year – a 10-point reform program aimed at creating a fairer, more flexible and modern VET system in South Australia.

Since the release of the policy statement and the transition to the implementation phase, DFEEST has continued to consult with the Commission regarding the development of various aspects of *Skills for All*. These issues and considerations are expanded further in this chapter, and include:

- The ACE sector as the fourth sector of learning and the wider application of a foundation skills curriculum.
- Quality criteria for registered training providers to become approved *Skills for All* providers.
- Criteria around how the *Skills for All* entitlement can be accessed by school students studying VET.
- Business rules around *Skills in the Workplace* which is a key initiative of the 'partnership with industry' aspect of *Skills for All*.
- The impact of *Skills for All* on the apprenticeship system, as well as monitoring national developments such as the recommendations from the *Apprenticeships for the 21st Century Expert Panel*.
- Qualifications and skill sets which will be eligible for *Skills for All* funding, including advice on caps and incentives and specialist occupations.

The Challenge – Increasing Workforce Participation

The data presented in Chapter 3 illustrates the considerable challenge South Australia faces in meeting the demand for workers arising from new jobs growth, major projects and replacement demand over the next five years. South Australia's current unemployment rate of 5.3% is in line with the Australian average.[3] The existing excess supply of labour, or unemployed persons, will steadily reduce when demand from the retirement of older workers is taken into account. Labour supply projections from *South Australia's 30-Year Plan* and the Productivity Commission indicate that the state will not have sufficient labour to meet expansion demand and replacement demand over the next 20 years.[4] Although skilled migration might be a short term solution, increasing labour force participation is the most obvious approach to meet this challenge.

3 ABS 2011, *Labour Force Survey Cat. No. 6202.0, Trend Estimates*, October.

4 Government of South Australia 2010, *The 30-Year Plan for Greater Adelaide*; Productivity Commission 2011, *Submission to the taskforce on a sustainable population strategy for Australia*.

The Challenge – Increasing Workforce Participation continued

South Australians continue to participate in the labour market at a lower rate than those living in other mainland states. Labour force participation rates in South Australia have been increasing steadily from 60.6% in 2002 to 63.4% in October 2011, but are still lagging behind the national rate of 65.6%. While this in part can be explained by South Australia's older age profile, there remains significant potential to encourage more people to participate.

Skills Australia has suggested a national participation target of 69% by 2025.[5] South Australia cannot afford to fall further behind. In acknowledgement of the importance of increased workforce participation, the Commission recommends that South Australia's participation rate equals the national rate.

The increase in participation will have to be generated from people who are presently not employed or who are underemployed. According to the latest data, there are over 263,000 people in South Australia who are either underemployed (approximately 114,100), unemployed (45,500) or not in the labour force but who want to work (103,400).[6] This illustrates some crucial challenges for South Australia, in particular reducing the large number of underemployed workers, engaging the long-term unemployed in work, and assisting those not in the labour force but who want to work in paid jobs.

The fact that there are as many as 263,000 South Australians who are available to take up work or increase their hours highlights that any consideration of supply issues needs to address underutilisation of existing labour in South Australia.

Using the existing workforce more effectively involves the provision of more hours for people who have indicated they are currently underemployed and would prefer to work more hours. A number of measures could be directed at the existing workforce:

- Delaying retirement of older workers, including gradual or phased retirement.
- Supporting flexible work arrangements such as part-time work, compressed weeks, purchased annual leave and job sharing.
- Increasing labour productivity.
- Job and workplace redesign.

However, the greatest potential lies in increasing participation among those currently not engaged in the labour force. Recent modelling shows that South Australia's labour force participation could be boosted through a combination of the following policies:

- A concerted effort to assist benefit recipients and others currently outside the labour force into jobs.
- Ensuring jobseekers have the skills needed by employers.
- Attracting qualified people back to fill job openings.
- Targeted assistance and changes in employment arrangements to increase women's participation.
- Improving transitions between study and work for young people.
- Maintaining recent levels of skilled migration.

5 Skills Australia 2010, *Australia's Workforce Futures*, p. 25.
6 DFEEST 2011, *South Australian Labour Market Profile 2010*, p. 3.

Supply potential of various demographic groups

The labour force participation rate for older workers has been steadily rising in recent years, although it remains below the rate recorded by younger workers. In 2010, workers aged 45 to 64 years recorded a labour force participation rate of 73.7% in South Australia, below the national average of 74.1%. At the same time, the participation rate for those aged less than 45 years was 77.9% (same as the national rate).

At the time of the 2006 Census the labour force participation rate for Indigenous Australians was 48.1% compared with the state average of 59%, and the Indigenous unemployment rate was 16% compared to the state average of 5.2%.

Women account for approximately 46% of the labour force in South Australia. The official unemployment rate for women has generally been lower than the male rate in previous years. Women participate in the labour force at a much lower rate than men – 57.4% for the year ended September 2009, compared to the male participation rate of 69.8% – and are much more likely to work part-time; 50.3% of employed women were working part-time compared to 16.7% of men in this period.

Women predominate in occupations and industries that attract lower pay and less job security, notably in health and community services, retail trade and hospitality. Women are also more likely to be outside of the labour force entirely, despite a preference to work, which, with the high incidence of part-time work, suggests a degree of hidden unemployment among women.

While female participation rates have been increasing over recent decades, male participation rates have been falling. This has largely been a result of the decline of traditional male-dominated industries in South Australia, in particular manufacturing. In the absence of deliberate strategies to boost participation, the male rate is projected to decline significantly over the next 20 years.

People with disabilities are under-represented in both training and employment. The comparative labour force status shows that in 2003, people with a disability experienced higher levels of unemployment (9.2%, compared to 5.5% for people without disabilities) and lower participation in the labour force (51.4% compared to 81%).

Strategies to increase workforce participation

Increasing labour force participation is a national policy imperative being driven through COAG. The Commission supports the South Australian Government's policies and reforms aimed at increasing skills acquisition. *Skills for All* reforms will give more opportunities for people to enter training and develop the skills that will improve their employment options. *Skills for All* will specifically target groups facing barriers to participation in learning and work, including people who left school prior to completion, those without a preliminary qualification, the long-term unemployed, those returning to work after caring and those with language, literacy and numeracy (LLN) issues.

The two most critical triggers for labour market disadvantage are early school leaving accompanied by low skill levels, including basic or foundation skills. Studies show that the economic benefits from improving literacy levels are significant; there are high returns for those in work, higher levels of productivity and increased levels of workforce participation.[7]

7 Michael O'Neil 2011, *Importance of LLN Skills From an Economic, Social, Labour Market, Government and Citizenship Perspective Including Links With Industry and Employment*, presentation at the LLNP National Provider Forum 2011, Melbourne, 8-9 June.

The Challenge – Increasing Workforce Participation continued

Strategies to increase workforce participation

As part of increasing training pathways and encouraging higher rates of VET participation, the government will invest at least $6.4 million over the next six years in additional funding for foundation skills. This will create 6000 additional training places for South Australians who want assistance with their literacy and numeracy so they can access higher level training and find work. The Commission suggests that the government provides more funding to ACE program providers which have a vital role in engaging people in their local communities. While there needs to be more funding for programs with inclusive objectives, there must also be funding for both capital and staffing overheads in community centres in areas of low workforce participation and low educational achievements.

The Commission has previously advocated additional support and case management for people who have no or low levels of post-school qualifications. Learning Support Services (LSS) will be trialled for people enrolled in TAFE SA who require additional support. The proposed trial under *Skills for All* should be evaluated comprehensively with a view to extending it to all who require this level of support.

Workforce planning tools, career advice services, succession planning and mentoring schemes are available to employers and employees to manage transitions in and out of the workforce. Often however, the provision of access points to these programs is not well coordinated by government agencies. In previous plans the Commission has indicated the need for comprehensive career development services, not just career information provision. The Commission believes that *Skills for All* should provide an opportunity for these services to support and promote greater access to flexible work and to facilitate greater workforce participation.

At the Commonwealth level, since 1 January 2010, employers and employees in the national workplace system have been covered by the National Employment Standards (NES). Any employee may ask their employer for flexible work arrangements, but since 1 January 2010 the *Fair Work Act 2009* has provided some employees with children a legal right to request a flexible working arrangement. These sorts of entitlements are designed to encourage greater flexibility in the workplace, thereby enabling greater levels of participation among those with caring and other responsibilities.

Managing the competing demands of work, family and social life is an issue that affects many South Australians. By promoting a work-life balance culture and environment in the workplace, employers can improve their ability to attract and retain employees, in turn enriching people's health and wellbeing and building stronger communities. The Commission supports the introduction of targets in *South Australia's Strategic Plan* (SASP) to increase workforce participation because of the benefits to the state and the individual.

Projects developed as part of the *SA Work Life Balance Strategy*, which incorporate work-life balance arrangements in workplaces, have strong industry involvement. Some of the outcomes are the production of employer tools and resources which assist with the employment of older workers, and flexible work arrangements that meet the needs of people with families, or particular arrangements for Aboriginal people with cultural responsibilities.

Workforce participation priorities differ between South Australian regions, and therefore it is important that regional responses to lift participation rates are led by the region and are evidence-based. For example, for some regions, the participation imperatives relate to young people at risk, while in others the imperatives may be around mature-age males not participating in the labour force.

Currently the state government invests $9 million annually in *South Australia Works* programs that reach and engage people who face barriers to learning, training and work. These programs assist people who are least likely to connect to training, to gain access to highly supported pathways into training and employment.

South Australia Works Networks that consist of industry, community and government stakeholders consult in their local communities and build strategic alliances to develop and fund programs that respond to changes in skill and employment needs in their regions. Enabling decision making in local communities is a powerful driver in achieving shared government and community outcomes, and the Commission supports DFEEST's approach of strategic planning with each State Government Region to determine tailored workforce participation priorities.

Contractors tendering for state government infrastructure projects are required to show that a minimum of 15% of labour hours worked on these jobs are undertaken by apprentices, trainees, Aboriginal people or people with barriers to employment (see *Case study 1*). For this policy to succeed it will be important that compliant companies are rewarded with the provision of ongoing work, particularly those that engage in the training of apprentices and trainees. After the review of the policy, due in 2013, the government might wish to consider reducing the threshold in order to capture more projects.

Case study 1: The 15 Per Cent Workforce Participation in Government Construction Procurement Policy

The 15 Per Cent Policy is the main government instrument for ensuring that major, government-funded infrastructure and building projects drive employment and training outcomes for apprentices and trainees, Aboriginal people and local people with barriers to employment. The policy also provides for the upskilling of existing workers.

On projects of more than $5 million that exceed six months duration, 15% of the onsite labour hours on projects must to be undertaken by the above target groups.

Current projects include the Southern Expressway duplication, Adelaide Oval Redevelopment, Adelaide Rail Electrification Project (a component of the Rail Revitalisation program) and Tonsley Park Redevelopment.

Although some projects are out-of-scope projects (i.e. commenced before 1 January 2011) some contractors are demonstrating a strong corporate and social responsibility. For example, the John Holland Group has been enrolling Aboriginal participants in a 10-week pre-employment training program and has a specific recruitment campaign for Aboriginal females.

There are significant employment opportunities for Aboriginal communities in regional Australia, particularly in the mining industry. Both Iluka and Oz Minerals have strategies and programs in place to support their targets of Indigenous employment. They require all contractors to participate and work closely with traditional lands associations to match potential employees with available jobs. These companies understand the need for mentoring, cultural awareness of the non-Aboriginal workforce and consideration for special arrangements to take part in cultural business.

ACE as a fourth sector of learning

Individuals without adequate language, literacy and numeracy skills are not always able to take advantage of further education, training and employment opportunities. For example, while the proportion of women in the labour force with a non-school qualification is increasing, the number of women without a non-school qualification remains too high. There is considerable potential to support low-skilled people through the ACE sector as an entry point to re-engaging in learning with pathways to further education, training and employment.

The Challenge – Increasing Workforce Participation continued

ACE as a fourth sector of learning

Organisations that offer community learning opportunities provide excellent value-for-money due to the significant contribution of volunteers; they connect hard-to-reach people in innovative ways and are accessible to everyone. They are uniquely placed to connect with the most disadvantaged in our community and deliver on key targets in *South Australia's Strategic Plan*. Providers of ACE programs offer a range of informal learning opportunities and understand that learning pathways differ for high-needs groups. The community sector is able to respond to the diversity of their local communities' needs by providing a non-threatening environment and methods of learning that can welcome and support those unfamiliar or uncomfortable with more formal settings. Some programs are more focused on participation than training, but they are an important first step for people to engage in learning.

A stronger ACE sector can assist people of working age to engage in learning, upskill and re-enter the workforce, and address low levels of literacy and numeracy, currently experienced by many South Australians. The Commission acknowledges the contribution of the ACE sector to re-engage learners across all age cohorts and supports the policy direction of *Skills for All*. However, the Commission acknowledges that a large investment is required to assist people to build self-esteem and actively participate.

The sector faces significant challenges in managing increased demand for services, increasingly complex issues and difficulties in recruiting and retaining skilled people. The Commission believes that for the sector to deliver its capacity needs to be strengthened.

For the ACE sector to become a true fourth sector of learning, government expenditure needs to be maximised and pooled so it can expand its reach. The Commission believes that it is essential to strike the balance of maintaining the sector's current uniqueness while exploring ways to deliver programs that enable participants to embark on a vocational pathway.

To build the capacity and capability of ACE as a fourth sector of learning in South Australia – charged with the responsibility of foundation-level skills training delivery while maintaining its ability to attract people who face barriers to workforce participation – the sector needs to be adequately funded. It needs sustainable, vibrant community centres, ACE providers and services in order to support the provision of foundation skills and other courses.

With regard to the funding process of delivery of foundation skills under *Skills for All*, the track record of individual providers needs to be acknowledged during funding rounds. Community centres need to receive appropriate support where necessary to implement the delivery of programs.

The Commission regards that its own role in the development of ACE as a fourth sector of learning is through endorsement of its objectives as well as through promoting its achievements.

Over recent years the Commonwealth has made large funding commitments to improve language, literacy and numeracy for job seekers but this funding has been predominantly focused on VET providers, not community-based providers.[8] It is imperative that a national foundation skills strategy takes account of the distinct role of the ACE sector in the delivery of foundation skills to people who are currently not engaged in the labour market.

A major challenge for the government in implementing *Skills for All* is achieving the desired student uptake. Diverting *Skills for All* funding to boost the training efforts in the ACE sector, focusing on foundation skills, may be one way of meeting this challenge. If the sector's capacity is strengthened, then the government's participation objectives, such as vocational outcomes and employment, are more likely to be achieved.

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8 NVEAC 2011, *Equity blueprint 2011-2016 creating futures: Achieving potential through VET.*

Quality of the VET System

Developments during 2011

Throughout 2011 there have been significant developments with respect to addressing quality within the VET system in South Australia.

In May 2011, the government introduced changes to the *Training and Skills Development Act 2008* that resulted in a tougher regulatory and compliance system for the VET sector. The Commission applauds the government's legislative changes, which sees the strengthening of the Commission's powers to respond and apply sanctions more quickly where necessary, coupled with a tougher penalty regime.

Following the legislative changes, the government endorsed the Commission's revised *Guidelines for Registered Training Organisations* (RTO Guidelines) operating in South Australia. The guidelines now stipulate many more requirements from training providers, including special purpose financial reporting, more stringent records management, a mandated code of practice, the appointment of an accountable officer, and new minimum requirements for industry engagement.[9]

At the time of revising the guidelines, the Commission also conducted a consultation with a range of key stakeholders about regulatory arrangements for the delivery of VET to school students. The Commission is of the view that VET learning students receive as part of their schooling must be of the highest quality and that there should be appropriate protections for purchasers of VET (i.e. schools, on behalf of students). Further, the Commission believes that VET programs delivered as part of schooling programs need to have employment relevance, industry acceptance and identified career pathways.

During consultations there was strong support from industry for additional registration requirements for training providers delivering to school students, and for the Commission to approve the qualifications that training providers can offer this group of clients. As a result, the revised RTO guidelines include a section prohibiting providers from offering training to school students (other than through a school-based apprenticeship or traineeship) without approval from the Commission. This new requirement comes into effect on 1 January 2012.

The Commission notes the implementation of the first phase of the Training Guarantee for SACE Students (TGSS) under *Skills for All*. The scheme enables eligible senior secondary school students to commence a Certificate III completion pathway while they are at school as an integrated part of the SACE. Students undertake accredited training at an RTO and are guaranteed a place with the RTO to complete the qualification post school.

During 2011 the Commission established a working group of key stakeholders (including the SACE Board, the three schooling sectors, SA Unions and Business SA) to help it work through the operational issues relating to the provision of quality VET to school students. As part of this work, the Commission will publish a *Guide for Schools* later in 2011 to help schools, students and parents better understand and navigate the new arrangements.

Also, the Commission will continue to work with the SACE Board on strategic policy issues relating to the delivery and recognition of VET for school students. It will also work closely with the national regulator to encourage the national take-up of the additional registration requirements contained in the Commission's RTO guidelines.

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9 See section 10 of the guidelines *http://www.tasc.sa.gov.au/LinkClick.aspx?fileticket=BJ9dD41Vf7E%3d&tabid=139*

Quality of the VET System continued

Developments during 2011

In 2011, all state governments (apart from Victoria and Western Australia) agreed to refer their regulatory powers of VET and higher education (restricted to non-public universities) to the Commonwealth. TEQSA was established on 1 July 2011 and will assume responsibility for regulating all higher education providers nationally in January 2012. The national regulator of the VET system, ASQA, was also established on 1 July 2011. The South Australian Government is introducing referral legislation to State Parliament to transfer responsibility for regulatory responsibilities under Part 3 of the *Training and Skills Development Act* by the end of 2011.

The Commission believes that the changes to the *Training and Skills Development Act* and associated RTO guidelines introduced during 2011 provide a sound regulatory base for the VET system nationally. The Commission will continue to work with DFEEST to encourage ASQA and the National Skills Standards Council to embed aspects of the *Training and Skills Development Act* into its regulatory standards, which will be developed during 2012-13.

We are also confident that we are handing over to TEQSA an exemplary quality framework based on our regulation of the non self-accrediting higher education providers in South Australia.

Enhancing quality under *Skills for All*

The Commission supports the government's efforts to drive quality outcomes under *Skills for All*. Only training organisations that are registered by ASQA, and which meet additional eligibility criteria set by DFEEST, can receive public funding for delivery of training to students exercising their *Skills for All* entitlement and employers accessing subsidised training for their workers. The Commission supports this preferred provider model based on selection criteria that cover proven track performance and sound evidence of planning and quality assurance. However, it believes there are several important aspects of quality assurance that could be explored further to drive improved quality outcomes under *Skills for All*.

The Commission appreciates that in order for the *Skills for All* reforms to be effectively implemented there needs to be a broad range of training providers delivering training across the range of eligible qualifications and skill sets. As such, there may need to be a degree of transitioning of current RTOs to deliver under *Skills for All* and support for new providers to enter the market.

The Commission believes that *Skills for All* provides the government with a unique opportunity to drive the overall quality of the system – not only in terms of training and assessment services but also in terms of course offerings that are truly relevant to industry.

The Commission is encouraged that the proposed *Skills for All* approval criteria will require training providers to declare that 'independent industry representatives will be engaged (at least annually) in validating assessments for each qualification' and that training providers are to provide industry referees regarding the quality of graduate outcomes, including relevant employment. It is critical that these checks of industry engagement are effectively scrutinised.

Moreover, one area that is consistently raised in the Commission's industry consultations is the need for industry to be involved in developing course content. While training packages by their nature provide extensive flexibility for industry to develop content that is relevant to them, there is also a danger that training providers have the ability to offer training that is primarily driven from the perspective of low cost or marketability rather than industry relevance. The requirement for industry engagement as part of the *Skills for All* preferred provider model should minimise this from occurring.

As is discussed in Chapter 6, the strength of the *Skills in the Workplace* initiative is that employers are able to negotiate with providers to ensure that training content is relevant to their needs. For this to occur key players in the system – employers, training providers and industry intermediaries – need to build capacity so that quality products are developed and relationships are formed.

It is therefore important under *Skills for All* that systems are in place to ensure this capacity building takes place.

Overall, a strong message needs to be sent to training providers wanting to deliver under *Skills for All*. The Commission recommends that upon *Skills for All* approval, training providers are made aware they may be exposed to a full quality assessment within the first two years of registration. This is over and above any regulatory requirements providers will need to fulfil under ASQA's regulatory regime.

The Commission accepts DFEEST's plans to expand significantly the capability of its current e-business systems so it can develop ongoing evidence-based quality assurance monitoring. However, the Commission believes that an effective quality assurance regime can only be achieved by conducting site assessments or face-to-face meetings when necessary. The Commission recognises there are resource implications with this strategy but believes it would be a worthy investment to truly raise the quality of VET in South Australia.

Further, the Commission believes that there should be a formal complaint handling mechanism under *Skills for All* whereby both clients and industry bodies can raise concerns about quality of course delivery and content. Skills SA – the public interface of *Skills for All* – will need systems in place so the department can act on customer feedback swiftly. The department will also need to work closely with the Training Advocate and develop a service agreement and information-sharing protocols with ASQA for a robust quality assurance regime.

Partnerships with industry

The Commission is pleased to see a focus in *Skills for All* on fostering a training culture within industry and encouraging the uptake of workforce development practices to address skills utilisation, productivity, job design, attraction and retention issues.

The new *Skills in the Workplace* initiative will provide opportunities for firms, sectors and clusters to co-invest with government in qualifications and skill sets to respond to identified skilling needs for existing workers. It is important that the program is driven by industry demand, however it is also important that levers are used to encourage 'hard to reach' firms to engage in the training culture required under the reforms.

The sliding subsidy scales that will apply depending on the size of the firm should encourage take-up of training within smaller firms which have previously found it difficult to invest in the skills of their workforce.

The Commission also believes there is an opportunity to fund a small number of 'flagship interventions' in sectors or regions where there is the potential to build on existing collaborative approaches to skills development and utilisation. These are areas where the potential has already been identified but which require the government to act as a facilitator. The renewable energy sector could warrant attention given the state government's focus on sustainability and some successes in developing initiatives to support the sector.

It is important that the new *Skills in the Workplace* initiative complements, but does not duplicate, the new Commonwealth Government's Workforce Development Fund.

Quality of the VET System continued

Partnerships with industry

The Commission strongly endorses the proposed role for intermediaries under the new policy framework. Workforce development advisors and other intermediaries (supported by appropriate tools and resources) can play an important part in assisting enterprises, particularly SMEs, and sectors in developing a workforce plan which links with their business plan. They can also help develop workforce development strategies, such as training responses, to address their needs. It is important that these advisors have the specialist knowledge and skills required to provide this range of advice and support to firms. A key criterion for endorsement of advisors should be the extent of their industry networks.

It is also important that the workforce plans developed by firms form part of the assessment process for access to funds under the *Skills in the Workplace* initiative. This should include details of how the skills of the workforce will be used to maximum effect. Firms should be encouraged to maintain their plans, regardless of whether they continue to access public funding for training.

These issues are discussed further in Chapter 6 *Building Capacity*.

Apprenticeships and Traineeships

The apprenticeship system continues to be a central element of South Australia's training market. The 'user choice' arrangements which have been in place for apprenticeships for some time are now being extended to all other areas of public funding under *Skills for All*. The alignment of subsidy and fee arrangements for qualifications at the same level, with or without a contract of training, is a key element of the reforms which will help reduce the complexity of the system – making it fairer and more transparent. It is imperative that this alignment occurs as soon as possible.

In its 2010 plan and subsequent policy work, the Commission has identified some key areas where it believes further policy reforms are required within the apprenticeship and traineeship system in South Australia, pending any reforms which may be implemented nationally.

Completion arrangements

In 2010 the Commission approved a policy which requires verification of competency by both the employer and the apprentice/trainee before the qualification can be issued by the training provider. The revised RTO Guidelines, which came into effect on 30 May 2011, include a requirement which gives effect to this policy. DFEEST has commenced the development of an on-line tool to enable recording of competency achievement by all parties to a contract, against the apprentice/trainee's agreed training plan. This should streamline the process and facilitate information sharing between the parties.

This policy will be monitored by the Commission to ascertain whether there is a noticeable impact on completion rates.

Nominal terms

The Commission is concerned that some nominal terms for traditional trade apprenticeships may be unnecessarily long. This can impact on completion rates which for most trades remain unacceptably low.

The Commission recently approved a set of principles for determining the nominal terms of apprenticeships and traineeships. It is currently consulting with industry stakeholders in key sectors to identify whether terms can be reduced, based on the agreed principles.

Institutional trade training

An issue consistently raised in the Commission's consultations with stakeholders is the role that institutional trade training plays in developing skilled tradespeople who meet industry's needs. The Commission has begun an investigation of this area, with a view to developing a formal policy.

Together with DFEEST, the Commission is undertaking research on the employment outcomes of individuals who have completed trade qualifications through an institutional pathway, rather than an apprenticeship. This research will help ascertain the degree of acceptance by employers of institutional trade qualifications, and the effectiveness of institutionally-based training in preparing individuals for the trades.

This will be followed by consultation with key stakeholders and will inform the development of a policy by the Commission during 2012.

The Commission is also monitoring developments at the national level, including the Commonwealth's response to the *Apprenticeships for the 21st Century Expert Panel*, and what this will mean for South Australia.

The Commission supports the general thrust of the panel's recommendations, particularly those that aim to promote a culture of competency-based progression and improved completion rates. We welcome the Commonwealth Government's investment in mentoring – as announced in its initial response to the panel's report – to support apprentices and trainees.

We also agree with the panel's assertion that the current system is too complex and that work needs to be done with the jurisdictions to create a simpler, more user-friendly system. This will be a focus of the Commission's work in 2012.

Finally, given the Commission's strong interest in regulating the quality of VET delivered to school students, we fully endorse the panel's recommendation that VET in schools be formally regulated across Australia. We urge the Commonwealth Government and ASQA to treat this as a priority under the new national regulatory arrangements.

Chapter 3

DEMAND AND SUPPLY OF QUALIFICATIONS

This chapter presents a ***quantitative*** assessment of the workforce challenge facing South Australia over the five-year period of this plan (2009-10 to 2014-15). It presents updated estimates from those published in the 2010 plan.

The quantitative assessment takes into account growth from ongoing economic activity, new opportunities resulting from major projects, the need to address South Australia's relatively poor qualifications profile and the impact of an ageing workforce. It is complemented by the detailed ***qualitative*** information gathered during stakeholder consultations, which is summarised in Chapter 5 and presented in detail in Appendix 2 *Industry Profiles and Priorities*.

This quantitative assessment presents modelling of future economic growth, labour productivity and employment growth based on an update of the economic scenario presented in the EDB's 2009 *Economic Statement*. The EDB's estimates for economic and employment growth are intended to be ambitious but realistic, and indicate what is possible. However, we acknowledge that the scenario was developed early in 2011 before the economy started to show signs of weakening. This may have some impact on the five-year averages presented in this plan. The estimates will be reviewed in early 2012.

The supply estimates presented below incorporate the additional training places announced by the state government in the 2010 election commitment *Jobs Strategy* (an extra 100,000 training places over six years) and new initiatives announced in the 2011-12 Commonwealth Budget. In the estimates for occupational groups presented in Appendix 2 and the assessments of specialist occupations summarised in Chapter 4, this additional effort has been allocated to occupations based on where anticipated supply shortfall is likely to occur. The Commission's estimates and assessments, therefore, are reliant on these allocations actually occurring.

The analysis below is presented at a fairly high level of aggregation, across six qualification levels. The industry priorities (discussed in Appendix 2) are presented around 16 broad *occupational groupings*.

Chapter 4 includes a discussion of the 87 specialist occupations it has identified, including those where the Commission believes more detailed workforce planning may be needed, and where the government may have to intervene in skills planning to avoid surpluses or shortages of critical skills.

Appendix 1 *Modelling Results* includes more detailed results from the economic modelling which underpins the analysis presented here, including a description of the methodology used and key changes introduced in 2011.

The Updated EDB Scenario

Following the release of the 2010 version of the five-year plan, the Commission requested the EDB to review and update its economic scenario to enable this update of the Commission's modelling.

The update incorporates revisions to the size and scheduling of major projects in the state. According to the updated scenario, South Australia is not likely to experience the fuller impacts of major projects until the later part of the forecast period (2013-14 and 2014-15).

The Demand Outlook

Key Points:

Projected economic growth: average of 3.25% per annum between 2009-10 and 2014-15.

Projected employment growth: average of 1.65% per annum between 2009-10 and 2014-15.

Projected labour productivity growth: 1.6% per annum from 2009-10 and 2014-15.

Jobs from economic growth: 69,000 new jobs between 2009-10 and 2014-15.

Replacement demand: 94,000 net openings between 2009-10 and 2014-15.

Total job openings: 163,000 between 2009-10 and 2014-15.

Over the five-year period covered by this plan it is estimated that growth in the South Australian economy will create a need for 69,000 new jobs. This expansion is only part of the challenge – the ageing of the population will also have a significant impact on future demand for labour and skills. As discussed in Chapter 2, South Australia's demographics are such that, as the population ages, there will be an increasing need to replace workers who retire.

Job openings also occur when people change occupations or leave the workforce for health or other reasons, such as caring responsibilities or studying. This job turnover accounts for a significant proportion of replacement demand for workers.

Over the period 2009-10 to 2014-15, the number of net job openings resulting from replacement demand is likely to be around 94,000 – more than the 69,000 jobs created through growth in the economy. It is likely that many of the job openings resulting from replacement demand will be filled by existing workers, creating openings at lower skill levels. This will give employers the opportunity to create new job pathways for those who have previously been excluded from the labour market, and to redesign jobs and organise work in different ways to assist attraction and retention of skilled workers.

The combined impact of economic growth and the need to replace workers will result in estimated total job openings over the five-year period of about 163,000. Labour supply and skill levels in South Australia must increase to capitalise on these opportunities.

While South Australia's economic prospects will be driven by new growth areas, such as major mining, defence and infrastructure projects, and opportunities in the tourism and renewable energy sectors, the majority of jobs will continue to be created in labour-intensive service occupations. Top-down modelling suggests that of total job openings over the five-year period:

- The majority, 35,000 (or 22%) are likely to be in the largest sector, business and financial services, which accounts for one-quarter of total employment and covers occupations such as accountants, bank workers, office managers, HR professionals, general clerks, cleaners, real estate professionals and security officers.
- About 25,000 (15%) are projected to be in health and community services, which provides 11% of total employment and includes child and aged care workers, social workers, medical and nursing professions and other health professions.
- A further 24,000 (15%) are likely to be in wholesale, retail and personal services, which accounts for 13% of total employment and includes sales workers, wholesalers, florists, hairdressers, checkout operators and telemarketers.

- Sectors with occupations associated with manufacturing, cultural and recreational services and primary industries are estimated to have fewer than 5000 job openings each.

A full list of the occupations covered by each sector is included in the Attachment to Appendix 2 at **www.tasc.sa.gov.au**.

Identifying the likely demand for qualifications

To capture the likely total demand for qualifications from industry, the skilling requirements of ***new entrants*** (filling job openings resulting from expansion and replacement demand) and the skilling requirements of the ***existing workforce*** have been estimated separately. The system used to estimate the future demand for qualifications draws heavily on methodology developed by Monash University's Centre for the Economics of Education and Training (CEET).[10]

Underpinning these estimates is the assumption that skills deepening will occur in the planning period at a rate that is consistent with that published by Skills Australia in 2010 under its *Open Doors* scenario.[11]

To meet the projected industry demand, it is estimated that 110,000 new entrants will need to gain a qualification between 2009-10 and 2014-15.[12] Just under half (45%) of these projected qualifications will be at the Bachelor degree or higher level, 21% Certificate III, 14% Advanced Diploma/Diploma and 11% Certificate IV. The remaining 9% of demand is at Certificate I/II level.

The other challenge is to refresh and boost the skill levels of the existing workforce to lift productivity and enable workers and firms to innovate and move to new growth areas. Projected demand for qualifications from this source is about 186,000, comprising 66,000 workers who are upskilling (completing a qualification at a higher level than their current highest qualification) and 120,000 who are gaining a qualification at an equivalent or lower level (referred to as 'skills broadening').

Among existing workers, one-quarter of all qualifications are projected to be at Certificate III level, 24% Bachelor degree level or higher, 19% Advanced Diploma/Diploma and 17% Certificate IV. The remaining 14% of demand is at Certificate I/II level.

The Commission acknowledges that its methodology – by definition – attempts only to capture 'industry demand'. This approach, not surprisingly, results in low estimates of demand for Certificate I and II level qualifications. While industry demand for these qualifications is low, they provide pre-employment skills and also an entry point for many individuals, particularly young workers, and a stepping stone to higher level qualifications.

The Commission believes that this 'pathways demand' should be incorporated into the modelling, given that a number of individuals need these lower level qualifications before they can attain the higher level qualifications needed by industry. This year's modelling is the first time that pathways demand has been incorporated, and results in demand for an additional 3000 qualifications at Certificate I/II level over the five-year period.[13]

The combined demand for qualifications from new entrants, existing workers and pathways demand results in projected total demand over the five-year period for 299,000 qualifications.

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10 Shah, C. 2010, *Demand for qualifications and the future labour market in Australia 2010 to 2025*, a report for the Department of Education, Employment and Workplace Relations, Canberra.

11 Skills Australia 2010, *Australian Workforce Futures: A National Workforce Development Strategy*, Canberra.

12 Not all of the projected job openings translate into demand for qualifications. This is because not all jobs require formal qualifications and some of the supply for those that do will be met by existing workers or people currently outside the labour market who already have the required qualifications and skills.

13 The Commission will continue to refine its methodology for estimating 'pathways demand'.

The Demand Outlook continued

Identifying the likely demand for qualifications

Table 1: **Projected Total Demand for Qualifications, 2009-10 to 2014-15**

Qualification Level	Number
Bachelor degree or higher	95,000
Advanced Diploma/Diploma	51,000
Certificate IV	44,000
Certificate III	70,000
Certificate II	24,000
Certificate I	15,000
Total	**299,000**

The supply of qualifications over the five-year period is estimated by extrapolating recent trends in completions at the VET and higher education levels, incorporating policy changes and estimating the contribution from migration. Having said that, we acknowledge that we may not have captured the full policy impact of changes to the funding of higher education, and what this means for enrolments and future completions. This will be monitored as data becomes available.

The supply estimates have limitations (as discussed in Appendix 1) and should be considered ***indicative only***. Most notably, the estimates exclude a significant, but unquantified, amount of privately-financed training.

Using trends in ***completions*** as the measure of supply is appropriate for planning purposes but can be misleading for resource allocation. This is because not everyone who enrols in a course completes it and gains a qualification. This means that the number of ***required commencements*** is significantly greater than the number of completions.

Based on recent trends in completions, the South Australian education and training system should produce about 195,000 post-school qualifications over the five-year period.

When the 2010 election commitment is factored in, the projected number of completions increases by 12,000 over the five-year period.

Additional completions can also be expected from the remaining funding available through the Productivity Places Program (PPP). It is estimated that South Australia will receive an additional 35,000 completed VET qualifications through the PPP over the remainder of the funding agreement with the Commonwealth Government.

The 2011 estimates also factor in the announcements made in the 2011-12 Commonwealth Budget,[14] which result in an estimated additional 3000 completed qualifications in this planning period.

In addition to supply from the education and training system, net migration also contributes to the pool of qualifications in the state labour market. Over recent years population growth in South Australia has been relatively strong, driven overwhelmingly by net overseas migration. The growth in population has in turn boosted labour supply and qualifications.

Based on recent trends in net overseas and interstate migration, it is projected that South Australia will gain 22,000 additional qualifications over the five-year period. This estimate incorporates recent changes in migration policy by the Commonwealth Government.

14 As the PPP program is phased out other initiatives such as the Workforce Development Fund will replace it.

Combining the estimated PPP qualifications (35,000), the state election commitment (12,000), the new Commonwealth Budget initiatives (3000) and net migration (22,000) with projections of 'existing effort' (195,000), results in total projected supply of qualifications over the five-year period of 268,000.*

Comparing Demand with Supply

Table 2 below shows the projected ***industry demand*** for qualifications (to skill new entrants and upskill and re-skill existing workers) combined with the ***pathways demand***, compared with projected supply (from the sources described above) over the forecast period.

Table 2: **Projected Demand and Supply of Qualifications, 2009-10 to 2014-15**

Qualification Level	Demand	Supply	Imbalance (Supply minus Demand)
Bachelor degree or higher	**95,000**	**75,000**	**-20,000**
Advanced Diploma/Diploma	51,000	36,000	-15,000
Certificate IV	44,000	43,000	-1000
Certificate III	70,000	69,000	-1000
Certificate II	24,000	35,000	11,000
Certificate I	15,000	11,000	-4000
Total*	**299,000**	**268,000**	**-31,000**

* Components may not add up to total due to rounding.

The modelling suggests that within the higher education sector there is likely to be a significant shortfall (20,000 qualifications) at Bachelor degree level or higher over the five-year period (projected industry demand for 95,000 higher education qualifications, compared with projected supply of 75,000). As mentioned above, trends in higher education enrolments and completions will need to be monitored to gauge whether the policy changes currently being implemented are addressing this gap.

In the VET sector, there is projected demand for qualifications of 204,000 over the five-year period, which is broadly in line with the projected supply of 194,000.

Overall the modelling suggests total net undersupply across the tertiary system of 31,000 qualifications over the five-year period.

The net figure for the VET sector masks some significant imbalances between qualification levels which will need to be addressed. The projections show a significant shortfall of 15,000 qualifications at Advanced Diploma/Diploma level, whereas demand and supply at Certificate I, III and IV levels are broadly in balance.

The estimates show a projected oversupply at Certificate II level (11,000 qualifications) suggesting the need to redistribute public funding away from these qualifications to higher level qualifications. In re-allocating funding, mechanisms will need to be in place to encourage individuals to progress from Certificate I and II level qualifications to higher level qualifications. This should be a key objective of the *Skills for All* reforms as they are rolled out.

Summary

The modelling has identified a significant projected shortfall of supply for higher level qualifications (Diploma and above) to meet projected industry demand over the five-year period.

The Commission acknowledges that the state government has limited ability to address the projected shortfall of supply at the higher education level, but encourages the government to pursue better pathways between VET and higher education, and the creation of a seamless tertiary system. In a student demand-driven system, the government will need to consider how it can encourage students and potential students to aspire to higher level qualifications in line with demand from industry. Directing student demand under *Skills for All* towards Diploma and Advanced Diploma courses will be a key challenge.

The Commission re-iterates its view that lower level qualifications are an important element of pathways for learners and urges the department to closely monitor student demand for these qualifications. Exemplary information systems must be in place to inform people of the skills in demand in the South Australian economy and how individuals can best navigate and progress through the system.

If learners are going to progress from lower level qualifications to higher levels, careful consideration needs to be given to the ‘eligible qualifications list’ for public funding, and to ensure that the list of approved providers under *Skills for All* includes a sufficient choice of providers who are able to provide the support needed by these learners.

Finally, it needs to be remembered that privately-funded provision of training is not captured in the supply estimates above. These qualifications would add further to the pool of qualifications. However, due to data scarcity, it is not clear whether this source of supply targets the skills in demand in the economy, as outlined in this plan. This also needs to be considered when determining which qualifications will be eligible for public funding.

The Commission will continue to work with ASQA to ensure that the provision of essential data on enrolments and completions is a core requirement for registration as an RTO under the new national system. This will deliver a better information base to support future planning.

Chapter 4

SPECIALIST OCCUPATIONS AND SKILL SETS

With the implementation of the *Skills for All* policy, the Commission has been asked to provide advice on some specific elements of the reforms. This chapter of the plan:

- Summarises the Commission's assessment of the outlook for demand and supply for ***specialist occupations*** in South Australia.
- Presents the Commission's advice on where ***caps and incentives*** may need to be applied to ensure that student demand for qualifications is in line with industry need.
- provides advice on what types of ***skill sets*** should be eligible for public subsidy, and which are considered priorities for funding during the planning period, based on identified industry need.

Detailed write-ups for the specialist occupations – incorporating advice from extensive industry consultations – are included in Appendix 2 *Industry Profiles and Priorities*. Appendix 2 also incorporates industry views on priority skill sets, eligible qualifications and caps and incentives across the 16 occupational groupings.

Specialist Occupations

With significant uncertainties attached to skills planning, the Commission believes we should look more closely at what is feasible and realistic. This involves distinguishing between occupations where the government should focus its workforce planning efforts, and those where labour market activities and local planning are better indicators.

For the majority of occupations there is no tight relationship between particular skills and qualifications, and the job requirements. For these occupations, the labour market is generally effective in responding to changing skill needs and economic fluctuations. However, for some occupations, where there is a much tighter relationship between the job and a specific qualification, there is potential for market failure because the training time is typically quite long and the labour market is less able to adjust quickly. The skills for these 'specialist occupations' are highly specific and the qualifications are not readily transferable from elsewhere.

The Commission has adopted the following criteria for defining specialist occupations in the South Australian economy:

Criterion 1: The skills are highly specialised and require extended learning and preparation over several years.

Criterion 2: The skills are deployed for the uses intended (close occupational fit).

Criterion 3: The opportunity cost of the skills being in short supply is high (causing either bottlenecks in the supply chain or imposing significant costs by their absence) and/or the skills are required to implement the government's economic development priorities.

Criterion 4: There is robust intelligence from industry regarding the demand, supply and use of these skills and there is adequate data available to assess the first three criteria.

Specialist Occupations continued

The purpose of developing the list is to help identify where detailed workforce planning may be required, and where the government may need to intervene in skills planning. For those areas identified as requiring further examination, it is important that government and industry work together through established industry skills advisory mechanisms and existing industry workforce planning models and approaches.

A range of data and information sources have been used to assess occupations against the four criteria. These are presented in Attachment 1.

These criteria and measures align closely with those used by Skills Australia to identify ***specialised occupations*** at the national level.

Attachment 2 presents the list of specialist occupations, sorted by the 16 occupational groupings used by the Commission in its analysis and modelling.

The Commission has identified 87 ANZSCO[15] occupations in South Australia which meet its criteria, representing just under one-quarter of all occupations in the labour market.

Together, these 87 specialist occupations account for around 23% of total employment in South Australia.

The majority of occupations on the list are professionals (52), followed by technicians and trade workers (29), community and personal service workers (4) and managers (2).

It is important to state that inclusion of an occupation on the list does not attach a relative degree of importance to that job – many 'important' or 'highly valued/rewarded' jobs do not require specific qualifications. Indeed, this is one of the reasons for choosing the term 'specialist' – rather than 'critical' or 'priority' occupations.

It is also important to clarify that the criteria used to define a specialist occupation do not, of themselves, indicate whether an occupation is currently facing a prospective ***excess*** or ***shortage*** of skills (the criteria do not include any indicators of current and/or future demand and supply).

Undertaking an analysis of the future demand and supply of qualifications for the specialist occupations is the starting point for determining where government intervention in skills planning may need to occur. It also helps identify where other (non-training) workforce development responses may be required.

The Commission has undertaken this analysis for the specialist occupations over the five-year planning period 2009-10 to 2014-15, to identify where ***imbalances are likely to occur***. The demand and supply analysis used is the same as that used for the high level quantitative assessment of the five-year outlook for the demand and supply of qualifications presented in Chapter 3.

As outlined in Chapter 3, the Commission's analysis compares the ***total demand*** for qualifications (encompassing new entrants and existing workers) with likely supply from the education and training system, and from migration.

15 ABS 2009, *Australian and New Zealand Standard Classification of Occupations* (ANZSCO).

Demand for qualifications comprises:

- The skilling requirements of new entrants to fill job openings resulting from expansion and replacement demand.
- Existing workers upskilling for a qualification higher than their current highest level qualification.
- Existing workers broadening their skills for a qualification at an equivalent or lower level than their current highest level qualification.

Supply of qualifications comprises:

- Graduates from higher education institutions, excluding overseas students.
- Publicly-funded graduates from vocational education and training.[16]
- The contribution of net migration from overseas and interstate.

In the analysis, supply from migration is considered separately to supply from education and training. In other words, the demand for qualifications is initially compared with supply from the education and training system to gauge whether it is likely to be sufficient. The further contribution (positive or negative) from migration is then considered. Migration has been treated in this way based on the Commission's view that migration should not be seen as a long-term strategy to address skills needs – rather it should act as a 'safety valve' when the skills are not available in the local labour force.

The detailed assessments included in Appendix 2 are based on the Commission's top-down modelling combined with industry advice. They identify where we believe:

- There will be ***sufficient*** supply of qualifications to meet industry demand over the planning period.
- Supply is likely to be ***insufficient***.
- Supply is likely to be ***more than sufficient***.

The starting point for these assessments is a comparison between total demand for qualifications and total supply.[17]

Other factors which are taken into account in the final assessment are:

- Whether the occupation is currently in shortage in South Australia as assessed by DEEWR. (For these occupations, it is assumed that some additional supply will be required to make up for the current shortfall.)
- Evidence provided by industry stakeholders which supports a different assessment.

The analysis undertaken for this plan shows that 57% (50) of the specialist occupations are projected to have ***sufficient*** supply of qualifications to meet industry demand over the five-year planning period. A further 33 are likely to have ***insufficient*** supply and the remaining four are likely to have ***more than sufficient*** supply of qualifications.

This suggests that the government may need to intervene in skills planning for 37 specialist occupations (and the associated qualifications) to ameliorate the imbalances.

16 Total supply also includes fee-for-service activity delivered by TAFE SA and privately-funded contracts of training.

17 Within the model, supply is considered to be sufficient where the projected difference between demand and supply is expected to be within plus or minus two times the standard error of the imbalance for qualifications associated with that occupation. In other words, where the difference is significant and unlikely to be the result of chance.

Specialist Occupations continued

Of the occupations which are likely to have ***insufficient*** qualifications, the majority require higher education:

- construction managers
- engineering managers
- accountants
- cartographers and surveyors
- urban and regional planners
- chemical and materials engineers
- civil engineering professionals
- electrical engineers
- electronics engineers
- industrial, mechanical and production engineers
- mining engineers
- veterinarians
- early childhood (pre-primary school) teachers
- special education teachers
- medical imaging professionals
- optometrists and orthoptists
- chiropractors and osteopaths
- dental practitioners
- anaesthetists
- internal medical specialists
- psychiatrists
- surgeons
- other medical practitioners
- midwives
- nurse managers
- registered nurses
- psychologists.

Only six of the 33 are VET-related occupations:

- floor finishers
- painting trades workers
- wall and floor tilers
- plumbers
- electrical distribution trades workers
- telecommunications trades workers.

Of the four occupations likely to have ***more than sufficient*** qualifications, all are higher education related (however, environmental scientist has both VET and higher education pathways):

- chemists, and food and wine scientists
- environmental scientists
- university lecturers and tutors
- dieticians.

Listing the occupations in this way is not meant to suggest that they should be thought of as operating in 'silos'. Also, while they all meet the criteria for specialist occupations, occupations change all the time. This is particularly the case in areas undergoing significant reform, such as health – where the boundaries between occupations are continually blurring. Indeed, job redesign can be an effective response to bottlenecks in many of these occupations. These changes are not necessarily captured in the top-down model or in the occupational classifications used by the ABS, and we must rely on industry intelligence to monitor these trends.

The detailed write-ups in Appendix 2 elaborate on how the assessments for specialist occupations were reached, and present industry views on the outlook for these occupations.

The Commission's work on specialist occupations has taken on a specific purpose as South Australia moves towards a student demand-driven approach. Within this system, the Commission's analysis will be used to ensure that student demand is broadly in line with industry needs, through the application of caps and incentives for particular qualifications.

Caps and Incentives

In a demand-driven system responsive to the needs of employers and individuals, the government's role is to set broad priorities and maximise access to information for all stakeholders. As discussed in Chapter 2, this requires the provision of comprehensive career and labour market information and services, as well as information on the range and quality of services offered by RTOs. This information should be made available to students, employers, jobseekers and existing workers to support informed client choice and to help ensure that student demand is broadly in line with industry need.

For specialist occupations it is important that government closely monitors where the supply of qualifications is likely to be over or under demand, and to apply caps or incentives as required. The ***eligible qualifications*** list (published by DFEEST in November) will play a critical role in facilitating this.

Directing student choice towards areas of industry demand helps avoid bottlenecks in the supply chain which could limit the state's economic growth. It will also help reduce the costs associated with over-investment of public resources in areas where industry demand is already being met.

Having said that, it is the Commission's view that caps should only be applied in exceptional circumstances, based on a detailed examination of the data driving the assessment of oversupply, and after considering the views of industry. One area which we believe needs further investigation relates to qualifications where a work placement is ***required*** as part of the training package prior to achieving competency.

For example, following a significant increase in nursing student commencements over the past few years in both pre-registration and pre-enrolment courses, we note a significant shortfall of clinical places for enrolled nurses (Diploma of Nursing), particularly in regional areas of the state. We also note that university enrolments in the Bachelor of Nursing (registered nurse) are expected to increase with the introduction of new funding models, placing additional pressure on clinical placements. While it is critical that South Australia is training sufficient nurses to meet industry demand, consideration must be given to the availability of clinical places and the impact that delays in accessing placements has on the supply pipeline.

For occupations which are not qualification-specific – and therefore do not meet the criteria for specialist occupations – the supply of qualifications should largely reflect student demand. However, it still may be necessary for the government to direct resources in order to meet industry skill needs. Again, the eligible qualifications list will play a major role in signalling to the market which qualifications the government wants to invest in.

Caps and Incentives continued

Accordingly, the Commission believes that the eligible qualifications list for public funding under *Skills for All* should not be restricted without careful consideration of the issues discussed here.

The Commission will provide government with detailed information on all occupations in the South Australian labour market where its modelling and consultations with industry suggests that there will be a future imbalance in the supply of qualifications.

Skill Sets

The Commission is pleased to see that the government has accepted its recommendation that public subsidies be available for skill sets, in addition to full qualifications.

Research conducted on the uptake of VET over the past decade shows that approximately half of all individuals enrolled each year complete only one or two units of competency.[18] Increasingly, individuals are finding that it is a job requirement to possess specific sets of skills to meet industry standards or regulatory and legislative requirements. Workers may need to update their skills because of structural change, new technologies or legislative changes, but this is unlikely to require a full qualification.

The *Skills for All* policy acknowledges that there is a public benefit to be achieved through subsidising the acquisition of certain types of skill sets, and these are referred to as ***eligible skill sets***.

Within the national training system, skill sets – defined simply as ***clusters of units from one or more training packages*** – can be designated or identified in any of the following ways:

- At the national level skill sets are identified by an Industry Skills Council (ISC) and put through the approved DEEWR endorsement process. These are referred to as ***endorsed skill sets***.
- At the local level skill sets can be identified by an RTO in collaboration with employers. They cover functions within a job role and may involve upskilling or re-skilling existing workers.
- At the individual level groups of units can be identified by individual learners and a statement of attainment issued by the RTO on completion.

Currently, there are over 600 endorsed skill sets across 72 national training packages. Skill sets appear in all industries and across all levels of work (including pre-employment skills). They provide a clearly defined statement of the skills and knowledge required by an individual to meet industry needs or a licensing or regulatory requirement. They can also be contextualised to meet local industry needs.

For the purposes of public funding under *Skills for All*, it is important that the criteria adopted by DFEEST for approving skill sets is clear about which types are ***eligible***. At this stage in the development of *Skills for All*, our consultations with stakeholders indicate a significant degree of uncertainty and confusion about what may constitute an eligible skill set. For example will:

- The list be restricted to those skill sets endorsed in training packages?
- An individual be able to use their entitlement to select their own personalised skill set?
- Employers be able to select a set of units for upskilling or re-skilling their employees?
- RTO-defined skill sets be eligible for subsidy?

The Commission supports the development of a list of eligible skill sets based on clear criteria – to provide clarity for users of the system and to guide public funding decisions. Clear and simple approval processes are also required, which take into account industry views regarding suitability for public subsidy and levels of priority.

18 Precision Consultancy 2007, *STA Skill Sets Communiqué*, March, p 5.

A key criterion for public funding of skill sets should be the transferability of the skills gained by the individual. The Commission supports the *Skills for All* approach that public funds will not be available to support the development of skills that are entirely enterprise specific. Further, the Commission re-affirms its view that skill sets should only be available for individuals who already hold a minimum Certificate III. Having said that, the criteria should be developed in a way that encourages and supports learners to continue to build on skill sets, particularly as a pathway to higher level qualifications.

Within some industry sectors, sequential/progressive learning is embedded and funding of skill sets should reflect this pattern specified by industry. Many skill sets have pre-requisites specified in training packages which must be acknowledged in the funding arrangements and eligibility criteria.

It is important that the level of subsidy available for skill sets avoids unintended consequences. For example, they should not provide individuals with a financial incentive to enrol in a skill set where a full qualification is more appropriate.

The Commission has also heard arguments from industry for the development and funding of some entry-level (foundation) skill sets for disadvantaged job seekers, based on successful models funded through *South Australia Works*. If these are to be funded under *Skills for All* it will be critical that support services are put in place to ensure that these learners get access to work experience that matches their training and that they are encouraged to build on the skill sets to achieve a full qualification over time. This is discussed further below.

In approving skill sets for funding under *Skills for All*, the Commission is of the view that funding should not necessarily be restricted to skill sets currently endorsed within national training packages. Consultations with industry have identified a number of emerging areas where industry believes that skill sets could be developed to support upskilling and re-skilling of workers. Industry is clear, however, that skill sets should not undermine trade qualifications.

The demand for skill sets will vary across industry sectors – some sectors have an established track record of using skill sets, while other sectors have not yet fully addressed the implications of public subsidised skill sets. As demand for skills sets is largely untested, the take up should be monitored closely by DFEEST, in consultation with industry skills advisory bodies, and changes made accordingly to the eligible list, subsidy structure and caps and incentives.

Industry has cautioned that the availability of public subsidies for skill sets may see a substitution between employer-financed fee for service activity and subsidised training. This may lead to 'excess demand' which will require prioritisation from independent industry sources.

Within some sectors, the existing endorsed skill sets are likely to have limited demand – as they are highly specialised. In these cases, they should be used to complement the funding of full qualifications for specialist occupations.

Where ***emerging skill sets*** are identified, and there is industry support at a state level, Industry Skills Boards (ISBs) should be encouraged to work with the relevant national ISCs to gain endorsement for them to be recognised in national training packages. Increasingly, skill sets will span a number of industry areas to support multiskilling.

Skill Sets continued

Discussions with industry have identified a range of skill sets where demand exists, including those which have relevance across a range of industry sectors, those which are related to licensing or regulation and those which will support skills broadening for existing workers. Detailed information on industry demand for skill sets is included in Appendix 2, but the list below is indicative of the Commission's recent consultations with industry skills advisory bodies.

Generic skill sets

- project management
- environmental management
- mental health (across caring industries)
- supply chain
- small business management
- workplace training supervision
- enterprise training and assessment
- mentoring
- sustainable practices.

Licensing or regulatory requirements

- home assessors (green skills)
- cabler registration
- BAS agent registration
- early childhood work
- site OHS coordinator
- racing industry.

Skill broadening/emerging areas

- irrigation
- logistics
- electronic records management (legal and medical)
- mine surveying and design
- loss adjustors – automotive
- rail infrastructure
- hybrid technologies
- dementia support
- pastoral care
- disability work with people who are older
- audiometry.

In addition to the vocational skill sets listed above, industry consultations have also highlighted some skill sets in demand that are designed to assist learners by providing direct foundation skills or by providing supervisory skills to mentors and supervisors. Some examples are provided below.

Skill sets to support supervision of apprentices and trainees

Given the Commission's focus on apprenticeships and traineeships, and its objective to improve completion rates in South Australia, it commends the current project being led by DFEEST to roll out a skill set designed specifically for employers who supervise trainees and apprentices.

This strategic, cross-industry project proposes to provide registered employers with training in TAE10 Workplace Supervisor, a skill set from the Training and Education Training Package. The skill set will be tailored for those supervisors and employers who need to better understand and manage the competency-based progression system, and to work with providers to make better use of agreed training plans.

This skill set should contribute to a higher quality learning and assessment experience for the apprentice/trainee in the workplace – a key factor which has been identified as supporting apprentices and trainees through to completion of their training.

Skill sets to support foundation skills and pathways demand

Industry consultations have also identified demand for skill sets that will provide pathways into work for school leavers, disengaged job seekers and other equity and access groups. A new skill set in Digital Literacy has been developed through the Information Technology Training Package to support this need. The skill set provides units of competency that together build towards a Certificate I.

More broadly, the new Foundation Skills Training Package (being developed by Innovation and Business Skills Australia) will provide the framework for qualifications and skill sets to support language, literacy and numeracy competencies – key elements of pathways demand.

These skill sets should be used in conjunction with vocational skill sets to assist individual learners on pathways to full vocational qualifications.

The Commission, in collaboration with DFEEST, will continue to liaise with industry skills advisory bodies about eligible skill sets. We will also work with DFEEST to estimate the likely demand for skill sets and to determine how they can be measured.

Attachment 1: Methodology for identifying specialist occupations

The table below shows the criteria which have been used by the Training and Skills Commission to identify specialist occupations in South Australia, and the associated indicators, measures and data sources.

Criterion	Indicators/Measures
1 Long lead time Skills are highly specialised and require extended learning and preparation over several years.	Length of course. *Measure:* An occupation must be at ANZSCO Skill Level 3 or above.[19] *Source:* ABS cat. no. 1220.0
2 High use The skills are deployed for the uses intended (close occupational fit).	The skills which people acquire through education and training are used for their intended purpose. A majority of people in the occupation have the requisite qualification. *Measure:* Above average match between intended and destination occupation of graduates. 60% or more of those working in the occupation have a skill level commensurate with that specified. *Source:* Skills Australia
3 Opportunity cost The opportunity cost of the skills being in short supply is high (causing either bottlenecks in the supply chain or imposing significant costs by their absence) and/or the skills are required to implement the government's economic development priorities.	The occupation has licensing or registration requirements.[20] The occupation/skills are needed to deliver government priorities. *Measures:* Registration/licensing requirement. The occupation is associated with the state government's economic priorities. *Sources:* COAG mutual recognition arrangements, ABS *ANZSCO*, cat. no. 1220.0, EDB 2009 *Economic Statement*, DFEEST STEM Occupations.
4 Industry intelligence There is robust intelligence from industry regarding the demand, supply and use of these skills. There is adequate data to assess the first three criteria.	ISBs and other industry stakeholders (e.g. professional associations) can provide robust intelligence. *Measures/Sources:* ISB coverage by occupation. ISB advice on skills and workforce development priorities. National Industry Skills Councils' *Environmental Scans*. Information available from professional associations.

19 Occupations at Skill Level 3 have a level of skill commensurate with one of the following:
- AQF Certificate IV
- AQF Certificate III including at least two years of on-the-job training.

At least three years of relevant experience may substitute for the formal qualifications listed above. In some instances relevant experience and/or on-the-job training may be required in addition to the formal qualifications. *Source:* ABS cat. no. 1220.0

20 Occupations for which some form of legislation-based registration, certification, licensing, approval, admission or other form of authorisation is required by individuals in order to practice the occupation legally.

Attachment 2: Specialist Occupations List, South Australia

ANZSCO	Occupation	TaSC occupational grouping
3212	Motor Mechanics	Automotive
3242	Vehicle Body Builders and Trimmers	Automotive
3211	Automotive Electricians	Automotive
3241	Panelbeaters	Automotive
3243	Vehicle Painters	Automotive
2321	Architects and Landscape Architects	Building and Construction
2332	Civil Engineering Professionals	Building and Construction
1331	Construction Managers	Building and Construction
2322	Cartographers and Surveyors	Building and Construction
3121	Architectural, Building and Surveying Technicians	Building and Construction
3122	Civil Engineering Draftspersons and Technicians	Building and Construction
3311	Bricklayers and Stonemasons	Building and Construction
3312	Carpenters and Joiners	Building and Construction
3321	Floor Finishers	Building and Construction
3322	Painting Trades Workers	Building and Construction
3331	Glaziers	Building and Construction
3332	Plasterers	Building and Construction
3333	Roof Tilers	Building and Construction
3334	Wall and Floor Tilers	Building and Construction
3341	Plumbers	Building and Construction
1332	Engineering Managers	Business and Financial Services
2211	Accountants	Business and Financial Services
2212	Auditors, Company Secretaries and Corporate Treasurers	Business and Financial Services
2513	Occupational and Environmental Health Professionals	Business and Financial Services
2713	Solicitors*	Business and Financial Services
2414	Secondary School Teachers	Education and Training
2415	Special Education Teachers	Education and Training
2411	Early Childhood (Pre-primary School) Teachers	Education and Training
2413	Middle School Teachers	Education and Training
2421	University Lecturers and Tutors	Education and Training
2412	Primary School Teachers	Education and Training
2333	Electrical Engineers	Electrotechnology
2334	Electronics Engineers	Electrotechnology
3424	Telecommunications Trades Workers	Electrotechnology
3132	Telecommunications Technical Specialists	Electrotechnology
3411	Electricians	Electrotechnology
3421	Airconditioning and Refrigeration Mechanics	Electrotechnology
3422	Electrical Distribution Trades Workers	Electrotechnology
3423	Electronics Trades Workers	Electrotechnology
2515	Pharmacists	Health and Community Services
2525	Physiotherapists	Health and Community Services
4112	Dental Hygienists, Technicians and Therapists	Health and Community Services
2346	Medical Laboratory Scientists	Health and Community Services
2511	Dietitians	Health and Community Services
2512	Medical Imaging Professionals	Health and Community Services

* Legal professionals admitted to practice only.

Attachment 2: Specialist Occupations List, South Australia

ANZSCO	Occupation	TaSC occupational grouping
2514	Optometrists and Orthoptists	Health and Community Services
2524	Occupational Therapists	Health and Community Services
2526	Podiatrists	Health and Community Services
2527	Speech Professionals and Audiologists	Health and Community Services
2531	Generalist Medical Practitioners	Health and Community Services
2544	Registered Nurses	Health and Community Services
4114	Enrolled and Mothercraft Nurses	Health and Community Services
2521	Chiropractors and Osteopaths	Health and Community Services
2522	Complementary Health Therapists	Health and Community Services
2523	Dental Practitioners	Health and Community Services
2532	Anaesthetists	Health and Community Services
2533	Internal Medicine Specialists	Health and Community Services
2534	Psychiatrists	Health and Community Services
2535	Surgeons	Health and Community Services
2539	Other Medical Practitioners	Health and Community Services
2541	Midwives	Health and Community Services
2542	Nurse Educators and Researchers	Health and Community Services
2543	Nurse Managers	Health and Community Services
2723	Psychologists	Health and Community Services
3112	Medical Technicians	Health and Community Services
4111	Ambulance Officers and Paramedics	Health and Community Services
2331	Chemical and Materials Engineers	Mining and Engineering
2335	Industrial, Mechanical and Production Engineers	Mining and Engineering
2339	Other Engineering Professionals	Mining and Engineering
3222	Sheetmetal Trades Workers	Mining and Engineering
2336	Mining Engineers	Mining and Engineering
2344	Geologists and Geophysicists	Mining and Engineering
3221	Metal Casting, Forging and Finishing Trades Workers	Mining and Engineering
3223	Structural Steel and Welding Trades Workers	Mining and Engineering
3232	Metal Fitters and Machinists	Mining and Engineering
2341	Agricultural and Forestry Scientists	Primary Industry
2345	Life Scientists	Primary Industry
3111	Agricultural Technicians	Primary Industry
2342	Chemists, and Food and Wine Scientists	Primary Industry
2343	Environmental Scientists	Primary Industry
2347	Veterinarians	Primary Industry
2326	Urban and Regional Planners	Public Administration and Safety
2349	Other Natural and Physical Science Professionals	Public Administration and Safety
4413	Police	Public Administration and Safety
3231	Aircraft Maintenance Engineers	Transport and Storage
2311	Air Transport Professionals	Transport and Storage
2312	Marine Transport Professionals	Transport and Storage

Refer to Appendix 2 for detailed assessments for each of the occupations on the list.

Chapter 5

SKILLS NEEDS: INDUSTRY AND REGIONAL PRIORITIES

This chapter summarises the main themes and issues identified through the Commission's consultations with industry and regional stakeholders over the past year.[21]

Industry Stakeholders: Common Themes and Priorities

A range of themes emerged from the Commission's consultations with ISBs, the Defence Teaming Centre (DTC) and the Resources and Engineering Skills Alliance (RESA) in preparation for this plan. Issues identified during the 2009 and 2010 consultations remain priorities, including quality and responsiveness of the education and training system, attracting and retaining skilled workers and the need for customised support services for disadvantaged learners.

The industry skills advisory bodies also sought further information on the *Skills for All* reforms, particularly how their vocational education and training requirements will be met, and the rules determining eligible qualifications, subsidy levels and skill set funding.

The following issues and observations were raised during consultations in 2011:

- Improvements in language, literacy and numeracy are required to remove barriers to employment and participation.
- The demand for skills and labour across industries is commonly being driven by an ageing and retiring workforce and technological advancements, including responses to environmental sustainability.
- As the baby boomers begin to retire and exit the workforce, employers increasingly endeavour to upskill their existing workforce to fill the gaps and adopt new technologies and lean production methods.
- In addition to the ageing population, industries also have to compete with the more lucrative resources industry that is luring away not only highly skilled workers but also those with transferrable skills.
- Despite opportunities in the resources sector, there are fewer and fewer people choosing to live and work in regional areas, constraining growth in regional industries.
- The employment of people who have been disengaged from the labour market requires up-front and ongoing tailored support.
- There is concern amongst industry about the quality and accessibility of training available, particularly in relation to increasing the flexibility of delivery.
- Sponsored migration is one response to meeting industry's skills and labour needs.

21 Detailed write-ups of specialist occupations and industry advice of priority occupations, qualifications and skill sets are included in Appendix 2 *Industry Profiles and Priorities.* The information will be presented around the 16 occupational groupings used in the Commission's modelling, rather than the ISB sectors.

Feedback from Industry Skills Advisory Bodies

Business Services Industry Skills Board

The demand for skills and labour in the business services industries is being driven by the industry-wide move to green star ratings. Mandatory legislation and licensing requirements around energy efficiency and sustainability for specific occupations are expected to impact significantly on the residential, commercial and public housing sectors, including rental properties. However, the drought response has pushed out the timing of the rollout of green star ratings, providing industry with more time to develop the necessary skill sets. Recent changes in the finance sector, including regulation, amalgamations, takeovers and closures have created a pool of workers seeking to change their careers, driving the industry's demand for skills and labour.

The main factor affecting the supply of skilled workers within the sustainability sector is the availability of providers to deliver emerging green skill sets. Leadership and management skills together with environmental management are key skills priorities across all sectors. Industry also stressed the importance of ensuring that vocational education and training is aligned to its requirements. Currently, industry believes that lower level qualifications are not addressing the fundamental issues which must be addressed to meet the state's strategic targets.

Industry also believes that the skills and labour needs may be addressed through greater use of injured workers, job seekers and the underemployed. However, realising the potential of these groups requires different funding models, with individualised approaches and a commitment from employers.

The business services industries raised concerns about the quality of training and the need for ongoing involvement of ISBs in driving quality improvements and the allocation of public resources.

Construction Industry Training Board

The demand for skills and labour within the commercial and civil construction sectors over the coming five-year period is being driven by the construction of the new Royal Adelaide Hospital and the proposed Olympic Dam expansion. The short-term demand for skills and labour in the housing market is being driven by interest rates, where a rise places additional pressure on an already flat housing market. While the medium term outlook may be more promising, there is a significant risk of losing apprentices because of a lack of work among sub-contractors.

During the consultation sessions, the construction industry expressed a need to bridge the gap between identified skills gaps and the employer's decision to hire. Industry emphasised the importance of the connection between government construction procurement and workforce participation policy, and ensuring the policies are workable and have industry support.

The main factors affecting the supply of skilled workers in the construction industry includes sufficient numbers of teachers and trainers, both in the delivery of VET in schools and in the VET system generally. The CITB is aiming to alleviate this by establishing and sponsoring students through secondary school teaching degrees and the *Doorways 2 Construction* program.

There is also a constant requirement for skills renewal as materials, technologies and processes are adopted and adapted.

Industry believes there is no shortage of people interested in working in the construction sector. However, due to the large degree of sub-contracting within the industry, the use of skills and labour is largely dependent on the employer's view of activity levels in the short to medium term.

If an employer does not have the confidence to hire and there is no job commitment, then the training will not be used and there is no point commencing. Also, it was stressed that the training must reflect industry's requirements otherwise it will not benefit the person.

The industry is also concerned about the quality of some training, particularly how the flexibility of training packages can allow RTOs to aggregate inappropriate elective units in qualifications. This is of particular concern for the small to medium-sized enterprises that can only access training available through RTOs.

Construction managers are also well sought after, with a growing trend to have tertiary pathway candidates undertake part-time employment during their training to provide better context for the learning process.

Defence Teaming Centre

The demand for skills and labour within the South Australian defence industry is primarily driven by several major high-tech projects outlined in the Australian Government's white paper. It is also driven by the through-life support of other major projects such as the Air Warfare Destroyer project, the Collins Class submarine and the AP-3C Orion Aircraft project. Project Sentinel, a $1 billion 12-year project to supply, operate and maintain a fleet of 10 electronic Dash 8 surveillance aircraft for Australian Customs, also has a significant impact on the demand for skills and labour within the South Australian defence industries.

Similar to other industries, a major challenge is the retirement of the skilled workforce, particularly critical senior experts. This will leave a large hole in the specialised and highly skilled workforce.

In addition, the supply of engineers is restricted by the number of work experience placements available, as the Australian Institute of Engineers requires students to undertake workplace experience during university semester breaks. Recent citizenship changes increasing the waiting period for a permanent resident from two to four years are also creating challenges. It means permanent residents are restricted to unclassified tasks for four years.

The lure of the lucrative mining industry is a constant attractive option for many engineers and tradespeople. It will be particularly challenging for the defence industry to retain these skilled workers during an expected lull in work in 2013 before an anticipated increase in 2014. Different organisations will be seeking similarly skilled people, and competition is expected to be strong.

The key skill and occupation priorities in defence are increasing and maintaining engineering and technical skills. This can be done through generating higher interest amongst school-aged students in technical fields, as well as entry level training that can migrate into the needed skill sets. However, industry believes that this can be challenging. Students who have a technical bent but are not too academic are increasingly being directed to complete Year 12 instead of enrolling in a pre-vocational program that may be better suited to them. The industry is also experiencing difficulties in attracting people experienced in OH&S, finance, procurement and production planning, as well as schedulers, estimators and safety critical engineers.

In an effort to address these challenges, the industry has suggested modification of existing migration and citizenship policies to help bring in much needed skills, and a greater focus on pathways as well as science, technology, engineering and maths (STEM) skills.

Feedback from Industry Skills Advisory Bodies continued

Electrotechnology and Water Skills Board

The key driver affecting the demand for skills and labour in the electrotechnology and water industries includes the electrification of rail, expansion of electricity grid and the gas industry, reclaimed water industry, expansion of Torrens Island power station, new wind farms, energy and water auditing, and technologies to improve energy efficiency in existing commercial and domestic properties.

The main challenges affecting the supply of skilled workers within the industries include maintaining funding for preparation through Certificate I Electro and Certificate II Career Start as these are foundation skills for trades; ensuring RTOs have the capability to expand; quality of RTO delivery; upskilling workers in preparation for the National Broadband Network; and similar to other industries, the ageing workforce.

The most vital skill and occupational priorities are predominantly around training and upskilling to meet these challenges. Other priorities include the need to upskill water operators and hydrologists; creating nationally accredited gas workers and establishing a national gas RTO; RTO availability; flexible delivery of training; and adding post-trade pathways to electrical and refrigeration.

The industries are also challenged by systemic issues, such as improving the accessibility of funding for higher qualifications and upskilling for small to medium-sized enterprises, completion of on the job skills by apprentices, and greater flexibility in the delivery of post-trade training. RTO capability is a serious issue for developing and upskilling national training, particularly in relation to gas, water and instrumentation.

Attraction and skilling are enhanced by pre-vocational studies leading to apprenticeships, which should continue to be developed. When these are complemented by projects to identify and build a pool of instructors with recent industry experience, industries will be able to meet demand increases and employee attrition.

Food, Tourism and Hospitality Industry Skills Advisory Council

The volatility and instability of the global marketplace, an ageing workforce, declining regional labour pool, increased global competition and export demand make workforce planning and development a significant challenge for the food, tourism and hospitality industries. A general tightening of the economy, leading to higher savings and reduced consumer expenditure, has an impact on most of the sectors covered by FTH.

The demand for skills and labour is being driven by increased sales and the expansion in the number and diversity of clients nationally and internationally, and by the growth of specialised food sectors. Jobs will evolve to require higher level and greater breadth of skills, greater adoption and understanding of technology, improved management skills for complex scenarios, and integrated and innovative delivery of skills combined with the diffusion and adoption of research findings to raise enterprise productivity.

In addition, the skills and labour requirements will continue to be driven by increased environmental awareness and expectations of a sustainable value chain, ongoing seasonal labour requirements, changing consumer tastes, preferences and expectations, and climate change.

Factors affecting attraction and retention of skilled workers include split-shifts, fluctuating hours, seasonal requirements and interpretation of qualifications included on the Skilled Occupation List. In regional areas, access to accommodation and transport remains a significant challenge.

Demand from these industries is traditionally Certificate II and III (trade) level qualifications. The industry believes that skill sets should be seen as building blocks to complement rather than replace full qualifications and should not be used to dilute trades. FTH believes that a number of their industries will be disadvantaged due to the direction of *Skills for All*, which only funds skill sets for individuals with an existing full qualification of at least Certificate III.

FTH also raised concerns about the quality of training currently provided. Industry believes that the situation is exacerbated by modern industrial awards which tie qualifications directly to award payments. The possibility exists for entire cohorts to be locked out of employment.

Manufacturing Industry Skills Advisory Council

The key drivers affecting the demand for skills and labour within the manufacturing industries include innovation, changing technology, the regulatory environment and the ageing of the workforce. The manufacturing industry is also responding to the economic implications of climate change while developing a sustainable manufacturing sector.

The main challenge affecting the supply of skilled workers is the absence of enough quality providers to deliver training. The industry is also competing with the mining industry for skilled workers, and it is having difficulties attracting and retaining skilled staff and young people in apprenticeships.

To alleviate this shortage of skilled workers, the industry's main priorities are to upskill existing workers, ensure there is adequate recognition of current skills, integrate on-the-job training, boost foundation skills and ensure that skill sets for emerging technologies can be mapped back to training packages. Additional priorities include preparing the industry for a low carbon economy and competitive manufacturing.

MISAC has also highlighted the systemic issues of ensuring quality training through regulation and contractual arrangements, and empowering clients to choose their providers; ensuring and promoting the professional development of the VET workforce; and the need to discipline the training market, including the disclosure of non-compliant providers.

Primary Industries Skills Council

Industry restructuring resulting in larger farms, more corporate structures and broader and deeper skills needs are fundamental drivers of the demand for skills and labour in the primary sector. These industries are also experiencing a loss of specialist and general skills through local and national labour competition, retirement, and a continued drift of young people from regional to urban areas for study and job opportunities.

The main challenge affecting the supply of skilled workers is the lack of interest shown by school-leavers in working in regional areas or primary industry sectors, with poor industry and school career promotions further exasperating the issue. These challenges are also complicated by a lack of suitable accommodation or settlement support for out-of-area workers. The industries also experience poor access to skill development programs, with few open learning and higher education options, and limited regional learning options, particularly outside major regional centres. According to industry, a full qualification focus in VET is largely out of step with the learning culture and requirements of the industry.

Given the very low numbers of young people in the industry, efforts to engage them must be increased through flexible preparatory programs and a balance between trade and primary industry training. Industry believes that some of these challenges can only be resolved through migration due to a lack of suitable training in Australia and a disinclination to work outside metropolitan areas.

Primary industries would benefit from improved intelligence regarding major developments impacting on existing industries, such as updates on location and timelines for mining and oil and gas projects. These developments affect all industry sectors, particularly primary industry.

The skills in primary industries will shift towards more management roles and technical work as machinery and cropping systems adapt to new technologies, and specialist servicing skills become a more common feature.

Feedback from Industry Skills Advisory Bodies continued

Primary Industries Skills Council

The nature of work that most sectors undertake includes complex risk management decisions in environmental management and reporting, food safety and traceability systems, cold chain management systems, export compliance and documentation systems, financial management systems, etc. All of these are built in to most farming, horticulture and seafood industry job roles. One of the biggest problems the industry suffers from is recognition of the level of competency within the industry and the mismatch between the ABS definitions and 'the real world job roles'.

Resources and Engineering Skills Alliance

An upturn in activity follows the transitioning of exploration into early stage production and the proposed expansion of Olympic Dam. The recovery from the global financial crisis and the strong terms of trade for Australia has also resulted in an increase in demand for skills and labour within the mining sector. Licensing and compliance requirements, particularly for high risk areas, are also driving demand and are additional to trade and professional qualifications. Changes in technology and productivity drivers are resulting in the need for multi-skilled and dual-trade workers.

The greatest challenge determining the supply of skilled workers is the small size of the experienced labour pool within South Australia. The industry is constrained by the capacity of RTOs due to the availability of providers in the regions who have skilled staff and access to appropriate infrastructure and equipment. As a result, the sector relies on a model of work-based training and assessment, rather than external education provision. National and global competition for labour has an impact on the supply of skilled workers, resulting in the use of fly-in fly-out labour, interstate and international recruitment, and poaching between firms, sectors and regions.

There are also challenges and issues with the current apprenticeship system. Industry believes the apprenticeship model is inflexible, often requiring a commitment that goes beyond the life of projects and which enterprises may not be willing to provide. Additionally, the pre-vocational and pre-apprenticeship courses do not prepare young people for the realities of living and working at remote sites.

The key skill and occupation priorities include filling gaps in skilled para-professional areas, support for indigenous job seekers, and initiatives to increase female participation. Although skill sets would be an appropriate response to these priorities, they do not necessarily exist within current training packages, e.g. in areas where equipment and skills are leading-edge.

A critical priority is access to industry standard equipment by RTOs and appropriately skilled trainers. This may be accessible through auspice arrangements and alliances with other sectors, e.g. defence, and pooling of training demand and development of industry-wide training arrangements.

SA Health and Community Services Skills Board

The key drivers affecting the demand for skills and labour within the health and community services industries are the significant growth in demand due to an ageing population. Technological change is also leading to new services and work practices and to the requirement for different skills, e.g. through greater use of assistive and information technologies and models such as e-health.

State and Commonwealth government policies and reform agendas also impact on the demand for skills and labour, particularly the COAG reform agenda in the areas of health, ageing and early childhood development, and the recent work of the Productivity Commission on aged care, the early childhood workforce, and a national disability insurance scheme.

Reviews of the industries, including those undertaken by the Productivity Commission, consistently point to the need for competitive wages and conditions. Developing proactive approaches to attracting and retaining staff in an environment of increased competition will be one of the most significant challenges in the supply of skills and labour.

In order to meet these requirements, the industries will need to further develop and use the skills of existing staff, strengthen management and leadership skills, and provide opportunities for career progression and better quality of working life. The industries also need to build and manage diverse workforces that better reflect the communities served, which includes addressing age, cultural and language barriers.

Key skill priorities include an ongoing need for entry level training across all sectors, as well as improvements in language, literacy and numeracy, and IT skills. Addressing the skills needs of volunteers and informal carers is also necessary.

One of the ongoing responses is overseas recruitment of health professionals. Greater attention is required to preparing and supporting migrants, employers, employees and service users for the challenges posed. It is hoped that work by Health Workforce Australia will develop new understandings to inform policy discussion about the place of migration in the health workforce.

It may be difficult for skilled workers to use their skills fully considering the sub-contracting and casual nature of employment within some of the industries. Many people are underemployed, with considerable numbers having multiple jobs to secure sufficient income. There is a significant requirement within the industry to redesign work roles to enable better matching of skills to jobs and to provide flexible working conditions.

Service Skills SA

The main driver for skills and labour in the service industry is the strength of the economy, as growth is largely governed by consumers' disposable income. High petrol prices and a shift to on-line buying are having a significant impact on the retail sector. Consumer spending has faced the toughest six-month period since the global financial crisis and retailers are operating with leaner workforces. Despite this, demand for products and services relating to the ageing population will continue to be a driver, as will the rapidly changing market needs.

Strong competition from higher paying industries is creating challenges in attracting and retaining skilled labour, and trading hours, award changes and new parental leave provisions all impact on the ability to ensure sufficient staff to meet demand. The industry is increasingly relying on casual staff due to the flexibility they allow. These factors together with the ageing workforce is resulting in the loss of skilled staff and significant churn in the retail sector, highlighting a need for defined career paths and the need to engage with other sectors to ensure holistic approaches to workforce development priorities, e.g. related to infrastructure projects.

Interpersonal skills, customer service, attitudinal skills, and language, literacy and numeracy remain critical within the services industries, as are transferable skills. In addition, there is also a need for improved leadership and people management skills.

Migration remains an appropriate response to these requirements but must be accompanied by English language training. In addition, skills development aligned to industry development strategies, skills to increase enterprise productivity and reduce costs, skill set training for key skills areas and streamlined approaches are also appropriate responses.

Feedback from Industry Skills Advisory Bodies continued

Service Skills SA

Service Skills SA is seeking tools and resources to support workforce development, exemplars of best practice skills and workforce development, and information regarding regional workforce planning and development strategies.

The services industry reiterated its ongoing concerns about the quality of training and the role for industry in recognising and endorsing quality.

Transport and Distribution Training SA

The main drivers for skills and labour within the transport and distribution industry are the ageing workforce and drivers being attracted to lucrative positions with other industries. Growth of freight and requirements for warehouse and storage is pushing demand for skills and labour.

The road transport sector workforce is affected by downturns as well as growth, e.g. high agricultural returns, wine export demands and falls in retail. New tighter legislations requiring road transport to become safer, such as through Chain of Responsibility laws, have also had an impact on the demand for skills and labour.

Transport and logistics struggle to compete with other sectors in influencing the school system and enticing young people to the industry, which limits the supply of skilled workers. The rail transport sector finds it challenging to attract qualified and experienced drivers to South Australia and has only a limited pool. The road transport sector also finds it difficult to compete with other industries in attracting young people to the industry, which is further hindered due to minimum age requirements to operate equipment such as forklifts.

The industry believes that career paths are not conducive to attracting people as it is common to 'start at the bottom and work your way up', e.g. washing trucks, becoming work ready, impressing management, etc, and the base/entry rate is very low. The promotion of logistics and material logistics in schools to attract young school-leavers – as there are no age or licensing restrictions – would also benefit the defence industry.

Key skill and occupational priorities include entry level locomotive driver trainees, upskilling rail operators to be drivers, continuing with retention strategies for drivers, and continuing to support the notion of a national safe working system for rail.

The transport and distribution industries also raised the systemic issues of needing to align rail regulations across all States and Territories, increasing the profile of the rail industry and associated careers, introducing VET in school programs with pathway options into industry, and amending the license to operate a forklift to be competency-based, not age-based (18 years).

Regional Profiles and Priorities

The state has been divided into 12 State Government Regions for uniform use in planning, reporting and service delivery across all state government departments and agencies. There are four regions in the Adelaide metropolitan area, three in the greater Adelaide area (Adelaide Hills, Barossa, and Fleurieu and Kangaroo Island) and five country regions (Eyre and Western, Far North, Limestone Coast, Murray and Mallee, and Yorke and Mid North). They all have unique and common challenges impacting on their capacity for increasing skills and workforce development.

During 2011, DFEEST partnered with each region to identify strategic priorities for increasing participation in learning, training and work. Over 400 people participated in sessions in all parts of the state, including representatives from local industry, community, government and community service providers. The strategic priorities identified by regional stakeholders, will assist DFEEST to develop specific projects and guide resource allocation. This section of the plan has benefitted greatly from information provided by *South Australia Works* regional networks.

The Commission also visited Whyalla (part of the Eyre and Western Region) in May 2011 as part of its regional consultation process for the 2011 update of the five-year plan. The visit provided an opportunity for people outside metropolitan Adelaide to inform the Commission about the challenges they face in finding suitable workers, dealing with thin training markets, and leveraging funding to train job seekers and existing workers. The Commission has scheduled a regional meeting for December in the Riverland and will hold more regional meetings during 2012.

Skills Australia has proposed that Regional Development Australia (RDA) committees use local networks for workforce development planning and advisory roles to inform state and national policy and funding.[22] The Commission supports this direction as its Whyalla consultations showed that the RDA network is a crucial source of information on business growth plans on which workforce development strategies can be developed. Information from the roadmaps developed by RDAs in South Australia was used to develop the regional profiles in this chapter.

Regional Consultations: Themes and Priorities in State Government Regions

The Commission believes it is critically important that regional South Australia shares in the dividends of the state's economic growth. While non-metropolitan regions account for just over a quarter of the state's population and full-time equivalent jobs, they generate approximately 40% of total exports and almost 25% of GSP.

The current pipeline of mining activity in the state suggests that demand for skilled workers in some regions will continue to grow. It is therefore important that regional communities put in place strategies to ensure local workers are able to benefit from these opportunities and that those experiencing barriers are prepared to participate in the workforce. Conversely, other regions will continue to require assistance in transforming their economic structure, particularly those that have been heavily exposed to recent periods of drought or have experienced plant closures.

Currently there are large differences between the labour markets in individual towns within regions, with unemployment rates ranging from 0.5% in Roxby Downs to 10.2% in Coober Pedy.[23] While the average unemployment rate in regional South Australia is lower than that for Adelaide, the Murraylands and Far North regions are well above average. Also, it has been the case for some time that non-metropolitan South Australia generally experiences a net loss of young people who move away for work or study, leaving an older than average population and workforce.

Every South Australian region has significant numbers of people with low educational attainment, and 2006 Census data shows that over one-third of the total workforce population in South Australia left secondary education prior to year 12.[24] Therefore, improving the provision and take-up of foundation skills and entry-level training, with the ultimate aim of increasing skills and qualifications, are priorities in each State Government Region.

22 Skills Australia 2011, *Skills for prosperity—a roadmap for VET*, p. 76.
23 Department of Education, Employment & Workplace Relations, *Small Area Labour Markets* June Quarter 2011.
24 SACES 2010, *South Australia Works Implementation and Evaluation*, report commissioned by DFEEST, December, p. 18.

Regional Consultations: Themes and Priorities in State Government Regions continued

Certain population cohorts – in addition to early school leavers – face significant barriers to workforce participation and are the focus of many regional priorities. These disengaged learners include:

- young people at risk in the labour market
- Aboriginal people
- newly-arrived and non-English speaking migrants
- mature-age people not participating in the labour market
- people with low levels of literacy and numeracy and limited employability skills
- people without non-school qualifications.

Stakeholders in each region also identified common systemic barriers to workforce participation – including transport, child care provision and housing – which require cross-sectoral approaches to address.

Skill shortages are most common at times of high economic growth and low unemployment. However, they can also occur in regions with high unemployment where there is a mismatch between the skills available and the skills in demand. Some businesses find it difficult to fill a vacancy because existing staff do not have the skills for the required positions.

From a labour demand perspective, stakeholders in all regions consulted by DFEEST acknowledged the significance of building local capacity to meet expected future job openings – either from replacement demand or growth. The priorities that were agreed in each region reflect the importance of harnessing the local labour force.

The workforce participation priorities for the regions over the period to 2014 aim to ensure that people who are most disadvantaged in the labour market can access pathways that lead to sustainable employment. By ensuring all people have this opportunity, in the longer term they will have access to their *Skills for All* learning subsidy.

The major priorities identified in the State Government Regions are outlined below. The regions that form Metropolitan Adelaide are presented as one as they have a number of challenges and opportunities in common.

Adelaide Hills

The projected population growth for Mt Barker in the state government's *30-Year Plan for Greater Adelaide* – 4.3% per year over the next 10 years – has been identified as the major driver towards a successful economic development and job creation strategy for the region.[25] As a consequence of this population growth, the RDA estimates that 6850 full-time equivalent jobs will be generated across the Adelaide Hills region over the next 15 years, with an increase in Gross Regional Product (GRP) of $805 million. Service sector industries (such as building and construction, retail, hospitality, health and education) are expected to provide the greatest opportunities for business development and job growth.

The main industry sectors are wine production, beef and dairy cattle, vegetable growing, fruit orchards and tourism. Due to its proximity to metropolitan Adelaide, nearly 60% of the Adelaide Hills residents work outside the region.

Despite generally positive workforce participation trends in the Adelaide Hills, a number of challenges remain, especially in building local capacity to meet future job growth.

25 RDA Adelaide Hills, Fleurieu and Kangaroo Island 2011, *Regional Roadmap.*

The major workforce participation priorities for the region are aimed at giving people access to pathways to sustainable employment, namely:

- Ensuring young people who are disengaged from learning and work are supported to make effective transitions through training pathways.
- Assisting people who are marginalised in the labour market (such as newly-arrived migrants, people with disabilities and Aboriginal people) to transition to sustainable learning, training and employment pathways.

Barossa

The high importance of the wine industry as a source of income and employment in the region creates both opportunities and threats. It is estimated that between 80% and 90% of all local economic activity and 41% of all jobs within the Barossa and Light Local Government Areas are related to the wine industry. However, the local workforce is vulnerable to economic downturn as they are predominantly employed in casual, part-time or seasonal work.[26]

Recently, the global financial crisis and its aftermath, the increasing value of the Australian dollar, as well as increased wine production worldwide have created a supply/demand imbalance for the Barossa wine industry. Despite this, the local industry shows a degree of strength and resilience and will continue to do so, provided adaptation strategies are supported.

Opportunities for economic growth in the region are expected to be related to:

- food, wine tourism and related services
- education
- food production, including niche and branded produce
- intensive horticulture
- racing support industries and tourism
- new growth localities in the region, especially Roseworthy, Gawler and Two Wells.

Despite generally low unemployment and relatively high rates of labour force participation, the Barossa region has a number of workforce participation challenges, including low educational attainment, large numbers of young people disengaged from the labour market and barriers to participation for people with disabilities.

Priorities, strategies and activities to address these issues are built around labour demand and supply connections, namely:

- Ensuring that learning and skills development in the region meets the needs of individuals and industry.
- Ensuring that young people who are at risk in the labour force are connected with education and employment opportunities.

Eyre and Western

Eyre Peninsula is a largely rural community, triangular in shape and bound at its corners by the larger cities of Whyalla, Port Lincoln and Ceduna. While the agricultural and fishing sectors are well established, aquaculture and tourism have developed more recently as major sources of employment and revenue. Whyalla has considerable engineering and steel production facilities but the high Australian dollar and weak demand is putting pressure on the manufacturing industry. However, the expansion of OneSteel's port facilities from 6.5 million tonnes to approximately 12 million tonnes by 2012 and the acquisition of iron ore assets will increase the demand for labour.

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26 DFEEST Employment and Skills Formation Network *Strategic Plan* for 2009-2012, p. 5.

Regional Consultations: Themes and Priorities in State Government Regions continued

Eyre and Western

Currently employment is concentrated in a narrow band of industries – agriculture, forestry and fishing in the Western part and manufacturing around Whyalla, making the region more vulnerable to structural and cyclical influences. Under-representation in growth sectors, combined with low educational attainment means that displaced workers from these sectors often find it difficult to find alternative, sustainable employment.[27]

Following the visit to Whyalla in May 2011 the Commission engaged RESA and Innovation Economics to conduct a workforce study associated with current and upcoming mining projects in the Eyre Peninsula *(Case study 2)*. The report provides the Commission with a better understanding of the total job openings associated with the projects, the types of jobs required and the associated qualifications. It provides the Eyre and Western region with a resource that enables program responses so that the opportunities from these projects are maximised by the local community.

Case study 2: Workforce study for the resources sector in the Eyre Peninsula

Over the next five years the existing mines of OneSteel and Iluka are likely to be joined by at least seven new mining operations. These projects will transform the economic and social structure of the Eyre Peninsula.

If all seven mines proceed to the operating phase, it is estimated that more than 2200 ongoing direct jobs will be created in mining and processing operations over the next decade. Due to high turnover within these operations, the new job openings will substantially exceed the number of new jobs created. Therefore it is estimated that replacement demand over the next decade will exceed 5000 positions. During the construction phase it is estimated that an additional 4500 new job openings will be generated. Notwithstanding that most positions require formal qualifications, the study estimates that between 10% and 20% of positions may be available to people without experience.

Data gathered in the workforce study will inform and influence the courses and levels of propriate allocation of training places and resources. Workforce development advisors, to be funded under *Skills for All*, may also be of value in aiding industry to identify workforce development strategies for attracting and retaining workers and broker relevant training and support.

The study points to the benefits of mining companies engaging with local communities to ensure regions maximise and capture the economic and social benefits on offer. Iluka, Iron Clad, OneSteel Whyalla and Centrex have programs and policies in place that support Indigenous employment.

The study supports the recommendation by the National Resources Employment Taskforce that resource companies be required to provide a workforce impact statement (to outline the workforce needs of their project) as part of the government approval process. The Commission supports this recommendation and suggests the government consider this approach as it finalises its negotiations with BHP Billiton on the Olympic Dam project.

27 DFEEST 2011, internal documents.

The Commission's consultations in Whyalla highlighted that the region has a significant number of people who have been disengaged from work for long periods of time. Ceduna and Whyalla are among the most disadvantaged Statistical Local Areas in South Australia. The percentage of young people aged 15-24 receiving an unemployment benefit is much higher in Eyre and Western (8.4%) than South Australia as a whole (5.2%). Similarly, the number of jobless families is considerable higher than the state average.[28]

A focus on entry level employment opportunities is required to build work history and a sustainable work ethic. The regional profile prepared by the RDA Whyalla and Eyre Peninsula has a strong focus on improving employment opportunities for Aboriginal people and ensuring that all local people have the necessary education and skills to take advantage of employment in growth industries.

In Eyre and Western the major workforce participation challenges are:

- Entrenched workforce participation disadvantage (often intergenerational), particularly in the Whyalla region.
- A very high share of employment in just two sectors – agriculture, forestry and fishing, and manufacturing.

Far North

The Far North region has a number of major projects that will require skilled staff over coming years, particularly in the mining, infrastructure development and construction industries. Therefore, it is imperative that the Far North has a sufficient pool of skilled workers to take up these job openings. Many of the people who have been disadvantaged in the labour market, and who have been out of work for some time, need foundation skills if they are to achieve sustained employment.

Employment in the region is concentrated in a narrow base – mining, retail trade and health and community services. While the mining sector is responsible for a great deal of employment and export income in the Far North, over-reliance can lead to vulnerability, especially if the current mining boom comes to an end. Job shedding that occurred in the mining sector during the global financial crisis also illustrates how vulnerable the sector is to changing economic conditions.

Furthermore, despite the many highly-skilled and technical jobs demanded in the mining sector, Roxby Downs contains a relatively high percentage of unskilled and semi-skilled workers (26% of those employed), above that of the Far North region generally (23.5%) and South Australia as a whole (17.2%). While these low- and semi-skilled workers in Roxby Downs may currently be in full-time and relatively highly-paid employment, they remain vulnerable to job losses associated with changing economic conditions. In addition, the sheer geographic spread of the Far North region means that job opportunities, such as those in Roxby Downs, are often located a considerable distance from where a large number of people who are disadvantaged in the labour market live, such as in Port Augusta.[29]

The region's priorities for increasing participation in learning, training and work are focused on:

- Building literacy and numeracy and foundation skills, in response to low levels of educational attainment. Across the Far North region in 2006, there were 7950 people whose highest level of educational attainment was year 11 or lower. This is out of a total working age population of just 19,075.

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28 Ibid.

29 Coober Pedy and Port Augusta Statistical Local Areas (SLAs) are among the most disadvantaged SLAs in South Australia. See Vinson 2007, *Dropping off the Edge: the distribution of disadvantage in Australia*, p. 79.

Regional Consultations: Themes and Priorities in State Government Regions continued

Far North

- Working with industry and community to improve workforce opportunities and outcomes for Aboriginal people. Despite having the smallest overall population of all the State Government Regions, in 2006 the Far North had the second highest Aboriginal population – 5067, or 18.7% of the region's total population compared with 1.7% state-wide.
- Developing more opportunities for young people to gain training and work through programs and services that provide individualised support and skills to assist their pathway to employment. Across the Far North, 29.8% of all 15-19 year olds were not in full-time education or employment, compared with a state average of 21.6%.

Fleurieu and Kangaroo Island

Significant population growth targets have been set for the Fleurieu sub-region in the *30-Year Plan for Greater Adelaide* (concentrated in Victor Harbor and Goolwa). While business development and job opportunities will be linked to industries serving the growing population, the nature and range of these services are likely to be different, largely due to the older age profile of the Fleurieu region. This older population will require specific service industries, such as allied health and recreation and sport. Therefore, a structural change in the economy is occurring, away from a predominantly male-dominated agricultural workforce with relatively low attainment in formal education, to a female-focused, qualified workforce.

The geographic constraints relating to Kangaroo Island mean that agriculture and tourism form the cornerstone of economic development and jobs creation. According to the EDB, the island is economically and socially 'languishing'.[30] There are only 4500 residents, transport to and from the island is expensive, delivery of state government services is fragmented, and the cost of inputs to production and the cost of delivering goods to market are high. The EDB has recommended the establishment of a Kangaroo Island Futures Authority to deliver on projects outlined in their report.

Compared with state-wide trends the Fleurieu and Kangaroo Island region has recently experienced poor employment and high unemployment. This may be due to a number of factors, including the impact of reduced spending power of self-funded retirees as a result of the global financial crisis (and its subsequent effect on small businesses in the region), and continued challenging environmental conditions.

In Fleurieu and Kangaroo Island the major workforce participation challenges are:

- People with low educational attainment. There were 11,827 people whose highest level of educational attainment was year 11 or lower at the time of the 2006 Census. This is out of a total 'working age' population of 25,878.
- Young people at-risk in the labour market. It is estimated that there were 602 15-19 year olds neither learning or earning (i.e. not in full-time education or employment) at the time of the 2006 Census (26.2% of the 15-19 year old population, well above the state average of 21.6%).

Limestone Coast

More than 35% of employment in the Limestone Coast region is in agriculture, fisheries and forestry (18.8%) and manufacturing (16.8%), a share well above the state average. Furthermore, agricultural employment in the region is characterised by a high concentration of males (71%) and over half of those employed are aged 45 and over. Together with health and community services, transport and storage, and education these industries face significant workforce issues as this cohort leaves the workforce.

30 Economic Development Board 2011, *Paradise Girt by Sea. Sustainable economic & social development for Kangaroo Island*, p. 4.

The unemployment rate in the region fluctuates and is higher in the Lower South East than the Upper South East. It is consistently lower than the state average over time.

There are a number of cyclical and structural challenges facing the agricultural and manufacturing sectors in the region, such as a glut in grapes, milk price reductions, high exchange rate, reductions in timber product sales, increased efficiencies through the use of technology, changes in land use, and a drop in private investment.[31]

The Limestone Coast is characterised by a relatively low educational attainment, a high number of mature age people and women of all age groups not participating in the labour force, and the ageing workforce.

The region's priorities in response to these issues are based on:

- Ensuring accessibility of support services and skills development for those who are vulnerable or not participating in the local labour market.
- Driving skills development that builds individual skill sets that are mobile, easily transferable and meet current and future industry needs in the region.

Murraylands and Riverland (Murray and Mallee State Government Region)

Murraylands and Riverland is another region facing structural pressures because its economic fortunes are significantly reliant on the agricultural sector. In 2006, 21.8% (or 6419) of people employed in Murraylands and Riverland worked in the agriculture, forestry and fishing. This is considerably above the state average for agricultural employment (4.7%). The sector has experienced cyclical and structural difficulties including droughts, a wine grape glut, the impact of the global financial crisis and the high value of the Australian dollar. The sector has a high concentration of males and older workers.

There is a potential skills mismatch between the Murraylands and Riverland labour force and future industry opportunities. This can be seen through the target sectors identified in the Murraylands and Riverland *Regional Roadmap*, which include new and emerging industry sectors such as alternative energy, niche food processing, education and skills training, aquaculture and tourism.[32]

The workforce participation priorities for the region relate to the following issues:

- The relatively low educational attainment of people in the region, which is among the lowest in South Australia.
- Newly-arrived migrants with language and literacy issues. Over the past five years, 529 new migrants settled in Murraylands and Riverland, with 215 of them (41%) settling in Murray Bridge.[33]
- Aboriginal disadvantage. Murraylands and Riverland have a substantial Aboriginal population with just over 2000 people – 3.1% of the total population, which is significantly above the state average of 1.7%.
- Entrenched unemployment and labour market disadvantage within the Murray Bridge Local Government Area. Out of 114 Statistical Local Areas Murray Bridge is among the five most disadvantaged areas in South Australia.[34]

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31 Regional Development Australia's *Limestone Coast Regional Roadmap 2010-2015*.

32 RDA 2010, *Murraylands and Riverland Regional Roadmap and Strategic Plan 2010-2013*, p. 58,

33 Data provided by DFEEST Skills Recognition Unit.

34 Vinson, T 2007, *Dropping off the Edge: the distribution of disadvantage in Australia* p. 79.

Regional Consultations: Themes and Priorities in State Government Regions continued

Murraylands and Riverland (Murray and Mallee State Government Region)

The focus of the workforce participation priorities for Murraylands and Riverland include ensuring that people with low educational attainment have access to learning, training and employment pathways; assisting individuals who are marginalised in the labour market (such as Aboriginal people, migrants from a non-English speaking background and people with disabilities) to transition to sustainable pathways; and increasing workforce participation by taking advantage of regional opportunities for economic growth.

Yorke and Mid North

Agriculture remains the largest employer in the region but over recent years has moved from broad-acre farming to more intensive farming and animal husbandry (i.e. pig and poultry farming), feed lots and horticulture. The Clare Valley is recognised as a premium wine region but has been struggling with falling grape prices and oversupply problems. The retail and hospitality industries continue to provide the bulk of employment opportunities for low-skilled job seekers.

Much of the work in the region is seasonal in nature because of the predominance of employment in agriculture, viticulture, retail and hospitality and also the vagrancies of the weather. The region experiences high levels of underemployment and youth unemployment. Also a large number of young people leave the area to pursue tertiary education. The high number of people in the region that do not have a driving license causes problems with access to services and availability for employment. Low levels of education attainment and low levels of literacy and numeracy continue to be high on the agenda. Large skill shortages exist in metal fabrication, building and construction and health services.

There is considerable opportunity for value-adding of commodities in Yorke and Mid North. The region has nearly half of the wind energy capacity installed in South Australia with further potential for geothermal and wave developments. Significant extractive industries exist in the region, including limestone, dolomite, gypsum and sand. A number of mining companies are expending considerable funds in exploration, such as on copper/gold deposits on the Yorke Peninsula. Demand for skilled construction workers and skilled tradesmen will further increase once these projects progress to the start-up phase.

Local stakeholders have agreed to focus on:

- Education and skill attainment by developing programs that assist individuals to increase their foundation skill levels and provide pathways into further education and training.
- Increased participation in the labour force by developing coordinated initiatives to engage individuals who are not working.
- Youth engagement and participation by creating better linkages between services to increase transition options for young people into further education, training and employment.

Metropolitan Adelaide

The regions making up metropolitan Adelaide (Northern, Eastern, Southern and Western Adelaide) have a range of future projects planned – the new RAH, Adelaide Oval re-development, Playford Alive and several retail precincts. Together these create significant employment opportunities in construction, health and community care and retail. There is contraction in the building industry due to the end of *Building the Education Revolution* stimulus funding and restrictions on capital lending by banks. Metropolitan Adelaide has generally below average levels of unemployment except in northern Adelaide which has risen over recent years.

There are pockets of significant disadvantage in certain parts of Northern, Western and Southern Adelaide. With some major employers closing down in the North and South (e.g. Mitsubishi, Mobil, Electrolux and Bridgestone), significant skill developers have been lost to the regions. Generational unemployment remains an issue as well as youth unemployment, Indigenous engagement, barriers facing people with mental and physical disabilities and problems facing mature age jobseekers. Each region has new migrants from a non-English speaking background who need assistance with language and literacy. Unlike non-metropolitan regions, more young people move to Adelaide for study and work reasons.

Southern Adelaide is positioning itself as the cleantech and water hub of Adelaide, which will cater for evolving 'green collar' jobs. The development of the Sustainable Industries Education Centre at Tonsley Park is part of the state's strategy to incorporate more clean, green technologies into training in the building, construction and water industries. Significant defence projects in Northern Adelaide will provide construction and advanced manufacturing jobs. One challenge is to ensure that all groups in the community benefit from the economic opportunities.

Various skill and workforce development challenges are common in metropolitan Adelaide:

- Many people with potential are disengaged from the workforce because of their low levels of LLN skills.
- Improvements in LLN and STEM skills are needed for all workers, including those in higher level jobs.
- Access to transport and flexibility in training delivery are impacting on participation in study and work.
- Soft skills such as integrity, work ethic and punctuality are fundamental.
- Information and advice is required for career pathways and training options.
- Improved cross-agency collaboration and communication is required to ensure better use of funding and less duplication.

Priorities that have been developed for the metropolitan region include:

- Linking young people at risk in the labour market with appropriate support services.
- Increasing awareness of relevant programs and activities for people currently not engaged with the labour market.
- Improving foundation skills of the large number of people with low educational attainment.
- Strengthening links between industry, education and training.

Chapter 6

BUILDING CAPACITY

The Commission commends the government's reforms under *Skills for All* and we have indicated throughout the plan our support for specific elements. We have also commented on areas we believe should be monitored closely as the reforms are implemented.

The Commission is of the view that, for the reforms to be effective, they must be underpinned by concerted efforts to build the capacity of players in all parts of the system: students (and potential students), employers, training providers, intermediaries, industry skills advisory bodies and government agencies.

Students

As South Australia moves towards a student demand-driven entitlement model, it is imperative that students are empowered to make informed choices about their work and study pathways. The system must build the capacity of individuals to choose the training that meets their aspirations while offering providers able to deliver training and support services that best meet their individual needs. This applies equally to new entrants, second-chance learners and existing workers who are upskilling or re-skilling, or who require additional literacy or numeracy skills to adapt to changing workplace requirements.

We have commented elsewhere on the need for comprehensive, high quality, easy to access career and labour market information and services, as well as information on the range and quality of services offered by RTOs, to support informed client choice. We are strongly of the view that the publication of an *eligible qualifications list*, of itself, will not be sufficient to support informed student choices. The Commission suggests that the list be complemented by a guide that indicates which jobs are likely to have good prospects in the future, similar to that published by DEEWR at the national level.

Improving the available information must be treated as a matter of urgency in the reform process. In doing so, users of the system must be made aware of the services and resources available and develop the ability to question and validate the services being marketed by training organisations.

We also acknowledge that many students are well-equipped to navigate their own pathways with little assistance. The system must be flexible enough to support the full spectrum of student needs and Commonwealth programs should be leveraged to assist this.

The Commission fully supports the opportunity for students to work with their chosen provider to develop a customised training plan to document their training pathway (including an assessment of their prior learning) and any additional support services they require.

The focus of the *Skills for All* individual entitlement should be on those skills and qualifications that enable individuals to be adaptable, within their chosen career, but also throughout their working life.

The mechanisms being put in place to monitor quality outcomes under *Skills for All* provide an opportunity to assess how the reforms are performing in terms of assisting students meet their aspirations. This, in turn, can help assess the effectiveness of the student demand-driven approach in aligning student aspirations with industry demand for skilled workers.

Industry

Skills for All requires industry to increase its participation and co-investment in training and workforce development. This will not be achieved unless the reforms can effectively build a training culture and increase industry and employer commitment to developing and fully using the skills of the workforce. This needs to be done within a broad workforce development framework.

Funding and other levers should be used to foster a more widespread learning culture among South Australian firms, which, in turn, will enable the state to capitalise on the economic opportunities on the horizon. We are strongly of the view, however, that the effective use of skills in the workplace is just as important as the acquisition of those skills. Given the current scale of under-utilisation (in 2009 42% of Australian employers reported that the skills level of their employees was above that required by the organisation), improvements in skills use could be a principal source of productivity improvement over the next decade.

Under the new policy framework, employers will need to be more discerning purchasers of education and training services and will have to build relationships with providers. Many will need assistance in articulating their skill needs and developing workforce plans which are linked to their business strategy. Many will also need assistance in identifying and developing appropriate workforce development responses.

The Commission strongly supports the move for endorsed workforce development advisors to work with enterprises, collectives of employers and clusters to identify skill needs, promote workforce development strategies and raise awareness of available training options and funding sources. It is important that these advisors have access to high quality tools to assist them and that they have strong links with industry.

The network of endorsed advisors should include practitioners with expertise in workforce planning, together with practitioners who can provide more general advice focusing on training and other responses (such as attraction, retention and job re-design).

As the pool of skilled labour diminishes over the next decade (as discussed in Chapter 2) employers will increasingly have to compete with each other to attract and retain skilled workers. Initiatives to foster high performance work practices will become increasingly important.

Funding levers, such as the new *Skills in the Workplace* initiative, should be used to encourage and support firms and industry sectors to build capacity in this area. This includes ensuring that workforce plans developed by firms form part of the assessment process for access to public funds. These plans must not only demonstrate that workforce planning has occurred, they must also show evidence that applicants have considered how they will approach issues such as workplace organisation, job design and skills utilisation.

We watch with interest the work of Skills Australia in this area, particularly its forthcoming publication of a range of skills utilisation case studies from industries across Australia.

As discussed in Chapter 2, the sliding subsidy scales for different-sized firms under *Skills for All* should encourage take-up of training within smaller firms which have previously found it difficult to invest in the skills of their workforce. The Commission also believes that DFEEST should work in collaboration with a few selected regions or sectors to facilitate a limited number of high impact interventions which can serve as exemplars. These should build on the learnings of previous projects funded through state government initiatives and Commonwealth-funded schemes.

The new Commonwealth Workforce Development Fund provides further opportunities to develop collaborative initiatives to support key industry sectors. The *Skills in the Workplace* initiative should evolve over time in line with changes to the national fund, always ensuring that duplication is minimised.

The Commission strongly supports driving industry co-investment in training and workforce participation through procurement and other processes related to major projects and infrastructure. These projects should require workforce planning and investment in skills that drive employment outcomes, particularly for groups underrepresented in the workforce. The state government's *15 Per Cent Workforce Participation in Government Construction Procurement Policy* provides a model to achieve this (refer Case study on page 11).

Providers

As discussed in Chapter 2, in order to access public funds under *Skills for All*, providers will need to satisfy pre-qualification requirements which are over and above those required to be a registered training organisation. These will focus on quality, financial viability, links to industry, data compliance, student support and service capacity.

To take full advantage of the opportunities under *Skills for All*, RTOs will need to build capacity in:

- Undertaking front end assessments of students' needs, including recognition of prior learning, and articulating these in personalised training plans.
- Working with a broader range of clients – ranging from school students to experienced workers updating their skills – in a broader range of settings.
- Developing relationships with other service providers, including learner support services, where these are not available within the RTO.
- Working more closely with employers to determine and meet their training and broader workforce development needs.

There will also need to be a continued and strengthened commitment to building the capacity of the VET and ACE workforce through targeted professional development initiatives. The Commission supports the initiatives that DFEEST is putting in place to support providers within the VET and ACE sectors to develop the skills of their workers.

We fully support the requirement under *Skills for All* that publicly-funded training providers will need to participate in nominated capacity building initiatives to ensure their practices are consistent with good practice.

The Commission supports the separation of purchaser and provider through the establishment of a separate Office of TAFE SA, and the clear identification of the critical ongoing functions of the public provider. TAFE SA needs to respond more flexibly in the new environment and its managed transition is a sensible approach.

Intermediaries and Industry Skills Advisory Bodies

The VET system in South Australia is supported by a network of bipartite industry skills boards which provide an integral link between policy and funding agencies and individual firms and industry sectors. The Commission relies heavily on this network when it is gathering industry intelligence and advice to complement its own analysis of industry skill needs. These bodies also develop a range of tools, models and programs which represent best practice approaches to training and workforce development. The Commission believes that these models – which demonstrate policy in practice – should be showcased as exemplars to other sectors and organisations.

Intermediaries and Industry Skills Advisory Bodies continued

Other players within this space include the national ISCs (some of which have a presence in South Australia), unions, employer groups, practitioners and community organisations.

Under *Skills for All* the skills advisory network will be complemented by funding to support endorsed workforce development advisors to work with firms and sectors on more specific needs, such as workforce planning, workforce development strategies, advice on quality RTOs and information on funding sources for training. We re-iterate the importance of these advisors having the specialist skills required to provide the range of advice and support required by firms, and that they have access to high quality tools to support them in this role.

It is important that new and existing networks work effectively with each other and also with government agencies, to ensure a coordinated approach to capacity building.

Government Agencies

As South Australia moves towards a demand-driven system, government agencies, particularly DFEEST, will need to re-focus their efforts to ensure that:

- They are better able to anticipate where student demand might occur and develop ways of steering students towards areas of industry need.
- Industry engagement strategies effectively gather the information needed to feed into priority-setting and to the development of high quality, appropriate consumer information.
- They have an adequately resourced quality assurance system underpinned by quality data systems which allow for monitoring and evaluation of provider performance and student outcomes.
- They can effectively assess demand for, and measure the supply of, skill sets.
- They can effectively assess which proposals from industry should be prioritised for public funding under the new workforce development framework.

As the national reforms to VET are rolled out it will be important that state government initiatives leverage and complement – but do not duplicate – Commonwealth initiatives, including the new Workforce Development Fund and business support programs such as *Enterprise Connect* and the *Workforce Innovation Program*.

In essence, ensuring that all of these elements are working effectively together will drive the success of *Skills for All*. The following case study of the collaborative approach used to avoid job losses in the automotive sector during the global financial crisis (GFC) demonstrates how this can be done in a way which supports workers, the workplace and the broader sector.

Case study 3: Workforce retention through a collaborative approach

In April 2009, GM Holden announced that it was cutting car assembly to a single shift and halving production as a result of significant reductions in car sales caused by the GFC. This reduction was in place from May 2009 until December 2010. The Commonwealth and state governments worked with GM Holden and its supply companies to identify strategies by which they could retain their workforce through upskilling or additional training opportunities during production downtime.

At GM Holden the majority of employees undertook Certificate III in Competitive Manufacturing. Training in the supply companies was predominantly in Competitive Manufacturing, Front Line Management and Human Resources. DFEEST-funded training associated with secondary employment for GM Holden workers who needed to secure other part-time employment during the period of reduced hours.

Additional services offered through the state government included an initial workforce skills audit, the provision of career advisory services, financial management skills and information on training which fell outside the Commonwealth's Productivity Places Program, for example occupational licensing and skill sets.

A total of 605 workers registered for the Training for Secondary Employment Program. Of these, 561 workers accessed DFEEST-funded training in qualifications ranging from truck, forklift, electrical and white card licenses to short courses in security and hospitality. A further 38 GM Holden workers accessed career coaching workshops. In total, 651 qualifications, licences and statements of attainment were awarded.

Chapter 7

CONCLUSION

The Commission looks forward to working with DFEEST as the *Skills for All* policy reforms are rolled out over the next four years. We will watch with interest to see what impact the reforms have on:

- raising the skill levels of South Australians
- supporting informed student choice
- driving improvements to the overall quality of the system
- the capacity of players within the system to work effectively together
- supporting economic growth through productivity improvements and increased responsiveness within firms and sectors
- raising workforce participation and fostering a more inclusive society.

We will monitor closely those facets of *Skills for All* which we have flagged as being crucial to the success of the policy, namely:

- The need for quality assurance mechanisms that genuinely drive the overall quality of the system – not only in terms of training and assessment services but also in terms of course offerings that are truly relevant to industry and that provide meaningful vocational pathways for students.
- The need for the ACE sector to be effectively developed as the fourth sector of learning in South Australia. For this to happen, resources need to be maximised and pooled so it can expand its reach. This must be done through a whole-of-government approach.
- The need for adequately funded and integrated learning support services to help students achieve their learning goals and transition to work or further learning. The proposed trial should be evaluated comprehensively with a view to extending it to all who require this level of support.
- The need for comprehensive, high quality career development *services* – not just career information provision. We believe that the system should be financially supported to provide students, jobseekers and existing workers with access to career advice and support to transition from school to employment, education or training, and between jobs.
- The importance of the proposed workforce development advisors who can work with enterprises, collectives of employers and clusters to identify skill needs, promote workforce development strategies and raise awareness of available training options. It is important that these advisors have access to high quality tools to assist them in this role.

Finally, we will continue to consult with our stakeholders to identify new and emerging policy priorities which need addressing as we navigate this new environment.

Appendix 1

MODELLING RESULTS

This Appendix supports the information presented in Chapter 3 and includes:

- The results of modelling of future economic growth, labour productivity and employment growth based on an update of the economic scenario presented in the EDB's 2009 *Economic Statement*.
- A quantitative assessment of the workforce challenge over the five-year period from 2009-10 to 2014-15 related to new opportunities resulting from major projects and the impacts of the ageing workforce.

Updated Economic Scenario

The modelling numbers presented below incorporate the updated EDB economic scenario for 2011, which uses known data and information, particularly about major projects. The scenario takes into account baseline economic growth and the employment impacts of major projects which are considered to be 'above average'.

The 2011 EDB economic scenario incorporates revisions to the size and scheduling of major projects which suggests that South Australia will not experience the fuller impacts until the later part of the forecast period (2013-14 and 2014-15).

The scenario was developed early in 2011 before the economy started to show signs of weakening. This may have some impact on the five-year averages presented in this plan. The estimates will be reviewed in early 2012.

Key Points:

Projected economic growth: average of 3.25% per annum between 2009-10 and 2014-15.
Projected employment growth: average of 1.65% per annum between 2009-10 and 2014-15.
Projected labour productivity growth: 1.6% per annum from 2009-10 and 2014-15.

The Demand Outlook

Over the five-year period 2009-10 to 2014-15 it is estimated that growth in the South Australian economy will create ***69,000 new jobs***. This number is lower than was projected for the 2008-09 to 2013-14 period in the Commission's 2010 plan. The difference is due to a lower number of new jobs generated by major projects rather than a slower rate of underlying employment (which is projected to be stronger in the current update than in the 2010 plan). Previously, the number of new jobs from major projects was strengthened by employment growth being calculated from the very low GFC-affected level in 2008-09.

Over the planning period, the number of net job openings resulting from replacement demand is likely to be about ***94,000***.

The Demand Outlook continued

The combined impact of economic growth, plus the need to replace workers who will be leaving the workforce or changing occupations, results in estimated total job openings over the next five years of about *163,000*.

Data Updates/Refinements to Methodology:

- The EDB scenario has been updated for the 2009-10 to 2014-15 period. The updated scenario incorporates the latest available information on rates of economic and employment growth, productivity and major projects demand.
- ABS labour force survey data (used to estimate baseline occupational shares) has been updated for 2009-10.
- Monash Centre of Policy Studies (CoPS) employment forecasts have been updated using the September 2010 release (Monash forecasts are used to project future occupational shares).
- Future employment growth rates across sectors were developed based on advice from the Commission Modelling Working Group.
- Monash Centre for the Economics of Education and Training (CEET) replacement rates have been updated to incorporate 2010 labour force data (replacement rates are used to estimate replacement demand).

Demand for Qualifications

To capture the likely total demand for qualifications, the skilling requirements of new entrants (to fill job openings resulting from expansion and replacement demand) and the skilling requirements of the existing workforce have been estimated separately. The methodology used to estimate the future demand for qualifications draws heavily on methodology developed by CEET.[35]

Underpinning these estimates is the assumption that total skills deepening will occur in the forecast period at a rate that is consistent with the Skills Australia *Open Doors* scenario and therefore will be more subdued than that observed in recent years.[36]

Data Updates/Refinements to Methodology:

- Skills deepening rates have been updated to incorporate 2010 ABS Survey of Education and Work data.
- Skills deepening rates have been estimated at the 4-digit occupation level by using occupation and qualification shares and an iterative re-distribution process. Previously skills deepening rates for a given sub-major occupation group were applied to each of the 4-digit occupations within the sub-major group. This approach resulted in some anomalies at the 4-digit level. The new approach allows the qualification profile for each 4-digit occupation to deviate from the average qualification profile for the sub-major group.
- A continuation of historic trends in the forecast period would result in skills deepening occurring at a rate of 1.2% per year. Due to the asymptotic nature of skills deepening, it was assumed that skills deepening will occur at a slower rate of 1%, which is consistent with the Skills Australia *Open Doors* scenario.

35 Shah, C, 2010, *Demand for qualifications and the future labour market in Australia 2010 to 2025*, A report for the Department of Education, Employment and Workplace Relations, Canberra.

36 Skills Australia 2010 *Australian Workforce Futures: A National Workforce Development Strategy.*

New Entrants

To meet the projected industry demand, it is estimated that 110,000 new entrants will need to gain a qualification between 2009-10 and 2014-15:

Table 1: **New Entrants, Demand for Qualifications, 2009-10 to 2014-15**

Qualification Level	Number
Bachelor degree or higher	50,000
Advanced Diploma/Diploma	16,000
Certificate IV	12,000
Certificate III	23,000
Certificate II	7,000
Certificate I	4,000
Total	**110,000**

Components may not add up to total due to rounding

Existing Workers

Projected demand for qualifications from existing workers totals around 186,000. This figure results from an estimated 66,000 workers who are upskilling (completing a qualification at a higher level than their current highest level qualification) and an estimated 120,000 workers who are gaining a qualification at an equivalent or lower level (referred to as 'skills broadening').

The number of workers upskilling (66,000) is lower than what was projected for the 2008-09 to 2013-14 period in the 2010 plan. The number of existing workers upskilling is dependent on the change in the proportion of workers with a non-school qualification over the forecast period. In the 2010 plan, growth in the proportion of workers with a non-school qualification was calculated from the low GFC-affected level in 2008-09. This strengthened the change in this proportion and in turn, boosted the number of workers upskilling.

Table 2: **Existing Workers (upskilling), Demand for Qualifications, 2009-10 to 2014-15**

Qualification Level	Number
Bachelor degree or higher	15,000
Advanced Diploma/Diploma	18,000
Certificate IV	9,000
Certificate III	14,000
Certificate II	1,000
Certificate I	8,000
Total	**66,000**

Components may not add up to total due to rounding

Demand for Qualifications continued

Existing Workers

The composition of existing workers broadening activity differs to that projected for the 2008-09 to 2013-14 period in the 2010 plan, particularly for Certificate II, Certificate IV and Bachelor degree and above level qualifications. The current estimates are considered more reflective of broadening activity across qualification levels, as it is based on VET and higher education data on current level of qualification completed by previous highest level qualification. Previously, highest level of qualification completed was assumed to represent the qualification in which broadening occurred.

Table 3: **Existing Workers (broadening), Demand for Qualifications, 2009-10 to 2014-15**

Qualification Level	Number
Bachelor degree or higher	30,000
Advanced Diploma/Diploma	17,000
Certificate IV	23,000
Certificate III	33,000
Certificate II	14,000
Certificate I	3,000
Total	**120,000**

Components may not add up to total due to rounding

Data Updates/Refinements to Methodology:

- Aggregate estimates of skills broadening have been calculated using ratios from the ABS Survey of Education and Training Experience 2009 (employed persons with a non-school qualification who have completed a non-school qualification in the past 12 months). The distribution of skills broadening across qualification levels and occupations has been estimated using NCVER VET data (employed persons undertaking a qualification at or below their current level) and Graduate Destination Survey data (graduates employed and undertaking further study). This new methodology has resulted in less broadening demand at the Bachelor degree or higher level and increased demand at the Certificate II and IV levels.
- Additional adjustments were made where projected broadening demand at particular qualification levels far exceeded current levels (as suggested by completion data).

Pathways Demand

The Commission acknowledges that its methodology, by definition, attempts only to capture industry demand. This approach, not surprisingly, results in low estimates of demand for Certificate I and II level qualifications. While industry demand for these qualifications is low, they provide pre-employment skills and also an entry point for many individuals (particularly young workers) and can be a stepping stone to higher level qualifications.

The Commission believes that this pathways demand should be incorporated into the modelling, given that a number of individuals will need to undertake lower level qualifications before they can attain the higher level qualifications needed by industry. Pathways demand has been incorporated into the modelling for the first time in 2011 and results in demand for an additional 3000 qualifications at Certificate I/II level over the five-year period.[37]

Table 4: **Pathways Demand for Qualifications, 2009-10 to 2014-15**

Qualification Level	Number
Certificate II	2,500
Certificate I	500
Total	**3,000**

Data Updates/Refinements to Methodology:

- This is the first time pathways demand has been incorporated into the modelling. The methodology has been developed in conjunction with the DFEEST.
- Pathways demand for qualifications was derived using NCVER student numbers for previous highest education level by highest current qualification level. This derivation helped calculate the percentage of student qualification demand where the previous highest level qualification acquired was at the Certificate I or II levels.

Total Demand

The combined demand for qualifications from new entrants, existing workers and pathways demand results in projected total demand over the five-year period for 299,000 qualifications.

Table 5: **Projected Total Demand for Qualifications, 2009-10 to 2014-15**

Qualification Level	Number
Bachelor degree or higher	95,000
Advanced Diploma/Diploma	51,000
Certificate IV	44,000
Certificate III	70,000
Certificate II	24,000
Certificate I	15,000
Total	**299,000**

37 The Commission will continue to refine its methodology for estimating pathways demand.

Projecting the Supply of Qualifications

The supply of qualifications over the five-year period is estimated by extrapolating recent trends in completions at the VET and higher education levels, incorporating policy changes and estimating the contribution from migration. It is acknowledged that the estimates presented below for higher education supply may not capture the full policy impact of changes to the funding of higher education and what impact this will have on enrolments and, hence, completions down the track. This will be monitored as data becomes available.

In addition, it is important to keep the following points in mind in relation to these figures.

- Because only completions are captured, the estimates account for non-completers during the five-year planning period.
- The estimates exclude study which, while accredited, does not lead to a full qualification. For example, the numbers do not include individuals achieving a statement of attainment either through completed units of competency or industry endorsed skill sets. Currently there are no estimates available for the number of completed skill sets.
- The VET data primarily includes publicly-funded training. In addition to publicly-funded VET, fee-for-service activity delivered by TAFE SA and privately-funded contracts of training (traineeships) are also included. A significant (but, again, unquantifiable) amount of training occurs outside of the publicly-funded training system which is not captured.
- The higher education data excludes overseas students.
- The numbers do not capture informal and non-formal training (non-accredited training).

Consequently, the numbers should be considered indicative only, particularly when they are considered against the demand estimates presented above.

Based on an extrapolation of recent trends in available data, the South Australian education and training system can be expected to produce about ***195,000*** post-school qualifications over the five-year period.

This supply of qualifications from the education and training system is lower than projected for the 2008-09 to 2013-14 period in the 2010 plan. This difference is predominantly due to the exclusion in 2011 of completers who have not entered, and are unlikely to enter, the workforce (***wastage***).

Table 6: **Projected Qualification Completions (based on past trends), 2009-10 to 2014-15**

Qualification Level	Number
Bachelor degree or higher	58,000
Advanced Diploma/Diploma	19,000
Certificate IV	29,000
Certificate III	53,000
Certificate II	28,000
Certificate I	9,000
Total	**195,000**

Components may not add up to total due to rounding

Data Updates/Refinements to Methodology:

- COT completions have been updated to 2009.
- VET completions have been updated using final 2008 estimates.
- Higher education completions have been updated using 2009 estimates.
- In this iteration of the modelling VET/COT and higher education completions have been concorded to occupations using 2006 Census data for 15 to 29 year olds (previously, destination survey data from the NCVER Student Outcomes Survey and the GCA Graduate Destination Survey was used). Adjustments were made to the Census-based concordance to focus on likely ***intended*** occupations as opposed to actual occupations. This has limited the number of higher education completers allocated to the retail sector – an issue evident in the 2010 modelling.
- Also in this iteration of the modelling, estimates of wastage (completers who have not entered and are unlikely to enter the workforce) have been accounted for by using wastage rates estimated from 2006 Census data. This has effectively reduced the supply of VET/COT and higher education by 20,500 (or 4100 per annum).

2010 State election commitment

When the 2010 state election commitment of an additional 100,000 training places over six years is factored into the supply of qualifications, the projected number of completions increases by 12,000 over the five-year period.

Table 7: **Projected Additional Qualification Completions, state election commitment 2009-10 to 2014-15**

Qualification Level	Number
Advanced Diploma/Diploma	3,000
Certificate IV	3,000
Certificate III	3,000
Certificate II	1,000
Certificate I	2,000
Total	**12,000**

Productivity Places Program

Additional completions can also be expected from the Productivity Places Program (PPP). Based on the National Partnership Agreement with DEEWR, it has been projected that South Australia could gain around 66,000 additional training places over the life of the program – comprising 23,000 places for job seekers and 43,000 places for existing workers.

Not all of these places have translated into completed qualifications because there is wastage from training, some individuals use more than one place to complete a qualification (to gain higher level qualifications requires more than one place), and some participants (particularly existing workers) use the training to gain a skill set rather than complete a full qualification.

Projecting the Supply of Qualifications continued

Productivity Places Program

In this analysis, we assume that 65% of participants will complete their qualification. While this completion rate is higher than that being achieved currently within the VET system, the Commission is confident of high completion rates for the following reasons:

- For job seekers, completion of the PPP is part of their agreement with their employment services provider and RTOs are supporting job seekers to finish the course in order to receive the completion payment.
- For existing workers, their participation in the PPP is negotiated with their employer and is often linked to a pay rise or other benefits upon completion.
- The use of recognition for prior learning (RPL) up front means that for many students the length of time needed to complete a full qualification is relatively short.

Based on these assumptions it is projected there will be an additional 35,000 completed VET qualifications through the PPP over the forecast period.

In this update of the modelling, the number of PPP completions is significantly higher than projected for the 2008-09 to 2013-14 period in the 2010 plan. This difference is due to a change in methodology: previously the National Partnership Agreement was used to estimate qualification commencements however, in the current update actual PPP allocations data provided by DFEEST has been used.

Table 8: **Projected PPP Completions by Qualification, 2009-10 to 2014-15**

Qualification Level	Number
Advanced Diploma/Diploma	10,000
Certificate IV	10,000
Certificate III	9,000
Certificate II	6,000
Total	**35,000**

Data Updates/Refinements to Methodology:

- PPP data has been updated to take into account existing worker allocations in 2010 and job seeker allocations in 2011 (provided by DFEEST).
- Future PPP completions are distributed across the occupational sectors in a way that is consistent with the 2006 Census data for persons aged 15 to 29 years.
- Previously, commencements (to which the 65% completion rate is applied) were derived by reducing allocated training places (new and continuing enrolments) as published in the National Partnership Agreement using its conversion rates.
- A new methodology for calculating commencements has been developed in conjunction with DFEEST. PPP allocation data collected by DFEEST has replaced the reduced National Partnership Agreement training places figures and are considered to better reflect commencements generated under PPP.

Building Australia's Future Workforce – National Partnership for vocational education and training

As a result of the measures announced in the 2011-12 Commonwealth Budget, it is estimated that there will be an additional 3000 completed qualifications in the forecast period.

Table 9: **Projected National Partnership Completions by Qualification, 2009-10 to 2014-15**

Qualification Level	Number
Advanced Diploma/Diploma	1,000
Certificate IV	1,000
Certificate III	1,000
Total	**3,000**

Data Updates/Refinements to Methodology:

- This is the first time that National Partnership for VET (announced in the 2011-12 Commonwealth Budget) demand has been incorporated into the modelling. The methodology has been developed in conjunction with DFEEST.
- It is assumed that South Australia's share of the annual funding of $238.4 million under the National Partnership will equate to the State's population share (7.4% or $17.6 million per year).
- Based on what has been observed in the PPP for existing workers program, the cost of each commencement is estimated to be $3900. Therefore South Australia's share of the National Partnership funding equates to 4500 commencements per year.
- The supply of qualifications from this funding source has been included in the model in a similar manner to the election commitment contribution to qualifications, with the disaggregation by qualification and occupation being determined by the undersupply of qualifications.
- It is important to note that the number of completions being significantly lower than total commencements in the period is consistent with DFEEST advice that there is a time lag of up to six months between the allocation of funds and actual commencements and that certificate level and advanced diploma/diploma level qualifications then take two and three years to complete respectively.

Net Migration

In addition to supply coming through the education and training system, net migration also contributes to the pool of qualifications in the state labour market. Over recent years population growth in South Australia has been relatively strong, driven overwhelmingly by net overseas migration. The growth in population has, in turn, boosted labour supply and qualifications.

Based on trends in net interstate migration and Skills Australia forecasts of potential net overseas migration, it is projected that South Australia will gain 22,000 additional qualifications over the next five years.

Projecting the Supply of Qualifications continued

Net Migration

In this update of the modelling, the supply of qualifications from net migration is lower than projected for the 2008-09 to 2013-14 period in the 2010 plan. Previously, it was assumed that net overseas migration would continue around current levels. Projections are now based on applying South Australia's recent share of total net overseas migration to the projected annual level of 250,000 assumed under the Skills Australia *Open Doors* scenario. This results in net overseas migration in South Australia easing in the forecast period, which is consistent with the Department of Immigration and Citizenship's (DIAC) expectation that net overseas migration will be lower due to weaker temporary migration in coming years.

Table 10: **Projected Net Migration (overseas/interstate), 2009-10 to 2014-15**

Qualification Level	Number
Bachelor degree or higher	17,000
Advanced Diploma/Diploma	3,000
Certificate III	2,000
Total	**22,000**

Data Updates/Refinements to Methodology:

- ABS interstate arrivals and departures have been updated to June 2010.
- Net overseas migration by visa type has been updated for 2008-09.
- The methodology for calculating net overseas migration and the supply of qualifications from overseas migrants was refined in conjunction with DFEEST and DTED.
- Projections of net overseas migration are now based on applying South Australia's recent share of total net overseas migration to the projected annual level of 250,000 assumed under the Skills Australia *Open Doors* scenario.
- The supply of qualifications from unemployed overseas migrants has been included in the current update. It is assumed that unemployed overseas migrants have the same occupation and qualification profile as employed overseas migrants.
- The 60% of overseas student migrants that are included are assumed to have the same occupation and qualification profile as domestic 15 to 24 year olds.

Total supply

Combining the estimated PPP qualifications (35,000), South Australia's election commitment (12,000), the Commonwealth Budget initiatives (3000) and net migration (22,000) with projections of existing effort (195,000), results in total projected supply of qualifications over the five-year period of 268,000.*

* Components may not add up to total due to rounding

Imbalance of Qualifications

Table 11 compares total demand for qualifications with projected supply of qualifications over the planning period, resulting in an estimated undersupply of 31,000 qualifications over the five-year period.

Table 11: **Projected Demand and Supply of Qualifications, 2009-10 to 2014-15**

Qualification Level	Demand	Supply	Imbalance (Supply minus Demand)
Bachelor degree or higher	95,000	75,000	-20,000
Advanced Diploma/Diploma	51,000	36,000	-15,000
Certificate IV	44,000	43,000	-1,000
Certificate III	70,000	69,000	-1,000
Certificate II	24,000	35,000	11,000
Certificate I	15,000	11,000	-4,000
Total	**299,000**	**268,000**	**-31,000**

Components may not add up to total due to rounding

ACRONYMS

ABS	Australian Bureau of Statistics
ACE	Adult Community Education
ANZSCO	Australian and New Zealand Standard Classification of Occupations
ASQA	Australian Skills Quality Authority
CEDA	Committee for Economic Development of Australia
CEET	Centre for the Economics of Education and Training (Monash University)
CITB	Construction Industry Training Board
COAG	Council of Australian Governments
CoPS	Centre of Policy Studies (Monash University)
DEEWR	Department of Education, Employment and Workplace Relations
DFEEST	Department of Further Education, Employment, Science and Technology
DTC	Defence Teaming Centre
EDB	Economic Development Board
FTH	Food, Tourism and Hospitality Industry Skills Advisory Council
GFC	Global Financial Crisis
GSP	Gross State Product
ISB	Industry Skills Board
ISC	Industry Skills Council
LLN	Language, Literacy and Numeracy
LSS	Learning Support Services
NES	National Employment Standards
PPP	Productivity Places Program
RDA	Regional Development Australia
RESA	Resources and Engineering Skills Alliance
RPL	Recognition of Prior Learning
RTO	Registered Training Organisation
SACE	South Australian Certificate of Education
SACES	South Australian Centre for Economic Studies
SASP	South Australia's Strategic Plan
STEM	Science, Technology, Engineering and Maths
TEQSA	Tertiary Education Quality and Standards Agency
TGSS	Training Guarantee for SACE Students
VET	Vocational Education and Training

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Notes

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