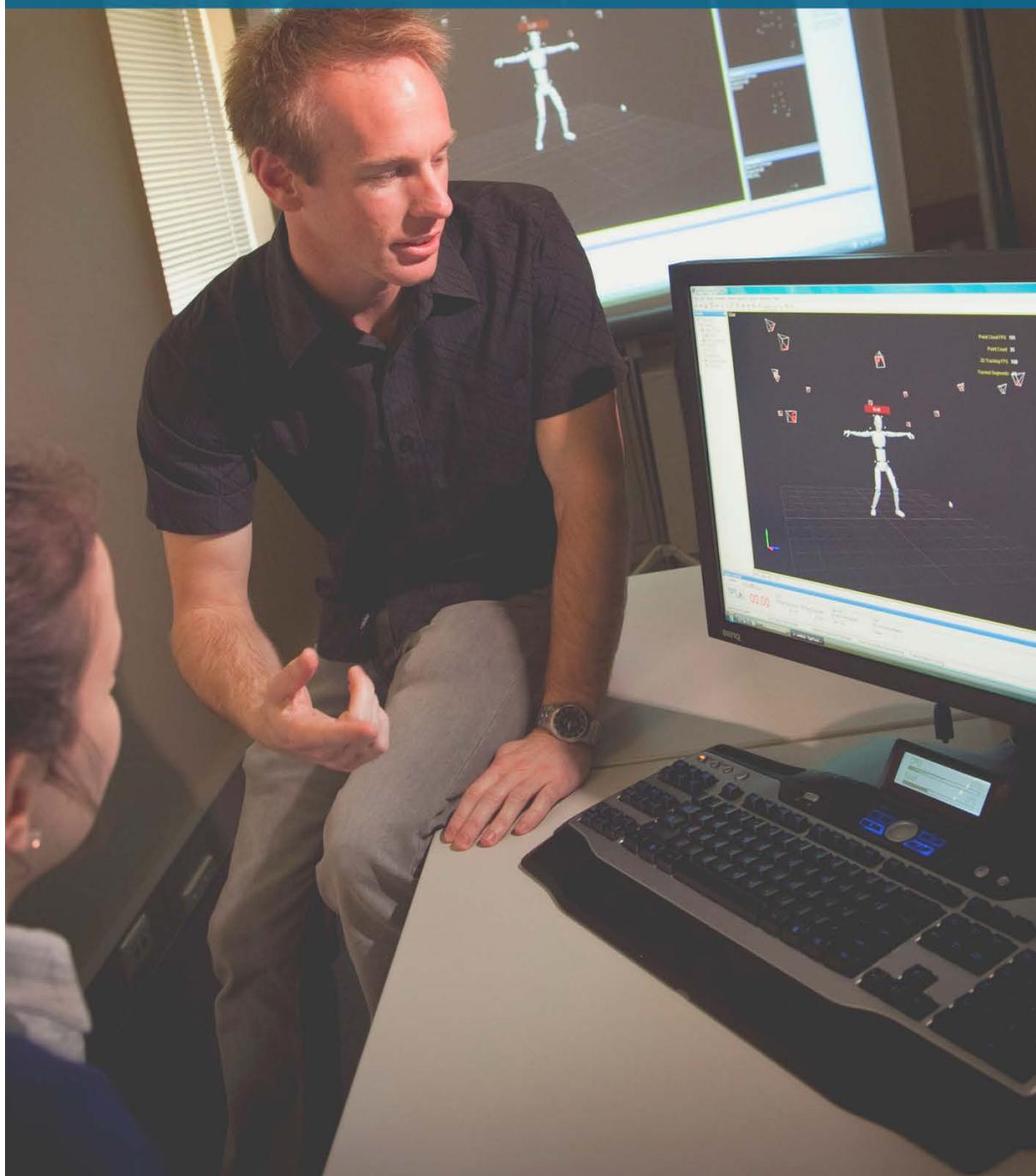


BACKGROUND PAPER

STATE TRAINING PLAN
2018-2021



Government of **Western Australia**
Department of **Training**
and **Workforce Development**



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1. INTRODUCTION

This paper has been prepared to support the State Training Board (the Board) in developing the *State Training Plan 2018–2021*.

This document outlines the planning context for the development of the State Training Plan (the Plan) and includes detailed information and analysis on the:

- current State and national vocational education and training (VET) policy settings and priorities;
- VET delivery trends;
- economic and labour market trends and forecasts for Western Australia;
- findings of industry research, including those of the Board; and
- industry workforce profiles and priorities.

The information contained in this background paper is at a point in time. It is not intended to provide an integrated narrative on the State's workforce and training needs, but rather be used as a reference document to support the development of the Board's annual State Training Plan.

2. PLANNING CONTEXT

The vocational education and training (VET) sector plays an integral role in ensuring Western Australia has a job ready workforce for existing and emerging industries.

In Western Australia, the VET sector is guided by the *Vocational Education and Training Act 1996* (the VET Act). The key objective of the VET Act is to establish a training system that is responsive in meeting the current and future training and skill development needs of industry and the community.

The Board under Section 18 of the VET Act has been established as the peak industry advisory body to the State Government regarding vocational education and training. A function of the Board is to prepare an annual State Training Plan for the Minister's approval.

The Plan is developed within the context of State and national VET policies and priorities. It also takes into account the underpinning principles and initiatives as outlined in the State Government's *Plan for Jobs*.

The State Training Plan draws upon detailed economic and labour market trends and forecasts. It is also informed by industry intelligence and other relevant research such as key strategic projects undertaken by the Board.

The priorities identified in the Plan guide the State Government's investment in the VET sector over a four year period. These priorities inform the parameters for policy development and funding of the training system and ensure Western Australia is able to meet the demand for priority skills required by industry. These training priorities are reflected in the Delivery and Performance Agreements for TAFE Colleges, and for the tender process for competitively allocated funds¹.

Figure 1 on the following page provides an overview of the planning framework for the development of the State Training Plan 2018-2021. The various elements that inform the development of the Plan are described in further detail in Sections 3-10 of this document.

¹ Further details regarding the procurement of the training priorities identified in the State Training Plan are included in Section 10 of this document.

Figure 1: State Training Plan planning framework



3. NATIONAL AND STATE VOCATIONAL EDUCATION AND TRAINING (VET) PRIORITIES

3.1 STATE VET PRIORITIES

The State Government's *Plan for Jobs* provides the basis for future policy development and programs for the VET system in Western Australia.

Underpinning the *Plan for Jobs* is the need to diversify the State's economy, develop key transport and other economic infrastructure, and leverage off State expenditure in these areas to maximise opportunities for Western Australians to get jobs, including through apprenticeships and traineeships.

To achieve more equitable and affordable VET course fees so everyone can access job opportunities, the *Plan for Jobs* includes the following principles:

- promoting the importance of the VET sector as a pathway to job opportunities;
- more accessible VET courses for school students by removing any identified barriers to participation and access;
- promoting TAFE and quality VET private training providers; and
- maximising regional access to training and job opportunities.

These are crucial to encourage student participation in VET and achieve the *Plan for Jobs* priorities. The State Government's *Plan for Jobs* focuses on expanding the local job market, creating opportunities for apprentices and trainees as well as ensuring a training system that is responsive to industry needs. These outcomes will be achieved through initiatives such as the new *Priority Start* policy which will require companies awarded government building and maintenance contracts to meet apprenticeship and traineeship targets.

The *Plan for Jobs* expands the role of TAFE and range of TAFE services such as establishing Industry Skills Centres. TAFE colleges will become one-stop shops liaising directly with local industries, co-locating training and assessment facilities and providing employers, unions, apprentices and trainees with a single point of contact for their training needs.

Training provided by TAFE colleges will be central to ensuring the workforce is prepared for the METRONET rail system through access to industry relevant training, particularly apprenticeship and traineeship opportunities.

The work of the Board and the Industry Training Councils is vital in ensuring there is a direct link between industry and the State Government.

3.1.1 DELIVERY OF TRAINING TO MEET PRIORITY WORKFORCE NEEDS OF INDUSTRY

The State Government prioritises training funding to meet industry's skills development needs. These revolve around the following programs listed below.

Apprenticeships and traineeships

Apprenticeships and traineeships are central to the *Plan for Jobs* in ensuring a skilled workforce in the future. Apprenticeships combine paid work with structured training and tend to be in traditional technical trades, such as automotive, building and construction, electrical and metals trade areas.

There are also a wide range of pre-apprenticeships pathways, including for school students, which lead to jobs needed by industry. Opportunities to expand training programs with work experience that lead to a traineeship will help a wider range of students and employers engage with the VET system.

Priority industry qualifications

Training is subsidised in more than 600 State priority courses for eligible students where a training place is available.

State priority courses include:

- over 140 priority industry qualifications which have been identified in the Priority Industry Qualifications List (PIQL);
- all apprenticeships and eligible traineeships in Western Australia; and

- specific priority foundation skills courses.

Qualifications on the Priority Industry Qualifications List are aligned with skilled occupations in high demand across Western Australia. Priority industry qualifications equip students to take up jobs that are considered industry critical in Western Australia.

Foundation skills

Foundation skills training (language, literacy, numeracy and employability) aims to ensure that individuals are equipped with the necessary skills and abilities required to complete higher level education and training.

Foundation skills are also crucial in developing capabilities for individuals to effectively participate in the workforce and the community.

Foundation skills' training comprises accredited courses and qualifications that focus on:

- English language, literacy and numeracy (LLN) – listening, speaking, reading, writing and use of mathematical ideas; and
- Employability skills, such as collaboration, problem solving, self-management, digital literacy, learning and information and communication technology (ICT) skills required for participation in modern workplaces and contemporary life.

Two priority foundation skills courses, the Course in Applied Vocational Study Skills (CAVSS) and the Course in Underpinning Skills for Industry Qualifications (USIQ) are always co-delivered with an industry qualification to eligible students. These courses are provided to build a student's literacy, numeracy and employability skills to increase their chance of finishing their industry qualification.

Access and participation

The State Government is committed to supporting student access and participation to ensure all Western Australians, including disadvantaged learners, can participate in, and complete their training to access job opportunities.

There are a number of initiatives which target disadvantaged learners from the following key priority groups:

- Aboriginal² Australians;
- youth at risk (15 to 24 year olds);
- people from regional and remote areas;
- people with disability;
- culturally and linguistically diverse people; and
- school-based apprentices and trainees; and
- unemployed job seekers.

The WA Group Training Program provides funding for Group Training Organisations (GTOs) to employ and support apprentices and trainees from selected priority groups. The program provides wrap around support services with the aim of improving completion rates and delivering sustained employment outcomes.

The Government also provides additional funding through the Participation Program. This program provides support such as mentoring and counselling to disadvantaged individuals to help them to access and complete training.

² The term Aboriginal is intended to include reference to Torres Strait Islanders and Indigenous Australians.

VET in Schools program

In Western Australia, the VET in Schools program provides students with opportunities to gain a nationally recognised qualification, workplace experience and skills development while completing their secondary education. Students are required to achieve either an Australian Tertiary Admission Rank (ATAR) or a minimum of a Certificate II VET qualification for their Western Australian Certificate of Education (WACE).

A *VET Qualifications Register for Secondary Students* provides parents, students and schools with industry guidance on the suitability of qualifications and quality requirements to meet industry needs and standards. Updated annually, an emphasis is placed on qualifications with a pathway to labour market priorities.

The Department of Training and Workforce Development works closely with the school sector to ensure the VET in Schools program is able to provide high quality and industry recognised outcomes for students.

3.1.2 ABORIGINAL WORKFORCE DEVELOPMENT STRATEGY

In 2010, the *Training together – working together: Aboriginal workforce development strategy* was launched as a collective approach to improve the employment and training outcomes of Aboriginal people in Western Australia.

The Aboriginal workforce development strategy identified a significant need to connect Aboriginal job seekers and employers, and provide support services to both groups in the metropolitan and regional areas of Western Australia.

The network of services available through the strategy provide Aboriginal job seekers with access to various training and career development support services (including training organisations, mentoring services, and an online jobs board³). There are also services that provide advice to employers on how to attract, recruit and retain Aboriginal employees.

To further improve Aboriginal workforce participation in Western Australia, two additional programs have been implemented. In 2016, the Aboriginal Youth Transitions Strategy (AYTS) was implemented as a pilot in the Goldfields and South West regions providing Aboriginal students with post-school follow-up and case management services. The other program, *Working Together – Connecting Businesses and Young Aboriginal People in the Workplace*⁴ provides a range of activities aimed at expanding work opportunities (including work experience) for Aboriginal people in the Goldfields, Great Southern, Mid-West, South West and West Kimberley regions.

3.2 NATIONAL VET PRIORITIES

The ***National Agreement for Skills and Workforce Development (NASWD)*** is an ongoing agreement that provides Australian Government funding to States and Territories to support the training system.

The key objectives of NASWD funding include:

- Skill levels of the working age population are increased to meet changing needs of the economy;
- All working age Australians have the opportunity to develop skills; and
- Training provides skills and capabilities needed for improved economic participation for working age Australians.

The long term targets of the NASWD are to:

- halve the proportion of Australians aged 20–64 without qualifications at Certificate III and above between 2009 and 2020; and
- double the number of higher level qualification completions (diploma and advanced diploma) between 2009 and 2020.

³ The jobs board enables government and non-government organisations to lodge vacancies online and access resumes and other documents posted by registered Aboriginal job seekers.

⁴ This program is delivered under an agreement with the Regional Chambers of Commerce and Industry WA (RCCIWA).

A new National Partnership is being negotiated between the Australian Government and the States and Territories and will be funded through the establishment of the Skilling Australians Fund (the Fund). It will prioritise:

- apprenticeships and traineeships for occupations in high demand;
- occupations with a reliance on skilled migration pathways;
- industries and sectors of future growth;
- trade apprenticeships;
- apprenticeships and traineeships in regional and rural areas;
- high level traineeships; and
- pre-apprenticeships.

Under the National Partnership the State Government will be required to develop projects to attract matching funds from the Commonwealth Australian Government.

Projects developed for the National Partnership will be geared towards meeting the objectives of the State Government's *Plan for Jobs*. The Government and the State Training Board will consult with employers, industry and community sectors to ensure the projects provide for innovative solutions to meet their needs.

4. VOCATIONAL EDUCATION AND TRAINING (VET) DELIVERY TRENDS

4.1 NATIONAL

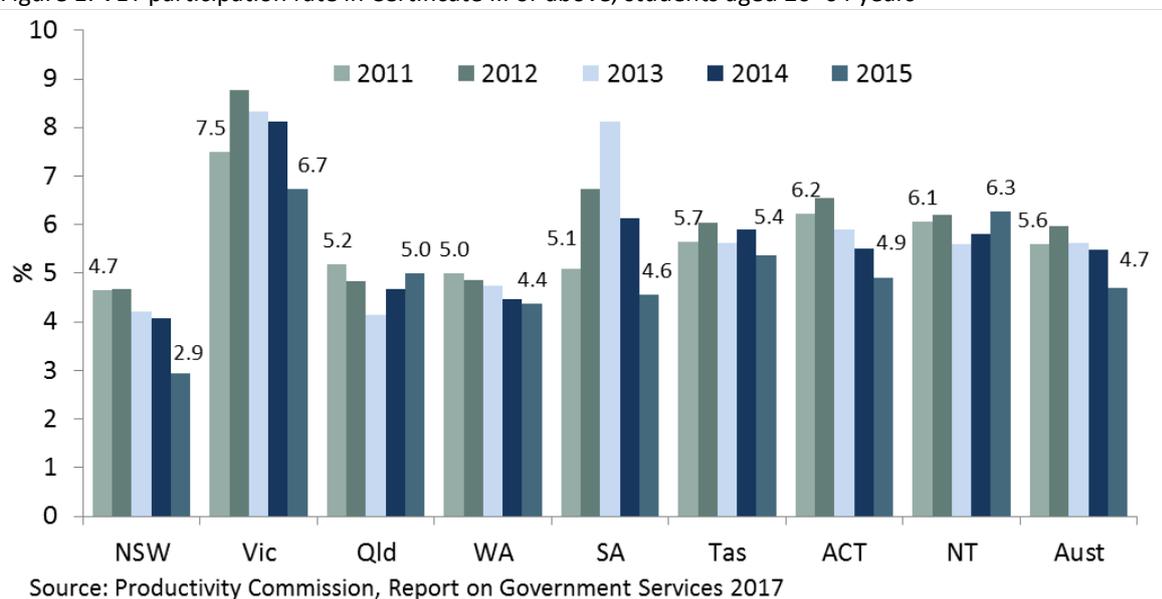
One of the long term targets of the NASWD is to halve the proportion of Australians aged 20–64 years without qualifications⁵ at Certificate III level or above between 2009 and 2020.

Nationally, in 2015⁶ around 861,100 people aged 15–64 years participated in VET at Certificate III or above, representing 5.5% of the population aged 15–64 years. This was a significant decrease from the 993,800 people in the previous year, which represented a 6.4% of the population aged 15–64 years.

In 2015, around 4.4% of all people aged 20–64 years in Western Australia participated in a VET course at Certificate III or above – lower than the rate of 5.0% recorded in 2011.

Figure 2 shows the VET participation rates in Certificate III and above between 2011 and 2015. Western Australia has broadly followed the trends of other jurisdictions.

Figure 1: VET participation rate in Certificate III or above, students aged 20–64 years



The NASWD includes a further national target to double the number of higher level qualification completions (diploma and advanced diploma) between 2009 and 2020.

In 2015, approximately 142,900 people aged 15–64 years participated in a VET course at diploma level or above, representing 0.9% of the population aged 15–64 years nationally, a decrease of 0.4 percentage points since 2010.

Again, Western Australia followed the national trend in 2014, with approximately 13,800 people in Western Australia aged 15–64 years participating in a VET course at diploma level or above, representing 0.8% of the State's population aged 15–64 years, – a decrease of 0.3 percentage points since 2011.

⁵ This Agreement while focused on the VET sector recognises the role played by governments, individuals, industry and by the higher education and school sectors in attaining these targets.

⁶ The latest available data at a national level is 2015.

Figure 2: VET participation rate in diploma level and above, students aged 15–64 years



Source: Productivity Commission, Report on Government Services 2017

In terms of the National Partnership Agreement on Skills Reform (Skills Reform NP), which expired on 30 June 2017, Western Australia has exceeded all of the targets⁷ agreed with the Australian Government for completions in:

- aggregate qualifications;
- higher level qualifications (Certificate III and above);
- Indigenous Australians (Certificate II and above);
- students with a disability (Certificate II and above); and
- regional and remote area qualifications (Certificate III and above).

The National Centre for Vocational Education Research's (NCVER)'s recently released *Total VET Students and Courses 2015*⁸ publication, which includes all VET activity (total VET activity) comprising both public and private funded training. The report indicates that 55.5% of all VET hours delivered nationally in 2015 were Government funded, with 36.6% privately funded by domestic students. In comparison, almost two-thirds (62.9%) of VET hours delivered in Western Australia in 2015 were Australian Government or State-funded and a further 30.5% of VET hours delivered in Western Australia in 2015 were privately funded by domestic students.

Further information on the release of *Total VET Students and Courses 2016* is included in Appendix A.

4.2 STATE

To ensure Western Australia is able to support its current and future labour market needs, the focus for the State's training system has been on those qualifications that are deemed a priority.

In contrast to previous years, there was a 1.4% decrease in enrolments in broad priority training qualifications (see table 1) in 2016. This includes a decrease of 9.6% in apprenticeships and traineeship enrolments partially offset by an 11.0% increase in CAVSS and USIQ enrolments. There was also a 7.6% contraction in general industry qualifications, resulting in an overall decline in enrolments in the State of 3.5%.

⁷ Latest data at a national level only available at 2013 – ACIL Allen Consulting, *Review of the National Partnership Agreement on Skills Reform Final Report*, 21 December 2015.

⁸ NCVER, *Total VET students and courses 2015*, 26 July 2016

<https://www.ncver.edu.au/publications/publications/all-publications/2874#>

Table 1: VET delivery by funding type – course enrolments 2014–2016

Training category	Course enrolments		
	2014	2015	2016
Apprenticeships and traineeships	41,316	38,111	34,456
Priority industry qualifications	11,758	23,614	24,618
CAVSS and USIQ ⁹	17,076	16,306	18,100
Other foundation skills courses	9,297	10,153	9,807
Sub-total – Priority training	79,447	88,184	86,981
General industry qualifications	60,592	46,198	42,677
Total	140,039	134,382	129,658

Source: VET Enrolment Data Collection¹⁰, final full year data for 2016

Table 2 illustrates the delivery of training for the broadest level of occupational groupings¹¹ for the period 2014 to 2016. As shown below, the largest number of enrolments occurred in higher skilled occupational areas. Of these, enrolments were the highest for technicians and trade workers, followed by community and personal service workers.

⁹ For further information on the Course in Applied Vocational Study Skills (CAVSS) and the Course in Underpinning Skills for Industry Qualifications (USIQ), please see section 7.2.

¹⁰ Data collection is for the National Training Agreement (NTA) scope which is only for enrolments funded by the Department of Training and Workforce Development.

¹¹ Australian and New Zealand Standard Classification of Occupations (ANZSCO) Major Group – 1-digit codes.

Table 2: VET delivery – course enrolments by ANZSCO

ANZSCO	Course enrolments		
	2014	2015	2016
1 Managers	7,729	8,259	6,871
2 Professionals	9,679	8,846	7,495
3 Technicians and trades workers	36,085	32,089	30,137
4 Community and personal service workers	26,232	25,762	25,857
5 Clerical and administrative workers	12,721	11,322	10,915
6 Sales workers	1,878	1,851	1,967
7 Machinery operators and drivers	6,566	7,023	7,166
8 Labourers	12,380	12,790	11,187
General education ¹²	26,769	26,439	27,957
Total	140,039	134,381	129,658 ¹³

Source: VET Enrolment Data Collection¹⁴, final full year data for 2016

Table 3 provides a list of the top five qualifications delivered in 2016 in each of the above occupational categories.

Table 3: Top five qualifications in each occupational area (ANZSCO)

ANZSCO	Top five qualifications by NTA-scope ¹⁵ course enrolments
Managers	Certificate IV in Competitive Systems and Practices
	Certificate III in Agriculture
	Diploma of Leadership and Management
	Certificate IV in Customer Engagement
	Certificate IV in Customer Contact
Professionals	Certificate II in Conservation and Land Management
	Certificate IV in Training and Assessment
	Certificate IV in Information Technology (Networking)

¹² This category includes foundation skills training and does not have defined occupational outcomes.

¹³ Total includes 106 'Not yet classified' enrolments.

¹⁴ Data collection is for the National Training Agreement (NTA) scope which is only for enrolments funded by the Department of Training and Workforce Development.

¹⁵ Data collection is for the National Training Agreement (NTA) scope which is only for enrolments funded by the Department of Training and Workforce Development.

	Diploma of Screen and Media
	Certificate III in Visual Arts
Technicians and trades workers	Certificate III in Electrotechnology Electrician
	Certificate III in Engineering – Mechanical Trade
	Certificate III in Carpentry and Joinery
	Certificate III in Engineering –Fabrication Trade
	Certificate III in Light Vehicle Mechanical Technology
Community and personal service workers	Certificate III in Early Childhood Education and Care
	Diploma of Nursing (Enrolled/Division 2 nursing)
	Diploma of Early Childhood Education and Care
	Certificate III in Hospitality
	Certificate III in Individual Support
Clerical and administrative workers	Certificate III in Business
	Certificate II in Business
	Certificate IV in Bookkeeping
	Certificate IV in Warehousing Operations
	Certificate III in Business Administration
Sales workers	Certificate III in Retail Operations
	Certificate II in Retail Services
	Certificate IV in Retail Management
	Certificate III in Community Pharmacy
	Certificate III in Automotive Sales
Machinery operators and drivers	Certificate III in Civil Construction (Plant Operations)
	Certificate III in Warehousing Operations
	Certificate II in Surface Extraction Operations
	Certificate III in Driving Operations
	Certificate III in Surface Extraction Operations
Labourers	Certificate II in Building and Construction (Pathway – Trades)

	Certificate II in Electrotechnology (Career Start)
	Certificate II in Engineering
	Certificate II in Horticulture
	Certificate II in Automotive Servicing Technology
General education	Course in Underpinning Skills for Industry Qualifications
	Course in Applied Vocational Study Skills (CAVSS)
	Certificate II in General Education for Adults
	Certificate III in Spoken and Written English
	Certificate II in Spoken and Written English

Source: VET Enrolment Data Collection¹⁶, final full year data for 2016

Table 4 shows VET sector course enrolments by industry classification for the period 2014 to 2016. The top four industries during this time in terms of the number of enrolments were health care and social assistance, manufacturing, construction, and professional scientific and technical services.

In 2016, the health care and social assistance industry had the highest number of related course enrolments in the VET sector with almost a 14% share of total course enrolments in 2016, compared to a share of 11.4% in 2014.

Course enrolments related to the manufacturing industry had the second highest number of total VET sector course enrolments, and maintained its 2015 share of total course enrolments of over 12% in 2016.

The third largest industry for course enrolments in 2016 was for construction which increased its share of total enrolments in 2016 to 9.1% from 7.1% in 2014.

The fourth largest industry for course enrolments in 2016 was for professional, scientific and technical services, however, this industry reduced its share of enrolments to 7.3% in 2016, compared to 8.9% in 2014.

¹⁶ Data collection is for the National Training Agreement (NTA) scope which is only for enrolments funded by the Department of Training and Workforce Development.

Table 4: VET sector course enrolments by industry classification

Industry	Course enrolments		
	2014	2015	2016
Agriculture, forestry and fishing	7,371	6,903	6,674
Mining	3,125	2,973	2,520
Manufacturing	17,578	17,088	16,456
Electricity, gas, water and waste services	2,698	1,528	729
Construction	9,963	11,913	11,751
Retail trade	3,882	3,083	2,385
Accommodation and food services	6,494	5,626	4,966
Transport, postal and warehousing	4,972	4,930	4,352
Information media and telecommunications	2,847	2,534	2,458
Financial and insurance services	240	140	61
Rental, hiring and real estate services	178	119	70
Professional, scientific and technical services	12,426	10,800	9,448
Administrative and support services	7,930	7,628	7,613
Public administration and safety	800	991	844
Education and training	4 000	3 207	2,645
Health care and social assistance	15,943	16,627	18,085
Arts and recreation services	4,473	3,541	3,381
Other services	6,109	7,039	6,751
Not classified ¹⁷	29,010	27,711	28,469

Source: VET Enrolment Data Collection¹⁸, final full year data for 2016

The following table outlines the top five qualifications in each industry area.

¹⁷ The 'Not classified' category mainly consists of General Education course enrolments which by their general nature are not classified by industry, as well as some other course enrolments that have not been classified to a specific industry.

¹⁸ Data collection is for the National Training Agreement (NTA) scope which is only for enrolments funded by the Department of Training and Workforce Development.

Table 5: Top five qualifications in each industry area (ANZSIC)

ANZSIC	Top five qualifications by NTA-scope ¹⁹ course enrolments
Agriculture, forestry and fishing	Certificate III in Agriculture
	Certificate II in Conservation and Land Management
	Certificate II in Horticulture
	Certificate III in Horticulture
	Certificate III in Wool Clip Preparation
Mining	Certificate II in Surface Extraction Operations
	Certificate III in Surface Extraction Operations
	Certificate II in Resources and Infrastructure Work Preparation
	Certificate III in Surface Extraction Operations
	Certificate III in Resource Processing
Manufacturing	Certificate III in Electrotechnology Electrician
	Certificate III in Engineering - Mechanical Trade
	Certificate IV in Competitive Systems and Practices
	Certificate III in Engineering - Fabrication Trade
	Certificate II in Electrotechnology (Career Start)
Electricity, gas, water and waste services	Certificate III in Electrotechnology Electrician
	Advanced Diploma of Engineering Technology - Electrical
	Certificate III in Electrical Fitting
	Certificate II in Water Operations
	Certificate III in ESI - Power Systems - Distribution Overhead
Construction	Certificate II in Building and Construction (Pathway - Trades)
	Certificate III in Civil Construction Plant Operations
	Certificate III in Carpentry and Joinery
	Certificate III in Plumbing
	Certificate I in Construction

¹⁹ Data collection is for the National Training Agreement (NTA) scope which is only for enrolments funded by the Department of Training and Workforce Development.

Retail trade	Certificate III in Retail Operations
	Certificate II in Retail Services
	Certificate IV in Retail Management
	Certificate III in Community Pharmacy
	Certificate III in Meat Processing (Retail Butcher)
Accommodation and food services	Certificate III in Hospitality
	Certificate III in Commercial Cookery
	Certificate II in Hospitality
	Certificate IV in Hospitality
	Certificate II in Kitchen Operations
Transport, postal and warehousing	Certificate III in Warehousing Operations
	Certificate IV in Warehousing Operations
	Certificate III in Driving Operations
	Certificate II in Warehousing Operations
	Certificate III in Maritime Operations (Master Up To 24 Metres Near Coastal)
Information media and telecommunications	Certificate III in Information, Digital Media and Technology
	Certificate II in Information, Digital Media and Technology
	Diploma of Screen and Media
	Certificate III in Telecommunications
	Certificate III in Media
Financial and insurance services	Certificate III in Financial Services
	Certificate IV in Banking Services
	Diploma of Banking Services Management
	Certificate IV in Financial Services
	Certificate IV in Financial Services
Rental, hiring and real estate services	Certificate IV in Property Services (Real Estate)
	Certificate IV in Property Services (Operations)

	Certificate III in Property Services (Operations)
Professional, scientific and technical services	Certificate IV in Bookkeeping
	Diploma of Leadership and Management
	Certificate IV in Work Health and Safety
	Diploma of Management
	Certificate IV in Work Health and Safety
Administrative and support services	Certificate III in Business
	Certificate II in Business
	Certificate IV in Customer Engagement
	Certificate III in Business Administration
	Certificate IV in Customer Contact
Public administration and safety	Certificate IV in Local Government (Regulatory Services)
	Certificate III in Security Operations
	Certificate II in Security Operations
	Certificate III in Government
	Certificate II in Government
Education and training	Certificate III in Education Support
	Certificate IV in Education Support
	Certificate IV in Training and Assessment
	Diploma of Training Design and Development
	Certificate III in Education Support
Health care and social assistance	Certificate III in Early Childhood Education and Care
	Diploma of Nursing (Enrolled/Division 2 Nursing)
	Diploma of Early Childhood Education and Care
	Certificate III in Individual Support
	Certificate III in Aged Care
Arts and recreation services	Certificate III in Fitness
	Certificate III in Visual Arts

	Diploma of Music
	Certificate III in Sport and Recreation
	Certificate IV in Visual Arts
Other services	Certificate III in Light Vehicle Mechanical Technology
	Certificate III in Hairdressing
	Certificate II in Automotive Servicing Technology
	Certificate III in Mobile Plant Technology
	Certificate II in Hairdressing

Source: VET Enrolment Data Collection²⁰, final full year data for 2016

The VET in Schools program provides a valuable training pathway for senior secondary students in Western Australia.

The following figure shows the growth in course enrolments funded by the Department of Training and Workforce Development for the VET in Schools program from 2015 to 2016 across industry classifications.

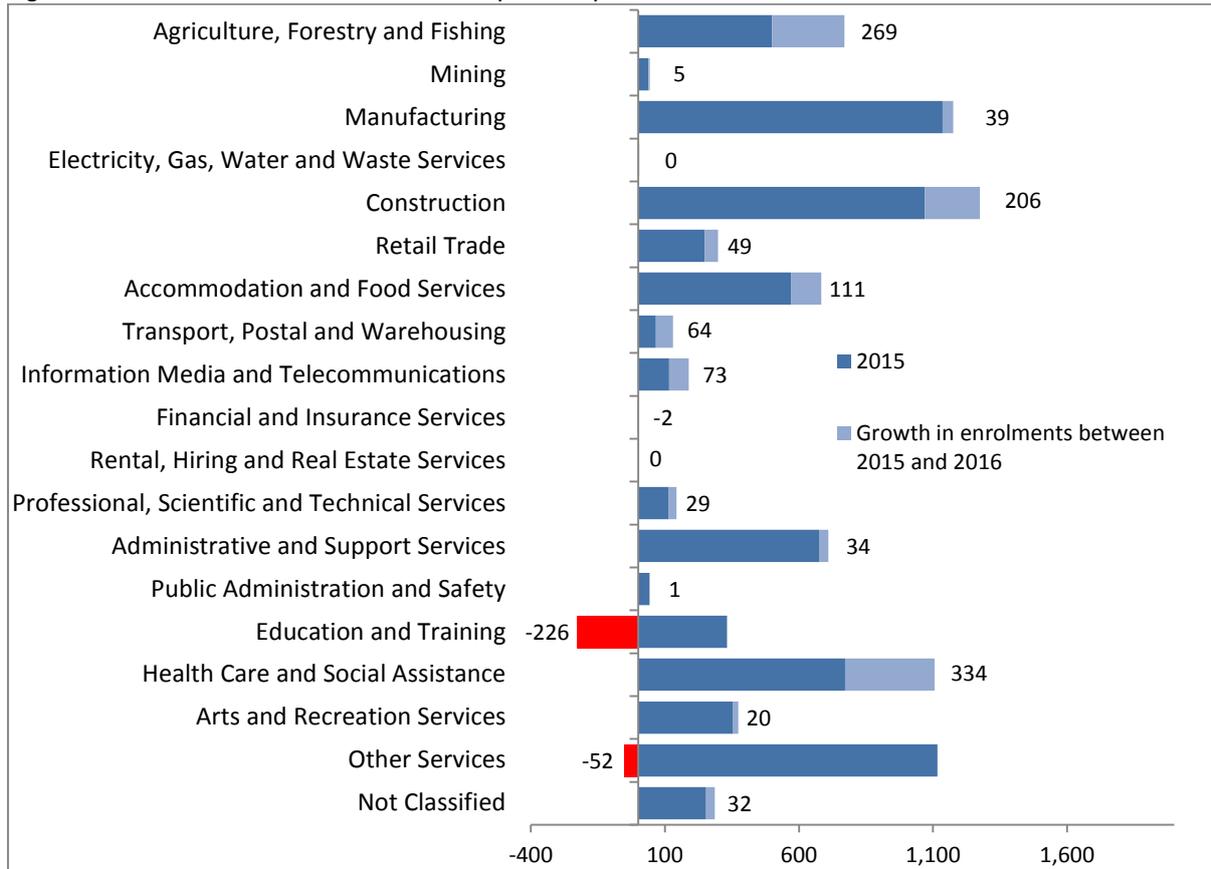
Figure 4 illustrates that across both years, manufacturing, construction, health care and social assistance, and other services²¹ industries attracted the highest number of course enrolments for the VET in Schools program.

The four industry classifications with the highest percentage increase in course enrolments in 2016 were transport, postal and warehousing, information media and telecommunications, and healthcare and social assistance with increases of 96.7%, 62.9%, 53.8% and 43.3% respectively.

²⁰ Data collection is for the National Training Agreement (NTA) scope which is only for enrolments funded by the Department of Training and Workforce Development.

²¹ The Other Services Division includes a broad range of personal services; religious, civic, professional and other interest group services; selected repair and maintenance activities; and private households employing staff.

Figure 3: VET in Schools course enrolments by industry classification



Source: VET Enrolment Data Collection, final full year data for 2016 – NTA scope only

Table 6 includes the top five qualifications delivered in 2016 by each of the industry classifications for the VET in Schools program.

Table 6: Top five²² VET in Schools qualifications delivered in 2016, by industry classification (ANZSIC)²³

ANZSIC	Top five qualifications by NTA-scope ²³ course enrolments
Agriculture, forestry and fishing	Certificate III in Wool Clip Preparation
	Certificate III in Agriculture
	Certificate II in Agriculture
	Certificate II in Rural Operations
	Certificate II in Aquaculture
Mining	Certificate II in Resources and Infrastructure Work Preparation
	Certificate I in Resources and Infrastructure Operations
	Certificate III in Resource Processing

²² Where applicable.

²³ Data collection is for the National Training Agreement (NTA) scope which is only for enrolments funded by the Department of Training and Workforce Development.

Manufacturing	Certificate II in Engineering
	Certificate II in Electrotechnology (Career Start)
	Certificate II in Engineering Pathways
	Certificate II in Electronics
	Certificate III in Engineering - Technical
Electricity, gas, water and waste services	Certificate II in Water Operations
Construction	Certificate II in Building and Construction (Pathway - Trades)
	Certificate I in Construction
	Certificate II in Plumbing
	Certificate II in Civil Construction
	Certificate II in Building and Construction (Pathway - Para Professional)
Retail trade	Certificate II in Retail Services
	Certificate III in Retail Operations
	Certificate II in Community Pharmacy
	Certificate II in Floristry (Assistant)
	Certificate III in Floristry
	Certificate III in Meat Processing (Retail Butcher)
Accommodation and food services	Certificate II in Hospitality
	Certificate III in Hospitality
	Certificate II in Kitchen Operations
	Certificate I in Hospitality
	Certificate II in Hospitality
Transport, postal and warehousing	Certificate II in Warehousing Operations
	Certificate III in Aviation (Flight Operations)
	Certificate II in Maritime Operations (Coxswain Grade 1 Near Coastal)
	Certificate II in Stevedoring
Information media and telecommunications	Certificate II in Information, Digital Media and Technology

	Certificate III in Information, Digital Media and Technology
	Certificate III in Media
	Certificate II in Information, Digital Media and Technology
	Certificate II in Creative Industries (Media)
Professional, scientific and technical services	Certificate II in Animal Studies
	Certificate II in Sampling and Measurement
	Certificate IV in Information Technology Networking
	Certificate III in Laboratory Skills
	Certificate III in Accounts Administration
Administrative and support services	Certificate II in Business
	Certificate III in Business
	Certificate II in Tourism
	Certificate III in Events
	Certificate II in Business
Public administration and safety	Certificate II in Government
	Certificate II in Government
	Certificate II in Security Operations
Education and training	Certificate III in Education Support
	Certificate IV in Education Support
Health care and social assistance	Certificate II in Community Services
	Certificate II in Health Support Services
	Certificate III in Early Childhood Education and Care
	Certificate III in Health Services Assistance
	Certificate II in Community Services
Arts and recreation services	Certificate III in Sport and Recreation
	Certificate II in Sport and Recreation
	Certificate II in Community Activities
	Certificate II in Outdoor Recreation

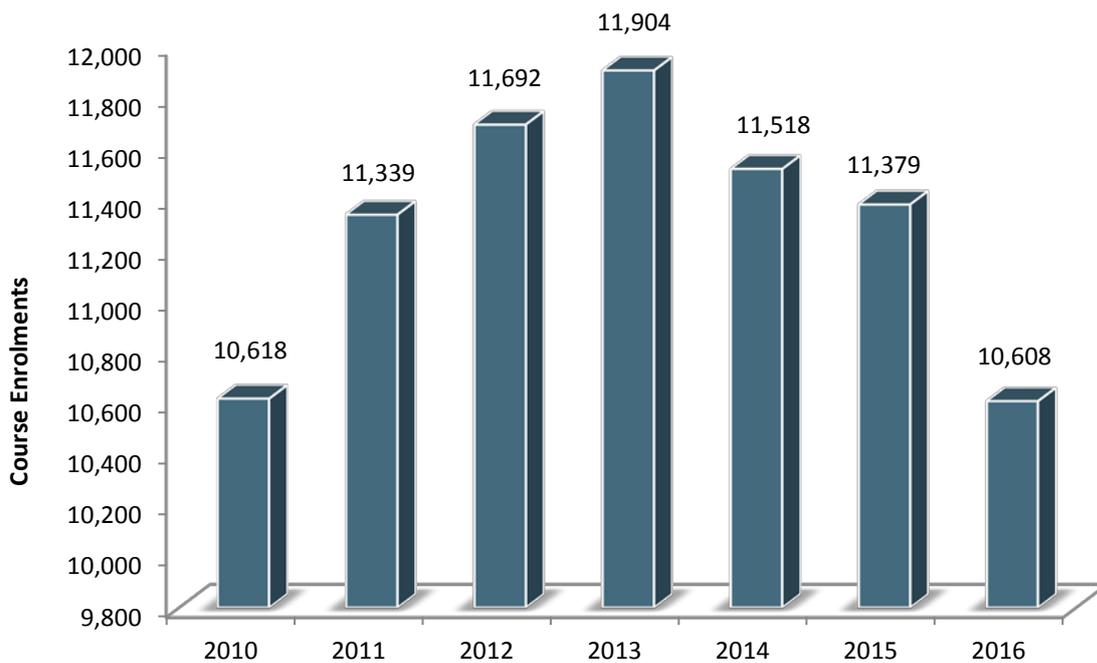
	Certificate III in Fitness
Other services	Certificate II in Automotive Servicing Technology
	Certificate II in Automotive Vocational Preparation
	Certificate II in Retail Make-Up and Skin Care
	Certificate II in Hairdressing
	Certificate I in Automotive Vocational Preparation

Source: VET Enrolment Data Collection²⁴, final full year data for 2016

Released in 2010, the *Training Together-Working Together: Aboriginal Workforce Development Strategy* has assisted Aboriginal Western Australians in improving their training and employment outcomes.

As illustrated in Figure 5, since 2010 course enrolments for Aboriginal people steadily increased until 2013. However, consistent with the overall delivery trends within the training system, Aboriginal participation in training has since declined. The decrease in enrolments has been attributed by some stakeholders, to increases in TAFE fees in previous years.

Figure 4: Aboriginal participation in training by NTA scope²⁵



Source: VET Enrolment Data Collection, final full year data for 2016

The Aboriginal workforce development strategy included connecting Aboriginal job seekers and employers, and providing support services to both groups in the metropolitan and regional areas of Western Australia.

Since the inception of the strategy in 2010-11, more than 1,400 Aboriginal people have been placed into employment and over 840 Aboriginal people have commenced training that is closely linked to job opportunities.

²⁴ Data collection is for the National Training Agreement (NTA) scope which is only for enrolments funded by the Department of Training and Workforce Development.

²⁵ Ibid.

Additionally, from December 2015 to June 2017 more than 1,840 non-government and 2,750 government vacancies had been posted on the online jobs board²⁶. Some 370 job seekers had registered to receive vacancies relevant to their area of interest, and 226 employers had registered to post vacancies and manage their recruitment process online.

²⁶ The jobs board enables government and non-government organisations to lodge vacancies online and access resumes and other documents posted by registered Aboriginal job seekers.

5. WESTERN AUSTRALIA’S ECONOMY AND LABOUR MARKET

In identifying priorities for the State Training Plan 2018–2021, it is important to consider current conditions in the economy, labour market, and the outlook over the next few years.

5.1 CURRENT CONDITIONS

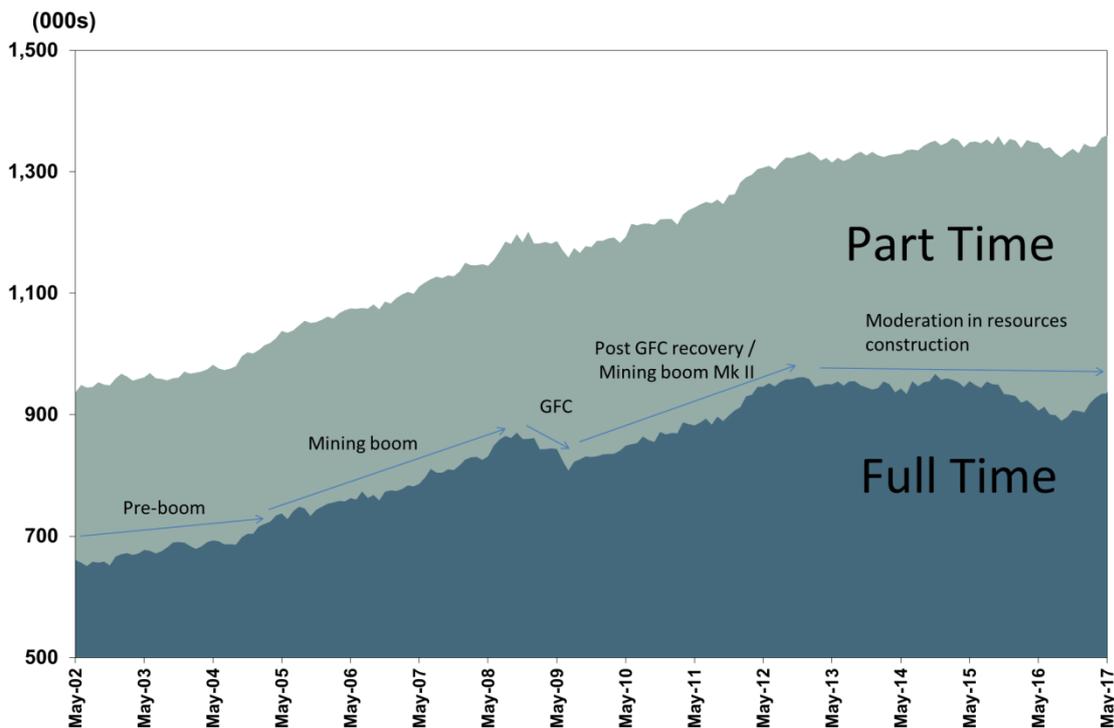
Western Australia is currently experiencing challenging conditions in its domestic economy, which have flowed through to a softening in the labour market. Subdued business and consumer confidence, slower population growth, continuing global uncertainty, variable commodity prices, and the ongoing transitioning of many of the State’s major resource projects from construction to their less labour intensive operations phases have all been key factors moderating labour market conditions in the State.

Employment growth has slowed over the past four years in Western Australia. Overall, there was a slight fall in the State’s average employment level over 2016–17 compared to the previous year. The State recorded a contraction in employment of –0.4% over 2016–17, compared to 0% growth in 2015–16. This growth rate was significantly lower than the equivalent growth rate nationally over the past year of 1.3%, and it was well below the State’s average yearly rate recorded over the past decade of 2.1%.

Further to this, compositional employment growth over 2016–17 was driven by part time employment, which increased by 2.8% compared to the previous year, while full time employment declined by 1.9% for the same period. This reflects a general shift occurring in the State’s labour market, with a relative skewing of jobs growth shifting towards part time workers over the past four years.

However, it should be noted that the last five months of 2016–17 showed a turnaround in full time employment for the State. The Reserve Bank of Australia (RBA) has stated that employment outcomes in Western Australia were no longer deteriorating and that solid employment growth had occurred since the start of 2017. This has provided evidence that the drag on economic activity from earlier declines in the terms of trade and falling mining investment were running their course.²⁷

Figure 5: Western Australia’s employment levels



Source: ABS, 6202.0

²⁷ RBA board minutes, April and August 2017.

Business investment

Business investment in the State has continued to contract since its peak²⁸ in late 2012 and this has contributed to softer labour market conditions. However, the resource sector's shift to the less labour intensive operations phases continues to present opportunities for a different mix of skills, but mainly at a higher skill level.

The June quarter 2017 *Deloitte Access Economics Investment Monitor* for Western Australia reported there was around \$167.2 billion worth of current or prospective major investment projects, which equated to a significant 22.4% share of the national total value of such projects. However, approximately 38.7% of this amount is for projects which are already under construction, with only about 2.9% (\$4.9 billion worth) of the total \$167.2 billion figure committed to definite future projects (with more speculative projects accounting for the remainder). Further, \$46 billion (or 71%) of the total worth of projects currently under construction relates to two large LNG projects, both of which are scheduled to finish construction by 2017–18.

Variable commodity prices and declining levels of mining investment have had considerable flow-on effects to other sectors of the State's economy.²⁹ The Reserve Bank of Australia's business liaison unit suggests that cost-cutting initiatives in the mining industry has placed significant pressure on the margins of its suppliers and these businesses have, in turn, focused on reducing the cost of their own inputs, including labour.³⁰

Further to this, the indirect effects of subdued conditions in the mining sector appear to be impacting components of the non-mining sector, with a decline in services employment (such as in Professional, Scientific and Technical Services industry) and goods-related employment (such as in Retail) in Western Australia reflecting the high exposure of business services linked to mining investment-related activity.³¹

Dwelling commencements have trended lower over the past year, and population growth, one of the key drivers of dwelling demand, has been soft. The Reserve Bank of Australia noted that falling levels of construction work done were consistent with persistently weak conditions in Western Australia's construction sector.³²

The volume of residential construction work done decreased by 24.6% over the year to June 2017.³³ Furthermore, the latest (April 2017) forecasts from Western Australia's Housing Industry Forecasting Group,³⁴ show that around 19,000 dwelling commencements in the State are expected for 2016–17, substantially down from the 25,482 commencements in 2015–16, with commencements forecast to rise modestly to 21,000 in 2017–18.

Softer domestic business conditions are impacting commercial building, with the volume of non-residential construction work done in the State decreasing by 4.7% over the year to June 2017.³⁵

²⁸ The national accounts (ABS, 5206.0) for the June quarter 2017 show that business investment has now decreased to \$9.2 billion for the quarter, down from a record high of \$20.6 billion in the September quarter 2012.

²⁹ Research from the Reserve Bank of Australia suggests that there are both direct and indirect effects of conditions in the resources sector on activity in the non-mining sector. The direct effect arises because many non-mining firms provide inputs and support to firms involved in mining investment or resource extraction. There is also an indirect effect, whereby conditions in the mining sector affect economic conditions more broadly, for example via spending of profits, wages and tax revenues generated in mining and mining-related activities. Reserve Bank of Australia, Statement on Monetary Policy – May 2016, Domestic Economic Conditions.

³⁰ Reserve Bank of Australia, Bulletin, The Labour Market during and after the Terms of Trade Boom, Davis, McCarthy, Bridges, March quarter 2016.

³¹ Reserve Bank of Australia, Statement on Monetary Policy – May 2016, Domestic Economic Conditions.

³² RBA board minutes, June 2017.

³³ ABS 8755.0 Construction Work Done, Australia, Preliminary, Mar 2017 (Spreadsheet: Table 05)

³⁴ The Housing Industry Forecasting Group (HIFG) is a joint industry and government body re-established in February 2008 to provide independent commentary on the housing sector in WA. The Department of Planning and the Housing Authority jointly provide the HIFG secretariat and research function.

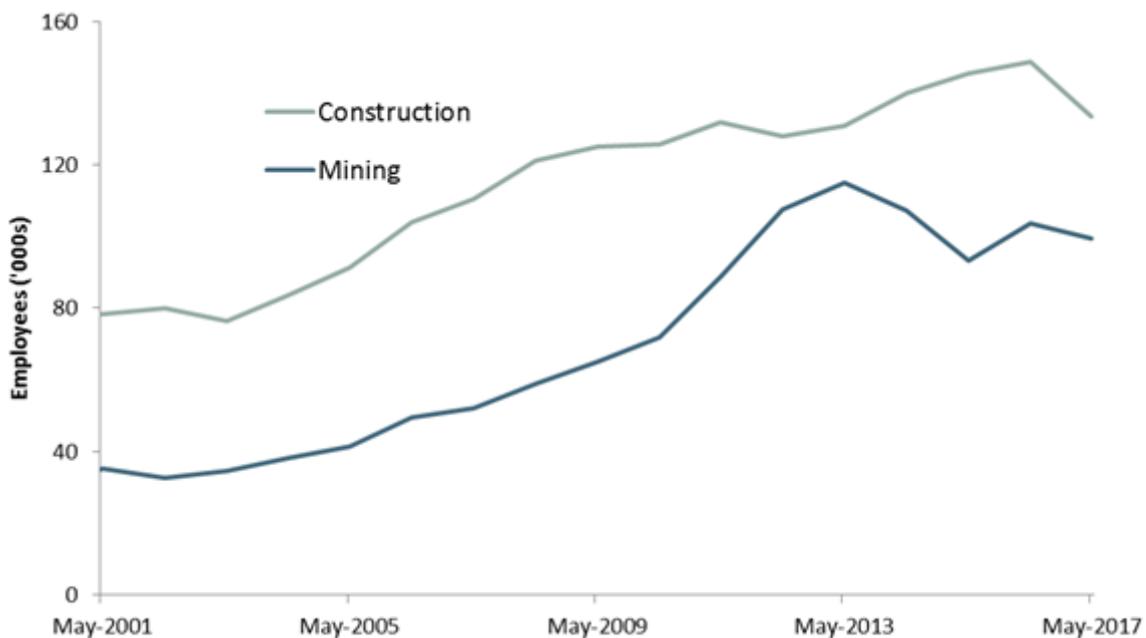
³⁵ ABS 8755.0 Construction Work Done, Australia, Preliminary, June 2017.

Industry employment

Over the past couple of years it is likely that some of the recent movements in employment in the State's construction sector consisted of construction workers leaving the major resource projects and switching over into non-resource construction work. Commentary from the Reserve Bank of Australia suggests "that many of the construction workers employed in the investment phase of the mining boom had previous experience in civil and residential construction and have been able to return to jobs in these industries (though for a time they were reluctant to do so given the lower wages on offer)."³⁶

The following chart shows that over the past three years strong employment growth in the construction industry has coincided with a general decline in mining employment.

Figure 6: Average number of persons employed in Western Australia's mining and construction industries (four quarter moving average)



Source: ABS, 6291.0.55.003 (four quarter moving average)

While local construction workers (ex-resource sector) may have helped to meet the labour recent demands of the non-resource construction industry, not all of these workers will have been able to fit easily into the residential or non-resource commercial sector roles. Some level of direct 'on the job' training may be required, and some skill sets may not be directly transferable. In addition, construction trades workers who have returned from the resources sector may be hired by employers in the building sector which could have impacted on the employment of apprentices. The employment of job ready workers may be viewed as an easier recruitment strategy.

The Construction industry in Western Australia employed an average of 133,300 persons over 2016-17 and the industry was responsible for 9.9% of all persons employed in the State compared with 11.0% in 2015-16. The Construction industry as a whole recorded a decrease of 15,500 employees, to remain the State's equal second largest employer, (alongside Retail Trade), behind the Health care and social assistance industry.³⁷

The resource sector's move from Engineering Construction phase to the Operational phase appears to have caused an increase in tradespeople in the Construction Industry (increased by 4,500) from May 2016 to May 2017 as workers returned to the Residential, Commercial and Civil Sector. However, the total workforce has decreased by 10.0% which coincides with the downturn in 'Building Commencements'.

³⁶ Reserve Bank of Australia, Bulletin, The Labour Market during and after the Terms of Trade Boom, Davis, McCarthy, Bridges, March quarter 2016.

³⁷ ABS 6291.0.55.003 Labour Force, Australia, Detailed, Quarterly, May 2017, Table 05.

The combination of the expected completion of two large LNG projects in 2017–18 and a forecast decline in the number of residential commencements over the next couple of years suggests that there will be limited opportunities for existing resource construction workers to transition to the residential sector in the near to mid-term.

The Health care and social assistance industry has seen relatively steady employment growth over the past couple of years although employment declined from 2016–17 by 1.6% or 2,600 persons. The industry continues to be the highest employing industry in the State, accounting for 11.5% of all employees.³⁸ Even with the decrease in employment levels, this industry continued to have high importance as the State's population ages and the additional demand this places on health and social services.

Reflecting ongoing pessimism in consumer sentiment, retail sales (a partial indicator of household consumption) slowed in Western Australia over the past year, with levels of retail turnover staying steady, and increasing by 0.4% over the year to June 2017.³⁹ In contrast to this modest increase in spending, employment growth in the Retail trade industry declined by 3.0% (4,100 persons) in 2016–17. The Retail trade industry is the State's third largest employing industry accounting for 9.9% of total jobs.⁴⁰

Education and training has jumped to be the fourth highest employing industry in 2016–17, compared to being the sixth highest the previous year. The industry recorded an increase of 5,900 workers to a total of 102,800 employees, with a share of 7.8% of all employees in the State. While it is difficult to fully substantiate this increase in employment⁴¹, the ABS industry figures can be volatile from year to year.

Mining's contribution to the State's economic output is currently the highest of all industries (accounting for 22.9% in 2015–16).⁴² However, due to its capital intensive nature, and with many projects moving into their less labour intensive operational phase,⁴³ the mining industry recorded a decrease in employment of 4,300 workers over 2016–17 to a total of 99,400, to be the fifth highest employing industry in the State. Continuing volatility in commodity prices and a focus on efficiency has impacted on mining industry employment. The mining industry had a smaller share of 7.4% of all employees in the State in 2016–17, down 0.3% over the year and 1.6% since peak employment during the resources investment boom (February 2013).

The fall in mining employment over the past four years comes as mining companies have faced weaker global commodity markets,⁴⁴ and increased levels of uncertainty in respect to the economies of our major export partners (primarily China).

The professional, scientific and technical services industry recorded a marginal decrease in employment growth in 2016–17, with a reduction of 1,100 workers to a total of 99,200 employees. The industry continues to be the six largest employing industries with a share of 7.4% of all employees in the State.

The relative importance of the six industries mentioned previously (construction, health care and social assistance, retail trade, education and training, mining, and professional, scientific and technical services) is highlighted by the fact that they are responsible for employing over half (54%) of all workers in the State. All of these industries (aside from education and training) recorded a decrease in employment over 2016–17.

The State's transitional economic conditions over the past year are reflected with a further five industries recording falls over the year, including Information, media and technical services (down 1,200 workers or -

³⁸ Ibid.

³⁹ ABS 8501.0, Retail Trade, Australia, Table 003.

⁴⁰ ABS 6291.0.55.003 Labour Force, Australia, Detailed, Quarterly, May 2017, Table 05.

⁴¹ Note that more detailed outputs from the ABS Labour Force Survey are subject to volatility associated with sampling error which is reflected in higher relative standard errors when compared to headline figures.

⁴² As measured by Gross State Product. Source: ABS 5220.0, State Accounts, 2015–16 (current prices). Note that in 2014–15 Mining had a 25.7% share of the Gross State Product for WA.

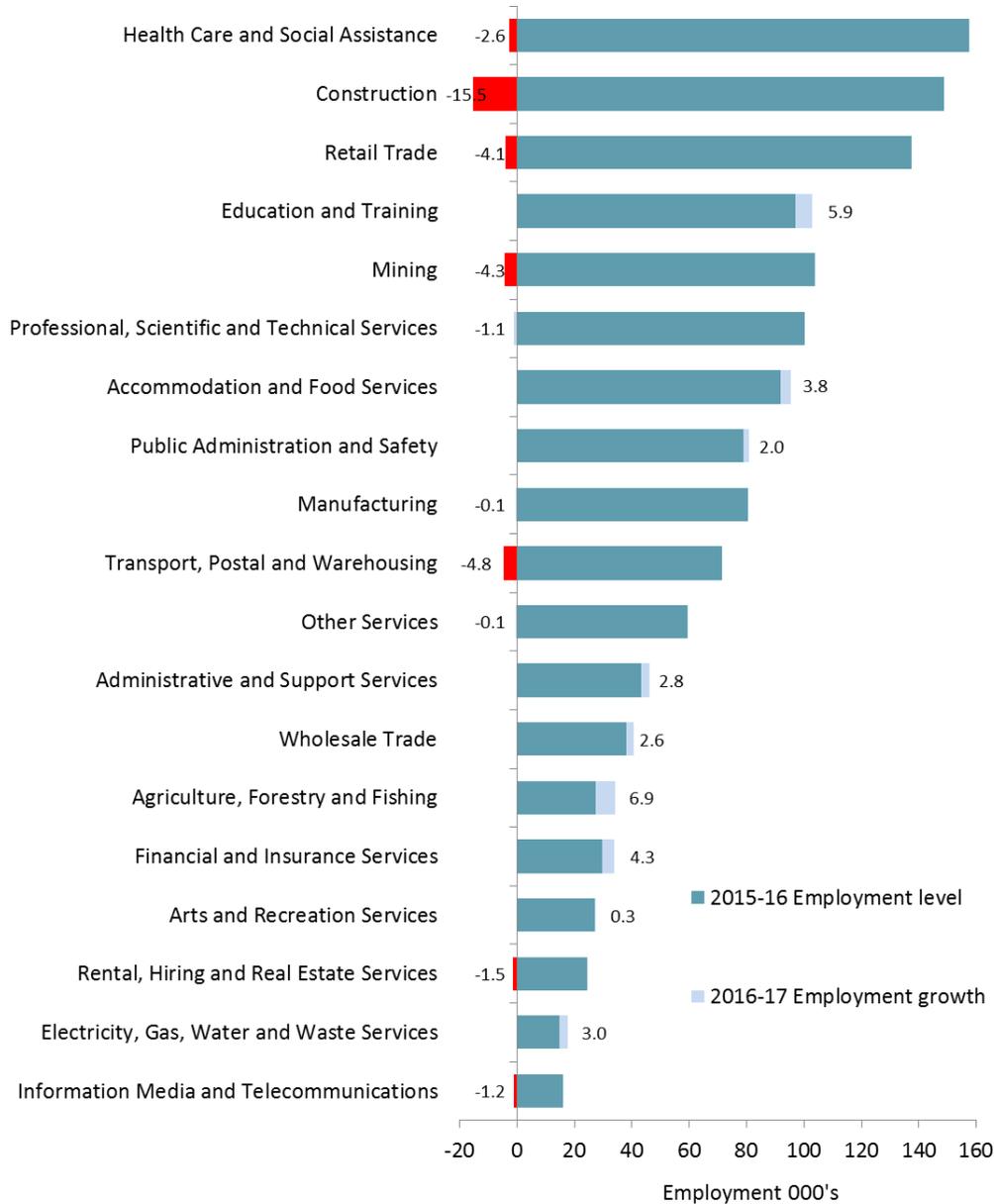
⁴³ Note the ratio of employees required in the construction to operation phase for iron ore projects is around 2:1 and for LNG projects it is around 5:1. Source: National Australia Bank, NAB Group Economics, The Mining 'Cliff': How far have we come? May 2016

⁴⁴ "In 2015 global commodity prices continued to decline and despite an increase in production across several major commodities, the value of Western Australia's mineral and petroleum industry reached just over \$91 billion. The Australian dollar weakened further during the year, down from an average of 90 US cents in 2014 to 75 US cents for 2015. This weakening of the Australian dollar helped to offset falling commodity prices with producers shielded to some extent from the lower prices." Source: WA Department of Mines and Petroleum, Mineral and Petroleum Industry 2015 Review.

7.5%); transport, postal and warehousing (down 4,800 workers or -6.7%); and rental, hiring and real estate services (down 1,500 workers, or -6.2%).⁴⁵

The following chart shows current employment levels for all industries in the State.

Figure 7: Number of persons employed by industry, growth over 2016–17 and levels 2015–16 for Western Australia



Source: ABS, 6291.0.55.003, Labour Force, Australia, Detailed, Quarterly, May 2017, Table 05

Breaking down the State’s employment growth by industry for 2016–17 shows that employment growth was mixed with only nine of the 19 industries recording an increase in employment. The industries other than education and training to record strong jobs growth over the year were agriculture, forestry and fishing⁴⁶ (6,900 workers or 25.3%); electricity, gas, water and waste services (3,000 workers or 20.4%); financial and insurance

⁴⁵ ABS 6291.0.55.003 Labour Force, Australia, Detailed, Quarterly, May 2017, Table 05

⁴⁶ Note that more detailed outputs from the ABS Labour Force Survey are subject to volatility associated with sampling error which is reflected in higher relative standard errors when compared to headline figures.

services (4,300 workers or 14.5%); accommodation and food services (6,600 workers, or 7.7%); and wholesale trade (2,600 workers or 6.8%).⁴⁷

These trends further underscore the transitioning in jobs growth away from the resources sector into a broader based growth profile, albeit with this happening in an environment of different and mixed economic influences on an industry by industry basis, and moderate conditions for the demand of labour are impacting upon the State overall. It is also important to note that employment changes by industry in the State can noticeably fluctuate on a year to year basis.

The following table shows the longer term trends in employment by industry in the State – most noticeably, the key driver of growth over the past decade have been via a very strong resources sector, as reflected by mining (47,400 additional workers), professional, science and technical services (22,000 additional workers) and construction (22,900). Additionally the strong growth in health care and social assistance (51,400 additional workers) reflects Western Australia’s very strong population growth over the past decade, as well as an ageing of the population. The accommodation and food services industry has also recorded strong employment growth over the past decade following a surge in spending in cafés and restaurants in line with the resources boom and increases in disposable incomes (28,600 additional workers).⁴⁸

Table 7: Employment changes over time in Western Australia’s labour market

WA employment by industry	Differences in employment levels, relative to:				
	Current size (2016–17)	One year ago	Three years ago	Five years ago	Ten years ago
Agriculture, forestry and fishing	34,300	6,900	6,400	1,500	- 8,100
Mining	99,400	- 4,300	- 7,900	- 8,200	47,400
Manufacturing	80,400	- 100	- 9,900	- 11,900	- 16,100
Electricity, gas, water and waste services	17,800	3,000	- 4,100	1,300	3,600
Construction	133,300	- 15,500	- 6,600	5,300	22,900
Wholesale trade	40,600	2,600	1,800	- 1,300	2,000
Retail trade	133,200	- 4,200	0	1,700	9,600
Accommodation and food services	95,500	3,800	17,100	21,200	28,600
Transport, postal and warehousing	66,800	- 4,800	- 4,900	5,900	20,900
Information media and telecommunications	14,900	- 1,200	1,000	1,800	- 4,000
Financial and insurance services	33,900	4,300	- 2,800	4,300	3,700
Rental, hiring and real estate services	23,100	- 1,500	- 6,100	- 2,700	600
Professional, scientific and technical services	99,200	- 1,100	- 3,600	4,600	22,000
Administrative and support services	46,100	2,800	4,500	4,500	7,200
Public administration and safety	81,000	2,000	2,200	6,100	11,700
Education and training	102,800	5,900	4,700	9,500	24,400
Health care and social assistance	154,900	- 2,600	17,900	13,700	51,400
Arts and recreation services	27,300	300	7,300	5,900	7,400

⁴⁷ ABS 6291.0.55.003 Labour Force, Australia, Detailed, Quarterly, May 2017, Table 05.

⁴⁸ ABS 6291.0.55.003 Labour Force, Australia, Detailed, Quarterly, May 2017, Table 05.

Other services	59,500	- 100	2,600	5,500	18,400
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Source: ABS, 6291.0.55.003 (annual four quarter average)

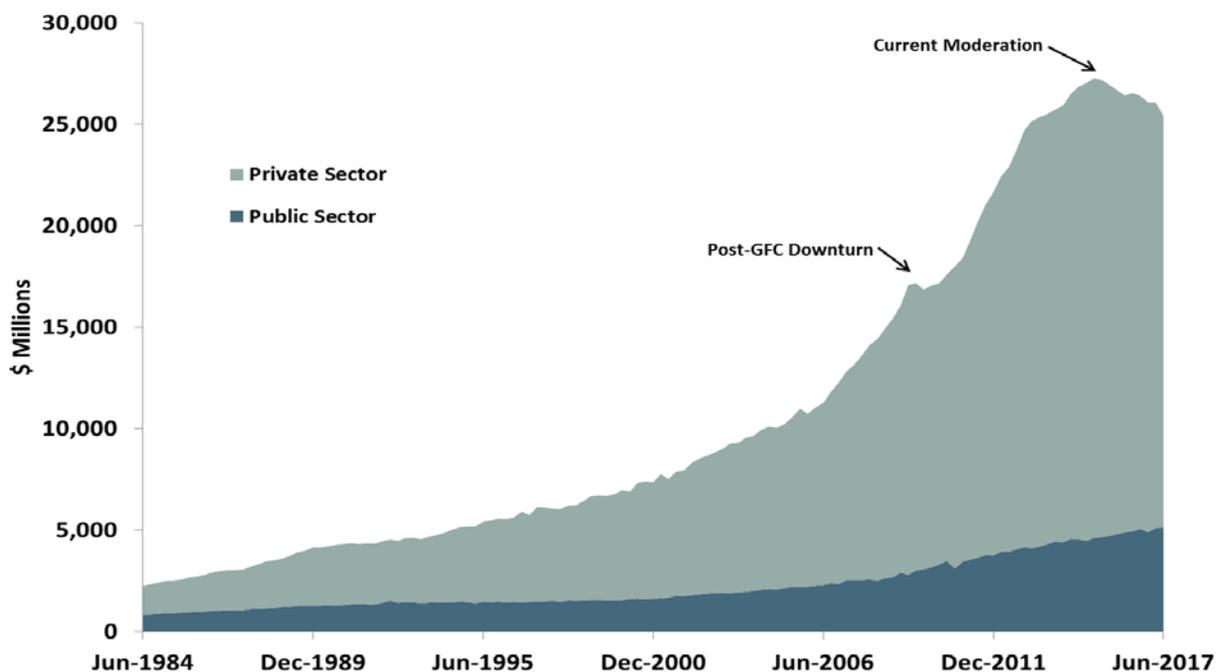
The table also shows evidence of longer term structural changes in employment in the State. For example, employment levels in the agriculture, forestry and fishing industry are around 20.0% lower than they were a full decade ago, mostly due to technology change and related productivity improvements in the industry, together with variable weather conditions, and (towards the latter part of the decade) a higher but recently declining Australian dollar.

Declining employment levels in the State’s manufacturing industry have been affected by factors such as tariff reductions, increasing globalisation trends (especially the outsourcing of tasks to lower cost economies), impacts over time from a relatively high Australian dollar and changing technologies/consumer preferences.⁴⁹ The information media and telecommunications industry has also seen declines, likely due to the nature of the dynamic nature of the industry itself (in respect to declines in traditional media use, labour productivity trends, and similar).

Such compositional changes in the State’s labour market have meant a general decrease in employment growth in higher wage, full time positions (in industries like construction, mining, and professional, scientific and technical services), towards jobs growth that is more skewed towards lower paid, part time jobs (such as in accommodation and food services).

This change has contributed to recent decreases in the overall value of the total compensation of employees (which can be seen as a broad measure of the total wages bill for the whole of the State). As shown by the chart below, the recent decrease has been more pronounced than at any other time in the State’s contemporary economic history of the past few decades (even including the post GFC downturn of 2008–09).

Figure 8: Compensation of employees, Western Australia



Source: ABS, 5206.0, seasonally adjusted

⁴⁹ However, manufacturing in WA (relative to most of Australia) is more focused on manufacturing of food, niche products and especially resource-related value adding (such as bauxite to alumina processing) – for example, it does not have the same exposure to car manufacturing as other states. This mostly explains the divergent trends that have seen manufacturing employment in the State grow by about 5% over the past decade, compared to a fall of around 9% for the industry nationally.

The impact of lower household incomes may be impacting other sectors of the economy (associated with household spending) and has coincided with flat retail sales⁵⁰ over the past year to June 2017.

As already outlined earlier in Section 5.1, employment growth in the State has slowed over the past three years, with a relative skewing of jobs growth towards part time workers. The annual average number of full time employees in Western Australia in 2016–17 was 913,400 workers, which was 17,800 workers lower than the previous year.

However, the last five months of 2016–17 showed an upturn in full time employment for the State. While this is an encouraging sign it is too early to say if this rebounding trend will continue.

Part time employment (defined as working between one and 35 hours a week) has grown more strongly over the most recent three year period, with an annual increase of 11,800 workers to 2016–17.

Some of the State's relatively stronger growth in part time positions in recent years likely reflects a reticence from employers to hire full time workers in times of softer economic conditions. It may also reflect employers changing the hours of some existing positions from full time to part time due to business conditions. Over the past two years, fewer part time workers have been able to move into full time work than normal.

This pattern was also reinforced by the decrease in the annual average of overall volume of hours worked in the State over 2016–17, which contracted by 0.7% compared to the previous year.

This suggests that the State's labour force is experiencing an increase in spare capacity, and also implies that employers currently have the ability to increase the hours of existing employees, before taking on new workers. This could mean that total jobs growth in the short to medium term will remain sluggish, particularly if overall labour demand remains soft.

Even so, the State retains a similar proportion of full time to part time jobs when compared nationally with 68.0% of all jobs in the State being full time positions, compared to 68.1% nationally in the 2016–17.⁵¹

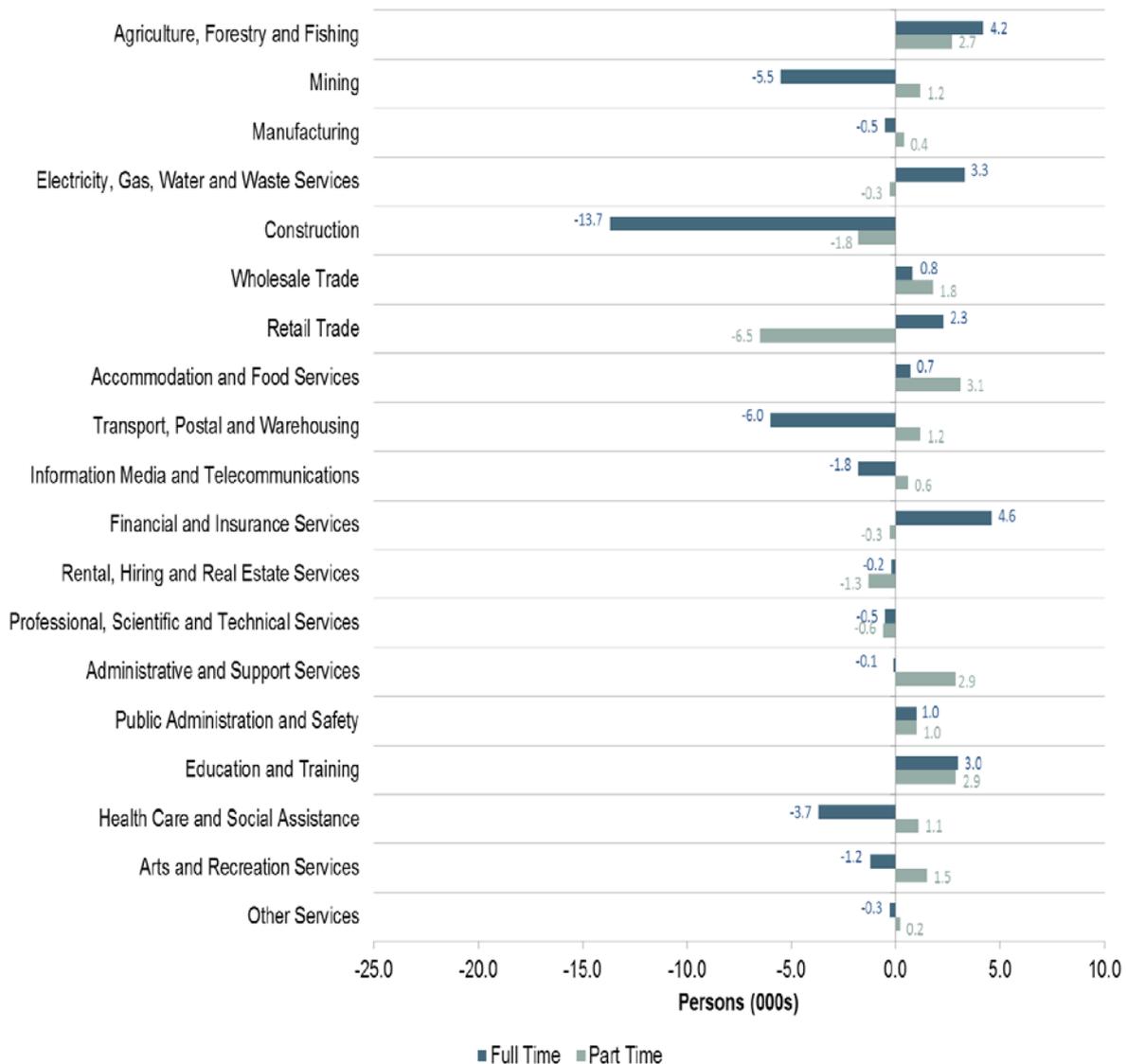
However, industries that traditionally employ workers on a part time basis were mixed in their hiring practices over 2016–17, with accommodation and food services experiencing an increase of 3,100 part time employed, while retail trade suffered a decrease of 6,500 part time workers over the same period.

Figure 10 shows that 12 of the 19 industries in Western Australia had increases in part time employment during 2016–17 compared to only eight industries recording an increase in full time employment. Accommodation and food services, and education and training recorded the largest increases in part time employment. Construction recorded a very large decrease in full time employment, while transport, postal and warehousing, and mining also recorded decreases in full time employment. Financial and insurance services and agriculture recorded strong increases in full time employment.

⁵⁰ Retail turnover in Western Australia increased by only 0.4% (annual average) over the year to June 2017, compared to peaks in excess of 10.0% reached during the resources boom years. (Source: ABS Cat. 8501.0, Retail Trade, Australia).

⁵¹ ABS 6202.0 Labour Force Summary, Australia, June 2017, Tables 01 and 08.

Figure 9: Annual employment change for 2016–17 by industry and employment status, Western Australia



Source: ABS, 6291.0.55.003 Four quarter moving average

Unemployment, underemployment and participation

Also reflecting the continuing moderation in the State’s labour market, Western Australia’s unemployment rate averaged 6.2% over 2016–17. This was an increase of 0.2 percentage points above the previous year’s average unemployment rate of 6.0%. This result continues a longer running upwards trend in the State’s unemployment rate over the past four years.

The State’s increasing unemployment rate also means that Western Australia’s average unemployment rate of 6.2% for 2016–17 is above the national rate of 5.7%.

Figure 10: Unemployment rate – Western Australia and Australia



Source: ABS, 6202.0, 12 month moving average

The softer labour market conditions have coincided with slowing labour supply. This is reflected in the State's annual population growth rate⁵² declining to 0.7% in December 2016, after having recorded a high of 3.7% four years earlier in December 2012. During 2016 in particular, net overseas migration has slowed considerably to increase by just 12,900 people and net interstate migration is strongly negative with –10,800 people. The decrease in net immigration has assisted the State's labour market to adjust without the unemployment rate increasing as much as it otherwise might have.⁵³

In this context, the change in the unemployment rate equates to the estimated average number of unemployed persons in Western Australia rising to 88,400 in 2016–17 from 85,500 in the previous year. Accordingly, the level of new job creation in the State has not been able to keep pace with the growth in the number of persons in the labour market.

The State's labour market participation rate⁵⁴ averaged 67.5% over 2016–17, which was significantly lower than the average rate of 68.3% recorded a year prior. However, the Western Australia's participation rate continues to remain well above the national rate of 64.7%.

The participation rate can heavily impact the unemployment rate. For example, hypothetically, if employment was to remain at its current level but participation was instead at the peak the State recorded during the resources expansionary period (69.9% in December 2008), then the unemployment rate would stand currently at around 7.8%.⁵⁵ Alternatively, if (again, hypothetically) the State's participation rate was to fall to levels experienced following the global financial crisis [GFC](67.7% in May 2010), the current unemployment rate would be reduced to around 4.8% (due to the reduction of persons willing and able to work in the softer economic conditions).

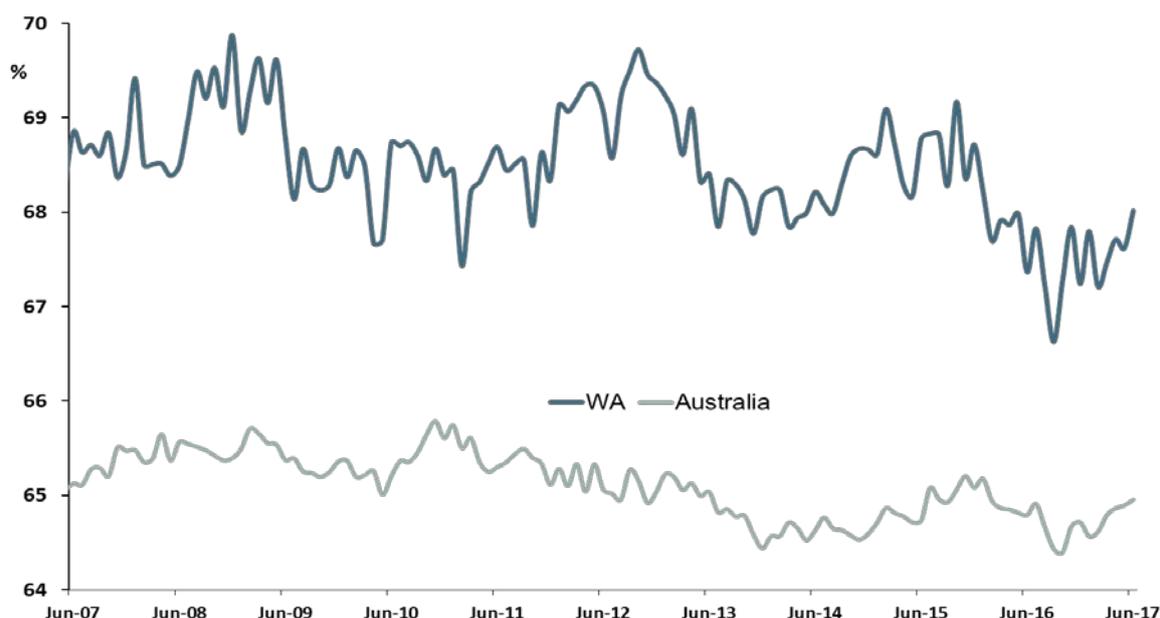
⁵² ABS 3101.0 Australian Demographic Statistics, Dec 2015 (Spreadsheet: Table 4).

⁵³ Reserve Bank of Australia, Bulletin, The Labour Market during and after the Terms of Trade Boom, Davis, McCarthy, Bridges, March quarter 2016.

⁵⁴ These are calculated as the total labour force as a share of the total civilian population (aged 15 or over).

⁵⁵ This is on a hypothetical (and simplified) presumption the additional participating people seeking employment would not be able to find jobs.

Figure 11: Labour force participation rate – Western Australia and Australia



Source: ABS, 6202.0, 12 Month moving average

Similar to national trends, the ageing of the State's population remains a key issue for labour market participation – in part due to the expected decline in the level of participation in the labour market on account of increasingly higher proportions of working adults being at (or close to) typical retirement age. With the oldest of the baby boomers having turned 71 years of age, this is likely to impact negatively on the labour supply over coming years.

However, there is little sign at present that Western Australia is experiencing this to the same degree as the other States. This is in part likely due to the younger age demographic of the State's population (compared to Australia). In addition, the current moderate economic and financial market conditions may mean that some workers in the State are pushing out their retirement intentions.⁵⁶

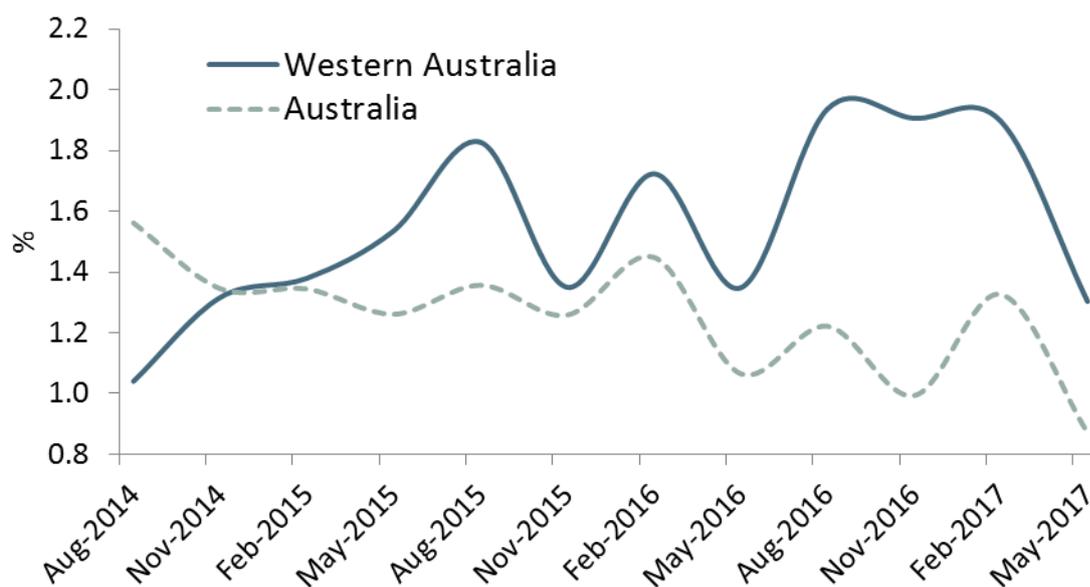
Retrenchment rates⁵⁷ (that is, the number of retrenchments as a percentage of total employment) over 2016–17 show that Western Australia had an average rate of retrenchment at 1.8% – well above the national average of 1.1%.

The following chart shows that the quarterly retrenchment rate series can be variable, which is not overly surprising, given the degree of volatility associated with the timing of retrenchments.

⁵⁶ For those in the Australian labour force who intended to retire, the most common main factors influencing their decision about when they would retire were 'financial security' (40% of men and 35% of women), 'personal health or physical abilities' (23% for both men and women), and 'reaching the eligibility age for an age (or service) pension' (13% for both men and women). (Source ABS 6248.0, Retirement Intentions, July 2014 to June 2015).

⁵⁷ The ABS calculates the retrenchment rate with the denominator being the number of persons employed in the middle month of the previous quarter. For example, for a November retrenchment rate, the November month estimate of the total number of persons retrenched during the last three months is divided by the number of persons employed in August. The previous quarter's employed estimate is used for the denominator as a proxy for people who held a job sometime in the last three months. (Source: ABS 6291.0.55.003, Nov 2015).

Figure 12: Retrenchment rate – Western Australia and Australia, quarterly



Source: ABS, 6291.0.55.003 (data cube 29a)

The same data shows that around 94,400 people were retrenched in Western Australia during 2016–17. In the quarter following retrenchment, around half (or 45,800 people) were subsequently able to find employment, while over a third (or 34,300 people) were unemployed, and 15% (or 14,300 people) were not in the labour force.⁵⁸ An analysis of media reports suggest the larger retrenchment announcements in Western Australia over the past year were mostly related to the mining, construction, and professional, scientific and technical industries.

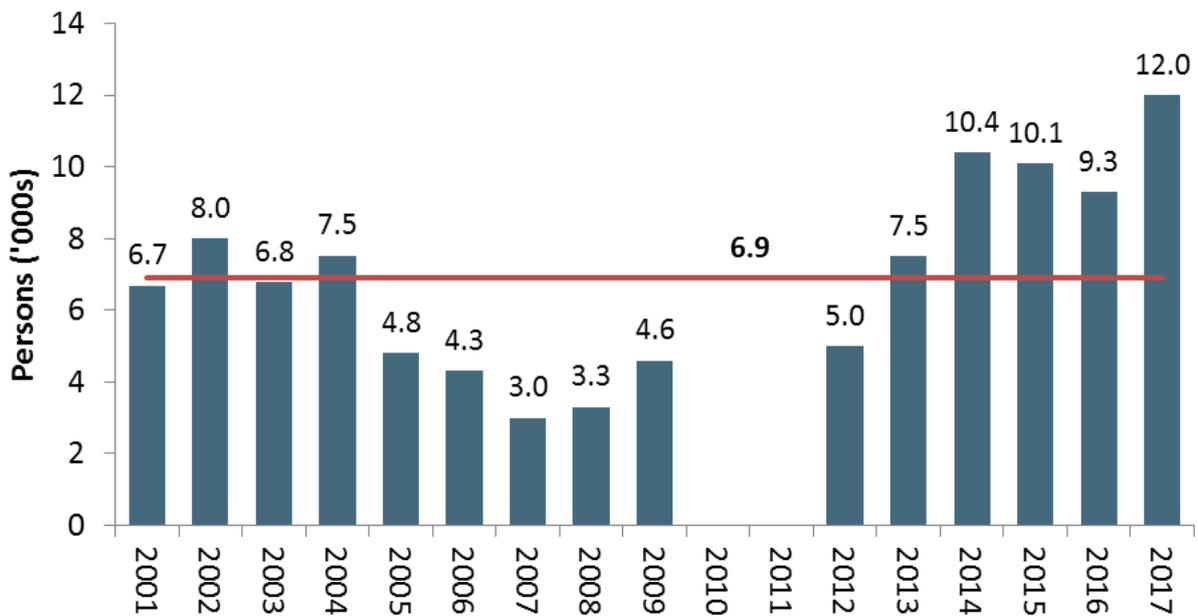
To some degree, extended softer economic conditions may become another of the drivers that will reduce levels of participation by Western Australians, as increased numbers of unemployed workers become discouraged from looking for work in the weaker labour market conditions.⁵⁹ It is cautioned that for this data, it is not possible to accurately determine over time the reasons people at the ‘periphery’ of the State’s jobs market are deciding to either seek or not to seek work at a State level. However, since 2012 the estimated number of discouraged job seekers in Western Australia has more than doubled, to stand at 12,000 people as of February 2017.⁶⁰

⁵⁸ ABS 6291.0.55.003 (data cube 29a), May 2017.

⁵⁹ Discouraged workers are those workers not currently employed, and who are available and able to work, but who are not currently actively seeking work, due to labour market conditions (that is, they have temporarily or permanently given up looking for work). As they are not ‘actively seeking employment’, such persons do not come under the definition of unemployed (and are also excluded from participation rate calculations). However, there is no regularly reported data on the number of discouraged workers at the State level.

⁶⁰ ABS cat. 6226.0, *Participation, Job Search and Mobility*, Table 7 and Table 14.

Figure 13: Number of discouraged job seekers, Western Australia



Source: ABS, 6226.0 and 6220.0 (NOTE: data is not available for 2010 or 2011).

The moderation in the State's labour market over the past three years is also reflected in recent record high estimates of underemployment⁶¹, which measures those persons who are employed, but whose labour effort is not being fully utilised. As such, underemployment is one of the key measures for reviewing spare capacity available in the labour market.

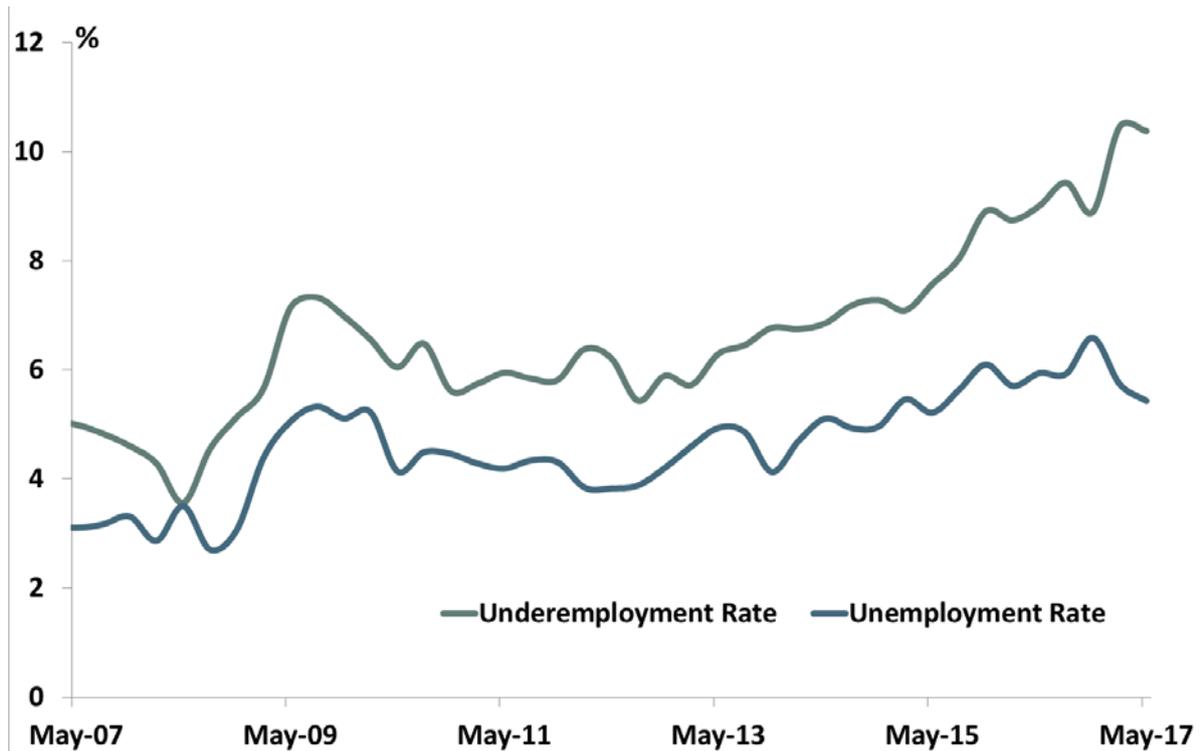
Similar to the unemployment rate, the underemployment rate is the number of people underemployed as a percentage of the total labour force. It is worth noting that given the definitions for both rates, it is not possible for a person to be unemployed and underemployed at the same point in time.

Over 2016–17, there was an average level of around 139,700 underemployed workers in Western Australia.⁶² This represented an increase of 15,400 persons compared to 2015–16 (12.4% higher). This contrasts to the record lows experienced during the peak of the resources expansionary period in 2007–08, when the number of underemployed persons was estimated at almost a third of this level (50,600 persons). The chart below shows the underemployment rate for Western Australia alongside the unemployment rate.

⁶¹ The number of underemployed persons is made up of: part time workers who would prefer more hours, and are available to work; and full time workers who, for economic reasons, worked part time hours during the ABS Labour Force survey period. In contrast, those who are unemployed are those persons who were not employed during the Australian Bureau of Statistics reference week, and: 1) had actively looked for full time or part time work at any time in the four weeks up to the end of the reference week and were available for work in the reference week; or 2) were waiting to start a new job within four weeks from the end of the reference week and could have started in the reference week if the job had been available then.

⁶² Note: Underemployment and underutilisation figures from the ABS at the time of writing were released on a quarterly basis and monthly basis. All data in the section, though a close match to the financial years stated, is four quarters worth of data to May of the respective year to allow for a longer timeframe analysis.

Figure 14: Western Australia’s underemployment and unemployment rates



Source: ABS, 6202.0 (quarterly seasonally adjusted)

The State’s underemployment rate as at June 2017 stood at 9.8%, with a sharp rise of 1.1 percentage points over the last year. As shown in the chart below, the State and national underemployment rates have both been trending higher over recent years, though at a greater degree in Western Australia.

Figure 15: Western Australian and Australian underemployment rates



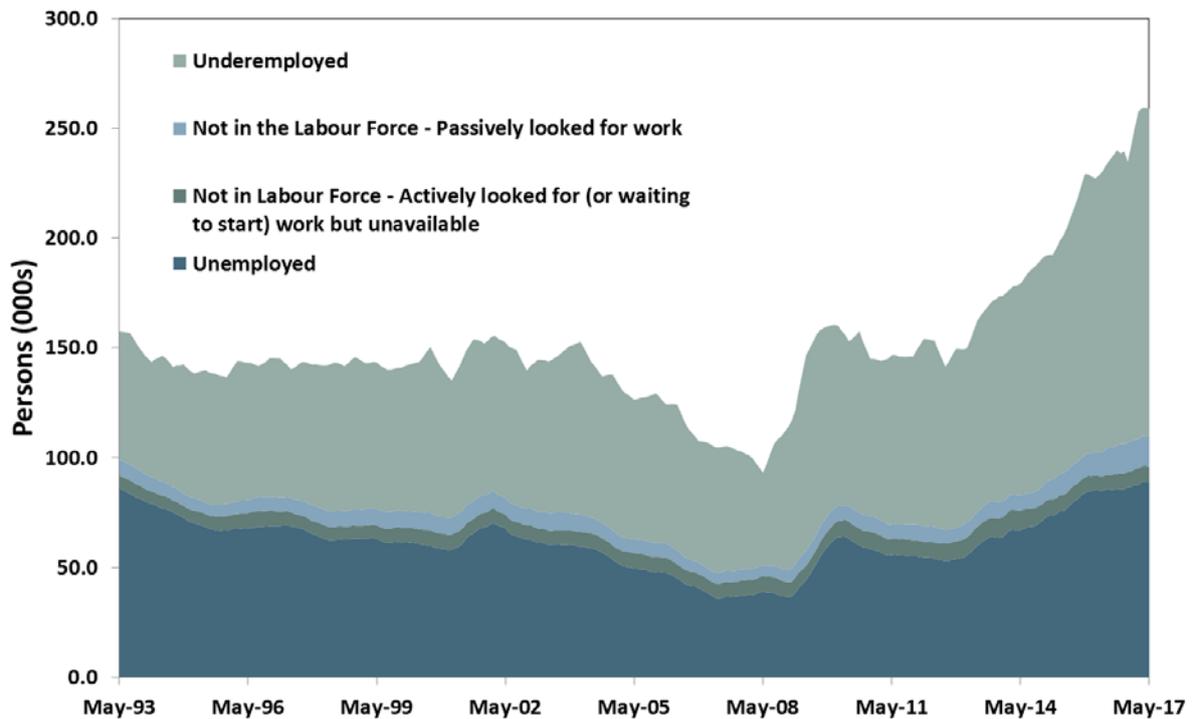
Source: ABS, 6202.0 (quarterly seasonally adjusted)

Underemployment rates have now exceeded previously held highs both nationally and across all states (including Western Australia) since the start of the current labour force series in 1978. This suggests that there are increasingly larger proportions of those who are employed and would like to work more hours, with the underemployment rate for Western Australia exceeding the national rate during the past couple of years for the first time since 2004.

Combining the number of underemployed and unemployed can also be used to provide an estimated level of underutilised (that is, spare) capacity in the State's current jobs market. In addition, it underscores the degree to which those seeking to either increase their hours of work or find work in the first place are facing high levels of competition from other job market participants.

As of May 2017 there were around 238,200 persons in Western Australia who were underutilised (that is, those underemployed and unemployed). Taken together with those persons in the State who 'passively' sought work that is, looking for, but not applying for a job), and those who actively sought work, but for whatever reason were not immediately available to start work (the middle two sections of the graph below), there has been a very sharp and notable increase in additional capacity in the State's labour market in the last three or so years.

Figure 16: Western Australia's spare labour capacity

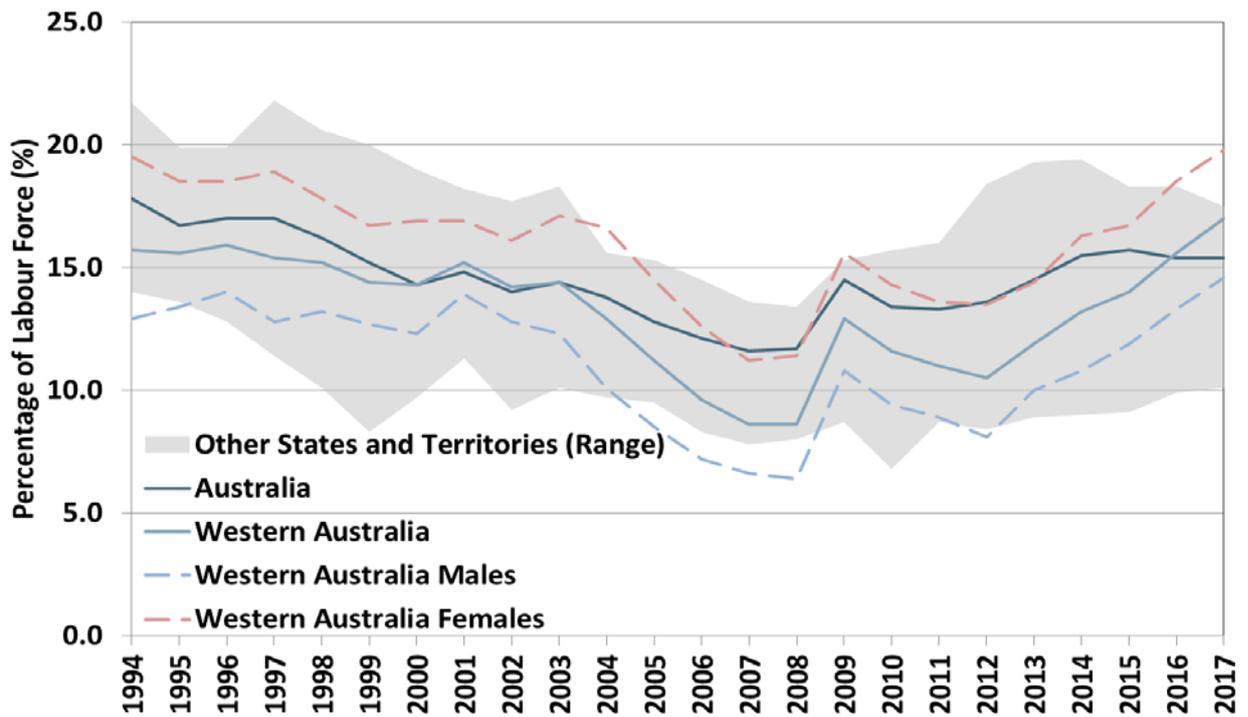


Source: ABS, 6202.0, Table 25 and 6291.0.55.001, NM2

As also shown on the graph above, the State's number of underemployed persons has grown at a much greater rate than the number of unemployed. This trend has also been experienced nationally, though has been sharpest in Western Australia over recent years. The evidence suggests that persons who are underemployed are primarily those employed for part time hours, but wanting an increase in hours – including moving into (or seeking a return to) full time employment status.

The graph below shows Western Australia's underutilisation rate (the sum of the number of persons unemployed and the number of persons in underemployment expressed as a proportion of the labour force), has historically been lower than that recorded nationally. In Western Australia, the rate has historically trended consistently in the lower half when compared to the other states and territories, signifying a lower supply of labour on hand compared to the other jurisdictions. This pattern changed following the end of the resources investment boom and the coinciding significant falls in the demand for labour, with Western Australia now trending near the top of the range against other states for the first time.

Figure 17: Underutilisation rates by state and gender⁶³



Source: ABS, 6226.0, Participation, Job Search and Mobility, Special Table. Note: Calculation of underutilisation switched from September to February from 2014 onwards

The graph above also highlights that females consistently experience a higher rate of underutilisation in the labour market, with at present around one in every five Western Australian women actively seeking employment or looking for additional hours of work at the start of 2017.

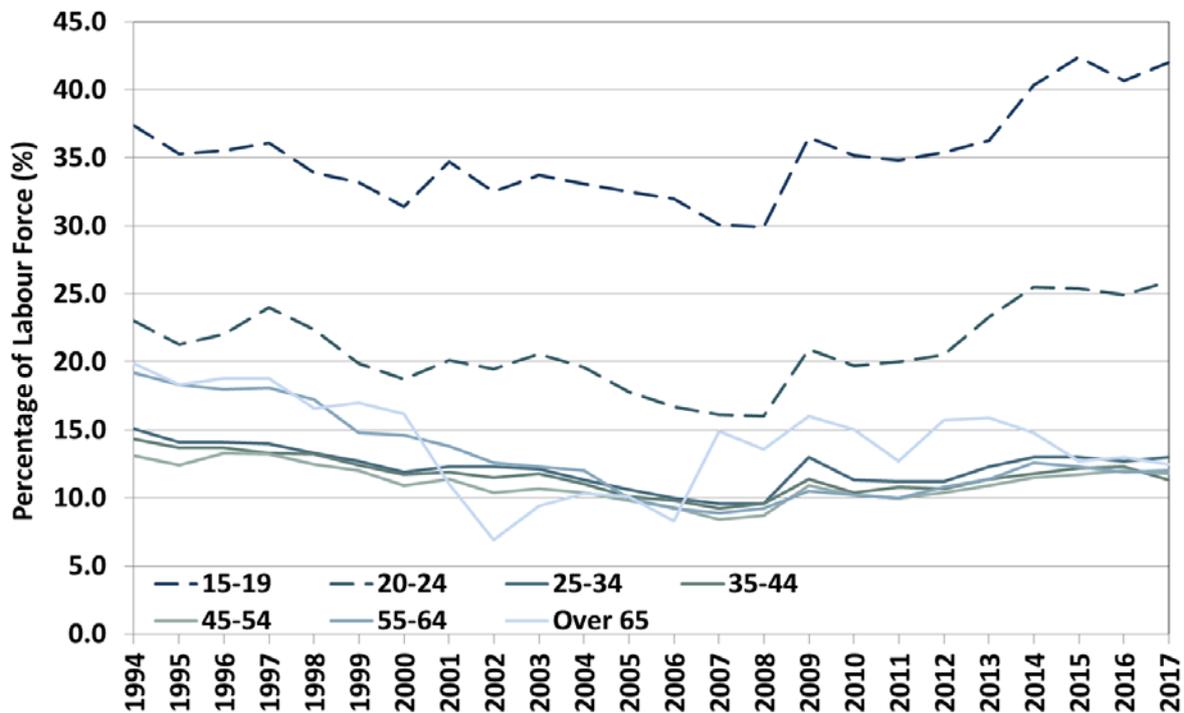
Looking at underutilisation rates by age shows that the youth cohort (aged 15–24) is disproportionately affected by underutilisation. This is not unsurprising given that the rate of youth unemployment is persistently double that of the overall unemployment rate. Over the past decade, the underutilisation of youth (dotted lines on the graph below) has trended noticeably higher and currently shows no signs of slowing. At present, around one in four young people in their early twenties is not working at their desired capacity. This is of particular concern given this age group includes many new graduates from both VET and higher education who have completed their qualifications and entered the labour market. This also aligns with separate surveying of recent graduates from Graduate Careers Australia and the National Centre of Vocational Education Research (NCVER), which shows an overall decline of graduates having full time employment within 4– 6 months of graduating over the same time period.⁶⁴

⁶³ Note: Extended Under Utilisation – includes those marginally attached to the labour force; as per the labour market status of persons displayed in previous chart.

⁶⁴ Graduate Careers Australia, Australian Graduate Survey 2016 and NCVER, Total VET Graduate Outcome 2016.

Figure 18: Underutilisation rates by age (national)⁶⁵

Note: Reliable labour force data by age breakdown is generally only available at a national level.



Source: ABS, 6226.0, Participation, Job Search and Mobility, Special Table. Note: Calculation of underutilisation switched from September to February from 2014 onwards.

Another indicator of the state of Western Australia's labour market is the duration for which unemployed people have been unemployed, with those who have been continuously unemployed for a year or more commonly classified as 'long term unemployed'. Prior to the rise in the number of long term unemployed around 2009 (resulting from the economic downturn induced by the GFC), long term unemployment in the State in 2008 had fallen to average annual levels of around 2,700 people (averaging only 0.2% of the State's labour force).

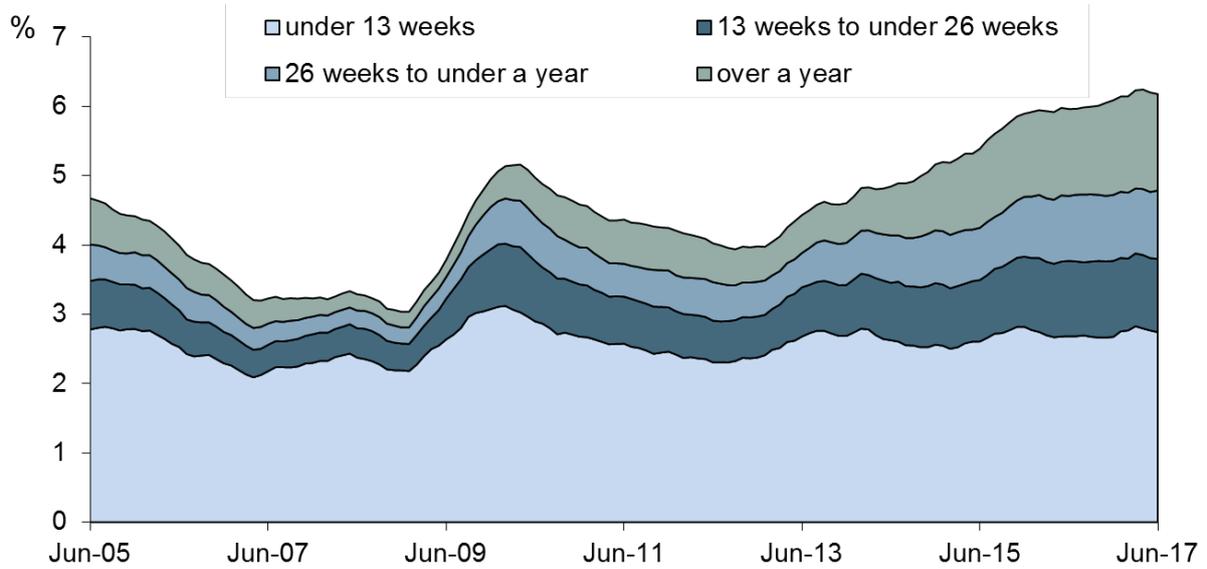
In contrast, the number of long term unemployed persons in Western Australia is now at an average annual level of 19,900 persons (or around 22.5% of the average number of unemployed people over 2016–17). This was an increase of 1,900 persons from the previous year. The top grey block of figure 17 shows the proportion of the State's unemployment rate consisting of those who have been unemployed for over a year.⁶⁶ In recent years since the start of the post resource investment boom period, short term 'frictional' unemployment (under 13 weeks) has remained largely stable, though the number of persons unable to find employment promptly after entering a period of unemployment has increased markedly. At the end of the 2016–17 financial year, 55.6% of the State's unemployed were out of work and actively seeking employment for longer

⁶⁵ Note: Extended Under Utilisation – includes those marginally attached to the labour force.

⁶⁶ It is cautioned that the incidence of long term unemployed in the State can be a lagging indicator of conditions, purely due to what it is measuring. For example, for any period when labour market conditions deteriorate, it will take a while (up to a year) for any newly unemployed person to go through a continuous period of being unemployed for a full 12 months. Accordingly, some of those who have been unemployed for a period of between 26 weeks to a year (figure 11 above), given some more time, may yet progress up to the next category of being unemployed for over a year. Even so, for any given unemployed person, going from one duration category into another category (of a longer duration) is by no means a certainty – indeed, most unemployed persons do not end up in this category. Rather, people who are unemployed for only short periods of time (under 13 weeks) typically make up the majority of unemployed people at any given time, regardless of labour market conditions (as can be seen from the preceding chart). Most (but not all) of these are likely to represent 'frictional' unemployment – those workers who are unemployed only for temporary periods, because they are between jobs, or are newly entering the labour market prior to finding work.

than 13 weeks. This is compared to the peak of the resources boom period prior to the GFC where the equivalent result was 26.8%, when vacancies were plentiful and the movement into jobs markedly easier.

Figure 19: Western Australian unemployment rates, decomposed by duration*

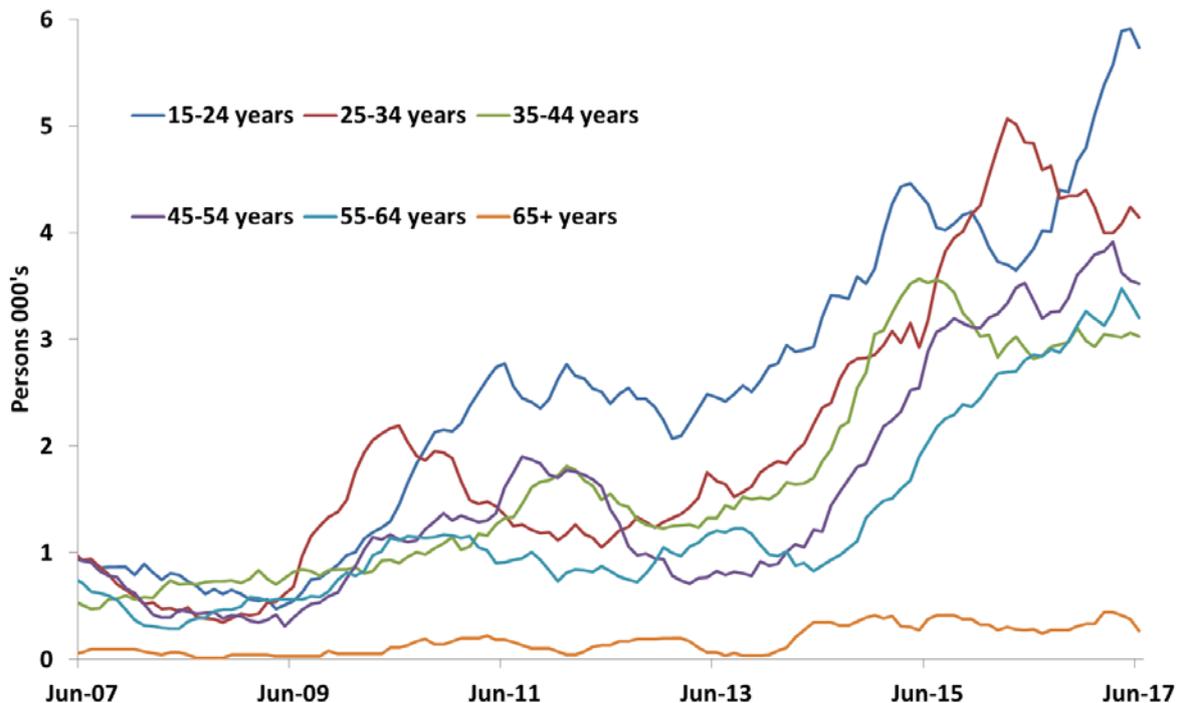


*Number of unemployed persons, by duration of unemployment, expressed as a percentage of the State’s labour force

Source: ABS, 6291.0.55.001, UM2, 12 month rolling average

The following graph shows the decomposition of those long term unemployed persons by age cohort. The younger age cohorts have experienced the highest numbers of persons being unemployed for a year or more, including a noticeable spike during 2016–17 in the number of long term unemployed youth aged 15 to 24.

Figure 20: Long term unemployed (>1 year) by age, Western Australia (000s)



Source: ABS, Customised data request, 12 month moving average (June 2017)

Youth Unemployment and Participation

Economic downturns tend to have a disproportionately negative impact on labour market opportunities for young people, possibly due to employer preferences for retaining older workers with greater levels of skill/experience, meaning newer entrants to the labour market find it harder to gain employment.⁶⁷

During 2016–17, the average total employment for the youth cohort (for full time and part time positions) decreased by 7,000 persons (down 3.4%) to 202,600. Full time employment recorded a significant decrease of 10,100 persons. However, this was partially offset by an increase in part time employment of 3,000 persons.

The number of young people unemployed in Western Australia (those seeking either full time or part time work) increased by 3,600 persons (or 13.7%) to an average of 29,900 people over 2016-17. This result represented just over a third (33.8%) of total unemployed persons in Western Australia being from the youth cohort.

A factor to consider when comparing the respective unemployment rates for young people relative to the total population is that a much larger proportion of the younger age groups are involved in full time or part time education while undertaking or seeking employment.

In this context, it is useful to consider unemployment rates for young people according to their educational attendance. For example, around 83.8% of the 15–24 aged youth cohort who were seeking part time employment were also attending full time education in 2016–17, and as such, a useful way of examining youth unemployment is to focus on those seeking full time employment.

There was an average of around 18,100 young people seeking full time employment during 2016–17, with an average unemployment rate of 16.4% (compared to 13.2% the previous year). As shown by the next chart, the State's current unemployment rate for those aged 15–24 searching for full time employment is relatively low on a longer term historical basis.⁶⁸ However, as shown on the graph below, the unemployment rate for this demographic cohort continued to rise sharply, overtaking the equivalent national rate for the first time since 2005.

Figure 21: Unemployment rate for 15–24 year olds searching for full time employment



⁶⁷ National Centre for Vocational Education Research, Briefing paper 23, Young people in an economic downturn, 2010.

⁶⁸ However, this phenomenon can be explained somewhat by the increase in the proportion of the youth cohort remaining in education for longer, with approximately 49.9% engaged in full time education at June 2017 compared with 26% in 1987.

Source: ABS, 6291.0.55.001 (12 month moving average)

There is a concern that the current moderating conditions in the State’s labour market are showing a significant increase in unemployment rates for the 15–24 age cohort compared to the rest of the population, which (as shown in the chart above) is also manifesting itself in the sharp increases in the number of youth unemployed for longer durations of time.

The following chart shows that the number of youth being unemployed for longer periods has been increasing, with the number of young people unemployed for more than six months rising notably over the past four years. Long durations of unemployment are of particular concern as they often precede further unemployment or a complete exit from the labour market. This is especially problematic for the youth cohort as an early spell of prolonged unemployment may permanently damage long term employability.

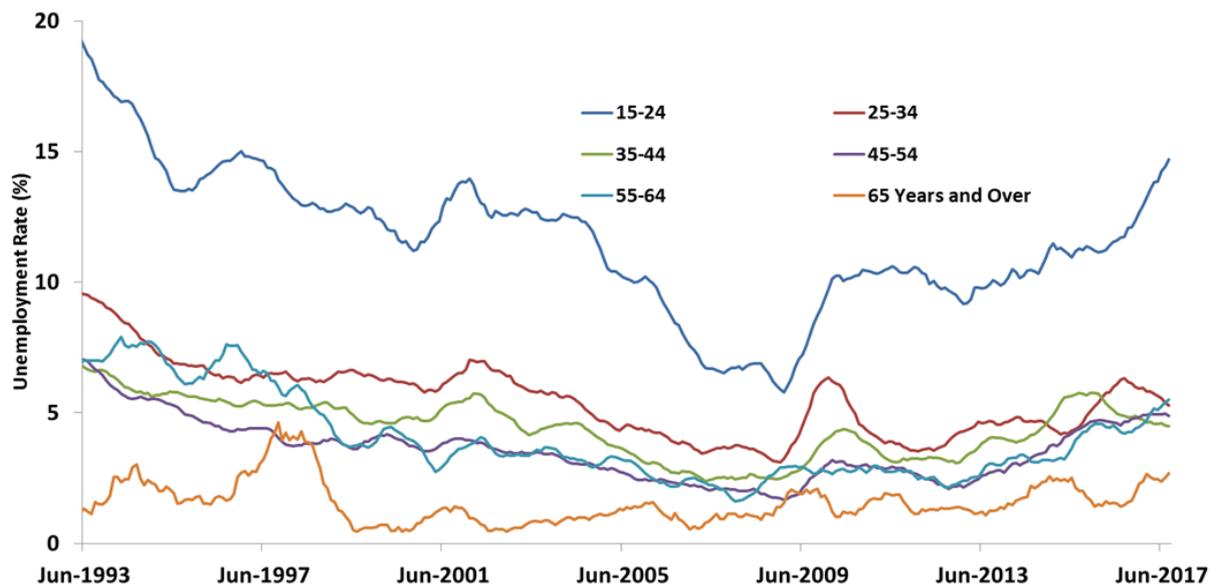
Figure 22: Long term duration of unemployment for 15–24 year olds in Western Australia (000s)



Source: ABS, Customised data request, 12 month moving average (June 2017)

Further, the following chart shows that the youth cohort aged 15–24 still has higher unemployment rates considerably above those of other age cohorts. The chart also shows that during past economic downturns (for example, in 1991, 2001 and more recently the GFC in 2009), youth tended to record sharper increases in unemployment in comparison to most other age cohorts.

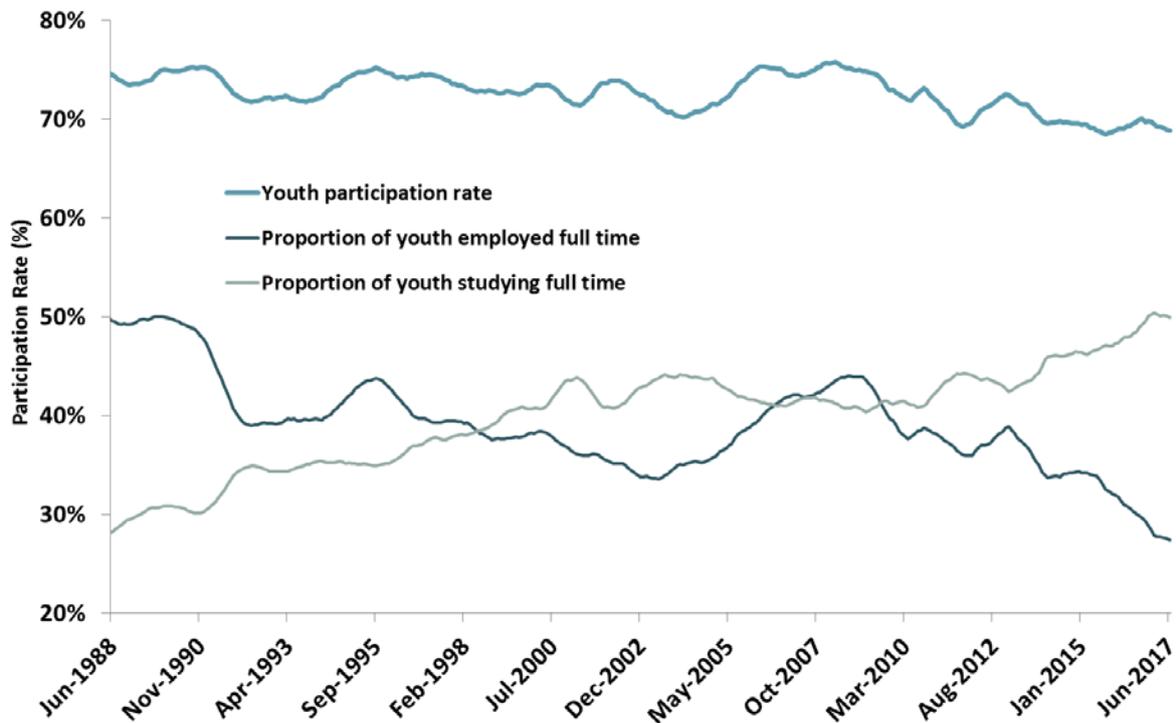
Figure 23: Western Australian unemployment rate by age



Source: ABS, 6291.0.55.001, 12 month moving average

A softer labour market over the past four years may also be contributing to a recent increase in the proportion of young people returning to or continuing in full time study for longer. This is particularly the case over the past four years, where a declining proportion of youth being employed full time has coincided with an increase in the proportion of young people studying full time.

Figure 24: Labour market participation and the proportion in full time education and full time employment of persons aged 15–24, Western Australia



Source: ABS, 6291.0.55.001, 12 month moving average

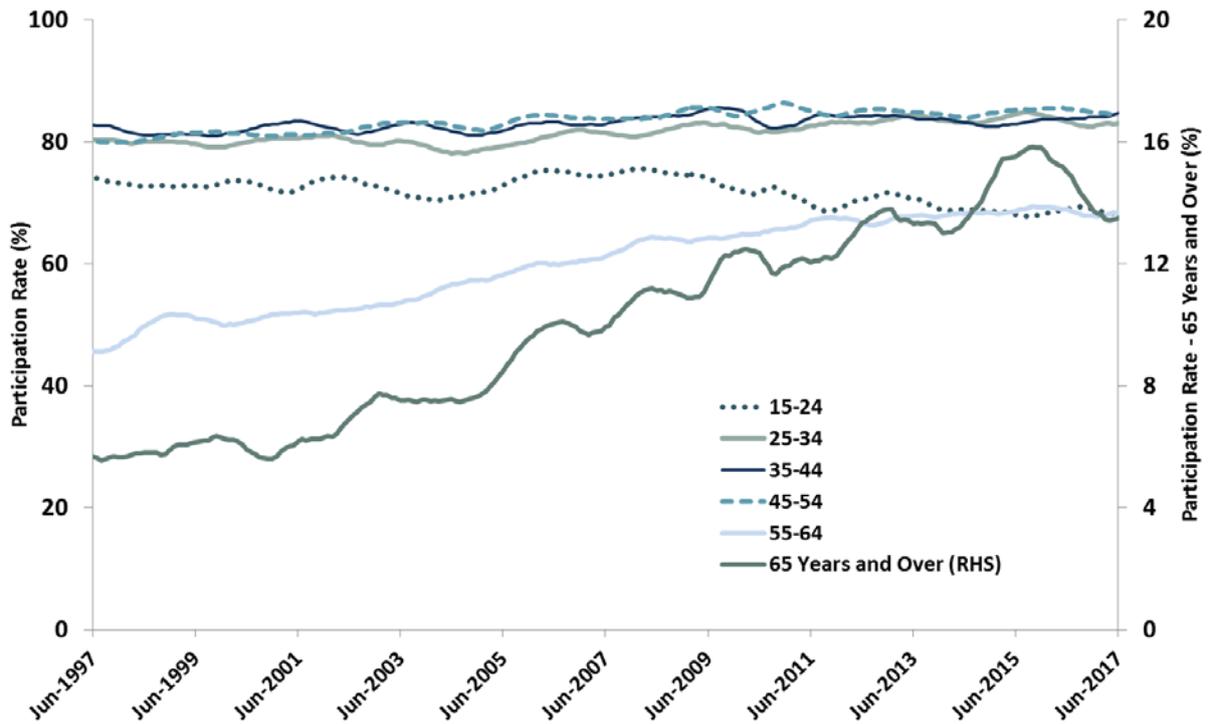
The participation rate for young people decreased by 0.7 percentage points (to an average of 68.8% over the 2016–17), compared to four years prior with an average of 71.5%. This has resulted in the youth cohort making up a lower proportion of the overall labour force.

The youth cohort is vulnerable to changing labour market conditions and thus acts as a barometer of near term pressures on the labour market. The State's youth will have a progressively more vital role to play in respect to bolstering future labour supply in the State's workforce, in particular as a replacement source for labour as the State's working population ages, and the current cohort of 'baby boomer' workers retires in increasing numbers.

Of note has been the strong increase in the participation of older cohorts with people aged 55 to 64 years, and those aged 65 years staying longer in the labour force – albeit this growth coming from a low base. Part of the reason for this trend may be due to people delaying their retirement due to a lack of financial security.⁶⁹ Rising participation rates for older cohorts have the potential to slow the rate of job opportunities for those younger people replacing retiring workers.

⁶⁹ For those in the Australian labour force who intended to retire, the most common factors influencing their decision about when to retire were 'financial security' (40% of men and 35% of women), 'personal health or physical abilities' (23% for both men and women), and 'reaching the eligibility age for an age (or service) pension' (13% for both men and women). Source: ABS 6248.0, Retirement Intentions, July 2014 to June 2015

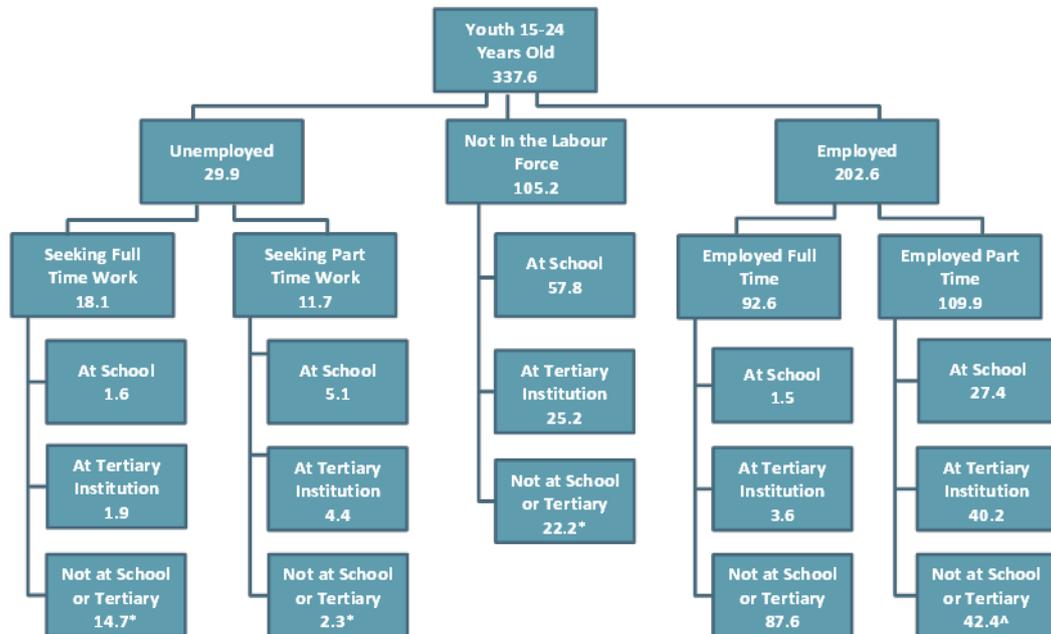
Figure 25: Participation rate by age, Western Australia



Source: ABS, 6291.0.55.001, 12 month moving average

A more detailed breakdown of the 15–24 age cohort in relation to their labour force and educational status over 2015–16 shows that 60.0% of 15 to 24 year olds were engaged in employment of some kind, 31.1% were not in the labour force and a further share of 8.8% were unemployed.

Figure 26: Labour force/educational status of persons aged 15 to 24 years, WA



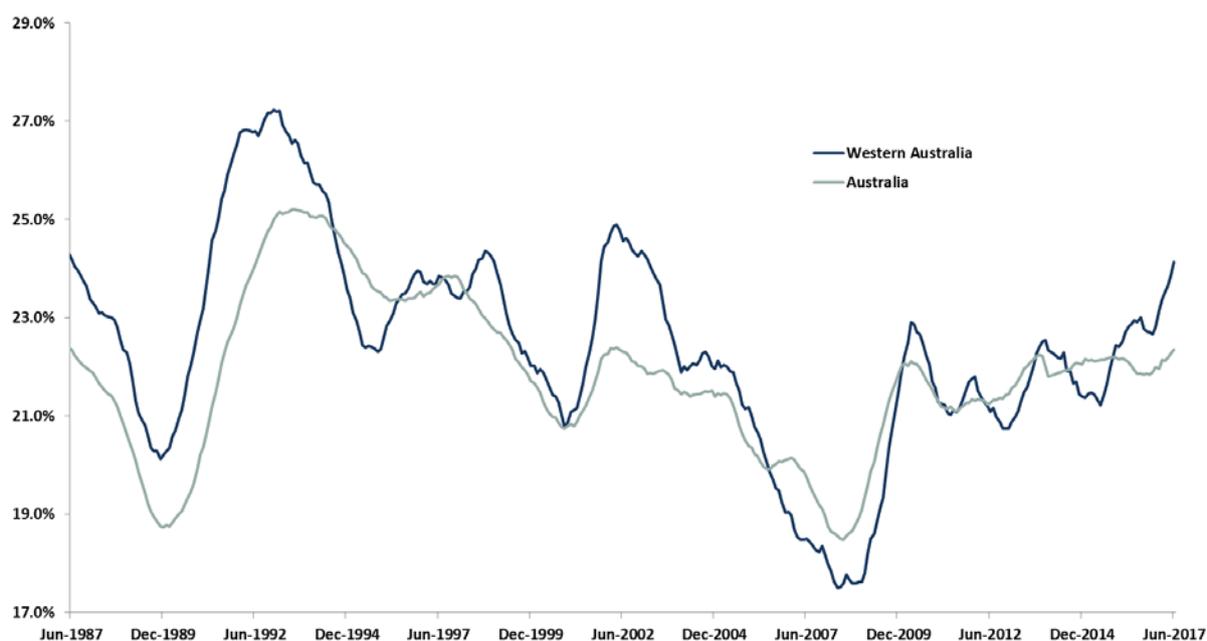
Source: ABS, 6291.0.55.001 (12 month average to June 2017 ['000s])

An area of specific interest is the group of young people who are either:

- not working or engaged in any form of full time education (39,200 persons); or
- employed part time, but not in any full time education (42,400 persons).

These groups make up the proportion of the youth population considered not ‘fully engaged’ and consisted of an average of 81,600 people over 2016–17, or 24.2% of the State’s total youth population. This number has increased by around 3,900 persons since the 2015–16 and is well above the national average of 21.7%, as shown below in figure 24. It is also above the decade average of 21.1%.

Figure 27: Proportion of 15–24 year olds not fully engaged, WA and Australia

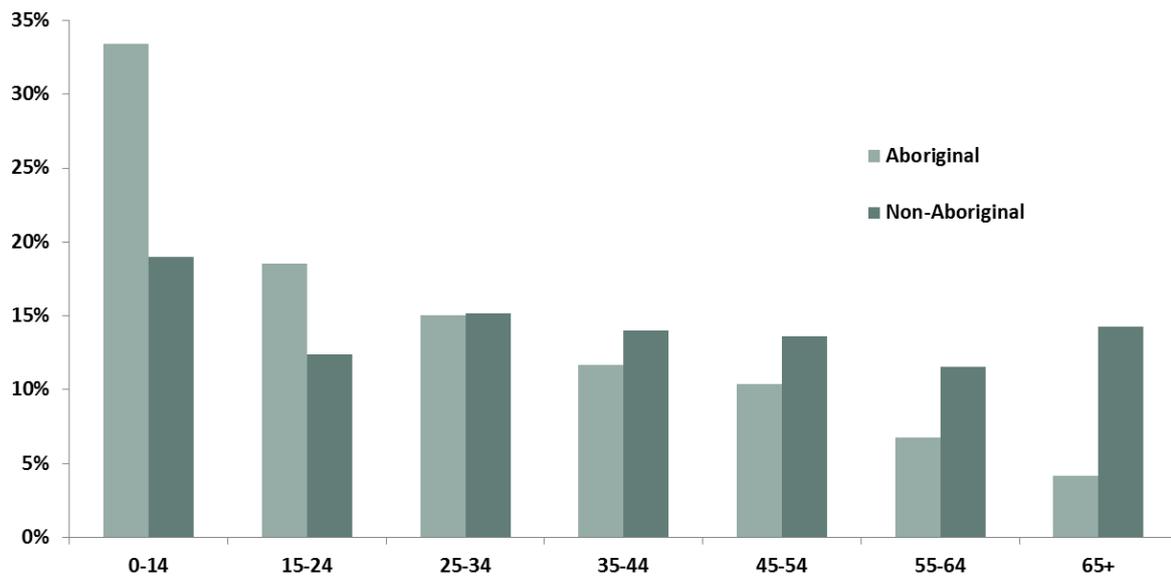


Source: ABS, 6291.0.55.001, 12 month moving average

Further to this, during 2016–17, there were around 17,000 unemployed young people who were not attending full time education, the highest level since 2001–02. Accordingly, Western Australia’s young people should be a very important component of the State Training Plan, particularly in terms of ensuring that they acquire appropriate training and preparation for entry into the State’s workforce.

The issue of youth outcomes is also especially important within the Aboriginal and Torres Strait Islander (Aboriginal) demographic as they have a younger age profile than non-Aboriginal people, as shown below in figure 29.

Figure 28: Proportion of Aboriginal and non-Aboriginal persons by age, WA



Source: ABS, Census of Aboriginal and Torres Strait Islander Peoples Profiles, 2016

Figure 29 illustrates the increasing number of young Aboriginal people in Western Australia compared with older age groups. The median age of the Aboriginal population in 2016 was 23 years compared with 37 years for non-Aboriginal persons. Over half (51.9%) of Aboriginal people were aged under 25 years in Western Australia compared with 31.4% of non-Aboriginal people.⁷⁰

Congruent with this is the fact that for all age groups in 2014–15, Western Australia had the second highest proportion of Aboriginal persons not in the labour force at 47.3% and the highest Aboriginal unemployment rate of 26.9% in Australia.⁷¹

As such, the VET sector remains a crucial element in connecting young people’s competencies with industry’s skill requirements. The early career pathways and related skilling up of the State’s young people remains of significant importance, as this represents a critical stage in the beginning of any person’s career development and their future work engagement. More information on young people is included in Appendix C.

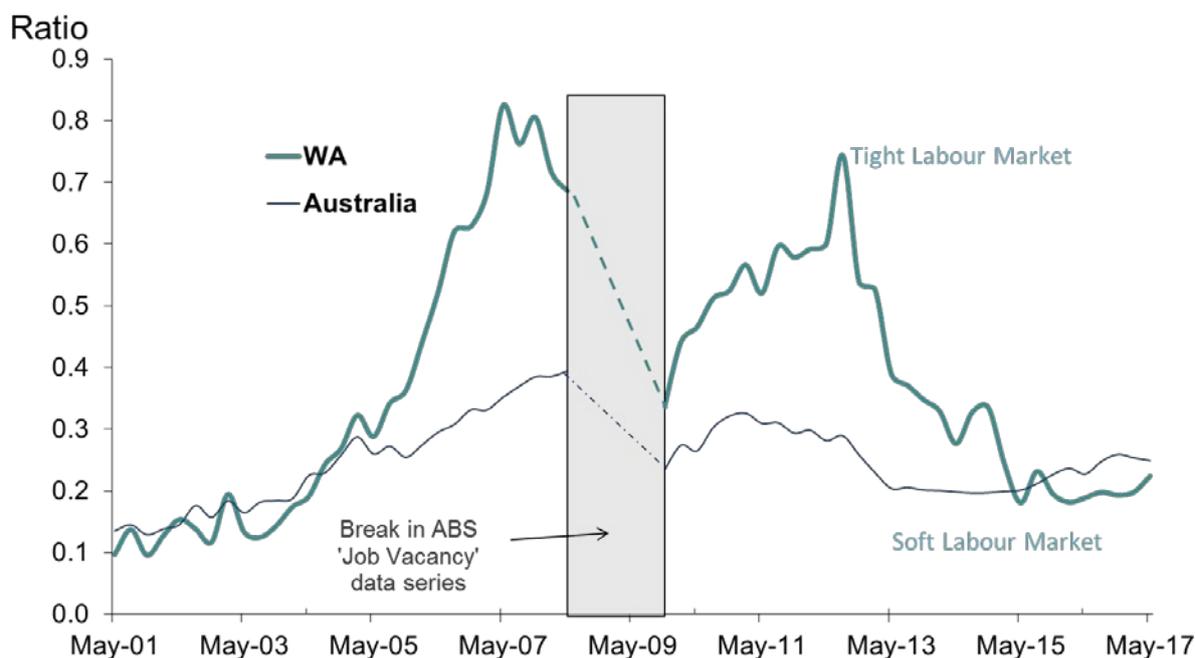
Job vacancies and fill rates

As a leading indicator of employment demand, job vacancy levels are another key indicator of labour market conditions. Reflecting the slowing in the State’s labour market in recent years, job vacancy levels in the State have seen a sizable decline over the past three years. When reviewed as a ratio of job vacancies to the number of unemployed persons, the results show that over the past couple of years, this indicator has dropped below the equivalent national result. This suggests a slightly softer labour market locally for those people seeking a job compared to Australia as a whole.

⁷⁰ ABS, 2016 Census.

⁷¹ 4714.0 National Aboriginal and Torres Strait Islander Social Survey, Australia, 2014–15.

Figure 29: Ratio of job vacancies to unemployed



Source: ABS, 6202.0 and 6354.0

Consistent with this, the *CCI Survey of Business Expectations* shows around 21% of businesses reported labour to be scarce in the March quarter 2017, which was higher than the 8% recorded in the previous year. However, this current rate is down substantially from consistent results of around 75.0% recorded for the same survey question during the peak of the resources expansionary period.

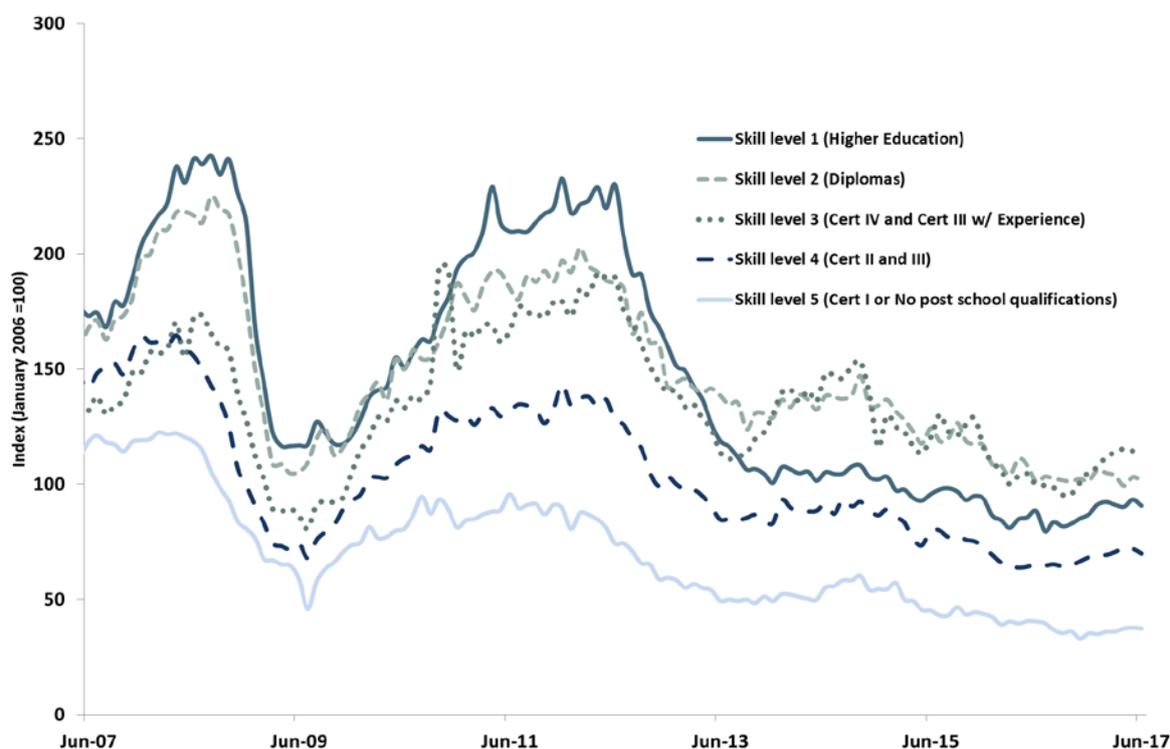
A further proxy for labour demand, the *Internet Vacancy Index (IVI)*⁷² (IVI - produced by the Australian Department of Employment) showed that Western Australia recorded a 6.2% decrease in job vacancies for 2016–17 compared to a year prior. The index is below its reference point, which demonstrates that advertising counts on a monthly basis are below their levels at the start of the index in January 2006.

The IVI also provides a breakdown of listed job adverts by their indicative skill level as defined by ANZSCO.⁷³ Though there have been declines across all areas, what is of note is the rate of decline for certain skill levels. Since the State's labour market began to soften towards late 2012, those occupations requiring a bachelor degree or higher have declined the most sharply.

⁷² This index has been trended and is based on a count of online vacancies newly lodged on SEEK, CareerOne and Australian JobSearch during the month. For more information, see: <http://lmip.gov.au/default.aspx?LMIP/VacancyReport>

⁷³ The method used to match job advertisements to their skill level is undertaken by coding first via ANZSCO. That is to say a job advertisement is coded to an ANZSCO, and that ANZSCO's assigned skill level by the ABS is also automatically coded for that job advertisement as well. As a result, where a job advertisement has a different qualification requirement, such as a Child Care Worker (nominally a Skill level 4) wanting a diploma qualified applicant (Skill level 2), this is not picked up at present in this data set.

Figure 30: Internet vacancy index – advertising by skill levels, Western Australia



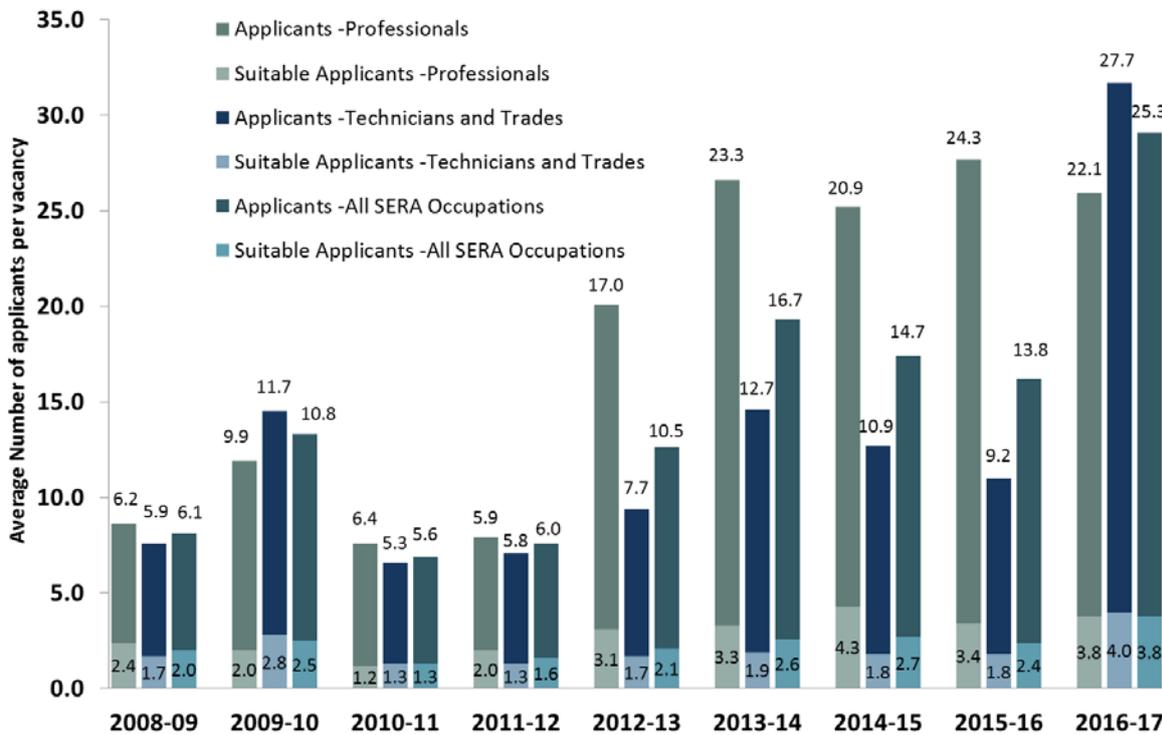
Source: Australian Government Department of Jobs and Small Business, Labour Market Information Portal (LMIP)

By comparison, since 2012, occupations requiring VET related skill levels declined at a slower rate than those requiring higher education. However, it is important to note that despite these heavy falls, proportionally advertising for higher education related occupations makes up the greatest amount of vacancies in Western Australia at 33.1%. When combined with VET, 88.7% of all online job advertisements are for occupations that indicatively require at least a Certificate II level qualification or higher for entry. This highlights the importance of post school education and training in Western Australia’s current labour market.

Weaker demand from employers has translated into higher levels of competition among job seekers for the small number of available job vacancies, which has been the case particularly since 2012. As shown in the chart below, the Australian Department of Jobs and Small Business *Survey of Employers Who Have Recently Advertised*⁷⁴ highlights that the State’s employers reported an average of 25.3 total applicants per vacancy across the 2016–17 program year. This was significantly higher than the 13.8 applicants per vacancy recorded for the year prior. The proportion of vacancies filled of 78% in 2016–17 was similar to the figure of 79% for 2015–16. These results showed that skilled job vacancy fill rates have now reached their highest levels seen over the decade. As shown on the chart below, competition amongst applications for jobs was strongest for technicians and trades during the 2016–17 program year. This result is, however, a reversal from the preceding program years when applicant numbers per vacancy for professional occupations were at times double what employers seeking trade level occupations received.

⁷⁴ These figures are a summary of the quantifiable results of the Australian Department of Jobs and Small Business skill shortage research program, based on the Survey of Employers who have Recently Advertised (SERA). The program assesses the labour market for around 100 skilled occupations, focusing mainly on professions, technicians and trades, but also including a small number of management and other occupations. Occupational coverage varies by state and territory and over time. Information about the SERA methodology is available at jobs.gov.au/skill-shortages.

Figure 31: Average number of applicants and suitable applicants per vacancy, Western Australia



Source: Australian Government Department of Employment, Survey of employers who have recently advertised (SERA)

The number of total applicants has broadly trended higher since 2012–13 as the resources boom started to wane. As applicant numbers grew, so too has the number of suitable applicants,⁷⁵ though the pace of which has not increased as rapidly as the total number of applicants. This is partly due to the fact that the number of applicants considered suitable is based on the employers’ assessment of suitability where occupation specific subjectivities can play a key influence. (For example, requirement for post training workplace experience using a specific piece of software in the case of a draftsman, or prior work with a certain cuisine in the case of a chef).

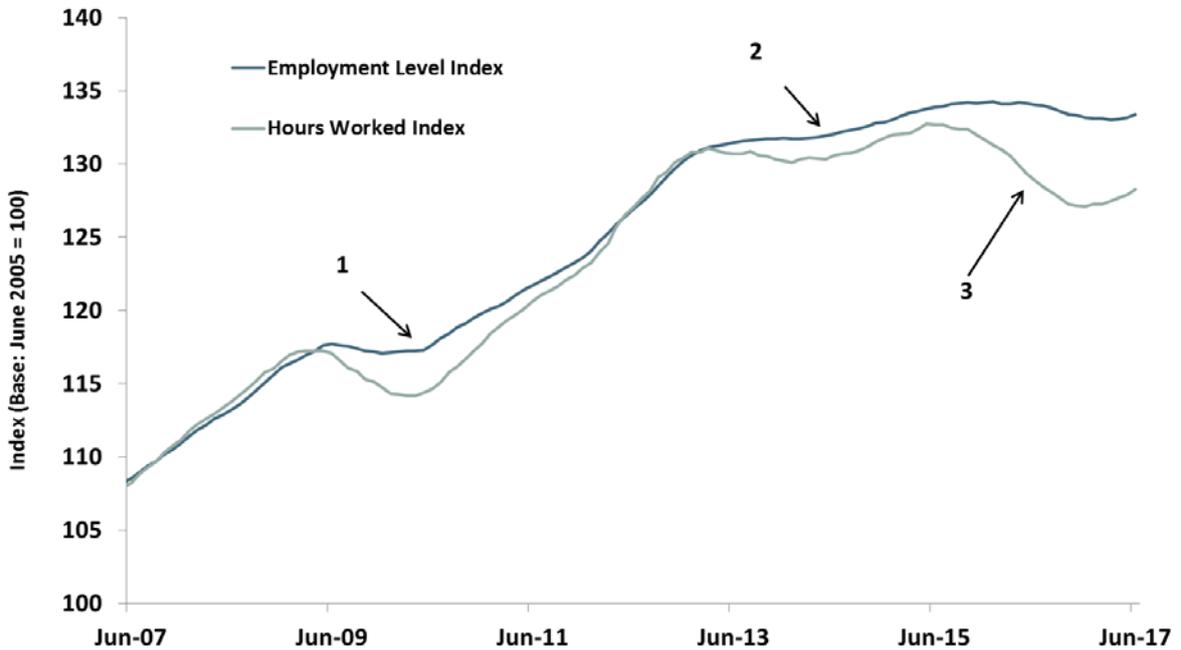
Hours worked and wage trends

The State’s moderating labour market is further reinforced by matching jobs growth against hours worked growth (with both being expressed as indices in the chart below). This shows that over the past three years employers have been reducing the hours worked by employees (as per arrow number 2 in the following chart).

⁷⁵ A suitable applicant is one who has the skills, experience and qualifications needed to undertake the advertised position. This may take into consideration ‘soft’ or non-technical skills.

Source: Department of Employment, Skill Shortage Research Methodology, 2016
https://docs.employment.gov.au/system/files/doc/other/ss_methodology.pdf

Figure 32: Index of employment levels and hours worked – Western Australia

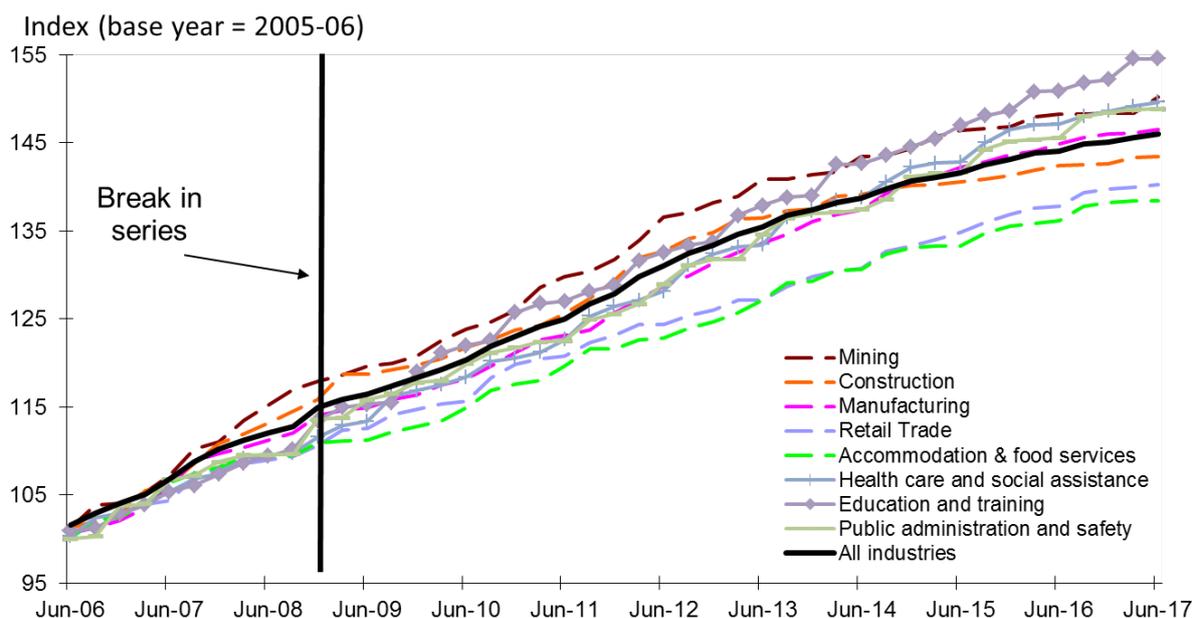


Source: ABS, 6202.0, indexed to 100 at June 2015 (12 month moving average)

This situation is somewhat similar to the period following the GFC in 2009, (arrow 1 in the chart above) when employers quite noticeably cut hours worked of employees, rather than actual jobs. The main difference between the two situations is that in the most recent period has persisted for an extended period of time and is much wider (see arrow 3). This situation is reinforced by the fact that the growth in employment over the past year has been in part time jobs rather than full time jobs. This implies that employers currently have some capacity to increase the hours of existing employees before taking on new workers. This could mean that total jobs growth in the short to medium term will remain sluggish, particularly if overall labour demand remains soft.

The spare capacity in the State’s labour market and stronger competition for job advertisements has resulted in a slowing in wages growth. Western Australia’s annual wages growth (as measured by the ABS Wage Price Index) was 1.8% over the year to June 2016, slightly lower than the 2.1% growth recorded over the year to June 2015. This is significantly lower than three years prior, with an annual growth rate of 3.4% in the year to June 2013.

Figure 33: Wage trends for selected industries – Western Australia



Source: ABS, 6354.0, Wage Price Index data (published and unpublished data)

The chart above shows the wage differentials by industry over recent years. The historically lower paying industries of the retail trade, and accommodation and food services have seen their salary levels decline further relative to the State result across all industries, suggesting the pay gap is widening. The large decrease in employment in the construction industry over the past year has coincided with lower than average wage growth.

The chart also shows that mining has offered strong growth in wages over the last decade; however, this rate of growth has slowed more recently. Despite the slowing in wage growth and weaker conditions, the salary levels in resources still remains well above the State norm. The education and training industry is also well above the State average, particularly following scheduled pay rises for the State's public school teachers in 2013–14.⁷⁶

Perth vs regional WA

When considering labour market characteristics for the State it is useful to also look at differences between metropolitan and regional areas. In 2016–17, over three quarters (78.1%) of the State's employees resided in Greater Perth, with 13,300 fewer workers compared to the previous year. An average of around 294,000 employees resided in the rest of Western Australia during 2016–17 – an increase of 7,800 workers from the previous year.

The participation rate for the rest of Western Australia of 69.5% was significantly higher than the previous year's rate of 68.5%. The participation rate of 67.0% for Greater Perth over 2016–17 was significantly below the 68.1% recorded for the previous year, and also well below that for the rest of Western Australia of 69.5%.

Greater Perth recorded an average unemployment rate of 6.5% over 2016–17, which was substantially higher than the 4.9% recorded for the rest of Western Australia. However, there is a high degree of variation in labour market conditions between the regions, which is highlighted by some significant differences in unemployment rates⁷⁷ which ranged from an average of 12.2% in the Kimberley during 2016, to 2.4% in the Pilbara. It is important to note that even within the Pilbara there was a range of 1.1% to 3.3% in unemployment rates for the local government areas that make up the Pilbara.

⁷⁶ *The School Education Act Employees' (Teachers and Administrators) General Agreement 2011.*

⁷⁷ Source: Australian Department of Employment, Small Area Labour Market (SALM) data. SALM estimates are subject to significant variability and should be viewed with caution. Results from this data set are derived from very small local populations and should not be relied upon for individual data points/results, but for longer term trends over time.

The Kimberley, Gascoyne and Goldfields–Esperance regions all recorded a significant decrease in their unemployment rates, while unemployment rates increased significantly over the past year for the Peel, Wheatbelt and Great Southern regions.

Table 8: Unemployment rates and population by region in Western Australia

Region	Unemployment rate		Population	
	2015	2016	2015	2016
Kimberley	14.1%	12.2%	38,785	38,825
Pilbara	3.2%	2.4%	65,826	65,675
Peel	7.9%	9.6%	131,826	135,366
South West	4.6%	4.4%	175,859	177,636
Great Southern	5.0%	7.0%	60,142	60,260
Mid West	7.7%	6.2%	57,946	57,612
Gascoyne	9.1%	7.0%	9,889	9,884
Wheatbelt	4.9%	7.2%	74,442	73,947
Goldfields–Esperance	5.8%	5.1%	60,500	59,312
Perth	5.9%	6.1%	1,914,712	1,938,557

Source: Australian Government Department of Employment, Small Area Labour Market data and ABS 3218.0

There was mixed population growth across the regions, with the Pilbara, Mid West, Gascoyne, Wheatbelt, and Goldfields–Esperance regions all recording a decline in total population between 2015 and 2016 while the Kimberley, Peel, South West, Great Southern and Perth regions recorded an increase in population during this period.

This highlights that Western Australia’s labour market is not homogenous and is likely to continue to have a diverse mix of employment conditions and opportunities across the State.

Population and migration

In respect to overall trends in labour supply in the State, Western Australia’s overall resident population⁷⁸ grew by 0.7% over the year to December 2016, after having recorded a high of 3.5% in December 2012. Western Australia now has an annual growth rate well below the national rate of 1.6%.

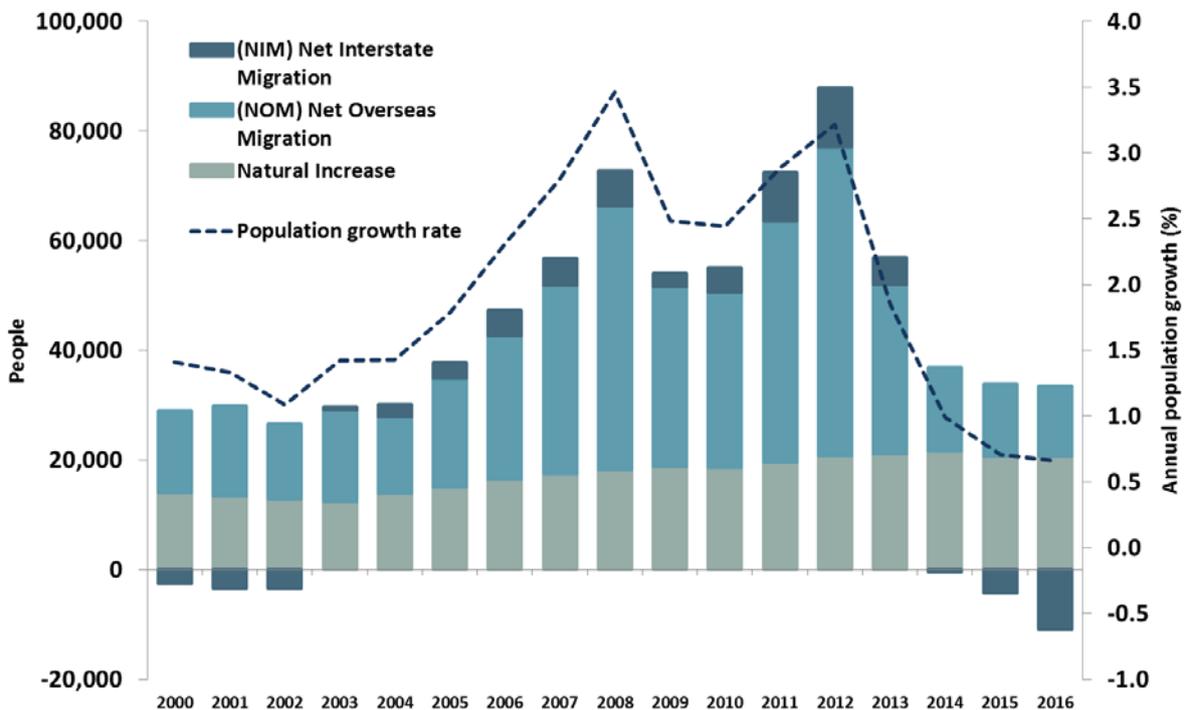
Net overseas migration has slowed down considerably and the State had a net interstate migration outflow of 10,800 people.⁷⁹ This slowdown in population growth has coincided with the softer labour market conditions in Western Australia. As mentioned previously, the decrease in net immigration has assisted the State’s labour market to adjust without the unemployment rate increasing as much as it might otherwise have.⁸⁰

⁷⁸ Australian Bureau of Statistics, Cat. No. 3101.0, December 2016.

⁷⁹ Australian Bureau of Statistics, Cat. No. 3101.0, December 2016.

⁸⁰ Reserve Bank of Australia, Bulletin, The Labour Market during and after the Terms of Trade Boom, Davis, McCarthy, Bridges, March quarter 2016.

Figure 34: Components of population growth – Western Australia



Source: ABS, 3101.0

Over the past three years, the natural increase (births less deaths) has been the major driver of population growth in Western Australia (with an additional 20,600 people in 2016). However, the ongoing importance of migration to the State is highlighted by the fact that around 12,900 came from the State's net international migration gain.

Further highlighting the importance of migrants to the State's workforce, 39.2% of those employed in Western Australia over 2016–17 were born outside Australia.⁸¹

The Australian Department of Immigration and Border Protection (DIBP) has full responsibility for migration into Australia.⁸² Migrant labour supply for Western Australia can be categorised as skilled and unskilled. Skilled migrant workers for the State are predominantly sourced under the following visa programs: the Temporary Work (Skilled) visa (subclass 457); the permanent employer sponsored program – the Employer Nomination Scheme (subclass 186) and Regional Sponsored Migration Scheme visa (subclass 187); and General Skilled Migration (for example, Skilled Independent Visa [subclass 189] and State Nominated visa [subclass 190]). Unskilled migrants are primarily sourced from the Working Holiday Maker, Refugee and Humanitarian and the Student Visa programs.

The permanent employer sponsored program is subject to the Australian Government's annual planning levels. For the 2016–17 program year, the total places available were capped at 186,515, with 48,250 (25.9%) places allocated to the permanent employer sponsored program. For the 2015–16 program year, Western Australia accounted for 7,305 permanent primary skilled visa outcomes. This is comprised of General Skilled Migration (2,616 visa outcomes), Employer Nomination Scheme (2,277), Regional Sponsored Migration Scheme (2,248) and Others (164) such as Business Innovation and Investment Program, Business Skilled and Distinguished Talent. In comparison to 2014–15 program year, the total number of permanent skilled visa outcomes in 2015–16 fell by 19.4% and also across every category. General Skilled Migration experienced a 28.0% decline in visa outcomes, followed by Employer Nominated Scheme (23.0% decline), Others (10.9% decline) and Regional Sponsored Migration Scheme (1.8% decline).

⁸¹ Source: Australian Bureau of Statistics, Cat. No. 6291.0.55.001 (data cube LM4).

⁸² Note: DIBP migration program outcome data will possibly enter the public domain for the first time later in the year, allowing for far greater analysis of skilled migration history to the State to be included in this public document. This section may be expanded if data is available in time for final release version of this paper.

For temporary skilled migration, data is only available to the public for the Temporary Work (Skilled) visa (subclass 457).

Temporary migration into Australia under the subclass 457 visa is not subject to an overall quota from the Australian Government. The number of visa grants fluctuates according to the employers' demand for overseas workers. Historical data on 457 visas can be a useful barometer of where employers have sought to fill the gaps, (see figure 31 below).

Nationally, for the 2016–17 program year there were 46,480 primary 457 visas granted. This represents a 2.5% increase from 2015–16, where 45,395 primary 457 visas were granted.⁸³

For Western Australia there were 5,241 primary 457 visas granted in 2016-17. This presents a 12.1% decline compared to 2015-16 where 5,963 primary 457 visas were granted.⁸⁴

At a broad occupational level, for Western Australia the three most highly skilled occupation groups accounted for 92.6% of the total primary 457 visas granted for 2016–17. Specifically, the occupation groups of Professionals accounted for 42.7% of the total primary 457 visas granted to the State for 2016–17, Technicians and tradesworkers 33.7% and Managers 16.3%. The significant proportion of the total 457 primary visas granted to the State in these three occupation groups is because the 457 is a skilled visa.⁸⁵

At a broad industry level, the industries in the State that obtained an above average share of primary 457 visas granted (as a proportion of the overall employment levels by industry sectors) for 2016-17 were: Other Services (926 visa grants, 1.6% of total employment in industry); Information, Media and Telecommunications (197 visa grants, 1.3%); Electricity, Gas, Water and Waste Services (125 visa grants, 0.7%); Mining (590 visa grants, 0.6%); and Professional, Scientific and Technical Services (562 visa grants, 0.6%).⁸⁶

The fluctuation in the number primary 457 visas granted over time is consistent with the Australian Department of Employment's Internet Vacancy Index (a proxy for job openings). As demonstrated by figure 36, the higher number of vacancies, the higher number of 457 visas granted, with the overall flow of 457 visas into the State tending to be broadly responsive to overall labour market conditions (albeit with typically a half year lag).

⁸³ Department of Immigration and Border Protection (DIBP), *Subclass 457 visas granted pivot table, 2016–17 to 30 June 2017 – comparison with previous years*.

⁸⁴ Ibid.

⁸⁵ Ibid.

⁸⁶ Australian Bureau of Statistics, *ABS 6291.0.55.003 Four Quarter Moving Average* matched against Department of Immigration and Border Protection's *"Subclass 457 visas granted pivot table, 2016-17 to 30 June 2017 – comparison with previous years"*. Note – The ABS data on employment numbers are as at May 2017.

Figure 35: Inflows of 457 visas into WA relative to job advertisements



Source: Australian Government Department of Jobs and Small Business, Labour Information Portal, Internet Vacancy Index (IVI), indexed to 100 at 2006. Australian Government Department of Immigration and Border Protection, Quarterly 457 Visa Report (457 Visa Index), indexed to 100 at 2007

The preceding chart also suggests that the year to 30 June 2016 reflects further contraction in labour demand in the State and is consequently likely to be followed with slowness in 457 visa numbers into Western Australia over the next year or so. However recent and further unknown (at time of writing) Australian Government changes to temporary skilled visa requirements on both nominees and Australian employers are likely to have a greater influence on the number and composition of visa grant numbers into 2018 and beyond.

On 18 April 2017, the Australian Government announced significant visa reforms to the skilled migration programs, to be implemented in a staggered process over the course of the next 12 months. The visa reforms focus on strengthening the integrity and tightening eligibility requirements to the skilled migration programs. The visa reforms include changes to the composition and application of the Australian Government's skilled occupation lists, as well as changes to visa specific criteria such as English language and age.

The immediate effect of the visa reforms is the introduction of two new Australian Government's skilled migration occupation lists. The Short-term Skilled Occupation List (STSOL) replaces the Consolidated Sponsored Occupation List. The Medium and Long-term Strategic Skills List (MLTSSL) replaces the Skilled Occupation List. The STSOL will be updated every six months by the Australian Government's Department of Jobs and Small Business, and the MLTSSL will be updated annually by the Australian Government Department of Education and Training.

In addition to the above changes to the skilled occupation lists, higher English proficiency requirement and a lower age requirement are introduced for some visa programs (for example, permanent employer-sponsored program).

In March 2018, the Temporary Work (Skilled) visa (subclass 457) will be replaced by a new Temporary Skill Shortage visa.

The likely extent of the impact of the Australian Government's visa reforms on the State is difficult to determine at this stage, and will become apparent only with time. Skilled migration has been, and will continue to be, an important source of skills, given its role in filling those jobs that cannot be filled by the local workforce. However, the State Government's primary workforce development priority remains the training and preparation of Western Australians for the State's workforce.

5.2 WESTERN AUSTRALIA'S LABOUR MARKET OUTLOOK

Commodity prices and the global economy both continue to be somewhat volatile, with considerable uncertainty regarding their outlook.

In respect to the views held by the State's business community for the near term economic outlook, the *CCI Survey of Business Expectations* for the March quarter 2017 showed that 19.0% of business expect the State's economic conditions to improve over the next 12 months, with 40.0% expecting steady conditions, and 31.0% expecting conditions to deteriorate. Similarly, the June quarter 2017 *CCI Survey of Consumer Confidence* showed that over the medium term 29% of consumers expect the State's economy to strengthen over the next 12 months, 31.0% expect it to remain the same, and 36.0% of consumers believe the economy will be weaker.

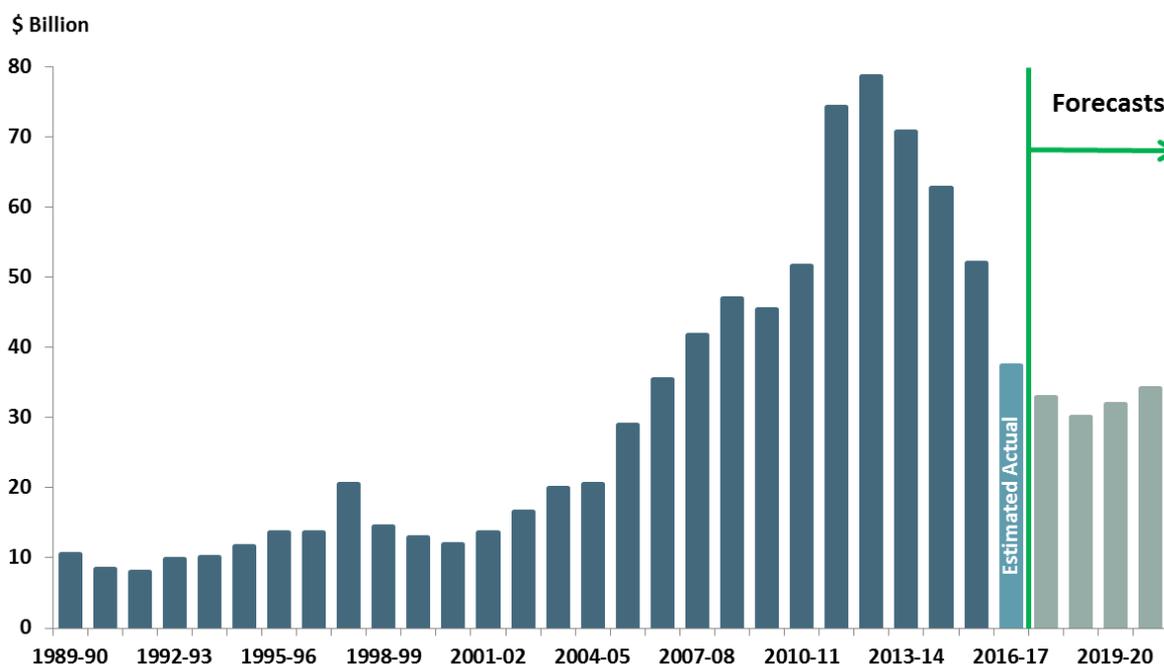
In addition, the Reserve Bank of Australia stated that business sentiment has improved recently in Western Australia.⁸⁷

According to the Western Australian Department of Treasury, the State's economy is forecast to have increased by 3.0% in 2017–18. Economic growth in 2018–19 is then forecast to increase marginally to a rate of 3.25%, before returning to 3.0% in 2019–20. While these forecasts show broadly that healthy rates of growth are expected, this is in part predicated to occur in the shorter term largely due to increased export volumes. Further into outlook years, the domestic economic is expected to return to positive growth territory including an increase in household consumption and a positive growth for business investment in 2018 and beyond.⁸⁸

Business investment

The budget forecasts show that business investment levels in the State are expected to contract over the next year before increasing around 2018–19 (see Figure 36 following).

Figure 36: Business investment (historical, estimated actual and forecast, in chain volume terms), Western Australia



Source: ABS, 5220.0 and WA Department of Treasury (2017–18 Budget Economic Statement)

However, even though the forecast fall in the State's business investment volumes represents a sizable contraction from the peak in 2012–13 (with a 34.0% share of the State's economy), business investment is forecast to return to a 12.0% share by 2019–20, which is much closer to the State's long-run average.⁸⁹

⁸⁷ RBA Statement on Monetary Policy, Domestic Economic Conditions, May 2017.

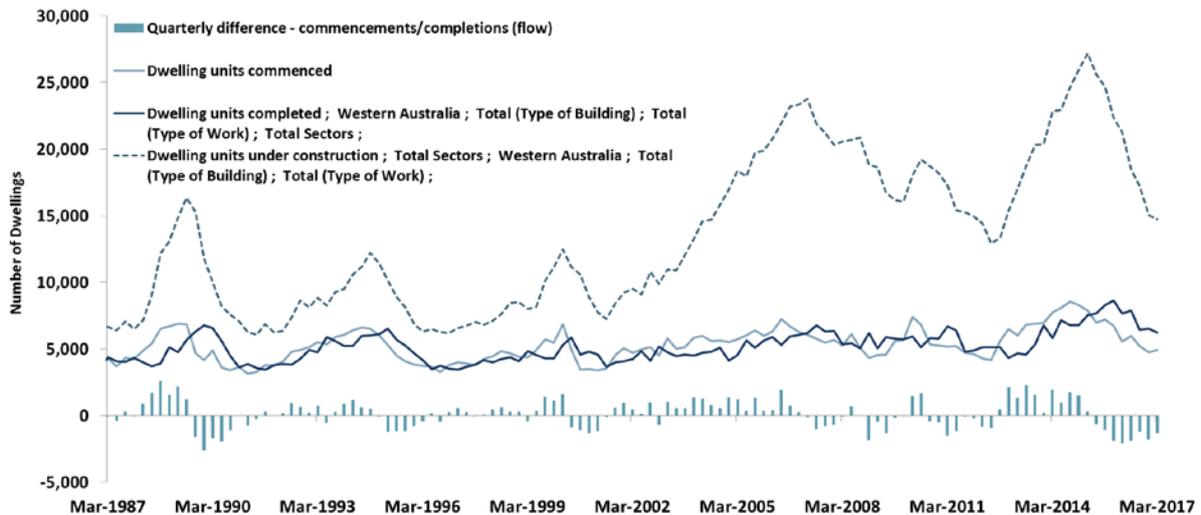
⁸⁸ WA Treasury, 2017–18 Budget Economic Statement, September 2017.

⁸⁹ WA Treasury, 2017–18 Budget Statement, September 2017.

Deloitte Access Economics⁹⁰ is also forecasting that resource investment in the State has passed its peak and will continue to decline into the coming years (with a similar profile to the State Treasury forecasts shown in the preceding chart).

In addition to the expected decrease in resource sector construction activity in the State (albeit from a high base), the pipeline of work still to come for residential construction (that is, work already committed to or underway) has been declining. This is demonstrated by the chart below, which shows that completions are outpacing the number of residential building starts in the State over the past eight quarters (light blue bars), meaning that the stock of residential work under construction has been decreasing from its record high in 2015 (dashed line below).

Figure 37: Western Australian dwelling activity



Source: ABS, 8752.0

The outlook for residential construction activity in the State is expected to be mixed in future years. Leading indicators of residential construction have softened significantly with residential building approvals⁹¹ down by 17.6% over the year to June 2017. Forecasts from Western Australia's *Housing Industry Forecasting Group* (April 2017) suggest that dwelling construction starts in the State will increase slightly to 21,000 in 2017–18. However, the Western Australian Treasury forecasts suggest the recovery in will be a slightly more delayed, with dwelling investment decreasing by 2.5% in 2017–18 before recovering to record 5.0% growth in 2018–19.⁹²

Slower activity in the State's residential and commercial markets⁹³ over the near term is likely to moderate employment growth in the construction industry.

⁹⁰ Deloitte Access Economics, Business Outlook, June 2017.

⁹¹ ABS 8731.0, figures based on the 12 months to June 2017, compared to the corresponding period a year earlier.

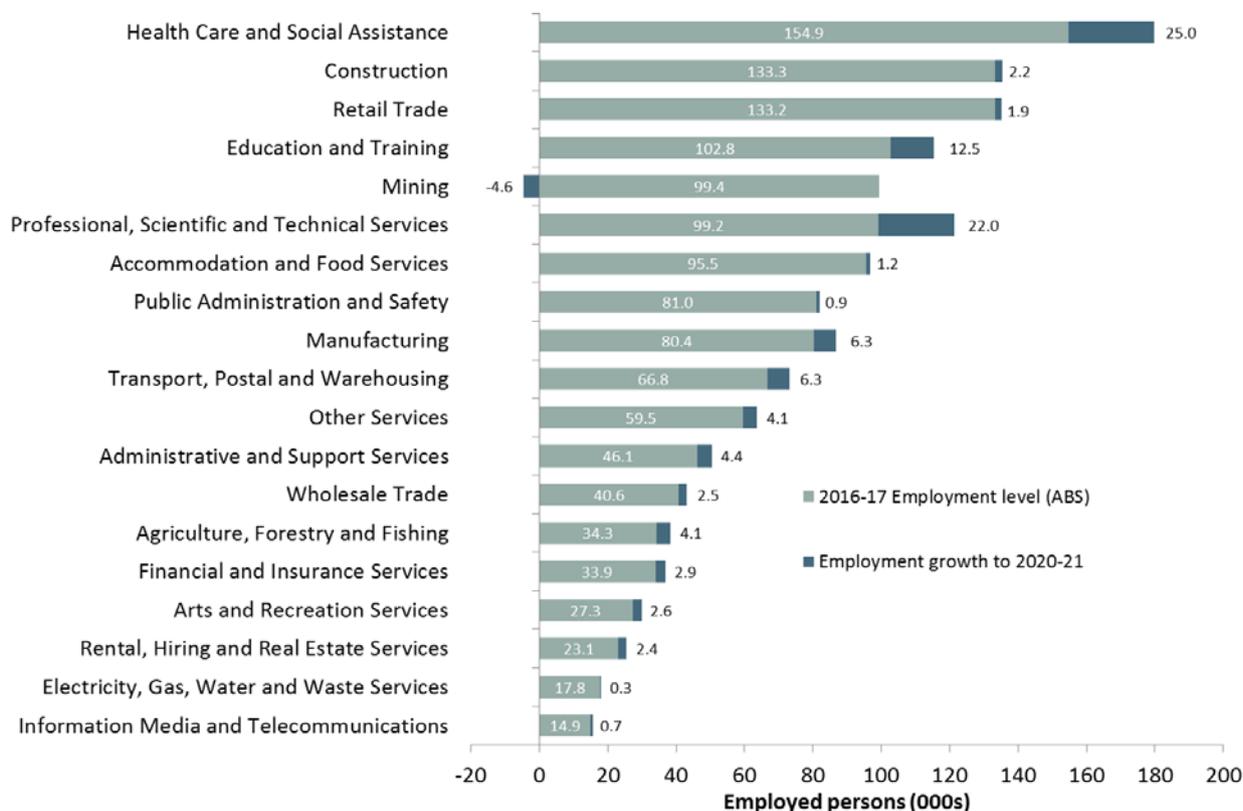
⁹² WA Department of Treasury, 2017–18 Budget Economic Statement.

⁹³ Softer domestic business conditions are impacting commercial building, with the volume of non-residential construction work done in the State decreasing by 8.4% over the year to March 2017 (ABS 8755.0 Construction Work Done, Australia, Preliminary, March 2017).

Forecast employment growth⁹⁴

For the purposes of the State Training Plan, it is useful to look at the expected composition of the State’s projected employment growth over both the short and longer term. Forecasts from Victoria University’s Centre of Policy Studies⁹⁵ (CoPS) show that over the coming four years that growth in the State’s industry employment levels is expected to be broadly based. The forecast growth in industry employment levels is shown by the darker blue parts of the bars in figure 38.

Figure 38: WA projected employment growth by industry, 2016–17 to 2020–21



Source: Centre of Policy Studies, Victoria University, October 2017

According to the CoPS forecasts, the health care and social assistance sector will remain the largest industry (by employment size) in the State over the coming four years, and will increase by 25,000 workers to a total of 179,900 employees in 2020–21. This strong growth is not unexpected and has been a common theme across most forecasters over a number of years. This has primarily been and continues to be attributed to the ageing population and the introduction of the National Disability Insurance Scheme (NDIS).

Also according to CoPS, mining employment is forecast to decline by 4,600 over the next four years, to sit at 94,800 by the end of 2020–21. With many of the State’s large resource projects moving into their production phase over coming years, the export-driven growth phase the State’s economy is expected to be less labour intensive for the resource sector, but still requiring a skilled and increasingly more permanent/ongoing workforce for the sector.

The falls in mining employment from the CoPS forecasts are consistent with other similar forecasts and outlooks for major projects, including the jobs growth forecasts from the Australian Government’s Department

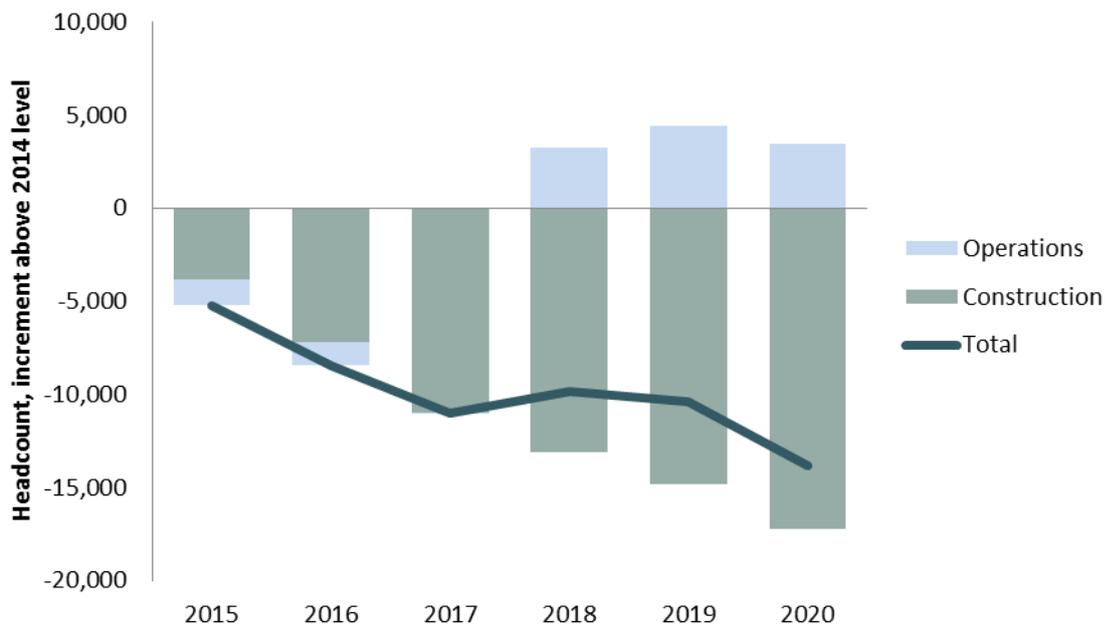
⁹⁴ Note: Changes in release schedules means a comparison set of forecasts from the Australian Government Department of Employment, which have been traditionally included in this paper were not available at the time of drafting. If available at the time of the finalising the public release version, this section may be expanded.

⁹⁵ These employment forecasts are based on detailed labour market projections taken from the Monash model (and based on information available as at October 2016), developed by the Centre of Policy Studies (previously based at Monash University and now based at Victoria University). It should be noted that there is a certain degree of uncertainty attached to any forecast.

of Jobs and Small Business, and the Western Australian Chamber of Minerals and Energy (CME) Resources Sector Outlook report.⁹⁶

In particular, the CME's forecasts show that employment levels specific to construction jobs on projects in the State's overall minerals and energy resource sector are forecast to decline across each of the years out to 2020 by some 17,300 persons, relative to 2014 employment levels (grey coloured bars in the following chart).

Figure 39: New workforce breakdown, head count, and increment above 2014 level



Source: 2015-2025 Western Australian Business Sector Outlook, WA Chamber of Minerals and Energy⁹⁷

The same set of CME forecasts show that even with some increases in the positions required to operate such resource projects (once operational) from 2018 (lighter blue bars in chart above), the trend expected for the resource sector's total workforce (for both construction and operations) is for lower numbers of workers from around 2018 (dark blue line above).

Referring to the CoPS set of industry forecasts, CoPS are projecting that Western Australia's construction industry will see only a small increase in employment of 2,200 workers in the four years to 2020–21 (this represents an average growth rate of just 0.4% annually over the period). This is in line with the slowing conditions in construction activity relating to resources, commercial building and residential sectors.

Another possible downside to construction worker job growth is in respect to those workers who had previously been working on resource projects, but who now no longer have such work, and are looking to switch to working in other roles (for example, possibly resource operations roles, and/or non-resource construction roles, or possibly even work in other sectors of the State's economy).⁹⁸

The combination of the expected completion of two large LNG projects in 2017–18 and an expected decline in the number of residential commencements over the next couple of years in the State suggests that there might be only limited opportunities for resource construction workers who remain in the resources sector to transition to the residential sector.

⁹⁶ WA Chamber of Mineral and Energy, 2015–2015 Western Australian Resources Sector Outlook.

⁹⁷ Note: The Chamber of Minerals and Energy has committed an updated Outlook paper which may be released in the near term. Findings from this updated paper may replace current content for the final public release document.

⁹⁸ Note: Some of these construction workers may not be residents of Australia (for e.g. workers on temporary 457 visas) and therefore may not necessarily be able to easily stay on in the State in other jobs, once their visa expires. However, the numbers of such workers it is not known. Similarly, the degree to which such workers would be able to obtain permanent Australian residency (or another temporary work visa), and furthermore, be seeking to remain in Western Australia (as opposed to seeking work in other States) is not clear.

In view of the State's current dynamic economic environment (particularly in respect to the resource sector's transitioning), it is very difficult for any forecaster to accurately predict specific and detailed movements in employment growth, particularly in the medium to longer term, as there are many uncertainties to be considered.

Accordingly, care needs to be exercised when interpreting any forecaster's projections of labour market movements for the State (especially the further out in time such forecasts go, and particularly in the case of the detailed employment forecasts covered above). The forecasts in this section should therefore be seen as an indicative picture of what the State's future labour market may look like, given the continuation of expected growth trajectories.

Such degrees of uncertainty were a key reason the State Training Board adopted a scenarios-based approach to develop potential strategies and policies to address potential and plausible long term workforce futures for Western Australia. A scenarios research project was undertaken by the Board which initially involved the development and econometric modelling of four distinct scenarios, where each scenario represents a plausible and internally consistent 'alternative future' path for the State's workforce over the period 2012 to 2030. The four scenarios were not meant to be specific projections of the State's workforce future, nor did they represent simple extrapolations of past trends. Rather, each of the scenarios represents a specific and quite distinct 'alternative vision' of the State's potential future.

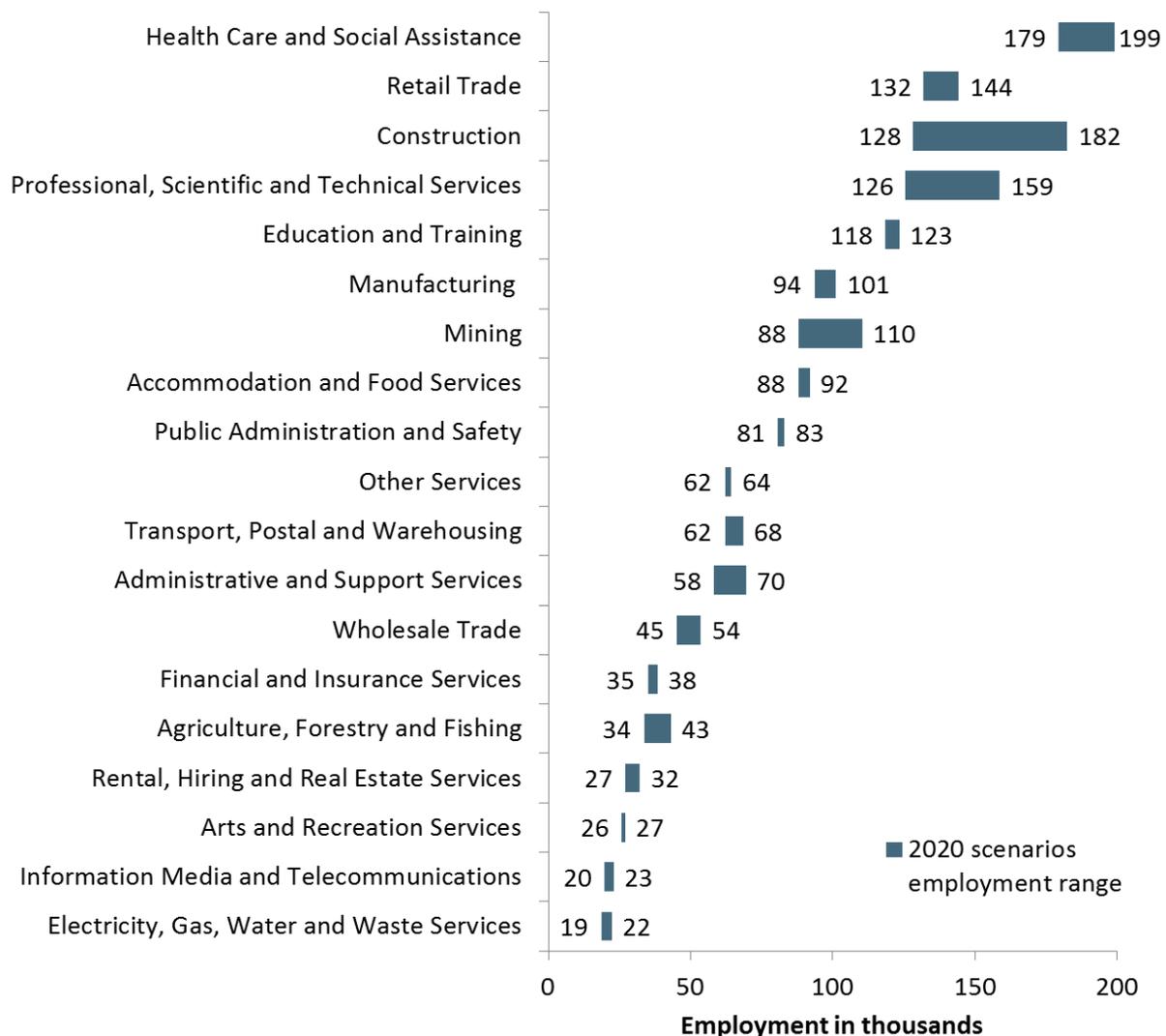
Such scenarios have been produced with an explicit recognition that no single set of forecasts is likely to be fully correct, such that modelling quite distinct scenarios can help deal with the uncertainties and risks of the future (as well as those developments of which we can be reasonably certain).

One of the key findings when comparing employment growth outcomes across the four scenarios was that some of the State's industries had very large degrees of variation in respect to their future employment growth potential. In contrast, for some other industries, this variation was not as large.

This variation between the industries is demonstrated by figure 41 below which shows the range in variation that the scenarios modelling showed for the employment levels expected by 2020 for each of the State's industries.

As can be seen in the next chart, the State's construction industry in particular has a very sizable variation between what the scenarios suggested for the industry's highest level of employment by 2020 (around 182,000 workers) in the high growth scenario, and the lowest level by then (just 128,000 workers) in the lowest growth scenario. This underscores the variable nature of the industry due to both cyclical effects (for example, the housing cycle) and the uncertainties surrounding construction work in respect to the State's future resource sector projects.

Figure 40: Scenarios project – range of projected employment growth for Western Australian industries out to 2020



Source: Deloitte Access Economics, Workforce Scenarios (for the State Training Board)

Similarly, another industry with a significant variation is mining, with a top range of 110,000 workers and a bottom range of 88,000 workers by 2020 (as shown in figure 41 above). This means that the CoPS forecast for mining employment of around 94,800 workers by the end of 2020–21 (as per figure 40 shown earlier) would sit around the lower/middle end of this range.

A key point of the scenario forecast ranges shown above is that although the health care and social assistance sector in the State also has some reasonable variation in its outlook, by 2020 it is expected to have grown quite considerably (by somewhere between 30,000 to 50,000 extra workers). Two further observations which are consistent with the forecasts from CoPS include that there is likely to be broad based growth across most sectors regardless of scenario; and that the health care and social assistance sector will quite likely become the clear leading employer in Western Australia over the next few years.

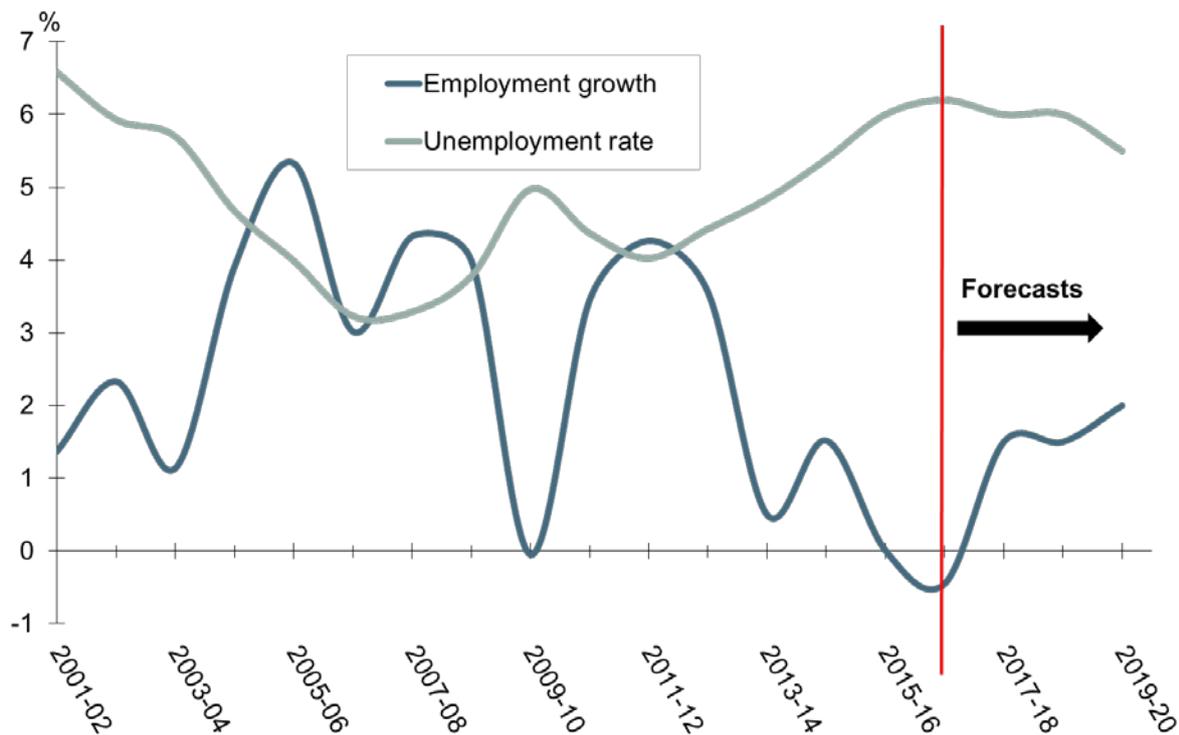
Common to all scenarios, an ageing population profile sees the 'working age population'⁹⁹ grow at a significantly slower rate than overall population growth. The ageing of the workforce into the future remains a challenge to labour force participation in Western Australia. Due to this demographic trend a significant share of employment opportunity growth out to 2030 comes from the replacement of those retiring across all scenarios.

⁹⁹ The working age population refers to those people aged between 15 and 64 years of age.

Looking at forecasts for the State’s labour market overall, the Western Australian Department of Treasury expects that growth in both labour demand and supply over the next few years will remain subdued. Reflecting this, State Treasury’s forecasts show overall employment levels in Western Australia growing at an annual rate of just 0.25% in 2017–18, and 1.5% in 2018–19 (well below the State’s historical 10 year annual average growth rate of 2.1%). These employment rate forecasts from WA Treasury suggest that an additional 54,300 people will be employed over the next three years.

Compared to Federal Government Budget employment forecasts for Australia, State Treasury’s employment growth forecasts mean that Western Australia is expected to record employment growth at a slower rate than national employment growth of 1.5% over 2017–18, while both forecasts show the same rate of 1.5% for 2018–19. Such forecasts are also consistent with forward indicators of labour demand for the State (such as job vacancy surveys, business expectations and consumer confidence), which all point to the current subdued conditions in the State’s labour market continuing over the next year.

Figure 41: Historical and WA Treasury forecast employment and unemployment growth rates



Source: ABS, 6202.0 and WA Treasury

The State Treasury’s employment forecasts are higher for two of the three forward years than comparative forecasts from Deloitte Access Economics, (see the first three columns of the following table). Similar to the cautionary notes earlier about labour market forecasts, the divergence in forecasts in the table below in part relates to the sizable degrees of uncertainty in respect to the State’s outlook (hence a key reason averages of the forecasts are shown as the bottom part of the table).

Table 9: Headline forecasts for the State's labour market

Forecaster	Employment growth (%)			Unemployment rate (%)		
	2017–18	2018–19	2019–20	2017–18	2018–19	2019–20
WA Treasury Budget 2017–18 (Sept 2017)	1.5	1.5	2.0	6.0	6.0	5.5
Deloitte Access Economics (June 2017)	1.7	1.1	1.4	5.7	5.8	5.9
WA Chamber of Commerce and Industry (July 2017)	n/a	n/a	n/a	6.2	6.0	n/a
Centre of Policy Studies, Victoria University (Oct 2017)	1.5	1.5	2.0	n/a	n/a	n/a
Average (rounded)	1.6	1.4	1.8	6.0	5.9	5.7

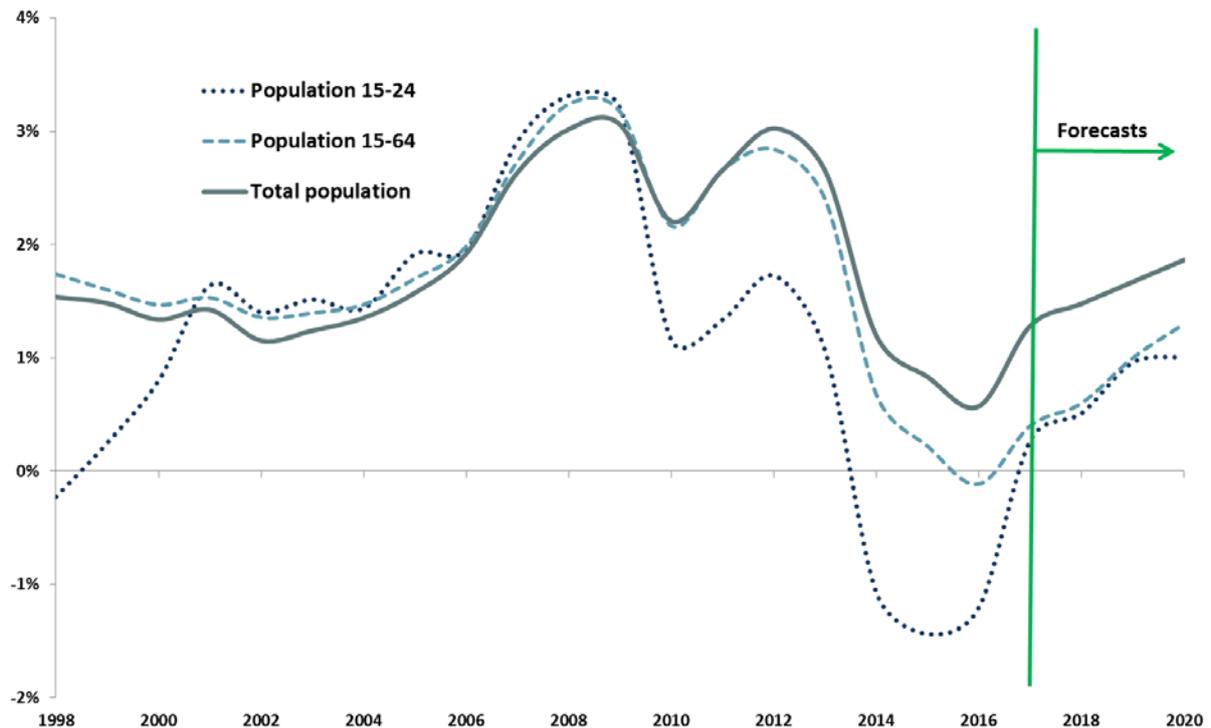
State Treasury's forecasts show that after peaking at 6.5% in 2017–18, Western Australia's unemployment rate is expected to fall marginally over the following year. The slowing growth in labour supply is expected to help moderate the State's unemployment rate.

However, Deloitte Access Economics' forecast is for the State's unemployment rate to gradually trend upwards over the next few years from 5.7% in 2017–18 to 5.9% in 2019–20, given the significantly weaker employment growth results expected when compared to WA Treasury. The Chamber of Commerce and Industry is forecasting that the State's unemployment rate will decrease from 6.2% in 2017–18 to 6.0% in 2018–19.

Population

A key reason for the State's overall unemployment rates remaining relatively moderate over the next few years relates to an expected softening in growth in labour supply in the State (compared to strong growth in previous years). As outlined above, population growth rates have declined in recent years, with State Treasury forecasting population growth in the State's core working age population (aged 15 to 64) of just 0.6% in 2017–18 and 1.0% in 2018–19, rising to 1.3% in 2019–20. This compares to much stronger rates of around 2.0% to 3.0% over most of the past decade (see dashed line in figure 40).

Figure 42: Historical and forecast population growth rates



Source: ABS, 3101.0 for historical data; WA Treasury and WA Tomorrow for projections (series A)

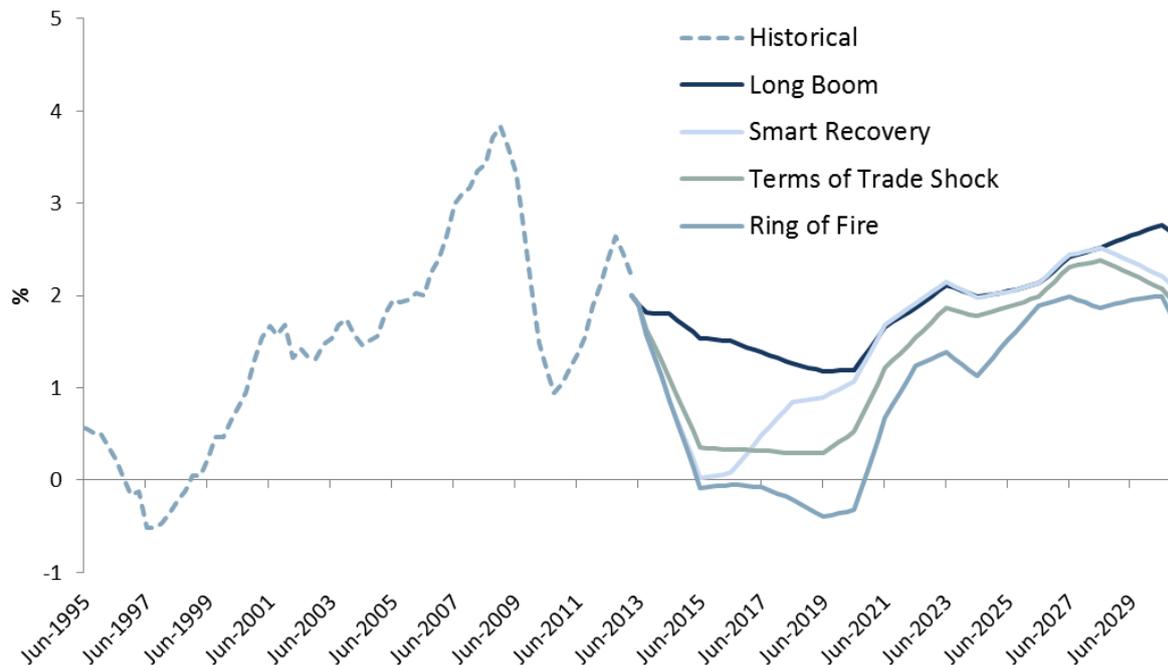
The sizable difference between the forecast growth rates for 15 to 64 year olds relative to the State’s overall total population is being driven by the current age profile demographics; this will become particularly pertinent as workers from older age cohorts retire in increasing numbers into the future.

Even though increasingly greater proportions of the State’s population are currently at (or nearing) retirement age, this does not necessarily mean they will retire soon. As outlined earlier there is little sign at present that Western Australia is experiencing any retirement ‘exodus’ of workers from older age cohorts outside of normal historical trends. This can in part be due to the current moderate economic and financial market impacting upon personal household finances, meaning that some workers in the State have likely been delaying their retirement intentions to be in a better financial position. This to some extent is why the State’s labour market participation rates are not expected to decrease significantly in the next few years, but instead moderately decline from current rates over the long term as a greater proportion of the adult civilian population move into retirement.¹⁰⁰

However, as the preceding chart also showed even more pronounced is the much lower growth being currently experienced and expected over the next year in the State’s 15 to 24 year old youth cohort. The limited growth/declines shown for the youth cohort relative to previous years underscores the importance of ensuring youth are suitably trained in order to help support the State’s skilled labour supply in coming years. This imperative is also reflected in the scenarios modelling, which shows sharp drops in population growth for the 15 to 24 youth cohort across three of the four scenarios (with the notable exception of the ‘long boom’ scenario), with growth in the cohort only picking up again from 2020 onwards – see chart below.

¹⁰⁰ State Treasury budget economic forecasts show the State’s labour market participation rate is expected to increase from an average of 67.8% in the 2016–17, to 68.1% in 2018–19 and 2019–20. While no other forecaster explicitly publishes forecast participation rates for Western Australia, the other forecast parameters in Deloitte Access Economics’ Business Outlook (June quarter 2017) publication mean participation rates can be inferred – these show an implied forecast participation rate of 67.8% in 2017–18, followed by a slightly higher rate of 67.9% in 2018–19.

Figure 43: Historical and future population annual growth rates expected for the 15 to 24 age cohort in Western Australia, by Scenario



Source: ABS, 3101.0 and Deloitte Access Economics

This demographic outlook suggests that the supply of domestic graduates in the State in the next few years will be limited by expected demographic trends. The skilling up of young people in Western Australia therefore continues to be of significant importance, with the VET sector remaining a crucial element in connecting young people's competencies with industry's skill needs. A focus on youth should therefore be a key feature of the Plan for 2018–2021.

Skills

The greater requirement of industry for higher level skills should also be another key focus of the Plan. The short term forecasts produced by Victoria University's Centre of Policy Studies (as per their industry forecasts detailed earlier) can also be broken down on an occupational basis.

Such a breakdown shows that for the shorter term (the next four years), employment growth in the State is expected to occur mostly in higher skilled occupations (as shown by the darker blue parts of the bars in figure 44). Though university pathway linked occupations from the Professional Occupation Major Group is expected to experience the strongest rate of growth, accounting for a little over one out of every three positions, the occupations groups with a VET pathway available are also expected to increase. Technicians and trades workers, community and personal service workers, and clerical and administrative workers combined are expected to account for another third of all jobs created over the coming four years. Only around one in every seven employment positions newly created are expected to in occupations where there is little or no formal training requirement – highlighting the importance of post school education and training availability in the modern labour market.

Figure 44: WA projected employment growth by occupation (from 2016–17 to 2020–21)

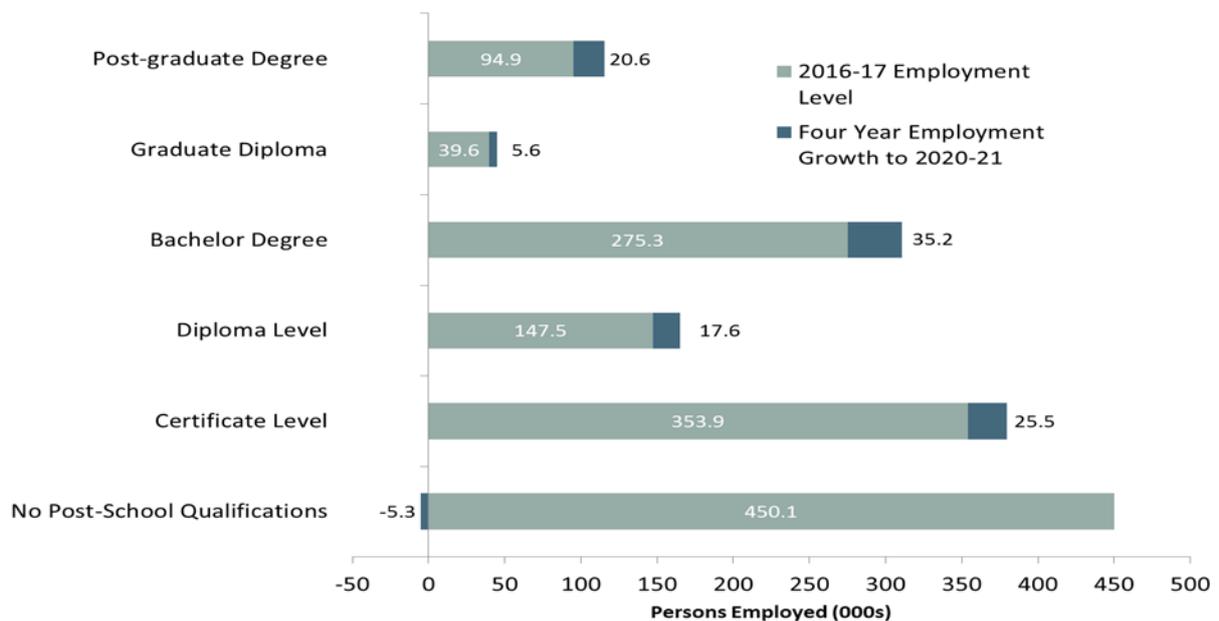


Source: Centre of Policy Studies, Employment Forecasts, October 2017

The likely requirement by employers for higher skill levels over the next few years is reinforced by a breakdown of the same CoPS employment projections on a qualifications basis.

As shown by figure 45, employment growth in the State is expected to come mostly from those jobs requiring at least a certificate level or higher. In stark contrast, the pool of persons without any post school qualifications is projected to experience a decline in employment.

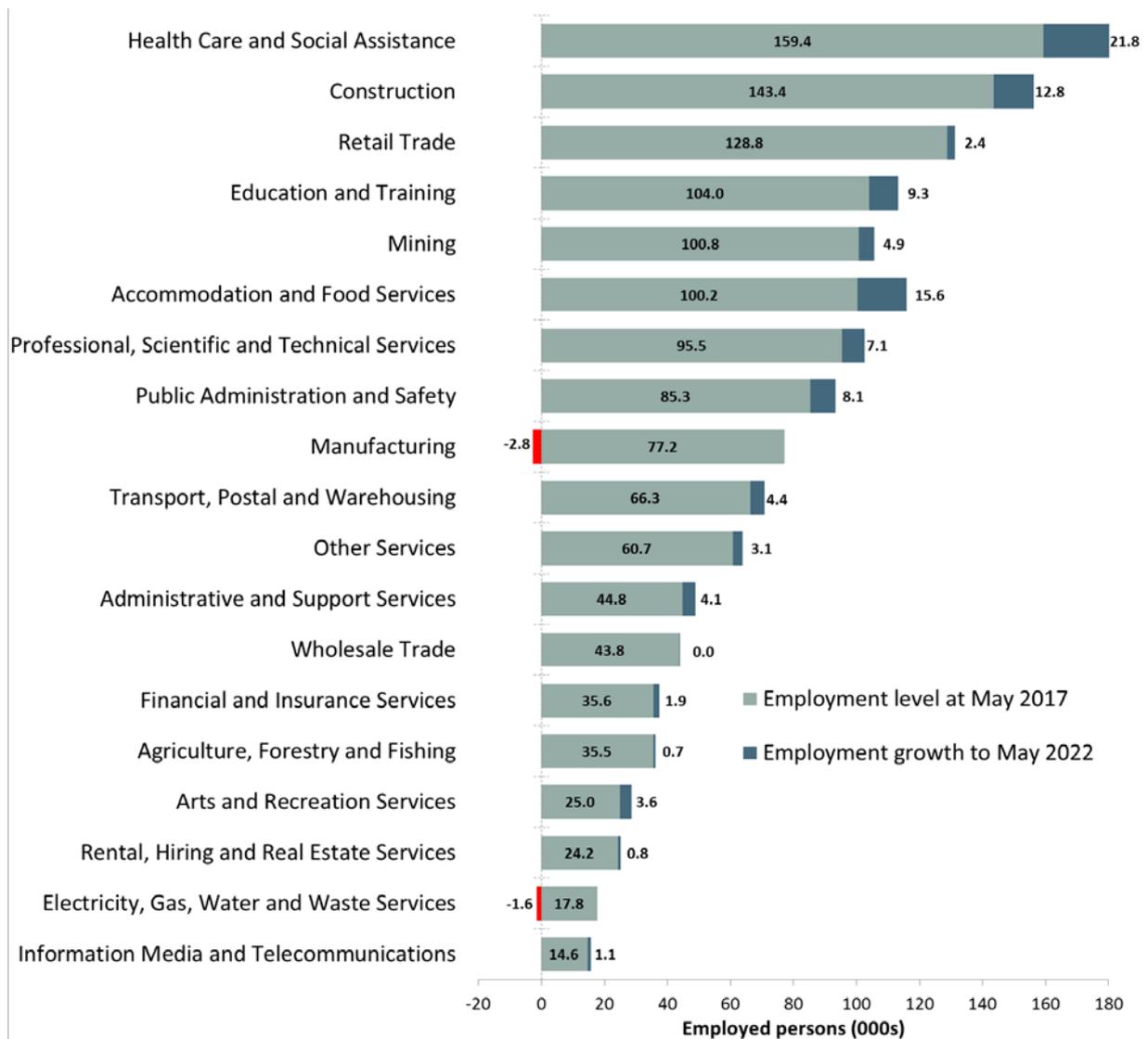
Figure 45: WA projected employment growth by qualifications (from 2016–17 to 2020–21)



Source: Centre of Policy Studies, Employment Forecasts, October 2017

An alternative set of projections of employment by industry for Western Australia over a five year period out to 2022 is available from the Australian Government’s Department of Employment (DoE) regional forecasts.

Figure 46: WA projected employment growth by industry (out to May 2022)

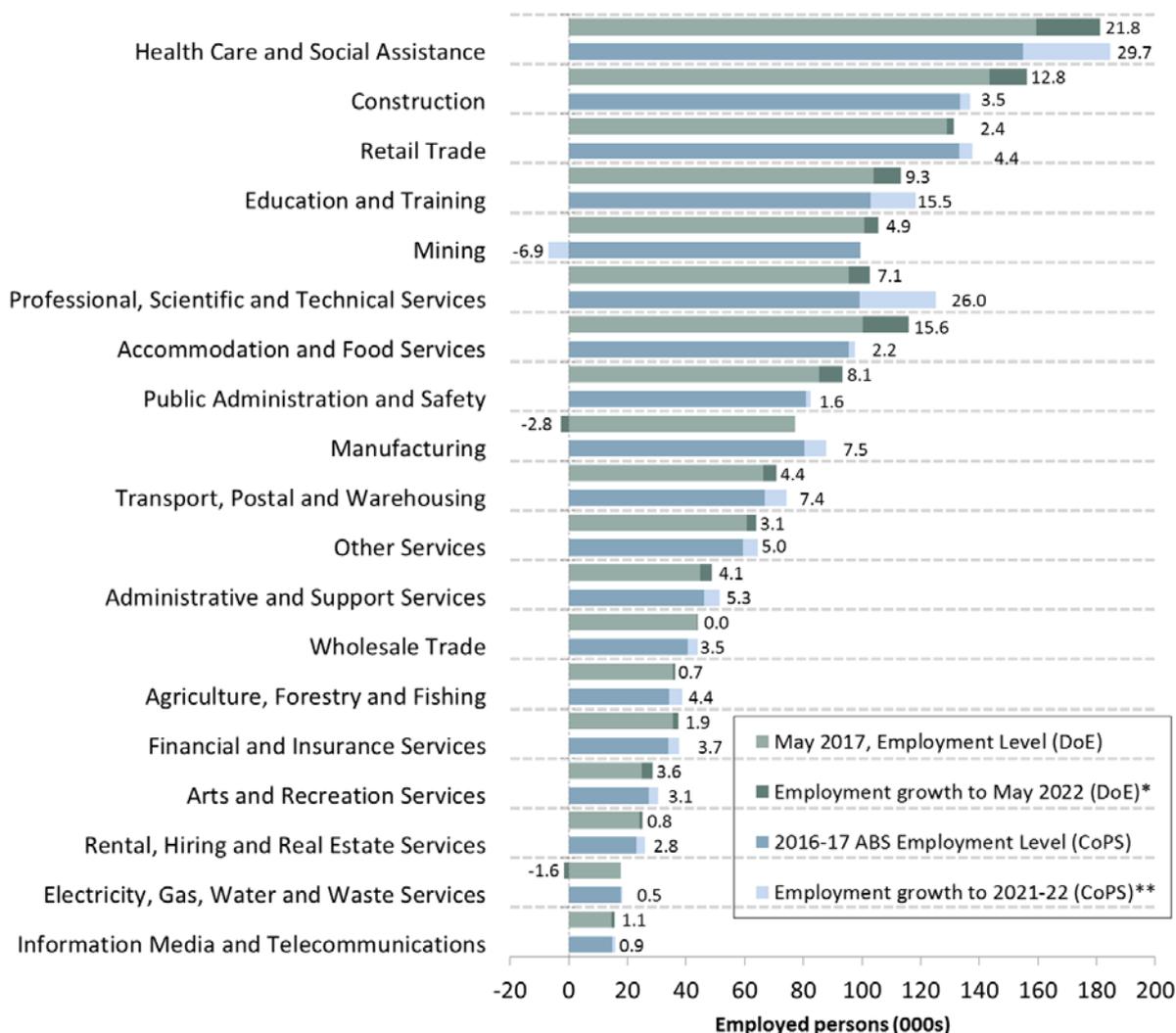


Source: Australian Government Department of Employment, Labour Market Information Portal (LMIP), Nov 2017

As shown in Figure 47, the Department of Employment forecasts that the largest employment gains over the next five years is likely to occur primarily in the State’s traditionally bigger employing industries. These include health care and social assistance (21,800 additional workers); accommodation and food services (15,600); and construction (12,800). Other significant employers such as retail trade, mining and transport, postal and warehousing are expected to experience more subdued rates of growth. Manufacturing and electricity, gas, water and waste services are expected to see a net decline in employment levels over the coming five years (down 2,800 and 1,600 persons respectively).

The next chart below compares the Department of Employment’s industry employment growth forecasts for Western Australia with the similar set produced by the Victoria University’s Centre of Policy Studies (CoPS), as referenced earlier in Figure 39 above (albeit the CoPS forecasts below utilise a further years’ worth of projections, so that both forecast sets shown are for a similar five year period).

Figure 47: Comparison Centre of Policy Studies forecast and Department of Employment projections



Note: CoPS figures extended to encompass five year period for consistency purposes. CoPS four year results quoted across other parts of the State Training Plan. DoE projections are fixed for the five year period with movements on an annual basis not available.

Source: Australian Bureau of Statistics (ABS), 6291.0.55.003, 2016-17

Centre of Policy Studies (CoPS), Victoria University, 2017

Commonwealth Department of Employment (DoE), Labour Market Information Portal, Nov 2017

Comparing the two sets of forecasts shown above, one broad consistency across both sets is that the industries of health care and social assistance, construction and retail trade will remain the State’s top three employing industries. However, as can also be seen by the chart above, there are some significant differences in the expectations for industry drivers of jobs growth across Western Australia for the next four to five years.

In part, such variation is possibly due to the slightly differing time periods the forecasts shown above in Figure 48 cover – the CoPS forecasts are for the period 2016-17 to 2021-22, while the DoE forecasts cover the period starting May 2017 and ending May 2022.

In addition, like all forecasters, DoE and CoPS forecasts utilise different forecasting approaches, models and assumptions. In particular, the State’s current dynamic labour market and broader economic environment means it is very difficult for any forecaster to predict compositional movements in the State’s labour market accurately. This situation further highlights the significant uncertainty in expectations of forecasts of key growth areas in the State’s labour market over the short to medium term.

Accordingly, significant caution needs to be applied in respect to any assumptions about the future state of Western Australia's labour market, as there are many uncertainties to be considered. The forecasts in this section should therefore be seen as an indicative picture of what the State's future labour market may look like, given the continuation of expected growth trajectories.

5.3 KEY RISKS TO THE OUTLOOK/FORECAST CAUTION

In addition to uncertainties and risks pertaining to domestic trends in the State's domestic workforce, the State's economy remains particularly exposed to a very dynamic global economy. This raises an appreciable risk that the State's labour market outlook could change quite materially (and rapidly) if any one of a number of key global risks were to eventuate.

Some of the key global economic risks to the outlook include:

- China's economic concerns (particularly with development moving away from infrastructure building, concerns around the rapid accumulation of debt, and ongoing issues around the stability of China's financial system);
- ongoing fiscal issues and economic malaise within parts of Europe (including the impact of Britain's exit from the European Union)¹⁰¹;
- the US economy's still somewhat uncertain recovery path, with the IMF forecasting annual average growth of 1.9% out to 2022¹⁰²;
- financial market stability issues and perceptions of possibly overpriced housing and other asset markets in some key markets around the world;
- the risks and opportunities associated with of the 'Fourth Industrial Revolution';
- possible rising protectionism and a roll-back of existing trade openness affecting the State's export markets; and
- continuing geopolitical risks and instability in some parts of the world (including the many and varied current conflict 'hotspots').

The Western Australian Treasury¹⁰³ has highlighted that the timing and magnitude of the tapering in capital expenditure on the large LNG projects currently under construction remains a key risk to the domestic economic outlook. In particular, a sharper than expected fall in business investment could translate into weaker than anticipated economic growth. This presents a downside risk that could affect business and consumer confidence levels, as well as impacting overall hours worked and income levels, and thus acting to moderate activity in the non-resource related parts of the State's economy.

In addition, there is also the risk that dwelling investment may decline more strongly than forecast by State Treasury. There is a risk that employment levels may be weaker than forecast, particularly concerning employment for the construction industry (which is a major contributor to overall employment growth in Western Australia).¹⁰⁴

A key risk to the State's labour supply is that population growth slows at an even greater rate than expected and/or retirement rates are more pronounced than anticipated. In either case, these would act to further moderate the expected easing in labour supply growth. There is a further risk that slower than expected population growth may lead to weaker consumer spending and dwelling investment.

It is also worth keeping in mind that prevailing economic demand conditions will influence the given labour supply situation. That is to say, when economic conditions are good participation levels are expected to rise as people are attracted into the jobs market. However, as conditions worsen this can sometimes be a disincentive

¹⁰¹ World Economic Outlook Update, July 2017.

¹⁰² World Economic Outlook Update, July 2017.

¹⁰³ WA Treasury, Pre-election financial projections statement, February 2017.

¹⁰⁴ Western Australian State Budget, May 2016, Budget Paper 3.

for some people (particularly those out of work or marginally attached to the workforce) to remain active participants in the workforce.

There are some other significant circumstances that might also play out in a way that ends up materially affecting the State's labour market.

For example, a possible situation in which domestic economic conditions are worse than expected (as per above) may mean that those close to retirement age rethink their retirement intentions (especially if superannuation or investments decline in value), leading to a likely bias towards working longer than they otherwise would have. While this would help support overall levels of labour market participation, it would act to curb what otherwise would have been the creation of a vacancy for another worker (particularly young people) wanting to enter the labour market.

If, however, conditions are still reasonably conducive to employers wanting to increase their own workforce's output, the significant underutilisation of existing labour that now exists in Western Australia (see earlier figure 17 for additional detail) suggests that some employers may look to increase the hours of their existing workforce in preference to hiring new workers (thereby representing another possible restraint to higher rates of employment growth).

As touched on above, a specific skills transitioning risk is the extent to which resource construction workers in the State – with increasingly fewer opportunities for resource construction work – are then able (and willing) to take advantage of opportunities that might open up in residential/non-residential construction.

Given the degrees of uncertainty around the State's labour market outlook and the dynamics described above, the importance of retaining a flexible approach to the planning and purchasing of training delivery is imperative.

The Board is also currently undertaking a project which will examine the implications of innovation and technology on the State's key industries, workforce, and future skills requirements. The project aims to appraise how current and emerging innovation and technology advances are changing the nature of work and will take into account factors impacting the demand for skills.

In addition, the project aims to identify those foundation skills that will enable Western Australians to participate in the knowledge economy of the future as job seekers, entrepreneurs, business owners and innovators. The project will identify the changes in policy necessary to ensure an appropriate response to these skills needs and strategies.

5.4 KEY TRENDS IN LABOUR SUPPLY FROM TRAINING AND EDUCATION

Replacement of existing workers

As discussed above, the forecasts for the Western Australian labour market show continued employment growth (albeit at a more moderate pace compared to recent years), with demand continuing for skilled workers with post school qualifications.

However, the employment growth forecasts referred to earlier show the demand for labour that is expected to arise from the *net* number of 'new' jobs generated in the State (that is, the total number of new job positions created across the State, less the total number of any job positions lost).

In addition to forecast employment growth, there is also a requirement for 'replacement' workers for those employees who cease work. This equates to the number of new workers required by the State's labour market just to maintain an equivalent number of workers (that is, the number of new entrants the State's labour market needs solely to replace those workers who leave for reasons relating to retirement, death, emigration out of the State, or any other personal/lifestyle reasons for discontinuing work).

This underlying 'churn' rate of workers required just to maintain employment levels is known as a 'net replacement rate'.¹⁰⁵ The Centre for the Economics of Education and Training (CEET) at Monash University

¹⁰⁵ New jobs from growth in demand account for only a portion of all jobs that are expected to be available for newly trained graduates. Many current workers will cease working in their occupation for a variety of reasons, such as ill-health, retirement or transfer to another occupation. These departures will create additional opportunities for newly trained graduates. The number of workers retiring from some occupations (for example, teachers) will rise in coming years due to

produces forecasts of this rate, with the latest CEET forecasts suggesting the State will likely experience an annual average net replacement rate of 1.9% over the five year period from 2018 to 2022.

This is lower than the national equivalent rate of 2.2%, in part owing to the slightly younger demographic across Western Australia's workforce compared to the other states. Over this five year period, it is expected that 128,300 existing employed Western Australians will need to be replaced. Around 64,200 of these persons are from major occupation groups that have partial or strong links to VET pathways.¹⁰⁶

This means that over this period, the State's labour market will require new entrants equivalent to an average of around 1.9% of the total number of people employed in the State each and every year, just to replace those workers who leave. This was equivalent to CEET's previous forecast for the State for the period 2017 to 2021. This soft rate of net replacement lower than equivalent national rate is a combination of Western Australia having a slightly younger population makeup than the other states, while the ongoing weak labour market conditions locally is expected to have promoted an importance around job security for existing workers, rather than one of mobility. In addition as part of a national trend (and despite ageing population trends), older workers aged between 55–64 and those over 65 are increasingly delaying their retirement and staying in the workforce longer than before as evidence through increasing rates of participation.¹⁰⁷

With the softer economy, the CEET replacement demand modelling suggests that demand for workers to replace those exiting is currently outpacing (in percentage and overall numbers) net growth forecasts from major forecasters, including those made by WA Treasury.

By aligning the time periods between the CEET net replacement calculations against the earlier CoPS employment growth forecasts highlights the expected source for labour demand in the years ahead. On this basis, Western Australia is expected to require around 104,600 persons *just* to replace exiting workers between now and 2021, compared to a slightly lower number (of around 97,700 additional workers) that will be further required to fill net job growth requirements over the same period. With employment growth rates remaining well below decade-long averages of past years, this means job 'churn' will continue to the highest component for the creation of job opportunities.

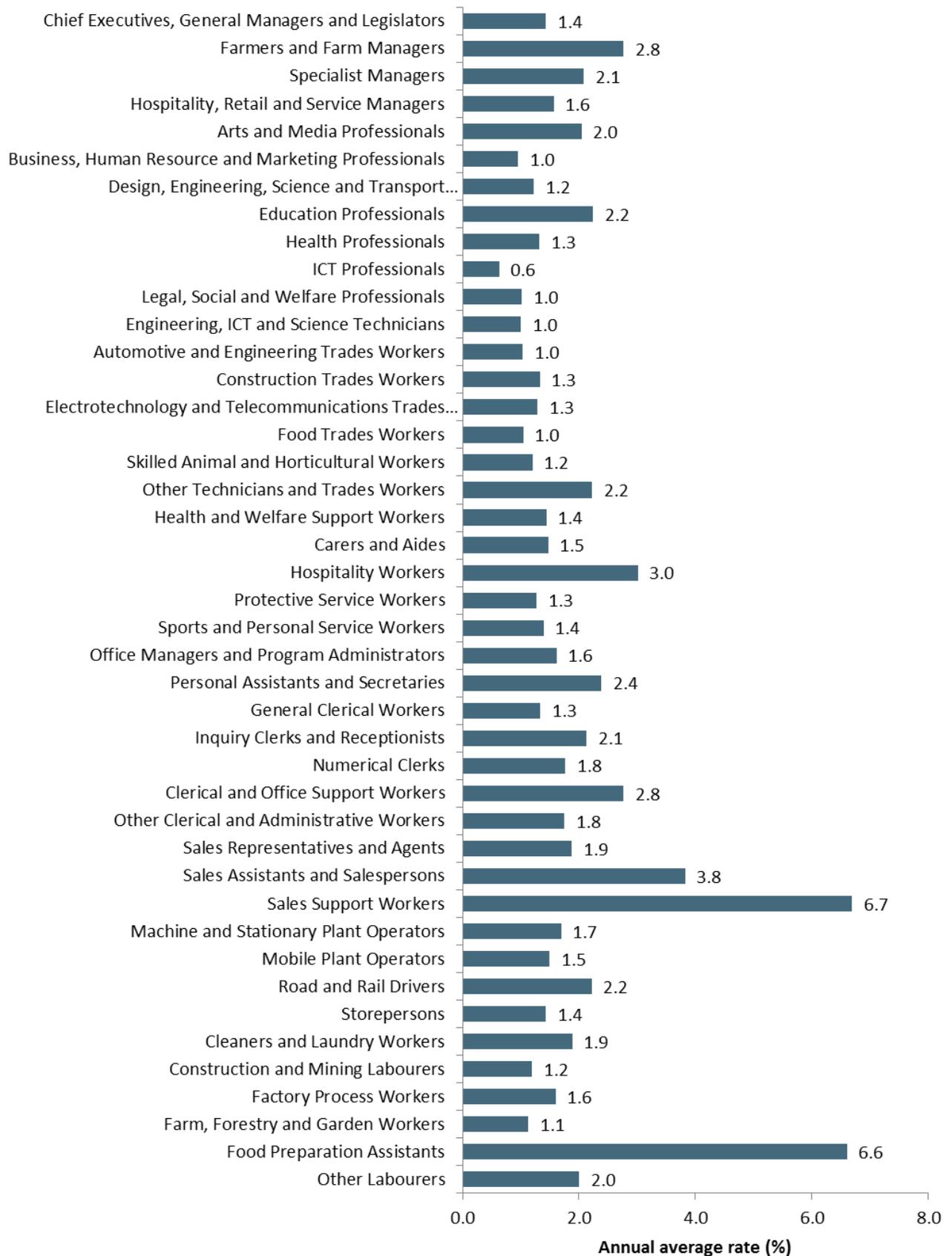
The following chart shows the forecast annual average net replacement rates by detailed occupation for Western Australia for the period 2018 to 2022.

the ageing of Australia's baby boomers. The exits from the workforce, net of those who return, creates replacement needs, which when added to jobs created due to growth in demand, provide a more complete picture of job openings for new entrants. It should be further noted that these CEET estimates do not relate to the upskilling of existing workers, or existing workers increasing their hours of work, as a means for generating a greater quality and/or quantity of labour 'effort'.

¹⁰⁶ Source: CEET, Net Replacement and Job Opening for New Entrants, Western Australia, November 2017. Calculation based off net replacement need from the ANZSCO Major Groups of Managers, Technicians and Trades Workers, Community and personal Service Workers, and Clerical and Administrative Workers.

¹⁰⁷ ABS Labour Force Survey, Cat. No. 6291.0.55.001, LM1.

Figure 48: Forecast net replacement rates (%) by selected occupation, Western Australia, 2018–22



Source: Net replacement and job openings for new entrants, Australia, 2018 to 2022, Centre for the Economics of Education and Training, Monash University

The figure above shows that there is a wide mix of forecast net replacement rates across the various occupations in the State. Generally, the higher skilled occupations tend to have relatively lower net replacement rates than the less skilled occupations. This may partly be attributed to linking the individual's investment in higher education or specific trade qualifications to longer term career employment.¹⁰⁸ It may also be that some of the lower paying occupations such as sales support workers and food preparation assistants may experience significant turnover of (typically) younger people seeking less skilled employment opportunities while studying and/or starting their working lives.¹⁰⁹ Other occupations may tend to have relatively older workforces meaning that the rate of leaving the labour force was higher¹¹⁰ (for example, farmers and farm managers).

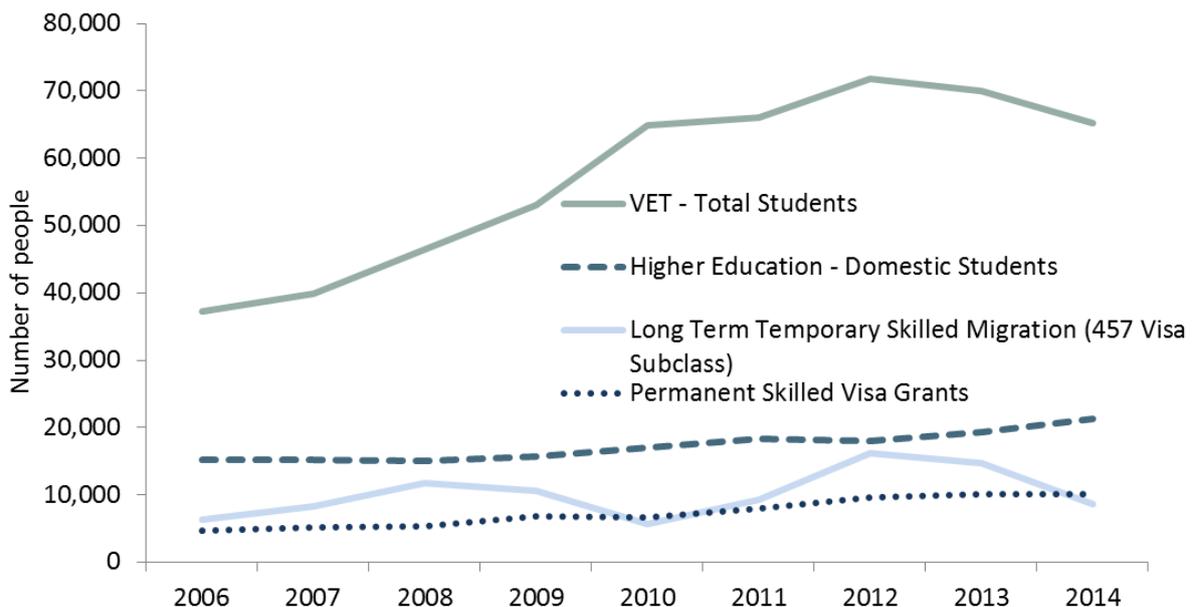
Skilled labour supply overview

The supply of skills in Western Australia is derived from three key sources:

- domestic student qualification completions;
- net overseas migration; and
- net interstate migration.

Over the last 10 years, the supply of qualifications from domestically trained and educated students has been significantly more than the supply of qualifications from both overseas and interstate migration. The following chart shows selected components of the State's skilled labour supply emanating from the VET sector, higher education and overseas migration. Note that data is not available on skilled interstate migration.

Figure 49: Selected sources of skilled Labour labour supply, Western Australia



Source: Department of Training and Workforce Development; Australian Government Department of Education and Training (uCube); and Australian Government Department of Immigration and Border Protection

¹⁰⁸ Individuals with high-skill trajectories tend to access high-skill occupations, often including long tenures in the occupation. Source: NCVET, Yu, Bretherton, Shutz, (Workplace Research Centre, University of Sydney), Vocational trajectories within the Australian labour market, 2012.

¹⁰⁹ The Board's 'Youth Matters' project shows that after leaving high school, young people are more likely to mix labour market participation with further study and are more likely to trial several employment options. In most cases it is easier for young people to opt for low-skilled jobs to provide income, while quite often also providing some entry level experience to gain a 'toe-hold' into the jobs market.

¹¹⁰ Job turnover and vacancies by occupation for the Department of Employment and Workplace Relations, CEET, Shah and Burke, November 2005.

The chart shows that the majority of skilled labour emanates from the VET sector, (which also includes a portion of international students), with the higher education sector providing around a 20% share, and then with temporary and permanent migration contributing the remainder.

Higher education

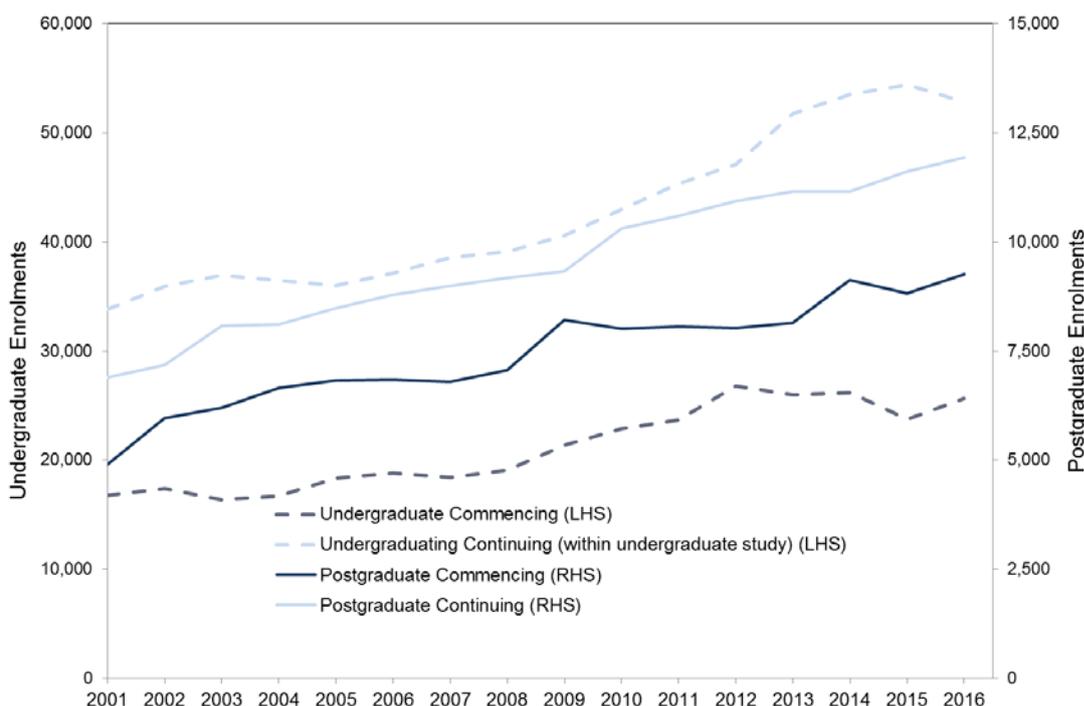
The higher education sector enables students to gain bachelor level and postgraduate qualifications for entering or furthering a professional career.

Higher education commencements for the State’s five universities were quite stable between 2001 and 2006, with 21,600 to 25,200 domestic student commencements each year.

In line with the Australian Government decision to uncap university places, the onset of the Global Financial Crisis and the resulting impact felt across the Australian economy, there was a noticeable surge in overall commencements starting around 2007–08. This change in the uptake of higher education continued to increase during Western Australia’s resources investment boom period.

Data from 2014–2016 suggests that a stabilisation in new commencements then occurred, with levels of around 32,000 –35,000 per year appearing to be the new norm. University commencements (for undergraduate and postgraduate degrees) in Western Australia rose by 7.3% in 2016. This result largely offsets the declines in commencements that occurred in 2015 when a 7.9% reduction was recorded. The softer labour market may be impacting upon recent graduates deciding to further their studies and skills in response to increased competition for professional employment positions (as per the solid lines in figure 50 below).

Figure 50: Higher education domestic student numbers, Western Australia

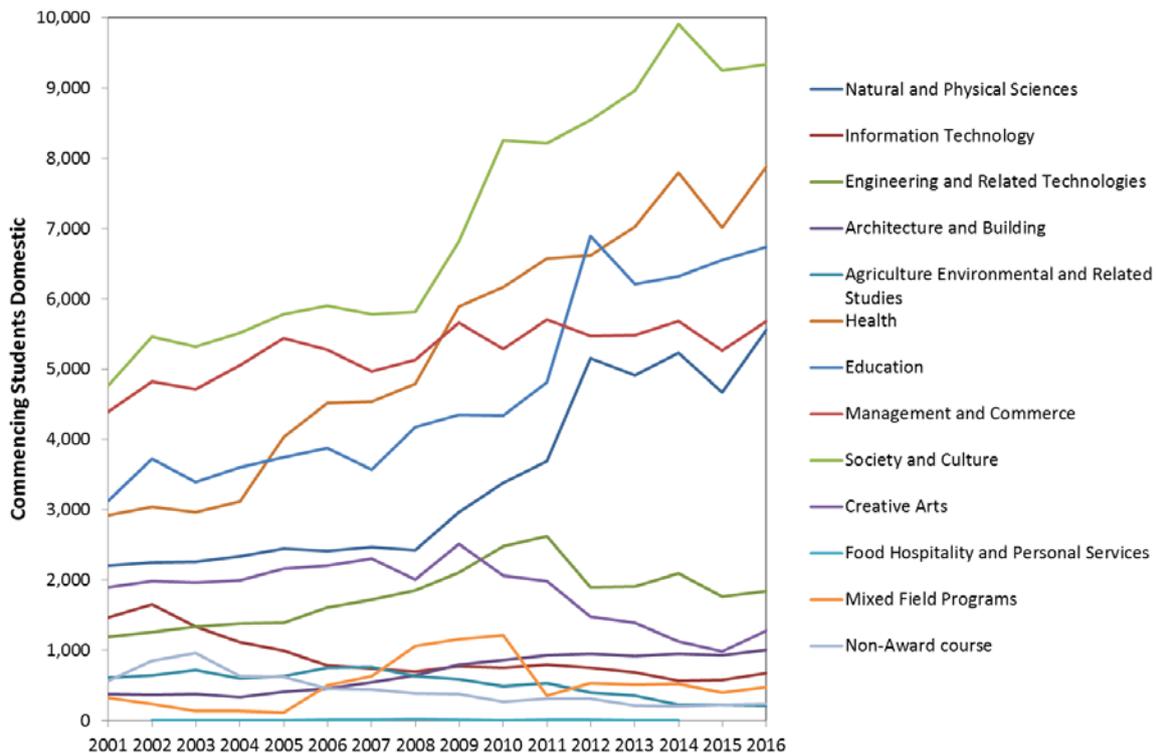


Source: Australian Government Department of Education and Training, Higher Education Statistics, uCube, November 2017

Figure 51 below shows that a return to record level commencements occurred in the fields¹¹¹ of Health and Natural and Physical Sciences. Proportionally, the greatest area of new commencements occurred for courses within the broad study field of Society and Culture which had a 23.3% share (9,333) of commencements in 2016, followed by Health (19.7% share with 7,889 commencements), and Education (16.8% share with 6,734 commencements).

¹¹¹ Source: ABS 1272.0 Australian Standard Classification of Education (ASCED).

Figure 51: University commencements by field of education, Western Australia



Source: Australian Government Department of Education and Training, Higher Education Statistics, uCube, November 2017

The areas that incorporated science, technology, engineering and mathematics (STEM) disciplines collectively accounted for 25.2% of all new commencements in Western Australian universities in 2016 – up from 24.3% in 2015. Though there is no sign of a decline in their proportional delivery, over the longer term, there has been no sign of a marked recovery to shares seen at the turn of the century when STEM accounted for around 28% to 30% of all new commencements at the university level. Total commencement levels in this key area have, however, continued to increase over the last 15 years, showing that despite growth in this focus area, other fields of study are growing stronger and/or are more appealing to prospective students.

Within the STEM subject areas, the field of engineering and related technologies recorded a declining share of total commencements from 6.6% in 2009 to 4.6% in 2016. Information technology remains one of the smallest shares in higher education, accounting for only 1.7% of all commencements in 2016, down from 2.4% in 2009.

Natural and physical sciences saw a return to trend growth in its proportional share, with 13.9% in 2016, up from 9.3% in 2009.

The fields of society and culture¹¹² and management and commerce both showed declines, and are also somewhat associated with employment in the professional, scientific and technical services industry.¹¹³

However, there are examples where enrolment choices are not always aligned to labour market trends. For example, the share of new university commencements in the study field of education increased from 15.9% in 2014 to 17.7% in 2015, despite a decrease in employment of around 4,000 workers in the industry of education and training during 2015–16.

In addition, recent strong employment growth of around 5,500 workers in the health care and social assistance industry over the past year does not correlate with university enrolments in the field of health, which recorded a decline in total share to 18.9% in 2015 from 19.6% in 2016.

¹¹² The education field of Society and Culture includes Political Science, History, Psychology and Law etc.

¹¹³ The professional, scientific and technical services industry includes architectural, engineering, legal, accounting, advertising, market research, consulting, veterinary and computer system services.

It should be noted that softer labour market conditions may also be impacting upon university students deciding to continue on with further study after completing a bachelor degree,¹¹⁴ with the compositional share of postgraduate students relative to total university enrolments (commencements plus continuing students) increasing to 21.3% in 2016 from 20.7% in 2015 and 20.3% in 2014.

Vocational education and training

The vocational education and training (VET) sector enables students to gain educational qualifications and build workforce skills.

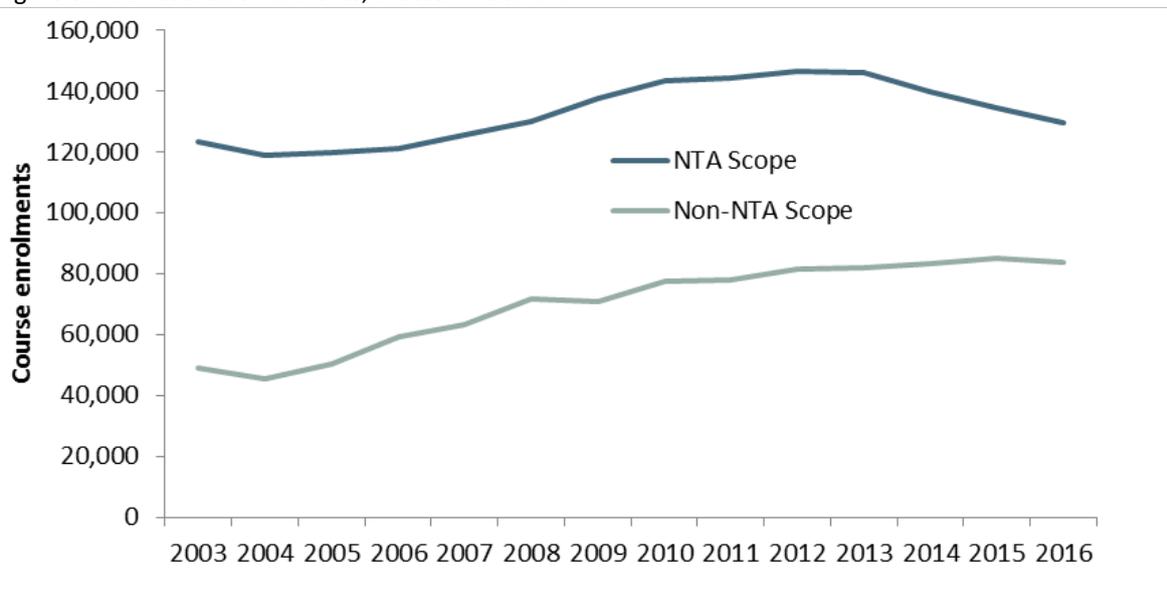
It should be noted that the length of time for VET course completion can vary dramatically, based largely on the level of qualification and structure of individual courses. Where as an undergraduate bachelor degree will generally start with a standard three year course, the VET sector encompasses everything from short courses at the Certificate I level, through to diploma and advanced diploma level qualifications that take three years to complete at a full time rate of study.

It should also be noted that not all VET students aim to complete a full course; some VET students only aim to complete skill sets.¹¹⁵

The majority of course enrolments are funded through the National Training Agreement (NTA) between the Australian and State Governments, with the 129,658 VET course enrolments funded in 2016 representing a decline of 3.5% over 2015 levels. However, this represents a 7.0% increase over the decade since 2006.

Course enrolments **not** covered by the NTA were 83,735 in 2016, a decrease of -1.5% from the previous year. Over the decade since 2006, enrolments in this area have increased by 41.4%.¹¹⁶

Figure 52: VET course enrolments, Western Australia



Source: DTWD, Administrative Data

¹¹⁴ Note: Graduate Careers Australia annual survey of recent graduates (four months following completion of an undergraduate degree), notes in their 2016 report that post graduate numbers fluctuate between one fifth and one quarter of all graduates will move into further full time study in line with labour market conditions.

<http://www.graduatecareers.com.au/wp-content/uploads/2017/11/GradStats-2016.pdf>

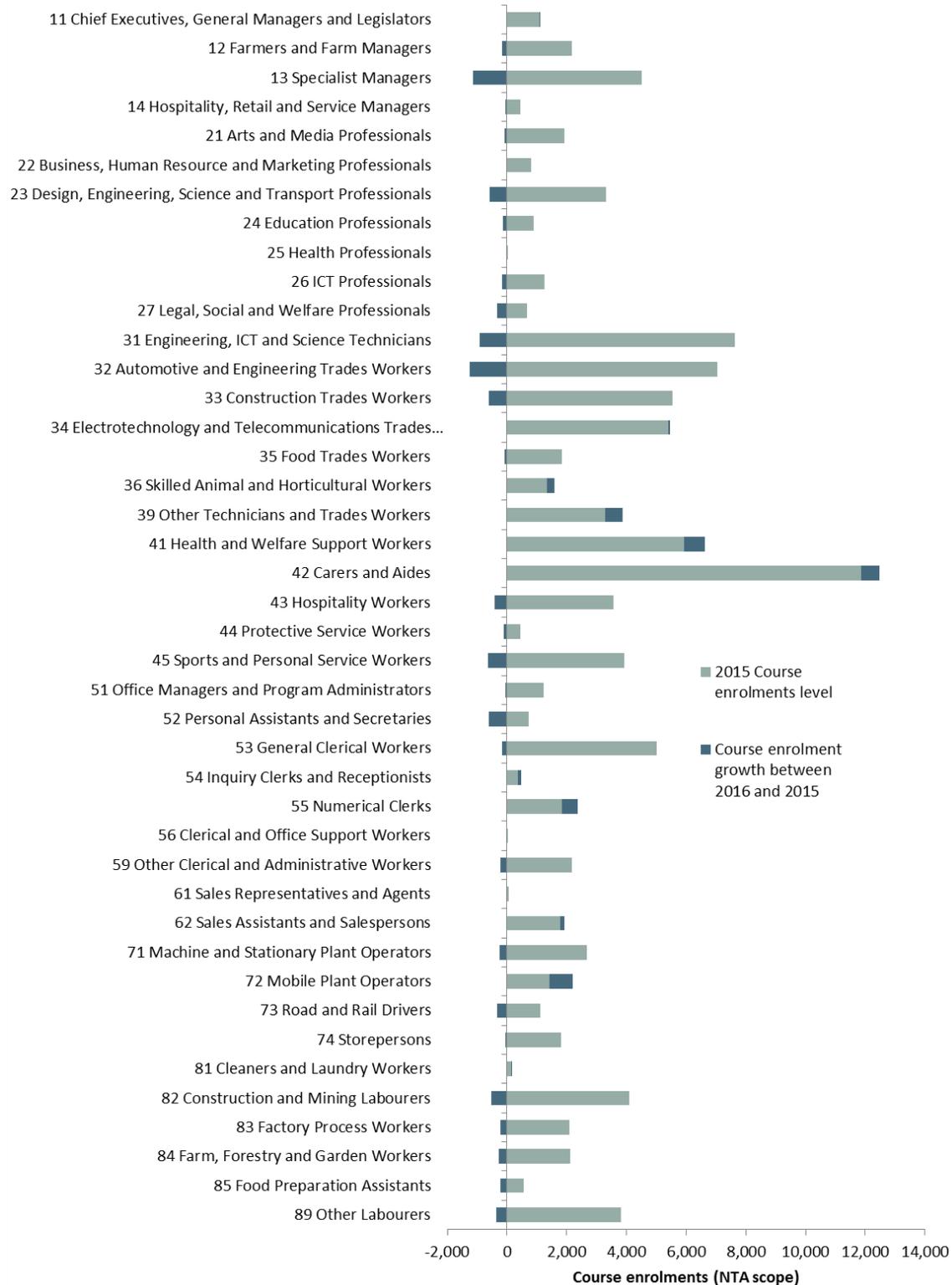
¹¹⁵ Even so, prevailing labour market (that is, employer expectations) and policy changes are, over time, moving against this as a suitable pathway to employment, in favour of full completions of VET courses.

¹¹⁶ Course enrolments not covered by the National Training Agreement can vary year to year, as changing Australian and State Government policies and funding levels administered outside of the control of the Department of Training and Workforce Development influence the VET market.

As mentioned before there was a decrease of 2.7% in overall VET course enrolments (NTA scope) in 2016 compared to 2015, which may be due in part to the labour supply issues for youth noted above, other factors such as uncapping of university places (therefore increasing demand for university education) and fee increases under the previous Government. At the same time there was also an increase in priority qualifications (mapped to the State's priority occupations).

Figure 53 shows VET course enrolments in 2015 and 2016 at a detailed occupational grouping level.

Figure 53: VET course enrolments (NTA scope) by occupation, Western Australia



Source: VET Enrolment Data Collection, final full year data for 2016

The overall decrease in VET course enrolments for the majority of occupations has coincided with a decrease in total employment in State for 2016–17 compared to the previous year. However, this is not across all industries.

Another area which also saw some differences in alignment between employment trends and the types of qualifications being studied was the accommodation and food services industry. While this industry increased in employment size by 3,800 workers over 2016–17, the number of course enrolments related to hospitality workers and food trades workers declined in 2016.

While employment in the health care and social assistance industry decreased slightly in 2016–17, VET course enrolments in priority occupations of health and welfare workers and carers and aides increased. This aligns with the sector's expected positive future employment outlook in association with an increase in the aged population.

The construction, transport, postal and warehousing, and mining industries all decreased in employment size over 2016–17, which is reflected in the decrease in enrolments in specialist managers; design, engineering, science and transport professionals, engineering, ICT and science technicians, automotive and engineering trades workers, construction trades workers, machine and stationary plant operators, road and rail drivers, and construction and mining labourers.

Some of this could be explained by the current and forecast economic/labour market factors having a direct impact on employers' willingness to employ new workers, particularly those requiring a training contract under an apprenticeship. However, these factors cannot be attributed as the sole or the primary reason for such decreases. The declining apprenticeship (and traineeship) commencements in Western Australia are likely to reflect a number of factors (not all of which are economic by nature¹¹⁷), such as:

- slowing growth in the overall number in the State's youth cohort – those aged 15–24;
- uncapping of university places;
- fee increases under the previous State Government (possibly making other alternatives like university/direct work slightly more attractive);
- much greater competition from skilled workers returning from construction work on major resource sector projects (that is, alleviating shortages in a range of trades across the State/obviating the need for hiring apprentices);
- a sharp increase in apprentice and trainee wages (the 2013 Australian Fair Work Commission decision raised wages by about \$100 a week – representing an increase of almost a third in apprenticeship/traineeship wages); and
- past cuts to government incentives (that is, "...changes to a number of government financial incentives between 2012 and 2013 – including the removal of employer standard commencement, recommencement and completion incentive payments for existing workers in training not on the Department of Education's National Skills Needs List (NSNL) – appear to have contributed to a marked decline in the number of commencements in non-trade occupations from mid-2012."¹¹⁸

The strong employment increase in agriculture, forestry and fishing also coincided with an increase in enrolments for skilled animal and horticultural workers. Other occupations to record an increase in VET course enrolments include numerical clerks and mobile plant operators.

The number of course enrolments have decreased since a peak in 2012, and as a result there was a decrease in completions for the number of qualifications awarded¹¹⁹ in 2016, with a decrease of 1.2% compared to 2014/15.

¹¹⁷ For example, beside the recent changes to incentives already identified by the Department of Training and Workforce Development, other non-economic drivers can include views held by prospective apprentices and trainees on other alternatives for example, immediate work, other VET/university study options); school leaver numbers/young age cohort growth rates; longer term workforce planning and other strategic planning considerations at the firm level by businesses; apprenticeship and traineeship policy and related regulatory changes at both a state and federal level (and in particular the 2013 decision by the Fair Work Commission for the first year pay rate for apprentices to be increased from 42% to 60% of the adult rate); among many other factors.

¹¹⁸ Source: Productivity Commission Report into the Workplace Relations Framework (page 270) December 2015.

¹¹⁹ Qualifications awarded are not produced on a NTA scope basis. In addition, there are also lags in reporting qualification completions. For example, there were 4,150 qualifications awarded in 2015 that were completed in 2014, and a further

However, it should be noted that the qualifications awarded data is not available on a NTA scope basis (and also incorporates some timing lags between when a qualification was completed and when it was awarded); hence this reduces the effectiveness of using this data series for comparison purposes but it is still somewhat useful in relation to indicative trends.

Table 10: VET qualifications awarded by level of education by collection year¹¹⁹

Levels of Education	2015	2016
211 Graduate Diploma	0	12
221 Graduate Certificate	16	8
411 Advanced Diploma	1,016	666
421 Diploma	6,617	6,680
511 Certificate IV	11,603	10,599
514 Certificate III	20,977	21,711
521 Certificate II	23,267	25,408
524 Certificate I	5,141	4,501
991 Statement of Attainment Not Identifiable by Level	274	183
	69,768	68,911

Source: VET Data Collection, final full year data for 2016

The table above shows that there was a slight decrease in qualifications awarded in 2016 compared to the previous year; however, there were increases in qualifications awarded at the Diploma and Certificate II and III levels.

It is worth noting that labour market conditions may change during the time period between commencing and completing a qualification. Generally VET sector qualifications take between 12 to 18 months and this may allow more flexibility to meet market demand in a timely manner in comparison to a university qualification which will generally be for a period of at least three years.

In addition, there could be many factors other than perceived employment opportunities at play which may influence the study choices of individuals, both at university and in VET. These include an individual's current skill set, aptitudes and preferences, as well as cost, access to financial study assistance and availability of places.

State priority occupation list

The transitioning of Western Australia's labour market is reflected in the makeup of the Department of Training and Workforce Development's State priority occupation list (SPOL)¹²⁰ for 2017, which takes into account both demand and supply side factors.

Western Australia's SPOL for 2017 reinforces the importance of maintaining the highly skilled workforce required for the State's labour market.

Occupations ranked the highest on the 2017 SPOL are predominantly professional in nature, requiring either a university education or high level VET training for entry.

650 qualifications awarded in 2015 that were for qualifications completed in 2013. For these reasons they tend to be less reliable for analysis compared to VET enrolment measures.

¹²⁰ The State priority occupation list (SPOL) is an annually-produced list of jobs that are considered critical to the State and/or have demonstrated significant unmet demand. The list informs training priorities through the State Training Plan (and subsequently the Priority industry qualifications list or PIQL), workforce development planning, and the Western Australian skilled migration occupation list (WASMOL). See Section 7.1 for more information on the SPOL and its construction.

Those industries heavily represented by occupations on the 2017 SPOL generally relate to the health and social assistance industry, highlighting WA's increasing and ageing population and the related demands for services this will create.

Consistent with the SPOLs from previous years, the current SPOL retains a diverse mix, with other industries such as education; professional, scientific and technical services; education and training; and transport, postal and warehousing also having significant occupational representation. Further information pertaining to the current 2017 SPOL can be found at Section 6.1.

These are at the higher end of the skill levels, which correlates to other research indicating that the future needs of industry will focus around higher level skills. This is reflected in the methodology of the SPOL which is designed around the principles of:

- *high levels of skill* – the occupation must have specialised skills that require extended learning and preparation time;
- *clear and open pathways* – the occupation should have clear education and/or training pathways or qualifications that can be obtained within Australia, and where the skills learnt can be matched to the requirements of the occupation; and
- *occupational impact* – an occupation will be considered if any disruption in its supply would result in significant impacts more broadly across the industry or the State economy.

5.5 SUMMARY

Western Australia's training imperative remains strong despite the moderation in labour market conditions in the State. This is especially the case given the more moderate growth expected in the State's labour supply in coming years, particularly for prime working and youth age cohorts.

Western Australia's youth will be a vital component of the State's future labour supply, particularly with the expected ageing of the State's population over coming years and the increased need for the replacement of skilled workers. Slower projections of employment growth into the future mean that the replacement of those retiring becomes the largest individual component of demand.

In addition, early career pathways and skilling up the State's young people continues to be a very high priority, as this represents a critical stage in the beginnings of any person's career development and future work engagement. In relation to this, VET training continues to be crucial in connecting young people's competencies with industry needs, and creating a link between school based education and their chosen career(s).

Furthermore, in ensuring that the State's workforce is meeting industry needs, the easing in the major resource project construction in recent years towards the less labour intensive operations phases means that there is expected to be a continuous supply of skilled workers available across a variety of industries. This transitioning towards a broader based industry growth profile underscores the importance of ensuring that the State's training effort is appropriately targeted according to industry requirements.

In this context, there is a key risk that economic uncertainty, together with the softening labour market conditions expected over the coming years, will combine with factors such as resource construction workers 'returning' to non-resource construction roles, and the expected fall in the population growth rate of the youth (15 to 24) population to culminate in a drop in new apprenticeship numbers.

The factors described above and the other contextual issues and trends covered in this section represent some of the key overall considerations that are important for this State Training Plan.

6. OCCUPATIONAL AND QUALIFICATION ANALYSIS

State training priorities are informed by a range of sources in order to ensure that all Western Australians are provided with opportunities to develop skills that will be sought after by employers now and into the future.

A core facet of this involves identifying those occupations which play a crucial role in the State by meeting the current and future needs of industry and the wider community. This is achieved through comprehensive labour market analysis, primarily utilising the State priority occupation list (SPOL).

6.1. STATE PRIORITY OCCUPATION LIST

The SPOL is an annually produced list of jobs that are rated according to their priority status in Western Australia. The list includes those occupations that are either deemed critical to the State, have demonstrated unmet demand and/or are experiencing non-market-related factors¹²¹ that may influence the requirement for training. The SPOL is largely comprised of occupations characterised by highly specialised skills, which require extended education, training or preparation lead times, as well as clear education and/or training pathways.

The SPOL2017 has been developed via a range of economic data and labour market projections, as well as being informed by qualitative advice collected from various stakeholders by the Industry Training Councils. This year, the Department received 357 responses from the nine¹²² Industry Training Councils, the Public Sector Commission and the Western Australian Local Government Association. These related to 329 of the 743 eligible occupations.

Outcomes of the 2017 SPOL

The moderating Western Australian labour market has been a significant factor on the makeup and structure of the SPOL in recent years. Employment growth in the State has slowed, and coupled with the supply of skilled and semi-skilled workers via education, training and migration outcomes remaining relatively high, it is clear that the State is not experiencing the skills shortages and labour scarcity that was a hallmark of its labour market over the resource investment boom years.

As a sign of ongoing weakness in the demand for new labour (skilled and unskilled), the processes for compiling the SPOL2017 suggests that a greater amount of the State's demand for labour is coming from net replacement needs (or 'churn' of existing workers) or additional hours worked by existing workers, rather than net employment growth. On current forecasts used for the SPOL, it is expected that this broad trend will continue over the next year or so, although there are some early signs of recovery in growth in some sectors. More recent changes in the area of migration policy will have further impacts on local supply, although these are yet to be seen.

Besides market driven concerns, the SPOL also equally looks at the role, position and impact the occupation has within an industry and the wider Western Australian economy, otherwise known as 'criticality'. Any non-market factors such as regulatory changes that are potentially impacting occupations are also taken into consideration on a case by case basis.

The majority of the occupations appearing as State priorities in recent years (as shown on table 11 below) have been due to their inherent 'critical' status.¹²³

¹²¹ Non-market factors refer to any set of factors, not related to current demand or supply, which impact upon the training or migration requirements for that occupation such as changes in regulation and licensing arrangements.

¹²² Following SPOL2016, Industry Training Councils contracts were reviewed, resulting in two bodies amalgamating, leaving nine Training Councils. To ensure a number of industry sectors were not disadvantaged in this process, the State Training Board also signed a memorandum of understanding with both the Public Sector Commission and the Western Australian Local Government Association, recognising them as Industry Training Advisory Bodies under the *Vocational Education and Training Act 1996*.

¹²³ Critical occupations are generally highly skilled occupations where it is important to maintain a secure supply of workers. Further information on critical occupations can be found in the SPOL Methodology Paper at <http://www.dtwd.wa.gov.au/sites/default/files/uploads/spol-methodology-july2017.pdf>

Occupations with strong linkages within the education, and health and social assistance industries have historically had a strong SPOL presence due to the critical nature of many of their occupations. Construction, engineering and mining related occupations also maintain a presence on the list but are more susceptible to cyclical swings in economic activity.

This year's SPOL consists of **187 'State priority' occupations**, with two tiers that indicate occupational priority.

These two tiers are simply called **'State priority 1'** and **'State priority 2'**:

- State priority 1 features 24 occupations, where each of these occupations is identified as a critical occupation, and there is sufficient and appropriate evidence that the occupation is suffering from unmet demand; and
- State priority 2 has 158 occupations identified as critical only, classified as '2A'; and a further five occupations experiencing unmet demand only (but not identified as critical), classified as '2B'; making a total of 163 occupations.

Aside from these two 'State priority' tiers, there is a category called 'Priority 3', which has a further 59 occupations. Priority 3 occupations are not considered priorities at the State level, but may have evidence of unmet demand or other non-market-related factors impacting upon training or migration requirements at an industry (or potentially, regional) level. These factors are not considered broad or deep enough to consider the occupations as State priorities.

While the overall number of priority occupations fell from 250 to 246, the number of State priority occupations has risen from 178 to 187. This indicates that those previously mentioned signs of recovery are occurring among higher skilled and more critical occupations.

Table 11: ANZSCO major groups by SPOL priority for 2017, compared to 2016

ANZSCO	State Priority 1	State Priority 2A	State Priority 2B	Priority 3	Total	Other Identified Occupations
SPOL 2017						
1. Managers	2	21	-	2	25	5
2. Professionals	21	113	-	5	139	3
3. Technicians and Trades Workers	1	18	4	35	58	10
4. Community and Personal Service Workers	-	5	1	14	20	8
5. Clerical and Administrative Workers	-	1	-	1	2	1
6. Sales Workers	-	-	-	-	0	3
7. Machinery Operators and Drivers	-	-	-	2	2	7
8. Labourers	-	-	-	-	0	-
Total	24	158	5	59	246	37
SPOL 2016						
1. Managers	1	17	1	4	23	9
2. Professionals	26	106	-	7	139	7
3. Technicians and Trades Workers	-	19	2	37	58	16
4. Community and Personal Service Workers	-	4	1	15	20	9
5. Clerical and Administrative Workers	-	1	-	2	3	9
6. Sales Workers	-	-	-	3	3	1
7. Machinery Operators and Drivers	-	-	-	2	2	5
8. Labourers	-	-	-	2	2	1
Total	27	147	4	72	250	57

Table 11 shows the relatively small number of those occupations having unmet demand (State priorities 1 and 2B) as a proportion of the total (just under 12% of the SPOL occupations and less than 4% of all occupations assessed). The majority relate to 'critical' occupations that require maintenance of supply (State priority 2A). As stated above, this contraction of occupations with unmet demand is a reflection of the moderating labour market in recent years.

In addition, the table shows the SPOL has skilled occupations which are primarily from the managerial, professional, and technicians and trades *worker* grouped occupations. These are at the higher end of the skill levels, which correlates to other research indicating that the future needs of industry will focus around higher level skills. This is reflected in the methodology of the SPOL which is designed around the principles of:

- *high levels of skill* – the occupation must have specialised skills that require extended learning and preparation time;
- *clear and open pathways* – the occupation should have clear education and/or training pathways or qualifications that can be obtained within Australia, and where the skills learnt can be matched to the requirements of the occupation; and
- *occupational impact* – an occupation will be considered if any disruption in its supply would result in significant impacts more broadly across the industry or the State economy.

The table also contains a category titled ‘Other identified occupations’, referring to occupations for which issues have been identified but the evidence provided did not warrant inclusion as a priority for 2017. This list of occupations will be the basis of a ‘watch list’ for the SPOL2018.

Table 12 below shows a more detailed breakdown of these occupational categories. As can be seen, the greatest proportion of priority rated occupations come from those higher level occupational groups. The two largest contributors were health professionals (28.5% of total priorities) and design, engineering, science and transport professionals (15.9%).

Table 12: ANZSCO sub-groups by SPOL priority for 2017

ANZSCO Group	State priority 1	State priority 2A	State priority 2B	Priority 3	Total Priority Occupations	Total Eligible Occupations	Priorities as a Proportion of Total Priorities
11 - Chief executives, general managers and legislators	0	1	0	0	1	2	0.4%
12 - Farmers and farm managers	0	7	0	0	7	23	2.8%
13 - Specialist managers	1	12	0	0	13	38	5.3%
14 - Hospitality, retail and service managers	1	1	0	2	4	21	1.6%
21 - Arts and media professionals	0	0	0	0	0	28	0.0%
22 - Business, human resource and marketing professionals	0	3	0	0	3	51	1.2%
23 - Design, engineering, science and transport professionals	2	36	0	1	39	75	15.9%
24 - Education professionals	0	7	0	1	8	17	3.3%
25 - Health professionals	17	53	0	0	70	82	28.5%
26 - ICT professionals	1	5	0	2	8	21	3.3%
27 - Legal, social and welfare professionals	1	9	0	1	11	23	4.5%
31 - Engineering, ICT and science technicians	1	6	2	6	15	40	6.1%
32 - Automotive and engineering trades workers	0	1	1	10	12	30	4.9%
33 - Construction trades workers	0	2	0	11	13	15	5.3%
34 - Electrotechnology and telecommunications trades workers	0	5	0	5	10	15	4.1%
35 - Food trades workers	0	4	0	0	4	5	1.6%
36 - Skilled animal and horticultural workers	0	0	1	2	3	12	1.2%
39 - Other technicians and trades workers	0	0	0	1	1	42	0.4%
41 - Health and welfare support workers	0	2	0	7	9	16	3.7%
42 - Carers and aides	0	3	0	4	7	13	2.8%
43 - Hospitality workers	0	0	0	0	0	5	0.0%
44 - Protective service workers	0	0	0	2	2	7	0.8%
45 - Sports and personal service workers	0	0	1	1	2	23	0.8%
51 - Office managers and program administrators	0	1	0	0	1	5	0.4%
52 - Personal assistants and secretaries	0	0	0	0	0	3	0.0%
53 - General clerical workers	0	0	0	0	0	2	0.0%
54 - Inquiry clerks and receptionists	0	0	0	0	0	6	0.0%
55 - Numerical clerks	0	0	0	0	0	6	0.0%
59 - Other clerical and administrative workers	0	0	0	1	1	23	0.4%
61 - Sales representatives and agents	0	0	0	0	0	9	0.0%
62 - Sales assistants and salespersons	0	0	0	0	0	6	0.0%
63 - Sales support workers	0	0	0	0	0	1	0.0%
71 - Machine and stationary plant operators	0	0	0	1	1	28	0.4%
72 - Mobile plant operators	0	0	0	0	0	11	0.0%
73 - Road and rail drivers	0	0	0	1	1	7	0.4%
74 - Storepersons	0	0	0	0	0	1	0.0%
81 - Cleaners and laundry workers	0	0	0	0	0	3	0.0%
82 - Construction and mining labourers	0	0	0	0	0	9	0.0%
83 - Factory process workers	0	0	0	0	0	3	0.0%
84 - Farm, forestry and garden workers	0	0	0	0	0	5	0.0%
89 - Other labourers	0	0	0	0	0	11	0.0%
Total Eligible Occupations	24	158	5	59	246	743	100.0%

A copy of the SPOL is available in Appendix B.

7. INDUSTRY ENGAGEMENT

To ensure the State is able to build a highly skilled workforce, it is imperative that the VET sector has an understanding of the skill needs of industries and regions across Western Australia.

Established under Part 3 of the VET Act, the State Training Board is the peak industry training advisory body to the Minister for Education and Training in Western Australia.

The role of the Board is to provide high level expert advice to the Minister regarding:

- the existing and anticipated supply and demand for skills in various industries;
- strategies to support industries which are experiencing skill shortages;
- policy which aims to improve the links between specific industry developments and VET so as to gain optimum employment opportunities for people and ensure the availability of appropriately skilled labour in the State;
- strategic directions, policies and priorities for the State training system;
- emerging international, national and State training issues; and
- the extent to which training services meet the current and future requirements of industry and the community, including the requirement for equal opportunity of access to those services.

7.1. INDUSTRY TRAINING ADVISORY ARRANGEMENTS

Under section 21(1) (b) of the *Vocational Education and Training Act 1996*, the Board recognises 11 industry training advisory bodies (ITABs).

Providing industry intelligence to the Board and the Department of Training and Workforce Development, the ITAB network comprises nine Industry Training Councils and two other bodies – the Public Sector Commission and the WA Local Government Association (WALGA).

The Training Councils are funded by the Department of Training and Workforce Development under service agreements. The two additional bodies are recognised through a formal memorandum of understanding (MOU) between the body and the Department.

Below are the nine Industry Training Councils in Western Australia:

- Community Services, Health and Education Training Council: csheitc.org.au
- Construction Training Council: bcitf.org
- Creative and FutureNow-Creative and Leisure Industries Training Council: futurenow.org.au
- Financial Administrative and Professional Services Training Council: fapstc.org.au
- Food, Fibre and Timber Industries Training Council: ffittrainingcouncil.com.au
- Logistics Training Council: logisticstc.asn.au
- Resources Industry Training Council: ritcwa.com.au
- Retail and Personal Services Training Council: rapstc.com.au
- Utilities, Engineering, Electrical and Automotive Training Council: ueea.org.au

Undertaking extensive industry consultation with key stakeholders, including peak employers, employees, and industry organisations, the Training Council network is responsible for providing:

- industry intelligence and data on workforce and occupational priorities, in particular, current or emerging skills shortages which is used to inform the State priority occupation list (SPOL);
- detailed advice to inform the establishment/variation of apprenticeships and traineeships;
- recommendations regarding the development, review, endorsement and implementation of training packages;
- industry advice regarding the development of strategic policy for VET in Schools; and
- input into the strategic projects and policies related to the State's training system.

The Industry Training Councils also provide industry snapshots to the Department which are the basis of the Industry Workforce Profiles in Section 8 of this document.

7.2. STATE TRAINING BOARD PROJECTS

As part of its industry engagement framework, the State Training Board undertakes strategic projects in consultation with industry peak bodies and representatives, unions and employers to assist in identifying the directions, policies and priorities for the Western Australian training system.

Details of the key projects currently being undertaken by the Board are provided below.

Plan for Jobs – industry Information

The State Government's *Plan for Jobs* places emphasis on creating a vibrant and diversified economy with a broader range of industries and jobs for Western Australia. To maximise the State's workforce participation rate, it is essential that individuals are able to access and obtain the 'right skills' at the 'right time'.

To diversify the economy, greater effort is required in the areas of science, technology, manufacturing, tourism, services, education services, agriculture and other industries. The VET system plays an important role in delivering the skills needed for these industries.

The Board is currently leading extensive industry consultations on key aspects of the *Plan for Jobs*. As part of the initial work of this project, two consultation papers, *Growing Apprenticeships and Traineeships*, and *TAFE Industry Skills Centres* have been prepared by the Board.

Growing apprenticeships and traineeships

A key priority for the *Plan for Jobs* is the employment of apprentices and trainees on major infrastructure and maintenance projects such as the METRONET rail system and future defence industry contracts. Equally important for the State is providing opportunities for non-trade and paraprofessional jobs in other industries such as health care, community services, tourism and hospitality, education, agriculture and science. Many of these industries have experienced low number of apprentices and trainees in the past.

TAFE Industry Skills Centres

TAFE colleges are a critical part of the training system in Western Australia and the *Plan for Jobs* aims to transform TAFE colleges into one-stop-shop Industry Skills Centres. Under the Plan, TAFE will continue to deliver high quality training through its campuses across Western Australia. Liaising directly with emerging and established local industries, TAFE will offer additional services that will provide employers, apprentices and trainees, and prospective students with a single point of contact to assist them in addressing their workforce, career and training needs.

These papers, in conjunction with a number of face-to-face consultation forums seek to gain the views of employers, industry representatives and the training sector about how the State Government can address the skills requirements of industry now and into the future. It will also seek feedback from stakeholders on how TAFE can meet these workforce and training needs.

For further information, copies of the consultation papers can be found on the State Training Board website at <http://www.stb.wa.gov.au>.

Social assistance and allied health workforce

The State's aged care, disability, allied health and community service sectors have undergone significant changes in recent years. An ageing population, increasing complexity of disease, advances in medical technology, and increasing consumer expectations for more efficient and improved care will result in both challenges and opportunities for the State's workforce in this sector.

The training system will play an important role in providing opportunities for skill development for both existing workers and for new workers joining the industry. By understanding the current and future workforce

requirements, including the forecast growth of the sector due to factors such as the National Disability Insurance Scheme (NDIS) roll out in the State, the VET sector will be able to effectively respond to the demand for training places.

In 2017, the Board is working with industry and community stakeholders to identify the training and workforce needs of the aged care, disability, allied health and community service sectors, with a vocational education and training focus.

From this research and consultation, the Board aims to develop an inclusive workforce development plan for the sectors. The workforce development plan will define the roles of government, and the aged care, disability and allied health sectors. It will also focus on sourcing a highly skilled workforce, combining education and training strategies with employment and migration strategies.

Under the direction of a steering committee comprising representatives from the Board, State government agencies and relevant peak bodies and agencies, the project will aim to determine:

- the current composition and future requirements of the workforce in Western Australia in the public, private and not-for-profit sectors, including full time, part time and casual workers;
- the role of the VET system in addressing the workforce development needs of the sectors;
- the future workforce requirements; and
- identification and development of points of integration and intersection to encourage workforce development, mobility and shared resources between sectors.

It is envisaged the social assistance and allied health workforce development plan will be completed in 2018.

Innovation and technology project

The Board, in conjunction with the Department of Training and Workforce Development, is currently undertaking a project that will examine the impact innovation and technology have on the State's key industries, its workforce, and its skill requirements.

The project will build on the Board's work on workforce scenarios, which identified five focus areas that related to opportunities for young people, VET and university pathways, harnessing innovation and technology, workforce adaptability and evolving skill needs, and ageing population and workforce.

Overseen by the Board's innovation and technology working group (ITWG) which comprises members of the Board and selected industry specialists, the project aims to develop strategies that will:

- encourage schools, TAFE and private training providers to support and embed foundation skills, including science, technology, mathematics and engineering as appropriate at primary, secondary and tertiary levels;
- establish new or redesigned education and training programs that align with current and emerging technologies;
- develop a fresh approach to service delivery that enables more responsive and flexible training; and
- introduce options for multidisciplinary courses, short course skills training, or in-house training for existing workers, to address specific workforce needs.

The Board will work with enterprises, industry, education and training providers, State Government agencies and the community to achieve the following:

- appraise how current and emerging innovation and technology advances are changing the nature of work in some of Western Australia's key industries;
- reference how supply and other broader environmental factors (such as migration patterns, ageing demographics and global business) are likely to change the demand for skills and new types of jobs, and impact the work landscape;
- identify foundational skills that will enable individuals to participate productively in the knowledge-economy of the future, as job-seekers, entrepreneurs, business owners and innovators. These foundational skills include, but are not limited to: Science, Technology, Engineering and Mathematics (STEM) Skills; Digital Literacy Skills; Enterprise Skills – Communication; Creativity and Innovation;

Financial Literacy; Analytical and Critical Thinking; Project Management; Change Management and Adaptability;

- develop education, training and other strategies to increase the supply of local talents to meet the new and existing skills identified and embed and encourage these and foundational skills as appropriate at the primary, secondary and tertiary levels; and
- identify the changes in policy necessary to ensure an appropriate response to these skills needs and strategies.

It is envisaged that a final report will be completed in 2018.

7.3. RESPONSIVE PRIORITY OCCUPATION LIST FOR THE REGIONS

Developing a high quality training system to meet the needs of industry in Perth and regional Western Australia is imperative to meet the economic objectives of the State.

In its *Plan for Jobs*, the State Government has committed to ensuring the State Priority Occupation List is more responsive to the employment needs of the regions, and regional TAFEs are delivering training that aligns with future growth¹²⁴.

In order to implement the Government's commitment, the Department of Training and Workforce Development will be undertaking a labour market review for each of the nine regions in the State. The outcomes of the review will provide a basis for the development of a regional priority occupation list.

Undertaking interviews with employers and industry representatives from each of the regions, the review will aim to seek targeted qualitative evidence on current and future labour market trends. It also aims to identify occupations that have either unmet demand or are a priority requiring ongoing supply, and other issues relating to the attraction, recruitment and retention of workers.

The initiative will be supported by engagement with the local TAFE college, the Department of Primary Industries and Regional Development, the local regional development commission and the State Training Board.

To test the methodology of the labour market review, a pilot in the Goldfields region commenced in July 2017. Once the Goldfields pilot is evaluated in October 2017, it is intended these reviews will guide regional TAFE colleges in aligning their training programs with current and future skills needs of industry in their local area.

The first round of the regional labour market reviews will commence in 2018.

¹²⁴ Note: While the current SPOL is based on a robust methodology which provides evidence to guide training and workforce planning priorities at a whole-of-State level, it is not fit for purpose to identify specific occupational priorities at a regional level. This is primarily due to lack of available regional level occupational demand and supply data.

8. INDUSTRY WORKFORCE PROFILES AND PRIORITIES

For the purpose of providing industry intelligence and advice to the VET sector, the State Training Board uses the *Australian and New Zealand Industrial Classification (ANZSIC) 2006* (Revision 2.0) to allocate the sectors to be covered by the industry training advisory bodies¹²⁵.

The following 19 industry profiles (based on ANZSIC) provide a labour market overview of each industry and a snapshot of VET delivery for the period 2014-2016.

Each profile also highlights any developments and/or challenges impacting on the industry sectors, and the industry workforce priorities as identified by the respective Training Councils.

8.1. AGRICULTURE, FORESTRY AND FISHING

OVERVIEW

The agriculture, forestry and fishing industry is engaged in growing crops, raising animals, growing and harvesting timber, and harvesting fish and other animals from farms or their natural habitats. The sub sectors in the industry include¹²⁶:

- agriculture – growing and cultivation of horticultural and other crops (excluding forestry), and the controlled breeding, raising or farming of animals (excluding aquaculture);
- aquaculture – controlled breeding, raising or farming of fish, molluscs and crustaceans;
- forestry and logging – growing, maintaining and harvesting forests, as well as gathering forest products; and
- fishing, hunting and trapping – gathering or catching marine life such as fish or shellfish, or other animals, from their uncontrolled natural environments in water or land.

As of May 2017, the industry employed approximately 34,300 Western Australians, representing 2.5% of the State's workforce. In the year to May 2017, the industry experienced an average annual growth of 6,900 persons or 25.3%, (albeit from a small base and following longer term declines in employment). Over the five years to May 2017 the industry has experienced a net gain of 1,500 persons or 4.5% of its workforce.

The industry is dominated by non-employing businesses (64.6%), with 1.8% of enterprises having 20 or more employees.¹²⁷

The industry predominantly employs on a full time basis, with only 27.8% of workers employed part time.¹²⁸

The industry has a majority male workforce at 65.5% compared to the total State proportion of 54.9%. While one in three workers in this industry is female, between 2016 and 2017, the industry experienced an increase of some 4,600 female workers.

As of Census 2011, the 77.8% of the industry's workforce falls within the 25-64 age group and is consistent with the State's average (80.7%), the industry does have an ageing profile, with some 14.2% of the workforce being 65 years of age or older, compared to only 3.1% across all industries.

In 2015–16, the agriculture, forestry and fishing industry contributed 2.3% towards the Gross State product for Western Australia.¹²⁹

¹²⁵ It should be noted that coverage of an industry may be across more than one training council.

¹²⁶ ABS, 1292.0 - Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (Revision 1.0)

¹²⁷ Australian Bureau of Statistics. (2017). 8165.0 *Counts of Australian Businesses, including Entries and Exits, Jun 2011 to Jun 2016*.

¹²⁸ ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017

¹²⁹ ABS, 5222.0, State Accounts

ECONOMIC AND LABOUR MARKET SNAPSHOT¹³⁰

Economic indicators	Agriculture, forestry and fishing	WA average across all industries
% of total WA employment	2.5	
% average annual employment growth 2016–17	25.3	-0.3
% of full time employment	72.2	68.1
% of female employment	34.5	45.1
% of metropolitan employment ¹³¹	20.1	78.3
% of total WA gross State product (GSP) at 2016 ¹³²	2.3	

SNAPSHOT OF VET DELIVERY (COURSE ENROLMENTS) – 2014–2016

AGRICULTURE, FORESTRY AND FISHING	2014	2015	2016
Total course enrolments (NTA)	7,342	6,868	6,674
AQF level			
Certificate IV and above	611	570	529
Certificate III and below	6,731	6,298	6,145
Type of study			
Apprenticeship and traineeship	936	655	643
Institutional delivery	6,406	6,213	6,031
Location			
Metropolitan	1,427	1,430	1,660
Regional	5,915	5,438	5,014
Training providers			
TAFE	6,758	6,347	6,308
Private training organisations	584	521	366
Aboriginal people			
Course enrolments	1,389	1,459	1,164
Young people (15-24 years) – AQF level			
Certificate IV and above	110	158	157
Certificate III and below	2,526	2,347	2,352

TOP FIVE QUALIFICATIONS BY NTA SCOPE COURSE ENROLMENTS 2016¹³³

Qualification
Certificate III in Agriculture
Certificate II in Conservation and Land Management
Certificate II in Horticulture
Certificate III in Horticulture
Certificate III in Wool Clip Preparation

Source: VET Enrolment Data Collection19F¹³⁴, final full year data for 2016

¹³⁰ ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017 (unless otherwise stated)

¹³¹ Census 2011

¹³² ABS cat. no. 5220.0, National Accounts: State Accounts 2015–16, November 2016

¹³³ Contains VET in Schools training delivery

TOP FIVE VET IN SCHOOLS QUALIFICATIONS DELIVERED BY NTA SCOPE COURSE ENROLMENTS 2016

Qualification
Certificate III in Wool Clip Preparation
Certificate III in Agriculture
Certificate II in Agriculture
Certificate II in Rural Operations
Certificate II in Aquaculture

Source: VET Enrolment Data Collection19F¹³⁵, final full year data for 2016

INDUSTRY DEVELOPMENTS AND WORKFORCE CHALLENGES¹³⁶

AGRICULTURE

- The UN Food and Agriculture Organisation predict that global food production needs to increase by at least 60% by 2050. The Western Australian Government has set a goal of doubling the real value of agrifood production between 2013 and 2025. Given the limited availability of suitable land, it is expected that 85% of any increase in production will be achieved via increased yields and cropping intensity.
- Much agricultural production is already highly mechanised and it continues to be increasingly impacted on by new and improved technologies such as precision farming, drones, GPS, big data and analytics, and the 'internet of things'.¹³⁷ However, a lack of access to the internet, for online information and data, in rural and regional areas is an impediment to improving the productivity of agricultural businesses.¹³⁸
- The need to achieve productivity improvements is driving increased corporatisation of farming, including the consolidation of smaller farms and greater capital investment.
- Agrifood businesses are becoming increasingly integrated along the supply chain of producers, processors, distributors and sales. This may also involve the establishment of co-operatives.
- Changing consumer expectations are impacting on agrifood production and processing.¹³⁹ These include concerns the quality and integrity of food production systems, food provenance¹⁴⁰ and impacts on the environment.
- Although genetic modification is one of the main technologies being adopted for improving crop production, some debate continues in Western Australia regarding potential health and environmental impacts.¹⁴¹
- Weather variability has always dramatically impacted on agricultural production. This is being exacerbated by climate change. For example, while Australian wheat yields have been largely the same over the 26 years from 1990 to 2015, potential yields (the real limit on what a wheat field can produce) have declined by 27% since 1990, from 4.4 tonnes per hectare to 3.2 tonnes per hectare.¹⁴²
- The export of live animals (at value of \$329m for sheep and \$237m for cattle in 2014/15¹⁴³) continues to be a sensitive issue within the community.¹⁴⁴
- Australia's biggest milk producers export about half their produce every year. The fluctuating Australian Dollar, increased milk supply from the EU and a levelling of demand for milk products by

¹³⁴ Data collection is for the National Training Agreement (NTA) scope which is only for enrolments funded by the Department of Training and Workforce Development.

¹³⁵ Ibid.

¹³⁶ Industry advice provided by Food, Fibre and Timber Industries Training Council 2017

¹³⁷ KPMG, Powering Growth. <https://home.kpmg.com/au/en/home/insights/2016/09/powering-growth-realising-potential-agtech-australia.html>

¹³⁸ ABC News, <http://www.abc.net.au/news/2016-05-24/farmers-call-for-nbn-rollout-comparable-to-urban-areas/7441642>

¹³⁹ Department of Agriculture, Fisheries and Forestry, FOODmap An analysis of the Australian food supply chain, 2012

¹⁴⁰ ABC News Report, <http://www.abc.net.au/news/2016-04-15/nsw-youth-food-movement/7329880>

¹⁴¹ CCIWA, The future of agriculture: A vision for WA. <http://cciwa.com/docs/default-source/vision-series/agriculture-vision-paper.pdf?sfvrsn>

¹⁴² See The Conversation: <https://theconversation.com/changing-climate-has-stalled-australian-wheat-yields-study-71411>

¹⁴³ Department of Agriculture and Food, 2016, Western Australia's Agrifood, Fibre, Fisheries, Forestry Industries.

¹⁴⁴ See The Conversation: <https://theconversation.com/au/topics/live-exports-587>

China has led to an oversupply of milk across Australia. This has impacted on local production and farmers.¹⁴⁵

- Transform Peel¹⁴⁶ is a 35 year program that provides for fostering investment in intensive food production in the Peel region. The Peel Food Zone will incorporate innovative food technology solutions while protecting the productive capacity of soil and water resources.
- The sector generally lacks a post-school training culture and is seen to offer limited career pathways.
- Nationally, in 2013, 15.5% of people employed in the agriculture, forestry and fishing industry sectors engaged in work related training. This compares to 34.5% for all industry sectors.¹⁴⁷
- Nationally just under 18% of farmers have a Diploma or higher level qualification and 15.5% have a Certificate III or IV. This compares to 36% across all occupations having a Diploma or higher level qualification and 19.5% having a Certificate III or IV.¹⁴⁸
- The decline of rural towns and populations and the movement of young people to the city to gain education and training continue to exacerbate labour shortage issues for agricultural employers.
- Businesses report that employment opportunities in agriculture are often not seen as attractive/competitive; employee attrition/turnover is high; and sourcing experienced technical and supervisory employees is particularly difficult.
- The increasing complexity of farming operations and access to global markets require an increased level of technological and business sophistication. A lack of skilled staff is commonly cited by the sector as a barrier to innovation.¹⁴⁹
- The Western Australian Agricultural College provides a steady and quality supply of Certificate II graduates into the market.
- Non-employment based training enrolments in agriculture related qualifications are relatively high. In 2015 there were 2,002 new enrolments in Certificate I or II level training (77% of which were school students); 3,617 new enrolments in Certificate III level training; and 121 new enrolments in Certificate IV or Diploma level training.¹⁵⁰
- However the number of completions is comparatively low. Across 2014 and 2015 there were on average 656 completions of Certificate I or II level training (including traineeships); 276 completions of Certificate III level training; and 92 completions of Certificate IV or Diploma level training.¹⁵¹
- Industry access to training is an issue due to thin markets¹⁵² and the apprenticeship model not fitting industry needs. For July 2015 to June 2016 there were just 95 traineeship commencements in Certificate IIs, 98 for Certificate IIIs and 39 for Certificate IVs.¹⁵³
- Activity levels in amenity horticulture are significantly driven by population growth and property development, especially residential building construction. Coming from a decade of high population growth and high levels of residential building activity, the past couple of years has seen net migration into the State decrease and property prices decline. Accordingly business activity levels are generally lower.
- Many retail nurseries are small and family owned and the number of them is reducing. They tend not to offer career paths, preferring to employ younger and older people who are seeking part time and seasonal employment. There is trend towards larger wholesale nurseries, which supply retail stores, such as Bunnings.
- Building of the new Perth Stadium has created a spike in Sports Turf work, but this is short term and many contractors are employing backpackers.
- Arboriculture is a sector that has grown rapidly in recent years as trees have become more valued and the risks associated with tree-logging are better understood. Accordingly there has been an increasing level of complexity of the work and increased competencies required.
- While the remoteness of many conservation and land management activities is attractive to some

¹⁴⁵ ABC News report: <http://www.abc.net.au/news/2016-10-18/wa-farmers-dumping-milk-after-contracts-dry-up/7944402>

¹⁴⁶ See <http://www.peel.wa.gov.au/transform-peel/>

¹⁴⁷ ABS, 42340DO001_201304 Work-Related Training and Adult Learning, Australia, Apr 2013

¹⁴⁸ Department of Employment Educational Attainment Profile of Selected Occupations from ABS, Census 2011

¹⁴⁹ Bankwest Curtin Economics Centre, Positioned for an Ideas Boom: Productivity and Innovation in Australia, Mar 2016

¹⁵⁰ NCVET, TVA program enrolments 2015

¹⁵¹ NCVET, TVA program completions 2014–2015. Note that 2014 data is unreliable and 2015 data is preliminary.

¹⁵² Food, Fibre and Timber Industries Training Council, Thin Markets, http://media.wix.com/ugd/839a87_babeef79f6be451d9727183a6c51483e.pdf

¹⁵³ NCVET, Apprentices and trainees - June 2016

new entrants, many find the isolation a deterrent. The work in some areas is also often seasonal.

- The recent significant decline in demand for workers on resource construction projects has eased the overall availability of labour in the horticultural sectors.
- The existence of some Conservation and Land Management (CLM) roles and organisations is highly dependent on government funding and community support.
- Native title land management requirements and Aboriginal connections to the land are major drivers of much CLM training, especially in regional and remote areas of the State. Much training is in regional and remote areas requiring flexible delivery and often foundation skills support.
- The high level of volunteers in CLM sector drives training even though there is a low number of paid jobs.

AQUACULTURE

- Nationally the number of people employed in aquaculture is forecast to decrease by 0.9% between November 2015 and 2020, while the number of aquaculture workers and aquaculture farmers are forecast to increase by 15.2 and 5.3 respectively.¹⁵⁴
- The aquaculture sector is quite diverse and specialised, e.g. pearling industry's need for divers.

FORESTRY AND LOGGING

- The 'Forest Management Plan 2014–2023' covers activity in native forests and largely dictates available product after taking into account conservation and long term forest management issues. It provides some certainty of supply up until 2020. In many respects the supply of product is a major inhibitor to employment growth in native forest forestry and logging. If a reduction in supply should result in the closure, for example, of one of the largest three sawmills, then this could have very specific regional implications in the individual towns in which sawmills operate – Nannup, Bridgetown and Manjimup. While the Forest Management Plan estimated that 1,000 industry employees (that is, mainly those working on native forest hardwoods) were affected by the Plan, some of these may also be engaged in forestry and sawmilling work related to plantation timber outside the Plan's coverage.
- Industry stakeholders in the plantation and wood chipping sectors advise that they are moderately optimistic that the industry will be more stable overall in 2017, after failure of some private plantation schemes and some less economic placement of trees had caused the industry difficulty in earlier years.
- There are numerous international competitors in relation to the supply of woodchips and only a few major buyers, China being the most significant. Purchasers can shop on price and then change volumes on relatively short notice. In recent times this has caused considerable disruption to production, requiring retrenchments or drops in working hours for highly skilled personnel who would again be required when the market recovered. Being located in the regions, there is a tendency for these skilled operators to leave the region and the industry during downturns, with less likelihood of returning should work pick up. This is a particular problem for harvester and forwarder machine operator supply as these people have generic skills that are highly marketable in other industries and the cost of training their replacements can be extremely high, as well as damaging to production.
- All indications are that domestic building industry demand has decreased and will decrease further over the next year, due to a downturn in building activity. There may be some relief provided if renovation work increases, as this often includes a higher proportion of timber product than new construction.
- The industry was seriously affected in terms of recruitment and retention by the mining boom, especially with experienced, highly skilled mobile plane operators, including harvesters and forwarders. While overall demand has abated, the mining boom not only drew people to change their place of work, but also change their place of residence, as there was no need to reside in the previous town of residence to take up this employment. These individuals have generally been lost to the industry. Wage expectations are also higher than in the past, due to high mining wages, though the effect of this is diminishing. Although these events are historic, their long term effect will continue for some time in terms of additional training loads. In addition, while the demand from the mining sector has abated, the level of skill of the most competent forestry plant operators will always make

¹⁵⁴ These national forecasts should be treated with caution, given the highly specialised nature of aquaculture farming and the relative small size of the industry in WA.

them popular recruits for mining.

- Sandalwood production is expected to expand in the Eastern Goldfields. A new sandalwood oil processing facility opened its doors in Boulder, creating new tourism and Aboriginal employment opportunities in the Goldfields. This is part of the Native Sandalwood Industry Strategy which was announced by the Forest Product Commission for Western Australia.¹⁵⁵

FISHING, HUNTING AND TRAPPING

- Nationally the number of people employed in fishing is forecast to increase by 9.7% between November 2015 and 2020, while the number of deck and fishing hands is forecast to decrease by 20.5%.
- The fishing sector is characterised by long standing, family run businesses. Any recruitment is often family, relatives and contacts. Business entry and levels of activity are usually limited by fishing quotas.
- Increased fisheries management approaches in recent years has led to fewer businesses, fishing boats and employees. The industry is seasonal and employment is often temporary based around fishing trips.

2018 INDUSTRY WORKFORCE PRIORITIES¹⁵⁶

AGRICULTURE

- Encouraging and supporting the delivery of skills sets and qualifications in line with the Food, Fibre and Timber Industries Training Council (WA) Inc (FFTITC) FFTITC 'Thin markets' report.
- Fostering quality training, especially for traineeships, that addresses industry needs.
- Supporting initiatives that see more entrants at the graduate, Advanced Diploma and Diploma levels, such as scholarships, the Australian Grain Institute's Career in Grain project¹⁵⁷ and Muresk Institute.
- Fostering awareness of the availability of Certificate II traineeships and Australian Government employer incentives.

FORESTRY AND LOGGING

- Exploring solutions to the critical shortage of harvester and forwarder plant operators.
- Promoting the VET in Schools program with an emphasis on increasing awareness and perception of the industry and enhancing school and industry links.
- Finding solutions to training for the various thin market occupations in this sector, a matter complicated by regional issues and isolation.
- Continuing and increasing safety training.

AQUACULTURE | FISHING, HUNTING AND TRAPPING

- Encouraging and supporting the delivery of skills sets and qualifications in line with the FFTITC 'Thin markets' report.
- Fostering quality training, especially for traineeships, that addresses industry needs.
- Fostering awareness of the availability of Certificate II traineeships and Australian Government employer incentives.
- Maximising opportunities for progression from the Certificate II, through Certificate III and IV and onto Diploma or higher level qualifications.

¹⁵⁵ Forest Products Commission 2016 , Native Sandalwood Industry Strategy
<http://www.fpc.wa.gov.au/sandalwoodstrategy> viewed 1st March 2017

¹⁵⁶ Industry advice provided by Food, Fibre and Timber Industries Training Council (FFTITC)

¹⁵⁷ See: <http://www.giwa.org.au/capacity-building>

8.2. MINING

OVERVIEW

The mining industry is mainly focused on the extraction of naturally occurring mineral solids, such as coal and ores; liquid minerals, such as crude petroleum; and gases, such as natural gas.

The term mining is used in the broad sense to include: underground or open cut mining; dredging; quarrying; well operations or evaporation pans; recovery from ore dumps or tailings as well as beneficiation activities (for example preparing, including crushing, screening, washing and flotation) and other preparation work customarily performed at the mine site, or as a part of mining activity. The sub sectors in the industry include:¹⁵⁸

- coal mining;
- metal ore mining;
- non-metallic mineral mining and quarrying; and
- oil and gas extraction.

As of May 2017, the industry employed approximately 99,400 Western Australians, representing 7.4% of the State's workforce. In the year to May 2017, the industry experienced an average annual decline of 4,300 persons or 4.1%. Over the five years to May 2017 the industry has experienced a net loss of 8,200 persons or 8.2% of its workforce.

The industry is mainly comprised of non-employing and small to medium businesses. As of June 2016, there were 2,859 mining businesses in Western Australia, of these, 1,658 (58.0%) were non-employing businesses and 957 (or 33.5%) employed 1-19 employees. Only 167 businesses employed between 20-199 people (5.8%) and just 80 businesses employed more than 200 employees (2.8%).¹⁵⁹

The industry predominantly employs on a full time basis, with only 3.9% of workers employed part time.¹⁶⁰

The industry is male dominated with some 83,400 males (83.9%) employed across the State, compared to 16,000 females (16.1%).¹⁶¹ The industry has a younger workforce, with an estimated 57.6% of industry employees falling within the 25-44 years age cohort, compared to the State figure of 44.1% across all industries.¹⁶²

Over the past decade, the Western Australian mining sector has been the most significant contributor to Western Australia's economic growth. In 2015–16, the mining sector accounted for 22.9% (or \$54.9 billion) of Western Australia's gross State product (GSP).¹⁶³

¹⁵⁸ ABS, 1292.0 - Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (Revision 1.0)

¹⁵⁹ Australian Bureau of Statistics. (2017). 8165.0 *Counts of Australian Businesses, including Entries and Exits, Jun 2011 to Jun 2016*.

¹⁶⁰ ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017

¹⁶¹ Australian Bureau of Statistics, labour market data 2017.

¹⁶² Australian Bureau of Statistics, Census 2011.

¹⁶³ Western Australian Department of State Development, *Western Australia Economic Profile, December 2016*.

ECONOMIC AND LABOUR MARKET SNAPSHOT¹⁶⁴

Economic indicators	Mining	WA average across all industries
% of total WA employment	7.4	
% average annual employment growth in 2016–17	-4.1	-0.3
% of full time employment	96.1	68.1
% of female employment	16.1	45.1
% of metropolitan employment ¹⁶⁵	60.6	78.4
% of total WA gross State product (GSP) at 2016 ¹⁶⁶	22.9	

SNAPSHOT OF VET DELIVERY (COURSE ENROLMENTS) – 2014–2016

MINING	2014	2015	2016
Total course enrolments (NTA)	3,125	2,973	2,520
AQF level			
Certificate IV and above	67	113	121
Certificate III and below	3,058	2,860	2,399
Type of study			
Apprenticeship and traineeship	697	694	525
Institutional delivery	2,428	2,279	1,995
Location			
Metropolitan	866	683	627
Regional	2,259	2,290	1,893
Training providers			
TAFE	2,268	1,958	1,649
Private training organisations	857	1,015	871
Aboriginal people			
Course enrolments	753	510	443
Young people (15-24 years) – AQF level			
Certificate IV and above	0	0	20
Certificate III and below	680	609	581

TOP FIVE QUALIFICATIONS BY NTA SCOPE COURSE ENROLMENTS 2016¹⁶⁷

Qualification
Certificate II in Surface Extraction Operations
Certificate III in Surface Extraction Operations
Certificate II in Resources and Infrastructure Work Preparation
Certificate III in Surface Extraction Operations
Certificate III in Resource Processing

Source: VET Enrolment Data Collection19F¹⁶⁸, final full year data for 2016

¹⁶⁴ ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017 (unless otherwise stated)

¹⁶⁵ Census 2011

¹⁶⁶ ABS cat. no. 5220.0, National Accounts: State Accounts 2015–16, November 2016

¹⁶⁷ Contains VET in School Delivery

TOP FIVE VET IN SCHOOLS QUALIFICATIONS DELIVERED BY NTA SCOPE COURSE ENROLMENTS 2016

Qualification
Certificate II in Resources and Infrastructure Work Preparation
Certificate I in Resources and Infrastructure Operations
Certificate III in Resource Processing
-
-

Source: VET Enrolment Data Collection¹⁶⁹, final full year data for 2016

INDUSTRY DEVELOPMENTS AND WORKFORCE CHALLENGES¹⁷⁰

COAL MINING | METAL ORE MINING | NON-METALLIC MINERAL MINING AND QUARRYING

- Western Australia has been a major contributor to the national economy over the past decade, largely due to the record levels of resource related investment and development in the State.
- Western Australia has again led mining investment in Australia, attracting 66 per cent of the nation's total mining investment in 2015–16.¹⁷¹
- According to Australian Bureau of Statistics (ABS), a total of \$35 billion was invested in Western Australia's mining industry in 2015–16. Western Australia proved to be the investment destination of choice, increasing its share of national expenditure from 60 per cent in 2014–15 to 66 per cent in 2015–16. Over the period, total national investment fell by 29 per cent, compared to a 23 per cent decline in Western Australian investment.¹⁷²
- In 2015–16, new capital expenditure in Western Australia by mining, manufacturing and other selected industries decreased by 22 per cent to just over \$43 billion. The State accounted for 34 per cent of Australia's \$1.27 billion total.¹⁷³
- Australia attracted a total of \$1.4 billion in mineral exploration activity in 2015–16. Western Australian accounted for just over 61 per cent of this expenditure with \$871 million.¹⁷⁴
- The value of resource projects under construction, or in the committed stage of development, in Western Australia was recently estimated at \$97 billion. A further \$46 billion was identified for planned or possible projects in coming years.¹⁷⁵
- Recent years have seen a moderation of activity in the mining industry in Western Australia as it continues to transition from a construction and investment to a production phase.
- Iron ore prices have increased by more than double since the beginning of 2016, this steady re-emergence in market prices has assisted the industry and the State significantly with regaining positive financial results.
- Faced with relatively high operating costs, slowing Chinese demand and significantly lower commodity prices than in the past, the sector continues to operate in a cost constrained environment. Producers have been focused on organisational restructuring, production and operations efficiencies, managing costs, and production management as to remain globally competitive against increasing competition from overseas suppliers.
- This rationalisation is causing major mining companies to turn toward automation, technological advancements and data analytics to maintain an internationally competitive edge.

¹⁶⁸ Data collection is for the National Training Agreement (NTA) scope which is only for enrolments funded by the Department of Training and Workforce Development.

¹⁶⁹ Ibid.

¹⁷⁰ Industry advice provided by the Resources Industry Training Council (2017)

¹⁷¹ Department of Mines & Petroleum, *Mining & Petroleum Investment & Exploration Review, 2015–16*.

¹⁷² Australian Bureau of Statistics, *Mineral & Petroleum Exploration, September 2016*.

¹⁷³ Department of Mines & Petroleum, *Statistics Digest 2015–16*.

¹⁷⁴ Australian Bureau of Statistics, *Mineral & Petroleum Exploration, September 2016*.

¹⁷⁵ Department of Mines & Petroleum, *Mining & Petroleum Investment & Exploration Review, 2015–16*.

- Australia's primary mining competitor with an increasing market share, Brazil, has recently shipped the first of many low-cost, high-quality tonnes of iron ore from their new 'worlds-largest mine' located in the Amazon known as Serra Sul.
- In the 2017 State election, the National Party of WA proposed a significant production levy increase from 25c to \$5 per tonne on iron ore, which has been a major concern for the mining industry in recent times.
- The rapid emergence of autonomous equipment in the mining sector has led to the development of new job roles and associated skill sets. Currently, qualifications do not exist in the Resources and Infrastructure Industry (RII) Training Package specifically designed to meet the needs of the workers in remote operations centres.
- The mining sector has expressed concern about the voracity of high risk work training delivery and assessment in Western Australia. There is a view existing processes lack rigour and do not produce competent people capable of working safely on mining sector projects in Western Australia.
- With around 4% of Aboriginal workers employed in the industry, there is a need to promote diverse employment opportunities.
- The mining sector is traditionally male-dominated. Although the numbers of women employed in the mining industry has increased over the past decade, more needs to be achieved to increase and support women's workforce participation.

OIL AND GAS

- Chevron's Gorgon Project, located on the northwest coast of Western Australia, is one of the world's largest natural gas projects and the largest single resource development in Australia's history. The Chevron-led Wheatstone Project is located in Western Australia's Pilbara region and includes an onshore processing facility located at the Ashburton North Strategic Industrial Area. Chevron is looking to start up their third and final Gorgon LNG train early next quarter.
- Perth has become a centre for oil and gas education, training and industry development through institutions such as the UWA Energy and Minerals Institute, Curtin School of Mines, and South Metropolitan TAFE's Australian Centre for Energy and Process Training (ACEPT).
- Australia has seven operating LNG projects and three more being constructed, with production set to rise by more than 90 per cent over the next five years and the LNG industry is tipped to contribute \$55 billion to GDP by 2020¹⁷⁶.
- As of September 2015, Western Australia had A\$153 billion in LNG projects under construction or in the committed stage of development, and another A\$74.5 billion in LNG projects under consideration.
- Three major LNG projects under construction in Western Australia include Gorgon (15.6mtpa capacity), Wheatstone (8.9mtpa capacity) and the Prelude floating LNG (FLNG) project (3.6mtpa capacity), which will likely be the largest floating LNG project in the world.
- The Inpex-operated Ichthys Project (8.94mtpa capacity), which will source gas from the Browse Basin off Western Australia's coast and process it onshore near Darwin and offshore near the field, is also currently under construction. The Ichthys gas field is the largest discovery of hydrocarbon liquids in Australia in over 40 years.
- In value terms, Australia's LNG sales are expected to increase from an estimated \$US28.5 billion in 2016/17 to US\$49 billion by 2021/22 due to expansion of LNG export volumes, an increase of 72 per cent.¹⁷⁷
- Japan and China will continue to receive a large portion of Australian exports (more than 70 per cent combined in 2016/17, 46.9 and 27.3 per cent respectively, followed by South Korea (8.1 per cent).¹⁷⁸

¹⁷⁶ APPEA LNG National and Global Benefits, 2016.

¹⁷⁷ IBISWorld Industry Report B0700 January 2017, *Oil and Gas Extraction in Australia*.

¹⁷⁸ IBISWorld Industry Report B0700 January 2017, *Oil and Gas Extraction in Australia*.

By 2019, Japan is expected to account for around 50 per cent of Australian LNG exports (40 million tonnes), followed by China (18 million tonnes) and South Korea (13 million tonnes).

- There will always be some specialist occupations where people will be brought in from overseas – a lot of operations and maintenance will be able to source locally – Australia should only require specialist skills for specific sections of LNG plants – e.g. rotating equipment specialists. The oil and gas industry’s highly technical and specialised nature means it is unlikely the local labour force will have a depth and breadth of skills and experience to satisfy project operational and maintenance demands. It is therefore highly probable that the industry will require a combination of skills development and skilled migration strategies to ensure that projects have the necessary skilled workforce to transition safely from the construction phase to operations.
- The Western Australian resources industry faces the issue of attracting younger people into the industry. Western Australia’s oil and gas industry will face significant ageing issues in coming years. Relatively high salaries enable long term oil and gas sector employees to consider retirement at a relatively earlier age. According to the 2011 Census nearly 23 per cent of the oil and gas workforce was aged 50 years and over. Programs such as the Energy Apprenticeship Group’s (EAG) national energy technician training scheme is an example of an industry initiative to address this issue.
- As global competition for experienced oil and gas workers continues, it is likely a highly specialised contract shutdown skilled labour capability will be required in Australia and mobilised from State to State to perform shutdown work on LNG projects. Critical issue to mention here in relation to this will be the capacity of LNG shutdown schedules to be synchronised.
- Female and indigenous participation rates in the oil and gas industry is low. According to 2011 Census data, the average oil and gas industry female workforce participation rate was 26%.
- Given the LNG capacity being explored overseas it is likely skilled LNG workers will be attracted to these overseas projects from Australia, recruiters looking for LNG experienced Australian people to work in the United States. The United States don’t have LNG operations and experienced people capacity – they also do not have a well-developed VET sector so they rely on bringing people in from overseas.
- Workforce challenges and issues in the current price environment include LNG operators across Australia endeavouring to standardise qualifications and skill requirements wherever possible for cost reasons.

2018 INDUSTRY WORKFORCE PRIORITIES¹⁷⁹

COAL MINING | METAL ORE MINING | NON-METALLIC MINERAL MINING AND QUARRYING

- Contribute to national training package development and maintenance arrangements and appropriate training responses for people working in remote operations centres.
- Strengthening existing VET assessment arrangements for high risk work.
- Determine industry priorities for training package development, in light of technological advancements.
- Remote operations centres.
- Verification of competency – (Scaffolding).
- Future of high level VET qualifications in the resources sector.
- Assessment of the requirement for a new multi-skilled training model for integrated mining operations.

¹⁷⁹ Industry advice provided by the Resources Industry Training Council 2017

OIL AND GAS

- Champion greater female workforce participation in the Western Australian oil and gas industry through independent consultation and communications channels.
- Continue to promote Science, Technology, Engineering and Maths (STEM) and careers in the oil and gas industry to young people, coordinators of vocational education and training programs in schools and those seeking to make career decisions.
- Investigate the uptake of higher level VET qualifications (process operations and engineering) across the oil and gas industry to determine whether the existing qualifications align to industry job roles or whether there is a case for change. Work with operating companies, registered training organisations and the oil and gas industry regulator to explore issues associated with the delivery and assessment of high risk work in Western Australia.

8.3. MANUFACTURING

OVERVIEW

The manufacturing industry is mainly engaged in the physical or chemical transformation of materials, substances or components into new products (except agriculture and construction). The materials, substances or components transformed by units in this division are raw materials that are products of agriculture, forestry, fishing and mining, or products of other manufacturing units. The sub sectors in the industry include¹⁸⁰:

- food product manufacturing;
- beverage and tobacco product manufacturing;
- textile, leather, clothing and footwear manufacturing;
- wood product manufacturing;
- furniture and other manufacturing;
- pulp, paper and converted paper product manufacturing;
- printing (including the reproduction of recorded media);
- petroleum and coal product manufacturing;
- basic chemical and chemical product manufacturing;
- polymer product and rubber product manufacturing;
- non-metallic mineral product manufacturing;
- primary metal and metal product manufacturing;
- fabricated metal product manufacturing;
- transport equipment manufacturing; and
- machinery and equipment manufacturing.

As of May 2017, the industry employed approximately 80,400 Western Australians, representing 6.0% of the State's workforce. In the year to May 2017, the industry experienced no significant change in employment levels, down 0.1%. Over the five years to May 2017 the industry has experienced a net loss of 11,900 persons or 13.3% of its workforce.

The industry is predominantly made up of small business enterprises with 44.6% being non-employing entities, and 47.4% employing between one and 19 people. In terms of large enterprises, only 0.5% of Western Australian manufacturing businesses employ more than 200 employees.¹⁸¹

The industry predominantly employs on a full time basis, with only 18.8% of workers employed part time.¹⁸²

¹⁸⁰ ABS, 1292.0 - Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (Revision 1.0)

¹⁸¹ Australian Bureau of Statistics. (2017). 8165.0 *Counts of Australian Businesses, including Entries and Exits, Jun 2011 to Jun 2016*.

¹⁸² ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017

The industry has a majority male workforce at 74.3% compared to the total State proportion of 54.9%.

As of Census 2011, the 83.0% of the industry's workforce falls within the 25-64 age group and is consistent with the State's average (80.7%), while only 14.4% of the workforce is from the 15-24 youth cohort, compared to 16.2% across all industries.

In 2015–16, the manufacturing industry accounted for 5.1% of Western Australia's gross State product (GSP). This share has steadily fallen over the last 25 years from a high of 10.2%.¹⁸³

ECONOMIC AND LABOUR MARKET SNAPSHOT¹⁸⁴

Economic indicators	Manufacturing	WA average across all industries
% of total WA employment	6.0	
% average annual employment growth in 2016–17	-0.1	-0.3
% of full time employment	81.2	68.1
% of female employment	25.7	45.1
% of metropolitan employment ¹⁸⁵	81.0	78.3
% of total WA gross State product (GSP) at 2016 ¹⁸⁶	5.1	

SNAPSHOT OF VET DELIVERY (COURSE ENROLMENTS) – 2014–2016

MANUFACTURING	2014	2015	2016
Total course enrolments (NTA)	17,578	17,088	16,456
AQF level			
Certificate IV and above	5,059	4,804	3,842
Certificate III and below	12,519	12,284	12,614
Type of study			
Apprenticeship and traineeship	10,982	10,912	10,102
Institutional delivery	6,596	6,176	6,354
Location			
Metropolitan	13,541	12,931	12,892
Regional	4,037	4,155	3,557
Training providers			
TAFE	12,721	11,755	11,605
Private training organisations	4,857	5,333	4,851
Aboriginal people			
Course enrolments	581	572	561
Young people (15-24 years) – AQF level			
Certificate IV and above	1,419	1,203	984
Certificate III and below	8,352	8,531	8,529

¹⁸³ Western Australian Department of State Development, *Western Australia Economic Profile, December 2016*.

¹⁸⁴ ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017 (unless otherwise stated)

¹⁸⁵ Census 2011

¹⁸⁶ ABS cat. no. 5220.0, National Accounts: State Accounts 2015–16, November 2016

TOP FIVE QUALIFICATIONS BY NTA SCOPE COURSE ENROLMENTS¹⁸⁷ 2016

Qualification
Certificate III in Electrotechnology Electrician
Certificate III in Engineering - Mechanical Trade
Certificate IV in Competitive Systems and Practices
Certificate III in Engineering - Fabrication Trade
Certificate II in Electrotechnology (Career Start)

Source: VET Enrolment Data Collection19F¹⁸⁸, final full year data for 2016

TOP FIVE VET IN SCHOOLS QUALIFICATIONS DELIVERED BY NTA SCOPE COURSE ENROLMENTS 2016

Qualification
Certificate II in Engineering
Certificate II in Electrotechnology (Career Start)
Certificate II in Engineering Pathways
Certificate II in Electronics
Certificate III in Engineering - Technical

Source: VET Enrolment Data Collection19F¹⁸⁹, final full year data for 2016

INDUSTRY DEVELOPMENTS AND WORKFORCE CHALLENGES

FOOD PRODUCT MANUFACTURING | BEVERAGE AND TOBACCO PRODUCT MANUFACTURING¹⁹⁰

- Much food production and processing is already highly automated and it continues to be increasingly impacted on by new and improved technologies. Apart from small family or niche businesses, typically businesses in this industry sector require significant capital investment and must compete globally. Food processing businesses are becoming increasingly integrated along the supply chain of producers, processors, distributors and sales. The increasing cost of energy is reported as an inhibitor of growth.
- A strong and growing demand for food worldwide, and especially premium foods in Asia, indicates a growing demand for export product. There is an increasing demand for convenience and pre-prepared foods, although this may not mean highly processed.
- Changing consumer expectations are impacting on food production and processing.¹⁹¹ These include concerns the quality and integrity of food production systems, food provenance¹⁹² and impacts on the environment. Meat and food processing is heavily scrutinised with legislative requirements for food safety and chemical use. Accordingly industry's skills development focus tends to be around regulatory and compliance training.
- In baking, 84% of businesses are not factory based and franchise arrangements are a common feature.
- In meat processing, dominant trends include increased concentration of processing businesses, an increasing share of retail market by major supermarkets, increasing direct supply arrangements to those chains and increased levels of value-adding to products by the processor.

¹⁸⁷ Includes VET in Schools delivery

¹⁸⁸ Data collection is for the National Training Agreement (NTA) scope which is only for enrolments funded by the Department of Training and Workforce Development.

¹⁸⁹ Ibid.

¹⁹⁰ Industry advice provided by the Food, Fibre and Timber Industries Training Council (2017)

¹⁹¹ Department of Agriculture, Fisheries and Forestry, FOODmap An analysis of the Australian food supply chain, 2012

¹⁹² ABC News Report, <http://www.abc.net.au/news/2016-04-15/nsw-youth-food-movement/7329880>

- Australia's biggest milk producers export about half their produce every year. The fluctuating Australian Dollar, increased milk supply from the EU and a levelling of demand for milk products by China has led to an oversupply of milk across Australia. This has impacted significantly on dairy product production.¹⁹³
- The seafood processing industry is becoming smaller, with fresher and less processed produce more highly valued by consumers.
- The sector generally lacks a post-school training culture and is seen to offer limited career pathways. Specific units of competence, informal training and skill sets are valued above qualifications.
- For some businesses, accessing training is an issue due to seasonal work and the apprenticeship model not fitting industry needs.
- Meat, seafood and food processing business often have a high proportion of culturally and linguistically diverse workers. Many processors (especially meat processors) report that this labour is critical. In turn, the viability of regional processors is important to the future of many regional towns and communities.

TEXTILE, LEATHER, CLOTHING AND FOOTWEAR MANUFACTURING¹⁹⁴

- It is not clear how well 2011 Census data represents the current industry – it may overstate it. Conversely some areas have grown noticeably since 2011 (clothing alteration specialists).
- Despite the size of the overall workforce there is a relatively small pool of skilled Textile, Clothing and Footwear (TCF) workers other than sewing machinists and alterations specialists.
- While there is a high proportion of people from non-English speaking backgrounds, this is not generally considered a problem by the sector.
- Businesses include home-based sub contract sewing through to 10 major laundries, each turning over more than \$2m.
- Laundries which are dependent on mining companies and hotels are feeling the impact of lower hotel tenancy rates and fewer mine employees, but not yet to a critical level.
- Automation is increasing, with some job losses and training issues for the workforce of larger laundries.
- Training a workforce with low English language and English literacy presents constant challenges, especially when introducing technology.
- Employment based training was largely abandoned because of a recent tendency towards low quality delivery (often described as tick and flick) by out-of-state providers. The industry wants quality employment based training but needs it to include instruction by skilled people. The training needs to have the capacity to deal with the problems of language and literacy. Existing funding may be inadequate for this, especially as this will remain be a thin market until employers are convinced that the training is worthwhile.
- The emphasis on fashion design in current training offerings from VET in Schools (VETiS) to Advanced Diploma may be a mismatch to the industry's needs for lower skills. However the fashion design tag does appeal to more students and some of these may take up lower skilled jobs. This area needs to be reviewed carefully before any changes are made.
- Canvas and specialised textiles workers are identified as in short supply and the workforce is ageing. There is no publicly funded training available in this occupation in Western Australia (NB this industry also uses motor trimmers, but there is no training for them either in Western Australia).

¹⁹³ ABC News report: <http://www.abc.net.au/news/2016-10-18/wa-farmers-dumping-milk-after-contracts-dry-up/7944402>

¹⁹⁴ Ibid

WOOD PRODUCT MANUFACTURING | FURNITURE AND OTHER MANUFACTURING¹⁹⁵

- There is some uncertainty in the industry as orders are diminishing along with building activity. The industry is responding by reducing apprenticeship intakes.
- There has been a rapid, continuing adoption of new technology and automation in this sector which has posed problems of adjustment for the workforce. While the issue is not critical, it does involve de-skilling and a reduction in job satisfaction for many tradespeople and apprentices. Conversely other tradespeople have to learn new skills sets required to program and operate sophisticated machinery. Industry needs to adopt strategies to address both.
- This has also led to some re organisation of some companies along advanced manufacturing lines rather than traditional trade based operations – this leads to the need for generic, highly competent production managers as those trained through a career path in traditional trade based organisations have not developed the relevant skill sets.
- There is a shortage of publicly funded training for thin market occupations (e.g. industrial sewing machinists and trimmers) which is likely to lead to shortages in the longer term.
- There is a continuing dilemma with the cabinet making trade as it needs to expand to cover traditional cabinet making through to management of automation. Industry still believes that all cabinet makers will use the breadth of skills currently taught as preparatory training in the apprenticeship, but in practice many will not use some of these skills once the apprenticeship is complete.
- The Australian Glass and Glazing Association is pressing for more flexible training options for glaziers to meet the current need.

PRINTING¹⁹⁶

- Changing technology continues shaping the printing and graphic arts industry which is both a challenge and an opportunity. Heavily reliant upon printing hardware and software, companies are adopting emerging technologies and customising products and services. They have had to transition and increase revenue streams through competitor acquisitions and diversification into integrated services.¹⁹⁷
- Technological disruption has also provided openings for new products and innovation within the industry. As certain areas of print decline (offset) and others grow (inkjet and digital, packaging, signage) the world of print is characterised by novel forms: on demand printing, large format printing, vinyl wrap printing, glass and metal printing, digital packaging applications, display boards and materials, radio frequency identification embedded printed products and localised custom web printing.¹⁹⁸
- Demand for some printing services such as packaging materials and cartons has grown over the past five years and have remained in high demand from downstream manufacturers, as they cannot be easily substituted with digital alternatives.
- Increased retail activity has boosted demand for labels and signs, helping offset declines in other service segments. Demand for catalogue printing services has also risen over the past five years.¹⁹⁹
- Another emerging technology is 3D printing. Over the past year, 3D printing has seen exponential

¹⁹⁵ Industry advice provided by the Food, Fibre and Timber Industries Training Council (2017)

¹⁹⁶ Industry advice provided by FutureNow: Creative and Leisure Industries Training Council (2017)

¹⁹⁷ PwC Skills for Australia, Industry Skills Forecast and Proposed Schedule of Work Printing and Graphic Arts Version 2.0. 24 April 2017

¹⁹⁸ PwC Skills for Australia, Industry Skills Forecast and Proposed Schedule of Work Printing and Graphic Arts Version 2.0.

¹⁹⁹ IBISWorld, Industry Report C1611 Printing in Australia September 2016

growth in the Australian market with examples of innovative projects including the University of Newcastle's use of technology in the solar energy sector.²⁰⁰

- However, although some organisations within the print sector have adopted 3D technology into their business offerings, industry is divided in its view and implementation of 3D print, with many seeing this belonging within manufacturing rather than the print industry.
- WA employers report fluctuations in the Australian dollar influence the competitiveness of local businesses, with large jobs being outsourced to Singapore and Malaysia. Coupled with the onerous requirements and cost of maintaining ISO (International Organization for Standardization) certifications, it can become unprofitable to pursue large tenders.
- Similarly, hikes in prices issued by Australia Post are having a detrimental impact on competitiveness, resulting in contracts becoming untenable even for sizeable local businesses, an issue which needs to be addressed to support a sustainable future for the industry.
- Over the past decade, advances in printing technology have also created significant opportunities across the industry for improved energy efficiency, environmental performance and emissions reductions. However, in order to unlock these opportunities, training programs, research and development, and funding for the uptake of energy efficient technologies by printing businesses are needed.²⁰¹
- A decline in traditional processes, broadening business offerings and technological changes are continuing to alter the roles in which people work. Many employers are requiring their employees to be multi-skilled across a range of equipment and emerging technologies.
- With a prevalence of small businesses, many of which have struggled to realise a profit growth over the past decade, inhibiting their ability to invest in recruitment and professional development of staff, resources need to be directed at training and employer support to ensure workers have the right mix of new and traditional skills.²⁰²
- Similarly, ICP Printing and Graphic Arts Training Package graduates need adaptability and flexibility so they can respond well to change, embrace new technologies and adapt to changing roles and workplaces.²⁰³
- The development of a multi-disciplinary workforce with transferrable skills throughout the course or their career requires bringing soft skills (adaptability, creative thinking, problem solving, leadership, teamwork, mentoring and communication) to technical expertise. This will enable them to capitalise on technical change and address skill gaps as the sector adapts.²⁰⁴
- Changes to the ICP training package now provide greater flexibility in the packaging rules to align with industry requirements. However, although current industry needs appear to be met by two interstate providers, without a local registered training organisation or student funding for interstate travel, vocational delivery is limited to company specific onsite training.
- Victoria has responded to industry calls for broadly skilled workers by re-introducing offsite print apprenticeship classes. This will enable students enrolled in Certificate III in Printing to learn fundamentals of print away from their workplace and experience different type of print processes. This model caters particularly well for small to medium size printers who have been constrained by limited options in training, with the provider delivering a comprehensive training program that will

²⁰⁰ PwC Skills for Australia, Industry Skills Forecast and Proposed Schedule of Work Printing and Graphic Arts Version 2.0. 24 April 2017

²⁰¹ https://www.piaa.org.au/verve/_resources/Priorities_in_Print_2014.pdf

²⁰² PwC Skills for Australia, Industry Skills Forecast and Proposed Schedule of Work Printing and Graphic Arts Version 2.0. 24 April 2017

²⁰³ Ibid

²⁰⁴ Ibid

give students transferrable skills.²⁰⁵

- The sector in Western Australia is challenged to diversify its workforce by attracting young people and females into training and employment. This is thought to be attributed to the reputation and perception of poor employment prospects, a lack of awareness of pathways and breadth of occupations available in the industry.
- Effort is needed to change the negative public perception of the printing and graphic arts sector to attract talent. Changing community perception, actively lobbying to schools and career advisors, and clearly defining job opportunities and pathways is crucial to make the industry attractive to students. Part of this reputational issue is a lack of awareness of what printers actually do, the life cycle for product output and the sector's broader service offerings. Communication and strong relationships between industry and schools are key.
- The funding of the Future Print Apprenticeship pilot program, a model of best practice through its successful mentoring, retention and completion of print apprentices has ceased. Future Print has made a number of recommendations to continue the good work started by the program, such as establishing a national training centre to support the promotion of industry workforce development skills acquisition to cover industry training.²⁰⁶
- A number of Western Australian employers have reported a dedicated effort to modify working hours and shift arrangements to be more family friendly to attract women, particularly working mothers.

PETROLEUM AND COAL PRODUCT MANUFACTURING | BASIC CHEMICAL AND CHEMICAL PRODUCT MANUFACTURING | POLYMER PRODUCT AND RUBBER PRODUCT MANUFACTURING | NON-METALLIC MINERAL | PRIMARY METAL AND METAL PRODUCT MANUFACTURING²⁰⁷

- Over the past 10 years, employment in Western Australia's manufacturing sector has experienced an overall decline of 7.8 per cent, dropping from 94,700 employees in November 2007 (constituting 8.4 per cent of employment) to 87,300 employees in November 2016 (ninth-largest employer in the State, 6.5 per cent of overall Western Australian employment), reflecting the relatively fragile state of manufacturing in Western Australia.
- Employment in manufacturing peaked in February 2009 (105,100) and May 2012 (101,700), but continued its fluctuating downward trend which is thought to have mirrored the changing economic resources environment in Western Australia, as mining and oil and gas companies shifted focus on increasing production, reducing costs and ensuring the commercial viability of existing assets.²⁰⁸
- In contrast, in the last decade, the professional, scientific and testing services that includes scientific research, and scientific testing and analysis services, has increased by 14.5 per cent from 86,500 workers to 99,000 workers which now constitutes 7.4 per cent of the Western Australian workforce.²⁰⁹
- Many subdivisions of the manufacturing sector in Western Australia continue to suffer from high import penetration from neighbouring Asian countries, where companies are able to gain a competitive advantage through lower cost structures²¹⁰.
- The manufacturing industry in Western Australia is transitioning into niche, specialized high quality

²⁰⁵ ProPrint, Off-site print apprenticeships back in Vic. 4 May 2017. Accessed from: http://www.proprint.com.au/News/391065_off-site-print-apprenticeships-back-in-vic.aspx?eid=16&edate=20170504&utm_source=20170504&utm_medium=newsletter&utm_campaign=daily_newsletter&nl=daily

²⁰⁶ Print 21.com.au, Alarming fall in printing apprentices. 14 September 2016. Accessed from: <http://print21.com.au/alarming-fall-in-printing-apprentices/116631>

²⁰⁷ Industry advice provided by the Resources Industry Training Council (2017)

²⁰⁸ ABS, 6291.0.55.003 *Labour Force, Detailed, Quarterly, November 2016, Table 05.*

²⁰⁹ Ibid

²¹⁰ Resources Industry Training Council, *Industry Workforce Development Plan 2015/16*

and globally attractive goods and services.²¹¹

- While some of the workforce development implications arising from this transition are yet to be fully comprehended, manufacturing workers of tomorrow will need to have high levels of science, technology, engineering and mathematics skills, flexibility, resilience and innovation to meet employer and market requirements.
- The rapidly increasing prices for commodities on the international stage have also had a profound impact on the local manufacturing market, especially for small and medium enterprises, which constitutes the majority of the manufacturing enterprises in Western Australia.
- The rising price of petroleum and raw materials such as those used in non-metallic mineral product manufacturing and metal product manufacturing have had a negative impact, forcing smaller enterprises to absorb increased costs due to limited external demand and competition from imports.
- As industry implements new advanced technologies, automation and computer based applications it will rely more heavily on changing worker skills and capabilities to remain internationally competitive.
- Our changing workforce and skill needs reflect a changing industry and in order for both to evolve it is vital Western Australia has an education and training system capable of developing a flexible and highly skilled workforce and increasing employment and skills development opportunities for diversified participation.
- Enterprises participating in the latest Manufacturing Skills Australia e-scan identified workforce training and development as the top priority for lifting outcomes, followed by improved leadership and management, technology and processes²¹².
- The process manufacturing industries in Western Australia have an ageing workforce, which highlights the importance of retaining a more mature workforce and also attracting a younger workforce.
- Female workforce participation across the manufacturing sector sits at 31 per cent.

FABRICATED METAL PRODUCT MANUFACTURING | TRANSPORT EQUIPMENT MANUFACTURING | MACHINERY AND EQUIPMENT MANUFACTURING²¹³

- The downturn in mining industry activity in Western Australia has seen a large number of redundancies across operating and contracting companies in the iron ore, oil and gas and other resource areas. With this moderation in the resources sector, there has been a significant downturn in business activity within industries that employ engineers.²¹⁴
- There is a high number of engineering graduates applying for jobs, but without relative industry experience and skills.²¹⁵ Industry does not currently have the capacity to offer these graduates positions so that they can attain the required hands-on skills and experience.
- Apprenticeship commencements in metals, manufacturing services have continued to fall and have dropped from a high of 2,254 in 2011 to 1,092 in September 2016.²¹⁶ This poses a serious threat to the local supply of labour for these trades and for the State's engineering skills base in the future.
- Industry are increasingly concerned that training package development is not keeping pace with industry development and practices. Industry have concerns regarding registered training organisations reducing student contact hours for the off the job component of training and relying more and more on assessing rather than delivering training. *Training is becoming very minimal and apprentices/trainees are not meeting the needs of industry. This causes apprentices/trainees to be less employable than they should be and industry to lose faith in VET).*²¹⁷

²¹¹ Manufacturing Skills Australia, *Environmental Scan Summary*, 2014

²¹² Manufacturing Skills Australia, *Environmental Scan 2015*

²¹³ Industry advice provided by Utilities, Engineering, Electrical and Automotive Training Council (2017)

²¹⁴ Engineers Australia Vacancies for Engineers in WA June 2016 update

²¹⁵ ABC Report Mining Shift - <http://www.abc.net.au/news/2015-04-14/geologists-struggling-to-find-work-in-resource-rich-wa/6384440>

²¹⁶ Department of Training and Workforce Development (Apprentice Commencements)* (times two)

²¹⁷ Source UEEA Industry Survey February 2017*

- Eighty-five percent of the metals, manufacturing and engineering industry is mainly comprised of small to medium enterprises having less than twenty employees; fifteen percent are businesses with more than fifty employees.²¹⁸
- The engineering and production industries are increasingly moving towards automation to ensure long term sustainability. Qualifications and training package content need to reflect this industry shift. In key areas such as mechatronics, information technology networking, hydraulics, electronic and electrical engineering – these disciplines are coming together in the workplace creating new skill requirements.
- Technological advancements in areas such as automation, electronics, 3D printing and the increasing use of new and innovative materials such as carbon composites are highlighting the need for training in these new and emerging skills.
- The construction boom driven by large infrastructure projects across Victoria and New South Wales, which has increased the demand for skilled trades and engineers, has started a migration of skilled workers to the eastern states. Industry is reporting issues with recruiting suitably skilled workers within Western Australia particularly for companies specialising in maintenance and plant shutdown operations, with an increasing focus upon reducing cost and increasing productivity/volume/efficiency, with a greater emphasis on the planning and execution of maintenance and shutdown work. This will place a premium on skilled and experienced maintenance planners across the resources sector, particularly in the next one to two years as projects move into production. According to the most recent HAYS Regional Snapshot, maintenance and production planners continue to be sought after as stock levels and speed to market becomes increasingly competitive. According to National Energy Resources Australia's 'Sector Competitiveness Plan 2017', with the construction phase generated by the energy resources boom largely complete the focus now is to ensure sufficient breadth and depth of capability to support operating projects during their lifecycle, both for ongoing operations and maintenance, but also for shutdowns. Most plants will be scheduling maintenance shutdowns in the mid-term, which will put a strain on existing labour resources, drive up costs and potentially require overseas skills to be brought in. Economists and industry groups said one of the key challenges would be retaining the highly-skilled workers, including engineers and scientists, who moved to Western Australia during the boom years.
- In terms of the oil and gas sector, a number of major projects are moving into the operations and maintenance phase with a typical constriction of workforce. For one of the contractors, a large portion of work on the Wheatstone project is over 95% complete, with a pending redundancy and demobilization of 1,117 craft employees over the coming months, including fitters, welders, metal fabricators and electricians.
- Nearly all engineering companies rely on contract-based projects for the bulk of their work, most contracts are short term. This creates problems for companies wishing to employ apprentices/trainees, as the training period often extends beyond the project/s that they are engaged in. This forces industry to look at other sources of skilled workers, such as overseas workers in a decreasing skills market.
- A perceived lack of career guidance within the school curriculum is seen as a major issue in recruiting suitable applicants for apprenticeships/traineeships in engineering disciplines. The education sector's focus upon tertiary outcomes for school students creates a negative image of employment-based learning pathways.
- Engineering companies report that they require higher-level technical skills and multi discipline workers, e.g. fitter/welders or welders with higher skill levels within the workforce to remain competitive.
- It is critical industry has access to adequately skilled and experienced trade occupations for the

²¹⁸ Engineering and Automotive Training Council Environmental Scan 2010

operations and maintenance phase of projects 3 to 5 years from now, particularly when they run concurrently. It is anticipated Australia will have 22 LNG trains operating by the end of 2018. Conversations with Tier 1 contractors indicate the demand for certain maintenance and shutdown related trade occupations, such as welders and electricians, is likely to increase significantly, particularly 12 to 18 months after commissioning.

- The largest group of engineering workers are aged between 31-42 years old within the engineering industries. Due to the physically demanding nature of a large proportion of engineering trades, workers over this age group either move to management or supervisory roles or change careers. This coupled with the current trend of reduced apprentice intake across the engineering sectors will create future skill shortages.

2018 INDUSTRY WORKFORCE PRIORITIES

FOOD PRODUCT MANUFACTURING | BEVERAGE AND TOBACCO PRODUCT MANUFACTURING²¹⁹

- Encouraging and supporting the delivery of skills sets and qualifications in line with the Food, Fibre and Timber Industries Training Council (WA) Inc 'Thin markets' report.
- Fostering quality training, especially for traineeships, that addresses industry needs.
- Fostering awareness of the availability of Certificate II traineeships and Australian Government employer incentives.
- Maximising opportunities for progression from the Certificate II, through Certificate III and IV and onto Diploma or higher level qualifications.

TEXTILE, LEATHER, CLOTHING AND FOOTWEAR MANUFACTURING²²⁰

- Exploring solutions to the continuing shortage of sewing machinists in various sectors of this industry.
- Identifying quality employment based training solutions for thin market occupations that currently have no training solution.

WOOD PRODUCT MANUFACTURING | FURNITURE AND OTHER MANUFACTURING²²¹

- Finding solutions to thin market training issues, including locating suitable training providers.
- Increasing awareness and perception of career paths in the industry by school students and enhancing school and industry links, including VETiS programs.
- Monitor alignment of the apprenticeship with industry practice, given rapid automation.
- Extended periods of basic assembly work have been identified as discouraging apprentices – industry is becoming aware of the need to rotate apprentices through a range of tasks so that the apprentices perceive that they are making progress and learning a complete trade.

PRINTING²²²

Increase the workforce capacity of the print sector in Western Australia by:

- exploring industry appetite for the establishment of a school-based apprenticeship as a way to attract more young people in to the industry;
- investigating ways in which to provide improved sector communication on available training opportunities, career pathways and job opportunities to shift negative public perception of the printing industry;

²¹⁹ Industry advice provided by the Food, Fibre and Timber Industries Training Council 2017

²²⁰ Ibid

²²¹ Ibid.

²²² Industry advice provided by the FutureNow: Creative and Leisure Industries Training Council 2017

- encouraging practices to include greater employee diversity and engagement (for example with women and people with disabilities) by highlighting current best practice within industry;
- continuing to support the Printing Industries Craftsmanship Awards (Workforce Development Award) and explore ways to optimise participation; and
- providing industry representation on the Printing and Graphic Arts Industry Reference Committee through FutureNow CEO's membership on the Committee.

PETROLEUM AND COAL PRODUCT MANUFACTURING | BASIC CHEMICAL AND CHEMICAL PRODUCT MANUFACTURING | POLYMER PRODUCT AND RUBBER PRODUCT MANUFACTURING | NON-METALLIC MINERAL | PRIMARY METAL AND METAL PRODUCT MANUFACTURING²²³

- Undertake a detailed analysis of VETiS delivery in the process manufacturing industries and also gauge potential for industry engagement in VETiS programs.
- Continue to promote careers in the Resources Industry Training Council (RITC) industries to young people and more mature people.
- Work with industry partners to identify retention tools such as training, work culture and employee engagement initiatives to improve industry retention rates and undertake desktop research on retention strategies in practice that can be promoted through the RITC website and newsletters to industry.
- Continue to broker greater industry involvement in training package development and training delivery.
- Continue to champion greater female workforce participation in the downstream process manufacturing industry through independent consultation and communications channels.
- Promote science, technology, engineering and mathematics (STEM) pathways to ensure that VET and higher education initiatives reflect the expertise in demand by the Western Australian resources sector.

FABRICATED METAL PRODUCT MANUFACTURING | TRANSPORT EQUIPMENT MANUFACTURING | MACHINERY AND EQUIPMENT MANUFACTURING²²⁴

- Attract new entrants into the engineering industry as apprentices/trainees to maintain a sustainable engineering skills base for the future.
- Work collaboratively with Utilities, Engineering, Electrical and Automotive Training Council Inc (UEEATC) industry sector specific advisory groups to assist with providing State Government with industry intelligence and to identify new or emerging skill requirements and industry issues regarding training, employment and workforce development.
- Work collaboratively with the National Skills Service Organisation (SSO) and Industry Reference Committee's (IRCs) through the UEEA Training Council to provide Western Australian industry feedback and recommendations regarding training packages in areas such as new and emerging technologies, automation, electronics, 3D printing, mechatronics and innovative materials such as carbon composites.
- Retain skilled workers within the current economic downturn.
- Upskill existing workers to enable them to keep up with new technologies and working practices.
- Establish apprenticeships/traineeships in line with emerging trends within industry.
- Work collaboratively with registered training organisations to provide students with practical experiences aligned to current industry methods and practices during the off the job component of training delivery.

²²³ Industry advice provided by the Resources Industry Training Council 2017

²²⁴ Industry advice provided by Utilities, Engineering, Electrical and Automotive Training Council 2017

8.4. ELECTRICITY, GAS, WATER AND WASTE SERVICES

OVERVIEW

The electricity, gas, water and waste services industry is engaged in the provision of electricity; gas through mains systems; water; drainage; and sewage services. This division also includes units mainly engaged in the collection, treatment and disposal of waste materials; remediation of contaminated materials (including land); and materials recovery activities. The sub sectors in the industry include²²⁵:

- electricity supply – generation, transmission and distribution of electricity and the on-selling of electricity via power distribution systems operated by others;
- gas supply – distribution of gas, such as natural gas or liquefied petroleum gas, through mains systems;
- water supply, sewage and drainage services – storage, treatment and distribution of water; drainage services include the operation of drainage systems; and sewage services include the collection, treatment and disposal of waste through sewer systems and sewage treatment facilities; and
- waste collection, treatment and disposal services through sewer systems and sewage treatment facilities.

As of May 2017, the industry employed approximately 17,800 Western Australians and is the second smallest representing 1.3% of the State's workforce. In the year to May 2017, the industry experienced an average annual growth of 3,000 persons or 20.4%, (albeit from a small base and following longer term declines in employment). Over the five years to May 2017 the industry has experienced a net gain of 1,300 persons or 8.3% growth of its workforce.

The industry is predominantly made up of small business enterprises with 55.1% being non-employing entities, and 40.4% employing between one and 19 people. In terms of large enterprises, only 1.2% of Western Australian utilities employ more than 200 employees.²²⁶

The industry predominantly employs on a full time basis, with only 6.6% of workers employed part time.²²⁷

The industry has a majority male workforce at 73.1% compared to the total State proportion of 54.9%. Between 2016 and 2017, employment growth in this industry was split almost in half between both genders.

As of Census 2011, the 90.2% of the industry's workforce falls within the 25-64 age group and is above the State's average (80.7%). Though employment remains less than the State average for those over the age of 65, the employment of people from the youth aged cohort is only 7.5% or less than half of the result for all industry (16.2%).²²⁸

In 2015–16, the electricity, gas, water and waste services industry contributed 2.3% towards the gross State product for Western Australia.²²⁹

At June 2016, there were 726 businesses operating in the industry in Western Australia ranging from micro/small employing electrical contractors to large employing State Government owned utilities²³⁰.

²²⁵ ABS, 1292.0 - Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (Revision 1.0)

²²⁶ Australian Bureau of Statistics. (2017). 8165.0 *Counts of Australian Businesses, including Entries and Exits, Jun 2011 to Jun 2016*.

²²⁷ ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017

²²⁸ ABS 2011 Census.

²²⁹ ABS, 5222.0, State Accounts

²³⁰ ABS 8165.0 Counts of Australian Businesses

ECONOMIC AND LABOUR MARKET SNAPSHOT²³¹

Economic indicators	Electricity, gas, water and waste services	WA average across all industries
% of total WA employment	1.3	
% average annual employment growth in 2016–17	20.4	-0.3
% of full time employment	93.4	68.1
% of female employment	26.9	45.1
% of metropolitan employment ²³²	75.4	78.3
% of total WA gross State product (GSP) at 2016 ²³³	2.6	

SNAPSHOT OF VET DELIVERY (COURSE ENROLMENTS) – 2014–2016

ELECTRICITY, GAS, WATER AND WASTE SERVICES	2014	2015	2016
Total course enrolments (NTA)	2,861	1,573	729
AQF level			
Certificate IV and above	108	129	110
Certificate III and below	2,753	1,444	619
Type of study			
Apprenticeship and traineeship	2,534	1,366	561
Institutional delivery	327	207	168
Location			
Metropolitan	2,572	1,419	671
Regional	289	154	58
Training providers			
TAFE	1,609	904	388
Private training organisations	1,252	669	341
Aboriginal people			
Course enrolments	69	41	24
Young people (15-24 years) – AQF level			
Certificate IV and above	52	47	28
Certificate III and below	1,818	891	359

TOP FIVE QUALIFICATIONS BY NTA SCOPE COURSE ENROLMENTS²³⁴ 2016

Qualification
Certificate III in Electrotechnology Electrician
Advanced Diploma of Engineering Technology -Electrical
Certificate III in Electrical Fitting
Certificate II in Water Operations
Certificate III in Esi – Power Systems – Distribution Overhead

Source: VET Enrolment Data Collection²³⁵, final full year data for 2016

²³¹ ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017 (unless otherwise stated)

²³² Census 2011

²³³ ABS cat. no. 5220.0, National Accounts: State Accounts 2015-16, November 2016

²³⁴ Includes VET in Schools training delivery

²³⁵ Data collection is for the National Training Agreement (NTA) scope which is only for enrolments funded by the Department of Training and Workforce Development.

TOP FIVE VET IN SCHOOLS QUALIFICATIONS DELIVERED BY NTA SCOPE COURSE ENROLMENTS 2016

Qualification
Certificate II in Water Operations
-
-
-

Source: VET Enrolment Data Collection19F²³⁶, final full year data for 2016

INDUSTRY DEVELOPMENTS AND WORKFORCE CHALLENGES²³⁷

ELECTRICITY SUPPLY

- There are industry concerns regarding delivery of training in ever decreasing timeframes. This is undermining correct delivery of the training and, therefore, impacts on industry by having under skilled employees in an environment that can have very serious consequences.
- Cable jointer – specialist skills, appears to have low numbers being trained.
- Training package UET12 is urgently in need of a review and update, specifically relating to renewable energies and the importing of other units (normally licences).
- Developments in energy storage, smart grid and related technologies will have training and workforce development implications for the utilities industry.
- Lack of training in renewable technology skills. It is hoped that a review of the training packages by the Australian Industry Skills Committee via the Industry Reference Committee will alleviate this issue.
- Renewable energy-driven policies and regulations will impact upon employment and training.
- Ongoing privatisation will significantly impact the electricity supply sector.
- Industry importing skills as a short term solution, however, developing the capability with Western Australia would be a more sustainable solution.
- Ongoing privatisation will significantly impact the generation sector.
- The rapid increase in battery technology associated with renewable energy will require new standards and changes to the current training packages.
- Energy efficiency, renewable energy and environmental policies/priorities are driving rapid change in the generation industry.
- Identifying and delivering training in a very fluid environment – technology is changing quicker than the training products.
- Finding quality people with relevant experience.
- High Risk Worker Licence challenges with current qualification requirements.
- Pressures to reduce training delivery hours to apprentice groups.
- Delays with the development of relevant training packages creates a further disconnect between industry needs and training delivery.
- Industry slowdown, privatisation and contracting out projects, has impacted on a reduction of traditional apprenticeship/traineeship employment opportunities, which will lead to skill shortages in the future.
- Technology is moving away from overhead power line to solar/battery system. The UEE12 Training Package needs to include newer technologies to ensure that the training being undertaken and the outcomes of candidates meets industry requirements.
- Accessibility to electricity networks to undertake the relevant on the job components of training for apprentices. The Electricity Network Operators to remove unnecessary barriers to work on their network.

²³⁶ Ibid.

²³⁷ Industry advice provided by Utilities, Engineering, Electrical and Automotive Training Council 2017

- Training packages have not kept up with industry changes and the process to develop the new or update existing training packages is taking longer than all organisations would like and this leads to a decline in the use of the existing training package by industry.
- Demographics within the industry as the overwhelming majority of workers in the industry are aged 55 and over. Industry is not offering apprenticeships within this sector, creating skills shortages for the future.
- Transportability of qualifications (skill sets) given the vast diversity on how different generation plants operate.
- Lack of collaboration between industry and training providers to reduce the impact required on customisation of training to meet the skills they require.

GAS SUPPLY

- Industry slowdown, privatisation and contracting out projects, has impacted on a reduction of traditional apprenticeship/traineeship employment opportunities, which will lead to skill shortages in the future.
- Changes to the regulatory Gas Standard(s), which nominates the training package as the minimum requirement for people working in the industry.
- The lack of industry employment opportunities in regional areas is leading to a shortage of qualified gas fitters holding UEG qualification - (UEG30114).
- Low enrolment numbers in Gas apprenticeships in regional areas, thus making the delivery of training unviable.
- Delays with the development of relevant training packages creates a further disconnect between industry needs and training delivery.
- The slowdown in construction and in some cases production – there are less jobs available which has led to many leaving the State to pursue opportunities elsewhere.
- Finding a registered training organisation to place the gas qualifications on scope to enable training.
- Industry has identified the gas fitter as a niche occupation with industry reporting higher demand for Certificate III qualified gas fitters over the funded Certificate IV qualification. Industry would like the Certificate III to be funded because of this higher demand.
- The State Government should consider adding the gas fitter qualification as a priority on the State Priority Occupation List.

WATER SUPPLY, SEWERAGE AND DRAINAGE SERVICES

- Industry is not offering apprenticeships within the water sector, creating skills shortages for the future.
- The training package is urgently in need of a review and update, specifically relating to renewable energies technology skills.
- The employment profile of the water utility is perceived to be low amongst job seekers, particularly school leavers. This adversely affects industry employment growth, particularly at the entry level. Attracting more young people into the industry is a major challenge.
- Decentralisation of the water industry has impacted on employment opportunities.

WASTE COLLECTION, TREATMENT AND DISPOSAL SERVICES

- Growing awareness of climate change and its effects, developments in waste diversion and re-use, will impact on the utilities industry. Higher skilled occupations will be required to help address these issues.
- Industry is indicating that there is a pending skills shortage for the following occupations:
 - waste managers for alternative waste treatment facilities;
 - process design engineers for waste treatment facilities;
 - waste education officers/advisors within Local Government and private enterprises;

- recycling officers; and
- resource recovery and transfer centre operators.
- Technology changes such as conversion of waste to energy and anaerobic digestion i.e. the industry is becoming more technically challenging against “Business as Usual”, such as just landfilling waste.
- Legislative changes are demanding more sophisticated waste disposal processes.
- The employment profile within the waste management sector is perceived to be low amongst job seekers, particularly school leavers. This adversely affects industry employment growth, particularly at the entry level. Attracting more young people into the industry is a major challenge.
- Waste management industry not working together and training providers not representing the needs of the waste management industry.
- Training and development of people in the industry is not keeping pace with the legislative drive and technology changes being imposed on the waste management industry through social economic change.

2018 INDUSTRY WORKFORCE PRIORITIES

ELECTRICITY SUPPLY | GAS SUPPLY | WATER SUPPLY, SEWERAGE AND DRAINAGE SERVICES | WASTE COLLECTION, TREATMENT AND DISPOSAL SERVICES

- Work with the Electricity Network Operators to remove unnecessary barriers that will allow accessibility to electricity networks to undertake the relevant on the job components of training for apprentices.
- Engage with registered training organisations (RTOs) and Government in Western Australia regarding the delivery of the Certificate III and Certificate IV apprenticeships.
- Work collaboratively with RTOs in finding a solution for placing the qualification on scope to enable training to be delivered to meet industry requirements.
- Work collaboratively with Utilities, Engineering, Electrical and Automotive Training Council Inc (UEEATC) Training Council in seeking to have the Certificate III Gas Fitter funded as a priority.
- Raise the profile of the water sector amongst job seekers, by developing career promotional materials and highlighting VETiS pathways in an effort to attract more young people into the industry.
- Raise the profile of the waste management sector amongst job seekers, by developing career promotional materials and highlighting VETiS pathways in an effort to attract more young people into the industry.
- Work collaboratively with the National Skills Service Organisation and Industry Reference Committee’s through the UEEA Training Council to provide Western Australian industry feedback and recommendations regarding training packages in areas such as new and emerging technologies and new working practices.
- Work collaboratively with the UEEA Training Council’s sector specific Industry Advisory Groups to provide an effective forum for industry, training providers and State Government to identify new or emerging skill requirements and industry issues regarding training, employment and workforce development.
- Raise the profile of the utilities industry amongst job seekers, by developing career promotional materials and highlighting VETiS pathways in an effort to attract more young people into the industry.
- Work collaboratively with employers and training providers to ensure all training programs (including both on and off the job requirements) are suitable to the requirements of employers in the utilities industry.
- Provide support to the RTO Reference Group to ensure core training and assessment strategies provide the best result for the utility industries.

8.5. CONSTRUCTION

OVERVIEW

The construction industry is mainly engaged in the construction of buildings and other structures, additions, alterations, reconstruction, installation, and maintenance and repairs of buildings and other structures. The sub sectors in the industry include²³⁸:

- building construction;
- heavy and civil engineering construction; and
- construction services.

As of May 2017, the industry employed approximately 133,300 Western Australians, representing 9.9% of the State's workforce. In the year to May 2017, the industry experienced an average annual decline of 15,500 persons or 10.4%. Over the five years to May 2017 the industry has experienced a net gain of 5,300 persons or 4.0% of its workforce.

The industry is dominated by non-employing businesses (64.0%), with 1.8% of enterprises having 20 or more employees.²³⁹

The industry predominantly employs on a full time basis, with only 15.3% of workers employed part time.²⁴⁰

The industry has a majority male workforce at 86.4% compared to the total State proportion of 54.9%.

As of Census 2011, the 80.7% of the industry's workforce falls within the 25-64 age group and is consistent with the State's average (80.7%). The industry has a younger workforce than most industries in Western Australia with 17.1% of the industry being between 15-24 years of age, compared to 16.2% across all industries. This higher number can in part be attributed to the well-established pathways into the industry, such as apprenticeships, and the physically demanding nature of the work being less viable for an older workforce.

In 2015–16, the electricity, gas, water and waste services industry contributed 13.0% towards the gross State product for Western Australia.²⁴¹

ECONOMIC AND LABOUR MARKET SNAPSHOT²⁴²

Economic indicators	Construction	WA average across all industries
% of total WA employment	9.9	
Average annual employment growth % in 2016–17	-10.4	-0.3
% of full time employment	84.7	68.1
% of female employment	13.6	45.1
% of metropolitan employment ²⁴³	76.7	78.3
% of total WA gross State product (GSP) at 2016 ²⁴⁴	13.0	

²³⁸ ABS, 1292.0 - Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (Revision 1.0)

²³⁹ Australian Bureau of Statistics. (2017). 8165.0 *Counts of Australian Businesses, including Entries and Exits, Jun 2011 to Jun 2016*.

²⁴⁰ ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017

²⁴¹ ABS, 5222.0, State Accounts

²⁴² ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017 (unless otherwise stated)

²⁴³ Census 2011

²⁴⁴ ABS cat. no. 5220.0, National Accounts: State Accounts 2015-16, November 2016

SNAPSHOT OF VET DELIVERY (COURSE ENROLMENTS) – 2014–2016

CONSTRUCTION TRADE	2014	2015	2016
Total course enrolments (NTA)	10,007	11,883	11,751
AQF level			
Certificate IV and above	1,401	1,739	1,737
Certificate III and below	8,606	10,144	10,014
Type of study			
Apprenticeship and traineeship	4,615	5,255	5,133
Institutional delivery	5,392	6,628	6,618
Location			
Metropolitan	6,535	7,654	7,356
Regional	3,472	4,229	4,367
Training providers			
TAFE	7,433	8,713	8,342
Private training organisations	2,574	3,170	3,409
Aboriginal people			
Course enrolments	1,165	1,504	1,637
Young people (15-24 years) – AQF level			
Certificate IV and above	475	482	407
Certificate III and below	5,809	6,770	6,573

TOP FIVE QUALIFICATIONS BY NTA SCOPE COURSE ENROLMENTS²⁴⁵ 2016

Qualification
Certificate II in Building and Construction (Pathway - Trades)
Certificate III in Civil Construction Plant Operations
Certificate III in Carpentry and Joinery
Certificate III in Plumbing
Certificate I in Construction

Source: VET Enrolment Data Collection19F²⁴⁶, final full year data for 2016

TOP FIVE VET IN SCHOOLS QUALIFICATIONS DELIVERED BY NTA SCOPE COURSE ENROLMENTS 2016

Qualification
Certificate II in Building and Construction (Pathway - Trades)
Certificate I in Construction
Certificate II in Plumbing
Certificate II in Civil Construction
Certificate II in Building and Construction (Pathway - Para Professional)

Source: VET Enrolment Data Collection19F²⁴⁷, final full year data for 2016

²⁴⁵ Includes VET in Schools training delivery

²⁴⁶ Data collection is for the National Training Agreement (NTA) scope which is only for enrolments funded by the Department of Training and Workforce Development.

²⁴⁷ Ibid

INDUSTRY DEVELOPMENTS AND WORKFORCE CHALLENGES

BUILDING CONSTRUCTION | HEAVY AND CIVIL ENGINEERING CONSTRUCTION | CONSTRUCTION SERVICES

- It is estimated that approximately 17,000 construction industry employees are working on resource industry infrastructure construction projects. This is a significant reduction from the 29,000 estimated to have been employed in that sector in 2013.
- A large proportion of those workers have either returned to the Perth metropolitan region seeking employment, pursued construction work in the eastern states where there is a boom or returned overseas to countries such as New Zealand or the United Kingdom where a construction boom is also being experienced.
- The industry is reliant on a buoyant residential construction sector, which is a major employer in Western Australia and has experienced a significant downturn.
- New and emerging technologies, such as artificial intelligence/automation, changes to building techniques and materials will require changes to the skills required in the industry. There could be a call for more training in areas such as the alternative construction methods, occupational, health and safety, software and computer technology, robotics and the renewable energy sector.
- One of the key issues that the building and construction industry continues to encounter is that on completion of engineering construction projects in the mining/resources sector, a large number of skilled workers are no longer required. These workers appear to be re-entering the overall construction sector. The building and construction industry continues to recommend, through its workforce development priorities/plan that the resources industry pay the Building and Construction Industry Training Levy on engineering construction works in the resources sector. This would enable equitable sharing of the cost to train workers for the general construction industry.
- The industry relies on the recruitment of apprentices and while a strong trainer, the industry has struggled to maintain its skilled workforce through the recruitment of school leavers. There needs to be more 'trade training effort' for students in Year 11 and 12. These students need to be encouraged and funded to undertake pre-vocational courses that prepare them for entry into the construction industry.
- The current drop in apprentice commencements will begin to have a negative impact on the 'in training' figures over the next twelve months. There is already a negative impact on the number of skilled tradespeople in the industry with a 19.2% drop in trades workers in construction between the November 2015 quarter compared to the November 2016 quarter.
- Loss of knowledge and experience due to an ageing workforce and chronic physical injuries/conditions continues to raise concerns with employers.
- Issues related specifically to regional areas include:
 - a need to possess a broader range of skills;
 - importance of quality of work to ensure repeat business; and
 - difficulty in coordinating trades where long distances are involved.
- With around 4% of Aboriginal workers employed in the industry, there is a need to promote employment opportunities, particularly for the engineering and civil construction sectors in regional areas.

2018 INDUSTRY WORKFORCE PRIORITIES

BUILDING CONSTRUCTION | HEAVY AND CIVIL ENGINEERING CONSTRUCTION | CONSTRUCTION SERVICES

- Improving the profile of the building and construction and civil construction sectors, by continued promotion of career opportunities within the industry.
- Continue to promote and support the VET in Schools and pre-apprenticeship courses for the construction industry.

- Provide stakeholders with up to date industry intelligence through the regular publication of the Construction Industry Snapshot to encourage employment of apprentices as the economy recovers.
- Include resources sector engineering construction projects in contribution to the Building and Construction Industry Training Levy.

8.6. WHOLESALE TRADE

OVERVIEW

The wholesale trade division is engaged in the purchase and on selling, the commission based buying, and/or the commission based selling of goods, without significant transformation, to businesses. The sub sectors in the industry include²⁴⁸:

- basic material wholesaling;
- machinery and equipment wholesaling;
- motor vehicle and motor vehicle parts wholesaling;
- grocery, liquor and tobacco product wholesaling;
- other goods wholesaling; and
- commission-based wholesaling.

The wholesale trade employs just over 40,000 Western Australians or 3.0% of the State's workforce, including over 30,000 males and has recorded a strong employment growth rate of 6.8% in the year to 2017²⁴⁹. An estimated 37.7% of industry employees are in the 45-64 years age group²⁵⁰.

As of May 2017, the industry employed approximately 40,600 Western Australians, representing 3.0% of the State's workforce. In the year to May 2017, the industry experienced an average annual growth of 2,600 persons or 6.8%. Over the five years to May 2017 the industry has experienced a net decline of 1,300 persons or 3.0% of its workforce.

The industry is primarily small business enterprises with both non-employing businesses (49.8%) and small employers employing between one and 19 workers (44.6%) making up the clear majority of enterprises. Only 0.2% of businesses from the industry employ more than 200 staff in Western Australia.²⁵¹

The industry predominantly employs on a full time basis, with only 20.3% of workers employed part time.²⁵²

The industry has a majority male workforce at 74.1% compared to the total State proportion of 54.9%.

As of Census 2011, the 83.5% of the industry's workforce falls within the 25-64 age group and is consistent with the State's average (80.7%). The industry does have an older profile, with a smaller proportion of the industry being employed from the youth aged cohort (13.2%) compared to 16.2% across all industries.

In 2015–16, the wholesale trade industry contributed 2.7% towards the gross State product for Western Australia.²⁵³

²⁴⁸ ABS, 1292.0 - Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (Revision 1.0)

²⁴⁹ Australian Bureau of Statistics, labour market data 2017.

²⁵⁰ Australian Bureau of Statistics, Census 2011.

²⁵¹ Australian Bureau of Statistics. (2017). 8165.0 *Counts of Australian Businesses, including Entries and Exits, Jun 2011 to Jun 2016*.

²⁵² ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017

²⁵³ ABS, 5222.0, State Accounts

ECONOMIC AND LABOUR MARKET SNAPSHOT²⁵⁴

Economic indicators	Wholesale trade	WA average across all industries
% of total WA employment	3.0	
% average annual employment growth in 2016–17	6.8	-0.3
% of full time employment	79.7	68.1
% of female employment	25.9	45.1
% of metropolitan employment ²⁵⁵	84.8	78.3
% of total WA gross State product (GSP) at 2016 ²⁵⁶	2.7	

Note: No course enrolment data is available for the wholesale industry for the previous three years ending 2016.

INDUSTRY DEVELOPMENTS AND WORKFORCE CHALLENGES²⁵⁷
**BASIC MATERIAL WHOLESALING | MACHINERY AND EQUIPMENT WHOLESALING
 | MOTOR VEHICLE AND MOTOR VEHICLE PARTS WHOLESALING | GROCERY,
 LIQUOR AND TOBACCO PRODUCT WHOLESALING | OTHER GOODS
 WHOLESALING | COMMISSION-BASED WHOLESALING**

- Companies tend to operate in isolation due to the highly competitive nature of their businesses.
- With rising competition and decreasing profit margins, there are a number of companies that are internalising the wholesale functions of their operations as a means of sourcing new revenue streams. Such actions pose a significant threat to existing wholesalers. They are being bypassed as retailers and manufacturers are forming direct relationships with customers. As a means of survival, a greater effort is needed for wholesalers to establish themselves more effectively online and compete with other companies across country borders.²⁵⁸
- Due to the nature of the wholesale industry, there is an insufficient amount of information available to attract people to this industry.
- Some companies either do not identify themselves as wholesalers or do not consider the wholesaling function to be a core part of their business.
- In some cases wholesalers, as the ‘middle men’, are being bypassed by businesses as a cost saving measure to obtain cheaper prices through direct dealings with manufacturers.
- Online trading has altered the quantities and manner in which people place orders for goods. Some wholesalers have had to become more flexible in the way they conduct business or run the risk of being squeezed out by competition.
- Some of the job roles within this sector encompass people who multitask as they generally tend to work in smaller teams. This is especially true for smaller specialty wholesalers.

²⁵⁴ ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017 (unless otherwise stated)

²⁵⁵ Census 2011

²⁵⁶ ABS cat. no. 5220.0, National Accounts: State Accounts 2015–16, November 2016

²⁵⁷ Industry advice provided by the Logistics Training Council 2017

²⁵⁸ Retail Workforce Study, March 2014

- In an increasingly interconnected society, customers now want/require more product information across all channels and will purposely seek out those wholesalers who can offer that service to them.
- Disintermediation is becoming a growing concern for the wholesaling industry. It is a process where the role of the agent (in most cases the retailer) plays a less significant role in the supply chain. Manufacturers/wholesalers are forming more direct relationships with consumers and bypassing retailers in an effort to obtain cost savings and remain competitive. This can be seen by greater accessibility through online sales. The increased activity translates to shift in the way business is conducted. Not only do manufacturers/wholesalers now cater for bulk goods, they must also adapt to meet the demand for smaller batch sizes.
- As more web-based transactions are taking place, additional resources will be needed to cope with the increased demand for goods and services. There is growth potential for customer service roles within the industry as some wholesalers begin to cater for consumers and not just on-selling to businesses. This may involve smaller batch orders and more frequent client interaction.
- Warehousing has suffered from a poor image. It has often been viewed as a career with limited options and therefore has not generated a lot of interest from prospective job seekers. Entry level positions in warehousing and logistics remain the most difficult to fill and retain.
- The lack of language literacy and numeracy skills is preventing further career progression of some workers and as technology is incorporated into operations, there are concerns that some workers may fall further behind. The skills and aptitude required of workers has risen as the duties are becoming more complex.
- With the growing need for technology within businesses to deliver real time information for analysis, companies are further investigating how to integrate items such as tablet computers into their day to day operations. Some of the challenges associated with this include the durability of devices in high impact environments and implications of downtime during maintenance.
- More investment is needed to train people at higher levels and in management positions; however the industry is faced with the challenge of not being able to release key members of staff for prolonged periods of time.

2018 INDUSTRY WORKFORCE PRIORITIES²⁵⁹

BASIC MATERIAL WHOLESALING | MACHINERY AND EQUIPMENT WHOLESALING | MOTOR VEHICLE AND MOTOR VEHICLE PARTS WHOLESALING | GROCERY, LIQUOR AND TOBACCO PRODUCT WHOLESALING | OTHER GOODS WHOLESALING | COMMISSION-BASED WHOLESALING

- Identifying and promoting careers in the sector particularly to underrepresented groups including young people, women and Aboriginal people. This includes the production of career guides for secondary schools to encourage young people into the industry.
- Promoting opportunities in the industry to school careers advisors and VET coordinators to highlight VET in schools programs and school based traineeships.
- Identify occupations in demand in the warehousing and logistics sectors via the State's Skilled Priority Occupation List.

²⁵⁹ Industry advice provided by the Logistics Training Council 2017

8.7. RETAIL TRADE

OVERVIEW

The retail trade division includes units mainly engaged in the purchase and/or on selling, the commission-based buying, and the commission-based selling of goods, without significant transformation, to the general public. The retail trade division also includes units that purchase and on sell goods to the general public using non-traditional means, including the internet. The sub sectors in the industry include²⁶⁰:

- motor vehicle and motor vehicle parts retailing;
- fuel retailing;
- food retailing;
- other store-based retailing; and
- non-store retailing and retail commission-based buying and/or selling.

As of May 2017, the industry employed approximately 133,200 Western Australians, representing 9.9% of the State's workforce. In the year to May 2017, the industry experienced an average annual decline of 4,100 persons or 3.1%. Over the five years to May 2017 the industry has experienced a net gain of 1,700 persons or 1.3% of its workforce.

The industry is primarily made up of small employing businesses which hire between one and 19 employees (54.5%), followed by non-employing businesses (39.6%), with enterprises having 20 or more employees being in the minority (6.0%).²⁶¹

The industry employs on a full time and part time basis on broadly an equal measure, with 50.3% of workers employed part time.²⁶² It should be noted this measure looks purely at the number of hours worked per week by those employed in this industry and not at the mode of that employment. Therefore this figure should not be confused with the proportion employed on a contract or casual basis; data for which is not readily available at a State and industry level.

The industry has a majority female workforce at 57.1% compared to the total State proportion of 45.1%.

As of Census 2011, the 64.2% of the industry's workforce falls within the 25-64 age group and well below the State's average (80.7%), due to the strong youth representation in the industry of some 33.4% of the workforce (33.4%). This result is more than double the State total of 16.2% across all industries.

In 2015–16, the retail trade industry contributed 3.3% towards the gross State product for Western Australia.²⁶³

²⁶⁰ ABS, 1292.0 - Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (Revision 1.0)

²⁶¹ Australian Bureau of Statistics. (2017). 8165.0 *Counts of Australian Businesses, including Entries and Exits, Jun 2011 to Jun 2016*.

²⁶² ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017

²⁶³ ABS, 5222.0, State Accounts

ECONOMIC AND LABOUR MARKET SNAPSHOT²⁶⁴

Economic indicators	Retail trade	WA average across all industries
% of total WA employment	9.9	
% average annual employment growth in 2016–17	-3.1	-0.3
% of full time employment	49.7	68.1
% of female employment	57.1	45.1
% of metropolitan employment ²⁶⁵	80.3	78.3
% of total WA gross State product (GSP) at 2016 ²⁶⁶	3.3	

SNAPSHOT OF VET DELIVERY (COURSE ENROLMENTS) – 2014–2016

RETAIL TRADE	2014	2015	2016
Total course enrolments (NTA)	3,882	3,083	2,385
AQF Level			
Certificate IV and above	325	254	423
Certificate III and below	3,557	2,829	1,962
Type of Study			
Apprenticeship and traineeship	3,213	2,471	1,840
Institutional delivery	669	612	545
Location			
Metropolitan	2,893	2,316	1,857
Regional	987	767	528
Training providers			
TAFE	1,926	1,221	431
Private training organisations	1,956	1,862	1,954
Aboriginal people			
Course enrolments	264	299	192
Young people (15-24 years) – AQF level			
Certificate IV and above	122	101	143
Certificate III and below	2,578	1,971	1,379

TOP FIVE QUALIFICATIONS BY NTA SCOPE COURSE ENROLMENTS²⁶⁷ 2016

Qualification
Certificate III in Retail Operations
Certificate II in Retail Services
Certificate IV in Retail Management
Certificate III in Community Pharmacy
Certificate III in Meat Processing (Retail Butcher)

Source: VET Enrolment Data Collection19F²⁶⁸, final full year data for 2016

²⁶⁴ ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017 (unless otherwise stated)

²⁶⁵ Census 2011

²⁶⁶ ABS cat. no. 5220.0, National Accounts: State Accounts 2015-16, November 2016

²⁶⁷ Includes VET in Schools training delivery

²⁶⁸ Data collection is for the National Training Agreement (NTA) scope which is only for enrolments funded by the Department of Training and Workforce Development.

TOP FIVE VET IN SCHOOLS QUALIFICATIONS DELIVERED BY NTA SCOPE COURSE ENROLMENTS 2016

Qualification
Certificate II in Retail Services
Certificate III in Retail Operations
Certificate II in Community Pharmacy
Certificate II in Floristry (Assistant)
Certificate III in Floristry

Source: VET Enrolment Data Collection19F²⁶⁹, final full year data for 2016

INDUSTRY DEVELOPMENTS AND WORKFORCE CHALLENGES

MOTOR VEHICLE AND MOTOR VEHICLE PARTS RETAILING | FUEL RETAILING²⁷⁰

- Vehicle sales continued to decline in WA as a result of the slowdown in the mining and resources sectors (the decline in consumer spending is also reflected in the number of WA motor vehicle sales). Sales of passenger vehicles were running at around 5,000 per month in late 2012.
- More recently, in the first four months of 2016, sales were down to 3,300 per month. Sales of sports utility vehicles remained broadly stable over the same time period at close to 3,300 per month, while sales of “other vehicles”, such as commercial vans and trucks, has declined from 3,000 to 2,000 per month. With population growth in WA having slowed from 88,000 per year in 2012 to 33,000 in late 2015, it is difficult to see vehicle sales growth picking up over the next few years.²⁷¹
- The slowdown in the WA economy has resulted in a continual decline in commercial truck sales and servicing activity. Heavy truck sales were down 9.1% in June 2016 over the previous twelve months. SMEs in the heavy vehicle service and repair sector are finding it increasingly difficult to remain in business.
- New motor vehicle sales in WA remain on a downward trend, sales were 10.5% down in January 2017 over the same period in 2016, with the Automotive Holdings Group reporting weaker market conditions in Western Australia in its 2016 Annual Report. Conversely with customers choosing not to replace their vehicles, independent repair networks may benefit from this in the short term.

FOOD RETAILING | OTHER STORE-BASED RETAILING²⁷²

- Western Australia’s retail centre market is set to undergo a radical transformation over the next five years which will increase WA’s retail offering to a level comparable with the Eastern States and begin to elevate its retail centres to a global standard.
- Approximately \$2.5 billion worth of shopping centre redevelopment is earmarked to reach completion between 2019 and 2022. The proposed expansions include Whitfords City, Midland Gate, Westfield Innaloo, Karrinyup, Garden City, Westfield Carousel and Morley Galleria – totalling 338,034 sqm. The largest expansion is proposed at Morley Galleria which will increase the centre by 106,050sqm to 179,415sqm.²⁷³
- An acceleration of international brand entry is supported by demand from the younger demographic and an increase in tourist arrivals, particularly from China. Chinese tourists not only spend more per visit but have a higher appetite for goods. Change through new brands, products and retail concepts has enhanced the overall shopping experience and is expected to draw consumers back to physical stores.²⁷⁴
- Less competition and the local market’s proximity to Asia, where a lot of fashion retailers base their

²⁶⁹ Data collection is for the National Training Agreement (NTA) scope which is only for enrolments funded by the Department of Training and Workforce Development.

²⁷⁰ Industry advice provided by Utilities, Engineering, Electrical and Automotive Training Council 2017

²⁷¹ WA Economic Outlook - June 2016 - St George Bank

²⁷² Industry advice provided by Retail and Personal Services Training Council 2017

²⁷³ CBRE. (2016). “Shopping Centres of the future – Western Australia’s retail centre revolution”. December 2016.

²⁷⁴ CBRE (2016). “Pacific Retail – International Brands Driving Change”. October 2016

production, makes Australia an attractive option for expansion by international retailers.²⁷⁵

- H&M, or Hennes & Mauritz, the world's second-biggest retailer by sales, opened its second WA store inside the former General Post Office Building in Perth at the beginning of March 2017, nearly two years after it opened its Lakeside Joondalup location. H&M's Perth debut came hot on the heels of international rivals Zara and Topshop, which in 2014 took up residence nearby on the Murray Street Mall.
- The rapid growth of ALDI over the past five years has forced the two established industry giants, Woolworths and Coles, to cut prices and expand their private-label product ranges. Smaller players, such as IGA and Foodworks, have struggled to compete in an increasingly price-intense industry.²⁷⁶
- ALDI's long term expansion in WA will see up to 70 stores developed across the State, with 1200 new permanent jobs to be created statewide over the coming years. In 2016, ALDI opened stores in Belmont Forum, Kwinana, Lakeside Joondalup, The Square Mirrabooka, Halls Head, Australind, Harrisdale, Rockingham, Camillo, Southern River, Mandurah, Butler, Mundaring, South Lake, Armadale, Wattle Grove, Cannington, Waikiki, Morley and Ellenbrook.²⁷⁷
- These expansions further reinforce the need to train new and existing staff, particularly at managerial level, to meet industry's growing needs.
- Contrary to the disappointing or moderate performance of most retail sectors, supermarkets steadily improved showing a 3.78% trading increase (year-on-year 2016 versus 2017)²⁷⁸, as consumers allocate more of their spending on essential food items. However, industry-wide profit margins have fallen over the past five years as players have reduced prices and accepted lower margins to stay competitive. Supermarket industry revenue is projected to grow by an annualised 4.2% through to 2017, to reach \$105billion.²⁷⁹
- As hunters and gatherers, the physicality of shopping is such an integral part of our modern lifestyle. Notwithstanding technological advancements, online retail's fundamental shortcomings are in alienating human interaction, as well as prohibiting stimulation of association and our aspirations for inclusion or in developing bonds of loyalty.²⁸⁰
- Nationally, more than 2,100 retail businesses collapsed over the past two financial years and already this year there have been many business closures including five iconic brand national retailers, and more are expected to follow.²⁸¹
- Retailers need to look for new ways to grow their share of customer experience both instore and online. Customer experience teaches that stores have become part of our everyday life – places where we go for discovery, inspiration and socialisation.
- Offering consumers the products they want, at the time they want them and at the best price, will always be the major priority for the industry, with the objective of creating a unique and personalised experience for each customer.
- Retail stores are under more pressure than ever to provide great service experience across all channels as customers are increasingly posting online reviews on their products and services.
- Retailers are not quite going the distance in Australia – “the last mile” is defined as the last step before a product reaches the hands of the purchaser and is a significant factor in gaining customer loyalty. While customer expectations have been rising, Australian logistics providers have been unable to develop enough “last mile” capability resulting in Australian retail being slow to offer same-day delivery, particularly in the grocery sector, where freshness is a must.²⁸²

²⁷⁵ SmartCompany. 2017. *More international retailers tipped to set up shop in Australia*. Jan 2017.

²⁷⁶ IBISWorld. (2017). *Supermarkets and Grocery Stores. ReportSnapshot | ANZSIC G4111*. January 2017.

²⁷⁷ Inside Retail (2017). *Aldi's four-year expansion begins*. Feb 1 2017.

²⁷⁸ Australian Bureau of Statistics. (2017). 8501.0 - *Retail Trade, Australia, Jan 2017*.

²⁷⁹ IBISWorld. (2017). *Supermarkets and Grocery Stores. ReportSnapshot | ANZSIC G4111*. January 2017.

²⁸⁰ Inside Retail (2017). *The hunter- gatherer in us all*. April 13, 2017.

²⁸¹ Dun and Bradstreet Global Bankruptcy Report 2016 - *Asia Pacific Partnerships*

²⁸² Inside Retail (2017). *“Winning the last mile in online delivery”*. April 6, 2017.

Community pharmacy

- Community pharmacy is continuously evolving and is being used to alleviate some of the pressures on the health system. Pharmacies are broadening their role and becoming a multi-disciplined provider of health care services such as: providing information to the public and medical practitioners; reviewing medications; advising medical practitioners about optimal drug therapy and disease-state management; flu vaccinations; health and wellness checks; audio testing; and diabetes management. This expanded role impacts on the skills and knowledge that are required to provide this important health advice.
- The community pharmacy industry is a labour intensive business and its services cannot be automated as much as is possible in other industries. Therefore, management skills incorporating motivation, conflict management, planning and team building are crucial to the industry for its continued growth and productivity.
- The industry has experienced growth over the past five years and the demand for pharmacy assistants in Western Australia is expected to grow by 6.4% over the next five years.
- Job vacancies advertised on SEEK for pharmacy assistants and dispensary technicians in WA averaged between 21 and seven per month respectively between July to December 2016.
- The expansion of professional services means pharmacists will need to spend more time with customers. Pharmacists still have ultimate responsibility for dispensing but dispensary assistants are being asked to take on more responsibilities in dispensing and administration, so pharmacists can spend more time with customers.
- It is forecast that there will be a critical shortage of pharmacy assistants and dispensary technicians unless an increase in the uptake of training occurs.
- The removal of Certificate II employer incentives has reduced the number of people entering the industry.
- As the role of community pharmacies evolves and expands to a multi-disciplined provider of health care, along with the growing and ageing population, it will place greater demands on pharmacy staff to improve and maintain their knowledge of new products and health related services.
- Clinical intervention services and dose administration aids services have and will continue to increase which in turn means a better skilled workforce with a higher level of knowledge to deal with clinical issues than previously required.
- Pharmacies are experiencing difficulty obtaining suitable staff. It is taking between two weeks and six months to fill vacancies for pharmacy assistants.

Floristry

- Only half of all cut flowers retailed in Australia are sold by floristry businesses. The other half are sold by other retailers, such as supermarkets, online-only stores, greengrocers, convenience stores and roadside stalls.
- Some floristry businesses have diversified into the broader gift and homewares market or niche markets such as commercial or wedding sectors.
- The internet has had a significant impact on the way traditional florists conduct their business with a marked shift to orders being placed with offshore companies linking back to local florists.
- Despite a subdued retail environment, the online flower shops industry is expected to remain steady.²⁸³
- Over the next 10 years through 2021–22, industry revenue is expected to fall by an annual rate of 0.4%.²⁸⁴
- Sales were negatively affected at the beginning of the period as instability in financial markets and a slowdown in the Australian economy led to weak consumer sentiment and subdued spending.

²⁸³ IBISWorld (2016, July) Online Flower Shops in Australia in Australia; Market Research

²⁸⁴ IBISWorld (2016, July) Flower Retailing in Australia; Market Research

- The majority of floristry businesses are small and micro sized. There is a need for small businesses to develop business management skills, particularly in financial management, human resource management, pricing and operations.
- Diversification will be the main issue facing shop front businesses.
- With the emergence of greater online trading, both shop front and internet florists require greater digital literacy skills.
- Florists experience seasonal demand and during quiet periods many floristry businesses are too small to support an apprentice or trainee.
- Deregulated trading hours and the subsequent penalty rate continue to be an issue for small business and many indicate they are unable to afford to trade during the extended hours.
- Job advertisements for florists are minimal with only three jobs advertised between September to December 2016.

NON-STORE RETAILING AND RETAIL COMMISSION-BASED BUYING AND/OR SELLING²⁸⁵

- For the month of January 2017, online shopping accounted for 3.6% of total Australian retail turnover, and for the 12 months ending 31 December 2016, the average monthly spend online was 3.43% of retail turnover.²⁸⁶
- PayPal has found that shopping on a smartphone or tablet has become the only way to buy online for nearly 10% of those aged 18-34 (millennials) and only one-third exclusively bought from Australian outlets.
- AMP Capital found that Gen Z (18-22 years of age) prefer to shop in-store just as much, if not more, than current shoppers, as they are social creatures who are drawn to the contact that in-store shopping provides.
- Sixty-one percent of future shoppers (Gen Z) are likely to research online while in store and 83% would like to check stock availability on line, compared to 36% and 78% respectively of current shoppers.
- Young Australian men are now more interested in staying ahead of popular trends and love shopping in-store and online equally. They are ready and willing to buy whenever they can but have admitted to feeling uncomfortable shopping in shopping centres and prefer to shop with a group of friends. To address this, smart retailers have focused on their customer service offering, ensuring their team provide a welcoming approach when engaging with this target market.²⁸⁷
- It is likely that Amazon will be setting up operations in Australia in late 2018. Australians are already a big user of Amazon, spending between \$500 to \$700 million through Amazon's USA website. Much of the company's appeal lies in being able to meet the needs of consumers when offline retail has failed. However, Amazon could benefit niche retailers, such as health foods, as a new sales outlet for them.²⁸⁸
- Research from Mintel suggests one in three Chinese consumers has bought food online from Australia. Food and baby products are the leading products bought, followed by alcohol (20%), clothing and footwear (11%), beauty and personal care products (11%), personal electronics (8%) and household electronic appliances (7%). There is a lot of growth opportunity for brands in Australia to target Chinese consumers, particularly with Australia's reputation for the use of natural ingredients.²⁸⁹
- It is predicted that the online grocery market will reach \$2 billion in Australia in the next five years, as

²⁸⁵ Industry advice provided by Retail and Personal Services Training Council 2017

²⁸⁶ Australian Bureau of Statistics. (2017). 8501.0 - *Retail Trade, Australia, Jan 2017. A3 Online Retail Turnover*

²⁸⁷ AMP Capital (2017). From A to Gen Z. *Shopping with the Future Generation*.

²⁸⁸ ABC News (2017). *Amazon may be coming to Australia, so what does that mean for you?* Feb 24, 2017.

²⁸⁹ RetailWorld (2017) *Research reveals habits of online Chinese shoppers*. Retail World Editor. March 31 2017 eNewsletter.

young families increasingly go online to stock up on pantry staples and pet and baby products.²⁹⁰

- Even though 20% of Australians have purchased online groceries in the past year, the market still represents a tiny fraction (just 2%) of overall grocery sales.²⁹¹
- Coles and Woolworths together represent 88.5% of the online grocery market.²⁹²
- Lack of consumer confidence and continual increases in business running costs make it difficult for retailers, particularly Small and Medium Enterprises (SMEs), to keep up with consumer needs like online shopping, social media and new sales channels, as most cannot afford to employ someone dedicated to undertaking these functions.
- The entry of new global retailers is a major challenge to the industry, particularly in the fashion and supermarket sectors.
- Small businesses should be preparing for even tougher competition from international retailers this year. Many international retailers without a physical presence in Australia are already doing business here; they're just doing it online. They're learning a lot about our purchasing behaviour and our demographics.²⁹³
- While intensified competition is good for consumers, it continues to be challenging across all sectors of the industry. It is important that the industry transitions from their traditional business model in favour of rapid innovation and embraces digital technologies and diversification to meet the changing spending patterns of consumers.
- Research shows that Australian merchants are not meeting the needs of millennials²⁹⁴ who account for 21% of Australia's population but make up 34% of the nation's retail spend. Australian retailers need to make sure they offer free or competitive shipping, mobile-optimised sites and payment options across devices.²⁹⁵
- Smart retailers will need to focus on the tangible benefits of in-store shopping in order to attract Gen Z²⁹⁶ (the future shoppers) away from online shopping.
- For the growing number of retailers establishing a presence in the global marketplace, their success will be inextricably linked to their digital competence. With this, they are also being required to develop advanced skills in cross-cultural communication, language proficiency, merchandising and management.
- Online retailing continues to grow through Australian retailers, although at a slow rate and continues to threaten bricks and mortar. Market conditions have made consumers price sensitive and consequently online goods are purchased from around the world.
- Despite the imminent threat of Amazon entering Australia, some Australian companies are "sticking their head in the sand", and many are continuing to invest in brick and mortar, despite the apparent opening for online retailers in Australia. Additionally, many local firms still rely on outdated marketing research tools, whereas Amazon's strategy, like Google, Facebook and Apple, is to use data analytics to guide decisions for expansion and customer experience optimization.²⁹⁷
- While Amazon currently has strengths in categories such as books, tools and technology, its performance in fashion on the other hand has been harder to crack and its dominance in fashion remains elusive.²⁹⁸

²⁹⁰ InternetRetail: Online Grocery – 12th April 2017

²⁹¹ Ibid

²⁹² Ibid

²⁹³ SmartCompany. 2017. *More international retailers tipped to set up shop in Australia*. Jan 2017.

²⁹⁴ Early 1980s as starting birth years and the mid-1990s to early 2000s as ending birth years – as per Wikipedia.

²⁹⁵ Internet Retailing (2017) *What's motivating millennial shopping online?* April 5, 2017.

²⁹⁶ *approximate starting birth years that range from the mid-1990s to early 2000s - per Wikipedia*

²⁹⁷ ABC News (2017). *Amazon may be coming to Australia, so what does that mean for you?* Feb 24, 2017.

²⁹⁸ Inside Retail (2017). *How the fashion world almost led Amazon astray*. April 13 2017.

2018 INDUSTRY WORKFORCE PRIORITIES

FOOD RETAILING | OTHER STORE-BASED RETAILING | NON-STORE RETAILING AND RETAIL COMMISSION-BASED BUYING AND/OR SELLING²⁹⁹

- Retailers, particularly SMEs, need to ensure that they adapt their businesses to the changing needs of the consumer, for example newsagents diversifying into selling gifts, etc.
- Australian customer service standards are below par and employers and trainers need to deliver the necessary skills so that this then becomes an added value commodity.
- Due to new shopping centre developments and expansions, retailers will need to ensure that new and existing staff have the adequate skills, particularly at managerial level, to meet industry's growing needs.
- Local retailers need to be able to compete with the standards being set by global retailers entering Western Australia.
- Retailers need to overcome the difficulties experienced in attracting and retaining suitably experienced and/or qualified staff.
- Retailers need the skills to develop websites which they can utilise to manage social media, establish an online presence in the global marketplace and capture a share of international visitor spending.
- The removal of the Federal Government employer incentives for Certificate II traineeships in retail has shown a marked decline in numbers in training. Certificates III and IV are not showing an increase to compensate for this decline.
- There is the risk that the reduction of funding for retail qualifications will result in a loss of productivity for the industry, which is crucial given the intensified competition from online and international outlets.
- Recognition of skills is critical considering the majority of the retail workforce do not hold qualifications. With this in mind, notions of developing a highly skilled workforce must also be tied to building first on recognised skills.
- Skill sets designed to meet the needs of individual businesses are required to upskill existing workers, as well as the long term unemployed and people returning to the workforce such as single parents, mature age and career change people.

Community pharmacy

- Funding to develop upskilling training for existing staff to meet the demands of the expanded clinical role of pharmacies.
- To increase training in the Certificate IV Community Pharmacy and Certificate IV Dispensary Technician qualifications.
- Over half of the community pharmacy workforce is aged between 15-24 years old (compared with 15.5% across all occupations)³⁰⁰ while at the same time youth unemployment rates are reaching 14.9% in WA. There is an obvious disconnect between this occupation and the unemployed youth which somehow needs to be addressed. Funding for entry level training at Certificate II would go a long way towards addressing this disconnect.
- Promotion of careers and the expansion of current roles within the community pharmacy industry to address the demand for pharmacy staff.

Floristry

- To increase the uptake of florists in training in the industry.
- To explore avenues of additional income for shop front florists by diversifying into complimentary lines, and on line trading.

²⁹⁹ Industry advice provided by Retail and Personal Services Training Council 2017

³⁰⁰ Source: Job Outlook

8.8. ACCOMMODATION AND FOOD SERVICES

OVERVIEW

The accommodation and food services industry is engaged in the provision of short term accommodation for visitors and/or meals, snacks, and beverages for consumption by customers both on and off site. The industry incorporates the provision of accommodation, food/beverage, and hospitality services because one or more of these activities are undertaken by the same entity³⁰¹. The sub sectors in the industry include³⁰²:

- accommodation; and
- food and beverage services.

As of May 2017, the industry employed approximately 95,500 Western Australians, representing 7.1% of the State's workforce. In the year to May 2017, the industry experienced an average annual growth of 3,800 persons or 4.3%. Over the five years to May 2017 the industry has experienced a net gain of 21,200 persons or 29.3% of its workforce; making it the strongest employment growth industry over the longer term in Western Australia.

The industry is primarily made up of small employing business of between one and 19 employees (62.9%), following by non-employing businesses (25.7%). Larger employing enterprises employing above 20 employees makes up 11.7% of enterprises in this industry.³⁰³

The industry predominantly employs on a part time basis, with 61.1% of workers employed part time.³⁰⁴ It should be noted this measure looks purely at the number of hours worked per week by those employed in this industry and not at the mode of that employment. Therefore this figure should not be confused with the proportion employed on a contract or casual basis; data for which is not readily available at a State and industry level.

The industry has a majority female workforce at 54.7% compared to the total State proportion of 45.1%.

As of Census 2011, the 56.6% of the industry's workforce falls within the 25-64 age group and is well below the State's average (80.7%). The industry has the highest youth profile of any industry, with some 41.6% of the workforce being between the ages of 15 and 24, compared to the State result of 16.2% across all industries.

In 2015–16, the agriculture, forestry and fishing industry contributed 1.6% towards the gross State product for Western Australia.³⁰⁵

³⁰¹ Gambling institutions (casinos); amusement and recreation parks; long-term (residential) caravan parks; theatre restaurants; sporting clubs; and other recreation or entertainment facilities providing food, beverage, and accommodation services are excluded from this industry grouping.

³⁰² ABS, 1292.0 - Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (Revision 1.0)

³⁰³ Australian Bureau of Statistics. (2017). 8165.0 *Counts of Australian Businesses, including Entries and Exits, Jun 2011 to Jun 2016*.

³⁰⁴ ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017

³⁰⁵ ABS, 5222.0, State Accounts

ECONOMIC AND LABOUR MARKET SNAPSHOT³⁰⁶

Economic indicators	Accommodation and food services	WA average across all industries
% of total WA employment	7.1	
% average annual employment growth in 2016–17	3.8	-0.3
% of full time employment	49.7	68.1
% of female employment	54.7	45.1
% of metropolitan employment ³⁰⁷	77.4	78.3
% of total WA gross State product (GSP) at 2016 ³⁰⁸	1.6	

SNAPSHOT OF VET DELIVERY (COURSE ENROLMENTS) – 2014–2016

ACCOMODATION AND FOOD SERVICES	2014	2015	2016
Total course enrolments (NTA)	6,494	5,626	4,966
AQF level			
Certificate IV and above	1,744	1,233	925
Certificate III and below	4,750	4,393	4,041
Type of study			
Apprenticeship and traineeship	4,108	3,313	2,614
Institutional delivery	2,386	2,313	2,352
Location			
Metropolitan	4,089	3,405	3,393
Regional	2,398	2,216	1,567
Training providers			
TAFE	3,458	2,852	2,566
Private training organisations	3,036	2,774	2,400
Aboriginal people			
Course enrolments	558	505	416
Young people (15-24 years) – AQF level			
Certificate IV and above	494	385	379
Certificate III and below	3,119	2,865	2,675

TOP FIVE QUALIFICATIONS BY NTA SCOPE COURSE ENROLMENTS³⁰⁹ 2016

Qualification
Certificate III in Hospitality
Certificate III in Commercial Cookery
Certificate II in Hospitality
Certificate IV in Hospitality
Certificate II in Kitchen Operations

Source: VET Enrolment Data Collection19F³¹⁰, final full year data for 2016

³⁰⁶ ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017 (unless otherwise stated)

³⁰⁷ Census 2011

³⁰⁸ ABS cat. no. 5220.0, National Accounts: State Accounts 2015-16, November 2016

³⁰⁹ Includes VET in Schools training delivery

³¹⁰ Data collection is for the National Training Agreement (NTA) scope which is only for enrolments funded by the Department of Training and Workforce Development.

TOP FIVE VET IN SCHOOLS QUALIFICATIONS DELIVERED BY NTA SCOPE COURSE ENROLMENTS 2016

Qualification
Certificate II in Hospitality
Certificate III in Hospitality
Certificate II in Kitchen Operations
Certificate I in Hospitality
Certificate II in Hospitality

Source: VET Enrolment Data Collection19F³¹¹, final full year data for 2016

Note: Duplicate qualifications above are the result of training package amendments.

INDUSTRY DEVELOPMENTS AND WORKFORCE CHALLENGES

ACCOMMODATION³¹²

- Short stay accommodation is an important sector of the hospitality and tourism industry. The sector consists of hotels, motels, serviced apartments, Bed and Breakfasts, hostels, caravan parks and resorts.
- The Western Australian accommodation sector has experienced significant growth in recent years; thanks in part to unprecedented infrastructure developments in Perth, a contributing factor in the increase of both international and domestic tourism revenue in WA in 2016.
- This sector is susceptible to the same political and economic uncertainties, competition from new entrants, seasonality and work force challenges that the tourism industry in general experiences.
- In addition, short stay accommodation is a sector reliant on discretionary spending and the impact of weakened local consumer demand, predominantly in business travel may be evident through lowered occupancy, average daily rates (ADR) and revenue per available room (RevPAR)³¹³ in Perth CBD hotels in 2016. The effect however has been less severe than in the food and beverage sector, where changes in local consumer activity have a greater impact. It is hoped that the anticipated growth in international and interstate leisure visitation will help to offset impacts from further falls in the local consumer market for the short stay accommodation sector.
- The pace with which construction of new hotels has been taking place in Perth and Fremantle realised a net gain of 909 hotel rooms in 2016. Almost 1,000 new rooms were added across 7 hotels (500 of which were at the Crown Towers Hotel), and 181 rooms went back on the market at the refurbished Holiday Inn Perth City Centre. 271 rooms were temporarily off the market due to reconstruction at The Melbourne Hotel and IHG InterContinental.³¹⁴ Another 23 hotels are scheduled to open in the Perth metropolitan area in the next three years, and a further 30 hotels or serviced apartments are being planned.
- The sharing economy is influencing consumer choice of accommodation. Commercially-run hotels, motels, guest houses and serviced apartments are more often booked for business trips and shorter getaways, while rented houses or apartments are favoured for family holidays or extended education and employment stays, due to the functionality and convenience of multiple rooms, bathrooms and kitchen facilities.³¹⁵ However, for every booking made on a sharing platform, there are lost hours of work for hotel staff such as housekeepers, due to lowered occupancy in the hotel.

³¹¹ Ibid

³¹² Industry advice provided by FutureNow: Creative and Leisure Industries Training Council 2017

³¹³ ADR is the average income per paid occupied room in a given time period. RevPAR is calculated by dividing a hotel's total guestroom revenue by the room count and the number of days in the period being measured. ADR, RevPAR and occupancy rates are used in measuring financial performance in the accommodation sector.

³¹⁴ Perth Hotel Performance & Development Pipeline Summary using data from STR Global – December 2016, Tourism Western Australia, accessed 01/03/2017

³¹⁵ State of the Industry 2017, Tourism Research Australia, Canberra, February 2017

- There is also anecdotal feedback that visitors using accommodation booked on a sharing platform such as Airbnb provide an economic boost through spending on food and recreation activities in suburbs that have possibly not benefitted from tourism in the past. In response to the emergence of Airbnb, Tourism Accommodation Australia (TAA(WA)) is pushing for regulation of the short stay accommodation sector. Policy suggestions include capping the number of days that guests can stay, developing guidelines for strata management groups and introducing a code of conduct for home hosting.
- Online travel agents (OTA) are having a considerable impact on the short stay accommodation sector. On one hand, these sites provide an opportunity for accommodation operators to market their product to a wider audience resulting in more rooms being booked. On the other hand however they are seen as anti-competitive, where OTA's contractual arrangements prohibit commercial accommodation providers from advertising cheaper rates on their own website, in addition to charging an often-times crippling commission (up to 20% of the room rate). These actions diminish a venue's ability to remain competitive, leading many hotels to act creatively in attracting guests through offering cheaper nightly rates or other perks.
- A decision by the Australian Competition and Consumer Commission in September 2016 forced two large OTAs; Expedia (which owns Wotif.com) and Booking.com to allow operators to offer cheaper rates, but providers can only offer cheaper rates by phone or to walk-in guests. Accommodation venues continue to be restricted from advertising cheaper rates on their own website. The OTA service offering remains compelling, especially for smaller operators, due to their customer "reach" and are expected to grow over the next five years³¹⁶.
- There are overall labour shortages and skills gaps that are not being met through training pathways for accommodation services workers in Western Australia.
- Specifically, there is an ongoing general shortage of appropriately qualified and locally trained hotel or motel managers. The skill level for a hotel or motel manager corresponds with an Associate Degree, Advanced Diploma or Diploma in Hospitality Management plus on the job experience. In 2015, only 8 enrolments were recorded for the Advanced Diploma in Hospitality and 68 in the Diploma of Hospitality.³¹⁷
- There are leadership skills gaps reported for mid-level managers, particularly in regional areas. Duty managers or hotel service managers that supervise and coordinate the activities of hotel service workers need to have guest services skills at an operational level, but should also be able to adapt across various positions and progress towards a general manager position. A lack of leadership skills means that workers in a supervisory role cannot be promoted to a managerial role, and accommodation providers have to rely on workers that are not deemed competent to progress to a senior level.
- A specialisation of the hotel service manager is the night manager. This position for some metropolitan hotels is difficult to recruit due to the low remuneration and challenging hours. Many hotels are relying on underqualified, under-skilled or migrant workers to fill these positions, despite these workers requiring a relevant qualification and a number of years' industry experience.
- Furthermore, the Certificate IV in Hospitality forms part of a career pathway for people who have already been working in the industry and are progressing towards a leadership role in the industry through the Diploma and/or Advanced Diploma in Hospitality Management. This qualification is suitable for hotel service managers. However, funding for existing workers to access the Certificate IV in Hospitality traineeship was ceased in 2015 and numbers of people commencing a traineeship in Certificate IV in Hospitality have fallen significantly. In 2016, 201 people commenced a traineeship in

³¹⁶ IBISWorld Industry Report N7220, Travel Agency and Tour Arrangement Services in Australia, February 2017, Nick Tarrant, IBISWorld

³¹⁷ SIT Qualifications institutional enrolments (VESU), Department of Training and Workforce Development, Perth, accessed 05/05/2017

Certificate IV in Hospitality, a reduction from 465 in 2015 and 575 in 2014³¹⁸.

- While the number of new hotels in the metropolitan area is contributing to the shortages in hospitality workers in Perth, shortages are more pronounced in regional areas, where smaller accommodation sites are more prevalent and there are high levels of turnover for all staff in general. The regional context means that many accommodation services workers live on the property and therefore must fill many roles and perform various duties across the venue. For example, an employee might perform housekeeping duties in the morning and work as wait staff in the hotel restaurant at night. There is consequently a smaller team of staff and the associated lack of social benefits, plus low remuneration means that it is difficult to attract quality workers to regional short stay accommodation properties.
- Those workers that do go to the regions do not stay for very long.³¹⁹ Incentives that operators may utilise to attract and retain workers in regional areas include monetary bonuses, free accommodation and meals, which may help retain workers, but does not address skills gaps in relation to workers moving into leadership positions.
- Seasonality is a continual issue for the accommodation sector, particularly in the north and south of Western Australia. This creates recruitment issues and a reliance on casual and seasonal staff.
- Workforce challenges are also anticipated due to the changes to the Working Holiday Visa program. While it is too early to measure the full impact, anecdotal feedback from regional accommodation providers suggests potential working holiday makers are rejecting Australia for other countries, thus affecting these regional hospitality businesses' capacity to operate as many rely on the seasonal workforce and only some operators are able to participate in the Seasonal Worker Programme in northern Western Australia.
- The Fair Work Commission has recommended that Sunday and public holiday penalty rates under the Hospitality Industry (General) Award 2010 and the Restaurant Industry Award 2010 be reduced in July 2017³²⁰, which may affect accommodation services workers. This has generated a mixed response, with employer groups largely endorsing the recommendation, citing increased ability to provide shifts to staff on Sundays and public holidays that they have not been able to commit to in the past. Employee groups however, assert that a lowering of the wage will disadvantage hospitality workers and may lead to workers leaving the industry in search of better hours and pay. Casual employees who will not experience a reduction in their rates on Sundays are also likely to be impacted, and may lose out on Sunday shifts to cheaper permanent staff. Similarly, a further reduction in wages may be another deterrent for prospective workers to a sector already struggling with attraction and retention. Employee groups are also sceptical as to whether more hospitality venues will in fact open and hire more staff on Sundays and public holidays as a result of reduced staffing costs.
- The short stay accommodation sector will also be affected by the cessation of the Temporary Work (Skilled) visa (Subclass 457) program, which was replaced in April 2017 with short term visas of up to two years and medium to long term visas of up to four years. The occupations of accommodation and hospitality managers (nec) and hotel or motel managers have been retained as skilled occupations³²¹. There is concern that these accommodation workers will not be able to access permanent residency once their visa has expired, and will be dissuaded from coming to Australia, creating skills gaps that

³¹⁸ SIT Qualifications Traineeship commencements, Training Records System, Department of Training and Workforce Development, Perth, accessed 05/05/2017

³¹⁹ FutureNow Industry Advisory Group for Hospitality, meeting 3 December 2016

³²⁰ Proposed penalty rates changes for the Hospitality Award: full and part time employees will earn 150% on a Sunday (instead of 175%) and 225% on public holidays (instead of 250%). Casuals will not experience a change on Sundays but will earn 250% on public holidays (instead of 275%). Proposed penalty rates changes for the Restaurant Award: full and part time employees will earn 225% on public holidays (instead of 250%). There is no change to Sunday penalty rates and no change for casuals under the Restaurant Award.

³²¹ Australian Government, Department of Immigration and Border Protection, Combined list of eligible skilled occupations, accessed 23/05/2017

are unlikely to be filled by a local work force.

FOOD AND BEVERAGE SERVICES³²²

- The growth of hospitality venues in Perth and its surrounds has had a major impact on the food and beverage services sector in Western Australia, where hotel restaurants, in-room dining services, bars, cafés and coffee shops have been incorporated into 24 new hotels in Perth and Fremantle. Additionally, restaurants, cafés and bars are key components of the service provision at Elizabeth Quay, the Perth Stadium, Riverside, Yagan Square and within the redevelopments of Perth's existing hospitality precincts in the CBD, Northbridge, Leederville, Fremantle and Scarborough. This upsurge in venues has created growing workforce opportunities within the sector, but also increased competition for customers and quality staff.
- Western Australia has also seen a growth in recent years in the number of small bars and especially boutique venues, due to major liquor licencing reforms. These establishments provide a novelty experience for consumers by having a niche focus on culinary specialities and theming as a point of difference, but also contribute towards the heightened competition for established venues, by enticing customers as well as attracting experienced staff.
- The restaurant sector in Western Australia is challenged by the drop in discretionary spending and change in consumer demand as people are dining out less frequently and choosing cheaper options of casual dining. The changing landscape has contributed to several high-end restaurants closing down, with decreased attendance making them unable to absorb high rents and labour costs, low revenues and small profit margins.
- The hospitality workforce within clubs is another group being impacted by changing consumer trends and lower disposable incomes. Declining club memberships are seeing a change in service offerings and operations, where clubs are increasingly placing emphasis on their hospitality offering and targeting different market segments such as families, thus increasing the need for food and beverage staff. However in some regions multiple clubs are amalgamating into a single entity, resulting in a consolidation of amenities, and therefore reducing the requirement for hospitality staffing.
- As highlighted in the 'Eating Out in Australia 2017 report'³²³, the food and beverage industry's greatest workforce challenge is the recruitment and retention of quality candidates.
- FutureNow's Hospitality Industry Advisory Group stress there is a particular shortage of highly skilled workers at a managerial level. As new venues open, shortages for quality staff increases and newer boutique venues are seen to attract quality workers by offering higher wages or greater prestige.
- Similarly, the shortage of chefs in Western Australia remains extreme, stemming from dozens of new positions being created in new hospitality venues and from constant vacancies at established venues due to the occupation's high attrition rate. Current conservative estimates predict that at least 300 cooks or chefs will be needed for Perth's 24 new hotels, with another 100 chefs or cooks required at the non-accommodation venues of Elizabeth Quay, Perth Stadium, and Riverside and more still in venues in Perth's surrounding suburbs undergoing redevelopment. Of major concern are the low rates of completion by commercial cookery apprentices, the decline in commencements of the apprenticeship and the attrition rate of qualified chefs leaving Western Australia to travel or changing industries due to working conditions and low remuneration. In addition, chefs with many years' experience are also leaving the industry due to family commitments, the imposing physical demands of the job and improved work-life balance.
- There is a shortage for qualified and experienced club managers to organise and control the operations of a club in providing food, beverages, entertainment or sporting amenities for its

³²² Industry advice for the subsectors of Cafes and Restaurants, Pubs, Taverns and Bars, and Clubs (Hospitality) is provided by FutureNow: Creative and Leisure Industries Training Council 2017 Advice regarding Takeaway Food Services is provided below.

³²³ Intermedia Group, *Eating Out in Australia 2017 Fast Food to Fine Dining – State of the Industry*, hospitalitymagazine.com.au, Australian Hotelier and Bars & Clubs, November 2016

members. Significant skills gaps in business management, governance and financial acumen are prevalent, but there is also a lack of succession planning and career pathway promotion, which is of concern for the clubs sub-sector, particularly since there is an increase in clubs merging their operations, thus expanding the club manager's range of responsibility.

- It is anticipated that changes to the Working Holiday Visa program will intensify current workforce challenges. Industry has expressed concern that potential working holiday makers may reject Australia in preference for other countries as a working holiday destination, thus affecting regional food and beverage venue operations many of which rely on a seasonal workforce, typically sourced through this visa program.
- The Fair Work Commission has recommended that Sunday and public holiday penalty rates under the Hospitality Industry (General) Award 2010 and the Restaurant Industry Award 2010 be reduced in July 2017³²⁴.
- This has generated a mixed response, with employer groups largely endorsing the recommendation, citing increased ability to open restaurants or cafés and provide shifts to staff on Sundays and public holidays that they have not been able to commit to in the past.
- Employee groups however, assert that a lowering of the wage will disadvantage hospitality workers and may lead to workers leaving the industry in search of better hours and pay. Casual employees who will not experience a reduction in their rates on Sundays are also likely to be impacted, and may lose out on Sunday shifts to cheaper permanent staff. Similarly, a further reduction in wages may be another deterrent for prospective workers to a sector already struggling with attraction and retention. Employee groups are also sceptical as to whether more hospitality venues will in fact open and hire more staff on Sundays and public holidays as a result of reduced staffing costs.
- Due to the size of the workforce and difficulties with attraction and retention, the food and beverage sector has been a heavy user of the Temporary Work (Skilled) visa (Subclass 457) program and will be impacted by its cessation. In April 2017, the 457 visa program was cancelled and replaced with short term visas of up to two years and medium to long term visas of up to four years. There will no longer be permanent residency outcomes for the short term visa.
- Industry associations support the Federal Government's decision primarily because important occupations in the food and beverage sector have been retained as skilled occupations. Chefs have been included on the Medium and Long-Term Strategic Skills List, while café or restaurant managers, pastry cooks and cooks are included in the Short-Term Skilled Occupations List³²⁵. There is potential that migrant pastry cooks, cooks or café and restaurant managers will not be able to access permanent residency once their visa has expired, and there is concern that some of these workers with specific artisanal skillsets and the willingness to do the work will be dissuaded from coming to Australia, exacerbating skills gaps that are unlikely to be filled by a local work force.

Takeaway food services³²⁶

- The negative perception of employment within the industry is a concern where workers suffer from stress, underemployment and reduced job opportunities.
- Employment in the industry is characterised by low pay, poor working conditions, little training and few opportunities for career advancement.
- Customer abuse and threatening behaviour against employees has emerged as an increased risk to

³²⁴ Proposed penalty rates changes for the Hospitality Award: full and part time employees will earn 150% on a Sunday (instead of 175%) and 225% on public holidays (instead of 250%). Casuals will not experience a change on Sundays but will earn 250% on public holidays (instead of 275%). Proposed penalty rates changes for the Restaurant Award: full and part time employees will earn 225% on public holidays (instead of 250%). There is no change to Sunday penalty rates and no change for casuals under the Restaurant Award.

³²⁵ Australian Government, Department of Immigration and Border Protection, Combined list of eligible skilled occupations, accessed 23/05/2017

³²⁶ Industry advice provided by Retail and Personal Services Training Council 2017

employees within the industry and conflict resolution and developing better customer relations training may become essential for managers and front-line staff.

- The fast food market has progressively changed over the years with the market being influenced by overseas trends as well as more uniquely developed Australian eating out preferences.
- The appetite for convenient, reasonably priced meals remains strong, and while the industry has been impacted by the increased popularity of easy-to-prepare meals available in supermarkets, research indicates consumers have also started to look for more sophisticated menu items in aesthetically appealing surrounds. Eating out is now a part of the Australian lifestyle, with more people eating out on a weekly basis.
- Consumer demand for fast food is driven by trends in real household discretionary income, the level of convenience and health-consciousness among consumers.
- Today food service providers are considered to be classified within in one of three sectors:
 - Quick-service restaurants – quick-service is the term for restaurants that capitalise on speed of service and convenience. The emerging fast-casual restaurants often fall under the umbrella of quick-service restaurants;
 - Limited service restaurants – Patrons order or select items and pay before eating. Food and drink may be consumed on premises, taken out, or delivered to customers; and
 - Full service restaurants – establishments with a broader menu with counter, table and/or booth service and table wait staff.
- The growth of fast-casual restaurant chains are the quickest growing segment of Australia's food market. This sector includes operations such as: Grill'd, Nando's, Oporto, Zambrero, Mad Mex, plus many more and the continual flow of new themed entries offering a variety of ethnic-based food variations.
- Fast-casual chains have expanded by thirty per cent in the past five years, compared with five per cent for traditional fast food outlets. Industry establishment numbers are forecast to continually grow over the 10 years through 2021–22.
- More than half the population has visited a major fast food chain in the past month, and most will go to a quick-service restaurant four times over a month. The development and expansion of the McDonalds “McCafe” brand has met the demand for decent coffee. The introduction of “design your own healthier food choices” has also clearly positioned them as a leader within the quick-service restaurant category.
- Competition among players and a softer retail economy has had a minimal effect on establishment numbers, which have been supported mostly by demand for new healthier food retailers and entrants at the premium end of the market. Nonetheless, the industry has benefited from the rapidly expanding healthy foods segment.
- Once dominated by hamburgers, chicken, and fish and chips – today, consumers are looking for healthier choices. The consumer driven “healthier choice” requirement was realised by the national chain outlets who subsequently undertook a “health kick” review that resulted in a gradual change in their product and marketing mix.
- Healthier eating options are a reality of the fast food industry. Today fast food restaurants and the plethora of emerging themed concept food providers are offering servings that include grilled food, fresh salad, sushi bars and traditional ethnic dishes.
- Many new fast food options introduced were seen as passing fads, however, over time they have cemented their places in the fast food market.
- The rate of technological change has supported the industry’s mature life cycle status with efficiency gain advances in areas that are mainly focused on online ordering, home delivery and order-tracking.
- Several operational issues are also being addressed by the industry that is generally being driven by younger consumers such as price, location, and convenience.
- Millennials are fuelling Australia’s multi-billion dollar home delivery boom. Through a survey of 1,000 Australians they discovered nine in 10 consumers aged 18 to 34 were using home delivery services, compared to less than half of over 55 year olds.
- Food delivery services were the most popular category, with 75 per cent of respondents ordering

from brands including Domino's, Menulog, Deliveroo, Foodora and UberEats.³²⁷

- The negative perception of employment within the fast-food industry is a concern as many describe it as a “dead end job” where workers suffer from stress, underemployment and reduced job and life opportunities. Fast-food is seen as a form of secondary labour employment characterised by low pay, poor working conditions, little training, little chance of advancement and high staff turnover.
- There has been a decline in the number of traineeships since 2012 and one of the reasons stated is the change in employer incentive for non-trade apprenticeships/traineeships.
- The new SIR Retail Services Training Package V2.0 saw the removal of the Certificate II in Retail Fast Food at the request of the larger players in the industry. They will now access the Retail Training with fast food electives.
- There is a need for all levels of employees within the industry to be across new and improved technology and customer relations:
 - Technology – taking and processing food orders online, rapid dispatch and delivery activation, and monitoring GPS of driver tracker and drone echnology; and
 - Customer relations – relationship building and conflict resolution.
- Consumers have issues with delivery including navigation problems, complaints of cold food and late arrivals, and payment methods.
- Delivery drivers and cyclists are facing navigation and congestion challenges with half of Australians (49 per cent) complaining about late delivery, while a third (33 per cent) have received ‘compromised goods’ like cold food.
- Solving the issues of late deliveries are vital to industry growth and the industry has commenced looking at this issue and sharing ideas on a uniform approach to develop systems for improvement in: innovative payment methods; transporting methods; improved container technology for retaining food quality; and the future of autonomous delivery with drones.
- The Federal Workplace Ombudsman is concerned that large numbers of young people and migrant workers may be being under-paid by fast-food employers. To address this, the Western Australian office is asking more than 230 takeaway outlets to open their books as part of a nationwide food services campaign. Of employers audited in Western Australia so far, 48% had breaches, mostly minor, but many relating to underpayment of staff.

2018 INDUSTRY WORKFORCE PRIORITIES

ACCOMMODATION³²⁸

FutureNow will monitor and assess the reforms in respect of working holidays and skilled migration streams as well as changes to penalty rates at State and Federal levels. In consultation with industry and peak bodies, FutureNow will review their impact on industry to ensure availability of skilled short - stay accommodation workers through as many mechanisms as possible.

FOOD AND BEVERAGE SERVICES³²⁹

FutureNow will monitor and assess the skilled migration and penalty rates reforms at State and Federal levels and, in consultation with industry and peak bodies, review their impact on industry to ensure availability of skilled chefs, cooks and café or restaurant managers through as many mechanisms as possible.

³²⁷ Retailbiz - November 14, 2016

³²⁸ Industry advice provided by FutureNow: Creative and Leisure Industries Training Council 2017

³²⁹ Ibid

Takeaway food services³³⁰

- Better navigational systems to eliminate late home delivery;
- Improved container technology for retaining food quality;
- On-line order taking and rapid dispatch of food;
- Tracker systems to ensure safety of delivery personnel;
- Payment methods for home delivery;
- Customer relations and conflict resolution; and
- Negative perception of the fast-food industry.

8.9. TRANSPORT, POSTAL AND WAREHOUSING

OVERVIEW

The transport, postal and warehousing industry is mainly engaged in providing transportation of passengers and freight by road, rail, water or air. Other transportation activities such as postal services, pipeline transport and scenic and sightseeing transport are included in this division.

The sector is also involved in providing goods warehousing and storage and in providing support services for the transportation of passengers and freight. These activities include stevedoring services, harbour services, navigation services, airport operations and customs agency services. The sub sectors in the industry include³³¹:

- road transport
- rail transport;
- water transport;
- air and space transport;
- other transport;
- postal and courier pick-up and delivery services;
- transport support services; and
- warehousing and storage services.

As of May 2017, the industry employed approximately 66,800 Western Australians, representing 5.0% of the State's workforce. In the year to May 2017, the industry experienced an average annual decline of 4,800 persons or 6.5%. Over the five years to May 2017 the industry has experienced a net gain of 5,900 persons or 9.9% of its workforce.

The industry is dominated by non-employing businesses (73.8%), with only 1.8% of enterprises having 20 or more employees.³³²

The industry predominantly employs on a full time basis, with only 24.1% of workers employed part time.³³³

The industry has a majority male workforce at 75.9% compared to the total State proportion of 54.9%.

As of Census 2011, the 86.5% of the industry's workforce falls within the 25-64 age group and is consistent with the State's average (80.7%), the industry does have an ageing profile, with some 4.3% of the workforce being over the age of 65, compared to only 3.1% across all industries.

In 2015–16, the transport, postal and warehousing industry contributed 5.3% towards the gross State product for Western Australia.³³⁴

³³⁰ Industry advice provided by Retail and Personal Services Training Council 2017

³³¹ ABS, 1292.0 - Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (Revision 1.0)

³³² Australian Bureau of Statistics. (2017). 8165.0 *Counts of Australian Businesses, including Entries and Exits, Jun 2011 to Jun 2016*.

³³³ ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017

ECONOMIC AND LABOUR MARKET SNAPSHOT³³⁵

Economic indicators	Transport, postal and warehousing	WA average across all industries
% of total WA employment	5.0	
% average annual employment growth in 2016–17	-6.5	-0.3
% of full time employment	75.9	68.1
% of female employment	24.1	45.1
% of metropolitan employment ³³⁶	76.8	78.3
% of total WA gross State product (GSP) at 2016 ³³⁷	5.3	

SNAPSHOT OF VET DELIVERY (COURSE ENROLMENTS) – 2014–2016

TRANSPORT, POSTAL AND WAREHOUSING	2014	2015	2016
Total course enrolments (NTA)	4,975	4,863	4,352
AQF Level			
Certificate IV and above	1,075	1,415	1,149
Certificate III and below	3,900	3,448	3,203
Type of Study			
Apprenticeship and traineeship	2,146	1,889	1,656
Institutional delivery	2,829	2,974	2,696
Location			
Metropolitan	3,965	3,750	3,145
Regional	1,001	1,113	1,207
Training providers			
TAFE	1,335	1,288	1,390
Private training organisations	3,640	3,575	2,962
Aboriginal people			
Course enrolments	312	270	385
Young people (15-24 years) – AQF level			
Certificate IV and above	199	180	154
Certificate III and below	1,184	933	995

TOP FIVE QUALIFICATIONS BY NTA SCOPE COURSE ENROLMENTS³³⁸ 2016

Qualification
Certificate III in Warehousing Operations
Certificate IV in Warehousing Operations
Certificate III in Driving Operations
Certificate II in Warehousing Operations
Certificate III in Maritime Operations (Master Up To 24 Metres Near Coastal)

Source: VET Enrolment Data Collection³³⁹, final full year data for 2016.

³³⁴ ABS, 5222.0, State Accounts

³³⁵ ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017 (unless otherwise stated)

³³⁶ Census 2011

³³⁷ ABS cat. no. 5220.0, National Accounts: State Accounts 2015-16, November 2016

³³⁸ Includes VET in Schools training delivery

TOP FIVE VET IN SCHOOLS QUALIFICATIONS DELIVERED BY NTA SCOPE COURSE ENROLMENTS 2016

Qualification
Certificate II in Warehousing Operations
Certificate III in Aviation (Flight Operations)
Certificate II in Maritime Operations (Coxswain Grade 1 Near Coastal)
Certificate II in Stevedoring
-

Source: VET Enrolment Data Collection³⁴⁰, final full year data for 2016.

INDUSTRY DEVELOPMENTS AND WORKFORCE CHALLENGES³⁴¹

ROAD TRANSPORT – FREIGHT

- The freight task has increased dramatically in recent years, resulting in an increasing number of heavy vehicles sharing the roads with motorists adding to road safety concerns.³⁴²
- SME's and enterprises with low operating margins are being challenged by the increased regulatory reporting requirements and cannot always afford the time or costs of additional training.³⁴³
- Significant infrastructure investments are being made by the State and Australian Governments to address road congestion, route planning issues and improve transport network integration. Major projects include Gateway WA, NorthLink WA, and the proposed Perth Freight Link.³⁴⁴
- Automation is changing the nature of work as highlighted by the use of driverless autonomous dump trucks at Rio Tinto's iron ore mines in Western Australia.³⁴⁵
- Western Australia's 2016–2017 harvest resulted in a massive 16.616 million tonnes of grain being delivered to Cooperative Bulk Handling, smashing the record set three years earlier. The exceptional harvest result exceeded expectations and was in spite of widespread frost damage which caused substantial losses. A new December record of 831,000 tonnes of grain moved to port via rail was also set.³⁴⁶
- The development of lithium mining is gaining momentum in Western Australia, with 40% of the world's lithium found here. The owners of the Greenbushes mine announced in September 2016 that they would move to more than double the amount of chemical-grade lithium concentrate it produces. Other lithium mines are situated at Mount Marion near Kalgoorlie, and 120 km from Perth Hedland.^{347 348}
- The average age of truck drivers in Western Australia is approximately 56 years, with many drivers working into their 70s. Nationally approximately 57% of workers in road transport are aged 45 years and older.³⁴⁹
- Approximately 63% of workers have no post school qualifications; 24% have a certificate

³³⁹ Data collection is for the National Training Agreement (NTA) scope which is only for enrolments funded by the Department of Training and Workforce Development.

³⁴⁰ Ibid.

³⁴¹ Industry advice provided by the Logistics Training Council 2017

³⁴² Industry consultation

³⁴³ Ibid.

³⁴⁴ <https://project.mainroads.wa.gov.au/perthfreightlink/Pages/default.aspx>

³⁴⁵ Industry consultation

³⁴⁶ <https://thewest.com.au/business/agriculture/wa-farmers-deliver-record-grain-harvest-ng-b88358122z>

³⁴⁷ www.talisonlithium.com/projects

³⁴⁸ www.pilbaraminerals.com.au/pilgangoora-lithium-tantalum-project

³⁴⁹ www.joboutlook.gov.au

qualification; 6% have a diploma qualification and 6% have a tertiary qualification.³⁵⁰

- Male workers continue to dominate all occupations, with female participation well below the national average. Approximately 98% of truck drivers are male.³⁵¹
- Currently there are no mandatory requirements in Western Australia for drivers to have any formal training, apart from the relevant licence, which does not provide the appropriate skills and knowledge required to become a truck driver.³⁵²
- Concerns have been raised by competent drivers who have gained the relevant heavy vehicle licence and wish to enter the industry but cannot gain employment without several years of experience.³⁵³
- There is difficulty in attracting young people into the sector due to the poor image and poorly identified career pathways. While some employers are using strategies to attract and retain their workers, many SME's are unable to offer competitive incentives.³⁵⁴
- Poor language, literacy and numeracy skills have been identified, particularly amongst road transport drivers and forklift operators. This causes difficulties for workers who are increasingly required to multitask and complete more paperwork.³⁵⁵
- The industry is heavily regulated with training linked to regulatory requirements and not necessarily qualifications so many workers are not given the opportunity to complete whole qualifications.

ROAD TRANSPORT – PASSENGER

- Current Transperth projects include the Ellenbrook Bus Rapid Transit service, due to commence operation in 2018; new bus bays and layover bays at the new Forrestfield Station, to be completed in 2020; and new bus hubs at the Peninsula and Gloucester Park to service the stadium which is due for completion in 2018. Additional drivers will be required for this service.³⁵⁶
- Regional bus services have been improved with regular services now operating at a number of major centres.³⁵⁷
- There has been a major decline in public transport patronage across the metropolitan area in the last year with bus patronage falling by 3.2 per cent (2.6 million journeys).³⁵⁸ This may be attributed to a number of factors including a downturn in employment, particularly in the CBD, the relatively low cost of petrol and improvements to the road network. It is expected that passenger numbers will increase as the population grows.³⁵⁹
- Safety is a perceived risk for taxi and bus drivers, and although some incidents do occur, systems are in place to eliminate these incidents.³⁶⁰

³⁵⁰ Ibid.

³⁵¹ Ibid.

³⁵² Industry consultation

³⁵³ Ibid.

³⁵⁴ Ibid.

³⁵⁵ Ibid.

³⁵⁶ www.pta.wa.gov.au/projects/current-projects

³⁵⁷ Industry consultation

³⁵⁸ Public Transport Authority Annual Report 2016

³⁵⁹ Industry consultation

³⁶⁰ Ibid.

RAIL TRANSPORT

- Continually changing technology is having a major impact on the workforce, with different skill sets required. Some older workers find it difficult to embrace change and it is estimated the continuing changes will eliminate some workers.³⁶¹
- The State's rail industry is heavily influenced by the development of new or upgraded port facilities aimed at supporting increased export volumes, particularly iron ore. Positive forecasts for agricultural products are also expected to strengthen rail demand in Western Australia.³⁶²
- Automation is changing the nature of work as highlighted by the planned use of autonomous trains at Rio Tinto's iron ore mines in Western Australia. As automated technology evolves job roles will change and there will be increased demand for higher-level skills.³⁶³
- Perth's passenger rail system has expanded rapidly with more than two-thirds of the network built in the last 20 years. New lines from Perth to Butler (40 km), Mandurah (70 km) and the Thornlie branch (3 km) have transformed long distance urban movement within the city.³⁶⁴
- While Perth's rail patronage previously grew at the fastest rate of all urban networks in Australia, it dropped to a four year low in 2015–16. This is mainly attributed to the downturn in employment, particularly in the CBD. It is expected that the population growth will see an increase in passenger numbers in the future.³⁶⁵
- Major passenger projects include the construction of an underground rail line between Bayswater and Forrestfield, linking Perth with Perth airport – part of the \$1 billion Gateway Project, due for completion in 2020. The construction of a train station for the new Perth Stadium at Burswood is also due for completion in 2018.³⁶⁶
- Almost 25% of the workforce is expected to retire in the next decade, taking their skills and knowledge with them and leaving a shortfall of workers.³⁶⁷ Rail freight transport workers are among the oldest within the transport and logistics industry, with 52% aged 45 years and older.³⁶⁸
- The under 25s are the largest group which is under-represented at 4%, so the challenge is to attract young workers into the industry.
- Due to changing technology, new major projects are now calling for specific skill sets for overhead and signalling engineers, which is creating a world shortage. There is also difficulty in finding experienced trainers in this field.³⁶⁹
- While training has traditionally been on an as-needs basis, changes to the *2015 Rail Safety Act*, which states that all rail workers must be trained to Australian Qualifications Framework (AQF) standards, has changed the training ethos with much more structured training taking place.³⁷⁰
- Unlike some other occupations, train drivers require on the job training, so training is limited by the number of locomotives, limited track access and qualified drivers to supervise trainee drivers and act as mentors.³⁷¹
- Many workers in the rail industry work offsite or away from the base camp such as rail infrastructure workers. While training is an important aspect of their job, it is often difficult to organise.³⁷²
- The sector is dominated by male workers, with women making up only 12% of Western Australia's rail

³⁶¹ Ibid.

³⁶² Ibid.

³⁶³ Ibid.

³⁶⁴ Bureau of Infrastructure, Transport and Regional Economics and Australasian Railway Association Trainline 4 Statistical Report 2016

³⁶⁵ Public Transport Authority Annual Report 2016

³⁶⁶ <http://www.pta.wa.gov.au/projects>

³⁶⁷ Industry consultation

³⁶⁸ www.joboutlook.gov.au

³⁶⁹ Industry consultation

³⁷⁰ Industry consultation

³⁷¹ Ibid.

³⁷² Ibid.

workforce. There is concern by most rail companies regarding the lack of female participation, particularly at a senior level, and inroads have been made into attracting more female workers.³⁷³

- Poor literacy and numeracy skills have been identified in the rail industry, especially amongst rail track workers, gangers and new team leaders. This makes training difficult and impedes the upskilling and career progression of staff.³⁷⁴
- Approximately 45% of rail workers in Western Australia have no post school qualifications, 31% have a certificate qualification, 6% have a diploma qualification and 13% have tertiary qualifications.

WATER TRANSPORT | TRANSPORT SUPPORT SERVICES

- Growth in trade volumes means increased demand for skilled workers, particularly in the offshore oil and gas sector.
- The poor image of the sector and lack of awareness of opportunities has been detrimental to attracting new entrants. The sector is highly male dominated attributable to the physical nature of the work and working conditions with some occupations such as deckhands and marine transport professionals comprising 96% and 97% males respectively.
- The high rate of casualisation amongst stevedores and seafarers who are often employed on a contract basis can act as a disincentive to invest in workforce development.
- Training in the sector is largely linked to regulatory requirements and not qualifications. Many workers have completed skill sets but do not have whole qualifications which can impact their employability.

Maritime

- Around 25% of the domestic freight task on a tonne kilometre basis is carried by ships, with the number set to increase. Over the last 15 years, the amount of cargo carried by foreign vessels employing foreign crews has risen from 6% to 30%, with only 0.5% of export trade carried on Australian vessels.
- Differences in regulations between vessels including blue water, inshore, offshore and fishing makes it difficult for maritime workers to move from one type of vessel to another. This has been addressed by changes introduced by the Australian Maritime Safety Authority, which are being implemented.
- The maritime sector, with its huge presence in the north west, often has to send employees to Perth for training. Many require simulators which are exorbitantly costly and difficult to access.
- The ageing workforce is a significant obstacle to maintaining employee numbers and skills required. Approximately 42% of the seafarer workforce is aged 45 years and older. In the short to medium term, the ability to successfully attract, train and retain young workers will be critical in meeting the skills needs of industry³⁷⁵.
- The lack of available ship-based training berths related to the falling number of Australian flagged commercial vessels makes gaining mandated sea time difficult for trainees. The high cost training, particularly for those wishing to move into larger vessels, is also prohibitive and exacerbated by the loss of wages and in some instances accommodation costs while training.
- According to the 2011 Census, approximately 30% of the maritime workforce was born overseas, highlighting the need for cultural awareness and recognition of equity and diversity in the workplace.
- The relaxing of foreign seafarers work permits in Australian waters continues to negatively impact on both the employment of Australian seafarers and also their training opportunities. As a short term solution to fill labour shortages, a number of maritime occupations are on the Consolidated Skills Occupation List. Unless the maritime industry is discouraged from importing its workforce through skilled migration, and is instead given incentives to train a local workforce for their future needs,

³⁷³ Ibid.

³⁷⁴ Ibid.

³⁷⁵ Australian Industry Standards. Maritime IRC Skills Forecast Key Findings Discussion Paper 2017.

Australia will find itself unable to provide its own coastal maritime workforce.

Ports

- Freight growth is expected to continue over the next two decades. The Western Australian Regional Freight Network Plan has identified that by 2031 trade through the State's ports will increase by 140% to more than one billion tonnes per annum.
- In recognition of the significance of Western Australia's port infrastructure, the State Government has allocated funding of \$663.2 million over the next four years to all port authorities as part of the State's Asset Investment Program.³⁷⁶
- The *Ports Legislation Amendment Act 2014* was passed by Parliament during 2013–14 which saw seven of the existing regional port authorities consolidated into four new port authorities.
- Fremantle Port recorded 2015/16 as being its busiest cruise season since the early 1970's, with 58 ship visits transporting a total of 152,743 passengers. Indications are 2016/17 will be even busier with 60 vessel visits scheduled.³⁷⁷ As a rapidly growing market segment, there is sustained demand for seafaring workers with multidisciplinary skills at all levels.
- Competition for limited skills has resulted in employee poaching and inflated market wages to attract labour. Regional ports have had difficulties in attracting and retaining workers.
- Higher-level skill needs are emerging related to new technology such as automated cargo handling systems. Opportunities exist for business skills, project management and engineering.

AIR AND SPACE TRANSPORT

- The sheer size and isolation of Western Australia means there is little choice but aviation for travel between Perth and other states and between Perth and most of the State's major regional centres.
- Forecasts indicate that despite a projected smaller resources sector workforce by 2020, resources sector passengers utilising Perth Airport are forecast to increase due to shorter shift patterns during the operational phase.³⁷⁸
- Boeing's 2016 Pilot and Technician Outlook (which encompasses Australia) projects that between 2016 and 2035, the Asia-Pacific region will require an estimated 248,000 new commercial airline pilots.³⁷⁹
- In December 2016, Perth Airport and Qantas entered an agreement which will allow direct long haul flights between Perth and London. Flights on the newly established route are due to commence in the first quarter of 2018.³⁸⁰
- The Forrestfield-Airport link is expected to be completed and operational by 2020. This development will link the south eastern suburbs and the Airport to the CBD, reducing travel times and providing better connections to job prospects within the area. It is anticipated that this project will also create employment opportunities for aviation support services for people in and around the airport precinct.
- Reaching its peak in 2012–13 (approximately 800,000), there has been a significant fall in passenger numbers travelling to and from Karratha (550,000 in 2015–16). Despite this, Karratha still remains the highest recipient of Regular Passenger Transport and charter services after Perth Airport.³⁸¹
- The need for improved air cargo and passenger security arrangements sparked by increased global terrorist attacks has also had major implications for additional security training for staff and increased training for existing personnel.
- Advances in technology have enabled increased and diverse use of Unmanned Aerial Vehicles (UAV) within Australia. Commercial operation of UAV's will have an impact on the aviation industry and

³⁷⁶ Department of Transport Ports Handbook Western Australia 2016

³⁷⁷ Department of Transport Ports Handbook Western Australia 2016

³⁷⁸ 2015–2025 Western Australian Resources Sector Outlook, Chamber of Minerals and Energy

³⁷⁹ Boeing: 2016 Pilot and Technician Outlook, 2016

³⁸⁰ Perth-London flights announced by Qantas for 2018, ABC News, December, 2016

³⁸¹ BITRE Aviation Statistics 2016

skilling needs of operators. However, it should be noted that regulatory challenges remain a key issue for the popular use and impact of the Remotely Operated Vehicle in both commercial and recreational settings.³⁸²

- In relation to licencing requirements for pilots, there have been teething issues with the transitional arrangements for part 61 that came into effect in 2014.³⁸³ Civil Aviation Safety Authority is working towards addressing the concerns raised by industry stakeholders.
- The Western Australian Government released its first State Aviation Strategy in February 2015, following extensive stakeholder and community input. The strategy is designed to provide a sound framework for policy setting, and future planning and investment in Western Australian international and domestic air services and airport infrastructure.
- A number expansion work programs to regional airports have either commenced or have been identified in regional workforce development plans.³⁸⁴ Some of the works include the expansion of Newman and Busselton Airport,³⁸⁵ and renewal of the Geraldton runway.
- The aviation industry will not only require large numbers of additional pilots and new maintenance staff, but also additional air traffic controllers, operations managers, ground handling staff, airport staff and critically – trainers.³⁸⁶
- The aviation industry is experiencing a loss of knowledge and experience due to an ageing workforce. Qualified trainers in this sector are being lured back into the industry as pilots in an effort to alleviate strong demand for skilled workers. Other factors contributing to low pilot numbers include the long lead time to fully train pilots and the rising global demand for their highly transferable skills.
- Although Western Australia has some of the best flying conditions in Australia, industry has expressed concern over the limited airspace and use of instrument landing systems and non-directional beacons. The military occupies the airspace to the north of the metropolitan area and increased air traffic restricts access to Perth Airport.³⁸⁷
- The lack of succession planning in the aviation industry is creating organisational knowledge gaps and affecting the transition of workers from lower to higher level positions. It has been identified that more investment is needed to train and equip staff for managerial roles. These issues are magnified in regional centres where it is difficult for operators to replace staff, as is currently the case when workers go on leave.
- Some occupations in the aviation sector have a poor image with few career opportunities or pathways. These occupations include baggage handlers and ground crew. Although some pathways have been identified, many young people are still unaware of the existence of the industry or have not considered it as a career option.
- While Western Australian companies are sourcing skilled staff from interstate and overseas to complement their workforce, skilled local workers are also being sourced by other states/countries.
- Western Australia's clear airspace has attracted the international student training market, as highlighted by the use of Jandakot Airport as a training base for airline pilots from Singapore Airlines and China Southern Airlines. This places further pressure on domestic training availability.
- Improved alignment of qualifications to licencing and regulations is needed as some individuals opt to complete only the minimum licencing requirements without attaining other key training components.
- Although the sector remains male dominated, aviation is the second highest employer of females in the Western Australian transport and logistics industry.
- In late 2016 Perth secured long-haul flights to London. Due to commence in 2018, this development

³⁸² Aviation IRC Skills Forecast, 2017

³⁸³ Industry Consultation

³⁸⁴ <http://www.dtwd.wa.gov.au/workforce-development>

³⁸⁵ <https://www.mediastatements.wa.gov.au/Pages/Barnett/2017/02/Busselton-Margaret-River-set-for-take-off.aspx>

³⁸⁶ The Australian Aviation Associations' Forum, Aviation Policy 2016

³⁸⁷ Industry Consultation

presents an opportunity for Western Australia to become a hub for direct flights from Europe and would potentially increase patronage.

- In relation to smaller airports, particularly from regional stakeholders, concerns have been raised over the need for higher level skills that enable workers process and adequately respond to incidences that are beyond routine tasks.³⁸⁸

OTHER TRANSPORT

- Fluctuations in global fuel prices impact on the charges for services by airlines with flow on effects on importer/exporter charges.
- The import of fresh food supplies is still up, unlike most other commodities.
- The amount of project related work taking place is determining the workloads for companies on a contractual basis.
- The Trusted Trader Program trial between the Australian Border Force, importers and exporters was introduced to transition from a monitoring and enforcement approach towards self-regulation and trust. It is hoped that once fully implemented and operational. The program will reduce transaction times and foster a more cohesive use of statistical data.
- Digital disruption is a constant reminder to companies to be agile and be able to review their policies and procedures to remain compliant.
- Leaner efficiency drives implemented across the industry to cope with lower levels of growth in demand for services.
- Workers with prior experience in the road and trucking industry have proven to possess the qualities sought after by freight forwarders and customs brokers.
- Those with a sales background, knowledge of ports and aviation background tend to pick up on things fairly quickly as they are familiar with the operating environment.
- There is no longer as much pressure put on the workforce to deal with an influx of materials and equipment being bought into the country.
- There is a mix of both customs and freight clerks continuing to work in the industry.
- There is a casualisation of the workforce continuing to take place to accommodate those in the workforce deciding to stay working longer.
- Lower level prices from the resources sector impact the demand for purchases and services.
- In the coming years there could be a shift/change if the shortage persists. While some firms look into automation, others are dealing with the possibility of relocating workloads to other interstate offices and (electronic bypass).
- Potential changes to billing cycles to allow for greater flexibility in payments and tax/duty calculations.

WAREHOUSING AND STORAGE SERVICES

- The economic benefits of vertical integration have resulted in greater control and more efficient warehouse operations. More companies are opting for single user supply chain solutions that accommodate consumer preferences that demand greater flexibility, reliability, choice and speed.
- Traditional warehouses are being transformed into highly specialised warehouses, requiring equally specialised skills. Specialisation may be around a particular product, supply chain, customer or distribution network.
- An increasing number of intermodal hubs and distribution centres are located in close proximity to Perth and Jandakot airports, which provide more modern and tailored facilities with the added advantage of easy transport access.

³⁸⁸ Ibid.

- Semi-automation is improving the efficiency of supply chains and changing the nature of work as there are tasks that can be performed by computers or machines. Technology skills and problem solving skills are highly valuable in this environment.
- Following the challenges faced in 2015 of falling commodity prices and shifts in project work from construction to the operational phase, employers are slowly transitioning from a ‘wait and see’ approach to cautiously optimistic for 2016–17.³⁸⁹
- Faced with rapidly changing technology and adaptation to new workflow processes, employees feel an increased need and pressure to learn new skills (for example professional development and digital literacy).³⁹⁰
- As employers have to be highly flexible to customer needs, more so now than ever before, the role out and pace of organisational change presents challenges impacting their ability to adapt to multi-factor productivity in relatively short turnaround time frames.³⁹¹
- While progressive steps have been made with regard to making the industry more attractive to perspective workers, the female cohort remains an area which could be improved upon.
- The lack of adequate digital literacy skills is preventing further career progression of some workers and as technology is incorporated into operations. The skills and aptitude required of workers has risen as the duties are becoming more complex.
- With the growing need for technology within businesses to deliver real time information for analysis, companies are further investigating how to integrate mobile devices into their day to day operations. Some of the challenges associated with this include the durability of devices in high impact environments and implications of downtime during maintenance.
- Migrant workers account for 30% of workers in this industry. The high level of cultural diversity in the industry requires an in-depth understanding of cultural awareness from management when engaging and communicating with a diverse workforce. In some instances, pick-to-voice systems have assisted in addressing language barriers as well as improve on efficiency and accuracy rates.
- More investment is needed to train people at higher levels and in management positions, however the industry is faced with the challenge of not being able to release key members of staff for prolonged periods of time.
- The transport and logistics workforce, like a number of other sectors, are faced with a large proportion of workers set to retire in the next decade. Succession planning will impact the industry. The industry currently faces a recruitment challenge, whereby attracting, training and retaining young workers to undertake a career in the sector is proving to be a challenge. Compounding the issue is the increase use of sub-contracting and other new forms of employment engagement within the industry.
- With the nature of the work conducted (which predominantly comprises of shift work), start and finish times usually fall outside of peak travel times if utilising public transport. In Hazelmere, for example, the location is not adequately serviced by public transport and so private transport becomes a prerequisite to ensuring employment.

³⁸⁹ Industry Consultation

³⁹⁰ AIS Transport and Logistics IRC Key Findings Paper, March 2017

³⁹¹ Ibid.

2018 INDUSTRY WORKFORCE PRIORITIES³⁹²

ROAD TRANSPORT – FREIGHT

- Promotion of the recently established traineeship, Certificate II in Road Transport Yard Operations (Freight Handler) to employers and schools as a pathway into the road transport industry. The traineeship will include units from the Certificate II in Automotive Vocational Preparation to give a mechanical focus to the qualification.
- Identifying occupations in demand in the road transport sector via the State's Skilled Priority Occupation List (SPOL). Current occupations listed on SPOL include fleet manager (fleet controller/scheduler) and despatching and receiving clerk.
- Working with HVISTA to encourage the State Government to include mandatory units of competence for drivers to attain their heavy vehicle licence.

ROAD TRANSPORT – PASSENGER

- Work with the on-demand transport industry to identify and establish new contacts.
- Establish an industry working group for the road passenger industry.

RAIL TRANSPORT

- Identifying and promoting careers in the sector particularly to under-represented groups including young people, women and Aboriginal people. This includes the production of career guides for secondary schools to encourage young people into the industry.
- Identifying occupations in demand in the rail sector via the State's SPOL. Priority occupations listed on SPOL include transport engineer, train controller and train driver.

WATER TRANSPORT | TRANSPORT SUPPORT SERVICES

- Identify and promote career pathways in the maritime, ports and stevedoring sectors to attract and retain workers, by developing a Maritime Careers Pathways Guide. Widen the recruitment pool to include more young people, women and Aboriginal people. This includes aligning job roles to qualifications.
- Promote employment and training opportunities in the sector to school career advisors and VET coordinators to highlight VET in schools programs and school based traineeships.
- Identify occupations in demand in the maritime, ports and stevedoring sectors via the State's SPOL. Priority occupations reported against for SPOL 2017 include master fisher, ship's engineer, ship's master (marine pilot and harbour master), ship's officer, deck hand and marine surveyor.

AIR AND SPACE TRANSPORT

- Work is continuing on the State Aviation Training Strategy. Following the establishment of a steering committee in 2016, parameters on the scope of works have subsequently been agreed upon. Work has also commenced on the analysis of the industry through stakeholder consultation and the Logistics Training Council is awaiting input from the National Aviation Workforce Study which is due for release. The final report will provide feasible outcomes to address the training related challenges and opportunities within the aviation space.
- Promoting opportunities in industry to school career advisors and VET coordinators to highlight VET in schools programs and school based traineeships.
- Identifying and promoting career pathways in the aviation sector to attract and retain workers in both lower and higher level occupations. This includes aligning job roles to qualifications.
- Identify occupations in demand in the aviation sector via the SPOL. Priority occupations listed on SPOL include aeroplane pilot and helicopter pilot.

³⁹² Industry advice provided by the Logistics Training Council 2017

OTHER TRANSPORT

- Higher level workers with relevant work experience are still needed to replace the ageing workforce.
- How to tackle the brain drain of younger workers lured to more lucrative posts on the eastern states is having an adverse impact on the local workforce.
- There are no occupational shortages that have been identified in the short term.

WAREHOUSING AND STORAGE SERVICES

- As companies in Western Australia deal with a subdued market, there is an opportunity to develop strategies to address the growing need for evolving skill sets that deal with more sophisticated system application processes.
- Continued promotion of careers in the sector particularly to underrepresented groups including young people, women and Aboriginal people.
- Continued support for the education of new entrants to be knowledgeable of the fundamentals and the need to build up a level of experience.
- Promote higher level qualifications that are available to those that may be seeking to take on greater responsibilities and expand on their current skill sets.
- Identify occupations in demand in the warehousing and logistics sectors via the SPOL.

8.10. INFORMATION MEDIA AND TELECOMMUNICATIONS

OVERVIEW

The information media and telecommunications division is mainly engaged in:

- creating, enhancing and storing information products in media that allows for their dissemination;
- transmitting information products using analogue and digital signals (via electronic, wireless, optical and other means); and
- providing transmission services and/or operating the infrastructure to enable the transmission and storage of information and information products.

Information products are defined as those which are not necessarily tangible, and, unlike traditional goods, are not associated with a particular form. The value of the information products is embedded in their content rather than in the format in which they are distributed. For example, a movie can be screened at a cinema, telecast on television or copied to video for sale or rental. The sub sectors in the industry include³⁹³:

- publishing (except internet and music publishing);
- motion picture and sound recording activities;
- broadcasting (except internet);
- internet publishing and broadcasting;
- telecommunications services;
- internet service providers, web search portals and data processing services; and
- library and other information services.

As of May 2017, the industry employed approximately 14,900 Western Australians, representing 1.1% of the State's workforce. In the year to May 2017, the industry experienced an average annual decline of 1,200 persons or 8.0%. Over the five years to May 2017 the industry has experienced a net gain of 1,800 persons or 12.8% of its workforce.

³⁹³ ABS, 1292.0 - Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (Revision 1.0)

The industry is dominated by non-employing businesses (66.8%), with 2.7% of enterprises having 20 or more employees.³⁹⁴

The industry predominantly employs on a full time basis, with only 34.4% of workers employed part time.³⁹⁵

The industry has a majority male workforce at 59.7% compared to the total State proportion of 54.9%. While close to half of workers in this industry being female, between 2016 and 2017, the industry experienced an increase of some 4,600 female workers.

As of Census 2011, the 76.2% of the industry's workforce falls within the 25-64 age group and is consistent with the State's average (80.7%), the industry has a strong youth presence, with some 21.2% of the workforce falling between the ages of 15 and 24.

In 2015–16, the information media and telecommunications industry contributed 1.4% towards the gross State product for Western Australia.³⁹⁶

ECONOMIC AND LABOUR MARKET SNAPSHOT³⁹⁷

Economic indicators	Information media and telecommunications	WA average across all industries
% of total WA employment	1.1%	
% average annual employment growth in 2016–17	-8.0%	-0.3%
% of full time employment	65.6%	68.1%
% of female employment	40.3%	45.1%
% of metropolitan employment ³⁹⁸	88.1%	78.3%
% of total WA gross State product (GSP) at 2016 ³⁹⁹	1.4%	

³⁹⁴ Australian Bureau of Statistics. (2017). 8165.0 *Counts of Australian Businesses, including Entries and Exits, Jun 2011 to Jun 2016*.

³⁹⁵ ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017

³⁹⁶ ABS, 5222.0, State Accounts

³⁹⁷ ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017 (unless otherwise stated)

³⁹⁸ Census 2011

³⁹⁹ ABS cat. no. 5220.0, National Accounts: State Accounts 2015-16, November 2016

SNAPSHOT OF VET DELIVERY (COURSE ENROLMENTS) – 2014–2016

INFORMATION MEDIA AND TELECOMMUNICATIONS	2014	2015	2016
Total course enrolments (NTA)	2,847	2,534	2,458
AQF level			
Certificate IV and above	684	619	721
Certificate III and below	2,163	1,915	1,737
Type of study			
Apprenticeship and traineeship	232	272	220
Institutional delivery	2,615	2,262	2,238
Location			
Metropolitan	1,963	1,619	1,686
Regional	881	915	772
Training providers			
TAFE	2,523	2,305	2,301
Private training organisations	324	229	157
Aboriginal people			
Course enrolments	127	130	94
Young people (15-24 years) – AQF level			
Certificate IV and above	458	373	499
Certificate III and below	1,142	1,073	1,005

TOP FIVE QUALIFICATIONS BY NTA SCOPE COURSE ENROLMENTS⁴⁰⁰ 2016

Qualification
Certificate III in Information, Digital Media and Technology
Certificate II in Information, Digital Media and Technology
Diploma of Screen and Media
Certificate III in Telecommunications
Certificate III in Media

Source: VET Enrolment Data Collection19F⁴⁰¹, final full year data for 2016

TOP FIVE VET IN SCHOOLS QUALIFICATIONS DELIVERED BY NTA SCOPE COURSE ENROLMENTS 2016

Qualification
Certificate II in Information, Digital Media and Technology
Certificate III in Information, Digital Media and Technology
Certificate III in Media
Certificate II in Information, Digital Media and Technology
Certificate II in Creative Industries (Media)

Source: VET Enrolment Data Collection19F⁴⁰², final full year data for 2016

⁴⁰⁰ Includes VET in Schools training delivery

⁴⁰¹ Data collection is for the National Training Agreement (NTA) scope which is only for enrolments funded by the Department of Training and Workforce Development.

⁴⁰² Ibid.

INDUSTRY DEVELOPMENTS AND WORKFORCE CHALLENGES

PUBLISHING (EXCEPT INTERNET AND MUSIC PUBLISHING)⁴⁰³

- The current economic climate has introduced challenges to sustainability. These challenges include reduced financial contribution from business, reduced government funding and reduced disposable income across potential audiences.
- With the sector in a period of consolidation, publishers lack the capacity to take risks.
- A high level of technological change is providing competition to the sector in the form of free content.
- E-books enable piracy and the sector is seeing some erosion of sales because of this phenomenon.
- Educational books account for nearly a third of all sales; however it is a diminishing market owing to the rise of e-books.
- Writers, journalists and editors now need to have a broad skill set that encompasses marketing and promotion, small business management, website development and screen editing.
- Simultaneously the explosion of content has driven down the per-word rate for professional journalists and writers, affecting their capacity to build sustainable careers.
- This makes increasingly costly, related degrees less viable for many students.
- Illegal downloading and appropriation of works are making knowledge of intellectual property and copyright essential.
- Sector leaders struggle to prioritise professional development, given considerable financial and time constraints. Western Australia has only a handful of viable publishers and succession planning is a leading concern for these small businesses.
- As web-based platforms continue to drive new business and consumer markets for Western Australia's writers and editors, greater web development and digital marketing skills are required to facilitate best use of these digital platforms and access new markets.

MOTION PICTURE AND SOUND RECORDING ACTIVITIES | BROADCASTING (EXCEPT INTERNET) | INTERNET PUBLISHING AND BROADCASTING⁴⁰⁴

- A number of sectors within the screen and media industries are in permanent decline, owing to a combination of diversified mediums, reduced perceived value by the consumer and the subsequent drop in value of associated advertising.
- As such, development challenges are viewed in declining industry sectors as insurmountable, and industry instead seeks the point where consolidation is complete and new models can emerge. The high-production-value, specialist magazine publishing sector is a good example of a much smaller but financially secure future-proof industry.
- As with many creative industries, the film industry in Western Australia faces thin market issues. Achieving capacity and stability is difficult, training is a costly option for prospective industry workers, with little guarantee of a sustainable career path, and efficiencies of scale cannot be accessed. The global financial crisis has added to the challenges faced by industry, with funding sources from government initiatives to investment channels significantly reduced. Despite conditions, the Western Australian film industry is growing consistently and a recent \$16m Western Australian Regional Film Fund being administered through Screenwest is set to provide welcome support.⁴⁰⁵
- Similar conditions affect the animation and games development sectors, however the digital-first nature of these industries coupled with the time-zone advantages enjoyed by Western Australia mean the State is not challenged by physical isolation in the same way it can be in other areas. Given the exponential growth of games and animation internationally, industry is hopeful they will be viewed as prime candidates for targeted investment and support and confident that Western Australia could be

⁴⁰³ Industry advice provided by FutureNow: Creative and Leisure Industries Training Council 2017

⁴⁰⁴ Ibid.

⁴⁰⁵ <https://www.mediastatements.wa.gov.au/Pages/Barnett/2016/12/New-Screenwest-home-structure-to-drive-jobs.aspx>

Accessed 28.3.17

a hub for these sectors.

- The new State Government's commitment to promoting virtual and augmented reality technology and related industries should have a positive impact on the screen, animation and games development industries.
- The challenge to traditional business models brought about by technological advancement has precipitated evolving skill-set requirements in industry.
- Across the content industries, workers are required to hold a broad set of skills including small business management, writing, editing, web editing and content management, filming and film editing, presenting to camera, data analytics and intellectual property knowledge.
- This allows a worker to deliver content across multiple platforms, as demanded by the consumer, and to analyse what is attracting audiences, in turn raising the value of paid advertising content.
- It also allows them to build an independent freelance career and protect their work at a time when permanent full time roles are disappearing.
- A confounding factor however is that while education fees rise, pay for journalists and others in the content industries is falling, making them a less attractive option for students seeking a secure career path. While demand for content is ever growing, what the consumer is willing to pay has declined steeply.
- Any potential effort to significantly grow the animation and/or games development industries in Western Australia will need to be met by timely initiatives to attract students to associated qualifications in order to develop a large enough local workforce in the medium term. It is likely in the shorter term that a mix of local and international expertise would be required.

TELECOMMUNICATIONS SERVICES⁴⁰⁶

- Integration of technologies and the software applications associated with the 'Internet of Things' (IoT) will continue to evolve very rapidly. This rapid change will have a significant impact on the current training packages.
- Emergence of IoT and the new wireless standards for Long Term Evolution will lead to developments around this part of the telecommunications sector.
- The lack of employment opportunities in regional areas leads to low enrolment numbers in telecommunication apprenticeships, thus making the delivery of training unviable.
- Technological changes and transformation through the application of digital technology.
- Integration of technologies such as electronics, telecommunications, renewable energy, energy storage and the software applications associated with the IoT will continue to evolve very rapidly. This change will have a significant impact on the current training packages.
- The need for trade personnel to keep abreast of technological changes in their respective areas to meet industry requirements.
- Training packages will require reviewing to ensure these needs are addressed or specialised skill sets offered and customised to meet the needs of industry.
- Lack of expertise with the following skills: IoT engineer; IoT network engineers; IoT electronic developers; and narrowband radio engineers.
- Identifying and delivering training in a very fluid environment – technology is changing quicker than the training products and industry is unable to keep pace with transformation and digital utilisation.
- Pressure to reduce delivery hours to apprentice groups.
- Delays with the development of relevant training packages creates a further disconnect between industry needs and training delivery.
- Decentralisation of the industry.
- Industry downturn, privatisation and contracting out of projects has impacted on a reduction of

⁴⁰⁶ Industry advice provided by Utilities, Engineering, Electrical and Automotive Training Council 2017

traditional apprenticeships/traineeships employment.

- Regulatory body (industry licensing) needs to be more involved in the development of training or recognising/suggesting suitable training options which the regulators would accept.
- International Telecommunication Union ratification of Cat M and Cat NB-IoT standards in the next twelve months to transform industry through the application of sensors, actuators and controllers, for smart farming, transport, tourism and city management.
- Shortage of personnel with specialised technological skills.
- Technological changes across trade will require a mix of new and pre-existing competencies around narrowband radio, electronics, sensors, actuators and controllers. Keeping abreast of these changes and the impact required on customisation of training will require close collaboration with industry to meet the skills they require.

INTERNET SERVICE PROVIDERS, WEB SEARCH PORTALS AND DATA PROCESSING SERVICES⁴⁰⁷

- Digital technologies are expanding rapidly and there is still concern in some quarters around whether the National Broadband Network will provide adequate infrastructural support to Australian industry.
- Australia performs poorly in measures around the level of collaboration between universities and industry; however the National Innovation and Science Agenda has introduced a number of incentives to support research collaboration.
- Similarly the national agenda seeks to incentivise a start-up culture with a number of financial supports and concessions being made available.
- Industry recognises small business and start-ups face challenges when scaling product.
- It could be argued that the most significant development issue facing Australian information and communication technology (ICT) industries is workforce skills related, with local talent being rapidly drawn away to digital hubs such as San Francisco.
- Sectors of industry see the new skilled visa rules as exacerbating this issue since they no longer provide a permanent migration pathway and thus could be less attractive.
- This can leave local industry without the high-level strategic and innovative workforce capable of developing and delivering scalable product.
- Enrolments and completions at VET and higher level study have been in steady decline for some time and currently stand at less than half of what they were ten years ago.
- There were 347 completions at undergraduate level and above in Western Australia in 2015, versus a peak of 809 in 2002.⁴⁰⁸
- Between 2011–2015, ICT VET enrolments fell from 4,112 to 2,679 in Western Australia.⁴⁰⁹ There is considerable industry concern around how to meet the projected uplift in demand for ICT skills when enrolments are dropping.
- Industry work around content mapping of overseas qualifications has raised concern in some areas and contributes to industry's preference to source labour locally where possible, making initiatives to address falling enrolments and completions vital.
- There is a significant shortage of skilled ICT security specialists as well as a skills gap in this area across the broader ICT workforce.
- The number of primary 457 visa applications granted in Western Australia in the information, media and telecommunications sector fell by 12.2% between 2014–15 and 2015–16.⁴¹⁰ Industry expects that new skilled visa rules will lead to a further decline in the coming year.

⁴⁰⁷ Industry advice provided by FutureNow: Creative and Leisure Industries Training Council 2017

⁴⁰⁸ Department of Education uCube data. Accessed 8.2.17

⁴⁰⁹ DTWD Cognos VESU data cube. Accessed 13.2.17

⁴¹⁰ <https://www.border.gov.au/ReportsandPublications/Documents/statistics/457-quarterly-report-2015-12-31.pdf>

Accessed 8.2.17

- Industry recognizes the need to improve the skills base locally and that it is left vulnerable to changing market conditions globally by relying on Western Australia remaining an attractive option for skilled migrants.
- Some low to medium level vocationally-oriented ICT roles will continue to be replaced by the technology itself, as others shift overseas. This leaves a pathway gap with fewer entry level roles available for graduates to “cut their teeth” in.
- The pace of change possible with regards to training and education content is not always adequately able to meet the pace of change within industry. This issue has been recognised by the ICT Industry Reference Committee (IRC) and PwC, the Skills Service Organisation. A new ICT training package was released in 2016 with a view to keep content at a level general enough to accommodate industry developments where possible.

LIBRARY AND OTHER INFORMATION SERVICES⁴¹¹

- While the library and archives sectors have access to appropriate qualifications, they are subject to reduced funding, rapid digital advancement and changes in visitor habits as a result of widespread internet access. This has resulted in a need for a broader skills base, incorporating visitor services, events, curating, marketing, and business expertise.
- Peak body ALIA (Australian Library and Information Association) predict a small growth in available positions within the sector over the coming five years, however the need for unqualified workers is rapidly diminishing.⁴¹²
- Libraries are operating under significantly reduced budgets and, as well as resulting in some closures, this is impinging upon the facilities they are able to provide the public during a period of consolidation and repositioning.
- While there is significant discussion around how libraries can be repurposed in the digital age, the business and marketing skills required to execute change are often missing, as is sufficient capital.
- Libraries face increasing pressure to grow self-generated income and are forging new business models to meet this demand.

2018 INDUSTRY WORKFORCE PRIORITIES

PUBLISHING (EXCEPT INTERNET AND MUSIC PUBLISHING)⁴¹³

- Supporting the capacity of the arts sector through promoting the funding of a long term solution to the professional development needs of sector leaders and the broader sector.
- The IRC’s four year work plan and industry consultation around the development of writing and editing qualifications
- Promoting the value of sector peak body WritingWA where appropriate.

MOTION PICTURE AND SOUND RECORDING ACTIVITIES | BROADCASTING (EXCEPT INTERNET) | INTERNET PUBLISHING AND BROADCASTING⁴¹⁴

- One area in which both free-to-air and subscription television services are seeing growth is live or outside broadcast, especially with regards to live televised sporting, cultural and tourism events. This area is resistant to digital transformation in that it will always require a physically present film crew and as such, demand remains strong for this workforce. The upcoming opening of the Perth Stadium is predicted to increase demand in this area and recent events have required workers to fly in to address demand. North Metropolitan TAFE has reported strong employment outcomes for graduates

⁴¹¹ Industry advice provided by FutureNow: Creative and Leisure Industries Training Council 2017

⁴¹² <https://www.alia.org.au/media-releases/lis-qualifications-increasingly-important-employment-alia-lis-education-skills-and-employment-trend> Accessed 14.2.17

⁴¹³ Industry advice provided by FutureNow: Creative and Leisure Industries Training Council 2017

⁴¹⁴ Ibid.

of their Advanced Diploma of Screen and Media (Outside Broadcast), and FutureNow is working with industry to examine the potential to develop a traineeship in this qualification.

- FutureNow is working closely with its Screen and Media, Visual Art and Design, and Information Communications Technology Industry Advisory Groups to monitor developments in the significant growth markets of animation and games development. While currently small in Western Australia, these industries have substantial potential to grow into important economic drivers for the State.

TELECOMMUNICATIONS SERVICES⁴¹⁵

- Work collaboratively with the Utilities, Engineering, Electrical and Automotive Training Council Inc's sector specific Industry Advisory Group to review the current training courses in regards to new competencies for narrowband radio and potential for new electronics competencies around sensors, actuators and controllers.
- Work collaboratively with telecommunications sector to identify commonality with electro technology sector to seek benefits from the increasing correlation between the occupations within them.
- Work collaboratively with registered training organisation's regarding the delivery of training in a very fluid environment and the need for training products to keep pace with transformation and digital utilisation.

INTERNET SERVICE PROVIDERS, WEB SEARCH PORTALS AND DATA PROCESSING SERVICES⁴¹⁶

- Advocating for the benefits of accredited training and facilitating closer links between providers and industry in order to improve the flow of detailed information about industry needs.
- Supporting industry in avoiding labour shortages through providing current industry information to the Department through contributing to the State Priority Occupation List.
- Providing qualifications and pathways information to stakeholders through contributing to the VET in Schools Register.
- Continual development of the FutureNow Information and Communication Technology Industry Advisory Group which to date includes senior representatives of industry peak bodies the Australian Computer Society and the Australian Information Industry Association, and of the national Industry Reference Committee, the Western Australian Police, broader industry and registered training organisations.

LIBRARY AND OTHER INFORMATION SERVICES⁴¹⁷

- Working with the Galleries, Libraries, Archives and Museums Industry Advisory Group, including senior representatives of library peak bodies to identify critical work to support workforce development for the sectors.

⁴¹⁵ Industry advice provided by Utilities, Engineering, Electrical and Automotive Training Council 2017

⁴¹⁶ Industry advice provided by FutureNow: Creative and Leisure Industries Training Council 2017

⁴¹⁷ Industry advice provided by FutureNow: Creative and Leisure Industries Training Council 2017

8.11. FINANCIAL AND INSURANCE SERVICES

OVERVIEW

The financial and insurance services industry is mainly engaged in financial transactions involving the creation, liquidation, or change in ownership of financial assets, and/or in facilitating financial transactions. The sub sectors in the industry include⁴¹⁸:

- finance;
- insurance and superannuation funds; and
- auxiliary finance and insurance services.

As of May 2017, the industry employed approximately 33,900 Western Australians, representing 2.5% of the State's workforce. In the year to May 2017, the industry experienced an average annual growth of 4,300 persons or 14.1%, (albeit from a small base and following longer term declines in employment). Over the five years to May 2017 the industry has experienced a net gain of 4,300 persons or 15.6% of its workforce.

The industry is dominated by non-employing businesses (83.0%), with only 0.5% of enterprises having 20 or more employees.⁴¹⁹

The industry predominantly employs on a full time basis, with only 22.2% of workers employed part time.⁴²⁰

The industry has a majority female workforce at 59.5% compared to the total State proportion of 45.1%.

As of Census 2011, the 86.5% of the industry's workforce falls within the 25-64 age group and is higher than the State's average (80.7%). The industry has a smaller youth employment presence with 11.1% of the workforce falling between the ages of 15 to 24 years, compared to the State average of 16.2% over all industries.

In 2015–16, the industry contributed 4.2% towards the gross State product for Western Australia.⁴²¹

ECONOMIC AND LABOUR MARKET SNAPSHOT⁴²²

Economic indicators	Financial and insurance services	WA average across all industries
% of total WA employment	2.5	
% average annual employment growth 2016–17	14.5	-0.3
% of full time employment	77.8	68.1
% of female employment	59.5	45.1
% of metropolitan employment ⁴²³	89.8	78.3
% of total WA gross State product (GSP) at 2016 ⁴²⁴	4.2	

⁴¹⁸ ABS, 1292.0 - Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (Revision 1.0)

⁴¹⁹ Australian Bureau of Statistics. (2017). 8165.0 *Counts of Australian Businesses, including Entries and Exits, Jun 2011 to Jun 2016*.

⁴²⁰ ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017

⁴²¹ ABS, 5222.0, State Accounts

⁴²² ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017 (unless otherwise stated)

⁴²³ Census 2011

⁴²⁴ ABS cat. no. 5220.0, National Accounts: State Accounts 2015-16, November 2016

SNAPSHOT OF VET DELIVERY (COURSE ENROLMENTS) – 2014–2016

FINANCIAL AND INSURANCE SERVICES	2014	2015	2016
Total course enrolments (NTA)	240	140	61
AQF level			
Certificate IV and above	148	80	44
Certificate III and below	92	60	17
Type of study			
Apprenticeship and traineeship	146	72	32
Institutional delivery	94	68	29
Location			
Metropolitan	236	133	58
Regional	4	7	3
Training providers			
TAFE	145	91	34
Private training organisations	95	49	27
Aboriginal people			
Course enrolments	9	14	3
Young people (15-24 years) – AQF level			
Certificate IV and above	54	41	21
Certificate III and below	57	42	11

TOP FIVE QUALIFICATIONS BY NTA SCOPE COURSE ENROLMENTS 2016

Qualification
Certificate III in Financial Services
Certificate IV in Banking Services
Diploma of Banking Services Management
Certificate IV in Financial Services
Certificate IV in Financial Services (Different Nat ID to above Cert IV)

Source: VET Enrolment Data Collection19F⁴²⁵, final full year data for 2016

Note: No VET in Schools enrolments for this industry classification.

INDUSTRY DEVELOPMENTS AND WORKFORCE CHALLENGES⁴²⁶

- Four key trends impacting the industry as a whole include Fintech and automation, increased regulation, demographic changes and demand for higher education.⁴²⁷
- The industry is characterised as being highly competitive, highly regulated and impacted by cost pressures and risk aversion. Demand is seen for experienced professionals in compliance, risk and business development roles, such as auditing, financial and business analysts as well as roles supporting processes, procedures and reporting (financial administration roles).⁴²⁸
- Fintech innovation is an area of keen interest and development in the industry. In this context the industry faces challenges relating to purely digital offerings, these include digital identity systems, fraud/cyber-security, regulatory compliance, risk and the customer experience and product delivery. Demand for skilled workers to manage these issues is expected to increase.⁴²⁹
- Fintech developments are also felt at the client-service provider interface. Offerings need to be mobile/smart phone optimised, and wearable technology such as the Apple watch are moving into

⁴²⁵ Data collection is for the National Training Agreement (NTA) scope which is only for enrolments funded by the Department of Training and Workforce Development.

⁴²⁶ Industry advice provided by Financial Administrative and Professional Services Training Council

⁴²⁷ Skills for Australia - Financial Services Industry. www.skillsforaustralia.com/industries/financial-services/

⁴²⁸ Based on industry consultation and desktop employment advertising research (www.seek.com.au)

⁴²⁹ A Blueprint for Digital Identity - The Role of Financial Institutions in Building Digital Identity. World Economic Forum in consultation with Deloitte

the marketplace, changing the way people access their money and point of sale. Online, mobile and contactless EFTPOS options are all in development and due for release in 2017, with contactless already being rolled out ⁴³⁰. Mobile business operators are also increasingly turning to app-solutions to take EFTPOS and credit card payments (Paypal Here, PayAnywhere, Square, etc.).

- Due to Fintech advances, including those described, and the raft of accounting and related software options, organisations as well as their front-line and professional staff are increasingly required to have knowledge of a variety of digital tools and offerings, with the ability to explain them to, and assist both private and corporate customers in their use.
- This is a highly regulated industry and work across the sector is increasingly complex and multi-faceted. Higher levels of qualification are stipulated for most occupations to comply with licensing, regulatory and professional requirements.
- Demand for individuals with strong communication and other soft skills remains strong ⁴³¹ as the industry continues to become increasingly focussed on the customer relationship.
- The industry is characterised by an ageing workforce. ⁴³²
- Low numbers of Aboriginal people, young and mature age job seekers and regional communities are engaged in the industry and numbers undertaking relevant vocational qualifications have declined to almost nil.
- Indications are that fewer accountants are taking up licensing options to provide financial advice than anticipated, seeing it as a high cost, low return option. ⁴³³ This will likely exacerbate demand for financial planners. There is concern that the new educational requirements will lead many experienced planners to exit the industry, resulting in supply issues. ⁴³⁴
- In line with other industries, traineeships in the financial services industry have declined dramatically. Where the State engages 11% of the national workforce in this industry, it accounts for only 7% of the financial services training package enrolments.
- There is limited uptake of entry level traineeships and institution-based training, despite promotion to schools, where such options contribute to student's achieving their WACE. The school-to-work transition is unclear, despite traineeship and institution-based training pathways being aligned to accounts administration roles and the in-demand payroll occupation. While transitions beyond early-career roles do typically require tertiary qualifications, there are clear articulation pathways out of vocational qualifications. Interest in entry to the industry appears to be the primary issue, rather than career progression within it and greater understanding by those advising learners of the entry level occupations and pathway beyond is required.
- The negative impact from the global financial crisis has impacted on the sector where there is limited growth of employment which then acts as a disincentive to new entrants who see rewarding opportunities in other professions and industries. The ongoing workforce decline suggests this is still an issue.
- An increasing proportion of vacancies in finance professions are temporary/contract roles for niche projects and work.

⁴³⁰ Eftpos Australia. www.eftposaustralia.com.au/your-eftpos/consumer-info/faq-consumer/

⁴³¹ Skills for Australia - Financial Services Industry. www.skillsforaustralia.com/industries/financial-services/

⁴³² Industry consultation, Job Outlook, latest data (2015), www.joboutlook.gov.au (National data)

⁴³³ Feedback from the Institute of Public Accountants - WA Branch

⁴³⁴ Comment from The Financial Planning Association and the Association of Financial Advisors, as quoted in www.mentor.edu.au/blog/2016/02/12/degrees-for-advisors-what-you-need-to-know/ and in Financial advisers say new standards could push thousands to quit, Sydney Morning Herald, 2410112016

2018 INDUSTRY WORKFORCE PRIORITIES⁴³⁵

- Attraction of new workers to the industry has been compromised by negative perceptions due to scandals, the global financial crisis and lack of knowledge of occupations and career paths outside the most common/mainstream. The Financial, Administrative & Professional Services Training Council continues to promote traineeships to industry and individuals to skill workers in accounts, payroll, financial administration and accounting technician roles. The Certificate II in Financial Services continues to be promoted to schools as an alternative to business qualifications, with continuing work with relevant education and curriculum stakeholders to provide employment, career and education pathway advice.
- Concern regarding the currency of vocational qualifications particularly with regard to current and emerging technologies. The training council maintains a strong working relationship with PwC's Skills for Australia to ensure the Western Australian industry has input into training package projects. In addition the training council is working to build on and leverage industry network to gain additional insights into changing workforce profile, skill and education demands and concerns.
- Indigenous Australians are poorly represented and migrants who are often highly experienced and qualified struggle to find employment in the industry. The training council continues to promote Indigenous traineeships, mentoring and similar offered by industry stakeholders and training options to assist migrants in becoming more attractive as workers to local employers.
- The increase in the number of temporary/contract/project based roles means workers will need to consider and build their business and consulting acumen and consider niche specialisations in addition to their broader generalist knowledge. Business and risk analysis and business development skills are a priority as businesses function in an increasingly regulated environment and competitive market place. Organisations increasingly rely on non-financial professionals in marketing, management consulting and similar to create a competitive advantage. Retail sales experience and skill is sought after in front-line staff, particularly in the banking sector, as well as in insurance.

8.12. RENTAL, HIRING AND REAL ESTATE SERVICES

OVERVIEW

The rental, hiring and real estate services industry is mainly engaged in renting, hiring, or otherwise allowing the use of tangible or intangible assets (except copyrights). The assets may be tangible, as in the case of real estate and equipment, or intangible, as in the case with patents and trademarks.

The sector is also engaged in providing real estate services such as selling, renting and/or buying real estate for others, managing real estate for others and appraising real estate.

As of May 2017, the industry employed approximately 23,100 Western Australians, representing 1.7% of the State's workforce. In the year to May 2017, the industry experienced an average annual decline of 1,500 persons or 6.0%. Over the five years to May 2017 the industry has experienced a net decline of 2,700 persons or 11.4% of its workforce.

The industry is dominated by non-employing businesses (84.9%), with 1.1% of enterprises having 20 or more employees.⁴³⁶

The industry predominantly employs on a full time basis, with only 24.0% of workers employed part time.⁴³⁷

The industry has a majority female workforce at 51.5% compared to the total State proportion of 45.1%.

⁴³⁵ Industry advice provided by Financial Administrative and Professional Services Training Council

⁴³⁶ Australian Bureau of Statistics. (2017). 8165.0 *Counts of Australian Businesses, including Entries and Exits, Jun 2011 to Jun 2016*.

⁴³⁷ ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017

As of Census 2011, the 80.3% of the industry's workforce falls within the 25-64 age group and is consistent with the State's average (80.7%), the industry does have an ageing profile, with some 5.7% of the workforce being 65 years of age or older, compared to only 3.1% across all industries.

In 2015–16, the rental, hiring and real estate services industry contributed 2.1% towards the gross State product for Western Australia.⁴³⁸

ECONOMIC AND LABOUR MARKET SNAPSHOT⁴³⁹

Economic indicators	Rental, hiring and real estate services	WA average across all industries
% of total WA employment	1.7	
% average annual employment growth 2016–17	-6.0	-0.3
% of full time employment	76.0	68.1
% of female employment	51.5	45.1
% of metropolitan employment ⁴⁴⁰	81.6	78.3
% of total WA gross State product (GSP) at 2016 ⁴⁴¹	2.1	

SNAPSHOT OF VET DELIVERY (COURSE ENROLMENTS) – 2014–2016

RENTAL, HIRING AND REAL ESTATE SERVICES	2014	2015	2016
Total course enrolments (NTA)	178	119	70
AQF level			
Certificate IV and above	166	111	67
Certificate III and below	12	8	3
Type of study			
Apprenticeship and traineeship	164	107	70
Institutional delivery	14	12	0
Location			
Metropolitan	148	108	49
Regional	30	11	21
Training providers			
TAFE	110	86	44
Private training organisations	68	33	26
Aboriginal people			
Course enrolments	0	1	1
Young people (15-24 years) – AQF level			
Certificate IV and above	64	31	23
Certificate III and below	12	8	3

⁴³⁸ ABS, 5222.0, State Accounts

⁴³⁹ ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017 (unless otherwise stated)

⁴⁴⁰ Census 2011

⁴⁴¹ ABS cat. no. 5220.0, National Accounts: State Accounts 2015-16, November 2016

TOP FIVE QUALIFICATIONS BY NTA SCOPE COURSE ENROLMENTS 2016

Qualification
Certificate IV in Property Services (Real Estate)
Certificate IV in Property Services (Operations)
Certificate III in Property Services (Operations)
-
-

Source: VET Enrolment Data Collection19F⁴⁴², final full year data for 2016

Note: No VET in Schools enrolments for this industry classification.

INDUSTRY DEVELOPMENTS AND WORKFORCE CHALLENGES⁴⁴³

- Investment activity in the residential sector is relatively weak as there has been a massive shift in rental demand across Western Australia as population growth declines. Vacancy rates are high, particularly in commercial properties in the CBD and this is driving rental prices down significantly.
- Residential construction has slowed and properties are sitting on the market for longer before sale.⁴⁴⁴
- Advances in technology continue to impact on the way the real estate and property services industries operate. Workers need to be increasingly technology literate and familiar with industry-specific software.
- The strata management sector has long relied on contextualisation of existing property operations qualifications to train their workforce. However, new occupation specific qualifications (Certificate III, IV and Diploma) were released in 2016. Desire for traineeship delivery has already been formally expressed in Western Australia.⁴⁴⁵
- The real estate industry is highly regulated and business operators must be licensed and representatives working under a licensed operator must be either licensed or registered through the Department of Commerce.
- An ageing population is presenting new challenges for the real estate industry. This is due to the changes from living in the family freehold property to a leasehold retirement complex. Demand for individuals with experience and knowledge in this area is expected to increase.
- Migrants with experience and qualifications have difficulty entering licensed industries due to lack of local experience, professional networks and knowledge of Australian property market and culture⁴⁴⁶.
- Low numbers engaging in the sector from within Aboriginal and youth cohorts.⁴⁴⁷ Pathways do exist for those entering the industry in administrative roles to move into property management and sales.
- There is concern among some stakeholders regarding fast-tracked training for licensing purposes.

2018 INDUSTRY WORKFORCE PRIORITIES⁴⁴⁸

- The impact of digitisation is of concern to industry as it is anticipated to impact not only on the skills and knowledge required to enter the workforce, but those required by experienced workers and across all roles.
- The industry is characterised by a large number of sole traders and upskilling and remaining current with technological changes is expected to present a greater challenge for this group. The current economic climate has also seen many begin to exit the workforce, which may have implications in the longer term as the economy improves.

⁴⁴² Data collection is for the National Training Agreement (NTA) scope which is only for enrolments funded by the Department of Training and Workforce Development.

⁴⁴³ Industry advice provided by Financial Administrative and Professional Services Training Council

⁴⁴⁴ Advice from REIWA

⁴⁴⁵ Strata Management Community WA (industry professional association)

⁴⁴⁶ Based on industry consultation

⁴⁴⁷ Ibid

⁴⁴⁸ Industry advice provided by Financial Administrative and Professional Services Training Council

- Concern has been expressed by some stakeholders regarding the quality of training being provided. In addition there is concern about the currency of the content in qualifications. This has been the subject on ongoing review of the qualifications by the Construction and Property Services Industry Skills Council (CPSISC) and its successor Artibus. The training council continues to work closely with Western Australian stakeholders to ensure their input is included for consideration during this process.
- Industry consultation reveals that women remain underrepresented in specific occupations within the industry, particularly in real estate sales and facility management, the latter sourcing much of their workforce from among ex-tradespeople. In addition, migrant workers who hold industry qualifications in other countries are not able to enter the industry in Australia, due to the Certificate IV entry requirement and need to understand and work with relevant legislation.
- The relatively high educational requirement is also a barrier to some Indigenous Australians. The training council continues to consult with relevant stakeholders regarding barriers to entry and workforce diversity issues, and to promote the industry and training to underrepresented groups.

8.13. PROFESSIONAL, SCIENTIFIC AND TECHNICAL SERVICES

OVERVIEW

The professional, scientific and technical services industry is mainly engaged in providing professional, scientific and technical services.

Sectors engaged in providing these services apply common processes where labour inputs are integral to the production or service delivery. Sectors in this division specialise and sell their expertise. In most cases, equipment and materials are not major inputs. The activities undertaken generally require a high level of expertise and training and formal (usually tertiary level) qualifications.

Subsectors within the industry include activities related to legal and accounting, advertising, market research and statistical, management and related consulting, surveying and mapping, other professional, scientific and technical services, and veterinary services.

As of May 2017, the industry employed approximately 99,200 Western Australians, representing 7.4% of the State's workforce. In the year to May 2017, the industry experienced an average annual decline of 1,100 persons or 1.0%. Over the five years to May 2017 the industry has experienced a net gain of 4,600 persons or 5.0% of its workforce.

The industry is dominated by non-employing businesses (64.6%), with 1.8% of enterprises having 20 or more employees.⁴⁴⁹

The industry predominantly employs on a full time basis, with only 23.7% of workers employed part time.⁴⁵⁰

The industry has a majority male workforce at 60.5% compared to the total State proportion of 54.9%.

As of Census 2011, the 86.3% of the industry's workforce falls within the 25-64 age group and is above the State's average (80.7%). The industry does have a smaller proportion of persons employed from the youth cohort, with some 10.4% of the workforce being aged between 15 and 24, compared to only 16.2% across all industries. However this can be partly attributed to the higher proportion of occupations and fields of education that have traditionally longer lead times prior to employment, making it difficult for persons of these age group to enter.

In 2015–16, the professional, scientific and technical services industry contributed 5.0% towards the gross State product for Western Australia.⁴⁵¹

⁴⁴⁹ Australian Bureau of Statistics. (2017). 8165.0 *Counts of Australian Businesses, including Entries and Exits, Jun 2011 to Jun 2016*.

⁴⁵⁰ ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017

ECONOMIC AND LABOUR MARKET SNAPSHOT⁴⁵²

Economic indicators	Professional, scientific and technical services	WA average across all industries
% of total WA employment	7.4	
% average annual employment growth in 2016–17	-1.0	-0.3
% of full time employment	76.3	68.1
% of female employment	39.5	45.1
% of metropolitan employment ⁴⁵³	90.4	78.3
% of total WA gross State product (GSP) at 2016 ⁴⁵⁴	5.0	

SNAPSHOT OF VET DELIVERY (COURSE ENROLMENTS) – 2014–2016

PROFESSIONAL, SCIENTIFIC AND TECHNICAL SERVICES	2014	2015	2016
Total course enrolments (NTA)	12,425	10,794	9,448
AQF level			
Certificate IV and above	10,590	9,323	8,082
Certificate III and below	1,835	1,471	1,366
Type of study			
Apprenticeship and traineeship	2,109	1,675	1,575
Institutional delivery	10,316	9,119	7,873
Location			
Metropolitan	8,997	7,776	7,063
Regional	3,428	3,018	2,385
Training providers			
TAFE	10,060	8,561	7,469
Private training organisations	2,365	2,233	1,979
Aboriginal people			
Course enrolments	332	315	209
Young people (15-24 years) – AQF level			
Certificate IV and above	3,321	2,838	2,501
Certificate III and below	877	707	606

TOP FIVE QUALIFICATIONS BY NTA SCOPE COURSE ENROLMENTS⁴⁵⁵ 2016

Qualification
Certificate IV in Bookkeeping
Diploma of Leadership and Management
Certificate IV in Work Health and Safety
Diploma of Management
Certificate IV in Work Health and Safety

Source: VET Enrolment Data Collection19F⁴⁵⁶, final full year data for 2016

⁴⁵¹ ABS, 5222.0, State Accounts

⁴⁵² ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017 (unless otherwise stated)

⁴⁵³ Census 2011

⁴⁵⁴ ABS cat. no. 5220.0, National Accounts: State Accounts 2015-16, November 2016

⁴⁵⁵ Includes VET in School training delivery

TOP FIVE VET IN SCHOOLS QUALIFICATIONS DELIVERED BY NTA SCOPE COURSE ENROLMENTS 2016

Qualification
Certificate II in Animal Studies
Certificate II in Sampling and Measurement
Certificate IV in Information Technology Networking
Certificate III in Laboratory Skills
Certificate III in Accounts Administration

Source: VET Enrolment Data Collection19F⁴⁵⁷, final full year data for 2016

INDUSTRY DEVELOPMENTS AND WORKFORCE CHALLENGES

Professional, scientific and technical services (except computer system design and related services)⁴⁵⁸

- The surveying and spatial information occupations are increasingly embracing advanced technologies, requiring new workforce entrants and existing workers to have highly specific, technical skills and knowledge.⁴⁵⁹
- Accountants are increasingly sought on a project or fixed-term contract basis, particularly for roles that require niche skills or industry knowledge/experience.⁴⁶⁰
- Accountants and bookkeepers are typically working with multiple software packages, on multiple platforms. Strong technical skills are required in order to support clients in their use of software and applications, and to provide services via the different packages and platforms. Increasingly work is performed remotely via cloud-based applications and this raises both privacy and security issues.⁴⁶¹
- Increasing use of cloud-based accounting packages has seen some regionally based individuals and businesses seek out and engage metropolitan accountants, this will have ramifications for the regional workforce⁴⁶².
- Advertising and marketing professionals work in a highly competitive industry with a small client 'pool' relative to other states. Characterised by growth in digital and specifically social media marketing, new specialised roles are emerging such as digital marketing/social media campaign managers, online content editors, media management specialists. Increasingly professionals in this field need a strong understanding of online marketing strategies which include knowledge of related technology (email marketing, search engine optimisation, mobile content optimisation, website and social media analytics, etc.)⁴⁶³
- With the exception of the Certificate II and III qualifications that serve the surveyor and spatial sector, professional services qualifications are not considered suitable for delivery to secondary students. Concern has been expressed at the delivery of leadership and management qualifications to this cohort as occupational outcomes for this course are not realistic. Industry is not seeking entry level workers with management skills. The misuse of qualifications aligned to management roles as pathways to tertiary entry, rather than for vocational outcomes is concerning to many industry stakeholders.⁴⁶⁴

⁴⁵⁶ Data collection is for the National Training Agreement (NTA) scope which is only for enrolments funded by the Department of Training and Workforce Development.

⁴⁵⁷ Ibid.

⁴⁵⁸ Industry advice provided by Financial, Administrative and Professionals Services Training Council 2017

⁴⁵⁹ Industry consultation

⁴⁶⁰ Ibid.

⁴⁶¹ ICB and IPA conference proceedings

⁴⁶² Industry feedback

⁴⁶³ Desktop research of employment advertising www.seek.com.au

⁴⁶⁴ Industry advice

- Industry consultation indicates that supply of entry and mid-career legal administrators is not sufficient to meet demand.
- The adoption of new technologies such as GIS (Geographic Information System), GPS equipment in the surveying sector may restrict new entrants to bid for contracts.
- Lower than anticipated uptake of limited Australian Financial Services (AFS) licences by accountants is likely to change the profile of the workforce, particularly in relation to provision of advice around SMSFs and superannuation in general. Now that the accountant's exemption has expired, the impact of this should begin to become apparent.⁴⁶⁵
- In a sector that is increasingly digital in both service delivery and customer relationships, marketing and advertising professionals and businesses face competition on a variety of fronts, including large interstate service providers and individuals consulting via online platforms (such as Airtasker, Freelancer, Fiverr, etc) from all over the world. Online consultant platforms remain patchy in terms of quality and reliability of service provision but will disrupt the sector if this changes.
- Women are poorly represented in the architectural, engineering and technical services sector (26.2%), and in management/consulting (36.7%).⁴⁶⁶
- Indications remain that Indigenous workers are under-represented across the professional services industry despite a range of initiatives across many sectors.
- Translators and interpreters continue to face long term workforce challenges associated with an ageing workforce, poor employment conditions and remuneration and lack of training. The latter is being worked on by stakeholders in response to the recommendations of the industry taskforce chaired by the training council. This industry has the potential to employ more Indigenous workers however training accessibility and affordability in particular are major barriers.⁴⁶⁷

Veterinary services⁴⁶⁸

- Changing living standards and increasing urbanisation are impacting on the animal care and management industry. Companion animals have come to play an important part in the lives of many people and the levels of care and servicing of these animals continues to increase.⁴⁶⁹ This can be seen in the rapid increase in franchise, wholesale style pet stores, pet grooming and dog training services.
- Nevertheless, companion animal breeding remains open to 'backyard breeding' and so called 'puppy mills'. The industry, apart from veterinary services and racing related activities, remains poorly regulated and of inconsistent quality.
- While studies in animal care are popular, the companion animal sector generally lacks a post-school training culture and is seen to offer limited career pathways. Specific units of competence, informal training and skill sets (for example pet grooming) are often valued above full qualifications.
- Highly skilled pet groomers, dog trainers and horse trainers are reported as being in high demand.
- There is perhaps an opportunity promotion of traineeships in animal studies and companion animal services.
- It is reported that veterinary nursing experiences higher attrition rates during training as some students find a mismatch between the work and expectations; and lower retention rates with female veterinary nurses leaving the industry to start families.
- A need for refresher training has been identified both to encourage and re-skill veterinary nurses seeking to re-enter the workforce. This has partially been addressed by the introduction of a Diploma in Veterinary Nursing.

⁴⁶⁵ Advice from the Institute of Public Accountants

⁴⁶⁶ Labour force quarterly, November 2016, 4Q averages

⁴⁶⁷ Feedback from the Kimberley Interpreting Service

⁴⁶⁸ Industry advice provided by Food, Fibre and Timber Industries Training Council 2017

⁴⁶⁹ Animals Australia, http://www.animalsaustralia.org/factsheets/companion_animals.php

2018 INDUSTRY WORKFORCE PRIORITIES

Professional, scientific and technical services (except computer system design and related services)⁴⁷⁰

- Across the diverse range of occupations within the industry is an almost universal need for workers with highly specific, often niche knowledge of advanced and/or emerging technologies that are increasingly used in even routine work. For some occupations, such as accounting and management, consulting and contract roles are becoming more common – requiring individuals with a strong suite of both soft skills and project management, and agile/lean experience and training.
- The typically high entry requirements for professional occupations, coupled with the common requirement for local industry and legislation/regulatory knowledge create barriers for migrant and Indigenous workers. Pathways from administrative/support and technician roles into the professions do exist and the Training Council continues to promote articulation from entry level qualifications into higher level training for career progression. Although increasingly well represented in the professions, women remain significantly underrepresented in surveying and the training council continues to work closely with relevant stakeholders to promote the industry to women.
- In contrast to the industry as a whole, the interpreting and translating sector attracts a high number of women and migrants, however it is an aging workforce and ongoing issues regarding employment conditions and training access mean that there is little attracting new, young workers. The training council maintains strong relationships with key stakeholders and provides support and advice for ongoing initiatives to address these issues. Industry has also indicated a supply shortage exists for mid-level legal administration workers, and the training council continues to promote the Certificate III and IV in Legal Services as an alternative to more generic administrative qualifications and traineeships.

Veterinary services⁴⁷¹

- Encouraging and supporting the delivery of skills sets and qualifications in line with the Food, Fibre & Timber Industries Training Council (WA) Inc FFTITC “Thin markets” report.
- Fostering quality training, especially for traineeships, that addresses industry needs.
- Fostering awareness of the availability of Certificate II and III traineeships and Australian Government employer incentives.
- Maximising opportunities for progression from the Certificate II, through Certificate III and IV and onto Diploma or higher level qualifications.

8.14. ADMINISTRATIVE AND SUPPORT SERVICES

OVERVIEW

The administrative and support services industry is mainly engaged in performing routine support activities for the day to day operations of other businesses or organisations.

The sub sectors in the industry include:⁴⁷²

- administrative service – providing administrative support services are mainly engaged in activities such as office administration; hiring and placing personnel for others; preparing documents; taking orders for clients by telephone; providing credit reporting or collecting services; arranging travel and travel tours, and event management; and
- building cleaning, pest control and other support services.

⁴⁷⁰ Industry advice provided by Financial, Administrative and Professionals Services Training Council 2017

⁴⁷¹ Industry advice provided by Food, Fibre and Timber Industries Training Council 2017

⁴⁷² ABS, 1292.0 - Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (Revision 1.0)

As of May 2017, the industry employed approximately 46,100 Western Australians, representing 3.4% of the State's workforce. In the year to May 2017, the industry experienced an average annual growth of 2,800 persons or 6.3%. Over the five years to May 2017 the industry has experienced a net gain of 4,500 persons or 10.8% of its workforce.

The industry is dominated by non-employing businesses (53.9%) and small employing enterprises of less than 20 employees (40.5%), with only 5.8% of enterprises having 20 or more employees.⁴⁷³

The industry employs full time and part time workers in roughly equal measure, with 54.2% of workers employed full time.⁴⁷⁴ It should be noted this measure looks purely at the number of hours worked per week by those employed in this industry and not at the mode of that employment. Therefore this figure should not be confused with the proportion employed on a contract or casual basis; data for which is not readily available at a State and industry level.

The industry has a majority female workforce at 53.1% compared to the total State proportion of 45.1%.

As of Census 2011, the 81.8% of the industry's workforce falls within the 25-64 age group and is consistent with the State's average (80.7%). The industry employs those from the youth cohort at a rate close to on par with the State average across all industries, with some 15.0% of the workforce being between 15 and 24 years of age, compared to only 16.2% across all industries.

In 2015–16, the agriculture, forestry and fishing industry contributed 3.1% towards the gross State product for Western Australia.⁴⁷⁵

ECONOMIC AND LABOUR MARKET SNAPSHOT⁴⁷⁶

Economic indicators	Administrative and support services	WA average across all industries
% of total WA employment	3.4	
% average annual employment growth 2016–17	6.3	-0.3
% of full time employment	54.2	68.1
% of female employment	53.1	45.1
% of metropolitan employment ⁴⁷⁷	81.4	78.3
% of total WA gross State product (GSP) at 2016 ⁴⁷⁸	3.1	

⁴⁷³ Australian Bureau of Statistics. (2017). 8165.0 *Counts of Australian Businesses, including Entries and Exits, Jun 2011 to Jun 2016*.

⁴⁷⁴ ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017

⁴⁷⁵ ABS, 5222.0, State Accounts

⁴⁷⁶ ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017 (unless otherwise stated)

⁴⁷⁷ Census 2011

⁴⁷⁸ ABS cat. no. 5220.0, National Accounts: State Accounts 2015-16, November 2016

SNAPSHOT OF VET DELIVERY (COURSE ENROLMENTS) – 2014–2016

ADMINISTRATIVE AND SUPPORT SERVICES	2014	2015	2016
Total course enrolments (NTA)	7,930	7,628	7,613
AQF level			
Certificate IV and above	2,716	2,733	2,916
Certificate III and below	5,214	4,895	4,697
Type of study			
Apprenticeship and traineeship	2,725	2,873	2,789
Institutional delivery	5,205	4,755	4,824
Location			
Metropolitan	4,729	4,844	5,020
Regional	3,201	2,784	2,593
Training providers			
TAFE	5,491	4,733	4,569
Private training organisations	2,439	2,895	3,044
Aboriginal people			
Course enrolments	741	675	648
Young people (15-24 years) – AQF level			
Certificate IV and above	1,116	962	934
Certificate III and below	3,081	2,823	2,595

TOP FIVE QUALIFICATIONS BY NTA SCOPE COURSE ENROLMENTS⁴⁷⁹ 2016

Qualification
Certificate III in Business
Certificate II in Business
Certificate IV in Customer Engagement
Certificate III in Business Administration
Certificate IV in Customer Contact

Source: VET Enrolment Data Collection19F⁴⁸⁰, final full year data for 2016

TOP FIVE VET IN SCHOOLS QUALIFICATIONS BY NTA SCOPE COURSE ENROLMENTS 2016

Qualification
Certificate II in Business
Certificate III in Business
Certificate II in Tourism
Certificate III in Events
Certificate II in Business

Source: VET Enrolment Data Collection19F⁴⁸¹, final full year data for 2016

Note: Duplicate qualifications above are the result of training package amendments.

⁴⁷⁹ Includes VET in Schools training delivery

⁴⁸⁰ Data collection is for the National Training Agreement (NTA) scope which is only for enrolments funded by the Department of Training and Workforce Development.

⁴⁸¹ Ibid.

INDUSTRY DEVELOPMENTS AND WORKFORCE CHALLENGES

ADMINISTRATIVE SERVICES | BUILDING CLEANING, PEST CONTROL AND OTHER SUPPORT SERVICES⁴⁸²

- Employment projections continue to indicate sharp declines in occupations including secretaries and keyboard operators.⁴⁸³ While declines are also projected for bookkeepers, this is more likely due to declines in internal workers in favour of external consultants, with large numbers of bookkeepers operating as microbusinesses. The use of specialist service providers external to businesses is a growing trend particularly in the areas of bookkeeping and secretarial/personal assistant functions (virtual assistants).
- Off-shoring of repetitive and low skill tasks such as data entry and related administrative functions is extremely cost effective for businesses, especially in a softening economy.⁴⁸⁴
- The domestic cleaning market has expanded with establishment of many franchised and professional operators, however due to the nature of the work and low pay, the sector experiences high employee turnover.
- As a result of significant scams in the real estate sector in 2010/2011, changes were required to the real estate and conveyancing regulations.
- Pest management services face tighter controls on operation due to stringent environmental regulations. However, stricter health regulations, particularly in the food and hospitality industries, are boosting demand for pest control services.
- Research has highlighted the need for Australian businesses to be Asia-capable, referring to the need to have management skills suited to Asian conditions, beyond speaking the language.⁴⁸⁵
- For commercial cleaning services, many of the workers are largely unskilled job seekers with low literacy levels. Not being 'job ready', poses an issue in terms of workplace health and safety requirements.⁴⁸⁶
- Due to shifts in workforce entry points (low skill tasks such as data entry are being taken off shore), there is a need to identify the range and level of skills required by industry to ensure new entrants are competitive and valuable to employers.⁴⁸⁷
- While a large number of students access qualifications aligned to entry level administrative roles in school⁴⁸⁸, employment outcomes and further training engagement is unclear. There remains an increasing number of students being enrolled in supervisory level qualifications in school.⁴⁸⁹ Information from the education sector indicates that few, if any, do so with employment outcomes in mind – but rather as an alternative pathway for university entrance.⁴⁹⁰ The impact of this on the value of these Certificate IV level qualifications in the eyes of employers is unclear but concerning.
- There are a number of nationally recognised qualifications aligned to occupations within this industry. However educational attainment profiles suggest these are likely underutilised. Traineeship numbers are also in decline, however this is in line with the overall decline in traineeships across the board.
- It is increasingly common for employers to seek out administrative and support staff who have experience and knowledge of their industry of business.⁴⁹¹ This narrows the pool of suitable candidates for vacancies.

⁴⁸² Industry advice provided by Financial, Administrative and Professional Services Training Council 2017

⁴⁸³ Job Outlook – latest data (2015), www.joboutlook.gov.au (National data)

⁴⁸⁴ Based on industry consultation

⁴⁸⁵ Ibid.

⁴⁸⁶ Ibid.

⁴⁸⁷ Consultation and work ongoing by the Training Council

⁴⁸⁸ Based on data supplied by the School Curriculum and Standards Authority

⁴⁸⁹ Ibid

⁴⁹⁰ Consultations with Department of Education, AISWA and Catholic Education stakeholders

⁴⁹¹ Desktop research of employment advertising - www.seek.com.au

Event management services⁴⁹²

- Events attract visitors to a particular region for a specific time period and provide an economic boost as well as add social vibrancy, particularly in regional areas. In 2015–16, Perth secured 122 conferences and 75 corporate meetings and incentive events, attracting approximately 56,600 delegates and generating a Direct Delegate Expenditure (DDE) in excess of \$110 million (against a DDE target of \$108 million).⁴⁹³
- The business events secured in 2016 were a mix of national and international conferences from the medical/health, science, agriculture and education sectors and visitors in the corporate and incentive travel sector largely originated from Malaysia, Japan and Singapore.⁴⁹⁴
- By the end of 2016, 213 business events had been secured by the Perth Convention Bureau for the four years up to 2018.⁴⁹⁵
- Industry has welcomed the State Government's commitment for tourism marketing and events of \$425 million over five years.
- Through Tourism Western Australia (Tourism WA), \$19 million over three years was committed in the 2016 State Government Budget to attract events to the Perth Stadium⁴⁹⁶. Once operational, the Perth Stadium will provide greater opportunities for international events and the associated visitation to Western Australia.
- The State Government, through Tourism WA and the City of Perth, fund the Perth Convention Bureau (PCB) to secure large, high-yield conference events and promote Perth and the State as a premium conference destination. Contrary to previous indications, funding for the PCB was increased in 2016, where Tourism WA committed an additional \$10.7 million over four years to the existing PCB budget, thus launching a new four year Business Events Marketing and Promotional Services Agreement between the two organisations.⁴⁹⁷
- Tourism WA is sponsoring 94 sporting, cultural, arts and culinary events across the State in 2016–17. This support is provided through three mechanisms: major events funding, the Regional Events Program and the Regional Events Scheme. Tourism WA will continue to support the major events that include the Margaret River Gourmet Escape, The Margaret River Pro surfing competition, The Hopman Cup and the World Super 6 Perth international golf tournament which provide significant media coverage for the State and result in greater visitation.
- The strategy to optimise visitation through the Perth Stadium has seen a number of major events having already been scheduled for when the 60,000 seat stadium opens, thereby generating hundreds of jobs for cooks, hospitality workers, cleaners, security and operations workers. The major events planned for the Perth Stadium include the likely opening by singer Ed Sheeran, a Bledisloe Cup rugby union match (2019), Chelsea Football Club vs. Perth Glory soccer match (2018) and a Rugby League State of Origin match (2019). It is anticipated that at least 15,000 visitors from outside Western Australia will travel there for the Chelsea football match.
- The Perth Convention and Exhibition Centre (PCEC) attracts approximately 900,000 visitors each year to approximately 600 conferences and events.⁴⁹⁸
- LNG 18, the largest event of its kind to be held in Australia, was the State's major business event of 2016, bringing 6,000 delegates from over 70 countries to Perth. The estimated DDE for LNG 18 was \$15.784 million in DDE. It was held at PCEC which was required to construct a temporary marquee in the carpark to accommodate the volume of attendees.
- Since opening in 2012, approximately 2 million people have visited the Perth Arena which has hosted

⁴⁹² Industry advice provided by FutureNow: Creative and Leisure Industries Training Council

⁴⁹³ Perth Convention Bureau, Annual Report 2016, accessed 10/02/2017

⁴⁹⁴ Ibid.

⁴⁹⁵ Perth Convention Bureau, Annual Report 2016, accessed 10/02/2017

⁴⁹⁶ Tourism WA Industry Briefing 2016–17, June 2016

⁴⁹⁷ Ibid.

⁴⁹⁸ Tourism Council WA, The Western Australian Tourism Work Atlas, accessed 04/11/2016

nearly 180 public events. Attendance at the Hopman Cup 2017 set a new record of 13,917 fans for a single match and over 103,000 in total attending tournament matches with an additional 6,000 fans attending Roger Federer's open training session.⁴⁹⁹

- After a number of global incidents, there is a rising threat to public safety and security at large-scale events in Western Australia from terrorism. Industry stakeholders indicate that the terrorism phenomenon has already had a notable effect on several recent major events in Perth and will contribute to escalated costs and safety concerns. Going forward, the trend is unknown and unpredictable, but in addition to standard risk management issues including planning, marketing and delivery of events, the industry needs to be able to address the growing area of safety and security concerns.
- Challenges for employment opportunities exist due to the cyclical, short term nature of events. Since employment in this sector comprises mostly of contingent workers on a contract for a fixed period or specific project, there is a lack of stable ongoing work for many people within this sector. Similarly, most students are restricted from undertaking the Certificate III in Events through a traineeship as many employers cannot provide ongoing work for the training contract's 12 month duration. To address this issue, FutureNow will investigate the opportunity that a group training methodology could present.
- FutureNow's Events Industry Advisory Group (IAG) report that there is an ongoing shortage of professional conference organisers, due to a lack of awareness of this career pathway and events students favouring other streams such as functions (weddings and banquets) or community events.
- FutureNow's Events IAG maintain that volunteer management is crucial to the ongoing success of the sector, but report a number of issues related to volunteering. These include instances of volunteer mistreatment where volunteers are given limited or unsuitable training, leading to many leaving the sector and jeopardising the ability for best-practice organisations to access volunteers. Additionally, while volunteering can provide graduates with the necessary on the job skills and gives them the opportunity to demonstrate their commitment and work ethic – there is an issue in that many graduates possess unrealistic expectations of moving expeditiously into senior roles and are unwilling to volunteer or perform menial (although essential) tasks.
- Due to the sporadic nature of events and the large volume of freelancers, there is a lack of career progression and little support for event workers to progress towards leadership roles in the events sector. In order to grow leadership skills in the Australian events industry, Tourism Australia and Meetings & Events Australia have launched a national mentoring program, giving mentees the opportunity to connect with an experienced industry representative to discuss their career.⁵⁰⁰
- Meetings & Events Australia also coordinate an accreditation program for Accredited Meeting Managers and Accredited In-House Meeting Managers.⁵⁰¹
- Large-scale events which bring large groups of people together can carry the threat of unforeseen incidents, and the skills to avoid, mitigate and address a crisis are crucial to ensure public safety. The events qualifications in the *SIT⁵⁰² Training Package* will be reviewed in year one of the Tourism, Travel and Hospitality Industry Reference Committee (IRC) Training Product Review Plan 2016–17 to 2019–2020 to address this skill requirement.

⁴⁹⁹ Tourism WA Industry Briefing 2016-17, June 2016

⁵⁰⁰ http://www.pertharena.com.au/About_Perth_Arena.aspx, accessed 24/02/2017

⁵⁰¹ Tourism Australia, *Essentials* newsletter, 22/02/2017

⁵⁰² Tourism, Travel and Hospitality Training Package

Travel and tourism services⁵⁰³

- On the back of strong growth in visitation, the tourism industry is focussed on further developing two lucrative markets: the emerging Asian markets and the holiday and leisure segment. After a contraction during the resources boom, the holiday and leisure segment is recovering, as demonstrated by 37.1 million overnight trips (up 6%) and 92.8 million day trips (up 11%) being taken by Australians for the purpose of holiday in 2016.⁵⁰⁴
- In March 2018, Qantas commenced direct flights between Perth and London Heathrow. The 17 hour flight will directly connect Western Australia to its biggest inbound market. Tourism Western Australia (Tourism WA) economic modelling shows that potential visitor expenditure could be \$36 million per year as a result of the direct flight. Tourism WA and Qantas have signed a \$5.7 million deal that will assist in promoting Perth as the western hub of Australia for the non-stop flights, which will include promotion of travel into regional Western Australia.
- The Perth Airport reported a drop in domestic travellers in 2015–16, driven by a decline in business travellers.⁵⁰⁵
- The cruise sector saw an increase in ships and cruise ship visitor days to Western Australia in 2015–16. Overall, the cruise sector delivered over 224,400 passengers to Western Australia in 2015–16, spending \$275 million⁵⁰⁶. Western Australia's proportion of the national cruise tourism revenue should be expected to grow in coming years as there is a national shift away from New South Wales, particularly Sydney where capacity constraints prevent a number of ships from docking.
- International education is an important source of revenue for the tourism industry. Approximately 44,000 international visitors came to Western Australia for education purposes in 2016, yielding between the students themselves and visiting family and friends, approximately \$520 million in expenditure⁵⁰⁷. Asian-Pacific source markets are however represented in much higher volumes in Australia's eastern states⁵⁰⁸, which given their proximity to Western Australia, has led to organisations such as Study Perth asserting that attraction of nearby Asian markets should be of highest priority for this sub-sector.
- Western Australia has a unique Aboriginal cultural tourism offering. However, the sector is not operating to its full potential. Aboriginal tourism in Western Australia is impacted by the size of the State and the spread of businesses – where more Aboriginal tourism businesses operate in the State's north, but more visitors travel to the State's south. Initiatives that have been introduced to address the disparity between supply and demand include the Aboriginal Tourism Development Program, development of tourism sites of Aboriginal significance in Perth, the Camping with Custodians program and the Coalition Tailored Assistance Employment Grants programme.
- Tourism WA has developed a strategy of major events to optimise visitation through the 60,000 seat Perth Stadium. The major events that are anticipated to attract significant numbers of visitors include the likely opening by singer Ed Sheeran, a Bledisloe Cup rugby union match (2019), Chelsea Football Club vs. Perth Glory soccer match (2018, expecting to attract at least 15,000 visitors from outside Western Australia) and a Rugby League State of Origin match (2019). The significant opportunities arising from the Perth Stadium extend beyond the jobs that will be performed on site, to operators

⁵⁰³ Industry advice provided by FutureNow: Creative and Leisure Industries Training Council

⁵⁰⁴ Travel By Australians: December 2016 Results of the National Visitor Survey, 29/03/2017, Tourism Research Australia, Canberra.

⁵⁰⁵ Perth Airport Statistics 2015-16, <https://www.perthairport.com.au/Home/corporate/about-us/airport-statistics>, accessed 27/03/2017

⁵⁰⁶ Industry Briefing, Gwyn Dolphin, Tourism Western Australia, 30/03/2017

⁵⁰⁷ Industry Briefing, Gwyn Dolphin, Tourism Western Australia, 30/03/2017

⁵⁰⁸ DAVIS, G. (2017) *SIZING AND MAPPING HIGHER EDUCATION AND VOCATIONAL EDUCATION AND TRAINING IN PERTH AND PEEL*, FACTBASE BULLETIN 52, THE UNIVERSITY OF WESTERN AUSTRALIA AND COMMITTEE FOR PERTH, PERTH, APRIL 2017

that can incorporate a Perth Stadium event into a package, such as accommodation, tours, food and beverage or other entertainment or recreation activities.

- Industry report there is a shortage of suitable, trained tour guides. A lack of formal training, plus low remuneration and casual nature of work means that staff retention is a significant challenge in the tour guiding sector of the tourism industry. The national qualification for this occupation is a Certificate II in Tourism, Certificate III in Tourism or Certificate III in Guiding. However, there is no training delivery in Margaret River, Manjimup, Kalgoorlie, Derby, Fitzroy Crossing, Halls Creek, Kununurra or Wyndham.
- Industry advice indicates that marketing and digital literacy skills in tourism are not keeping pace with current e-commerce trends. To remain competitive, specifically once the Perth Stadium is operational, small or micro businesses must be able to develop packages and know how to market their product, while larger organisations should focus on higher-margin products to attract highly profitable markets, or differentiate themselves by offering niche products, for example adventure travel.
- The global phenomenon of terrorism is having an impact on the travel and tourism industry, especially on the events sector when large groups of people are gathered. In general, crisis management requires a high level of skill. Practices to mitigate risk and ensure public safety have already been put in place in Western Australia, thus influencing how some recent events in Perth have been organised. As such, the skills to avoid, minimise and respond to a crisis are scheduled to be reviewed in the first year of the Tourism, Travel and Hospitality Industry Reference Group Training Product Review Plan 2016–17 to 2019–20.
- There is demand for Chinese speaking staff to service this growth market of the State's tourism industry.
- Industry maintains that tourism businesses focused on attracting the Chinese market need to have at least a Mandarin speaking staff member as a minimum. However, there is a limited pool of tourism workers proficient in Mandarin in Western Australia. For tour guides in particular, in-depth local knowledge is essential and the job is therefore well suited to local workers. This means that training of local tour guides in Mandarin should be a priority, while international tourism and hospitality students fluent in Mandarin are a potential untapped source of workers for other occupations involved in the servicing of the Chinese market.
- Changes to the Working Holiday Visa program are presenting workforce challenges in the tourism industry. While it is too early to measure the full impact, there is anecdotal evidence suggesting that potential working holiday makers are already rejecting Australia for other countries, thus affecting regional tourism businesses' capacity to operate as many rely on the seasonal workforce and only some operators in northern Western Australia can participate in the Seasonal Worker Programme (tourism) pilot.
- Similarly, tourism workers employed under the Hospitality Industry (General) Award 2010 or the Restaurant Industry Award 2010 will have their Sunday and public holiday penalty rates reduced, which employee groups assert will disadvantage workers and lead to many workers leaving the industry seeking better pay elsewhere.

2018 INDUSTRY WORKFORCE PRIORITIES

ADMINISTRATIVE SERVICES | BUILDING CLEANING, PEST CONTROL AND OTHER SUPPORT SERVICES⁵⁰⁹

- Attraction of new workers to the industry remains compromised for many occupations due to pay and employment conditions, job stability and availability of full time hours and perceived lack of career progression. The Training Council continues to promote traineeships to sector within the industry and articulation pathways into higher level qualifications. While there is strong uptake of entry level qualifications in schools, data is not available to determine whether this is translating into workforce entry and there are a variety of other drivers for secondary students to undertake the Certificate II in Business in particular.
- Concern regarding the currency of vocational qualifications particularly with regard to current and emerging technologies and occupations/niche skills. The training council maintains a strong working relationship with PwC's Skills for Australia to ensure Western Australia industry has input into training package projects. In addition the training council is working to build on and leverage industry network to gain additional insights into changing workforce profile, skill and education demands and concerns.
- Indigenous Australians are poorly represented in both the workforce and in training, particularly in professional and management roles and their associated qualifications. Migrants are better represented in some sectors, such as cleaning, however English language proficiency can be a barrier to career progression. The training council continues to liaise with relevant stakeholders to monitor barriers and concerns in this area, and to identify and promote training and other options available to assist underrepresented groups with workforce entry and career progression.
- In a challenging economic climate organisations continue to increase their outsourcing of many administrative functions. This is resulting in an increasing need for individuals to be able to utilise technology and develop strong consulting skills, to meet growing interest from industry in virtual assistants and administrative contractors. With routine work being offshored to reduce costs, industry seeks to engage local workers with great breadth and depth of knowledge and skill and a strong suite of soft skills, particularly in terms of client engagement is critical. As many individuals working in cleaning and pest control run their own micro or small business, small business management skills are critical for business viability.

Event management services⁵¹⁰

- Participate in the review of events qualifications in the SIT Training Package four year work plan to include more comprehensive risk management units as well as units dedicated to business events.
- Exploration of group training option for the events industry.

Travel and tourism services⁵¹¹

- FutureNow is working with the Western Australian Indigenous Tourism Operators Council to discuss strategies that may assist in addressing the gaps reported in Indigenous tourism training delivery. FutureNow will continue to consult with the broader tourism industry, training providers and other stakeholders, including Tour Guides WA, Indigenous Business Australia and the Financial and Professional Services Training Council to explore the options available.
- FutureNow will monitor and assess the reforms in respect of working holiday visas as well as penalty rates at State and Federal levels. In consultation with industry and peak bodies, FutureNow will review the impact of these reforms on the workforce.
- FutureNow will participate in the Tourism, Travel and Hospitality Industry Reference Group Training Product Review Plan 2016–17 to 2019–20, specifically in the establishment of a new qualification dedicated to gaming and a review of events qualifications to include units addressing comprehensive crisis management.

⁵⁰⁹ Industry advice provided by Financial, Administrative and Professional Services Training Council 2017

⁵¹⁰ Industry advice provided by FutureNow: Creative and Leisure Industries Training Council

⁵¹¹ Industry advice provided by FutureNow: Creative and Leisure Industries Training Council 2017

8.15. PUBLIC ADMINISTRATION AND SAFETY

OVERVIEW

The public administration and safety industry is mainly engaged in Australian, state or local government legislative, executive and judicial activities; in providing physical, social, economic and general public safety and security services; and in enforcing regulations. The sub sectors in the industry include⁵¹²:

- public administration;
- defence; and
- public order, safety and regulatory services.

As of May 2017, the industry employed approximately 81,000 Western Australians, representing 6.0% of the State's workforce. In the year to May 2017, the industry experienced an average annual growth of 2,000 persons or 2.6%. Over the five years to May 2017 the industry has experienced a net gain of 6,100 persons or 8.0% of its workforce.

The industry is dominated by non-employing businesses (64.6%), with 1.8% of enterprises having 20 or more employees.⁵¹³

The industry predominantly employs on a full time basis, with only 24.7% of workers employed part time.⁵¹⁴

The industry has a small majority female workforce at 51.9% compared to the total State proportion of 45.1%.

As of Census 2011, the 88.8% of the industry's workforce falls within the 25-64 age group and is greater than the State's average (80.7%). The industry has an older profile, with only 8.5% of the workforce being between 15 and 24 years of age, compared to an average of 16.2% across all industries.

In 2015–16, the public administration and safety industry contributed 3.2% towards the gross State product for Western Australia.⁵¹⁵

ECONOMIC AND LABOUR MARKET SNAPSHOT⁵¹⁶

Economic indicators	Public administration and safety	WA average across all industries
% of total WA employment	6.0	
% average annual employment growth 2016–17	2.6	-0.3
% of full time employment	75.3	68.1
% of female employment	51.9	45.1
% of metropolitan employment ⁵¹⁷	80.0	78.3
% of total WA gross State product (GSP) at 2016 ⁵¹⁸	3.2	

⁵¹² ABS, 1292.0 - Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (Revision 1.0)

⁵¹³ Australian Bureau of Statistics. (2017). 8165.0 *Counts of Australian Businesses, including Entries and Exits, Jun 2011 to Jun 2016*.

⁵¹⁴ ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017

⁵¹⁵ ABS, 5222.0, State Accounts

⁵¹⁶ ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017 (unless otherwise stated)

⁵¹⁷ Census 2011

⁵¹⁸ ABS cat. no. 5220.0, National Accounts: State Accounts 2015–16, November 2016

SNAPSHOT OF VET DELIVERY (COURSE ENROLMENTS) – 2014–2016

PUBLIC ADMINISTRATION AND SAFETY	2014	2015	2016
Total course enrolments (NTA)	801	991	844
AQF level			
Certificate IV and above	167	365	307
Certificate III and below	634	626	537
Type of study			
Apprenticeship and traineeship	174	229	192
Institutional delivery	627	762	652
Location			
Metropolitan	273	369	347
Regional	528	622	497
Training providers			
TAFE	708	783	581
Private training organisations	93	208	263
Aboriginal people			
Course enrolments	129	178	123
Young people (15-24 years) – AQF level			
Certificate IV and above	23	57	35
Certificate III and below	315	269	235

TOP FIVE QUALIFICATIONS BY NTA SCOPE COURSE ENROLMENTS⁵¹⁹ 2016

Qualification
Certificate IV in Local Government (Regulatory Services)
Certificate III in Security Operations
Certificate II in Security Operations
Certificate III in Government
Certificate II in Government

Source: VET Enrolment Data Collection19F⁵²⁰, final full year data for 2016

TOP FIVE VET IN SCHOOLS QUALIFICATIONS BY NTA SCOPE COURSE ENROLMENTS 2016

Qualification
Certificate II in Government
Certificate II in Government
Certificate II in Security Operations
-
-

Source: VET Enrolment Data Collection19F⁵²¹, final full year data for 2016

⁵¹⁹ Includes VET in Schools training delivery

⁵²⁰ Data collection is for the National Training Agreement (NTA) scope which is only for enrolments funded by the Department of Training and Workforce Development.

⁵²¹ Ibid.

INDUSTRY DEVELOPMENTS AND WORKFORCE CHALLENGES⁵²²

PUBLIC ORDER, SAFETY AND REGULATORY SERVICES

- The growth of the security industry has partly been generated by the ongoing evolution of technology offering new products and services that are not only more effective, reliable and convenient but also more affordable.
- The increase in the level of crime and the random nature of crime has also contributed to consumers taking proactive steps to ensure their assets and properties are protected. This will impact demand in both technical security and for security guards and officers.
- More than ever before the security industry faces the requirement for staff to have and maintain an extensive list of skills. Soft skills, particularly customer service skills are often flagged as lacking by employers and are considered essential in many security roles.
- Security organisations providing services to remote regions of Australia need to be able to provide personnel with significant emergency services skills, a medical background, firefighting abilities, road rescue and mine rescue competencies.
- The literacy and numeracy levels of some workers, and individuals seeking to enter the industry remains of concern to employers and poses a number of issues with incident reporting and provision of evidence in court. In addition poor communication/English language skills impair the ability of security guards and officers to de-escalate incidents verbally and to issue instruction and effectively control crowds.
- The industry is facing enormous challenges in regional areas due to the high costs of living, the lack of housing and the general lack of people with the required skills.
- The security workforce is transient, with a high level of churn due to the hours required (nights/weekends), relatively low wages, limited career progression, and depending on the role, level of potential danger or boredom.
- Migrant and Indigenous workers are better represented in the security sector than many others, however industry demand for Indigenous workers in particular remains strong due to some contractual requirements.
- People from a non-English speaking background are well represented in the sector. While speaking a second language can be beneficial when working in the industry, foundation literacy and numeracy skills are still a fundamental requirement and are of concern to employers.
- While the Certificate II in Security Operations is the minimum requirement in gaining a license to work, there is a strong need to improve the quality of training delivered in this qualification.

2018 INDUSTRY WORKFORCE PRIORITIES⁵²³

PUBLIC ORDER, SAFETY AND REGULATORY SERVICES

- Industry has expressed concern about the depth, breadth and duration of training provided by some organisations delivering the Certificate II in Security Operations. The Financial, Administrative & Professional Services Training Council has undertaken extensive consultation and with the assistance of an industry working group has developed post-qualification, pre-licencing competency testing as a measure to validate the competency of individuals seeking to obtain a security officer or crowd controller licence.
- Industry has expressed concern regarding the language proficiency of security officers and crowd controllers. The industry attracts a larger than typical share of its workforce from the migrant population and those who do not speak English as their first language. Strong English language skills are critical to enable workers to communicate effectively in often stressful/difficult situations and large numbers of people, as well as for providing evidence in court and for completing incident

⁵²² Industry advice provided by Financial, Administrative and Professional Services Training Council 2017

⁵²³ Ibid.

reports and similar. To address this, the aforementioned competency testing also covers English literacy.

- The workforce is more diverse than most and ease of entry makes it attractive to migrant workers. However, despite comparatively good Indigenous representation in the security workforce, there remains unmet demand for Indigenous workers, as many contracts now stipulate an Indigenous quota. The training council continues to promote the security industry and training to Indigenous Australians in an effort to boost supply.

8.16. EDUCATION AND TRAINING

OVERVIEW

The education and training industry is engaged in the provision and support of education and training. Education may be provided in a range of settings, such as educational institutions, the workplace, or the home.

Education and training services are provided by preschools, schools, technical colleges, training centres and universities. They may be publicly owned and operated, or privately owned and operated, either for profit or not for profit.⁵²⁴

As of May 2017, the industry employed approximately 102,800 Western Australians, representing 7.7% of the State's workforce. In the year to May 2017, the industry experienced an average annual growth of 5,900 persons or 5.9%. Over the five years to May 2017 the industry has experienced a net gain of 9,500 persons or 10.2% of its workforce.

The industry is dominated by non-employing businesses (51.8%) and small employers with between one and 19 employees (41.2%). Around 7.3% of enterprises have 20 or more employees.⁵²⁵

The industry employs on a full time basis, with 41.9% of workers employed part time.⁵²⁶

The industry has a majority female workforce at 70.2% compared to the total State proportion of 45.1%.

As of Census 2011, the 89.4% of the industry's workforce falls within the 25-64 age group and is well above the State's average (80.7%). The industry does have an older profile, with only 7.4% of the workforce being between 15 to 24 years of age, compared to 16.2% across all industries. However it should be noted that this older profile is in part due to the nature of employment in this industry requiring largely higher level qualifications, generally unobtainable for most of the youth cohort.

In 2015–16, the education and training industry contributed 3.4% towards the gross State product for Western Australia.⁵²⁷

⁵²⁴ ABS, 1292.0 - Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (Revision 1.0)

⁵²⁵ Australian Bureau of Statistics. (2017). 8165.0 *Counts of Australian Businesses, including Entries and Exits, Jun 2011 to Jun 2016*.

⁵²⁶ ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017

⁵²⁷ ABS, 5222.0, State Accounts

ECONOMIC AND LABOUR MARKET SNAPSHOT⁵²⁸

Economic indicators	Education and training	WA average across all industries
% of total WA employment	7.7	
% average annual employment growth in 2016–17	5.9	-0.3
% of full time employment	58.1	68.1
% of female employment	70.2	45.1
% of metropolitan employment ⁵²⁹	79.4	78.3
% of total WA gross State product (GSP) at 2016 ⁵³⁰	3.4	

SNAPSHOT OF VET DELIVERY (COURSE ENROLMENTS) – 2014–2016

EDUCATION & TRAINING	2014	2015	2016
Total course enrolments (NTA)	4,000	3,207	2,645
AQF level			
Certificate IV and above	2,163	1,683	1,638
Certificate III and below	1,837	1,524	1,007
Type of study			
Apprenticeship and traineeship	10	10	1
Institutional delivery	3,990	3,197	2,644
Location			
Metropolitan	1,912	1,277	1,178
Regional	2,088	1,930	1,467
Training providers			
TAFE	3,748	3,148	2,568
Private training organisations	252	59	77
Aboriginal people			
Course enrolments	316	221	139
Young people (15-24 years) – AQF level			
Certificate IV and above	248	224	291
Certificate III and below	706	612	311

TOP FIVE QUALIFICATIONS BY NTA SCOPE COURSE ENROLMENTS⁵³¹ 2016

Qualification
Certificate III in Education Support
Certificate IV in Education Support
Certificate IV in Training and Assessment
Diploma of Training Design and Development
Certificate III in Education Support

Source: VET Enrolment Data Collection⁵³², final full year data for 2016.

⁵²⁸ ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017 (unless otherwise stated)

⁵²⁹ Census 2011

⁵³⁰ ABS cat. no. 5220.0, National Accounts: State Accounts 2015–16, November 2016

⁵³¹ Includes VET in Schools training delivery

⁵³² Data collection is for the National Training Agreement (NTA) scope which is only for enrolments funded by the Department of Training and Workforce Development.

TOP FIVE VET IN SCHOOLS QUALIFICATIONS DELIVERED BY NTA SCOPE COURSE ENROLMENTS 2016

Qualification
Certificate III in Education Support
Certificate IV in Education Support
-
-
-

Source: VET Enrolment Data Collection⁵³³, final full year data for 2016.

INDUSTRY DEVELOPMENTS AND WORKFORCE CHALLENGES⁵³⁴

- Growth in the industry over the next five years is expected to be led by school education and higher education, creating greater demand for staff in these sectors. The Vocational Education and Training (VET) sector is expected to remain at a similar level commensurate with the slowdown in the economy.
- The State Government's Switch program continues in 2017, it is designed to ensure an adequate supply of teachers to teach secondary subject areas of need.
- Educational outcomes for Aboriginal students continue to remain disproportionately low. VET in Schools continues to be an important vehicle to promote the industry to students and initiatives and have been developed to improve employment opportunities for Aboriginal people in the education industry (for example cadet programs).
- New technologies (including the National Broadband Network) will continue to impact on all teaching and learning due to the transformative effect of digital technology on traditional classroom-based, standardised learning approaches.
- An aging workforce is resulting in many workers retiring from the industry and leading to projected skill shortages over the next five years. In particular, there is increasing demand for teachers specialising in STEM (science, technology, engineering, and mathematics) subjects.
- There is a need to upskill the workforce and increase the numbers of teachers and learning support personnel available in classrooms. This is in response to increases in the number of students identified as having special learning needs, low levels of literacy and numeracy, English as a second language, disrupted or incomplete education, and rural and remote training access difficulties.
- The numbers of Aboriginal people in the education and training workforce are disproportionately lower than the numbers of Aboriginal students. At the same time, there is increasing demand for Aboriginal people to work in the industry in response to the educational needs of Aboriginal students.
- People from Culturally and Linguistically Diverse (CaLD) backgrounds are under-represented in the education and training workforce. There is a need to encourage employers to provide more employment opportunities for people from CaLD backgrounds.
- There is a need to address skills development and training of the education workforce in regional areas and encouraging the recruitment of people to work in these locations.

2018 INDUSTRY WORKFORCE PRIORITIES⁵³⁵

- Promoting initiatives that increase the recruitment of Aboriginal people in the education and training industry.
- Developing strategies to increase the recruitment and retention of teachers for migrants and people from culturally and linguistically diverse backgrounds.
- Working with stakeholders to seek ways of improving the recruitment of people to work in the

⁵³³ Ibid.

⁵³⁴ Industry advice provided by Community Services, Health and Education Training Council 2017

⁵³⁵ Ibid.

industry in regional and remote areas of the State.

- Monitoring workforce issues and trends for the occupations in demand in the education and training sector via the State's Skilled Priority Occupation List. Priority occupations listed on SPOL in 2016 include early childhood (pre-primary school) teacher, primary school teacher, middle school teacher, secondary school teacher, special needs teacher, teacher of the hearing impaired, and teacher of the sight impaired, vocational education teacher, Aboriginal and Torres Strait Islander education worker.

8.17. HEALTH CARE AND SOCIAL ASSISTANCE

OVERVIEW

The health care and social assistance division includes units mainly engaged in providing human health care and social assistance. Units engaged in providing these services apply common processes, where the labour inputs of practitioners with the requisite expertise and qualifications are integral to production or service delivery. The sub sectors in the industry include⁵³⁶:

- hospitals;
- medical and other health care services;
- residential care services; and
- social assistance services.

As of May 2017, the industry employed approximately 154,900 Western Australians, representing 11.5% of the State's workforce. The industry is currently the largest employer in the State. In the year to May 2017, the industry experienced an average annual decline of 2,600 persons or 1.6%. Over the five years to May 2017 the industry has experienced a net gain of 13,700 persons or 10.0% of its workforce.

The industry is dominated by non-employing businesses (64.6%), and small employing businesses of between one and 19 employees (39.9%), with only 3.1% of enterprises having 20 or more employees.⁵³⁷

The industry employs persons on a roughly even full time, part time split, with 46.0% of workers employed part time.⁵³⁸ The industry has a majority female workforce at 80.1% compared to the total State proportion of 45.1%. Despite dominating the workforce, three quarters of females working in this industry work part time, compared to just over one quarter of males.

As of Census 2011, the 86.2% of the industry's workforce falls within the 25-64 age group, which is higher than the State's average (80.7%). The industry does have an older profile, with only 10.3% of the workforce being between the ages of 15 and 24, compared to 16.2% across all industries. However, the higher proportion of roles that have long lead times through post school education is likely having an influence on this result.

In 2015–16, the industry contributed 5.4% towards the Gross State product for Western Australia.⁵³⁹

⁵³⁶ ABS, 1292.0 - Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (Revision 1.0)

⁵³⁷ Australian Bureau of Statistics. (2017). 8165.0 *Counts of Australian Businesses, including Entries and Exits, Jun 2011 to Jun 2016*.

⁵³⁸ ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017

⁵³⁹ ABS, 5222.0, State Accounts

ECONOMIC AND LABOUR MARKET SNAPSHOT⁵⁴⁰

Economic indicators	Health care and social assistance	WA average across all industries
% of total WA employment	11.5	
% average annual employment growth in 2016–17	-1.6	-0.3
% of full time employment	54.0	68.1
% of female employment	80.1	45.1
% of metropolitan employment ⁵⁴¹	82.5	78.3
% of total WA gross State product (GSP) at 2016 ⁵⁴²	5.4	

SNAPSHOT OF VET DELIVERY (COURSE ENROLMENTS) – 2014–2016

HEALTH CARE & SOCIAL ASSISTANCE	2014	2015	2016
Total course enrolments (NTA)	15,943	16,627	18,085
AQF level			
Certificate IV and above	7,628	8,197	8,578
Certificate III and below	8,315	8,430	9,507
Type of study			
Apprenticeship and traineeship	3,080	2,528	2,380
Institutional delivery	12,863	14,099	15,705
Location			
Metropolitan	10,757	11,542	12,628
Regional	5,185	5,085	5,457
Training providers			
TAFE	11,045	9,800	10,374
Private training organisations	4,898	6,827	7,711
Aboriginal people			
Course enrolments	1,132	913	1,082
Young people (15-24 years) – AQF level			
Certificate IV and above	2,655	2,900	3,143
Certificate III and below	3,336	3,132	3,657

TOP FIVE QUALIFICATIONS BY NTA SCOPE COURSE ENROLMENTS⁵⁴³ 2016

Qualification
Certificate III in Early Childhood Education and Care
Diploma of Nursing (Enrolled-Division 2 Nursing)
Diploma of Early Childhood Education and Care
Certificate III in Individual Support
Certificate III in Aged Care

Source: VET Enrolment Data Collection⁵⁴⁴, final full year data for 2016.

⁵⁴⁰ ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017 (unless otherwise stated)

⁵⁴¹ Census 2011

⁵⁴² ABS cat. no. 5220.0, National Accounts: State Accounts 2015-16, November 2016

⁵⁴³ Includes VET in Schools training delivery

⁵⁴⁴ Data collection is for the National Training Agreement (NTA) scope which is only for enrolments funded by the Department of Training and Workforce Development.

TOP FIVE VET IN SCHOOLS QUALIFICATIONS DELIVERED BY NTA SCOPE COURSE ENROLMENTS 2016

Qualification
Certificate II in Community Services
Certificate II in Health Support Services
Certificate III in Early Childhood Education and Care
Certificate III in Health Services Assistance
Certificate II in Community Services

Source: VET Enrolment Data Collection⁵⁴⁵, final full year data for 2016.

INDUSTRY DEVELOPMENTS AND WORKFORCE CHALLENGES

HOSPITALS | MEDICAL AND OTHER HEALTH CARE SERVICES⁵⁴⁶

- The State's health system faces many challenges including a growing and ageing population, increasing complexity of diagnosis, developing technology, increasing consumer expectations for care, remote delivery and rising costs.
- Western Australia's health facilities are undergoing a major transformation with the building of new hospitals such as Fiona Stanley Hospital, Perth Children's Hospital and refurbishment of many others.
- Within health services there is a shift towards interdisciplinary practice as the means to improve access to services for clients that have multiple needs. This will have implications for workforce development, particularly in regional and remote areas where training options are more limited.
- The Department of Health's Workforce Strategy 2016–2020 identifies a range of strategies to ensure the adequate supply of an appropriately skilled workforce, including doctors, nurses, midwives and Aboriginal health workers.
- A rise in the number of Culturally and Linguistically Diverse consumers in the State's health industry has increased the demand for workers with the necessary skills to work with a diverse client group.
- Ageing workforce resulting in an increasing number of experienced workers leaving the industry.
- Growing community demand for health services as the State's population ages at a faster rate.
- Challenge of providing health services and related training and workforce development in regional areas where small populations are dispersed across an area of 2.5 million square kilometres.
- Growing demand for occupations such as case manager, care coordinator and therapy assistant in response to rising incidents of dementia, alcohol and drug use.
- The low proportion of Aboriginal people in the health workforce (1.1%) given the higher levels of need of Aboriginal people for health services.
- Cultural awareness and sensitivity is an important workforce development issue for the health workforce.
- Increased competition for volunteers from other sectors and declining rates of voluntarism generally has resulted in decreasing numbers of volunteers in the industry.
- Lack of trained and qualified staff in the mental health sector at a time when both the government and non-government sectors are planning a general expansion of mental health services, including a range of new types of mental health service.
- The pace of technological development (eHealth technologies) continues to have upskilling implications for the health workforce.
- Access to quality clinical placements has been a perennial difficulty with all health related training and education, particularly in the vocational education and training (VET) sector where there is restricted funding available to both seek and support placements.

⁵⁴⁵ Data collection is for the National Training Agreement (NTA) scope which is only for enrolments funded by the Department of Training and Workforce Development.

⁵⁴⁶ Industry advice provided by Community Services, Health and Education Training Council 2017

RESIDENTIAL CARE SERVICES | SOCIAL ASSISTANT SERVICES⁵⁴⁷

- The Western Australian population continues to grow with the Australian Bureau of Statistics (ABS) reporting the population at the end of the June 2016 quarter as 2,617,200.
- The ABS has reported that the number of people in Australia aged 85 years or over is likely to increase rapidly over the next 50 years with people aged 85 years or over making up 5% to 7% of Australia's population, compared to only 1.6% in 2007.
- Community services have been moving consistently towards home-based and person centered models of support, particularly in disability, aged care and mental health services. This move has major implications for the nature of care and support services being delivered and the associated numbers and skills of workers required.
- The introduction of the National Disability Insurance Scheme is likely to result in greater casualisation of the disability support workforce.
- Industry reports that the attraction and retention of workers continues to be a major workforce issue.
- Community services agencies also report recruitment challenges related to the lack of experienced applicants for job roles.
- Many community service agencies are unable to release staff for training or professional development, due to the requirement to maintain service levels on a 24-hour per day basis.
- The current industry workforce has a gender disparity, with an estimated 70% female participation and low participation rates for mature-aged men.
- The community services industry has always been dependent on large numbers of volunteers to support the delivery of services. Competition for volunteers is increasing and the number of volunteers available decreasing. Duty of care requirements also means that volunteers need to be trained and competent in order to make their important contribution to service delivery.
- Aboriginal people and people from Culturally and Linguistically Diverse backgrounds are under-represented in the community services workforce.
- Industry continues to face significant difficulties in recruiting suitably experienced and qualified staff and accessing local training for staff development purposes in regional and remote parts of the State.
- The community services industry has voiced concern with some VET training delivery, in particular short term delivery patterns for Certificates III and Diplomas.
- The early childhood education and care sector continues to experience shortages of appropriately qualified staff.
- New and emerging skills are required in the community services workforce to deal with health and social issues in the community (including drug abuse) and to maintain pace with developments in technology.

2018 INDUSTRY WORKFORCE PRIORITIES

HOSPITALS | MEDICAL AND OTHER HEALTH CARE SERVICES⁵⁴⁸

- Support industry to address skill and labour shortages by evaluating, improving and promoting policies and programs aimed at increasing employment and training opportunities for people in access groups (for example people with a disability, young people aged 16-24, women returning to the workforce and mature men).
- Promote initiatives that aim to increase the recruitment and retention of Aboriginal people in the health industry in response to the growing number of Aboriginal people accessing the State's health services.
- Develop workforce development strategies to increase the recruitment of people from Culturally and Linguistically Diverse (CaLD) backgrounds.

⁵⁴⁷ Industry advice provided by Community Services, Health and Education Training Council 2017

⁵⁴⁸ Ibid

- Work with the Western Australian Mental Health Commission and the Western Australian Association of Mental Health to seek ways to address barriers to employment and training, including to encourage mental health agencies to adopt workforce planning and development programs.
- Work with stakeholders to identify recruitment and support models for increasing the number of volunteers in the industry.
- Work with stakeholders to support the recruitment of health care workers to live and work in regional and remote areas of the State.
- Identify occupations in demand in the health industry via the State's Skilled Priority Occupation List (SPOL). Of the 250 occupations identified in the SPOL 2016 across all industries, the health industry has 85 occupations.
- Work with industry to ensure that training package design supports the development of transferable skills.

RESIDENTIAL CARE SERVICES | SOCIAL ASSISTANT SERVICES⁵⁴⁹

- Identify workforce planning and development policies and strategies to support the delivery of essential services and reduce labour and skill shortages.
- Promote initiatives to increase the recruitment and retention of Aboriginal people and people from a CaLD background in the industry.
- Identify and develop recruitment and support models for volunteers.
- Identify strategies for encouraging the recruitment of people to the industry in regional areas.
- Liaise with State and national bodies responsible for maintaining and improving the quality of Vocational Education and Training delivery.
- Liaise with relevant State and national government departments and the Western Australian early childhood education and care sector to ensure consistency between the training package and the relevant regulations.

8.18. ARTS AND RECREATION SERVICES

OVERVIEW

The arts and recreation services industry is mainly engaged in the preservation and exhibition of objects and sites of historical, cultural or educational interest; the production of original artistic works and/or participation in live performances, events, or exhibits intended for public viewing; and the operation of facilities or the provision of services that enable patrons to participate in sporting or recreational activities, or to pursue amusement interests. The sub sectors in the industry include⁵⁵⁰:

- heritage activities;
- creative and performing arts activities;
- sports and recreation activities; and
- gambling activities.

As of May 2017, the industry employed approximately 27,300 Western Australians, representing 2.0% of the State's workforce. In the year to May 2017, the industry experienced an average annual growth of 300 persons or 1.1%. Over the five years to May 2017 the industry has experienced a net gain of 5,900 persons or 27.5% of its workforce, (albeit off a small employing base).

⁵⁴⁹ Industry advice provided by Community Services, Health and Education Training Council 2017

⁵⁵⁰ ABS, 1292.0 - Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (Revision 1.0)

The industry is dominated by non-employing businesses (63.8%), and small employing businesses of between one and 19 employees (33.7%), with only 3.2% of enterprises having 20 or more employees.⁵⁵¹

The industry predominantly employs broadly evenly between a full time and part time basis, with 51.4% of workers employed part time.⁵⁵²

The industry also employs broadly evenly across genders, with 51.7% of the workforce being female, compared to the total State proportion of 45.1%.

As of Census 2011, the 69.0% of the industry's workforce falls within the 25-64 age group and is consistent with the State's average (80.7%), the industry does have a younger age profile, with 27.2% of the workforce being 15 to 24 years of age, compared to only 16.2% across all industries.

In 2015–16, the industry contributed 0.5% towards the gross State product for Western Australia.⁵⁵³

ECONOMIC AND LABOUR MARKET SNAPSHOT⁵⁵⁴

Economic Indicators	Arts and recreation services	WA average across all industries
% of total WA employment	2.0	
Average annual employment growth % in 2016–17	1.1	-0.3
% of full time employment	48.6	68.1
% of female employment	51.7	45.1
% of metropolitan employment ⁵⁵⁵	88.5	78.3
% of total WA gross State product (GSP) at 2016 ⁵⁵⁶	0.5	

⁵⁵¹ Australian Bureau of Statistics. (2017). 8165.0 *Counts of Australian Businesses, including Entries and Exits, Jun 2011 to Jun 2016*.

⁵⁵² ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017

⁵⁵³ ABS, 5222.0, State Accounts

⁵⁵⁴ ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017 (unless otherwise stated)

⁵⁵⁵ Census 2011

⁵⁵⁶ ABS cat. no. 5220.0, National Accounts: State Accounts 2015–16, November 2016

SNAPSHOT OF VET DELIVERY (COURSE ENROLMENTS) – 2014–2016

ARTS AND RECREATION SERVICES	2014	2015	2016
Total course enrolments (NTA)	4,459	3,518	3,381
AQF level			
Certificate IV and above	2,136	1,759	1,766
Certificate III and below	2,323	1,759	1,615
Type of study			
Apprenticeship and traineeship	397	258	290
Institutional delivery	4,062	3,260	3,091
Location			
Metropolitan	3,000	2,373	2,240
Regional	1,459	1,145	1,140
Training providers			
TAFE	3,846	3,031	2,908
Private training organisations	613	487	473
Aboriginal people			
Course enrolments	442	353	332
Young people (15-24 years) – AQF level			
Certificate IV and above	1,614	1,281	1,316
Certificate III and below	1,428	1,032	954

TOP FIVE QUALIFICATIONS BY NTA SCOPE COURSE ENROLMENTS⁵⁵⁷ 2016

Qualification
Certificate III in Fitness
Certificate III in Visual Arts
Diploma of Music
Certificate III in Sport and Recreation
Certificate IV in Visual Arts

Source: VET Enrolment Data Collection19F⁵⁵⁸, final full year data for 2016

TOP FIVE VET IN SCHOOLS QUALIFICATIONS DELIVERED BY NTA SCOPE COURSE ENROLMENTS 2016

Qualification
Certificate III in Sport and Recreation
Certificate II in Sport and Recreation
Certificate II in Community Activities
Certificate II in Outdoor Recreation
Certificate III in Fitness

Source: VET Enrolment Data Collection19F⁵⁵⁹, final full year data for 2016

⁵⁵⁷ Includes VET in Schools training delivery

⁵⁵⁸ Data collection is for the National Training Agreement (NTA) scope which is only for enrolments funded by the Department of Training and Workforce Development.

⁵⁵⁹ Ibid.

INDUSTRY DEVELOPMENTS AND WORKFORCE CHALLENGES⁵⁶⁰

HERITAGE ACTIVITIES

- A lack of qualification offerings is limiting the capacity of new entrants to join the museums and galleries sector.
- Significant infrastructure investment has been made to deliver the new Western Australian Museum Perth site, however no accompanying plan is in place to support workforce development.
- Museums and galleries are increasingly competing for audiences with new forms of entertainment.
- Museums and galleries face increasing pressure to grow self-generated income and are forging new business models to meet this demand.
- Sustainability is a long term, ongoing issue for the creative industries globally, despite growing cognizance of the non-financial benefits brought to communities through the arts.
- Ongoing global economic conditions have seen international museums and galleries face funding cuts. This has led to recruitment freezes and a surplus of qualified people in the workforce. As a result, most senior and specialist positions in Western Australia currently attract international applicants.
- There is concern that a change in circumstances globally could affect the labour supply chain in occupations where there is a long lead time and no local pathways.
- A number of training and educational offerings have closed in recent years and there is currently no professional training for the museums and galleries sector available in Western Australia. This is an issue of considerable concern to the sector.
- For much of the creative industries, the current economic climate has introduced some challenges to sustainability. These challenges include: reduced financial contribution from business; reduced government funding; reduced disposable income across potential audiences; unaffordable rents, which have not decreased in line with reduced revenue (especially for galleries).

CREATIVE AND PERFORMING ARTS ACTIVITIES

Creative artists, musicians, writers and performers

- The current economic climate has exacerbated longstanding challenges to sustainability for the visual arts sector. These challenges include: reduced financial contribution from business; reduced government funding; reduced disposable income across potential audiences; and for galleries, unaffordable rents, which have not decreased in line with reduced revenue.
- Budgetary constraints limit the service that peak bodies are able to offer to the workforce, challenge the sustainability of smaller organisations and reduce opportunities for artists to exhibit their work. In turn this leaves the artists less prepared to manage their careers in a depressed market.
- The design sector in Western Australia is underrepresented, at 8.4% versus approximately 11% of overall Australian population, so there may still be potential for the market to expand despite indications that competition levels in industry are high nationally.⁵⁶¹
- Designers producing digital content have been increasingly challenged in recent years by infringements against their intellectual property. While ‘copycat’ designs of physical objects – especially fashion and homewares – have already become an issue for some, industry is concerned that the advent of effective and affordable 3D technologies is beginning to drastically reduce barriers to this form of theft.
- The instability which persists in the visual arts sector limits the affordability and accessibility of visual arts careers for an increasing number of people, and this issue is exacerbated by the growing cost of education and training. In addition, the limited capacity of industry bodies to provide training under present budgetary constraints risks pushing the onus for upskilling back onto the artist, who is often

⁵⁶⁰ Industry advice provided by FutureNow: Creative and Leisure Industries Training Council 2017

⁵⁶¹ <http://clients1.ibisworld.com.au/reports/au/industry/default.aspx?entid=564> Accessed 26.5.17

already struggling financially.

- An over reliance on volunteers in the sector inhibits career opportunities for artists and arts workers, and places volunteers under unreasonable pressure.
- While the picture is healthier in the design sphere, high levels of competition and freelancing make for potentially stressful careers, particularly if economic conditions begin to erode opportunities. The growing incidence of intellectual property theft may threaten the viability of smaller design firms and independent designers if they are unable to identify or legally challenge infringers.
- Given these challenges and issues, a number of skills areas come to the forefront as being vital to both visual artists and designers.
- Chief amongst those is intellectual property knowledge. While this is of particular relevance to designers, visual artists are also increasingly accessing new markets online and in digitising their product, they risk it being copied.
- A growing range of digital production methods are driving a need for artists and designers to upskill, for instance in 3D printing or augmented reality. As well as mastering the technology itself, the pace of change demands workers be flexible and adaptive to change, and able to engage in self-directed learning.
- As web-based solutions continue to drive new business and consumer markets for Western Australia's visual artists' work, greater web development and digital marketing skills are required to facilitate best use of these digital platforms. Marketing, outreach and a comprehensive use of social media are essential tools to reach a targeted market. Small business management skills are also increasingly vital. Current off-the-shelf business training solutions being accessed by arts graduates are an ill fit for industry, and more tailored training is needed.

Performing arts operation

- For much of the creative industries, the current economic climate has introduced some challenges to sustainability. Although a new dance company (Co3) and theatre company (The Last Great Hunt) is finding success in the current climate, others have scaled down their offer or disappeared altogether.
- Given this environment, many industry stakeholders report that organisations struggling to stay operational are unable to focus on growth targets. The impact is likely to be felt in the workforce also. All of Western Australia's major performing arts organisations offer significant mentoring, internship or other pathway programs and their ability to continue to service these is a vital link in the workforce chain of the sector.
- The Perth Fringe Festival has virtually doubled in size each year over the last four years, with over 1,800 local artists participating in 2015. The seasonal nature of performance work is challenging, with most artists struggling to make their careers financially viable.⁵⁶² Much of the growth within the sector is at this end of the market, where tickets are priced in a way that does not account for the higher costs of the performing arts companies that actually employ artists and support workers. This phenomenon, coupled with the increasing costs of education and training, is putting undue stress on the companies and the workforce.
- The new vocational education and training student loans scheme is viewed as exacerbating workforce pressures, with only 13 of an original 70 creative industries courses currently funded. A significant number of performing arts qualifications were included in the recent cuts, amongst them WAAPA's Advanced Diploma of Elite Dance. Most performing artists face difficulty reaching sustainability in their careers, and coupled with increasing university and vocational education fees, this can make the industry less viable as a career option for many.
- There is concern in industry that the unsustainable nature of much performing arts work places undue pressure on the workforce. Following the release of a report into mental health in the performing arts by Victoria University in late 2015, Entertainment Assist was established to reduce

⁵⁶² https://www.fringeworld.com.au/downloads/3069/media_release_fringe_world_2017_awards.pdf Accessed 12.5.17

'the shockingly high rates of anxiety, depression, suicide, isolation and other matters associated with working in the Australian entertainment industry'. The issue was reported as being directly related to the stress of sustaining a career in a high-pressure, low-security, poorly remunerated sector.⁵⁶³

- Given these pressures, it is unsurprising that the sector continues to report a growing need for an increasingly sophisticated knowledge in the area of income generation. Marketing, outreach and a comprehensive use of social media are essential tools to reach a targeted market and campaign for funds. Artists also require a working knowledge of intellectual property and copyright laws to assist them in protecting their product. Small business and freelance career management skills are more important than ever. While a number of peak organisations seek to provide quality short-duration training to artists, with their own viability under consistent threat, their offerings are both insufficient in depth, and insecure.

SPORTS AND RECREATION ACTIVITIES | GAMBLING ACTIVITIES

- Employment opportunities within the sport and recreation sector are increasing as more people are encouraged to engage in sport and recreation for health, fitness, enjoyment and many personal and social benefits. With this, the number of 24/7 gyms opening across the State has steadily increased. Already 11 per cent of gym members belong to a gym that's open 24 hours a day.
- Participation rates in physical activity decrease steadily with age, despite the overwhelming evidence of the health and economic benefits. Increasing and maintaining participation is critical, particularly as population projections indicate the proportion of people aged 65 and above is going to increase substantially reaching over 20 per cent of the total population in 2061.^{564 15}
- In 2012, only 43 per cent of adults met the recommended minimum of 150 minutes per week of at least moderate activity. Australia is seventh among developed countries for rates of obesity among people over 15 years of age, with nearly two thirds of adults overweight or obese.⁵⁶⁵
- To address this, there is a need for the sector to continue to form strong working relationships with other industries, particularly medical and allied health professionals. For instance, fitness professionals are increasingly collaborating with medical and allied health professionals to deliver evidence based exercise programs for people with managed health conditions. Similarly, the provision of integrated services within one facility provides opportunities for a holistic approach to health and wellbeing.
- The affordability of fees and charges are a significant barrier to participation in sport and recreation activities for some people. Initiatives such as the Department of Sport and Recreation funded [KidSport](#) and [SilverSport](#) programs which aim to increase the participation of children and older adults in sport by offering financial assistance to eligible applicants, is one measure that has been introduced to alleviate this barrier.
- Rapid population growth has increased the demand for useable open space, especially in outer metropolitan Perth and some regional centres. Ensuring access to quality, functional open space is a significant challenge.

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<https://www.entertainmentassist.org.au/vic/entertainmentassist/uploads/files/Phase%20%20Executive%20Summary%200-Final.pdf> Accessed 17.5.17

⁵⁶⁴ SD6 Strategic Directions for the Western Australian Sport and Recreation Industry 2016–2020

⁵⁶⁵ Service Skills Australia, Environmental Scan 2015, Sport Fitness and Recreation

Sport

- There is high staff turnover within the sport and recreation industry, due to a variety of factors including low levels of remuneration, the lack of a structured career path and undesirable hours.
- Sport employers report large numbers of applicants applying for advertised vacant positions, however, the quantity doesn't always correlate to finding quality applicants with an appropriate level of training and work or volunteer experience.
- The large number of volunteers relied upon by sport and recreation clubs and organisations presents a number of workforce challenges around attraction, retention and governance.
- Despite playing such a large and important role, many volunteers have not undertaken training for their role or are not given enough support. A challenge for the sector is to provide training to volunteers without being onerous on the person's time or too cost prohibitive.
- Technology and social media are an integral part of interacting with customers, clients and members who expect organisations to have a digital presence and to engage with them. Clubs and sporting organisations are expected to provide real-time updates to members, who expect a website or Facebook page as a matter of course. This poses a challenge, particularly where much of the workforce is voluntary and might not be digitally literate.

Fitness

- The fitness industry is experiencing an increase in personal trainers employed as contractors by large gym chains. This is changing the skills typically needed by people employed in these positions (greater need for marketing, promotion, and small-business management to attract and retain clients).
- Fitness instructors are increasingly working with a broader spectrum of clients, client needs and limitations, placing a growing need for skills which enable them to deal with and deliver suitable programs to children, adolescents, older participants and those with medical conditions, such as Diabetes Australia's Beat It and Lift for Life programs facilitated by Fitness Australia, requiring fitness instructors to complete related specific education courses.
- The quality of graduates has also been an issue for employers with feedback received that many lack work readiness when they are first employed. Longer duration courses are preferred over short courses as they provide the student with more time and opportunities to develop and reinforce their skill development. 'Real' work environments rather than simulated are preferred by industry as they lead to a more work-ready employee.
- A common challenge for the fitness industry is the retention of workers due to the physical nature of the work involved as well as differing work hours and relatively low levels of pay.
- The type of classes and activities offered in gyms and fitness centres is evolving with consumer interests changing as people seek gyms that are social, fun and accommodate busy, modern lifestyles.⁵⁶⁶

Outdoor recreation

- Western Australia is a destination point for numerous adventure and outdoor recreation pursuits. It is vital that this growth in outdoor recreation and adventure activities is matched by the provision of quality products, services and facilities that enhance the experience of participants, while keeping participants safe and sustaining the natural environment.⁵⁶⁷
- Outdoor recreation employers Australia-wide are reporting a shortage of trained and skilled staff to meet the growth that the industry is experiencing. In 2013, 43.8 per cent of organisations surveyed

⁵⁶⁶ PerthNow. WA's new exercise crazes muscle in on \$1.3b gym industry. January 23, 2017 Accessed from: <http://www.perthnow.com.au/news/western-australia/was-new-exercise-crazes-muscle-in-on-13b-gym-industry/news-story/428a2060025399841b56d7e2a7c0cbab>

⁵⁶⁷ SD6 Strategic Directions for the Western Australian Sport and Recreation Industry 2016–2020

reported difficulty in finding staff for outdoor recreation jobs.⁵⁶⁸

- Businesses in Western Australia report a lack of availability of adequately qualified and experienced staff, and there are instances of staff being brought over from the eastern states to fill labour shortages
- The seasonality and casualisation of the recreation workforce is a challenge due to the inability to sustain year-round employment. This also makes the utilisation of trainees for the sector more difficult when traineeships range from 12 to 24 months.
- There has been a shortage of research undertaken into the size, demographics and workforce development needs of the outdoor recreation industry in Western Australia, providing a challenge to understanding the workforce development needs of the sector.
- Risk management strategies are becoming increasingly important in the sector, with a national move towards consolidation of State based Adventure Activity Standards into the Australian Activity Standards for up to 22 outdoor activities. The need for qualified and experienced staff to undergo risk management training is critical to those pursuing outdoor pursuits.
- There is a lack of training providers delivering outdoor recreation vocational education and training qualifications in Western Australia at the level required by industry to fill labour shortage roles. Large numbers of students are undertaking outdoor education and outdoor recreation courses in senior high school, however, there remains the lack of a training pathway for them to continue outdoor recreation studies at a Certificate III or IV level if desired.

Community recreation/aquatics

- The community recreation/aquatics sector reports difficulties in attracting staff to regional and remote areas of Western Australia for roles such as pool manager, centre manager, pool lifeguard and swimming teacher. A lack of swimming teachers in particular could have severe implications when cohorts of children miss out on being taught potentially life-saving water safety skills. There have been instances in the past where regional pools have had to close due to a lack of qualified staff.
- Public aquatic centres play an essential role in teaching Western Australian children to swim and participate in water activities safely with 95% of all centres surveyed delivering swimming lessons. Centres need to continue to promote the importance of ongoing participation in swimming and water safety lessons, particularly amongst high risk groups including culturally and linguistically diverse communities, low socio-economic and Aboriginal communities.⁵⁶⁹
- Skills will need to be developed for the community recreation workforce to enable them to communicate and interact effectively with a diverse population.
- Aquatic clubs are currently facing a number of issues relating to the provision, distribution and access to aquatic facilities throughout the Perth metropolitan areas. As the majority of facilities are developed and managed by local and State government authorities, there is a need for policies and strategies to assist facility planners, facility managers, sporting associations and clubs to work together to ensure adequate provision and access to facilities, and to increase community participation and utilization.⁵⁷⁰
- The costs associated with delivering training to regional and remote areas is a challenge for training providers, with the YMCA, Royal Life Saving Society, AUSTSWIM and other Perth-based organisations running block training courses across the State for roles such as pool operator, pool lifeguard and swimming teacher.
- High industry turnover creates an opportunity for implementing engagement strategies to ensure qualifications, registrations and accreditations are renewed and maintained.

⁵⁶⁸ Outdoor Council of Australia & Service Skills Australia, 2013, 2013 National Outdoor Sector Survey

⁵⁶⁹ Royal Life Saving Society of WA and the Leisure Institute of WA Aquatics. Bigger Better Safer 2014–15 Western Australian Aquatics Industry Report

⁵⁷⁰ Department of Sport and Recreation. Aquatic Sports Strategic Facilities Plan. Perth and Metropolitan Region. November 2012.

Horse and dog racing/gambling services

- Industry image, working conditions and the high risk nature of many industry occupations can make it difficult to attract young people into training and employment. This is of particular relevance to apprentice jockeys and trackriders. The challenge lies in not just attracting them into the industry but providing them with opportunities, incentives and sustainable remuneration for longevity in industry well past racing.
- Safety in horse riding and handling, together with animal integrity and welfare, are key priorities being addressed nationally through training package reviews covering racing and equine sectors by Skill Service Organisations: Skills Impact (RGR Racing and ACM Animal Care and Management Training Packages) and SkillsIQ (SIS Sport Fitness and Recreation).
- ASQA's audit into equine safety in training and Skills Impact's subsequent stakeholder consultation and development of safety and animal welfare units embedded into equine related qualifications, highlights the importance of formal training in this industry to minimise exposure to dangerous situations and mitigate risk.
- Industry supports a balanced approach to increasing safety and mitigating risks in training, providing students have adequate exposure to workplace learning and realistic experiences with a range of horses to ensure workplace readiness and alleviate risk post qualification completion.
- There is a developing need to service animal athletes throughout their life and provide ex-racing animals with opportunities to be repatriated as companion animals. This has resulted in emerging new skills and employment opportunities within niche areas such as animal rescue groups undertaking behavioural assessment and training tailored for ex-racing greyhounds.⁵⁷¹
- The Western Australian TAB is a significant contributor to the State budget, with its proceeds supporting industry activity and its workforce development. Discussions around its privatisation have been ongoing for over two years, needing resolution to settle uncertainty within industry. Although the previous Western Australian State Government stated it would consult with the racing industry to develop an agreed solution, seeking an industry funding structure that would enable the Government to realise the value of the TAB, the current Labour Government will consider the sale, subject to the whole of industry supporting it.
- The racing sector workforce is beginning to reach retirement age in high numbers, creating significant challenges for employers, particularly their ability to attract people into the industry and develop their skills through on the job learning and formal training.
- With the current age of working jockeys being 35 and an average occupational retirement age being 34, industry is facing a growing shortage of jockey, partially being addressed by Racing and Wagering WA (RWWA) with its Apprentice Jockey Training program.
- The continued supply of qualified farriers to the racing and broader equine servicing industries (equestrian, horse riding schools, horse breeding, hobbyists) is of critical importance. Although current industry needs appear to be met by a private provider based in South Australia, further support with local vocational delivery is needed to attract and train adequate numbers to replace an ageing workforce upon retirement.
- South Metropolitan TAFE has ceased delivery of racing and equine qualifications in Western Australia in preference of companion animal and veterinary nursing qualification delivery. Industry believes this will have a significant negative impact on the supply of qualified and skilled graduates in the future, particularly stablehands and trackriders who play an integral part in supporting the work of jockeys. This situation reportedly exacerbates the compelling need for industry to employ unqualified people into high risk roles with in-house training instead of skilling its workforce through the vocational

⁵⁷¹ Department of Employment, 2016 Industry Employment Projections – Five Years to November 2020, report cited in Skills Impact, Racing Industry Sectors IRC Skills Forecast and Proposed Schedule of Work 2017–2020

system, leading to occupational health and safety concerns for unskilled workers in what are dangerous occupations.

- Although Rural Training Australia delivers Certificate III Racing – Trackrider traineeships as part of RWWA’s Apprentice Jockey Training program, traineeships for actual trackriders are not available through this program. This is due to the prohibitive cost to employers and the intrinsic nature of trackraider employment across multiple licensed racehorse trainers while under a training contract, with industry not supporting group training arrangements.
- To date, employers have relied on skilled migration to fill vacancies particularly trackrider (aligned to ANZSCO 361112 Horse Trainer), with acute shortages found in regional Western Australia. The ability for industry to meet labour shortages is expected to diminish under emerging national and State migration reforms. Changes to visa programs, related occupation lists used for skilled migration visas and removal of horse trainer/trackrider and farrier from these will aggravate supply of trained and experienced workers. These have alarmed industry, prompting a formal response being submitted to the Federal Government from the national industry peak body, Racing Australia (incorporating RWWA’s concerns).
- A major NSW business employs 150 trackriders, half of whom are employed on 457 visas. Although, industry and employment requirements for trackriders in Western Australia are smaller in size, industry’s reliance on this stream of experienced worker is equally critical.
- The racing industry has expressed a desire to link qualifications to licensing, particularly skill sets for stablehands, trackriders, and horse and greyhound trainers. Progress is impeded by the cost of enrolment for employers and the lack of local delivery in the State to support these occupations.
- Appetite also exists in the sector to formalise training and assessment (currently offered internally through RWWA for stewards, barrier attendants and harness catchers) for registered training organisation delivery at a cost viable to industry. Some of these skill sets are planned to be reviewed in the Skills Impact proposed schedule of work in the coming years (Racing Industry Sector Industry Reference Committee (IRC) Skills Forecast and Proposed Schedule of Work 2017–2020).
- Industry has identified race stewards’ integrity and high quality investigation skills as priority areas for review. The impact of technology on roles moving away from the requirement to stand in towers on race days has also elevated the need to address skill requirements, flagged for development over 2017 and 2018.
- RWWA are reviewing their Cadet Steward Program to capture a changing skill set, including the need for soft skills and reflecting the impact of technology.
- Employers (racing and farriers) report the cost of vocational training (additional training, apprenticeships and traineeships) to provide skilled labour as prohibitive in an industry predominantly characterised by very small businesses (mostly less than five employees). Similarly, the application process for employers seeking trainees deters them from participating in the system and is seen as convoluted, compliance heavy and an impost on resources.

2018 INDUSTRY WORKFORCE PRIORITIES⁵⁷²

HERITAGE ACTIVITIES

- Working with FutureNow’s Galleries, Libraries, Archives, Museums (GLAM) Industry Advisory Group, including senior representatives of library peak bodies, Western Australia Museum, Art Gallery Western Australia, Museums and Galleries Western Australia and independent gallery owners, to identify critical work to support workforce development for the sectors.
- With the new museum project due to launch in 2020, Museums and Galleries Western Australia⁵⁷³ have initiated an in-depth sector review. FutureNow are working closely with them to identify skills gaps and training needs and will make available a paper on sector issues in the first half of 2017.

⁵⁷² Industry advice provided by FutureNow: Creative and Leisure Industries Training Council 2017

⁵⁷³ <https://www.museumsaustralia.org.au/western-australia> Accessed 13.2.17

CREATIVE AND PERFORMING ARTS ACTIVITIES

Creative artists, musicians, writers and performers

- FutureNow is continuing to work closely with its Visual Art and Design Industry Advisory Group which includes representatives of: peak bodies Artsource, the Design Institute of Australia, and the Australian Graphic Design Association; arts organisations; and training providers.
- When facing challenges to the sustainability of their primary, artistic careers, having an in-demand skill could provide the stability that allows an artist to keep working on their art. It is currently estimated that visual artists make only 15% of their income from their art, and only 20% apply their skills outside of the sector.
- Traditionally, visual artists have engaged in further training and education to work in fields including education and art therapy. A less common pathway has been to gain additional qualifications in the fields of design, however the projected growth in demand for 2D design would indicate an area of potential here.
- While visual artists and designers engage in different processes of learning and application, there is some synergy in their work which suggests a secondary career in visual communication could provide much needed security for some Western Australian visual artists, although as with education and art therapy, it would require significant additional study. FutureNow is continuing work to raise awareness within the visual arts sector of the growing demand for visual communication skills and the potential for sustainable careers in this related field.
- Similarly, opportunities are growing within the sphere of the local authorities, and a suitable qualification in this area could be well utilised by visual artists seeking a broader career with an arts focus. FutureNow is engaging with industry in preparation for an upcoming review of existing Certificate III and IV Arts Administration qualifications as outlined in the Cultural and Related Industries Reference Committee Proposed Schedule of Work. These qualifications may be suitably adapted to support arts workers in a local government setting.

Performing arts operation

- The performing arts rely heavily on interstate and international visitors to deliver continued growth in ticket sales, and the sector broadly punches above its weight in bringing high-spend tourists to the State. Bids to expand audiences have seen a renewed focus on regional touring and this is broadly seen as beneficial to all stakeholders, despite staffing challenges. There are ongoing issues for the sector in accessing appropriately skilled, regionally based technicians to support touring productions. FutureNow collaborated with industry peak body CircuitWest to produce the Royalties for Regions funded Backstage Pass project, which provides a series of instructional videos around must-have theatre technical skills to the transient workforce required to support these productions⁵⁷⁴. The project is now accessible and has over 80 users. FutureNow will continue to work on promoting the resource through 2017–18.
- FutureNow continues to work closely with its Performing Arts Industry Advisory Group, and advocate for the appropriate funding of the performing arts sector and the availability of affordable education and training options for prospective performing artists.

⁵⁷⁴ <https://www.circuitwest.com.au/courses-overview/> Accessed 17.5.17

SPORTS AND RECREATION ACTIVITIES | GAMBLING ACTIVITIES

- Improved workforce capacity through an increase vocational education and training (VET) delivery in Certificate III and IV level qualifications for the outdoor recreation industry to support a growing adventure tourism sector.
- Industry has requested that support and monitoring is needed to ensure the high levels of sport and recreation VET in schools activity is meeting industry requirements and is to an appropriate industry standard.
- Industry has requested FutureNow explore the possibility of capturing information related to the pathways chosen by students as they exit VET training and enter higher education.
- Industry should not just focus on VET but include a mapping of entry into higher education.
- Industry has suggested mapping student pathways transitioning from school to vocational study, and to higher education.
- FutureNow will monitor the impact of skilled migration reforms on industry.
- FutureNow will continue to gather information related to occupations experiencing labour shortages in the sport and recreation industry through its Industry Advisory Group and broader stakeholder network.
- FutureNow will support the schedule of training package work being undertaken by Skills Service Organisations and advocate stakeholder feedback to guide training package development over 2017 and 2018, particularly in the areas of equine safety and outdoor recreation.
- Continue to monitor the availability of racing, equine and farriery delivery, including the effects of reduced delivery on supply and safety of workers into the industry.
- Work with Racing and Wagering Western Australia (RWVA) to explore feasible solutions for delivery of foundation level equine and racing qualifications, including the delivery of skill sets (for example trackriders), to ease the need for industry to employ entry level workers without formal qualifications into high risk occupations.
- Monitor the impact of skilled migration reforms on industry and work with RWVA to advocate for availability of skilled horse trainers (trackriders) through a migration pathway.
- Continue to gather information related to occupations experiencing labour shortages in the racing and equine industries through its Racing and Equine Industry Advisory Group and broader stakeholder network.
- Support the schedule of training package work being undertaken by Skills Service Organisations and advocate stakeholder feedback to guide industry priority skills for development over 2017 and 2018.

8.19. OTHER SERVICES

OVERVIEW

The other services industry classification includes a broad range of personal services; religious, civic, professional and other interest group services; selected repair and maintenance activities; and private households employing staff. Sectors are mainly engaged in providing a range of personal care services, such as hair, beauty, diet and weight management services; providing death care services; promoting or administering religious events or activities; or promoting and defending the interests of their members.

Also included are sectors mainly engaged in repairing and/or maintaining equipment and machinery (except ships, boats, aircraft, or railway rolling stock) or other items (except buildings). The sub sectors in the industry include⁵⁷⁵:

- repair and maintenance; and
- personal and other services.

⁵⁷⁵ ABS, 1292.0 - Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (Revision 1.0)

As of May 2017, the industry employed approximately 59,500 Western Australians, representing 4.4% of the State's workforce. In the year to May 2017, the industry experienced an average annual decline of 100 persons or 0.2%. Over the five years to May 2017 the industry has experienced a net gain of 5,500 persons or 10.5% of its workforce.

The industry is dominated by small employing businesses of between one and 19 employees (51.9%), and non-employing businesses (45.9%), with 2.0% of enterprises having 20 or more employees.⁵⁷⁶

The industry predominantly employs on a full time basis, with only 29.5% of workers employed part time.⁵⁷⁷

The industry has a majority male workforce at 57.5% compared to the total State proportion of 54.9%.

As of Census 2011, the 75.4% of the industry's workforce falls within the 25-64 age group and is lower than the State's average (80.7%). The industry does have a strong youth profile, with 21.4% of the workforce being between 15 and 24 years of age, compared to only 16.2% across all industries.

In 2015–16, the industry contributed 1.4% towards the gross State product for Western Australia.⁵⁷⁸

ECONOMIC AND LABOUR MARKET SNAPSHOT⁵⁷⁹

Economic indicators	Other Services	WA average across all industries
% of total WA employment	4.4	
% average annual employment growth in 2016–17	-0.2	-0.3
% of full time employment	70.5	68.1
% of female employment	42.5	45.1
% of metropolitan employment ⁵⁸⁰	78.1	78.3
% of total WA gross State product (GSP) at 2016 ⁵⁸¹	1.4	

⁵⁷⁶ Australian Bureau of Statistics. (2017). 8165.0 *Counts of Australian Businesses, including Entries and Exits, Jun 2011 to Jun 2016*.

⁵⁷⁷ ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017

⁵⁷⁸ ABS, 5222.0, State Accounts

⁵⁷⁹ ABS cat. no. 6291.0.55.003, Labour Force Survey Detailed, Quarterly, May 2017 (unless otherwise stated)

⁵⁸⁰ Census 2011

⁵⁸¹ ABS cat. no. 5220.0, National Accounts: State Accounts 2015–16, November 2016

SNAPSHOT OF VET DELIVERY (COURSE ENROLMENTS) – 2014–2016

OTHER SERVICES	2014	2015	2016
Total course enrolments (NTA)	17,578	17,088	16,456
AQF level			
Certificate IV and above	5,059	4,804	3,842
Certificate III and below	12,519	12,284	12,614
Type of study			
Apprenticeship and traineeship	10,982	10,912	10,102
Institutional delivery	6,596	6,176	6,354
Location			
Metropolitan	13,541	12,931	12,892
Regional	4,037	4,155	3,557
Training providers			
TAFE	12,721	11,755	11,605
Private training organisations	4,857	5,333	4,851
Aboriginal people			
Course enrolments	581	572	561
Young people (15-24 years) – AQF level			
Certificate IV and above	1,419	1,203	984
Certificate III and below	8,352	8,531	8,529

TOP FIVE QUALIFICATIONS BY NTA SCOPE COURSE ENROLMENTS⁵⁸² 2016

Qualification
Certificate III in Electrotechnology Electrician
Certificate III in Engineering - Mechanical Trade
Certificate IV in Competitive Systems and Practices
Certificate III in Engineering - Fabrication Trade
Certificate II in Electrotechnology (Career Start)

Source: VET Enrolment Data Collection19F⁵⁸³, final full year data for 2016

TOP FIVE VET IN SCHOOLS QUALIFICATIONS DELIVERED BY NTA SCOPE COURSE ENROLMENTS 2016

Qualification
Certificate II in Engineering
Certificate II in Electrotechnology (Career Start)
Certificate II in Engineering Pathways
Certificate II in Electronics
Certificate III in Engineering - Technical

Source: VET Enrolment Data Collection19F⁵⁸⁴, final full year data for 2016

⁵⁸² Includes VET in Schools training delivery

⁵⁸³ Data collection is for the National Training Agreement (NTA) scope which is only for enrolments funded by the Department of Training and Workforce Development.

⁵⁸⁴ Ibid.

INDUSTRY DEVELOPMENTS AND WORKFORCE CHALLENGES

REPAIR AND MAINTENANCE⁵⁸⁵

- Population growth within the State is approximately 1.0%, this equates to 29,800 new residents in the twelve months of 2015–2016.⁵⁸⁶ This creates the potential for approximately 59,600 additional vehicles on Western Australian roads every year. Consequently, the automotive workforce needs to grow at a similar rate to keep up with demand. With declining apprentice numbers and industry consolidation, skills shortages will become an issue within the next five years.
- The automotive industries ever-increasing use of new and innovative technologies continues to have a major impact upon the service and repair sectors. Small to medium enterprises (SMEs) are finding it difficult to access repair data and training for these newer technologies. Manufacturers closely guard their intellectual property rights for the technologies they have developed and provide limited access to technical data and repair information. The cost of accessing information and the tools required is forcing a growing industry shift towards specialist and franchised repairers and Original Equipment Manufacturer (OEM) associated workshops.
- The accident repair sector is continuing to suffer as a result of technological changes and an industry shift towards business consolidation with smaller businesses finding it increasingly difficult to meet industry and insurance companies' procedures and methods of repair.
- These issues are compounded by the physically demanding nature of the work. A large percentage of workers move to a management or supervisory role or leave the industry in their mid to late forties. The average age of technicians was just under 39⁵⁸⁷ and there is an historic reluctance to employ apprentices in the numbers required to sustain the industry. Panel beater and spray painter have been in short supply for many years.⁵⁸⁸
- The slowdown in the Western Australian economy has resulted in a continual decline in commercial truck sales and servicing activity. Heavy truck sales were down 9.1% in June 2016 over the previous twelve months.⁵⁸⁹ SMEs in the heavy vehicle service and repair sector are finding it increasingly difficult to remain in business.
- New motor vehicle sales in Western Australia remain on a downward trend, sales were 10.5% down in January 2017 over the same period in 2016⁵⁹⁰, with the Automotive Holdings Group reporting weaker market conditions in Western Australia in its 2016 Annual Report. Conversely with customers choosing not to replace their vehicles, independent repair networks may benefit from this in the short term.
- The increased use of technology in the agricultural machinery sector in areas such as precision agriculture and agricultural mechanisation has led to industry questioning the effectiveness of the current training package.
- Industry has concerns regarding some training providers reducing student contact hours for the off the job component of training and relying more and more on assessing rather than delivering training.
- A perceived lack of career guidance within the school curriculum is seen as a major issue in recruiting suitable applicants for apprenticeships/traineeships in automotive disciplines. Focus upon tertiary outcomes for school students create a negative image of employment-based learning pathways.⁵⁹¹
- Apprentice employment across all the automotive sectors is in decline with several of the large multi-franchise companies forecasting reduced intake numbers for 2017/18. In 2015, Motor Trades Association of Western Australia closed down its panel and paint training facility due to unviable student numbers. This leaves Western Australia with only one registered training organisation now

⁵⁸⁵ Industry advice provided by Utilities, Engineering, Electrical and Automotive Training Council 2017

⁵⁸⁶ The West Australian, Thursday 22 September 2016

⁵⁸⁷ Source Body Shop Business - The Tech Shortage

⁵⁸⁸ UEEA Industry Survey - February 2017

⁵⁸⁹ Truck Industry Council (TIC)

⁵⁹⁰ Federal Chamber of Automotive Industries

⁵⁹¹ UEEA Industry Survey - February 2017

delivering panel and paint training.

- Apprentice commencements across all the automotive sectors continue to show a decline with 1,301 commencements in the 12 months to 30th September 2014 and 1,014 commencements in the 12 months to 30th September 2016 equating to a decline of 22% in two years.⁵⁹²
- The automotive industry continues to have an “image problem” relative to attracting new entrants. The vehicle accident repair sector is experiencing the largest difficulty in attracting new entrants due to perceptions of low pay rates, dirty and noisy work environment, and a lack of career pathways.
- The issue of training and skills development in newer technologies is an ongoing problem particularly for the smaller and independent repairer network. Industry is reporting that the training package and training delivery is not keeping pace with current industry needs.
- It is increasingly difficult to recruit mechanics with current skills and knowledge, particularly fault diagnosis and electrical/electronic skills. This issue is a major concern, particularly to the non-manufacturer backed SMEs. The ever-increasing use of new and innovative technologies for crash avoidance systems, regenerative braking, battery charging systems and high pressure fuel systems is driving the need for training in these new and emerging technologies. Industry is concerned that the current training package and training delivery is not effectively addressing this ongoing issue. Some employers reported concerns around the standard of teaching and, in particular, the lack of student engagement in the classroom environment. The lack of personalised attention and failure to connect with today’s generation of students was seen by many as a contributing factor towards compromised knowledge and skills transfer within a training environment⁵⁹³
- Competition for labour from other industries such as the mining and resources sector will continue to be an issue as the skills attained in automotive qualifications easily transfer to mine maintenance programs. This issue has eased somewhat due to the current economic climate. According to the National Energy Resources Australia’s Sector Competitiveness Plan 2017, “With the construction phase generated by the energy resources boom largely complete, the focus now is to ensure sufficient breadth and depth of capability to support operating projects during their lifecycle, both for ongoing operations and maintenance, but also for shutdowns. Most plants will be scheduling maintenance shutdowns in the midterm, which will put a strain on existing labour resources, drive up costs and potentially require overseas skills to be brought in”.⁵⁹⁴
- Complexity of modern motor vehicles and the associated service and repair problems is forcing the non-manufacturer backed, independent service and repair network to consider specialising in a particular product or brand. Competing with the franchised dealer network is becoming a major issue for independent operators who are trying to compete against franchised dealers who can offer incentives to customers such as fixed and reduced price serving and long term warranty for the duration of vehicle ownership. This increased competition has negative impacts upon future apprentice intake and future workforce growth and sustainability within the non-franchised operators.

⁵⁹² Ibid.

⁵⁹³ Auto Skills Australia Environmental Scan 2015 - Identified Workforce Development Needs Western Australia

⁵⁹⁴ NERA – Sector Competitiveness Plan 2017

PERSONAL AND OTHER SERVICES⁵⁹⁵

Beauty services

- The industry is largely benefitting from a broader structural shift in the economy away from goods and towards services.
- It is also moving from an industry that was once perceived as the domain of the wealthy to one that is now a basic consumer service.
- Traditional salons are still the dominant model in the industry, but there has been a notable increase in salons and clinics offering a limited range of treatments and marketing themselves as experts in their chosen area. Over the past five years the beauty services industry has expanded to include services such as cosmetic tattooing, teeth whitening, specialist eye brow services and body piercing.⁵⁹⁶
- Traditional beauty salons that offer full service, including facials, body treatments, waxing, nails, eyelash tinting and tanning; specialised salons or clinics that offer specific treatments, have a focus on results or speed; and spas that offer relaxation, body treatments and high-end services focus on the customer experience.
- Deregulated trading hours and penalty rates continue to be an issue for small business in the industry.
- The industry is competing with the health sector as procedures such as enzyme peels, micro-dermabrasion and intense pulsed light (IPL), and cosmetic tattooing have generated a range of discussions regarding who is responsible for these types of procedures.
- The progressive ageing of the population will also support strong demand for hair colouring and beauty services, as salon visitors wish to slow or even reverse the signs of ageing through a wide range of treatments.
- The industry has seen an increase in the number of young males and females in the 20 to 35 age group seeking to enhance their appearance.
- Employers in the beauty industry have mixed experiences regarding the quality of vocational training, assessment and the level of experience and competence of trainers and assessors.
- Institutional training is not meeting the needs of the industry as many students do not have workplace experience before entering the workplace.
- Links between the industry and health professionals may create more employment opportunities in a medical and paramedical context however it is also causing tensions as more beauty salons are operating services that they do not have the skills or qualifications to perform.
- The ongoing and increasing use of new technologies, IPL, micro-dermabrasion, body piercing and cosmetic tattooing is driving the need for training of employers and employees. In many cases training is insufficient to guarantee client safety and no licence is required. The *Western Australian Radiation Safety Act 1975* does not preclude anyone from using IPL or laser equipment as it falls below the level stated in the Australian Capital Territory. If the question is should it be licenced, then the answer is clearly yes. There is so much permanent damage done to the consumer by the unskilled use of this equipment that regulation needs to be implemented to protect the public from dangerous practice. There should be an obligatory licence for anyone using this equipment and a serious penalty for anyone using this equipment without a licence.⁵⁹⁷
- The danger of cosmetic tattooing by unskilled and often untrained operators is emerging as a major issue for the industry. The SHB Hairdressing and Beauty Services Training Package do not address the need for a qualification or skillset for SHBBSKS003 Design and provide Cosmetic Tattooing. This unit also requires the learner to specify details of the 'anaesthetic used and method of application'. The use of anaesthetics is in breach of the Health Department of Western Australian Act where only

⁵⁹⁵ Industry advice provided by Retail and Personal Services Training Council 2017

⁵⁹⁶ IBISWorld January 2017

⁵⁹⁷ WA Register of Occupational Licenses

medical practitioners can administer anaesthetics. There is a clear danger to the public by allowing this practice to continue.

- Other issues surrounding cosmetic tattooing are that this should be a standalone qualification and not a unit embedded as an elective. The unit SHBBSK003 Design and Provide Cosmetic Tattooing enables tattooing of the breast areola, eyelids, eyebrows and lips. These are areas of high risk for serious and permanent damage.
- The unit SHBBINF001 Maintain Infection Control Standards is an elective only unit for all qualifications and should in fact be a core unit for all certificate levels.

Hairdressing services

- While there is no shortage of qualified hairdressers, there is a shortage of skilled hairdressers.
- There is evidence of industry dissatisfaction with the three year apprenticeship, which the industry overwhelming wants returned to a four year term.
- The number of barber shops across Australia has jumped an estimated tenfold over the past five years.
- Higher grooming standards for men and an increase in baby boomers trying to slow the ageing process has led to forecasts for a growth in industry revenue.
- The increasing prevalence of up-market barbers who provide services such as traditional wet shaves has provided a boost to the industry. Barber shops have also taken on the role of defacto men's shed – with men now going to the barber's shop for a beer and a shave.⁵⁹⁸
- In response to an identified skill shortage in barbering, a Class A apprenticeship – Certificate III in Barbering has been approved and has been listed in the Government Gazette.
- Apprenticeships for barbering have commenced and the numbers are increasing.
- As at December 2016 there were 586 apprentices in training which includes apprentices in barbering.
- Certificate II in Salon Assistant traineeships as at December 2016 were around 101.⁵⁹⁹
- The gradual ageing of the population has led to an increase in demand for hair colouring services (with six weekly visits common in this area). Demand for hair colouring services by males is on the rise. Industry suggests that part of the increased demand for services is highly linked to cultural and demographic trends. In particular, the ageing of the population, together with a cultural emphasis on appearance and youth, are driving demand for beauty and hair services.
- Salon workers are required to have sufficient digital literacy skills to engage efficiently with new technologies, such as appointment management software and the use of text messages for appointment confirmations. The use of tablets when consulting with clients is also increasing.
- The ability of salons to adapt to the constant changes of fashion and client requirements continues to be the biggest challenge for the industry.
- Salon workers are required to have sufficient digital literacy skills to engage efficiently with new technologies.
- While there is no shortage of qualified hairdressers, there is a shortage of "skilled" hairdressers, which industry has identified largely due to the apprenticeship being changed from a four year term to a three year term. Apprentices do not have the depth and breadth of skills required for a competent senior worker in the salon.
- An emerging skill gap identified for the industry is business management training.
- As hairdressing is considered a 'luxury' item, the down turn in the Western Australian economy and the lack of consumer confidence has had a serious impact on hairdressing salons with many battling to stay open.

⁵⁹⁸ Commercial Real Estate (2017). *Barbers give the corner shop a new lease on life*. March 23 2017

⁵⁹⁹ Department of Training and Workforce Development

Funeral services

- The funeral services industry is undergoing change. The industry is embracing the introduction and increasing the use of new technologies such as energy efficient crematory facilities, the use of online technology such as online condolence books, funeral videoing and online death registries.
- Funeral service organisations are moving increasingly toward providing a streamlined, all-encompassing funeral experience, including catering and floristry services. Some segments of the industry have set up floristry and event management services to meet the demand.
- The death rate in Western Australia is projected to increase steadily, in line with its ageing population. The funeral services industry expects the impact of this will be felt in the 2030s, by which time it will require additional staff and facilities to meet demand.
- There has been a gradual shift away from the norm of small, often family-owned businesses dominating the market, to large corporations or larger franchise chains.
- Smaller funeral directing businesses rely on a mix of casual and part time staff to support unpredictable demand.
- Larger funeral organisations are able to move staff across businesses as required and draw on centralised functions such as embalming and clerical roles to limit the effects of seasonal variations.
- The industry experiences an attrition rate in excess of 34% for those who have been employed in the industry for less than one year.
- The continuous increase in the State's population, which is projected to more than double between 2007 and 2056, reaching 4.3 million, will further boost the demand for funeral services.
- The funeral services industry has traditionally trained their staff on the job due to the specialised nature of the work. As of November 2014, the South Regional TAFE commenced training for this industry and is registered to deliver Certificate III and Certificate IV.
- By 2017, 13 people had completed Certificate III and 10 more people have commenced training in Certificate IV in 2017.
- Based on industry trends it is anticipated that between 800 and 900 additional funerals will take place in Western Australia in 2017.
- The national increase in obesity requires more manual handling skills and creates issues with equipment and facilities, such as hearses and crematoria.
- Increasing cultural diversity requires that funeral services have the ability to work across cultures – this extends to developing greater cultural awareness and widening the services provided to cater for different religions and cultural expectations.
- There is strong need for pre-employment courses and funding aimed at providing basic training and work experience to new industry workers who often have an incorrect perception of the industry.
- Currently, there is difficulty in finding qualified embalmers and managers.
- Attracting new employees is more of a challenge than retaining staff.
- Privatisation of cemeteries – the current situation with no competition does not create a high level of service.
- Current practices do not provide for the upgrade and provision of services at cemeteries such as: mechanical lowering services at grave sites; provision of courtesy vehicles; repair of sound systems; and upgrading chapels.
- There is no code of practice for minor independent funeral operators, lack of scrutiny of Occupational Safety & Health requirements and no written quotations for work to be carried out.

2018 INDUSTRY WORKFORCE PRIORITIES

REPAIR AND MAINTENANCE⁶⁰⁰

- Attract new entrants into the automotive industry as apprentices/trainees to maintain a sustainable automotive skills base for the future.
- Work collaboratively with Utilities, Engineering, Electrical and Automotive Training Council (UEEA) Training Council industry sector specific advisory groups to assist with providing State Government with industry intelligence and to identify new or emerging skill requirements and industry issues regarding training, employment and workforce development.
- Work collaboratively with the National Skills Service Organisation and Industry Reference Committee's through the UEEA Training Council to provide Western Australian industry feedback and recommendations regarding training packages in areas such as new and emerging technologies, precision agriculture and new working practices.
- Retain current workers within the current economic downturn.
- Upskill existing workers to enable them to keep up with new technologies and working practices.
- Establish apprenticeships/traineeships in line with emerging trends within industry.
- Work collaboratively with registered training organisations to provide students with practical experiences aligned to current industry methods and practices during the off the job component of training delivery.

PERSONAL AND OTHER SERVICES⁶⁰¹

Beauty services

- To ensure safe practices by skilled operators are in place for emerging and current services in the beauty services Industry particularly in the areas of IPL, cosmetic tattooing and body piercing and nail technology. Media reports in November and December 2016 highlighted the serious damage from IPL operators⁶⁰² and nail technicians⁶⁰³ that is caused by the lack of skill and regulation to this industry. The Queensland Government has recognised the public dangers of tattooing and cosmetic tattooing by introducing mandatory licensing for tattooists and has very heavy penalties for non-observance of the law.
- The industry has clearly indicated that the areas of IPL, nail technology and cosmetic tattooing should be regulated in the interests of public safety.

Hairdressing services

- To have the draft Public Health Guidelines for the hairdressing and barber industry 2016 endorsed and implemented. There is confusion in the industry between the current and the circulated draft and which one should be used.

⁶⁰⁰ Industry advice provided by Utilities, Engineering, Electrical and Automotive Training Council 2017

⁶⁰¹ Industry advice provided by Retail and Personal Services Training Council 2017

⁶⁰² WAtoday November 18th 2016

⁶⁰³ WAtoday December 1st 2016

- The Department of Health 2013 Guidelines need to be updated to meet the needs of the current industry requirements. The body art and personal appearance area is growing at a very fast rate with many non-skilled and unqualified operators performing body art such as tattooing and body piercing in both hairdressing and beauty salons. The guidelines need to be strengthened and kept up to date for the protection of the public.
- To build up the numbers of apprentice barbers and hairdressers.
- To lift the skill level of apprentice hairdressers. In 1997 the Department of Employment determined that it is skilled hairdressers that are in shortage as applicants for positions lack the required skills to do the tasks. This has not changed.

Funeral services

- Increase the ratio of embalmers and managers.
- Attraction and retention of staff.
- Continue to promote training and up skilling for workers in the funeral services industry to ensure the level of skill and knowledge is constantly expanding.
- Use Certificate I in Funeral Operations and Certificate II in Funeral Services to encourage potential funeral workers into the industry.
- Delivering a high level of service to the public from all workers in the industry.

9. REGIONAL WORKFORCE DEVELOPMENT AND PLANNING

To identify local workforce opportunities and challenges in regional Western Australia, the Department supported the development, release and implementation of workforce development plans for each of the nine regions.

To generate local ownership of the plans, the Department in consultation with the nine Regional Development Commissions established workforce development Alliances in each region. These Alliances are made up of local industry, community and government representatives, and are responsible for overseeing the development and implementation of regional plans.

The suite of comprehensive workforce development plans was aimed at developing a skilled workforce to meet the economic and community needs of each region. The plans captured relevant research and analysis at the time of development, and included the views and aspirations of industry and the broader community.

Each plan identified local workforce development opportunities and challenges in the region, and provided areas of focus (strategies) to address them.

A number of common themes relating to workforce development were identified in the regional plans. These include, but are not limited to:

- the challenge of attracting and retaining young people in regional communities and subsequently the workforce. The key factors contributing to this include the availability of education and training (in particular, higher education), perceived lack of career prospects and lifestyle issues;
- increasing the participation of under-represented groups – this issue is critical to addressing their skills and workforce development needs over the coming years, particularly among Aboriginal people, mature-aged workers, and people with a disability;
- lack of language, literacy and numeracy standards is a concern for employers; and
- competition for labour – there are challenges for many industry sectors to match wages and employment conditions offered by other sectors (this occurs during the mining and resources sectors peak periods).

Of the nine regional plans developed, six have now expired and have been formally acquitted by the respective Alliance during 2016–17. These include the plans for the Goldfields/Esperance, Great Southern, Kimberley, Pilbara, South West and Wheatbelt regions.

Workforce development plans for the Gascoyne, Mid-West and Peel regions are still being implemented and are due to expire in 2018.

Copies of the regional workforce development plans and their executive summaries are available at dtwd.wa.gov.au.

Regional Labour Market Profiles

In 2016, building on the work of the Regional Workforce Development Plans, the Department prepared Regional Labour Market Profiles for each of the nine regions.

These profiles include the regions' key industries, including an assessment of any major projects being planned in the foreseeable future, investment and labour force characteristics, and critical insights regarding skill requirements and workforce development issues.

The set of regional labour market profiles are included in Appendix D.

It is the intention of the Department to update the nine regional labour market profiles again in 2018. The updated documents will take into account the 2016 Census data, information gathered by the Department when undertaking its labour market review in the regions,⁶⁰⁴ and any other current information and data related to each region.

⁶⁰⁴ See Section 7.3, Responsive Priority Occupation List for the Regions

10. PROCUREMENT OF TRAINING PRIORITIES

The Department of Training and Workforce Development is responsible for the purchase of training and related services in accordance with the State's vocational education and training policies.

The recommended training priorities in the State Training Plan are instrumental in shaping the profile of these services.

The purchasing of training involves the strategic planning, formation and management of service agreements, contracts with, or grants to, external stakeholders, including TAFE colleges, private training providers, the Western Australian Academy of Performing Arts, contracted Career Centres, group training organisations and other providers. The Department's Service Resource Management Directorate manages all aspects of this process and the relationships with contractors and service providers.

The Department's procurement processes take into account the priorities of the State Training Plan and Australian Government priorities which include the National Agreement for Skills and Workforce Development and other National Partnership Agreements.

In the case of TAFE colleges, this is done through the Delivery and Performance Agreements process. Delivery and Performance Agreements contain negotiated training delivery profiles which are aligned to the policy and funding settings of the Department and other priorities identified in the State Training Plan. The profiles also identify General Industry Qualifications delivery priorities that among other things support higher level qualifications and skills pathways, and training delivery for targeted access groups and youth.

The majority of procurement with private training providers is done through competitive tender and grant processes which are also aligned where required with State training priorities.

In some instances however, training contracted through these processes will specifically target special needs groups including people who have a barrier to accessing mainstream training and/or employment opportunities. In line with State Government procurement practices, these tenders and grants are advertised on the State Government Tender site, Tenders WA.

Tender and grant documentation for all programs are designed to clearly articulate the purchasing priorities for each program. This is done to ensure transparency of process and to facilitate market comprehension of the purchasing priorities in order to obtain the most targeted response from providers.

Since 2014, the contracting arrangements have been streamlined to ensure a more efficient and effective process for the selection and subsequent management of contracted registered training organisations. The aim of this arrangement is to achieve greater quality training provision while providing healthy competition and choice for students and employers.

Department procurement processes and the development of programs are designed to ensure that targeted purchasing of training is strongly aligned with the State Training Plan.

11.APPENDICES

11.1. APPENDIX A – RELEASE OF TOTAL VET STUDENTS AND COURSES 2016

- Under the national total VET activity (TVA) initiative registered training organisations are required to submit training data on all vocational training activity at least annually.
- The requirement to report under TVA commenced from 1 January 2014, though some registered training organisations were granted a transition period or received an exemption.
- The National Centre for Vocational Education Research (NCVER) released the *Total VET students and courses 2016* publication on 22 August 2017.
- The publication provides an estimate of the nature and extent of vocational education and training delivered by all Australian providers in 2016, including both publicly funded and purely fee-for-service training.
- There were an estimated 4.2 million students enrolled nationally in vocational education and training (VET) in 2016, with 8.9% of these studying in Western Australia.
- In 2016 of all VET hours delivered in Western Australia, approximately 61% are Australian Government or State-funded (publicly funded) and 31% were fee-for-service by domestic students (privately funded). Fee-for-service by international students made up less than 8% of total VET activity in Western Australia.
- State figures show that the number of publicly funded students and the number of students studying with TAFEs both declined in 2016.
- NCVER estimates that 22% of working aged Western Australians participated in training in 2016. This was the second lowest participation rate of any jurisdiction, compared to a national participation rate of 24.2%.
- The de-duplication process applied by NCVER for the first time this year has had a significant impact on previously released 2015 figures. Nationally, the total number of students was revised downwards by more than half a million or 12%; in Western Australia student numbers were revised down by more than 100,000 or 24%.
- The Department of Training and Workforce Development will continue to work with NCVER, the Australian Government and other jurisdictions to address concerns around the classification of VET activity, data quality and the level of duplication for future TVA publications.
- The Department has access to unit level TVA data^{106F}, which will allow a detailed analysis of the private versus public market to inform policy decisions for the direction of public funding in Western Australia.
- The following table provides the total VET activity for hours delivered in 2016, by State delivering the training, and by the funding source.

Total VET Activity for hours delivered, by State of training delivery and funding source for 2016

Training delivery location	Funding source	Hours delivered	
		Count	Proportion of State total
New South Wales	Publicly funded (Cwth/State)	116,549,328	50.1%
	Fee for service domestic	96,151,718	41.3%
	Fee for service international	20,065,408	8.6%
	Total	232,766,454	100.0%
Victoria	Publicly funded (Cwth/State)	145,151,690	63.8%
	Fee for service domestic	61,435,482	27.0%
	Fee for service international	20,920,632	9.2%
	Total	227,507,804	100.0%
Queensland	Publicly funded (Cwth/State)	83,049,924	43.9%
	Fee for service domestic	98,606,679	52.1%
	Fee for service international	7,685,411	4.1%
	Total	189,342,014	100.0%
South Australia	Publicly funded (Cwth/State)	22,379,419	52.3%
	Fee for service domestic	18,360,454	42.9%
	Fee for service international	2,078,793	4.9%
	Total	42,818,666	100.0%
Western Australia	Publicly funded (Cwth/State)	49,430,337	61.2%
	Fee for service domestic	25,134,647	31.1%
	Fee for service international	6,248,072	7.7%
	Total	80,813,056	100.0%
Tasmania	Publicly funded (Cwth/State)	7,782,182	77.1%
	Fee for service domestic	2,156,516	21.4%
	Fee for service international	154,490	1.5%
	Total	10,093,188	100.0%
Northern Territory	Publicly funded (Cwth/State)	5,130,280	66.2%
	Fee for service domestic	2,465,124	31.8%
	Fee for service international	158,834	2.0%
	Total	7,754,238	100.0%
Australian Capital Territory	Publicly funded (Cwth/State)	5,928,428	48.1%
	Fee for service domestic	5,697,520	46.2%
	Fee for service international	706,822	5.7%
	Total	12,332,770	100.0%
Other (overseas; other Australian territories or dependencies; and unknown)	Publicly funded (Cwth/State)	2,528	0.0%
	Fee for service domestic	440,226	3.5%
	Fee for service international	11,996,703	96.4%
	Total	12,439,457	100.0%
TOTAL VET ACTIVITY	Publicly funded (Cwth/State)	435,404,116	53.4%
	Fee for service domestic	310,448,366	38.1%
	Fee for service international	70,015,165	8.6%
	Total	815,867,647	100.0%

11.2. APPENDIX B – STATE PRIORITY OCCUPATION LIST 2017

STATE PRIORITY OCCUPATION LIST 2017

State priority 1

These are the highest priority occupations. They will generally be of a high skill level (critical occupations), ranked in the top 50% on the occupational priority index⁶⁰⁵ and experiencing unmet demand.

ANZSCO	ANZSCO description
133611	Supply and distribution manager
149411	Fleet manager
231111	Aeroplane pilot
233916	Naval architect
251214	Sonographer
251412	Orthoptist
253316	Gastroenterologist
253323	Rheumatologist
253324	Thoracic medicine specialist
253399	Specialist physicians not elsewhere classified
253411	Psychiatrist
253513	Neurosurgeon
253515	Otorhinolaryngologist
253516	Paediatric surgeon
253517	Plastic and reconstructive surgeon
253521	Vascular surgeon
253913	Obstetrician and gynaecologist
253918	Radiation oncologist
254415	Registered nurse (critical care and emergency)
254422	Registered nurse (mental health)
254423	Registered nurse (perioperative)
262112	ICT security specialist
272112	Drug and alcohol counsellor
312113	Building inspector

State priority 2A

These are at the second highest level of priority. They will generally be of a high skill level and ranked in the top 50% on the occupational priority index. While these occupations may not be currently experiencing unmet demand, it is highly desirable to ensure supply is maintained to avoid skills shortages in the future.

ANZSCO	ANZSCO description
111111	Chief executive or managing director
121214	Grain, oilseed or pasture grower
121216	Mixed crop farmer
121312	Beef cattle farmer
121313	Dairy cattle farmer
121317	Mixed livestock farmer
121322	Sheep farmer

⁶⁰⁵ Further information on the calculation of the occupational priority index is available in the State Priority Occupation List Scope and Methodology Paper.

ANZSCO	ANZSCO description
121411	Mixed crop and livestock farmer
132211	Finance manager
132311	Human resource manager
132511	Research and development manager
133111	Construction project manager
133112	Project builder
133211	Engineering manager
134111	Child care centre manager
134211	Medical administrator
134212	Nursing clinical director
134311	School principal
135112	ICT project manager
139912	Environmental manager
141311	Hotel or motel manager
221111	Accountant (general)
222311	Financial investment adviser
222312	Financial investment manager
231113	Flying instructor
231114	Helicopter pilot
231211	Master fisher
231212	Ship's engineer
231213	Ship's master
231214	Ship's officer
231215	Marine surveyor
232111	Architect
232212	Surveyor
232611	Urban and regional planner
233111	Chemical engineer
233112	Materials engineer
233211	Civil engineer
233212	Geotechnical engineer
233213	Quantity surveyor
233214	Structural engineer
233215	Transport engineer
233311	Electrical engineer
233411	Electronics engineer
233511	Industrial engineer
233512	Mechanical engineer
233513	Production or plant engineer
233611	Mining engineer (excluding petroleum)
233612	Petroleum engineer
233911	Aeronautical engineer
233912	Agricultural engineer
233913	Biomedical engineer
233915	Environmental engineer
234111	Agricultural consultant
234112	Agricultural scientist
234211	Chemist
234411	Geologist
234412	Geophysicist
234514	Biotechnologist

ANZSCO	ANZSCO description
234611	Medical laboratory scientist
234711	Veterinarian
241111	Early childhood (pre-primary school) teacher
241213	Primary school teacher
241311	Middle school teacher
241411	Secondary school teacher
241511	Special needs teacher
241512	Teacher of the hearing impaired
241513	Teacher of the sight impaired
251211	Medical diagnostic radiographer
251212	Medical radiation therapist
251213	Nuclear medicine technologist
251311	Environmental health officer
251312	Occupational health and safety adviser
251411	Optometrist
251511	Hospital pharmacist
251512	Industrial pharmacist
251912	Orthotist or prosthetist
252112	Osteopath
252311	Dental specialist
252312	Dentist
252411	Occupational therapist
252511	Physiotherapist
252611	Podiatrist
252711	Audiologist
252712	Speech pathologist
253111	General medical practitioner
253112	Resident medical officer
253211	Anaesthetist
253311	Specialist physician (general medicine)
253312	Cardiologist
253313	Clinical haematologist
253314	Medical oncologist
253315	Endocrinologist
253317	Intensive care specialist
253318	Neurologist
253321	Paediatrician
253322	Renal medicine specialist
253511	Surgeon (general)
253512	Cardiothoracic surgeon
253514	Orthopaedic surgeon
253518	Urologist
253911	Dermatologist
253912	Emergency medicine specialist
253914	Ophthalmologist
253915	Pathologist
253917	Diagnostic and interventional radiologist
253999	Medical practitioners not elsewhere classified
254111	Midwife
254211	Nurse educator

ANZSCO	ANZSCO description
254311	Nurse manager
254411	Nurse practitioner
254412	Registered nurse (aged care)
254413	Registered nurse (child and family health)
254414	Registered nurse (community health)
254416	Registered nurse (developmental disability)
254417	Registered nurse (disability and rehabilitation)
254418	Registered nurse (medical)
254421	Registered nurse (medical practice)
254424	Registered nurse (surgical)
254425	Registered nurse (paediatrics)
254499	Registered nurses not elsewhere classified
263111	Computer network and systems engineer
263112	Network administrator
263113	Network analyst
263311	Telecommunications engineer
263312	Telecommunications network engineer
271111	Barrister
271311	Solicitor
272114	Rehabilitation counsellor
272311	Clinical psychologist
272399	Psychologists not elsewhere classified
272412	Interpreter
272413	Translator
272511	Social worker
272613	Welfare worker
311211	Anaesthetic technician
311214	Operating theatre technician
311312	Meat inspector
312411	Electronic engineering draftsman
312412	Electronic engineering technician
312913	Mine deputy
323211	Fitter ((general) - including mechanical fitters and plant mechanics)
332211	Painting trades worker
333211	Fibrous plasterer
342111	Air conditioning and refrigeration mechanic
342411	Cabler (data and telecommunications)
342412	Telecommunications cable jointer
342413	Telecommunications lines worker
342414	Telecommunications technician
351111	Baker
351112	Pastry cook
351211	Butcher or smallgoods maker
351311	Chef
411511	Aboriginal and Torres Strait Islander health worker
411712	Disabilities services officer
422111	Aboriginal and Torres Strait Islander education worker
423111	Aged or disabled carer
423313	Personal care assistant
512211	Health practice manager

State priority 2B

These are also at the second highest level of priority. They are not necessarily occupations of the highest skill levels, but they are ranked in the top 50% on the occupational priority index and are experiencing unmet demand.

ANZSCO	ANZSCO description
311111	Agricultural technician
311215	Pharmacy technician
322113	Farrier
361112	Horse trainer
451399	Funeral workers not elsewhere classified

State priority 3

These are the third tier and represent industry or regional-level priority occupations. They tend to be either occupations experiencing unmet demand or highly-skilled occupations. Typically, they will be ranked lower on the occupational priority index than State priorities.

ANZSCO	ANZSCO description
141111	Cafe or restaurant manager
142111	Retail manager (general)
234912	Metallurgist
242211	Vocational education teacher
261312	Developer programmer
261313	Software engineer
272111	Careers counsellor
311299	Medical technicians not elsewhere classified
312211	Civil engineering draftsperson
312212	Civil engineering technician
312311	Electrical engineering draftsperson
312312	Electrical engineering technician
312911	Maintenance planner
321111	Automotive electrician
321211	Motor mechanic (general)
321212	Diesel motor mechanic
322211	Sheetmetal trades worker
322311	Metal fabricator
322313	Welder (first class)
323111	Aircraft maintenance engineer (avionics)
323112	Aircraft maintenance engineer (mechanical)
323113	Aircraft maintenance engineer (structures)
323214	Metal machinist (first class)
331111	Bricklayer
331212	Carpenter (includes joiner)
332111	Floor finisher
333111	Glazier
333212	Solid plasterer
333411	Wall and floor tiler
334111	Plumber (general)
334112	Air conditioning and mechanical services plumber
334113	Drainer
334114	Gasfitter
334115	Roof plumber

ANZSCO	ANZSCO description
341111	Electrician (general)
341112	Electrician (special class)
342211	Electrical lines worker
342314	Electronic instrument trades worker (general)
342315	Electronic instrument trades worker (special class)
361211	Shearer
361311	Veterinary nurse
394111	Cabinetmaker
411111	Ambulance officer
411112	Intensive care ambulance paramedic
411213	Dental technician
411411	Enrolled nurse
411711	Community worker
411715	Residential care officer
411716	Youth worker
421111	Child care worker
421112	Family day care worker
421114	Out of school hours care worker
423211	Dental assistant
441211	Emergency service worker
441212	Fire fighter
452215	Outdoor adventure instructor
591211	Despatching and receiving clerk
712918	Train controller
731311	Train driver

Information on other identified occupations and other non-priority occupations are available via the State Priority Occupation List at dtwd.wa.gov.au/workforce-development.

11.3. APPENDIX C - WESTERN AUSTRALIA'S YOUNG PEOPLE – AN OVERVIEW

Young people (defined as those aged 15 to 24 years of age) are a crucial component of the State Training Plan in terms of ensuring they can acquire appropriate training and preparation for entry into the State's workforce.

Early career pathways and skilling up the State's young people continues to be a very high priority, as this represents a critical stage in the beginning of any person's career development and their future work engagement. Within this context, the vocational education and training sector remains a crucial element in connecting young people's competencies with industry's skill requirements.

The youth cohort is one of the most vulnerable to changes in conditions, and is considered a barometer of overall labour market conditions. Young people will also have a progressively more vital role to play in bolstering future labour supply in the State's workforce as a replacement source for labour as the State's working population ages, and the current cohort of 'baby boomer' workers retire in increasing numbers.

The proportion of the State's core 15 to 64 working age population, aged between 15 and 24 years, has already seen a substantial drop over past decades, from 23% of the labour market in the 1990's to around 17% currently (see dark blue line in Figure 1 below). This can be attributed largely to demographic factors (relatively higher proportions of older workers) as well as the trend of youth remaining in education for longer.

Figure 1: 15 to 24 year old and 25 to 64 year old workforces, Western Australia



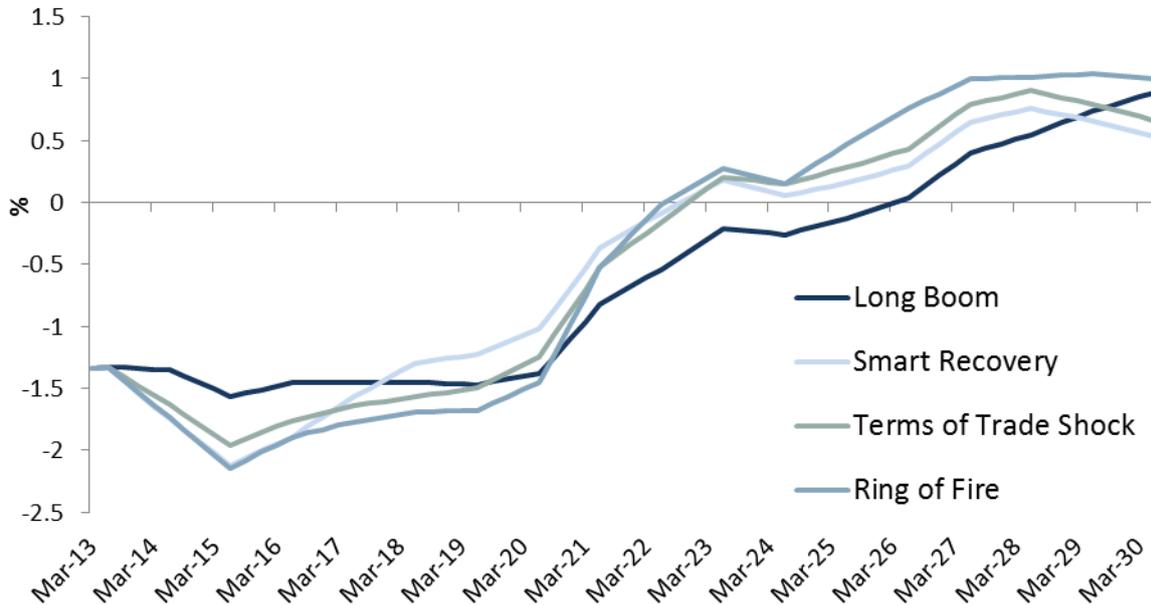
Source: ABS, 6291.0.55.001

Based on modelling from Deloitte Access Economics for the workforce scenarios project⁶⁰⁶, the State's 15–24 youth cohort is projected to experience population growth of a considerably slower rate over the period out to 2020 than that expected for the State's overall population.

Figure 2 below shows that across all scenarios the State's youth cohort is expected to grow at a lower rate than that of the State as a whole until 2022–23 for most scenarios.

⁶⁰⁶ Deloitte Access Economics (2013). Workforce Scenarios and Projections. Deloitte Access Economics Pty Ltd.

Figure 2: Percentage point growth differentials by scenario (for Western Australia’s 15 to 24 year olds, relative to Western Australia’s total population)



Source: Deloitte Access Economics.

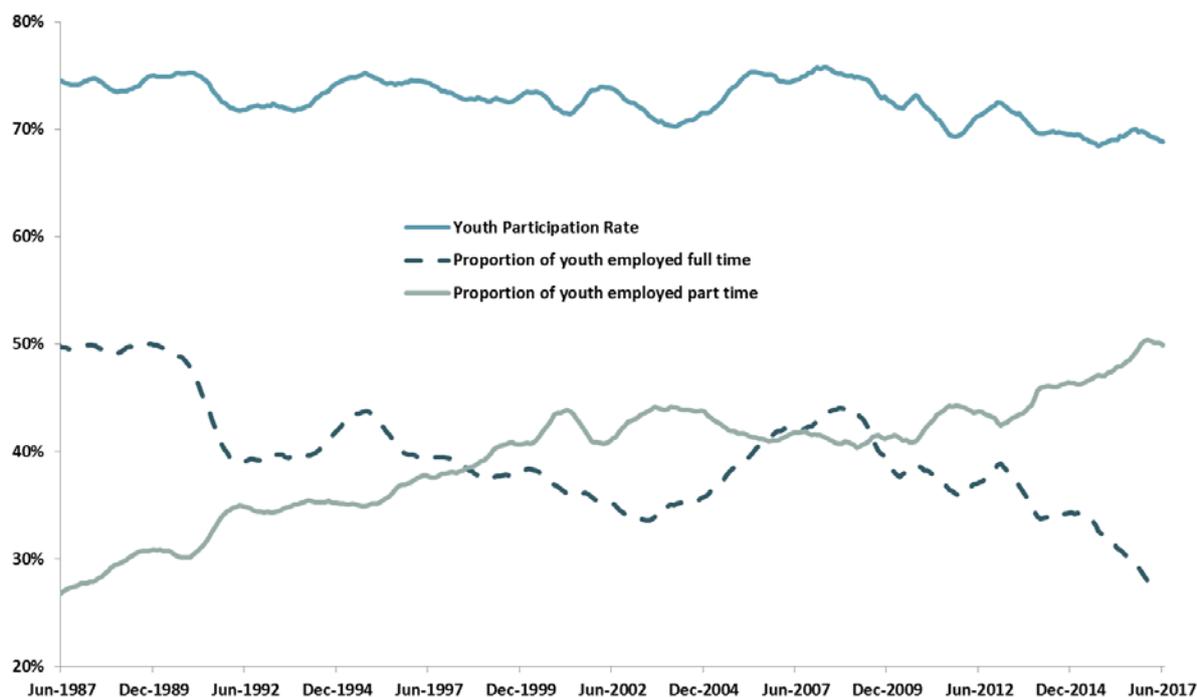
The expected slowdown in the growth of the youth cohort will therefore act as a natural demographic curb on the potential supply of new domestic graduates.

As mentioned previously, there is a longer term trend of young people remaining in tertiary education for longer before entering the labour market. The proportion of youth participating in full time education has risen from approximately 26% in 1987 to 49.9% in June 2017. As a corollary of this, there has been a decline in the proportion of young people in full time employment from around 50% in the mid-1980s, to around 27% in 2016–17.⁶⁰⁷

A key explanation of this is the increase in the school leaving age in 2008, resulting in compulsory school education until the age of 17. A softer labour market over the past two to three years may also be contributing to a recent increase in the proportion of young people returning to, or continuing in full time studies. This is reflected in the fact that the average labour market participation rate for young people was 68.8% for 2016–17, below the decade average of 71.5%.

⁶⁰⁷ ABS 6291.0.55.001

Figure 3: Labour market participation and the proportion in full time education and full time employment of persons aged 15-24, Western Australia



Source: ABS, 6291.5.55.001 (12 month moving averages).

Total employment for the cohort (for full time and part time positions) decreased by 7,000 persons (down 3.4%) to 202,600 during 2016–17. Full time employment recorded a significant decrease of 10,100 persons (down 9.8%). However, this was partially offset by an increase in part time employment of 3,000 persons (up 3.0%).

Over 2016–17 the number of young people unemployed in Western Australia (those seeking either full time or part time work) increased by 3,600 persons (or 13.7%) to 29,900, which represented just over a third (33.8%) of total unemployed persons in Western Australia.

A factor to consider when comparing the respective unemployment rates for young people relative to the total population is that a much larger proportion of the younger age groups are involved in full time or part time education while undertaking or seeking employment. In this context, it is useful to consider unemployment rates for young people according to their educational attendance.

Approximately 83.8% of the 15–24 aged youth cohort who were seeking part time employment were also attending full time education in 2016–17⁶⁰⁸, and as such, a useful way of examining youth unemployment is to focus on those seeking full time employment. There was an average of 18,100 young people seeking full time employment in 2016–17, with an average unemployment rate of 16.4% (compared to 13.2% the previous year)⁶⁰⁹.

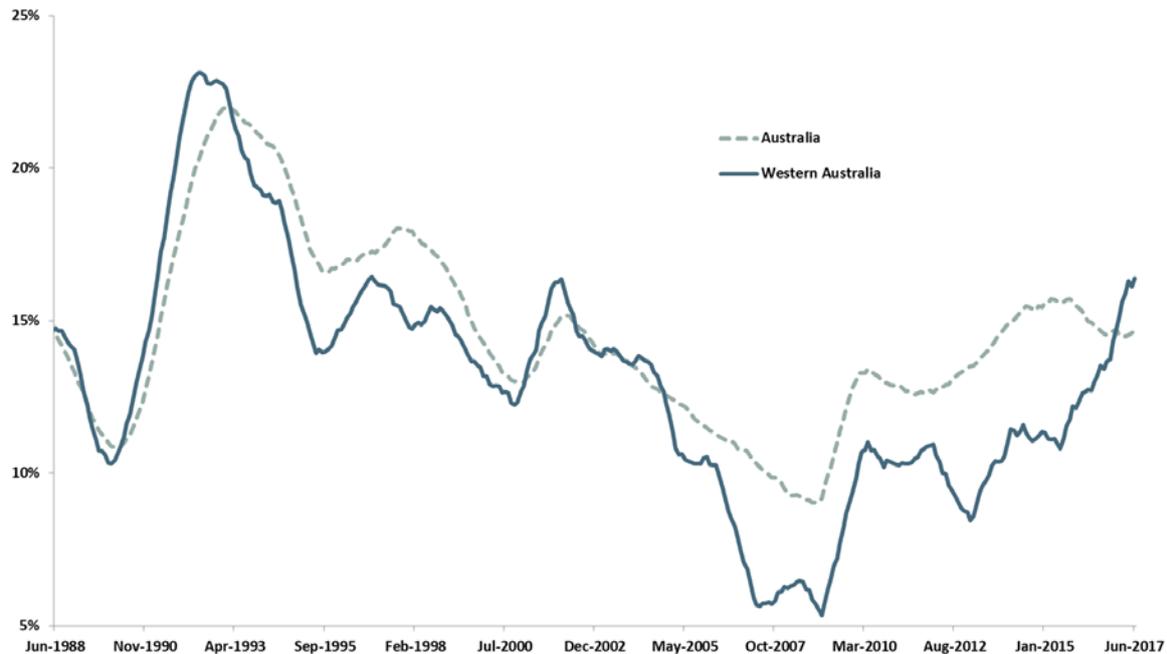
As shown by Figure 4, the State's current unemployment rate for those aged 15–24 searching for full time employment has risen sharply in Western Australia since the end of the resources investment boom. As 2016/17 the State has a higher proportion of young people in the labour force who are unemployed and seeking full time hours than Australia as a whole. This sharp increase can be attributed to young people struggling to source full time vacancies to occupy where the demand for full time labour has remained weak over 2016/17. The sharp increase in the rate of unemployment for this group is of a pressing concern and alongside other measures such as underemployment, highlights the inherent spare capacity currently seen in the State's labour market. This

⁶⁰⁸ ABS 6291.0.55.001 (12 month average to June 2017)

⁶⁰⁹ ABS 6202 (12 month average to June 2017)

situation has the effect of limiting the opportunities of less experienced persons to gain meaningful and ongoing work; in some cases despite formal qualifications being held.

Figure 4: Unemployment rate for 15-24 year olds searching for full time employment, Western Australia and Australia



Source: ABS, 6291.5.55.001 (12 month moving averages).

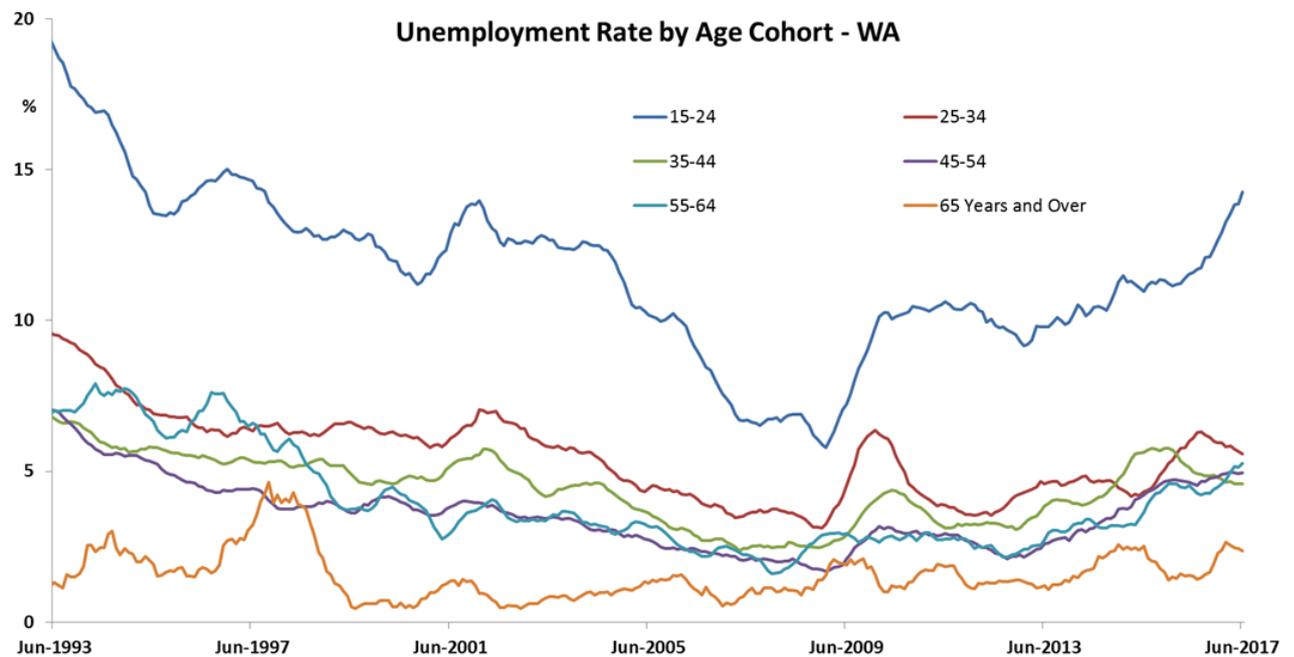
The State's youth unemployment figure has generally been trending upwards since the 2008 Global Financial Crisis (GFC) which impacted the labour market prospects of young people the hardest.⁶¹⁰ Lower youth participation rates are the main reason unemployment levels have not returned to the highs of the 1990's. Hypothetically, if the current youth participation rate was equal to the 2008-09 peak levels of 75.8%, the youth unemployment rate would be approximately 20.8%.⁶¹¹ This is compared with the current rate of youth unemployment of 12.8%, with a far lower participation rate of 68.8%.

Despite this, young people still have higher unemployment figures than other age cohorts, as shown below in Figure 5. During economic downturns in 2001 and the 2008 GFC the youth cohort recorded sharper increases in unemployment in comparison to most other age cohorts.

⁶¹⁰ Carvahlo, P. (2015). *Youth Unemployment in Australia*. The Centre for Independent Studies

⁶¹¹ ABS 6291.0.55.001 (12 month moving averages to June 2016), calculations by DTWD on assumption employment levels and rates remain at historical rates.

Figure 5: Unemployment rates by age, Western Australia



Source: ABS, 6291.0.55.001

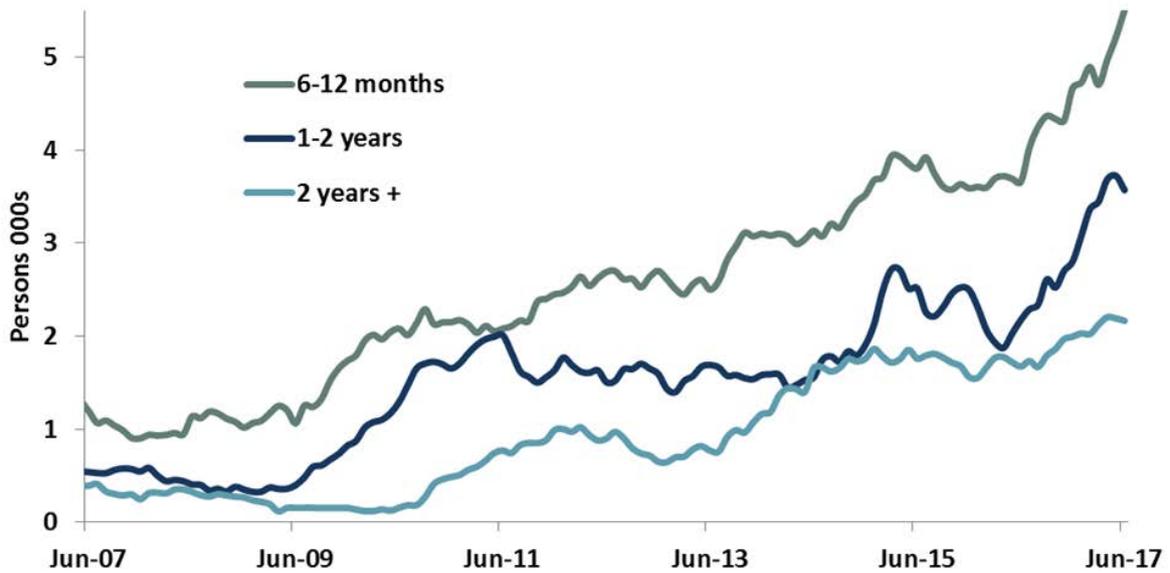
Economic downturns tend to have a disproportionately negative impact on labour market opportunities for young people, possibly due to employer preferences for retaining older workers with more experience as well as a decreased propensity for hiring entry level workers.

The State's labour market has softened over the past four years from the very strong growth experienced post Global Financial Crisis (GFC), resulting in a steady rise in the youth unemployment rate relative to other age cohorts. Young people are also far more likely to be underemployed, with the Australian youth underemployment rate at 20.5% compared with the average of 9.2% across all ages in 2016–17.⁶¹²

Since the GFC in 2008 the duration of unemployment for young people (aged 15-24) has been steadily increasing, as shown in Figure 6. This is especially noticeable for the number of young people who have been unemployed for 6-12 months, which in March 2015 was at the highest level since the late 1990's. The number of youth unemployed for one to two years also peaked in 2015 and plateaued through the early part of 2016 before rising again in 2017 to historic highs.

⁶¹² ABS 6202.0 (12 month moving averages to June 2017).

Figure 6: Long term youth unemployment (000's) Western Australia



Source: ABS, Customised data request, 12 month moving average (June 2017).

Long durations of unemployment are of particular concern as they often precede further unemployment or a complete exit of the labour market.⁶¹³ This is especially problematic for the youth cohort as an early spell of prolonged unemployment may permanently damage long term employability.⁶¹⁴

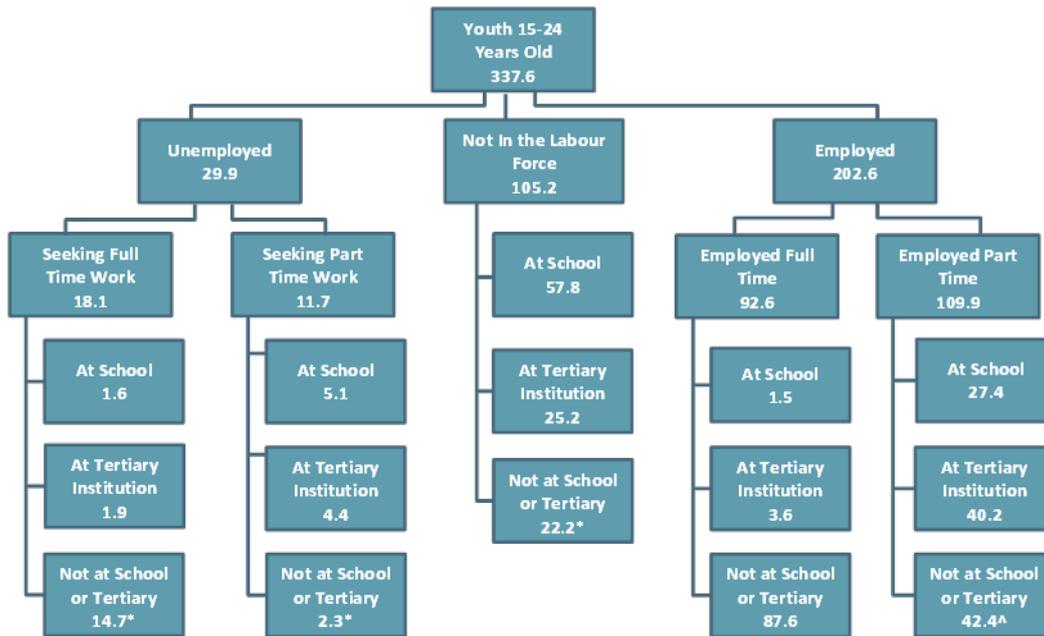
Figure 7 provides a more detailed breakdown of the 15-24 age cohort in relation to labour force and full time educational status over 2016–17. It breaks down the total youth population by labour force status, with 60% of 15 to 24 year olds engaged in employment of some kind, 31.2% not in the labour force and a further 8.8% unemployed.

⁶¹³ Buddlemeyer H, Héralut N. (2010). *The role of VET in preventing the scarring effect of youth joblessness*. Melbourne Institute of Applied Economics and Social Research. Adelaide, SA.

https://www.ncver.edu.au/__data/assets/file/0015/10752/preventing-scarring-effect-youth-joblessness-2318.pdf

⁶¹⁴ Buddlemeyer H, Héralut N. (2010).

Figure 7: Labour force/educational status of persons aged 15 to 24 years, Western Australia



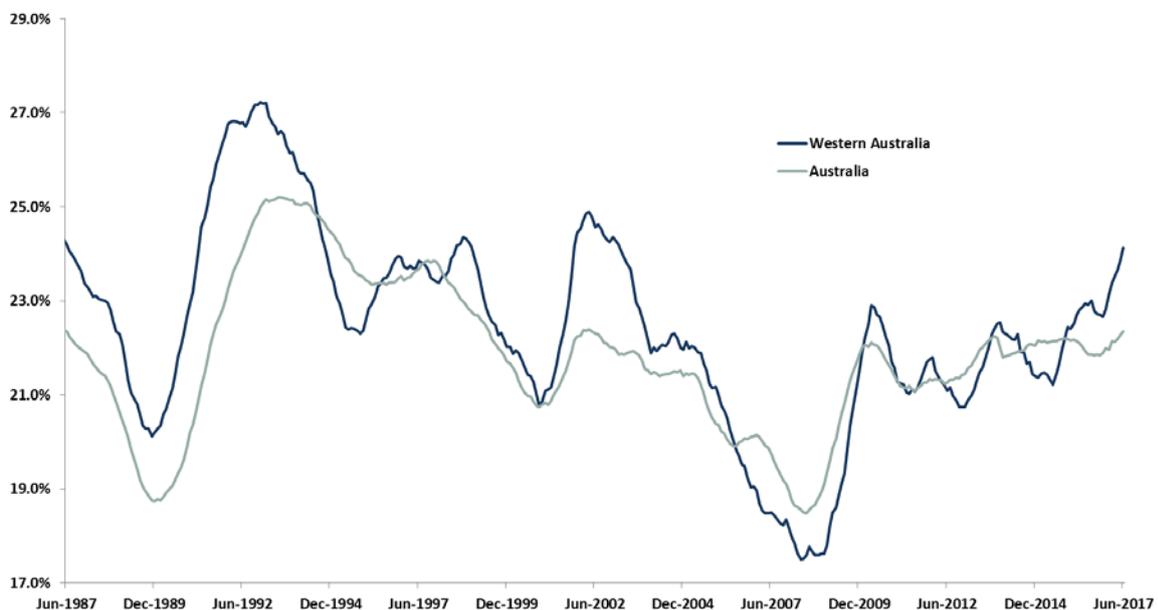
Source: ABS cat. No. 6291.0.55.001 (12 month average to June 2017 ('000s))

An area of specific interest in the preceding diagram is the group of young people who are either:

- not working or engaged in any form of full time education (*) – which combined total around 39,200 persons; or
- employed part time, but not in any full time education (^) – 42,400 persons.

These groups comprise the youth population considered not 'fully engaged' which, in mid-2017 consisted of 81,400 people, or 24.1% of the State's total youth population. This number has increased by around 3,900 persons since the previous year and is now well above the national average of 21.7%, as shown below in Figure 8. It is also above the decade average of 21.1%. The growing number of these 'at risk' groups of youth highlights the importance of the key focus on youth in this State Training Plan.

Figure 8: Proportion of 15-24 year olds not fully engaged – Western Australia and Australia



Source: ABS, 6291.0.55.001 (12 month moving average).

Young people, who aren't fully engaged in education or employment, or a combination of both, are at a greater risk of unemployment, low pay and employment insecurity in the longer term.⁶¹⁵ This group are at risk of becoming socially and professionally alienated, as well as being set up for a lifetime of labour market disadvantage and welfare dependence.⁶¹⁶

This risk is on the rise, as post-school qualifications are becoming increasingly important for employment outcomes. The proportion of work categorised as unskilled is shrinking due to the technological automation of many tasks, globalisation of a highly skilled workforce and the increasing prevalence of flexible work arrangements.⁶¹⁷

Young people are at particular risk with the decline of unskilled and low skill work as many young people commence their working life in low skill jobs.⁶¹⁸ The State Training Board's youth unemployment project⁶¹⁹ research shows that following secondary school, young people are more likely to combine labour market participation with tertiary studies, and commonly trial several employment options.

In these cases it is most likely that young people will need access to low skill jobs in order to gain entry to earn an income. The availability of low skill, entry level positions is therefore vital in allowing young people to complete tertiary qualifications as well as gain experience and skills in the labour market.

The labour market participation rate of those with post school qualifications is significantly higher than those without. Research⁶²⁰ shows a marked improvement in an individual's participation in the labour market and likelihood of employment if they hold a post-school qualification at the Certificate III level or higher.

This is demonstrated by Figure 9 which shows that labour market outcomes noticeably improve with post school qualifications and that those with Certificate III or higher qualification also enjoy significantly lower unemployment rates.

⁶¹⁵ ABS (2013). *Gender Indicators, Australia*. Cat. No. 4125.0

⁶¹⁶ Carvahlo, P. (2015). *Youth Unemployment in Australia*. The Centre for Independent Studies

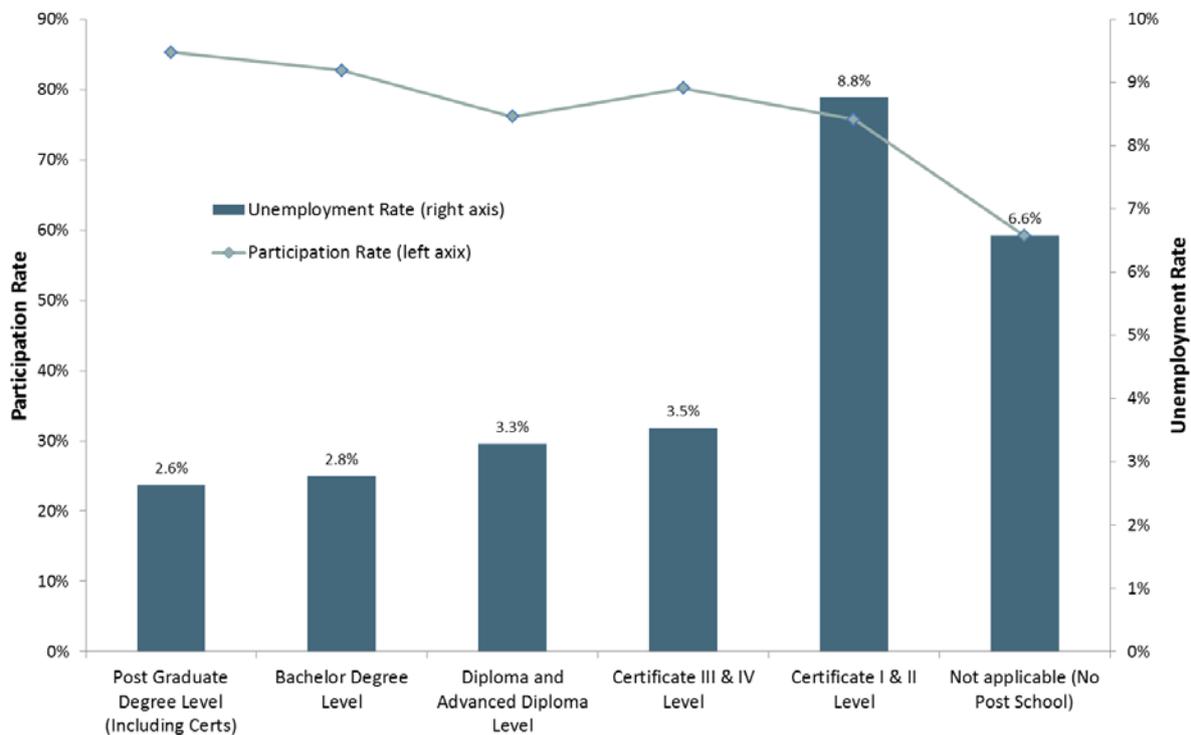
⁶¹⁷ The Foundation for Young Australians (2015). *The New Work Order: Ensuring young Australian have skills and experience for the jobs of the future, not the past*.

⁶¹⁸ Karmel, T., Oliver D., & Lu, T. (2013). *Starting out in low-skill jobs*. NCVER Adelaide

⁶¹⁹ State Training Board of Western Australia (2013). *Youth matters: a study of youth education, training, employment, and unemployment in Western Australia*.

⁶²⁰ For example, Michelle Circelli and Damian Oliver, National Centre for Vocational Education Research: *Youth transitions: what the research tells us* 2012; David D. Curtis, LSAY Research Report 52: *VET Pathways Taken by School Leavers* 2008; Damian Oliver, *Lower-Level Qualifications as a Stepping Stone for Young People* 2012.

Figure 9: Educational attainment and labour market outcomes, Western Australia



Source: ABS, Census 2011.

While the information in the chart above is for the whole of Western Australia’s population, it emphasises the importance of young people obtaining post-school qualifications (including at the Certificate I and II level, which are regarded as learning pathways or foundation skills to higher level qualifications).

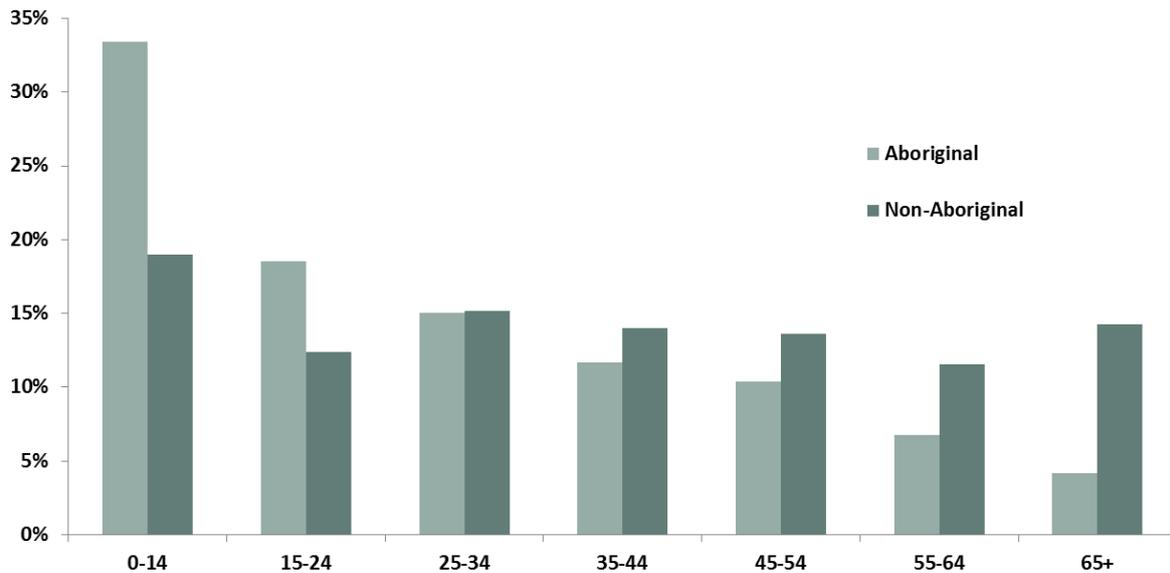
It should also be noted that the higher unemployment rate for those with a qualification at the Certificate I or II level, compared with those without any post school qualifications, likely relates to the much higher (around 20 percentage points) difference in labour market participation between the two groups. That is, there would be a lot of ‘hidden’ unemployment for those with no post school qualifications, given a fair proportion of the category is not likely to be actively seeking work at any given time, as evidenced by the group’s much lower participation rate.

The link between education attainment and better labour market outcomes is also reinforced in the modelling projections from the Workforce Scenarios Project which shows that the Western Australian economy is likely to be a higher skilled economy over time (out to 2030). It is projected that a notable share of future skill needs comes from the trend towards skills deepening and skills broadening and this is common to all four scenarios. Associated with this, qualification requirements within particular occupations tend to rise over time.⁶²¹

The issue of youth outcomes is especially important within the Aboriginal and Torres Strait Islander (Aboriginal) demographic as they have a younger age profile than non-Aboriginal people, as shown below in Figure 10.

⁶²¹ Deloitte Access Economics (2013). *Workforce Scenarios and Projections*. Deloitte Access Economics Pty Ltd.

Figure 10: Proportion of Aboriginal and non-Aboriginal persons by age, Western Australia

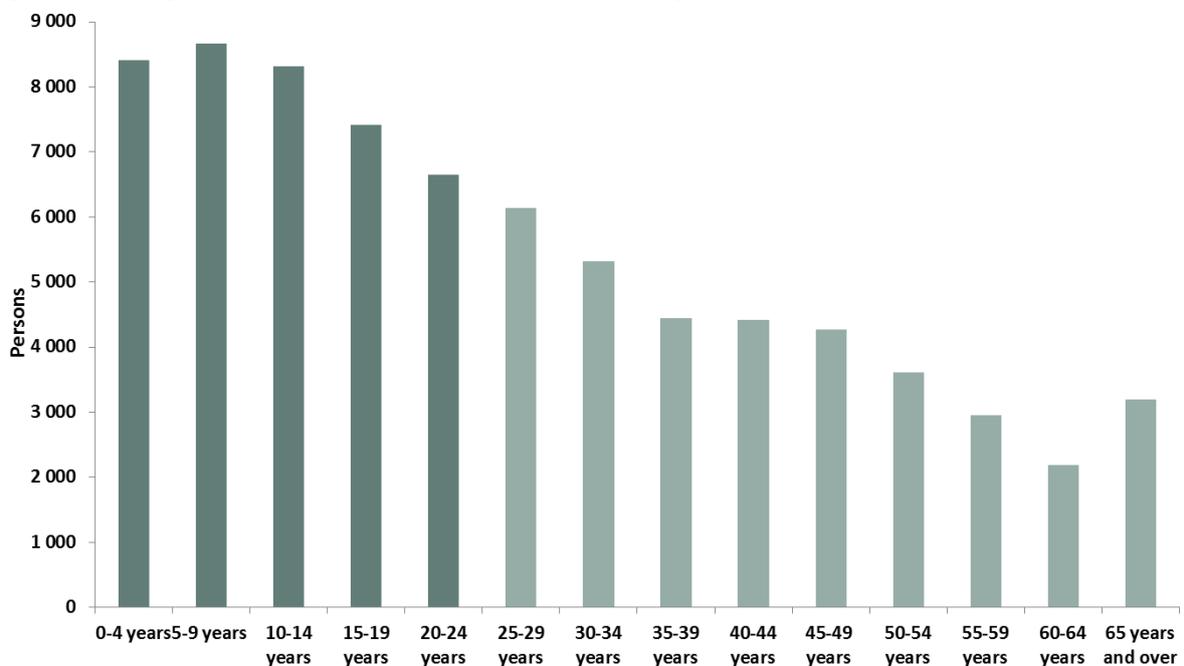


Source: ABS, Census of Aboriginal and Torres Strait Islander Peoples Profile, 2016.

In Western Australia the median age of the Aboriginal population in 2016 was 23 years compared with 37 years for non-Aboriginal⁶²² persons. This is due to increasing birth rates and also in part to more Aboriginal people self-identifying in official statistics.⁶²³

Figure 11 illustrates the increasing number of young Aboriginal people in Western Australia compared with older age groups. In 2016, over half (51.9%) of Aboriginal people were aged under 25 years in Western Australia compared with 31.4% of non-Aboriginal people.

Figure 11: Aboriginal and Torres Strait Islander population by age, Western Australia



Source: ABS, Census of Aboriginal and Torres Strait Islander Peoples Profile, 2016.

⁶²² ABS, 2016 Census

⁶²³ The Foundation of Young Australians (2015), "Young people are a vital resource".

After the Northern Territory, Western Australia has the lowest proportion of Aboriginal persons currently enrolled in formal study (15.7%) and with any non-school qualifications (44%)⁶²⁴ in Australia.

Figure 12 below displays the qualifications of Aboriginal and non-Aboriginal people aged 15–24 years old as at the 2011 Census. It shows lower levels of higher education qualifications amongst Aboriginal youths, and a much higher proportion of qualifications not stated.

Figure 12: Aboriginal and non-Aboriginal qualifications for 15–24 year olds, Western Australia



Source: ABS, 2011 Census, community profiles, Aboriginal and Torres Strait Islander Peoples Profile. This graph does not include persons with no post school qualifications.

As previously discussed, the attainment of post-school qualifications is a significant predictor of positive employment outcomes and is important for preparing young people for the workforce.

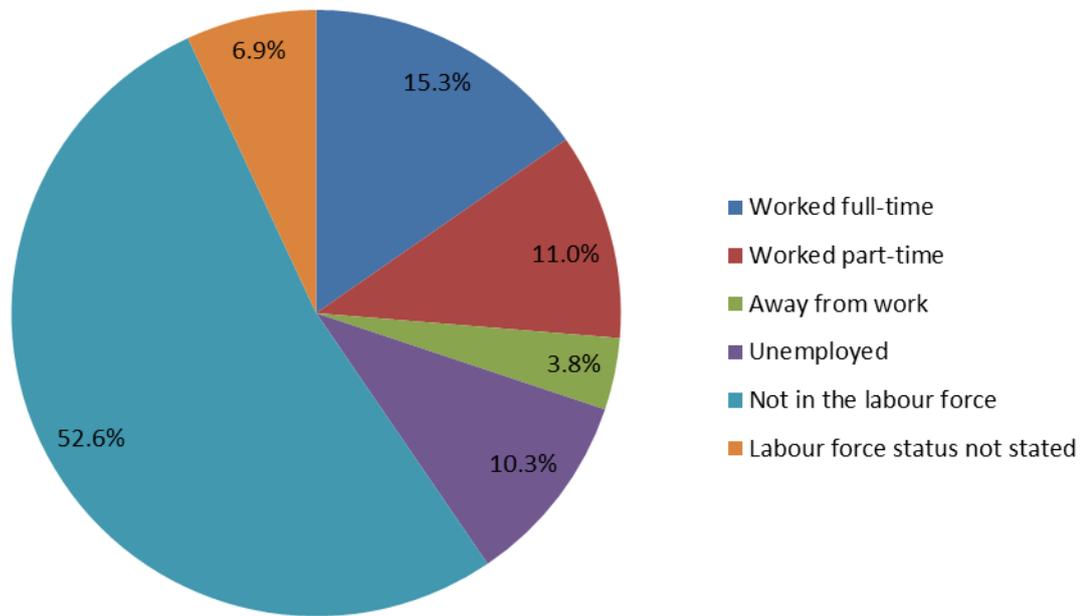
Congruent with this is the fact that for all age groups in 2014–15, Western Australia had the second highest proportion of Aboriginal persons not in the labour force at 47.3% and the highest Aboriginal unemployment rate of 26.9% in Australia.⁶²⁵

The 2011 Census shows that Aboriginal youth in Western Australia had a relatively low unemployment rate of 10.3%, but that a significant 52.6% of were not in the labour force.

⁶²⁴ 4714.0 National Aboriginal and Torres Strait Islander Social Survey, Australia, 2014–15

⁶²⁵ 4714.0 National Aboriginal and Torres Strait Islander Social Survey, Australia, 2014–15

Figure 12: Aboriginal and Torres Strait Islander youth labour force status, Western Australia



Source: ABS, 2011 Census, community profiles, Aboriginal and Torres Strait Islander Peoples Profile.

Encouraging young Aboriginal people into post-school education will have positive outcomes not only for employment but also broader health and well-being outcomes across their lifetimes as well as their families.

The above information all strongly underpins the key reasoning for why young people continue to be a critical focus for the State Training Plan.

11.4. APPENDIX D – WESTERN AUSTRALIA REGIONAL LABOUR MARKET PROFILES 2017

Please see attached electronic PDF