

Skills Insight acknowledges that First Nations peoples have been living on and caring for country for thousands of years.

This is respected in our values and the way we work.



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Guiding Workforce Solutions

As a Jobs and Skills Council, Skills Insight works to understand current and emerging work challenges and opportunities across the agribusiness, fibre, furnishing, food, animal and environment care industries.

This encompasses a vast array of industries that are crucial to Australia's communities, ecosystems and prosperity. The Workforce Plan is the strategic centrepiece of our JSC activities. It is a key output of our workforce planning activities, providing advice to the Department of Employment and Workforce Relations (DEWR) on workforce challenges and skill opportunities, and paving the way for the DEWR's approval of projects to explore ways to address the challenges.







What we do

Workforce Planning

To identify workforce challenges and skill opportunities and propose strategies to address them.

Training package and research projects

To investigate possible solutions for current and emerging skills needs and workforce challenges.

Strategic advice to the Government

On industry skills and training needs and national training system policies.

Who we engage with

Industry (employers, employer associations, employees, unions)

Governments

Jobs and Skills Australia (JSA)

Other Jobs and Skills Councils (JSCs)

RTOs and their representatives

Regulators

Non-registered training providers

Learners

Research collaborators

What we've achieved

Initial Workforce Plan published in October 2023, approved by the Department of Workplace Relations (DEWR)

Strategic Plan, Activity Schedule and Stakeholder Engagement Plan developed to guide operations

Established JSC Stakeholder Forum to provide governance functions and oversee industry stewardship

Established and connected Stakeholder Networks with representation across all industries and sectors we work with

Twelve projects to investigate skills and training solutions. Three are in the final stages.

Supported industry input into the review of the ANZSCO









Executive Summary

Workforce Planning is the strategic centrepiece for Jobs and Skills Councils (JSCs) and establishes essential context for all strategies and activities undertaken.

This Workforce Plan presents an update to Skills Insight's Initial Workforce Plan, which was published in October 2023. The Initial Workforce Plan took stock of existing data and information and set a path for prioritising and diagnosing workforce challenges during the first year of Jobs and Skills Council operations. This 2024 Workforce Plans builds on the Initial Workforce Plan by reflecting industry stakeholder feedback and validation of preliminary findings. It also updates data and analyses on the challenges and opportunities faced by 13 industry groups (which, following stakeholder feedback, has been refined to 16 industry sector scans presented in the Initial Workforce Plan). Based on this work, and the broader functions of the JSC, there is an update on current and prospective workforce planning activities, identification of gaps in national data collections, mapping of industry and workforce strategies (including collaboration progress updates and the identification of newly-released strategies), and an updated consultation plan.



Methodology

This 2024 Workforce Plan builds upon the data and evidence presented in the Initial Workforce Plan by using new and updated data sources released by Jobs and Skills Australia and others in the intervening period, notably the 2023 Skills Priority List. This quantitative data, with respect to identified evidence gaps, has been triangulated with qualitative evidence from multiple sources, including direct stakeholder engagement, published research, and applied research undertaken by Skills Insight. These multiple methods of data collection and analysis are triangulated to corroborate findings, enhance validity, and improve the reliability of information presented. At the same time, workforce challenges are contextualised within a whole-of-economy perspective, with the mapping of national and global trends and drivers, as well as national and jurisdictional differences, enabling insights on both current and emerging skills needs and investment challenges (for example, training delivery in thin markets and housing), or the identification of opportunities to validate diagnoses through further research and analysis.



Key workforce challenges

This Workforce Plan summarises Skills Insight's workforce planning priorities, which are updated from the Initial Workforce Plan, and approved by our JSC Stakeholder Forum. These priorities retain the strategic imperatives detailed in the last version, but are updated to reflect the language of, and so align with, the Australian Government's White Paper on Jobs and Opportunities. All activities and strategies in the document that follow are mapped back to these workforce planning priorities to demonstrate that they are evidence-base and designed to address identified symptoms exhibited by a workforce. An overview of the industries within Skills Insight's coverage is presented, including a summary of the key workforce and skills challenges and opportunities identified by stakeholders, as well as snapshots of the top employed occupations in each industry group and their Skills Priority List ratings. Providing context for this jobs and skills ecosystem is a description of the drivers of change, including climate change adaptation and mitigation, biosecurity, digital and automation practices, and workplace safety and risk management, and the research and strategies being carried out by Skills Insight to consider approaches to address them. There is then a focus on the 13 newlyrefined industry sector groups that share explicit knowledge, skills and jobs commonalities. Each scan includes key data and insights, as well as industry updates, which stakeholders have defined as most significant since the Initial Workforce Plan, along with prevalent challenges and opportunities. There are a multitude of labour market dynamics and workforce challenges experienced across these industry groups, including shortages, an ageing workforce, challenges in attracting and retaining diverse workers (including young people, women, First Nations peoples, people with disabilities, and skilled migrants), a need for leadership development to support decision-making, human resource management and succession planning. A key issue is the lack of access to skilling opportunities and training supply for existing and new workforces (especially in rural, regional and remote Australia).



Workforce planning activities

This provides an update on activities Skills Insight are currently undertaking or scoping for further research. All current or prospective activities are mapped to relevant workforce planning priorities, labour market dynamics, and the relevant industry and/or workforce that is experiencing supply and/or demand issues. For purposes of workforce planning, a skills shortage is defined as a significant shift in demand (relative to supply) for occupational skills (ANZSCO levels 1-4), whereas a labour shortage is defined as an excess of demand (relative to supply) of workers in lower-skilled occupations (ANZSCO skill level 5).



Gaps in evidence identified

This section aims to support and inform continuous improvement of data collections used for government and industry workforce strategies. It is an abridged version of the evidence gaps documented in the Initial Workforce Plan, including descriptions of their nature, extent, and impact, with commentary added to describe additional gaps or challenges encountered by Skills Insight and our stakeholders in the intervening period that may be a issue for quality workforce planning. There is also an update on relevant JSC activities to support addressing these gaps.



Existing workforce and skilling strategies

This section builds on the identification of existing workforce strategies and initiatives in the Initial Workforce Plan. The list is not exhaustive but indicative of the many government, workforce, skills, national, and regional strategies that are, and will be, considered in ongoing JSC workforce planning activities. This mapping of high-level workforce strategies includes descriptions of their owners, objectives, timing, how they relate to workforce planning priorities, and relevant collaborations that further the strategic goals of Skills Insight and these partners, whether associated with implementation, collaboration or influencing activities.



Planned and ongoing engagement

This section outlines Skills Insight's ongoing and diverse consultative strategies that underpin all workforce planning and associated stakeholder engagement and activities. It defines timing and opportunities for collaboration associated with different groups and the identified activities for which they are key stakeholders.



Towards a 2025 Workforce Plan

This 2024 Workforce Plan finishes with a mission statement for the 2025 Workforce Plan, which will be a more comprehensive document, that diagnoses and prioritises the greatest workforce challenges and opportunities across Skills Insight's industry coverage. This will include concern for current, emerging and future labour supply and demand, including skills gaps and shortages, with attention paid to small, niche and regional sectors, and to developing effective strategies for the greater inclusion of priority cohorts. There will also be enhanced collaboration with other JSCs, especially where jobs, skills and value chains overlap, and with Jobs and Skills Australia to refine data collection and analysis processes.



James and Clara McCormack working with cattle at their property near Mansfield



Diana McNaughton with stud owner
Jo Duncan at Forest View Farm



Apprentice cabinet maker Karen Suze at TAFE NSW Lidcombe Campus

How we navigate evidence

Our approach for ongoing and future data collection and analysis

Knowledge gaps

Identifying data and evidence gaps to consider limitations in what we know and what we will try to find out.

Stakeholder engagement

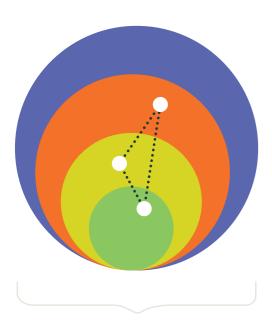
Understanding the experiences and needs of industry employers, training providers and learners.

Quantitative data analysis

Systematic examination of numerical workforce and skills data to interpret relationships and trends.

Qualitative data analysis

Systematic examination of nonnumerical workforce and skills data to develop place-based insights that illustrate wider issues.



Workforce Plan

These multiple methods of data collection and analysis are triangulated to corroborate findings, enhance validity, and improve the reliability of information presented in the Workforce Plan and the priority strategies that are defined.

Our data scope



Industry Statistics

- Structural information related to each industry.
- Size, composition, and economic output



Workforce Statistics

- Structural data about the labour force by region and nationally.
- Employment by geography, size and demographics (e.g. age and gender)



Industry Dynamics

- Fluid data on current workforce demands and future projections
- Trends such as hours worked, type of work (e.g. seasonal/ casual), and wage dynamics



Education & Training

- Information on processes and programs designed to impact skills, knowledge, and qualifications
- VET enrolment/completions, apprenticeships, and higher education, if relevant



Under-represented Groups

- Demographic segments not adequately or proportionally represented in the labour market
- Priority cohorts include First Nations peoples, people with disabilities, unemployed youth, and women in male-dominated industries

Following a triangulation research strategy

We triangulate to form robust, evidence-based narratives that inform Skills Insights' initiatives and key deliverables.

Enablers Strategy

Gather evidence to form an understanding of the characteristics of the agribusiness, fibre, furnishing, food, animal and environment care workforce

Leverage and contribute to the improvement of national qualitative datasets to diagnose some potential workforce challenges

Systematically collect and synthesise qualitative stakeholder insights to contextualise and add depth to our quantitative analysis

Develop appropriate responses to workforce issues by proposing and implementing projects in research, training product development, promotion and monitoring

Deliverable 2

Delivering our annual workforce plan to guide future JSC activities

- Labour Market Dynamics: to identify the various factors impacting the supply of or demand for people with a set of skills
- Labour Source Characteristics: to recognise the characteristics impacting what sources of labour are more likely to be available
- Find symptoms of how well the workforce is matching labour supply and demand
- Examine signs of potential skills shortages and/or surpluses, noting that multiple symptoms may be exhibited within a workforce
- Skills Insight's Membership & Stakeholder Networks are consulted to provide leadership and expertise across industry-specific sectors
- Regular stakeholder engagement to seek views that may help inform key government initiatives
- Opportunities to validate Skills Insight's diagnosis through further research and analysis, as well as to influence strategic responses to workforce challenges through various geographic lens
- Industry insights and data are used to identify areas of future skills needs and skills investment
- The Workforce Plan also informs the Activity Schedule and the Strategic Plan





Our Workforce Priorities

Revising our strategic priorities in line with stakeholder feedback, and the Australian Government's White Paper on Jobs and Opportunities.

The workforce planning priorities and associated strategies in our <u>Initial Workforce</u> <u>Plan</u> have been updated following stakeholder consultation and to align with the five objectives identified in the Australian Government's White Paper on Jobs and Opportunities ('The Working Future')¹, which provide a roadmap to position the Australian labour market for the future. The revised priorities have been approved by Skills Insight JSC's Stakeholder Forum, who have ongoing responsibility for shaping and approving workforce planning strategies.

These workforce planning priorities guide the strategies and planning of the JSC, and form the basis of proposed activities that address cross-industry challenges and opportunities within Skills Insight's coverage.

The icons in the key below are used throughout the rest of this document to link mapped challenges, strategies and activities back to our Workforce Planning Priorities, displayed opposite.









Improve data and evidence to inform delivery of sustained and inclusive full employment

- a. Support data improvement: Work with key agencies and partners to improve the evidence base, including national data assets, that informs forward workforce and human resource strategies and decision-making.
- b. Promote place-based approaches: Develop workforce planning methodologies wherein the power of national data collections may be complemented by nuanced, local data and information to address shortages and supply/demand issues.
- c. Holistic workforce planning: explore challenges from all angles, including how broader issues, often beyond the remit of JSCs, enterprises and the VET sector, contribute to jobs and skills issues in, for example, regional, rural and remote Australia.



Support workforce leadership and continuous capabilities development to help improve access to secure, fairly paid jobs

- a. Support industry skills and workforce leadership development.
- b. Support industry strategies to promote, and raise the profile of, careers, education and learning pathways.
- c. Support industry and VET sector decision-making skills for adopting innovations, including digital technologies.
- d. Promote upskilling opportunities for the current and prospective workforce.
- e. Promote succession planning, especially in small and niche industries with an ageing workforce.



Addressina skills needs and building our future workforce

- a. Support the appropriate skilling of the workforce by developing flexible training and education products and pathways that are industry-led and responsive to current and emerging trends.
- b. Promote re-skilling opportunities for the current and prospective
- c. Support industry in attracting skilled migrant and seasonal workers to address shortages.
- d. Support relationship building and collaboration between employers and training organisations, including to connect national training products with delivery of training 'on the ground.'
- Monitor the outcomes of skilling strategies and adapt strategies where necessary.



Overcoming barriers to employment and broadening opportunities

- a. Support industry to attract a diverse workforce, including by supporting work with priority cohorts to understand and address workforce imbalances.
- b. Develop resources to support training and assessment practices, including for workplace-based learning and training delivery in small or 'thin' regional, rural and remote markets.
- c. Support the delivery of foundation skills, including Language, Literacy, Numeracy, & Digital (LLND) Skills, to increase training participation and retention, and enhance workforce capabilities for the adoption of new systems and approaches.



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Industry overview

Our industries comprise a vast array of sectors, jobs and skills, and produce food, fibre, furnishing and textile products essential for Australia's homes, health and wellbeing.

The agribusiness, fibre, furnishing, food, animal and environment care industries directly employ **544,000** people, accounting for **around 4.3**% of total employment nationally (as of 2021), and engage more than **1.6 million jobs** across the agricultural supply chain (**11**% **of total employment**). These industries are responsible for working with and protecting Australia's environmental assets, now valued at more than **\$5.7 trillion**².

34%

are women

National average 51%

42%

of the workforce are over 50 years of age

National average 35%

2.5%

of the workforce are people living with disabilities

National average 5.8%

ABS census (2021)

12

Activities across our industries



Working with Animals

- Animal breeding and growth
- Animal health and welfare
- Animal training, retraining, rehoming and end-of-life
- Animal biosecurity and WH&S

Working with plants and trees

- Forest and plant cultivation and growth
- Cropping and harvesting
- Plant biosecurity and WH&S



Working in processing

- Processing animals for food
- Processing plants and trees for fibre (including pulp and paper)
- Producing timber and wood products for housing and the built environment
- Producing textiles, clothing, footwear, furnishing and upholstery



Leadership and business management

- Business leadership and management (value chain logistics, technology adoption)
- Ecosystem and land management (soils, water, forest and land care)
- Regulatory and legislative compliance
- Export and trade

Our labour context

Business context

There are around 247,000 individual industry businesses, which operate and trade in all states and territories, and comprise a variety of small, medium and large enterprises. Collectively, these operators form a sophisticated value chain with a total revenue of almost \$215 billion and contribute \$66 billion to overall GDP⁴.

Australia's extreme variety of climactic, geographic and geological conditions results in highly diversified production and products, including in niche and specialist sectors and a predominance of jobs in regional, rural and remote Australia. This involves working with and protecting Australia's environmental assets, now valued at more than \$5.7 trillion².

Social context

ABARES highlights that Australian agriculture accounts for 55% of Australian land use, 74% of water consumption and 13.6% of goods and services exported in 2022-23 (these figures do not include other industries under the coverage of Skills Insight, such as timber production). This is in the context that there is formal recognition of First Nations peoples' rights and interests in over 50% of Australia's land². According to the 2021 Census, almost 4% of the total population of Australia³ identified as Aboriginal and/ or Torres Strait Islander, but this group only accounts for 2% of the agribusiness, fibre, furnishing, food, animal and environment care workforce (though this proportion is higher in specific industries: please see the Industry sector scans below). The participation of, and collaboration with, First Nations peoples in agribusiness, fibre, furnishing, food, animal and environment care industries must be promoted to help Close the Gap, (including on key targets such as '8. Strong economic participation and development of people and their communities'), apply appropriate skills and knowledge, and address workforce shortages.

Education and Skill levels

Figure 1 shows that secondary education (commensurate with ANZSCO skill level 5) is the highest level of educational attainment for 48% of the agribusiness, fibre, furnishing, food, animal and environment care workforce³.

35% have vocational education and training-level qualifications (commensurate with ANZSCO skill levels 2 - 4), and 17% have a degree in higher education (commensurate with ANZSCO skill level 1).

Notably, the greatest proportion (35%) of the workforce are in occupations at ANZSCO Skill Level 1. This shows that many people hold positions requiring greater levels of skills and knowledge relative to their educational attainment, suggesting a high prevalence of on-the-job training that is not formally recognised. This may have a limiting impact on peoples' transferability between occupations and industries.



\$51 billion

in agricultural, forestry and fisheries exports (2020-21 forecast)



\$50 billion

direct tourism contribution to Australia's GDP (2019-20)



\$5.7 trillion

in environmental assets (modelled over 50 years in present value)



1.6 million

jobs across the agricultural supply chain



\$71 billion

in gross value agricultual, forestry and fisheries production (2020-21 forecast)

Source: Department of Agriculture, Water and the Environment (2022) Commonwealth Biosecurity 2030

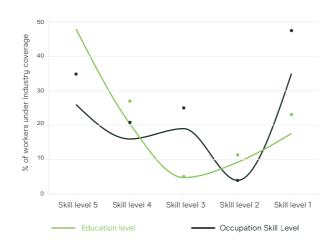


Figure 1: Education and Occupation Skill Levels

Source: ABS Census (2021)

Education and training

There are a variety of ways in which the agribusiness, fibre, furnishing, food, animal and environment care workforce develops skills for industry jobs. This includes informal and on-the-job training, unaccredited learning, higher education, and vocational education and training (VET) qualifications and micro-credentials (including skill sets and stand-alone units of competency) that may be undertaken through an apprenticeship, traineeship, subsidised or fee-for-service enrolment. In 2022, there were over 122,000 enrolments in agribusiness, fibre, furnishing, food, animal and environment care-related training package qualifications, generally sustaining the upward trend shown in 2021, including from pre-COVID⁷. Further research is required to understand the drivers and contexts around qualification completion and non-completion figures (this is the subject of NCVER research, described in the Existing workforce and skilling strategies section).

The Workforce and Skills, education 8 training challenges and opportunities detailed below were identified through extensive desktop research and validated and prioritised through stakeholder engagement. These issues, to a greater or lesser extent, apply across all industries under the coverage of Skills Insight and hence provide context for many of the sector-specific updates, challenges and opportunities documented in subsequent chapters, including the Industry sector scans, Workforce planning activities, and Existing workforce and skilling strategies. These high-level issues further frame considerations of potential JSC activities to implement, collaborate on, and/or influence a range of approaches to address jobs and skills challenges and opportunities.

Workforce

Challenges

- According to <u>JSA</u>, occupations that have a strong gender imbalance were more likely to be in shortage.
- Ageing workforces may exacerbate labour shortages, health and safety concerns, knowledge loss, and succession planning pressures.
- Negative community perceptions of careers make it challenging to attract new workers, especially when there are comparative advantages in adjacent sectors.
- Low housing availability in regional areas makes accommodating new and returning labour an ongoing challenge.

Opportunities

- Increasing workforce diversity and skilling opportunities and recognition are key <u>pull</u> <u>factors</u> in attracting new workers.
- Promoting non-traditional (e.g. off-farm) roles helps the public reimagine industry careers.
- By value-adding and diversifying, businesses can attract new workers and revenue streams.

Skills, education & training

Challenges

- Low language, literacy, numeracy and digital (LLND) skills can be a barrier to attracting and retaining learners in formal education.
- There is an imbalance in the supply of and demand for the delivery of VET, especially in rural, regional and remote areas.
- Less than half of students who start a nationally recognised VET qualification will complete it.

Opportunities

- Skills ministers have advanced <u>initial changes</u>
 to the Standards for RTOs 2015 that will allow a
 wider range of people to deliver training and so
 ease pressure on the VET workforce.
- Greater utilisation of recognition of prior learning (RPL) or recognition of current competency (RCC) could better enable the identification of skilling, upskilling and reskilling pathways and opportunities, pave the way for learner supervisors in the workplace, and articulate skills gained outside of formal credentialing (a key challenge for the proposed <u>National Skills</u> <u>Passport</u>).
- Implementation, promotion and monitoring activities by JSCs may support training by RTOs where it would otherwise not be delivered.

Top Employing Occupations

Below is a list of the top five occupation groups within each industry covered by Skills Insight, according to the number of workers employed and recorded in the 2021 Census data. These occupations are defined and categorised in the ANZSCO framework with four-digit codes or unit groups (which comprise multiple six-digit ANZSCO occupations). As some unit group titles displayed may not align with industry terminology, examples of six-digit occupations are provided in brackets for clarity. These often represent the largest proportion of occupational employment in the unit group.

Please note that some occupation titles can appear across industries due to the Australian Bureau of Statistics' coding of Census data. The data shows both industry-specific employment (e.g. Crop Farmers employed within the Horticulture industry) and total employment in that occupation (e.g. Crop Farmers nationally). The intention is to show how skilled occupations are employed in different industry sectors, leading to consideration of skills portability, industry-relevant training supply and demand, and, where appropriate, collaboration across JSCs, including stakeholder engagement and training product development. Please also note that data provided by JSA was mapped to a previous version of ANZSCO (Vers. 1.3.) instead of the updated 2022 version.

Stakeholders have questioned the veracity of some occupations being assigned to industries according to the ABS's coding of an employing business to an ANZSIC Class; for example, there are concerns that Cabinetmakers may not be employed by Timber, Wood Processing, and Building Solutions industry businesses in the numbers presented below. Such issues are documented in 8. Workforce planning evidence gaps in this document, and in greater detail in the Initial Workforce Plan. Skills Insight will continue to work with stakeholders to continuously improve data provision and understand industries' jobs and skilled needs.

Shortage (SPL)

Where a unit group includes occupations that are considered for inclusion in the **Skills Priority List (SPL)**⁵, its rating is provided:

NS No Shortage

R Regional Shortage

S National Shortage

For example, $2 \times S$ indicates 2 occupations on the SPL that are in shortage within the unit group.

Occupations in shortage are determined through an annual survey conducted by Jobs and Skills Australia, and may not reflect stakeholders' knowledge of the labour market (continuous improvement of the SPL is included in section 8. Workforce planning evidence gaps).

Future Demand

This classification is based on JSA's employment projections⁶ (at, below or above economy average), which are indicative of current trends and feedback, but will be considered carefully as part of any analyses due to known evidence gaps (as identified in the section below), which may cause data projection volatility and under-appreciation of regionally-based jobs.

Below average

Average

Above average

Trend (LFS)

The determination of employment trends below⁷ is based on each unit group's employment time-series trend since 2020 in the ABS's Labour Force Survey (LFS)⁷. The LFS provides up-to-date information on changes in the size and composition of each workforce through a time series. However, the data can be volatile especially in smaller population groups, which may not always accurately reflect the workforce.

Industry Industry No. workers Shortage Future Trend (LFS) Specific No. workers Shortage Future Trend (LFS)



Animal Care and Management

Veterinary Nurses	12089	13012	S	Volatile
Veterinarians	9524	11217	S	Increasing
Receptionists	1314	160598	4xNS	Volatile
Practice Managers	1083	27298	2xNS	Increasing
Animal Attendants and Trainers (e.g. Pet Groomer)	880	18642	S 5xNS	Increasing

Industry	No. workers Industry Specific	No. workers Nationally	Shortage (SPL)	Future demand	Trend (LFS)
	Specific	_			



Broadacre Cropping

Crop Farmers	11680	40183	10xNS		Declining
Mixed Crop and Livestock Farmers	3639	22836	NS	\bigcirc	Volatile
Crop Farm Workers (e.g. Grain, Oilseed, or Pasture Farm Worker)	2276	26678			Declining
Agricultural, Forestry and Horticultural Plant Operators	1475	10518	R		Increasing
Mixed Crop and Livestock Farm Workers	540	3800			Volatile



Ecosystem Management, Conservation, Landscaping, and Gardening

Gardeners (e.g. Landscape Gardener)	23719	64815	2xS NS	Increasing
Garden and nursery labourers	10387	27387		Increasing
Handypersons	3533	31541		Volatile
Environmental Scientists (e.g. Park Ranger)	1916	20230	R 4xNS	Increasing
Animal Attendants and Trainers (e.g. Zookeeper)	1442	18642	S 5xNS	Increasing



Aquaculture and Wild Catch

Deck and Fishing Hands	2396	5253	2xNS	Volatile
Aquaculture Farmers	1514	1726	S 5xNS	Volatile
Marine Transport Professionals (e.g. Master Fisher)	664	7817		Volatile
Aquaculture Workers	641	766	S 5xNS	Volatile
Meat, Poultry, and Seafood Process Workers	493	19012		Volatile



Horticulture

Crop farmers	20050	40183	NS	Declining
Crop farm workers	17781	26678		Declining
Garden and nursery labourers	4504	27387		Steady
Packers (e.g. Fruit and Vegetable Packer)	3244	57203		Volatile
Agricultural, Forestry and Horticultural Plant Operators	2939	10518	R	Increasing

	No. workers	No workers	Shortage	Euturo	
Industry	Industry	Nationallu	(SPL)	demand	Trend (LFS)
	Specific	rvationing	(01 L)	acmana	



Furnishing and Other Manufacturing

•	_				
Cabinetmakers	8989	22605	S		Steady
Carpenters and Joiners	2069	113362	3xS		Increasing
Production Managers	1103	57358	3xNS		Increasing
Upholsterers	1101	2146	S		Volatile
Clay, Concrete, Glass and Stone Processing Machine Operators (e.g. Glass Production Machine Operator)	927	2895	5xNS	•	Increasing



Meat, Poultry, and Seafood Processing/Manufacturing

Meat, Poultry and Seafood Process Workers	14271	19012			Volatile
Packers (e.g. Meat Packer)	8738	57203			Volatile
Meat Boners and Slicers, and Slaughterers	6704	7947	2xS	•	Declining
Butchers and Smallgoods Makers	1584	13776	S		Declining
Forklift Drivers	1492	56046	NS		Increasing



Forest Management and Harvesting

Forestry and Logging Workers (e.g. Tree Faller)	1149	2098	3xNS		Volatile
Agricultural, Forestry and Horticultural Plant Operators (e.g. Logging Plant Operator)	941	10518	R	>	Increasing
Other Farm, Forestry and Garden Workers (e.g. Farm Forestry and Garden Workers not covered elsewere)	938	10960	NS	•	Volatile
Agricultural and Forestry Scientists	726	6607	2xS NS		Volatile
Gardeners (e.g. Arborist)	511	64815	2xS NS		Increasing



Pulp, Paper, Packaging, and Hygiene

Paper and Wood Processing Machine Operators (e.g. Paper Products Machine Operator)	1325	5420	3xNS	•	Steady
Printers	1072	7691	2xNS		Steady
Other Stationary Plant Operators (e.g. Paper and Pulp Mill Operator)	890	21500			Steady
Forklift Drivers	835	56046	NS		Increasing
Packers	652	57203			Volatile





Livestock Farming

Livestock Farmers	57318	65890	S 10xNS		Steady
Livestock Farm Workers	18431	28741	NS	\bigcirc	Volatile
Mixed Crop and Livestock Farmers	16881	22836	NS	\bigcirc	Volatile
Mixed Crop and Livestock Farm Workers	2639	3800			Volatile
Crop Farmers (e.g. Grain, Oilseed or Pasture Grower)	2358	40183	10xNS	\bigcirc	Volatile



Textile, Clothing and Footwear

Laundry Workers	7229	12073		Declining
Sewing Machinists	3460	7992	NS	Declining
Clothing Trades Workers (e.g. Dressmaker or Tailor)	2410	6135	4xNS	Volatile
Other Cleaners (e.g. Carpet Cleaner)	1854	11495	NS	Volatile
Manufacturers	1207	15882	NS	Steady



Timber, Wood Processing, and Building Solutions

Cabinetmakers	4390	22605	S		Steady
Timber and Wood Process Workers	2117	4976			Increasing
Paper and Wood Processing Machine Operators (e.g. Sawmilling Operator)	1905	5420	3xNS		Steady
Carpenters and Joiners	1702	113362	3xS		Increasing
Production Managers (e.g. Production Manager (Manufacturing)	1092	57358	3xNS	•	Increasing



Racing and Breeding

Livestock Farm Workers (e.g. Stablehand)	4277	28741	NS	\bigcirc	Volatile
Animal Attendants and Trainers (e.g. Horse Trainer)	2399	18642	S 5xNS		Increasing
Livestock Farmers (e.g. Horse Breeder)	1067	65890	S 10xNS	\bigcirc	Steady
Sports Coaches, Instructors and Officials (e.g. Dog or Horse Racing Official)	502	40078	2xS 9xNS		Increasing
Greenkeepers	492	12554	NS		Volatile



Drivers of change and skills needs

A multitude of skills are required to traverse roles across agribusiness, fibre, furnishing, food, animal and environment care value chains.

As local and global trends evolve, along with emerging consumer demands, value chains also adapt and transform. Consequently, the skills needed by workers, as well as the industries they represent, change. Businesses are adapting to dynamic shifts in physical, economic and regulatory landscapes, necessitating the adoption of new practices and business structures8.

Workforce planning must consider the diversification of roles and skills in these industries, where the types of occupations required by industry often change over time. Examples include greater requirements for higher-skilled roles due to increasing adoption of digital technologies, as well as off-farm roles following business

Forces such as technological changes, value/supply chain issues, biosecurity and climate change issues are reshaping work within the industries under Skills Insight's coverage. The following pages provide a summary of drivers and skills needs, mapped to strategies that Skills Insight is implementing based on the workforce planning priorities. These drivers, which are inherently linked to industry megatrends, and their implications, have been validated and updated through extensive stakeholder engagement.





Interconnected value chains

Challenges / Skills needs

- Agribusiness, fibre, furnishing, food, animal and environment care value chains is highly complex, requiring management of end-to-end systems.
- Recent disruptions in supply chains exposed the need for connection, responsibility and risk strategies across all businesses.
- Skilled and agile workers are needed to comply with regulations and lead complex operations.
- To attract new workers, industries need to reframe perceptions of work as multifaceted and modern roles that are concerned with sustainability and datadriven product tracking¹⁰.
- To promote their credentials, industries are using environmental, social and governance (ESG) criteria and traceability systems to ensure quality, safety and welfare standards11.

JSC Led Strategies

- Support and provide input into Jobs and Skills Australia's Food Supply Chain Capacity Study.
- Collaborate with other JSCs to map cross-industry value chains, including skills and skilling pathways, career pathways, and relevant legislation.
- Promote modern career roles and pathways to attract new entrants.
- Work with stakeholders to improve national data classifications and collections, including the Australian and New Zealand Standard Classification of Occupations (ANZSCO), to ensure fit-forpurpose data and trend tracking across sectors and industries.
- (Q) (\$\phi) (\$\phi)
- Work with stakeholders and other JSCs to identify current and prospective skills and legislation requirements for ESG across the value chain.





Digital and automation practices

Challenges / Skills needs

- Innovation and technology can help increase productivity, especially where there are labour or skills shortages¹⁷.
- Some industries in regional, rural and remote areas experience barriers to adoption, with capital investment and connectivity issues preventing the rollout of new technologies and associated workforce skills development¹⁸.
- The Agricultural Workforce Digital Capability Framework projects that 41% of industry jobs (31% by automation and 10% by augmentation) will be transformed by digital technologies and associated skill needs¹⁷.

JSC Led Strategies

- Build upon the Agricultural Workforce Digital Capability Framework to support technology adoption and upskilling, including through collaboration with Rural Research and Development Corporations (RDCs) and existing state-based programs such as AgSkilled 2.0, across all industries covered by Skills Insight.
 - Collaborate with other JSCs, especially Future Skills Organisation, to review digital skills in high-use qualifications, using the Australian Digital Capability Framework and Agricultural workforce digital capability
 - framework.

- Update skills standards in training products as necessary and showcase best practices in learning resource development.
- Support upskilling and reskilling the existing workforce to bridge digital skills gaps, including across business administration and technical/trade-based roles.
- Promote industry careers and pathways to attract new and adjacent workforces with appropriate skills.







Biosecurity and contamination

Challenges / Skills needs

- Climate change, disruptive events (e.g. pandemics) and the global movement of people and products increases biosecurity and contamination risks in Australia¹⁶.
- Skills are needed to prevent, detect, eradicate and manage outbreaks for human and animal health, food and fibre production, and environmental protection.

JSC Led Strategies

• Research cross-sector biosecurity alignment to identify priority activities to help businesses prepare and respond to threats across their value chains.



Update skills standards in training products as necessary to support Australia's biosecurity system, as described in the National Biosecurity Strategy



Support systematic upskilling and reskilling of the workforce to identify and address any biosecurity and contamination skills and knowledge gaps (with potentially significant collaboration with other JSCs).

and through the ongoing work of the Implementation





Climate change adaptation and mitigation

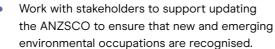
Challenges / Skills needs

- Australia has committed to target net zero emissions by 2050, which is supported by industry leaders, such as the National Farmers' Federation (NFF)12 and the Australian Forest Products Association (AFPA)¹³.
- Industry operators require support to navigate the many policy, business and skills challenges and opportunities that will be presented.
- Planning for and investing in a lowemissions future is critical, including changing land use and practices14 (e.g. businesses are looking for value-add opportunities to offset projected production declines across the cropping, livestock and fisheries sectors).
- Business leadership and management skills, supported by place-based data and metrics, are required to assess and invest in natural capital (soils, water, forest plantations, agroforestry, animals) based on value proposition.
- There are increased employment opportunities for First Nations peoples, especially in conservation and ecosystem management occupations¹⁵.

JSC Led Strategies

Support the development of data sources that provide industry leadership with evidence of the value proposition of adopting sustainable, climatesmart and natural resource management practices (including to improve soil health, protect natural capital, and participate in carbon and biodiversity markets).







 Support and promote partnerships between First Nations peoples and industry to address collective workforce and skills challenges.

Q ((() () (() () ()

 Update skills standards in training products as necessary to reflect current and emerging practices by workforces covered by the Agriculture and Land Sector Plan and Intergovernmental Panel on Climate Change (IPCC).



Support systematic upskilling and reskilling of the workforce to address any climate change adaptation and mitigation skills and knowledge gaps (with potentially significant collaboration with other JSCs).



Product safety, quality assurance (QA) and regulatory compliance



Challenges / Skills needs

- Tight regulatory environments entail difficulties for new and emerging sectors to access and compete for domestic and export market share¹⁹.
- Australia's food security and products' status as 'clean and green', as well as the sustainability credentials of timber, furnishings, pulp and paper, textiles, clothing and footwear products, requires consistent monitoring, recordkeeping, quality assurance, auditing and certification²⁰.
- There are skills shortages for roles, including leadership positions, inspectors, compliance officers and auditors across industries²¹.

JSC Led Strategies

 Support food security by working with industry leadership to understand and navigate the complexities of our food system, including regulation, input costs, freight and supply disruptions, and labour shortages, which may impact on businesses' practices and capacity.



Update skills standards in training products



• Support systematic upskilling and reskilling of the workforce to address any product safety, QA or regulatory compliance skills and knowledge gaps (with potentially significant collaboration with other JSCs).







Sustaining plants, trees, animals and materials

Challenges / Skills needs

- Upholding animal welfare is essential for market access, certification and consumer satisfaction²².
- Plants and trees must be actively managed to prevent losses and protect their vital role in sustaining oxygen, food, clothing and building materials.

JSC Led Strategies

 Promote quality education and training delivery strategies, including apprenticeships and traineeships, that enable hands-on, workplacebased experiences for working with living and organic materials.



Update skills standards in training products as necessary.







Workplace safety and risk management culture

Challenges / Skills needs

- Agriculture is a high-risk industry with exposure to many hazards. In 2021, it had the second highest death rate of Australian industries, and each injury cost six weeks of work, further exacerbating labour shortages²³.
- Growing an industry-wide safety culture requires awareness induction and training, which can benefit both employers and workers.
- Improvements in safety data and policy are required to inform analyses of labours' skills transferability from adjacent sectors and occupations²⁴.

JSC Led Strategies

• Work with Jobs and Skills Australia to explore how workforce safety data, including from SafeWork Australia and state/territory bodies, can be integrated with existing datasets.



• Support systematic upskilling and reskilling of the workforce to address any workplace safety and risk management skills and knowledge gaps (with potentially significant collaboration with other JSCs).









Industry sector scans

This section updates the industry scans in the Initial Workforce Plan, using recently published data and evidence where appropriate.

Notably, stakeholder feedback led to the 16 industry groups in the Initial Workforce Plan being condensed to 13 to more accurately cluster industries with a high degree of shared skills, knowledge and workforce transferability.

These 13 industry groups are reflected in the creation of 13 of Skills Insight's Stakeholder Networks, which will be a key source of intelligence for workforce planning, information dissemination, and stakeholder validation. Each industry group has distinct labour market dynamics and skills contexts that guide stakeholder engagement on each group's unique circumstances as much as cross-industry commonalities (detailed in the previous section).

For each industry group, there is a brief description of activities, highlights of significant data for workforce planning, an update on notable events or trends, and summary of the opportunities and challenges faced in relation to the workforce. At the end of this section is a summary of Skills Insight's priority workforce planning activities and how they relate to the identified challenges and opportunities.

All data and evidence on labour force dynamics presented for industry groups has been through a validation process with stakeholders, whose feedback has informed articulation of updates, trends and challenges faced. Stakeholders' input on data limitations is selectively acknowledged in these industry scans and then explored in greater depth in the following section.

Data Caveats

- Appendix 3 details how industry sector scan data maps to the Australian and New Zealand Standard Industrial Classification (ANZSIC), and the VET training packages that are most closely aligned with these sectors.
- As shown in 'Top employed occupations', several occupations are employed across
 multiple industries based on data from the 2021 Census of Population and Housing²⁵.
 As a result, occupations such as Animal Attendants and Trainers may be discussed in
 more than one industry scan.
- Employment figures presented in the highlights indicate the number of people
 employed in occupations within the specific industry group only (which is not
 precisely replicable due to the ABS's data perturbation for confidentiality purposes).
 Occupational data from the Labour Force Survey, however, does not distinguish
 between workers from different industries and, while Skills Insight have sought
 productively to work with this data, there may be inconsistencies because of the use
 of multiple collections.
- It is acknowledged that data from the quarterly Labour Force Survey⁷,
 whilst timely, can be highly volatile from its limited sample size. As such,
 the extent of any trends identified in the data summary may be
 over- or under-represented.
- The version of the Labour Force Survey used for analyses in this Workforce Plan is the December 2023 release. Whilst this iteration used raw data, future versions of the LFS analysis will be averaged across 12 months to potentially reduce volatility.
- The most recent employment projection figures, produced by Victoria University for Jobs and Skills Australia, cover '5 years to 2028'.
- The industry sector scans below are intended to present a consistent snapshot of data. For some industries, notably agriculture (which is often grouped with forestry and fishing), key agencies publish data that may not align with the figures presented; for example, ABARES is generally considered to be the dominant source of information for Australian agricultural commodities, but, for the purposes of consistency and accuracy, this Workforce Plan presents datasets with industry-wide coverage, with other sources used to supplement gaps and add analytical depth.
- The challenges and opportunities highlighted in each industry sector scan were determined through a combination of desktop research and stakeholder engagement. Opportunities are where a positive trend has been observed in the data (e.g. increasing female participation in a male-dominated workforce), while challenges are where a positive or consistent data trend was not identified. Please note that a challenge does not imply industry inaction in addressing the issue. Similarly, the data monitoring priorities reflect industry-validated concerns and their relative importance, including where data is considered to have gaps or inaccuracies, or where data monitoring is crucial for strategies to address key challenges.



Animal Care and Management

Animal care and management workers support the welfare of wildlife, exhibited, working, and domestic animals. While working with animals, many roles also require people-centred approaches and skills; for example, Assistance Dog Trainers. The industry is experiencing accelerated growth, with increasing opportunities and challenges for pet-related businesses, many of which are seeking to expand operations but facing issues with attracting skilled workers, especially in regional, rural and remote Australia.

Key updates

Consistent work demand but volatile labour supply.

The internet vacancies⁴² for key occupations, including Veterinary Nurses, Veterinarians, Receptionists, Practice Managers, and Animal Attendants and Trainers, have recovered to pre-pandemic levels. The cumulative hours worked for all these occupations have either been increasing or remained stable in the Labour Force Survey. The individual hours worked each year was cyclical, which is reflective of the annual volatility in employment numbers. This suggests that whilst overall demand is relatively stable, workers are adjusting to labour unavailability through longer hours.

Industry participation in Round 3 of the ANZSCO Review.

With stakeholder feedback and support, Skills Insight has proposed a number of changes to occupations within the industry, such as to separately identify Animal Management Officer, Animal Welfare Officer and Animal Technician, and recognition of occupations such as Animal Nutritionists.

Opportunities

Rising demand: Pet ownership in households has been increasing since pandemic lockdowns⁵³, driving demand for veterinary and other companion animal services.

Technological developments: Advanced medical, surgical and diagnostic procedures and medications⁵⁴ may boost productivity and alleviate skill shortages.

Challenges

Dependence on economic conditions: Demand for veterinary services can fluctuate with economic conditions and household income⁵⁵. Lack of stability may impact on the retention of veterinary nurses, with the ABS's Characteristics of Employment survey showing veterinary nurses' duration of employment is below the national average. Such issues will be explored further in Workforce Planning activities (see chapter 7).

Inadequately defined in data classifications:

Growing markets such as animal grooming and allied health services remain absent from or inadequately defined in the ANZSIC and ANZSCO, leading to limited data available on this workforce.

Low male participation: The very low participation of men (17% in 2021, a 3% decline from 2016) is a challenge for the sector, particularly in light of the anticipated increases in labour demand.

Data monitoring priorities

Labour shortages

Inadequately defined in data classifications

High

Workforce diversity

Medium

28,557

workers
2021 Census

12,100

Projected growth of workers (2028)

JSA Projections

83% female workers

2021 Census

1.2% First Nations

2021 Census

Time-series Data

Data Caveats

Broadacre Cropping

Australia's broadacre cropping industries comprise generally large-scale operations that produce a range of high-quality commodities, including wheat, rice, oats, rye, barley, corn, peas, millet and sorghum. Many broadacre farms also diversify into different cereal-cropping activities and sometimes into livestock farming. Skills in sustainability, irrigation, soil health, fertiliser use, pest management and technology use are highly valued.

Key updates

Irregular demand reflected through worker statistics.

Annual employment in key occupations (Crop Farmers, Mixed Crop and Livestock Farmers, Crop Farm Workers, Mixed Crop and Livestock Farm Workers) has been highly volatile in the Labour Force Survey. This is in line with the cyclical performance of grain growers, where the inverse relationship between price and volume fluctuates with market conditions⁶². For example, workers in Mixed Crop and Livestock Farming increased by 7,400 between 2022 and 2023, likely due to exceptional climate conditions for Australian crop production³².

Workers adjust to cyclical labour supply by long work hours.

The Labour Force Survey has also shown that whilst cumulative hours worked have been declining over a decade in all key occupations, the individual hours worked have been variable, often remaining persistently higher than 40 hrs/week in 2023.

Opportunities

Introduction of workplace reforms: Legislative changes that promote fair employment practices, such as the Secure Jobs legislation from December 2023, and the Fair Work Amendment (Closing Loopholes) Bill 2023 can contribute to greater workforce conditions and worker stability³⁰.

Increased industry revenue: Disruptions in global grain supply due to geopolitical conflicts have been elevating grain demand and costs. Australia has increased its output volume in recent years, aided by high rainfall⁶³. This may have increased demand for new industry entrants.

Challenges

Underrepresentation of women: Women represented 26% of the workforce in the 2021 Census, which was only up 1% from 2016.

Ageing Workforce: 54% of the workforce are aged 50 years and over, according to the 2021 Census. Attraction and retention of younger people to the industry is critical for succession planning needs⁶⁴.

Climate change: Fluctuating weather patterns are impacting on growers' practices associated with planting times, frost windows, pest and disease risk, and extreme weather event (e.g. bushfire and drought) preparedness. With concurrent rises in input costs (e.g. fertilisers and soil nutrients), farmers are reporting supply chain vulnerabilities⁶⁵.

Data monitoring priorities

Labour shortages

igh

Gender diversity

Medium

Ageing workforce

Medium

25,991 workers

2021 Census

↑5,000

Projected growth of workers (2028)

JSA Projections

26%

female workers

2021 Census

1.5% First Nations

2021 Census

Time-series Data

Data Caveats

26



Ecosystem Management, Conservation, Landscaping, and Gardening

This workforce cares for vast natural areas and bushlands, Indigenous Protected Areas, coastal landscapes, national and state parks, private and public gardens, sporting grounds, and green spaces. Demand for skills and labour across these industries is growing as climate change mitigation becomes a global priority, such as to sustain biodiversity, and to restore and rehabilitate landscapes with ecological and cultural importance.

Key updates

Passing of the The Restoring Our Rivers Bill

The Water Amendment Bill 2023 was passed in November, with scope for more funding, time and options for projects to improve the management of the Murray—Darling Basin³⁴. This may be a positive catalyst for occupations in Environmental Restoration, Monitoring and Research, some of which were already featured as being in shortage on the 2023 Skills Priority List (e.g. Arborist, Landscape Gardener).

Steady growth in workers within key occupations

27

The Labour Force Survey has seen a surge of workers as Gardeners (5-yr-change: 13%), Garden and nursery labourers (24%), Environmental Scientists (14%) and Animal Attendants and Trainers (44%), which may reflect an increased focus on robust environmental protections and ecological management.

Opportunities

Growing Industry: Native protection has grown to 19.8% of Australia's terrestrial land over the past decade, pinpointing demand in ecological protection³⁵.

Increasing representation of women: Women only accounted for 22% of this sector in 2021, rising 8% since 2016. There may be opportunities for a greater participation of women.

Low barrier to entry: The 2021 Census showed that the industry comprises many owner-operated entities (45.73% of workers), with 40.75% of all workers having an education attainment at the Year 10 equivalent.

Challenges

Extreme Weather: Whilst climate change can trigger demand for work in environmental stewardship, the nature of outdoor work in this industry may attract OHS and business viability concerns³⁶.

Sensitive to changes in government funding: Nature Reserves and Conservation Parks are highly reliant on government investment. Changes to environmental policies may affect funding in this industry³⁵. Data monitoring priorities

Labour shortages

High

Potential new skills requirements

Medium



Workforce diversity

Medium

58,374 workers

2021 Census

12,300

Projected growth of workers (2028)

JSA Projections

22% female workers

2021 Census

3.8% First Nations

2021 Census



Data Caveats

Aquaculture and Wild Catch

Businesses in this industry catch inshore, estuarine, offshore and freshwater fish, finfish, molluscs, crustaceans, prawns, rock lobsters, oysters and pearls. This is underpinned by current and emerging practices utilising technology and traceability systems to provide consumers with information on seafood provenance and production methods, inclusive of maintaining aquatic animal health, carbon emission mitigation, and regulatory compliance.

Key updates

Projected sector growth and workforce planning

Jobs and Skills Australia data projected the industry workforce to grow 8.2% by 2028, and 16.4% by 2033. Currently, there is no industry-led national approach to validating workforce data and projecting future growth. Data and evidence have been collected in select regions, such as that found in 'Future-proofing the NA aquaculture industry need for skilled staff to 2050', which may be used to support place-based workforce planning activities; however, this data may not represent national trends. Stakeholder feedback and a current Fisheries Research and Development Corporation (FRDC)-commissioned project⁵⁶ indicates the need for developing and maintaining a reliable national workforce data collection which can be used to support seafood industry workforce planning.

Empowering the First Nations fishing sector

In line with the National Fisheries Plan 2022-30⁵⁷, work is being progressed by the Fisheries Research and Development Corporation Indigenous Reference Group and the Australian Fisheries Management Forum Indigenous Working Group to support understanding of First Nations needs and priorities for participation in the sector.

Career pathways promotion

In response to increased competition in the labour market, industry peak bodies have released industry focused career pathway websites, including the Seafood Careers Australia and Seafood Jobs Tasmania websites, to promote employment opportunities in the industry.

Opportunities

Rising seafood consumption driving industry revenue: Demand for healthy proteins like fish

and seafood has grown, which is pushing up industry profitability recently, particularly with elevated prices⁵⁸.

Increased investment: As part of the Government's \$72.7 million investment in expanding Australian export markets, Austrade and the seafood industry have developed a plan to promote and diversify into markets such as Europe and the Middle East⁵⁹, which could see more work opportunities within the sector.

Challenges

Sensitive to regulations: The industry is prone to impact by State and Territory Licensing and Permit Regulations. For example, new limits for commercial barramundi fishing were recently set from important fishing areas in the Northern Territory that may result in job losses⁶⁰.

High & increasing barriers to entry: Industry consolidation in recent years has led to a moderately concentrated market, with major players accounting for >40% of industry revenue⁶¹.

Data monitoring priorities

Volatile industry conditions

Hiah

Long working hours

. . . .

Labour shortages

Medium (

9,934 workers

2021 Census

↑900

Projected growth of workers (2028)

JSA Projections

22% female workers

2021 Census

4.7% First Nations

2021 Census

Time-series Data



Data Caveats



Horticulture

A diverse industry that plants, grows and harvests fruit, nuts, vegetables and nursery products on a large scale, in both under-cover (hydroponics/greenhouse) and outdoor (field) systems.

Key updates

Decline in overall horticulture farm labour use

Data from the ABARES' farm survey²⁶ reported a decrease of 20% in total labour use since 2020, including both domestic and migrant workers. This is consistent with the declining number of Australian workers in key occupations (crop farmers, crop farm workers, and packers) in the ABS's Labour Force Survey and stakeholder feedback on recovery from the significant workforce disruption caused by the COVID-19 pandemic.

Robust growing conditions are heralding high labour demand

The industry has seen minimal frost events and good rainfall from the latest La Nina cycle, leading to reports of record crop volumes²⁷. However, data from the ABS' Labour Force Survey in Nov 2023 suggest insufficient labour, as the number of hours worked per person rose to an all-time-high for some key occupations (e.g. crop farmers and crop farm workers at 86.5 hrs/week).

Seasonal labour supply boosted by increase in Pacific Australia Labour Mobility Scheme (PALM) workers.

Despite challenges in domestic labour supply, Migration Statistics showed that the number of PALM workers increased from 4,629 in 2022 to 30,350 in 2023²⁸.

Opportunities

Job mobility: Regional differences in horticulture labour use can enable greater mobility throughout the year²⁶.

Technological advances: Adoption of computer-controlled production systems have enabled growers to consistently grow quality products, whilst limiting costs and environmental concerns²⁹.

Policy changes: From 2025, intentional wage underpayments by employers will be a criminal offence. In addition to higher minimum wages and piecework rates in the Horticulture Award in 2022, these are positive catalysts for improved working conditions³⁰.

Challenges

Skills shortage: Parts of the industry remain highly reliant on seasonal and temporary migrant labour needs. Where return rates are low, this generates high training and administration costs that can negatively impact workforce efficiency³¹.

Input costs/output prices: Whilst the value of commodities are forecasted to fall in 2023-24, farm input costs remain high that may impact work attractiveness and workforce development³².

Impact of Trade Agreements: The recent trade agreement with the UK, has resulted in a lack of UK backpackers, which has raised concerns about temporary labour availability in the industry³³.

Data monitoring priorities

Labour shortages

Seasonal & migrant labour needs

High

Workforce diversity
Medium

75,892 workers

2021 Census

↑6,600

Projected growth of workers (2028)

JSA Projections

36% female workers

2021 Census

1.9% First Nations

2021 Census

Time-series Data

Data Caveats

Furnishing and Other Manufacturing

The furnishing industry covers a broad range of sectors relating to furniture and fittings for residential and commercial buildings. This includes furniture manufacturing and finishing; interior design and decorating; design, flooring, manufacturing and installation of cabinets, fittings and décor; glass and window manufacturing; upholstery, security screens, grilles, awnings and blinds. It also includes niche sectors, such as coopering, mattress manufacturing and piano tuning.

Key updates

Escalating cost pressures leading to some closures

During the pandemic, sales of household goods surged, with money people may have spent on travelling instead being used on household renovations. This triggered a boom in construction and furnishings, and an increased uptake of apprenticeships, with flowon effects still underpinning overall industry revenue growth⁶⁶. However, supply delays, rising costs and staff shortages have led to the collapse of several furniture companies. Consumer spending, and likely supply-side demand was sustained in large retailers, assisted by pay later services during challenging economic conditions⁶⁷.

Variable work demand in key occupations

The Labour Force Survey suggested that employment in the industry's key occupations tend to fluctuate, particularly Production Managers and Upholsterers. Upholsterers have been recognised as being in shortage on the Skills Priority List, although the number of cumulative hours worked has been declining.

Opportunities

Digitally-driven sales: The increasing presence of online sales channels for furniture reduces the barrier to entry, and broadens the consumer market for small-scale operators⁶⁷.

Innovation opportunities: Emerging trends such as demand for home automation and smart furnishings, as well as sustainable practices and materials⁶⁸ (including recyclable and recycled materials, sustainability certification, and supply chain best practice), is creating demand for reskilling and upskilling opportunities within industry roles.

Responsive management of safety risks: Since safety risks in working with engineered stone have been flagged by Safe Work Australia, a decision to ban its use nationally from July 2024 has been legislated⁶⁹.

Challenges

Volatile industry conditions: Market demand within the industry is highly subject to conditions in the domestic construction industry and consumer discretionary income⁶⁶.

Male dominant workforce: Despite a 1% rise from 2016, women accounted for only 19% of workers in the 2021 Census. This may make the workforce more vulnerable to skills shortages⁷⁰.

Legislative changes: The removal of import tariffs between Australia and others in the ASEAN region⁴⁶ are expected to increase competition for local wooden furniture manufacturers.

Data monitoring priorities

Labour shortages

High

Volatile industry conditions, intl competition

High

Workforce diversity

Medium



31,426 workers

2021 Census

15,200

Projected growth of workers (2028)

JSA Projections

19%

female workers

2021 Census

1.2% First Nations

2021 Census

Time-series Data



30

Data Caveats



Meat, Poultry, and Seafood Processing/Manufacturing

The Australian meat, poultry and seafood processing and manufacturing industries are comprised of processors, wholesalers, retailers and exporters who collectively are responsible for supplying products to domestic and international markets. Workers process, grade and package meat, poultry, fish and shellfish. Strong skills in food safety, quality control, animal welfare and compliance requirements underpin Australia's reputation for producing highquality products.

Key updates

Declining trend in key occupations

Based on the Labour Force Survey, a significant drop in the number of workers has been observed in two key occupations: Meat Boners and Slicers, and Slaughterers and Butchers and Smallgoods Makers. The 5-year change for these occupations have been -38% and -30%, respectively, with the Nowcast of Employment (NERO)⁷⁶ showing significant declines particularly in South-East Australia and Queensland. Meat Boners and Slicers, and Slaughterers are classed as being in shortage on the 2023 Skills Priority List. Operational and workforce challenges, including low retention rates, were exacerbated by, and continue to be impacted from, the COVID-19 pandemic.

Labour shortages contributing to productivity loss

A 2022 industry survey conducted by the Australian Meat Industry Council suggested shortages of skilled labour were contributing to over 50% of establishments operating below 80% capacity⁷⁷. A variety of reasons for these shortages were suggested, including unwillingness to work in the industry, competition from other sectors and lack of international worker availabilitu.

Opportunities

Increasing international demand: Despite slowing domestic meat consumption, industry demand has remained strong from exports⁷⁸.

Migration Reform: Whilst workers in this industry have pre-existing migration pathways through Meat and Fishing Industry Agreements, employers must meet a salary threshold (TSMIT)⁷⁹ that is above the median wage of the industry (see Appendix 2). The development of a new Essential Skills Pathway⁸⁰ may provide opportunity to alleviate the persistent shortages for some occupations in this industry.

Challenges

Underrepresentation of women: Only 33% of the workforce were women, based on the 2021 Census. Whilst this was an increase of 3% from 2016, increased participation of women may alleviate some skill shortages.

Low skill level diversity: Over half of all workers in the meat, poultry and seafood processing industries are employed in occupations that align with ANZSCO skill level 525. A lack of skill level diversity can decrease industry attractiveness to workers with different skill levels.

Data monitoring priorities

Labour shortages

Workforce diversity

Medium (

Skill diversity

55,152 workers

2021 Census

J 100

Projected growth of workers (2028)

JSA Projections

33% female workers

2021 Census

2.6% First Nations

2021 Census

Time-series Data

Data Caveats

Forest Management and Harvesting

The workforce is responsible for the management and harvesting operations of forests designated for timber and fibre production, whether they are publicly or privately owned. Expert skills are required to meet the various challenges of managing forests sustainably and mitigating the effects of disasters, such as bushfires, as well as utilising data and digital technologies to undertake planning and certification activities.

Key updates

Reduction of native timber harvesting creating uncertainties.

Despite the state governments' commitment to increase support for further development of plantation forestry, the decision to end native timber logging in Victoria and Western Australia from 2024 raised widespread industry concern³⁷. This includes its impact on future timber supply, regional businesses across the value chain, and on regional communities linked to forestry value chain operations³⁸.

Challenging operating conditions in recent years.

The industry has seen weakening harvest volumes and a gradual declining trend in the cumulative hours worked in occupations such as Forestry and Logging workers (from 469000 hrs in 2016 to 246000 in 2023, according to the Labour Force Survey). This may reflect the cessation of native timber harvesting and disruptions in downstream markets from the pandemic³⁸.

Opportunities

Potential for skills shortage alleviation: Some occupations within the forest industry, such as Truck Driver, are classified as being in shortage on the Skills Priority List. Regional Forestry Hubs determine other shortages and provide the government with strategic plans to support growth.

Increasing representation of First Nations: Participation by First Nations peoples has risen by 1.4% between 2016

Digital and automation practices: The industry has been readily adopting technology such as drones, scanners, blockchain applications and big data analytics, which are changing industry skills requirements³⁹.

Challenges

Extreme weather: Bushfires and floods have caused, and will continue to cause, extensive damage to forests and plantations, with long-term consequences for forestry businesses, such as changes to timber quality and availability, disruption of supply chains, and impacts on forest management practices³⁸.

Impact from legislations: Introduction of the Ending Native Forest Logging Bill 2023 into Parliament would see further actions to halt logging if successful⁴⁰, which in turn would exacerbate employment and reskilling challenges, especially in the context of an ageing workforce and thin training markets.

Stability and sustainability of domestic wood supplies:

Declining plantation estates, coupled with removed access to native hardwood resources for commercial timber production in Victoria and Western Australia, poses significant risks for the long-term security of both hardwood and softwood supplies, which are essential for the Australian economy and its ability to reduce its carbon footprint through the use of low carbon building products such as timber and wood composites⁴¹.

Data monitoring priorities

Labour shortages

Challenging operating conditions

High

Workforce diversity Medium

9,891 workers

2021 Census

1,400

Projected growth of workers (2028)

JSA Projections

21% female workers

2021 Census

6.8% First Nations

2021 Census

Time-series Data



Data Caveats



Pulp, Paper, Packaging, and Hygiene

The workforce typically specialises in one or more pulping and papermaking operations, including wet end, dry end, pulping, stock preparation and handling, chemical recovery, electrical power generation, paper finishing and converting, steam generation, recovered fibre, and water services. Manufacturing of pulp, paper and paper products is critical for Australian households, offices, hospitals, food outlets and public buildings – from tissues and toilet paper, medical and sanitary products, to packaging and printing.

Key updates

Stable employment trends

Despite reports of lower recent demand from print publishing, most of the key occupations within the industry had relatively stable employment numbers, cumulative hours worked and individual hours worked in the Labour Force Survey.

Training providers not delivering VET qualifications

In their 2022 report⁸¹, the Pulp and Paper Manufacturing Industry Reference Committee (IRC) noted that employers believe that there is a lack of Registered Training Organisations (RTOs) that can deliver the PPM Training Package, in a way that meets workforce needs. The IRC partly attributed this to the challenge of low financial viability for RTOs in maintaining such training programs, coupled with low turnover rate in the workforce, resulting in a limited number of potential new enrollees.

33

Opportunities

Downstream demand: Rising demand from packaging by online retailers and food producers has supported revenue over recent years, which is expected to continue⁸².

Sustainability awareness and training: Industry operators have been investing in innovative practices, especially circular economy systems and manufacturing recycled and sustainable products⁸³. Designing promotional campaigns and training programs that showcase and deliver future-oriented skills, including in sustainability, circularity and design thinking and leadership, presents an opportunity to attract a skilled and motivated workforce.

Challenges

Underrepresentation of women: The 2021 Census showed women only accounted for 23% of this workforce, a 1% decline from 2016. Attracting priority cohorts may help with managing turnover in the context of an ageing workforce (45% are over the age of 50).

Digital and automation practices: The industry continues to invest in automation, which is reducing the number of employees required. However, industry revenues are declining at a faster rate than automation-related cost savings, which is adding to the pressure on employers to reduce staff costs⁸².

Addressing imbalances in VET demand and supply:

Training providers currently cannot sufficiently meet the specific needs of the industry, which means workers do not gain formal qualifications to complement their workplace-based learning and experiences, or to facilitate career mobility across occupations and industries.

Data monitoring priorities

Labour shortages

Absence of RTOs that can deliver

High

Workforce diversity

Medium

13,449 workers

2021 Census

12,200

Projected growth of workers (2028)

JSA Projections

23% female workers

2021 Census

1% First Nations

2021 Census

Time-series Data



Livestock Farming

The livestock industry plans, organises, controls, coordinates and performs farming operations to breed and raise livestock for the production of breeding stock, meat and other products and uses, which covers the value chain associated with products such as milk, eggs, and honey. It includes both specialised or mixed livestock farms that breed and farm one or a variety of animals (e.g. sheep and beef cattle), and mixed crop and livestock farming operations.

Key updates

Safety risks continue to be a concern

Data from Safe Work Australia⁴⁸ has shown that in FY 2021-22, there has been 1,002 serious injury compensation claims by Sheep, Beef Cattle & Grain Farmers, 214 claims by Dairy Farmers, and 275 claims by Other livestock farmers. The agriculture industry overall has been identified as a national priority to reduce fatalities and serious claims under the Work Health and Safety Strategy 2023-2033⁴⁹.

Farmers with mixed production operations working overtime.

As internet vacancies have recovered to pre-pandemic levels for all key
occupations, the individual hours worked have dramatically increased for Mixed Crop and Livestock Farmers and Mixed Crop and Livestock Farm Workers in the Labour Force Survey, ranging from 77 to 87 hrs/week to during 2023. This is suggestive of insufficient labour to meet demand during this period.

Opportunities

Rising exports: Increased global wealth, along with recent free trade agreements with countries like China, Japan and Indonesia⁵⁰ can increase demand for meat, cattle and wool in these markets.

Increased investment in machinery and equipment: Farmers have focused on upgrading equipment to improve output efficiency, which can bolster revenue as depreciation expenses⁵¹.

Support from Government: Farmers can receive financial assistance from both Federal and State Governments during periods of extreme weather conditions⁵².

Challenges

Climate and biosecurity risks: Extreme weather, pests and diseases remain a major threat to the industry, with potential outbreaks affecting export markets and industry attractiveness¹⁶.

Ageing workforce: The 2021 Census indicates that workers over 50 years account for 61% of the workforce. Workforce planning strategies may require focus on the attraction and retention of younger people to meet succession planning needs.

Data monitoring priorities

Labour shortages

High

Workplace health and safety issues

High

Ageing workforce

122,458

2021 Census

workers

↑ 6,700

Projected growth of workers (2028)

JSA Projections

32%

female workers

2021 Census

1.8% First Nations

2021 Census

Time-series Data



Data Caveats

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Textile, Clothing and Footwear

This industry consists of businesses that process and manufacture natural (e.g. wool, cotton and leather) and synthetic (e.g. polyvinyl chloride: PVC) materials, for textiles, leather, clothing and footwear goods production. It also covers services associated with these goods, including fashion and textile design, dry cleaning operations, laundry operations and clothing and footwear repairs.

Key updates

Post-pandemic recovery in employment.

The Internet Vacancy Index⁴² has shown that demand for all key occupations within the industry (Laundry Workers, Sewing Machinists, Clothing Trades Workers, Other Cleaners, Manufacturers) have recovered from 2020. However, the Labour Force Survey showed that whilst there is an increasing trend in the cumulative hours worked (e.g. Laundry workers), others are in a downtrend (e.g. Sewing Machinists) consistent with JSA's projections in below economy-wide average demand.

Challenging operating conditions for Laundry Workers.

A steep decline was observed in the number of Laundry Workers nationwide in the Labour Force Survey, from 15,700 in 2022 to 9,600 during 2023. According to Luke Simpkins, CEO of the Laundry Association Australia, businesses have been challenged by sharp increases in operation costs⁴³. Further, Catherine Cluning, CEO of the Drycleaning Institute of Australia, has noted that the erroneously low ANZSCO skill level (5) of occupations such as Drycleaner (within the Laundry Workers group) impacts skilled worker attraction because it omits those occupations from being eligible for the Skills Priority List, Apprenticeships Priority List, Skilled Migration Lists, and other relevant subsidies and programs.

Opportunities

New and emerging skills: Increases in the repair, reuse and recycling of textiles is predicted to have a significant impact on the industry, including emergent skills in eco-friendly production and design⁴⁴. There is also rising demand for skills in digital printing, laser cutting and textile mechanics.

Consumer demand: Demand for locally made, ethical and sustainable⁴⁵ products is providing opportunities for businesses to focus on quality craftsmanship and strong technical skills.

Challenges

International competition: Textile, Clothing and Footwear wholesalers and retailers often turn to lower cost imports for supply, which the government is supporting through reduced import tariffs from July 2024⁴⁶. This may reduce demand for local production⁴⁷.

Changing skills landscape: Local manufacturers who aim to reduce operating costs with new technology may lead to an increased demand for higher skilled workers, and a reduction in lower skilled workers.

Upskilling and reskilling: Employers have noted workforce benefits from offering apprenticeships to existing staff; however, apprenticeship wages must be supplemented to avoid worker disadvantage, and there may be productivity loss during staff withdrawal from work duties for training. Employers are seeking solutions that incentivise investing in existing staff.

Data monitoring priorities

Competition and operation challenges

Workforce diversity

Medium

36,782 workers

2021 Census

12,600

Projected growth of workers (2028)

JSA Projections

57% female workers

2021 Census

1.5% First Nations

2021 Census

Time-series Data

Data Caveats

Timber, Wood Processing, and **Building Solutions**

The product manufacturing industry is a vital part of the timber value chain, turning harvested trees into materials that can be used to construct buildings, furniture, flooring, timber products and other items. High levels of technical skills are required for operating the latest technologies in drying and cutting, including optimisation equipment, allowing industry to continue to supply the high-quality timber that is used to produce some of our most essential structures and products.

Key updates

Cyclical demand within industry

In line with the industry's sensitivity to housing construction activity, the number of workers in the Labour Force Survey for most key occupations have fluctuated in recent years. Overall demand as observed through cumulative hours worked showed that Timber and Wood Process Workers have been in a declining trend.

VET enrolments still in recoveru

Data from NCVER showed that whilst VET enrolments in relevant FWP Qualifications have increased from 298 in 2020 to 522 to 2022, it has yet to recover to pre-pandemic levels.

Opportunities

Technology adoption: Manufacturers, particularly softwood sawmills, are improving operational efficiencies and product customisation by investing in technologically efficient machinery84.

Environmental advantage: There is emerging consumer awareness of the key role of forestry⁸⁵ in carbon sequestration and storage, which will significantly contribute to meeting Australia's 2050 net zero emissions target.

Legislative changes: Recent Government assistance relating to the housing construction sector⁸⁶ may positively influence demand.

Challenges

Attracting new skilled workers: Despite a 1% rise from 2016, women accounted for only 19% of workers in the 2021 Census. There are challenges in attracting women and other priority cohorts to the workforce, and addressing thin training markets in regional areas, to help alleviate skill shortages, which may be exacerbated by a large proportion of the workforce approaching retirement age.

Volatile conditions: Activity within the industry is highly dependent on both upstream suppliers and downstream buyers. Competition from substitute products (e.g. steel and plastic) contributes to revenue volatility, which affects workforce attraction and retention⁸⁷.

Supply and demand: Housing shortages and population growth are raising demand for wood-based construction materials, such as engineered wood products and cross-laminated timber, in urban areas. However, the industry's capacity to meet this demand depends on the availability of forest resources, including plantations, and the policies and practices that regulate forests' management, establishment, and utilisation.

Data monitoring priorities

Labour shortages

Declining VET

enrolments

Medium

Workforce diversity

Low

26,738 workers

2021 Census

15,551

Projected growth of workers (2028)

JSA Projections

19% female workers

2021 Census

2.4% First Nations

2021 Census

Time-series Data



Data Caveats



Racing and Breeding

The industry covers racing authority operation, racehorse and race dog breeding, ownership and training, and racetrack and race club operation. Workers in this industry are skilled in training, nutrition, and biomechanics to care for dogs or horses actively participating in racing, keeping them physically healthy and preventing injury. Main activities also include the operation of racing stables, kennels, courses or tracks, the administration of racing clubs, the provision of riding or harness driving services, and horse or greyhound training for racing.

Key updates

Rising industry interest

Despite disruptions to in-person events during the pandemic, increased interest and investment in horse racing has contributed to growing employment (up 1.6%) and establishment (up 3.9%) numbers within the sector⁷¹, with the number of internet vacancies having recovered for all key occupations to pre-2020 levels. Industry growth is also interdependent with demand for value chain workforces, including feed merchants, farmers, saddleries, leather makers, veterinarians, farriers, PPE suppliers, horse float manufacturers and float drivers.

Varying trading conditions in recent years

Whilst high-quality thoroughbred racehorses have fuelled increased domestic and international interest, standardbred and other horses are facing increased competition with lower demand⁷². This may have contributed to the volatility observed in the cumulative hours worked for Livestock Farm Workers and Livestock Farmers in the Labour Force Survey.

Opportunities

Increasing female participation: Women represented 47% of the workforce in the 2021 Census, up 2% from 2016. To cater for the growing number of female jockeys, the Victorian Government has funded racecourses to upgrade their jockey rooms⁷³.

Addressing skills shortages supports animal welfare: Stakeholders noted under-reporting of Track Rider skill shortages, and recommended that Stablehand ANZSCO skill level 5 be raised to 4 to reflect welfare skills and unlock opportunities to address shortages.

Challenges

Health and safety risks: Stables and horse/dog training facilities present distinctive health and safety risks, which may deter potential workers⁷⁴.

Unacknowledged employment: In 2022⁷⁵, the Racing and Breeding Industry Reference Committee noted high levels of informal and voluntary work within the sector. They also highlighted a thinning VET market due to enterprises' increasing reliance on informal training. Skills Insight is undertaking a research project to examine how barriers to formal industry training delivery may be addressed.

Data monitoring priorities

Gender diversity

High

Unacknowledged employment

Medium



14,089 workers

2021 Census

1,300

Projected growth of workers (2028)

JSA Projections

47% female workers

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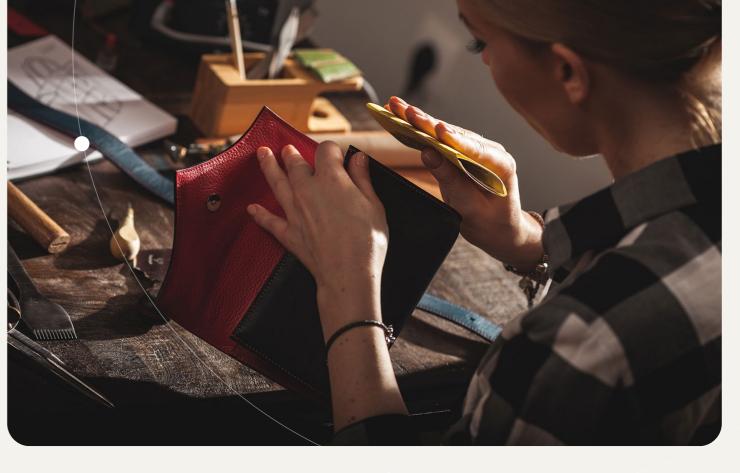
2.2% First Nations

2021 Census

2021 Census

Time-series Data

Data Caveats



7

Workforce planning activities

Skills Insight are currently undertaking, and analysing prospective, workforce planning activities. The below featured activities reflect both data analysis and stakeholder intelligence on priority issues.

Workforce planning priorities key:



Improve data and evidence to inform delivery of sustained and inclusive full employment



Support workforce leadership and continuous capabilities development to help improve access to secure, fairly paid jobs



Addressing skills needs and building our future workforce



Overcoming barriers to employment and broadening opportunities

Current Projects











Ag Trade Apprenticeship Project 🖔

Current (June 2023 - April 2024)

Research into the potential dynamics of an Ag Trade Apprenticeship, which was proposed in the NFF's 2030 Roadmap, the National Agriculture Workforce Strategy, and by the Agricultural Workforce Working Group, convened by Senator the Hon Murray Watt, Minister for Agriculture, Fisheries and Forestry, with a view to helping attract new entrants and promoting career pathways in agriculture.

Research activities included:

- Consultation Workshops (10 face-to-face and 3 online)
- Public consultation on an example qualification
- An electronic survey, with 290 responses, including from employers and RTOs
- 10 in-depth interviews with stakeholders from different jurisdictions and sectors
- Documenting of state-based processes for registering a new apprenticeship.

A final report will be submitted to Senator the Hon Murray Watt and skills ministers in April 2024 to present feedback and the potential dynamics of an Ag Trade Apprenticeship.

Labour market dynamics being addressed

- Industry evolution requiring increase in different skills (e.g. sustainability).
- There is demand from employers for VET graduates to develop less-tangible qualities (e.g. employability skills, attributes and behaviours).
- Prospective workers lack appropriate information on occupational pathways into industry occupations.







Horticulture Agriculture Aquaculture and

Wild Catch Forestry & Logging

Pulp, Paper, and **Converted Paper Product** Manufacturing

Exploring Training Demand & Supply Challenges Project %

Current (November 2023 - November 2024)

It can be difficult to gauge the true demand for VET training delivery from qualification enrolment data. A host of factors might prevent RTOs from offering a qualification even if there is industry demand. Similarly, learners or employers may experience barriers to engaging with formal training that are not related to the qualification itself. The challenges for all parties can be particularly pronounced in rural, regional and remote areas88.

This project will explore reasons for imbalances in the demand for and supply of VET training delivery. A research paper will be produced to outline the challenges faced by different stakeholders, with recommendations for potential solutions, including through JSC implementation, promotion and monitoring activities. It will build on similar 'low enrolment' research undertaken in 2020, paying attention to changes in the jobs and skills ecosystem over the past four years.

Labour market dynamics being addressed

- Existing workforce requires updated skills for their occupations.
- Low / declining number of people commencing training, despite an industry need for it.
- Certain populations find it harder to participate (due especially to location
- Employees lack appropriate information on occupational pathways / career prospects into occupations.









Connecting RTOs & Employers Research Project %

Current (November 2023 - June 2024)

Skills Insight are researching best practice for supporting improved connections between employers and RTOs. This project is concurrent and complementary to the Exploring Training Demand & Supply Challenges Project. It addresses the racing and breeding industry, where collaborative programs have been established to address barriers to formal training delivery in specific regions. As part of this research, Skills Insight are engaging with key organisations to uncover insights on what makes existing solutions successful, and whether they can be scaled up nationally (while considering local jobs and skills contexts).

Labour market dynamics being addressed

- Existing workforce requires updated skills for their occupations.
- Low / declining number of people commencing training, despite an industry need for it.
- Certain populations find it harder to participate (due especially to location issues).











Rural Operations Project %

Current (February 2024 - November 2024)

Certificate II in Rural Operations is used to provide learners with foundational skills required for further education and training pathways or roles in industries in rural, regional and remote areas, especially in northern Australia where rural operations are expanding. The qualification is being reviewed to establish if it accurately reflects the evolving skills needs of industry and learners.

Findings will be used to assess how the unique needs of the learners and workplaces that require these skills can be better met in future, while meeting the current requirements of policies that apply to training package products.

Labour market dynamics being addressed

- Employees lack appropriate information on occupational pathways / career prospects into the occupation.
- Structural industry growth (geographic-specific, or global) increasing demand for a set of skills in that industry for the long term.







Meat, Poultry, and Seafood Processing/ Manufacturing

Training Support Materials for Meat Safety Project 🐁

Current (November 2023 - July 2024)

The meat processing industry must meet National Standards associated with quality assurance (QA). Employers need a skilled workforce who are capable of understanding and implementing these standards so that meat processing plants can pass external audits and reviews and maintain access to domestic and export markets.

Training and assessment materials, available through MINTRAC, for delivering the Certificates III and IV in Meat Safety Inspection, require updating to reflect changes to QA standards and practices and advances in technologu.

Labour market dynamics being addressed

- Changed job or occupational design increasing need for some skill sets (e.g. digital skill
- Industry evolution requiring new skills from the existing workforce.



















Meat, Poultry, and Seafood Processing/ Manufacturing

Current 'Unit Sector' approach projects

- Shearing and Wool Classing Project (November 2023 - December 2024)
- **Livestock Operations Project** (November 2023 - December 2024)

Over the past few years, the entire agriculture, horticulture, conservation and land management (AHC) training package has been undergoing significant revision using a 'Unit Sector' approach to bring it up to date with current work methods and skills needs.

Labour market dynamics being addressed

- Changed job or occupational design increasing need for some skill sets (e.g. digital skill sets).
- Industry evolution requiring new skills from the existing workforce.

Worker Safety Induction Pilot 🎋

Current (November 2023 - June 2025)

Across the agricultural value chain, workers must have access to a safe work environment and the skills to keep themselves and others safe. These skills become even more important in workplaces involving machinery, animals, and isolated or remote locations.

During the March 2023 meeting of the Agriculture Workforce Working Group, convened by Senator the Hon Murray Watt, Minister for Agriculture, Fisheries and Forestry, it was proposed that investigations take place into what a safety induction program could look like for agriculture and related industries.

This project is to explore potential models for a safety induction program to be piloted in the meat processing industry to provide foundational safety capabilities for workers entering the industry.

Labour market dunamics being addressed

Existing workforce requires updated skills for their occupations.









Forest Management and Harvesting

Ecosystem Management, Conservation, Landscaping, and Gardening

Tree Felling Project %

Current (June 2023 - April 2024)

Using a chainsaw to fell trees is a crucial skill in forestry operations, agriculture and arboriculture, as well as in emergency events like storms, cyclones and bushfires. Manual tree felling skills are essential for removing trees in locations or positions that make the use of large machinery unviable. This skill may also be required in environments such as development, construction, landscaping, and parks and gardens. Three tree felling units have been reviewed to reduce barriers to training related to access to trees, while also supporting safe and competent tree felling.

Labour market dynamics being addressed

- Graduates from the training system need skills that meet the evolving needs for their occupations.
- Existing workforce requires updated skills for their occupations.
- Slow speed of supply (e.g. training system takes a long time to train new graduates).
- Certain populations find it harder to participate (due to location issues).







and Building Solutions **Furnishing and Other**

Timber, Wood Processing

Manufacturing

Wood Machining Research Project %

Current (November 2023 - April 2024)

Wood machinists play a crucial role in creating quality timber products for our homes and structures. There are currently two qualifications to support the skills of this job role: the furnishing qualification MSF30322 Certificate III of Cabinet Making and Timber Technology, with a specialisation in wood machining, and the forest and wood products qualification FWP31121 Certificate III in Wood Machining. The MSF30322 is the result of a 2022 project which merged three furnishing qualifications, with the aim of retaining expertise, while offering the potential for related career pathways. Skills Insight was contacted by stakeholders with concerns about the title of this qualification, as it may seem like graduates are trained in cabinet making rather than in the distinct trade of wood machining. Concerns were also expressed about the reduction of wood machiningspecific units. Skills Insight is undertaking a research project to explore the complexities of these issues and will produce a report, including potential solutions to address ongoing stakeholder concerns.

Labour market dynamics being addressed

- Graduates from the training system need skills that meet the evolving needs for their occupations.
- Employers and employees lack appropriate information on occupational pathways / career prospects into the occupation.









Essential Meat Processing Skills Project 🖔

Current (November 2023 - July 2025)

The AMP Training Package is undergoing a full review to meet both the Standards for Training Packages and the evolving needs of the industry. This project is the second stage of a broader project to review the entire AMP Training Package, and will focus on the essential skills in the Certificate II level qualifications, which support accredited training pathways for new entrants.

Labour market dynamics being addressed

- Changed job or occupational design increasing need for some skill sets (e.g. digital skill
- Industry evolution requiring new skills from the existing workforce.





Ecosystem Management, Conservation, Landscaping, and Gardening

Livestock Farming Horticulture

AHC Improvements Project %

Current (June 2023 - March 2024)

The AHC Training Package is one of the most complex, diverse and largest in the Australian system. Some key units of competency for work in the agriculture, horticulture, conservation and ecosystem management sector were revised as part of projects undertaken in 2019-22. As these units relate to important skills used across the industry, several qualifications and skill sets that were not part of the original projects required updating to incorporate the improved units.

Labour market dynamics being addressed

- Graduates from the training system need skills that meet the evolving needs for their occupations.
- Industry evolution requiring new skills from the existing workforce.

Recently approved





Textile, Clothing and Footwear

Research and Analysis of the Textiles, Clothing and Footwear Industry

The Australian Textiles, Clothing and Footwear industry is undergoing major transformation as onshore manufacturing is being re-introduced and advancements in technology have changed the nature of workforce occupations and skills⁸⁹. Stakeholder consultation and analysis will be undertaken to inform forward strategies and decision-making by the JSC. This will involve mapping existing industry strategies and resources for skilling, upskilling and re-skilling opportunities, and considering labour force dynamics (including symptoms such as shortages), sources of labour supply, and workforce diversity.

Labour market dynamics being addressed

- Industry evolution requiring new skills from the existing workforce.
- Industry evolution requiring increase in different skills.





From Training Package to Training Delivery

As overseers of training packages, JSCs are interested in how they are accessed, read, interpreted and translated into workforce skills. It is the responsibility of RTOs to undertake the translation of competency standards into skills, but at present there is only anecdotal evidence of how they achieve this important task. Anecdotal evidence suggests that some providers 'value add' to national training products to better serve the needs of particular employers, student cohorts and communities. Other providers may be more limited in the way they implement training products due to resourcing or expertise constraints. Better understanding of the process of translating training packages will allow Skills Insight to determine what additional support may be useful to RTOs to develop effective learning resources. The activity will involve identifying and examining translation with a focus on determining innovative processes that customise training to meet diverse, local employer, student and community needs. Skills Insight have subcontracted high profile VET researcher Steven Hodge and Griffith University colleagues to undertake this research

Labour market dynamics being addressed

VET qualification reform:

- This activity will test the proposed qualifications reform model (as per the March 2024 update of the Qualification Reform Design Group). Specifically, the research will consider differences in training product translation between a qualification that is tightly mapped to an occupation, a qualification that is not tightly mapped such that graduates can be employed in a diffuse range of occupations, and a qualification that develops cross-sectoral or foundation skills and knowledge which may be applied across industries, or lead to tertiary education and training
- This will support workforce planning in considering flows from qualifications to occupations, where delivering more graduates may be a relatively effective source of labour, and the methodologies practiced by, and capability needs of, the VET workforce.

Under consideration









Animal Care and Management

Review of Veterinary Nursing Skills Standards and Training Products

Veterinary nurses – and veterinarians – are in national shortage⁵. As of Feb 2024, the workforce is 96% female, with a median age of 27 years (compared with 40-44 years for all occupations), and only 56% are in full-time work (compared with 70% for all occupations)⁷. Industry stakeholders deem that accurately aligning job roles with required skills will help to address low veterinary nurse retention rates and further help professionalise the occupation.

Findings reported in an Australian Veterinary Association Veterinary Wellness Strategy⁹⁰ suggest that prevalent stress factors in veterinary services include high workload, long hours, poor remuneration, interpersonal abuse by clients, and staff shortages. The report recommends that the role of veterinary nurse 'warrants review and transformation for the benefits of those doing the role, but also the wider team' (ibid, p.48). This is based on findings that these workers experience uncertainty around work tasks and standards, and conflicting and inconsistent job roles, responsibilities, and expectations.

Despite skills shortages being recorded in every state and territory, veterinary nursing is still a growing workforce that attracts people to education and training. According to JSA, there are 15,200 veterinary nurses employed across all industries as of May 2023, with an annual employment growth of 700 and a projected 13.4% growth in employment in the ten years to May 2033. Meanwhile, enrolments in the Certificate IV in Veterinary Nursing are growing yearly, with almost 5,100 enrolments and 1,250 completions in 2022. While this might suggest a supply

of potential workers to alleviate pressure on businesses, skills shortages persist. Stakeholder feedback indicates that this is due to high turnover rates, in part due to the working conditions of veterinary nurses, as noted above, and low rates of pay, with median hourly earnings for veterinary nurses at \$27 compared with \$41 for all occupations (median full-time earnings per week are \$1,026 compared with \$1,593 for all occupations).

To improve veterinary nursing workforce employment outcomes, the Australasian Veterinary Boards Council (AVBC) and Veterinary Nurses Council of Australia (VNCA) are advocating for the mandatory registration of veterinary nurses and technicians (at present, there is mandatory registration in WA only, and a voluntary Australian Veterinary Nurse and Technician Registration Scheme). It has been proposed that a mandatory scheme may recognise the minimum education requirement as being Diploma-level rather than the current Certificate IV-level. The potential establishment of a national registration scheme necessitates a thorough review of qualifications and skill standards to ensure alignment and compliance with regulatory requirements. Industry-led changes may also support businesses in recognising higher-level skills and so responsibility and wage increases for this workforce such that retention rates rise and skills shortages are

Further stakeholder consultation is required to understand challenges for the veterinary nursing workforce and to consider the appropriateness of current skills standards.

Labour market dynamics being addressed

- Employers are not aligned with employee expectations on job attractiveness (e.g. pay, symptoms, etc.).
- There are insufficient people in the workforce with the level of experience employers require.



Cross-industry **Ecosystem Management**, Conservation,

Landscaping, and

Gardening

Activities and Initiatives to Support Closing the Gap

Skills Insight is exploring initiatives to strengthen relationships with First Nation stakeholders to guide and validate future work. This includes potential activities to:

- Develop training and workforce solutions for working with crocodiles in Northern Australia, where cultural knowledge and safety are highly significant.
- Collaborate with project leader, the First Nations Land and Sea Corporation, to develop immersive technology training and assessment resources to support delivery of the Respect for Country qualifications and Indigenous Ranger skills development.
- Research and analysis of skills and workforce issues in the fishing industry in Northern Australia, particularly in First Nations communities (including biosecurity and Indigenous Ranger program skills).

Labour market dynamics being addressed

- Certain populations find it harder to participate (due to disability, age, gender, culture, location, etc.).
- Industry evolution requiring increase in different skills.
- Structural industry growth (geographic-specific, or global) increasing demand for a set of skills in that industry for the long term.
- Negative population dynamics for the relevant geography (e.g. low / negative growth, ageing population).









Horticulture

Addressing Labour Supply and Demand in Horticulture

Horticultural farms tend to use relatively large amounts of casual and contract labour (including migrant labour) in peak seasons, reflecting the timing of labour-intensive operations, such as planting and harvest. Businesses need a safe, productive, reliable and, ideally, returning workforce, though struggle to source labour. Data on seasonal and migrant labour employment supply and demand is a significant gap in national collections (see the Workforce planning evidence gaps section below). Further research needs to be undertaken on the productivity and profitability outcomes of different hiring practices and the efficacy of different labour models to improve workforce planning in horticulture.

Labour market dynamics being addressed

Slow speed of supply (explore how to fill occupation gaps through strategies such as mapping pathways from adjacent workforces, influencing immigration policy and promoting domestic migration).





Broadacre Cropping Livestock Farming Horticulture

Promoting Agribusiness Career Pathways

An increase in people seeking a career in agribusiness is required to address persistent labour supply shortages. Evidence suggests misperceptions around roles, remuneration, and working conditions discourage many from considering industry careers. Addressing these misperceptions requires strategies to promote the breadth of modern occupations and build sustained interest into the future. Identifying strategies will involve further research to map the nature and extent of misperceptions among target markets, including young people and careers advisors, identifying attractive aspects of agribusiness careers, and considering exemplars of effective industry careers promotion. Outcomes may involve identifying a range of potential communications messages and mediums, including advertising, social media, careers advice resources, and school curriculum, through which misperceptions may be reframed and the appeal of agribusiness careers promoted. This activity is being considered in light of how it could engage with and build upon the work of organisations such AgriFutures Australia and the Primary Industries Education Foundation Australia (PIEFA).

Labour market dynamics being addressed

Employees lack appropriate information on occupational pathways / career prospects into the occupation.





Ecosystem Management, Conservation, Landscaping, and Gardening



Building on Tree Felling Project Outcomes

Through consultation undertaken as part of the <u>Tree</u> Felling Project, several needs were identified to help advance training delivery and enhance the quality, safety, and sustainability of tree felling operations, including:

Simulator technology for chainsaw tree felling training

Simulator technology provides an important opportunity to improve hazard awareness and enhance safety and training efficiency. Utilising simulators can reduce the number of trees required for training and reduce errors when practicing on real

Partnership protocols for tree allocation for training

 Industry could be supported through the development of protocols for identifying and sharing trees that can be used for training purposes. Strategic partnerships may help promote sustainable resource management and reduce the strain on training providers who experience difficulty sourcing trees.

Development of learning and assessment resources

 Nationally consistent learning and assessment resources could support training providers and promote uniformity and quality in training across various regions.

Challenges in establishing prerequisite units

There is stakeholder support for prerequisite units to provide additional guidance on learner suitability for undertaking each level of tree felling unit.

Further improvements to the Tree Felling units

Stakeholder feedback indicates a need for more differentiation between units at each skill level, especially concerning the size and complexity of trees for training at the basic and intermediate levels, which currently overlap.

Labour market dynamics being addressed

- Graduates from the training system need skills that meet the evolving needs for their occupations.
- Training system is not delivering training that meets the skill needs of industry.



Workforce Planning Data Analysis to Inform New Strategies and Activities

Skills Insight are developing increasingly sophisticated approaches to the analysis and presentation of secondary data published by JSA, ABS and others. Insights from this data analysis are emerging that provide a baseline for understanding industry-specific labour market dynamics, labour sources, and symptoms impacting a workforce. This will inform assessments of workforce challenges and the development of new workforce planning strategies and activities throughout 2024-2025.

Please see <u>Appendix</u> 1 & 2 for examples of data analysis and presentation that are contributing to developing workforce planning insights.



8

Workforce planning evidence gaps

This section addresses the workforce planning priority to:

Improve data and evidence to inform delivery of sustained and inclusive full employment

The aim is to support continuous improvement of data collections used for government and industry workforce strategies.

It is an abridged version of the evidence gaps documented in the Initial Workforce Plan, with additional commentary added to describe new gaps or challenges encountered by Skills Insight and our stakeholders in the intervening period.

Issue

Overlaps in JSCs' jobs and skills coverage

Description and Impact

Defining the workforces under JSCs' coverage is not straightforward because of the numerous overlaps across industries (ANZSIC), jobs (ANZSCO) and skills (National Training Register). It is important for JSCs to have clear sight of their stakeholders so that no cohort or group is unduly overlooked or excluded.

Strategy

JSCs are responsible for collaborating in areas of shared concern. For reference, Skills Insight have mapped the distribution of occupations across industries using 2021 Census data to understand where relevant jobs and skills may overlap with the coverage of other JSCs.

Issue

The ANZSCO does not accurately reflect current and emerging occupations

Description and Impact

Descriptions of occupations under the coverage of Skills Insight are outdated, or excluded, in the ANZSCO. This constrains effective workforce planning and potential industry eligibility for government programs and funding (linked to Skills Priority Lists, Australian Apprenticeship Priority Lists, Skilled Migration Lists, and others).

Strategu

Skills Insight has submitted stakeholder-informed survey responses to the first three rounds of the ANZSCO review. Round 4 in mid-2024 will seek feedback on the complete set of proposed changes. Skills Insight has begun collecting feedback on proposed changes reported so far.

There will be ongoing efforts to influence and collaborate with the ABS on updating the ANZSCO, as has been discussed in JSC CEO Forums and with DEWR.

Issue

The ANZSIC does not accurately reflect current and emerging industry sectors

Description and Impact

Descriptions of industries under the coverage of Skills Insight are outdated, or excluded, in the ANZSIC, notably for Animal Care and Management. This constrains effective workforce planning and industry access to government programs and funding.

Strategy

Skills Insight will continue to document gaps in the ANZSIC and their impact on stakeholders. In turn, there will be efforts to influence and collaborate with the ABS on updating the ANZSIC.

Issue

Vocational education and training data

Description and Impact

Challenges with scheduling, capacity and resources mean NCVER can only release Total VET Activity data for the previous year each August. This entails that in July JSC training product decision-making is informed by a data collection that finished 19 months ago.

Low survey response rates in Employers' Use and Views of the VET System and Student Outcomes Survey data collections constrain effective monitoring, which is a core JSC function (including to assess flows from qualifications to occupations to analyse with whether delivering more graduates may be an effective source of labour to alleviate workforce supply pressures).

Strategy

Skills Insight will continue to consult with NCVER on their National VET Research Program to provide constructive feedback on evidence gaps and potential future research and evidence collection.

Issue

Lack of granularity in accessible data

Description and Impact

Data from Government agencies (e.g. JSA) and other organisations (e.g. Work Safe Australia) are often released at a broad ANZSIC division level, i.e. Agriculture, Forestry and Fishing, which does not enable differentiation of subdivisions, groups and classes.

Furthermore, industries within Agriculture, Forestry and Fishing have not been featured in datasets such as the Labour Employer Surveys by ABS and Recruitment Experiences and Outlook Survey (REOS) by JSA, which has provided data features on other selected industries. This limits the value of these releases for workforce planning purposes.

Strategy

Skills Insight has been corresponding with data custodians to obtain granular data as a 'data user' where possible, in line with privacy requirements.

Issue

Gaps in seasonal, temporary, and migrant workforce data

Description and Impact

National data collections have variable approaches to recording seasonal, temporary, and migrant workers. There are often large margins for error in reporting, which cause volatile estimates. This poses barriers for effective workforce planning, especially for niche and regional industry sectors that rely on these sources of labour.

Strategy

Skills Insight will continue to engage with the JSA and ABS to support continuous improvement of national data collections. There will also be contributions to industry-based initiatives, such as AgriFutures Australia's Mapping the Workforce of Australian Agriculture project, which is considering data issues surrounding seasonal, migrant, un-documented and family member workers.

Issue

Data aggregation evidence gaps

Description and Impact

The lack of granularity displayed in national data collections that aggregate data (e.g. to four-digit ANZSCO level) entail challenges in assessing labour market dynamics, labour source characteristics, shortage/surplus symptoms and, ultimately, formulating appropriate strategies.

Strategy

Industry intelligence and stakeholder engagement, with a particular focus on place-based jobs and skills characteristics, supplements public data provision.

Skills Insight continues to support the continuous improvement of national data collections, and work with and harmonise data sources with differing levels of aggregation (including microdata).

Issue

Continuous improvement of the Skills Priority List (SPL) and Internet Vacancy Index (IVI)

Description and Impact

Many stakeholders feel the SPL underrepresents shortages in occupations predominately located in regional, rural and remote areas. Similarly, the IVI only monitors mainstream job websites and does not account for the predominance of jobs advertised by businesses through local and informal networks. Industry demand for workers in regional, rural and remote areas and some occupations is likely to be underestimated.

Strategy

Skills Insight will continue to promote continuous improvement of the IVI and participation in the SPL survey so that labour force demand and shortages are mapped appropriately. Alternatives and/or supplements to the IVI as an indicator for job supply are also in the process of being investigated with JSA.

Issue

Volatility in national data collections

Description and Impact

National data collections, such as the ABS <u>Labour Force Survey</u>, can be very volatile due to small participant and sample sizes, and large margins for error. As a result, underlying dynamics may be difficult to elucidate, and apparent trends may be misleading.

Strategy

Such data should be used with caution, and potential inaccuracies noted in relevant publications.

Issue

Lack of integration between national data frameworks and collections

Description and Impact

Multiple national data frameworks and collections do not align, potentially duplicating similar work that would be more effective if integrated. For example:

Many ANZSCO occupation skill levels are not reflective of the AQF level of the relevant NTR qualification, despite both defining the level of knowledge and skill required to competently perform tasks in the workplace.

Strategy

Skills Insight will continue to promote data source harmonisation where appropriate, including in the ANZSCO review and future consultation over an Australian Skills Taxonomy (which is earmarked to replace the Australian Skills Classification).

Issue

Contextual overlay in Australian Skills Classification (ASC)

Description and Impact

The ASC promotes a common language for skills and therefore jobs. However, the application of skills is highly contextual and contingent, and there are risks in overstating potential skills transferability. Stakeholders are unclear as to the usevalue of homogenising and clustering skills without an additional variable for risk so that true transferability can be assessed.

Strategy

Skills Insight will continue to engage with development of the Australian Skills Taxonomy. This will involve recommendations for the concept of risk and other contextual variables to overlay datasets intended to show skills transferability across occupations and industries.

Issue

Qualitative evidence and data underutilisation

Description and Impact

JSCs utilise data published by JSA and associated agencies, whose products are the most comprehensive in existence for workforce planning; however, data limitations discredit apparent trends. While qualitative data may not always be extrapolatable, it can enrich and explain quantitative data but also, where appropriate, call it into question. The release of qualitative data collected by national agencies, for example from Skills Priority List consultations, would facilitate greater transparency and analyses of complex quantitative data from which veracious insights do not always emerge.

Strategy

Skills Insight will continue to utilise and develop multiple methods, notably qualitative research, to address key data and evidence gaps. There will be efforts to triangulate qualitative and quantitative data and evidence to help understand and respond to jobs and skills challenges and opportunities in different contexts.

lssue

Lack of privileged access to research and data

Description and Impact

JSCs lack access to unit record data and research libraries/journals, limiting the breadth of information and analysis that informs workforce planning insights.

Strategy

Skills Insight will encourage arrangements for all JSCs to gain access to online research libraries.

Issue

Training package qualifications and assigned ANZSCO Identifiers

Description and Impact

Each qualification having one ANZSCO identifier potentially limits the recognition and transferability of skills acquired from VET across a broader range of occupations and industry sectors.

ANZSCO identifiers assigned to qualifications inappropriately can impact on whether the appropriate qualification/occupation is included on the Australian Apprenticeships Priority List and Skilled Occupations List.

Strategy

Skills Insight are engaging with the Qualifications Reform Design Group to test and refine a model to strengthen design focus and so improve outcomes from a qualification, especially for graduates with industry-relevant and transferable skills leading to decent work in a rapidly changing environment.

Example

The importance of training and education information and data being compatible with workforce data (e.g. from JSA and ABS) is exemplified in the following example:

If a four-digit ANZSCO Identifier is assigned to a qualification by NCVER on the National Training Register, the website automatically displays a six-digit code, with '00' added to the end of the four-digit code. This creates issues for formula-driven data and decisionmaking, which may have significant impacts for access to workers and training delivery; for example, the AMP31116 Certificate III in Meat Processing (Livestock Handling) was assigned the ANZSCO Identifier 8312 Meat Boners And Slicers, And Slaughterers, which is displayed as 831200 on the National Training Register. Such data misalignments may impact on whether eligible occupations/qualifications are appropriately included on updates of, for example, the Skilled Occupation List or Australian Apprenticeships Priority List. Skills Insight is investigating this issue further.

Issue

Attribution of occupations to industries

Description and Impact

2021 Census data was used to map occupations' distribution across industries, which is reflected in the data presented in the Initial Workforce Plan, and in this update integrating the latest JSA data releases. However, stakeholders have queried the relevance of occupation group titles and whether specific occupations are in fact employed in the industries under which data is presented. Feedback indicates a data-driven approach impacts on the credibility of Workforce Plan data and stakeholders' engagement with it.

Strategy

In 2024, Skills Insight will undertake a mapping exercise with stakeholders to improve the articulation of occupational data, including to understand how occupations that are employed across multiple industries can be attributed and represented accurately.

Skills Insight will continue to identify and report on gaps in the available evidence and data to provide constructive feedback to Jobs and Skills Australia, the ABS, and other national agencies. Continuous improvement of data collection and presentation methods by JSA, with support from JSCs, may assist in the development of more integrated and detailed approaches to identifying jobs and skills priorities.

In the next section, existing workforce and skilling strategies are mapped with reference to the key industry workforce challenges and evidence gaps noted in this section, including consideration of how these relate to Skills Insight's strategies, before current and future workforce planning consultations are outlined in the final section.





Existing workforce and skilling strategies

This section builds on the identification of existing workforce strategies and initiatives in the Initial Workforce Plan.

The list is not exhaustive but indicative of the many government, workforce, skills, national, and regional strategies that are, and will be, considered in ongoing JSC workforce planning activities. Due to the breadth and diversity of industries covered by Skills Insight, detailing all relevant industry-specific and state-based strategies and initiatives is beyond the scope of this document; however, these are explored in our workforce planning, industry stewardship, implementation, promotion and monitoring, and occupational standards and training product development functions and other activities of the JSC.

The intention of mapping high-level workforce strategies that traverse the industries we work with is to understand connections between diverse initiatives, where government or industry policy prioritises specific approaches, and to consider where Skills Insight may work with, collaborate on and/or help shape assigning relative primacy to different strategies that may have varying levels of significance to specific stakeholders, industries and jurisdictions.

The following is a Workforce Planning Priorities key to which the fourth column in the table below refers.



Improve data and evidence to inform delivery of sustained and inclusive full employment



Support workforce leadership and continuous capabilities development to help improve access to secure, fairly paid jobs



Addressing skills needs and building our future workforce



Overcoming barriers to employment and broadening opportunities

ABS: Review of the ANZSCO









The ABS is undertaking a comprehensive review of the Australian and New Zealand Standard Classification of Occupations (ANZSCO) to reflect the contemporary labour market and better meet stakeholders' needs.

Link with workforce planning priorities

Reviewing and updating the ANZSCO will support the articulation of, and data to guide, educational pathways, skilled migration programs and workforce planning strategies.

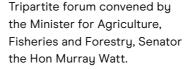
Update from Initial Workforce Plan

Skills Insight have submitted stakeholder-informed surveu responses to the first three rounds of the ANZSCO review. Round 4 in mid-2024 is to seek feedback on the complete set of proposed changes. Skills Insight have begun collecting feedback on proposed changes reported so far.

Jobs and Skills National 2023-2024

Agricultural Workforce Forum %





Key objectives

To establish solutions that address workforce issues in the agriculture and processing sectors.

Link with workforce planning priorities

The Forum influences the work of Skills Insight, including:

- Research into the dynamics of an Ag Trade Apprenticeship to help attract new entrants and promote career pathways.
- Development of meat industry safety training materials as a pilot for similar materials across agricultural, fishing and forestry

Update from Initial Workforce Plan

New (succeeds the Agricultural Workforce Working Group)

Agriculture and processing sectors

National

Nov 2023 - Current



AgriFutures Australia: workforce planning projects %









Key objectives

- Guide workforce data collection.
- Understand data gaps and needs of the major stakeholders.
- Evaluate current workforce data collection tools.
- Develop recommendations and data concepts that can improve workforce data collection.

Link with workforce planning priorities

Skills Insight are a stakeholder of, and contributor to, AgriFutures work to improve workforce data collection and enable better-informed workforce strategic planning, policy development, research, and progress monitoring.

Update from Initial Workforce Plan

Along with stakeholders from ABS, JSA and industry associations, Skills Insight continue to participate in this project.

Skills Insight will also be involved in a project being scoped to explore First Nations community engagement with industry. Agriculture, First Nations Peoples

National

Aug 2023 - Current











Key objectives

The Australian Government is developing a net zero plan, which will outline how transitioning to a net-zero economy can be achieved. Six sectoral plans will support this work, including one for agriculture and the land sector.

Link with workforce planning priorities

Aligning with the Australian Government's emission reduction goals will help producers and land managers to secure a profitable and sustainable future.

A proactive capabilitiescentred approach will allow industry to seize emerging opportunities and reduce risks associated with climate change.

Update from Initial Workforce Plan

New

Agriculture; and Conservation and ecosystem/land management

National

Aug 2023 - Current









Australian Government: Australian Universities Accord %

Key objectives

To devise recommendations and performance targets to improve the quality, accessibility, affordability and sustainability of higher education, in combination with VET, to achieve long term security and prosperity for the sector and the nation.

Link with workforce planning priorities

The Accord states that Australia is not meeting its current skills needs and will not meet them in the future unless

more higher education and VET graduates are produced.

The report lays out targets, including for 80% of the workforce to have a VET or university qualification by 2050. The attainment rate is currently at 60%, and an increase in graduates should include a greater proportion from priority cohorts, including people from low socioeconomic status backgrounds, First Nations peoples, people with disability, and people from regional, rural and remote communities. This

may be achieved with needsbased funding, improved RPL processes, a National Skills Passport, and attention to modular, stackable skills.

Update from Initial Workforce Plan

Skills Insight will continue seeking to address workforce challenges through strategies to identify, forecast and respond to skills needs across a range of educational pathways, including VET and higher education.

Higher education

National

2023-2024

Australian Government: Migration Strategy %

Key objectives

- Increased skilled migration to help meet labour shortages in regional Australia.
- Reform the Pacific Labour Mobility Scheme (PALM) scheme
- Area for future reform: evaluate regional migration settings and the Working Holiday Maker program to ensure migration supports development objectives in regional Australia and does not contribute to the exploitation of workers.

Link with workforce planning priorities

The PALM scheme allows

eligible Australian businesses to fill workforce gaps in regional Australia. PALM workers can undertake seasonal or longer-term semi-skilled and lower-skilled jobs, most commonly in the agricultural industries. There are currently about 35,000 PALM visa holders working in Australia, though the Migration Review identified that there is a lack of data to properly evaluate the migration system's performance and understand the full range of migrant outcomes. The agriculture sector experiences a substantial ongoing shortage of workers, but data gaps continue to be a barrier to addressing workforce needs.

Update from Initial Workforce Plan

As per recommendations in the Migration Strategy, Skills Insight will support improvements in data and evaluation to monitor the outcomes of migration strategies, and identify where migration may be an appropriate response to workforce supply and/ or demand imbalances

Jobs and skills

National/ international

2023 - Current

Australian Government: National Agricultural Traceability Strategy %

Key objectives

- Build a coordinated. collaborative, evidencedriven education, research and development agenda to lift our understanding of, and responses to, risks and opportunities.
- Coordinate a data-enabled, adaptable and secure approach within the traceability ecosystem to sustain and promote efficient market access.
- Improve tracking and tracing capabilities in relevant sectors to advance export opportunities, commodity confidence, and biosecurity and food safety responses.

Link with workforce planning priorities

Priorities include supporting industry and VET sector decision-making skills for the adoption of innovation, including digital technologies. This will also involve creating enduring and motivated partnerships across the whole traceability system to own and drive continued improvements and outcomes.

Update from Initial Workforce Plan

Skills Insight are investigating traceability and related systems (such as distributed ledger technologies) to understand workforce capabilities requirements along the food supply chain, which will inform collaboration with JSA and JSCs.

Agriculture National

2023 - 2033



Australian Government: National Regional, Rural and Remote Tertiary Education Strategy %







Key objectives

The Strategy includes recommendations such as:

- Improve access to tertiary study options for RRR students
- Expand access to high quality VET programs in RRR schools.
- Improve participation and outcomes for RRR students from equity groups including low socioeconomic status students, Indigenous students, students with disability and remote students

Insights from this consultation,

2024, will be documented in a

business case for consideration

which closed in Februaru

Key objectives

by government.

Link with workforce planning priorities

The industries covered by Skills Insight are largely based in regional, rural and remote Australia. However, many of these areas are 'thin' training markets for registered training organisations, whereby delivering training to few, and geographically dispersed learners, is often an unviable proposition.

Australian Government: National Skills Passport Consultation %

Link with workforce

planning priorities

and will support any

strategies aimed at:

and reskill.

future implementation

Skills Insight submitted a

response to this consultation

Informing education and employment decisions. Helping workers promote

their qualifications, upskill

Helping businesses find

staff with the right skills.

Update from Initial Workforce Plan

In 2024, Skills Insight are undertaking activities including:

- Exploring misalignments in VET supply and demand, with a focus on regional, rural and remote areas.
- Connecting RTOs & **Employers Research Project**

(Q) (Q) (Q) (Q) (Q)

Regional, rural and remote (RRR) Australia

National

2019 - Current

Sept 2023 - Current

Jobs and skills

National

Australian Government: White Paper on Jobs and Opportunities %

Key objectives

Key objectives

The White Paper outlines the Government's vision for a dynamic and inclusive labour market. Five key objectives for

- Delivering sustained and
- · Promoting job security and strong, sustainable wage growth

Skills Insight are continuing to support the research, design and delivery of pilot training products, in partnership with stakeholders from the Australian international

Reigniting productivity

Filling skills needs and

building our future

Overcoming barriers

to employment and

broadening opportunity

growth

workforce

and Indian agriculture sectors, to meet India's emerging agricultural skills needs and provide a market opportunity for Australian education providers, while strengthening the bilateral relationship by developing skills for a critical industry.

Update from Initial Workforce Plan

New

Jobs and skills International

Released Nov 2023

achieving this vision are:

inclusive full employment

Link with workforce planning priorities

a more strategic approach to workplace planning, linking JSA and JSC guidance on skills priorities into key policy choices across the VET, higher education and migration systems. Skills Insight have a key role in the delivery of these tripartite approaches

The Government is embedding

Update from Initial Workforce Plan

New

Jobs and skills

Closing the Gap %

Key objectives

Closing the Gap is a strategy that aims to improve the life outcomes of First Nations peoples with respect to health and wellbeing, education, employment, justice, safety, housing, land and waters.

Link with workforce planning priorities

The Productivity Commission's latest data on Closing the Gap shows there has been an improvement towards key targets, but they are not on track:

- Target 6: Increase the population of Aboriginal and Torres Strait Islander people aged 25-34 years who have completed nonschool qualifications of Certificate III or above.
- Target 7: Increase the percentage of people aged 15-24 years who are fully engaged in employment, education or training

Update from Initial Workforce Plan

Skills Insight are actively engaging with stakeholders and scoping collaborative activities to improve the participation of, and outcomes for, First Nations peoples in relevant industries and education and training

First Nations Peoples

National

2007 - Current

Australian Government: National Training Register Enhancement Project %

Key objectives

The NTR Enhancement Project is building systems and processes to ensure that training product development is more timely, less bureaucratic, and less complex, while still delivering national and local skills needs.

Link with workforce planning priorities

To help find solutions to skills and workforce challenges, the Australian Government, supported by JSCs, is strengthening its information and data assets, with the NTR to remain as the VET sector's source of truth.

Update from Initial Workforce Plan

Update from Initial

New (proposed in the

White Paper on Jobs

and Opportunities)

Australian Government's

Workforce Plan

New

VET National

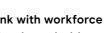
Current

57









This strategy presents ways to deliver mutual benefits for Australia and India through education, institutional and research partnerships, and employment mobility.

Link with workforce planning priorities

Australian Government and Adelaide University:

Australia's Education Strategy for India %

education sector and Australian







National

Released Sept 2023









Climate Change Authority (CCA): sectoral pathways review %









Key objectives

CCA is responsible for providing independent advice to government on climate change and emissions reductions targets and strategies

Link with workforce planning priorities

CCA are engaging with Skills Insight to help deliver advice on pathways to net zero for Australian sectors, including Agriculture & Land, and Resources. This includes consideration of skills and workforce planning, including opportunities for women, during the transition to net zero.

Update from Initial Workforce Plan

Jobs and skills National 2024

Industry training advisory bodies (ITABs)









Note: there are title variations in each jurisdiction, but 'ITAB' is used as a generic term here.

Key objectives

Industry skills and training advisory bodies have responsibility for documenting workforce and skills priorities and shortages in their respective jurisdictions. They provide strategic information and advice to state governments on workforce development issues and recommend which VET qualifications should be subsidised based on data and evidence.

Link with workforce planning priorities

ITABs are key placed-based stakeholders and sources of intelligence, who will be engaged at the conceptual stage of workforce planning strategies and activities so that workplans may be complementary, and minimise duplication of data and evidence collection to ensure the efficient allocation of time, money, and human capital.

Update from Initial Workforce Plan

Skills Insight coordinated a meeting with ITABs in Adelaide in September 2023 to develop ways of working with ITABs to support the JSC program and to begin development of a Memorandum of Understanding.

Jobs and skills

State-based

Ongoing

Jobs and Skills Australia: Food Supply Chain Capacity Study %







Key objectives

To develop critical evidence, insights and recommendations to support workforce planning, policy development and program design.

Link with workforce planning priorities

Skills Insight supports JSA in improving data collection and evidence provision to inform workforce planning strategies and decision-making. This includes work on both general activities and resources, and specific capacity studies.

Update from Initial Workforce Plan

Note: JSCs and JSA continue to collaborate on general workforce data and evidence provision

Agricultural production, transformation (processing and manufacturing)

and distribution.

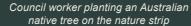
National

To September 2024



Owl and handler at Moonlit Sanctuary (image by Shannyn Higgins Photography)







Cabinetmaker Donald Coles from Duraform

Jobs and Skills Councils: Workforce planning %









Key objectives

Workforce planning is the strategic centrepiece of JSCs

Link with workforce planning priorities

JSCs are contracted to take an economy-wide approach in collaboration with other JSCs. There is a shared responsibility to support improvements in data and evidence collection and analysis to inform strategies and decision-making.

Update from Initial Workforce Plan

An inter-JSC Workforce Planning Community of Practice has established a platform for sharing best-practice, challenges, and scoping of collaborative activities.

Jobs and skills

National

2023 - Current

National Agriculture Labour Advisory Committee: National Agricultural Workforce Strategy %







(Q)

Key objectives

Key objectives include:

- Federal, state and territory ministers and industry leaders should prioritise continuous capabilities development, including for owners, managers and workers (Recommendation 1).
- Enhance sustainability (Recommendation 2)
- Value-add across the supply chain (Recommendations 3-5)
- Adopt digital technologies and develop associated skills (Recommendations 6-8)
- Attract and retain the future workforce (Recommendations 9-13)
- Strengthen education and training (Recommendations 14-17)
- Improve workforce planning, management, health and safety, and wellbeing (Recommendation 18)
- Empower place-based and locally-led approaches (Recommendation 19)
- Attract and protect the seasonal and transient workforce (Recommendations 20-31)
- Improve workforce data and information to bridge evidence gaps and inform policy (Recommendations 32-35)
- Work collaboratively to implement workforce planning strategies (Recommendations 36-37).

Link with workforce planning priorities

The Strategy concludes that the key enabling factor for supporting industry is lifting the capabilities and diversity of the workforce. It invites industry leaders to make workforce skills development planning core to their strategies, and to collaborate widely with federal and state government agencies, employers, industry bodies, and unions.

The Australian Government response to the National Agricultural Workforce Strategy supported the recommendations of the Strategy in principle, and various associated initiatives have already been implemented.

Update from Initial Workforce Plan

The Australian government have funded the implementation of various recommendations, which Skills Insight have contributed to, including reviewing the ANZSCO and exploring the potential dynamics of an Ag Trade Apprenticeship. Agriculture, forestry and fishing; meat processing; racing and breeding; conservation and ecosystem management

National

2021 - Current

National VET Completions Taskforce: National Vocational Education and Training Completions %







Key objectives

South Australia led a project to explore factors affecting completion rates and to identify opportunities to improve the proportion of students completing their training. To inform recommendations for improving completion rates, objectives included:

- Engagement: trialling new approaches with key system stakeholders across Australia, to consider how completion rates could be improved
- Insights and good practice: consider national and international good practice models for increasing completion rates
- Measurement of outcomes: collaborative data analysis between NCVER, JSA, and state, territory and Australian governments, with a view to improving data collection and reporting.

Link with workforce planning priorities

Poor qualification completion rates can result in a loss of productivity for industry and missed opportunities for learners.

Improving VET completion rates can achieve positive skills and occupational outcomes.

Diverse jobs and skills stakeholders can help improve completion rates through a greater appreciation for learners' characteristics and study purpose, and the design and delivery of VET.

Update from Initial Workforce Plan New

VET

National

From 2023

National Farmers' Federation (NFF): 2030 Roadmap %







Key objectives

The NFF's vision is for the industry to exceed \$100 billion in farm gate output by 2030. For 'people and communities', objectives include:

- Build leadership capability, including initiatives for financial literacy, corporate governance and regional development 'literacy' and practice.
- · Establishing a nationally consistent, 'tradeequivalent' job brand for skilled farm workers.
- Doubling the number of tertiary and vocational agriculture graduates.
- Clear career pathways to attract workers and develop their skills, with tailored streams for new entrants through to seasoned professionals.
- Increasing the available workforce by 25%, including from the Australian labour force and migration.
- Creating pathways for unemployed Australians to find on-farm work.
- Promote initiatives that facilitate inclusion of underrepresented cohorts in the agriculture industry.
- Adopting methods and strategies for the continuous improvement of sustainability and land use, workplace safety, digital practices, traceability and product integrity, and domestic biosecurity.

Link with workforce planning priorities

The NFF are a key stakeholder in the jobs and skills system generally and workforce planning processes specifically.

The 2030 Roadmap is a wide-ranging national agenda-setting document that covers all areas of workforce development. The NFF's influence in promoting leadership initiatives to attract new workers, including school leavers and under-represented cohorts, is critical across the agribusiness, fibre, furnishing, food, animal and environment care industries' value chains.

Update from Initial Workforce Plan

Among other activities to support improvements to skill development consistent with this roadmap. Skills Insight will soon complete a project on the feasibility of an Ag Trade Apprenticeship to help attract new entrants and promote career pathways in agriculture.

Agriculture, forestry and fishing

National

2019 - 2030

Qualifications Reform Design Group: a tripartite group established by Skills Ministers %



Key objectives

To provide advice about the design of a reform process for VET qualifications which prepares the sector for the future.

Link with workforce planning priorities

JSCs, as key agents in national VET arrangements, are central partners in bringing industry insights into new qualification models, and promoting the improved outcomes expected from new qualifications to current and prospective users of VET.

The Design Group's March 2024 update reported on its initial recommendations to the Skills and Workforce Ministerial Council for a program to modernise VET qualifications. The Design Group proposed a revised system that moves from a 'one size fits all' approach to designing qualifications

based on their purposes, especially to respond to changing workplaces and industries. Three broad purposes have been identified:

Purpose 1

Qualifications leading to a specific occupation (for example a licensed trade), that maintain a level of specificity necessary for safety or licensing requirements, particularly the integrity of the trades, and is unlikely to change substantially from the current approach;

Purpose 2

Qualifications that prepare learners for multiple, related occupations while retaining industry relevance; and

Purpose 3

Qualifications that develop cross-sectoral or foundation skills and knowledge which may be applied across industries, or lead to tertiary education and training pathways.

Update from Initial Workforce Plan

Skills Insight will assist the Design Group in testing the proposed reform model (as per the March 2024 update). Specifically, this will involve suitable approved and prospective activities being designed to test the value of the three broad qualification purposes, and to consider outcomes for learners and industry. Skills Insight will take an action learning approach, and provide progress reports to Skills Ministers, with recommendations for refining the purpose-led design of qualifications to inform new policy settings for the qualifications system.

VET

National

June 2023 - Current

Key objectives

The Australian Government has announced an additional \$414.1 million will be committed for a further 300,000 TAFE and vocational educational courses to be made fee-free from Jan 2024 - this is currently being negotiated with States and Territories through the 5-year National Skills Agreement.

Link with workforce planning priorities

The Australian Government announced additional funding for fee-free courses from Jan 2024. This is being negotiated with States and Territories through the National Skills Agreement, which sets out training places across areas of national priority, including agriculture, as well as for priority cohorts, including First Nations Australians, young people (17-24), and women undertaking study in non-traditional fields.

Update from Initial Workforce Plan

VET National

New

and to contribute to new national training product products do not currently for accredited courses by Centres may inform

The Commonwealth, state and territory governments: Fee-Free TAFE %



Workforce Plan Skills Insight continues to work with federal and state and territoru governments and agencies to identify skills priorities.

Update from Initial

VET

National

Jan 2023 - Current

64

Regional Australia Institute: Regionalisation Ambition 2032 🐁

Key objectives

Jobs and Skills objectives are for the regional workforce to be optimised and fit for the future. These include to:

- Reduce the recruitment difficulty in regional Australia to below 40%
- Increase the share of skilled workers employed in regional Australia to 80% of the regional workforce.
- Boost post-school qualification completion in regional Australia to 65% or above

Link with workforce planning priorities

The RAI's targets complement Skills Insight's workforce planning priorities given our coverage is predominately in regional, rural and remote areas.

Update from Initial Workforce Plan

Skills Insight continue to understand regional jobs and skills challenges holistically, and implement, collaborate on and/or influence strategies and activities as appropriate.

remote Australia

National

2022 - 2032

Regional, rural and

63









 Provide national leadership in the delivery of skills, education and training

Key objectives

TAFE Centres of Excellence %

- Bring together employers, unions, universities and other education and training providers to develop and implement real work and practical solutions to meet skills needs
- Support industry and enrich students' learning experience through applied research and problem solving programs.

Link with workforce planning priorities

JSCs will work with TAFE Centres of Excellence, including to harness Centres' insights from training delivery development (where training exist, curriculum development subsequent national training product development)



The Commonwealth, state and territory governments: National Skills Agreement %



Key objectives

The Agreement aims to:

- deliver a national VET system that provides high quality, responsive and accessible education and training to boost productivity
- support Australians to obtain the skills and capabilities they need to obtain well-paid, secure jobs
- ensure Australia has the skilled workforce it needs now and into the future, with TAFE at the heart of the VET sector.

Link with workforce planning priorities

Skills Insight will collaborate with governments, who have agreed national priorities for addressing critical skills and workforce shortages, including:

- gender equality
- Closing the Gap
- supporting the Net Zero transformation
- developing Australia's sovereign capability and food security
- ensuring Australia's digital and technology capability
- delivering reforms to improve the regulation of VET qualifications and quality.

Update from Initial Workforce Plan

Jobs and skills National 2024 - 2029

The Commonwealth, state and territory governments:



The Blueprint will identify strategies for:

 Growing and diversifying the VET workforce

VET Workforce Blueprint %

- Attraction and Retention
- Capability and career development
- Succession planning

Link with workforce planning priorities

The Blueprint will be developed in close consultation with key VET stakeholders, including JSCs. It will include analysis and consideration of:

- current workforce supply and demand, including qualification coverage, specialist roles and regional and remote distribution
- the interaction between the Standards for RTOs and the impact this has on the VET workforce
- the important role of industry as part of the VET workforce, including employers/supervisors involved in on-the-job training, particularly for apprentices and trainees, as well as the role of industry currency and maintaining connections between RTOs and industry.







Update from Initial Workforce Plan

New

VET

National

2023 - Current



consultation

Outline of planned and ongoing

This section outlines planned and ongoing consultation specific to Workforce Planning for 2024 - 2025. It builds on the outline of planned and ongoing consultation from the Initial Workforce Plan, and will only cover changes and additions from that plan.

Sections that have not changed from the Initial Workforce Plan include:

- Working with Jobs and Skills Australia
- Working with State training Authorities and state-based industry skills and training advisory bodies
- Consolidating stakeholder relationships
- First Nations stakeholders
- **Priorities and Timelines**

Stakeholder Engagement Governance

Skills Insight has now established the JSC Stakeholder Forum and supporting Stakeholder Networks. These governance structures will be formally consulted twice per year on the Workforce Plan that will be submitted to the Australian Government Department of Employment and Workplace Relations to provide guidance on:

- Q1/2 2024-2025 establishing the workforce plan priorities and the major focus for activity submissions
- Q3/4 2024-2025 approving the Workforce Plan for submission and the priorities for the Annual Activity plan.

The JSC Stakeholder Forum is made up of 23 representatives from the Stakeholder Networks. The Stakeholder Networks are made up of as many as 200 industry and association members. Network Members review Stakeholder Forum papers and provide advice to a representative of the Stakeholder Forum prior to decision-taking by the Jobs and Skills Council. Each network nominates a representative and a proxy for the Stakeholder Forum.

Up to ten of the Stakeholder Networks are drawn from large employee or employer representative bodies and/ or organisations with large cross-sectoral coverage. The key bodies with extensive networks, who have agreed to delegate representatives are:

- Australian Forest Products Association
- Australian Meat Industry Council
- Australian Meat Industry Employees Union
- Australian Workers Union
- First Nations Workers Alliance
- Manufacturing Division of the CFMEU
- National Farmers Federation
- Racing Australia
- Seafood Industry Australia

The 13 sector specific Stakeholder Networks reflect Skills Insight's coverage of the ANZSIC classification and VET training packages.

Animal care and management

- Animal Emergency Incident Management Network ANZ (AEIMN)
- Animal Management in Rural and Remote Indigenous Communities (AMRRIC)
- Assistance Dogs Australia
- Australian Veterinary Association (AVA)
- Good 2 Go Equine Dentistry
- Hanrob Dog Training
 Academy
- Peter MacCallum Cancer Centre
- Riding for the Disabled Association NSW
- RSPCA Australia Inc
- Veterinary Nurses
 Council of Australia
 (VNCA)

Aquaculture and wild catch

- Aboriginal Sea Company
- Austral Fisheries
- Australian Barramundi Farmers Association (ABFA)
- Australian Prawn Farmers Association
- Australian Southern Bluefin Tuna Industry Association (ASBTIA)
- Charles Darwin University
- Eastern Zone Abalone Industry Association
- Fisheries Research and Development Corporation (FRDC)
- Humpty Doo Barramundi
- NSW Fishing Industry Training Committee LTD
- Seafood & Maritime Training
- Tassal
- WA Fishing Industry Council (WAFIC)

Broadacre cropping

- Canegrowers
- Cotton Australia
- GrainGrowers
- Northern Territory
 Farmers Association (NT Farmers)
- NSW Farmers
- Queensland Farmers' Federation
- Ricegrowers' Association of Australia

Ecosystem management, conservation, landscaping and gardening

- Arboriculture Australia
- Australian Association of Bush Regenerators Inc AABR
- Australian Sports Turf Managers Association
- Department of Biodiversity, Conservation and Attractions (WA)
- ENSPEC
- Northern Land Council (NLC)
- TAFE NSW
- The Landscape Association

Forest management and harvesting

- Arbre Forest Industries
 Training and Careers Hub
- Australian Timber Trainers Association (ATTA)
- Timber Queensland
- Timberlands Pacific
- HQ Plantations

Furnishing and other manufacturing

- Australasian Timber Flooring Association (ATFA)
- Australian Cabinet and Furniture Association (ACFA)
- Australian Furniture Association (AFA)
- Australian Glass and Window Association (AGWA)
- Blind Manufacturers
 Association of Australia
 (BMAA)
- Floor Covering Institute of Australia Ltd (FCIA)
- G James
- National Security Screen Association

Horticulture

- Permaculture Australia
- Plant Health Australia
- National Association for Sustainable Agriculture Australia (NASAA)

Livestock farming

- AgForce Queensland
- Australian Honey Bee Industry Council
- Australian Pork Limited
- Australian Wool Exchange Limited
- Victorian Farmers
 Federation

Meat, poultry, seafood processing

- Australian Chicken Meat Federation Inc. (ACMF)
- CHM Alliance Pty Ltd
- Queensland Seafood Marketers Association
- The Midfield Group

Pulp, paper, packaging, hygiene

- Appita Inc
- Visy
- Kimberly Clark
- Sorbent Solaris
- Essity
- Opal Merrivale

Racing and breeding

- Australian Jockeys
 Association
- Australian Trainers
 Association
- Harness Racing NSW
- Racing and Wagering WA
- Racing Education Centre
- Racing SA
- Silverdale Farm
- Thoroughbred Breeders Australia
- Victorian Racing Integrity Board

Textiles, clothing and footwear

- Assembled Threads
- Drycleaning Institute of Australia
- Food, Fibre & Timber Industries Training Council WA
- Integral t Apparel Tech
- Laundry Association Australia

Timber, wood processing and building solutions

- Engineered Wood Products Association of Australasia Ltd
- Frame and Truss
 Manufacturers
 Association (FTMA)
- National Timber 8
 Hardware Association
- AKD Softwoods

Virtual Communities will be established for each of the Stakeholder Networks to facilitate ongoing engagement between the organisations that are part of the Stakeholder Networks and others operating in the relevant industry sectors.

Outside of formal consultations, these bodies will be engaged with informally throughout the year to gather industry intelligence, support research activities and review data as part of the development of the Plan, as outlined in the Stakeholder Engagement Plan section of the Initial Workforce Plan.

As a result of the experiences so far, and the guidance being received from DEWR, there appears to be no need to establish a Workforce Planning sub-committee. The JSC Stakeholder Forum will consider any need for sub-committees in its review of the industry engagement structures, expected to report in February 2025.

Developing new relationships and networks

In addition to the plans outlined in the Initial Workforce Plan, Skills Insight will also be prioritising building operational relationships with:

- Rural and Research Development Corporations
- Regional Development Australia branches
- Higher education bodies, particularly on improving research, data and evidence-based for VET reform

These bodies will be increasingly important as JSC work develops, and will be an area of focus now that industry stakeholder membership has successfully commenced and grown.

Opportunities for Cross-JSC Workforce Planning

Skills Insight has and will continue to actively participate in the cross-JSC structures that have been established, including the JSC CEO Forum, the Workforce Planning and the Communications Community of Practices. We will continue to share our experiences with other JSCs and to learn from their approaches.

Engagement with other JSCs in funded activities remains a priority, but is subject to development of a framework for these activities, including leadership, accountability and contractual arrangements.



Susie Falk and Peter Miller on site visit to McCormack's cattle farm



Diana McNaughton at an Animal Emergency Incident Management Network event



Susie Falk and Anna Henderson with Tracey Leo from Humpty Doo Barramundi



Andrew Horgan building fences with BlazeAid in Jingellic

Stakeholder Engagement Plan for Workforce Planning 2024 - 2025

The Stakeholder Engagement Plan is built on the Workforce Planning Priorities. The Plan is presented for each priority.

The time frames are defined by the financial year quarters:

Q1: 1 Jul - 30 Sep

Q2: 1 Oct - 31 Dec

Q3:1 Jan - 31 Mar

Q4: 1 Apr - 30 Jun

Engagement Purpose

Continue to work with major data organisations in our sectors to address gaps







Contributions

Contributions to research and analysis for the Mapping the Workforce of Australian Agriculture project, which includes the agriculture, fisheries and forestry workforces. (Q1, Q2)

Assist to finalise the Mapping the Workforce of Australian Agriculture project (Q3)

Work with partners to identify ongoing gaps and future work (O3)

Analyse improvements from the Mapping the Workforce of Australian Agriculture project (Q4)

Work with partners to develop plans to address ongoing gaps and future work (Q4)

71

Methods

- Continuing involvement in projects being led by Deakin University and Agrifutures through Steering and advisory committee meetings
- Review of projects with partners to identify opportunities for future joint activities
- Provision of industry intelligence and data
- Communicate key data needs and challenges with stakeholders, including consideration of opportunities for improving data collection and presentation and aligning efforts across industry bodies

Key Stakeholders

ABARES

Agrifutures (and other RDCs)

Deakin University

10 4

RMCG (consultancy)

Engagement Purpose

Engagement with key stakeholders for 2025 workforce plan and activities identification









Contributions

Undertake collection of data and industry intelligence

Methods

- Stakeholder meetings and discussions
- Formal and Informal Network approaches
- Virtual communities
- Conferences and events
- Working groups (if required)

Key Stakeholders

Australasian Meat Industry
Employees Union (AMIEU)
Australian Dairy Farmers
Australian Forest Products
Association
Australian Workers Union (AWU)
AVETRA

Career Development Association
Australia and similar career
development based peak bodies
CFMEU (Manufacturing Division)
Department of Agriculture,
Fisheries and Forestry (DAFF)
Department of foreign Affairs and
Trade (DFAT)
ABARES

ABARES
Austrade
ITECA
ILSC
NAILSMA

Indigenous Business Australia National Horticulture Council

National Horticulture Council Regional Australia Institute and Australian Farm Institute

First Nations Land Councils

RTO trainers

RTO learners and recent

graduates
TAFE Directors

VELG

VETASSESS

JSC Stakeholder Forum Key

Bodies

Formal network organisations Other Key Industry Peak Bodies Key Bodies to provide input from

identified cohorts

Regional Development Australia

network

Rural Research and Development

Corporations (RDCs)

Engagement Purpose

Engagement with Stakeholders to identify barriers and opportunities and influence changes









Contributions

Continue work to promote potential opportunities and ways to overcome barriers, including identification of specific activities that can be undertaken by the JSC

Methods

- Emails and website
- Virtual Communities
- Conferences and Events
- Stakeholder meetings and discussions

Key Stakeholders

Australian Forest Products

Association

Australian Meat Industry Council
Australian Meat Industry

Employees Union

Australian Workers Union

CFMEU Manufacturing

National Farmers Federation

Racing Australia

Seafood Industry Australia

Formal networks

TAFE Directors

VELG

Key Bodies to provide input from

identified cohorts

First Nations Land Councils

AVETRA

Australasian Meat Industry Employees Union (AMIEU)

Australian Workers Union (AWU)
CFMEU (Manufacturing Division)



Engagement Purpose

Finalise planning of activities for submission and seek approval for the priorities









Contributions

Based on stakeholder intelligence and data collected over the last twelve months, develop the relevant Activity Plan

Approval of priorities by the JSC Stakeholder Forum

- Formal Network approaches
- JSC Stakeholder Forum meeting
- Provision of industry intelligence and data
- Meetings and emails to S/ TTAs

Key Stakeholders

JSC Stakeholder Forum Formal network organisations that are peak bodies Other key Industry Peak Bodies State and territory training authorities (S/TTAs)

Engagement Purpose

Identify key priorities and obtain approval from the JSC Stakeholder Forum







Contributions

Present preliminary evidencebase from research and industry engagement to identify priority areas of work

Key Stakeholders

JSC Stakeholder Forum Formal network organisations Corporations (RDCs)

Engagement Purpose

Analyse and validate current information on data gaps









Contributions

Building on previous identification of industry data needs, potential data sources and research partners

Methods

- Stakeholder meetings and discussions
- Working groups and subject matter expert meetings
- Formal and Informal Network approaches
- Conferences and events
- Virtual communities

Key Stakeholders

Agrifutures Australasian Meat Industry Employees Union (AMIEU) Australian Dairy Farmers Australian Forest **Products Association** Australian Workers Union (AWU) **AVETRA** CFMEU (Manufacturing Division) Department of Agriculture, Fisheries and Forestry (DAFF) Department of foreign

Affairs and Trade (DFAT)

ABARES

Austrade **ITECA ILSC** NAILSMA First Nations Land Councils Indigenous Business Australia JSC Stakeholder Forum **Key Bodies** Formal network organisations that are peak bodies Other key Industry Peak **Bodies** Other Rural Research and Development

Corporations (RDCs)

All other JSCs

Engagement Purpose

Finalise submissions of activity proposals for November







Contributions

Further engagement with DEWR and S/TTAs

Methods

Meetings and emails

Key Stakeholders

Key Stakeholders

JSC Stakeholder Forum Formal network organisations State and territory training authorities (S/TTAs)

Engagement Purpose

Release completed research and seek feedback







Contributions

Distribution, promotion and feedback on research regarding misalignments in VET supply and demand and Training package translation to curriculum

Methods

- Emails and website
- Virtual Communities
- Conferences and Events
- Stakeholder meetings and

discussions

Australian Forest Products Association Australian Meat Industry Council Australian Meat Industry **Employees Union** Australian Workers Union **CFMEU Manufacturing** National Farmers Federation

Racing Australia Seafood Industry Australia

Formal networks TAFE Directors **VELG**

Key Bodies to provide input from

identified cohorts First Nations Land Councils **AVETRA** Australasian Meat Industry

Employees Union (AMIEU) Australian Workers Union (AWU) CFMEU (Manufacturing Division)

Engagement Purpose

Commence prioritised data work and identification of new priorities









Implement specific data improvements prioritised by the JSC Stakeholder Forum.

Commence work on researching potential new improvements.

Methods

- Stakeholder meetings and discussions
- Working groups and subject matter expert
- Formal and Informal Network approaches
- Conferences and events
- Virtual communities

Key Stakeholders

Agrifutures Australasian Meat Industry Employees Union (AMIEU) Australian Dairy Farmers Australian Forest **Products Association** Australian Workers Union (AWU) **AVETRA** CFMEU (Manufacturing Division) Department of Agriculture, Fisheries and Forestry (DAFF) Department of foreign Affairs and Trade (DFAT) ABARES

Austrade

ITECA

ILSC NAILSMA

First Nations Land Councils

Indigenous Business

Australia

JSC Stakeholder Forum **Key Bodies**

Formal network organisations that are

peak bodies Other key Industry Peak

Bodies

Regional Development Australia network Other Rural Research

and Development Corporations (RDCs)

All other JSCs



Engagement Purpose

Finalise Workforce plan content



Contributions

Using evidence-base collected over the last twelve months, develop the updated Workforce Plan

Approval of draft Plan and priorities by the JSC Stakeholder Forum

Methods

- Formal Network approaches
- JSC Stakeholder Forum meeting
- Provision of industry intelligence and data
- Meetings and emails
- Public consultation via website, social media and emails

Key Stakeholders

JSC Stakeholder Forum Formal network organisations **Public Consultation** State and territory training authorities (S/TTAs)









Engagement Purpose

Identify any cross-JSC themes and shared barriers and opportunities

Contributions

To identify and develop any potential cross-JSC activities

Methods

- Meetings and emails
- JSC CEO Forums

Key Stakeholders

All other JSCs

Engagement Purpose

Present Workforce Plan and prioritisation information for data improvement









Contributions

Finalise plans for the next round of data improvement for consideration by the JSC Stakeholder Forum and Formal networks

Methods

- Formal Network approaches
- JSC Stakeholder Forum meeting

Key Stakeholders

JSC Stakeholder Forum **Key Bodies** Formal network organisations that are peak bodies Public consultation

Engagement Purpose









Prepare plans for activities and commence next round of consultation and intelligence gathering regarding data improvements

Contributions

Submit Activity proposals for data improvement or proposals for joint activities

Build on industry intelligence to identify continuing data gaps and improvements

Methods

- Stakeholder meetings and discussions
- Working groups and subject matter expert meetings
- Formal and Informal Network approaches
- Conferences and events
- Virtual communities

Key Stakeholders

Australasian Meat Industry Employees Union (AMIEU) Australian Dairy Farmers **Australian Forest Products** Association Australian Workers Union (AWU) **AVETRA** CFMEU (Manufacturing Division) Department of Agriculture,

Fisheries and Forestry (DAFF) Department of foreign Affairs and Trade (DFAT) **ABARES** Austrade

ITECA ILSC

NAILSMA First Nations Land Councils Indigenous Business Australia JSC Stakeholder Forum Key **Bodies** Formal network organisations that are peak bodies Other key Industry Peak Regional Development Australia network Other Rural Research and **Development Corporations**

Engagement Purpose

Ongoing engagement with Stakeholders to identify barriers and opportunities and influence changes







Contributions

Continue work to promote potential opportunities and ways to overcome barriers, including identification of specific activities that can be undertaken by the JSC

Methods

- Emails and website
- Virtual Communities
- Conferences and Events
- Stakeholder meetings and discussions

Key Stakeholders

Australian Forest Products Association Australian Meat Industry Council Australian Meat Industry **Employees Union** Australian Workers Union **CFMEU Manufacturing**

National Farmers Federation Racing Australia

Seafood Industry Australia Formal networks

TAFE Directors VELG Key Bodies to provide input

from identified cohorts First Nations Land Councils

AVETRA

(RDCs)

All other JSCs

Australasian Meat Industry Employees Union (AMIEU) Australian Workers Union

(AWU) CFMEU (Manufacturing

Division)

Engagement Purpose

Finalise Workforce plan content







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Contributions

Using evidence-base collected over the last twelve months, develop the updated Workforce

Approval of draft Plan and priorities by the JSC Stakeholder Forum

Methods

- Formal Network approaches
- JSC Stakeholder Forum meeting
- Provision of industry intelligence and data
- Meetings and emails
- Public consultation via website, social media and emails

Key Stakeholders

JSC Stakeholder Forum Formal network organisations **Public Consultation** State and territory training authorities (S/TTAs)

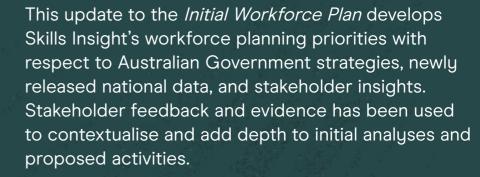






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Towards a 2025 Workforce Plan



The identified strategies will be applied consistently with <u>Skills Insight's approach to Workforce Planning</u> and will underpin all activities undertaken over 2024-2025. These strategies are part of a holistic approach, whereby Skills Insight are taking an active role in working with governments, industry, unions, learners, and training and education providers to implement, collaborate on, and/or influence a range of approaches to alleviate workforce challenges. This reflects that the jobs and skills ecosystem shapes and is shaped by a range of strategies and dynamics across multiple jurisdictions and stakeholder groups that can work together more productively with the right support. All gaps and challenges mapped in this document are mapped to a workforce planning priority. They are either the subject of current or prospective JSC activities or targeted stakeholder engagement to understand where strategies should be prioritised to provide needed support and have the greatest impact in the short, medium and longer terms.

Supported by the JSC Stakeholder Forum, the 2025 Workforce Plan will broaden and deepen insights on jobs and skills demand and supply challenges. It will go beyond identifying the symptoms of workforce challenges by including more direct diagnoses of the most pressing issues and determine strategies to address them, informed by detailed research and data analysis, stakeholder engagement, collaboration with JSA, and extensive consultation with other JSCs.

























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Appendix 1

Select demographic analyses to support Workforce Planning activities

Females in the workforce

Female representation in our industries are mixed

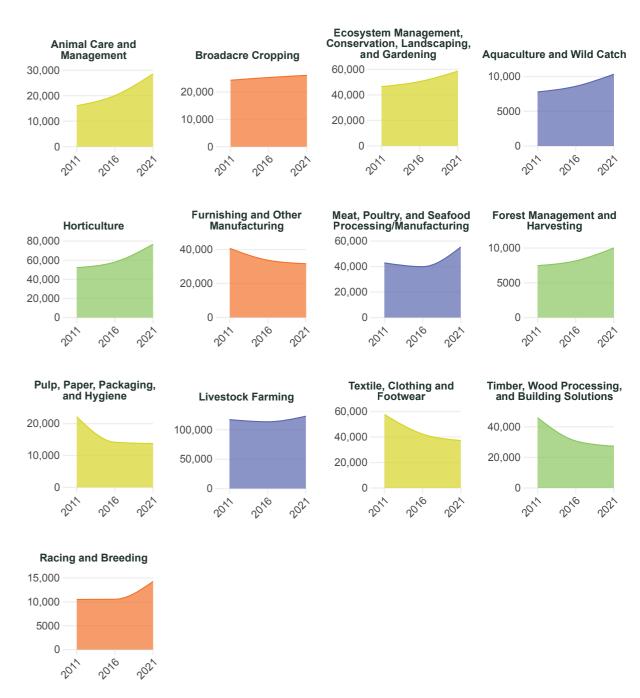
This graph shows the percentage of females in each industry's workforce. Whilst some have improved over time, increasing participation rates remain a challenge in most industries.



Source: ABS Australian Census Longitudinal Dataset (2006-2011-2016-2021)

Industry Employment, 2011-2021

Some industries are seeing an upwards trend, yet others are declining due to factors such as lower attraction, increased automation, imports and productivity. These shifts often come with changes in the skills in demand within the workforce, which is being monitored by Skills Insight with the support of JSA.



Source: ABS Australian Census Longitudinal Dataset (2011-2016-2021)

Change in First Nations Representation 2006-2021

First Nations Participation in our industries have increased to varying degrees

This graph shows the percentage of First Nations workers in different industries, from 2006 (start of line) to 2021 (full circle). Workforce planning strategies to increase collaboration and industry participation are currently being explored by Skills Insight.



Source: ABS Australian Census Longitudinal Dataset (2006-2011-2016-2021)

Migrants in the Workforce

Engagement in employment, education and training

This graph shows the percentage of temporary migrants in each industry that was engaged in employment, education and training in 2021. 'Partially engaged' suggests part-time work or study, whilst 'At least partially engaged' indicates those studying or in the labour force that did not provide sufficient information to determine their status.



Source: ABS Census of Population and Housing, counting persons, 15 years and over (2021), ABS Census of Temporary Migrants (2021)

Appendix 2

Ongoing Workforce Planning Data Analysis to Inform New Strategies and Activities

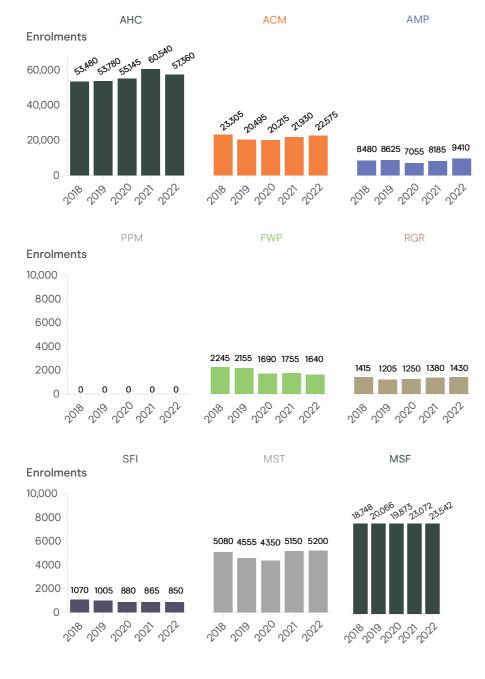
Training Package Qualification enrolments

Areas for further workforce planning analysis

Almost half of all qualification enrolments in these training packages were in just 5% of their qualifications

Further research is required to understand this phenomena, with stakeholders suggesting that many of the qualifications service small and niche industries with low workforce turnover, entailing challenges for balancing demand for and supply of training, especially in thin markets with challenging RTO operating environments. In 2024, Skills Insight are undertaking a project to explore training demand and supply challenges to better understand such issues and propose solutions.





Source: NCVER VOCSTATS (2023)

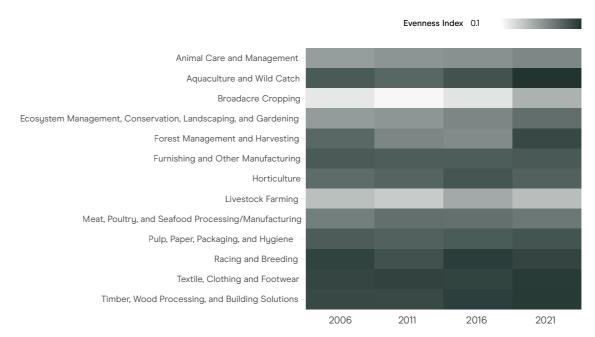
87

Workforce Skills Diversity

Increasing diversity in workforce skill levels seen across most industries

Here, Pielou's Evenness Index (J') us used to measure a group domiance in a community*. A low J' (lighter colour) indicates a high concentration of one or few skills in the workforce, while a high J' (darker colour) indicates a diverse range of workforce skill levels.

Understanding the distribution of industry occupation skill levels will help inform business and industry workforce planning stratgies to assess the supply of, and demand for skilled labour. It also considers the progressive evolution of tasks performed in occupations, for example, with higher skilled roles becoming more prevalent as technology adoption becomes more widespread.

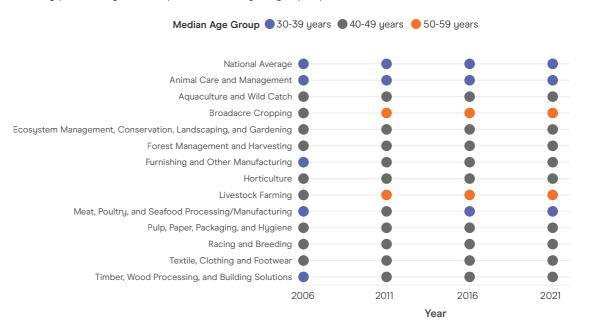


Source: Skills Insight analysis of ANZSCO occupation skill levels from the ABS Australian Census Longitudinal Dataset (2006 - 2011 - 2016), ABS Census (2021), Pielou (1966).

Industry Workforce Median Age

Median age group across industries consistently exceeded national average

Australia's national median age has risen over the years, but remain in a bracket lower than that of workers within our industry coverage. Median age data informs workforce planning strategies that seek to address ageing workforces, including prioritising careers promotion for younger people (and other conhorts).



Source: ABS Australian Census Longitudinal Dataset (2006-2011-2016), Census (2021) A lack of connecting purple line suggests no movement between the years since 2006. Where a year has not been specified on the chart (faintly outlined in the dot), assumer the value is the same as the previous record (e.g. The median age class for the National Average has not shifted since 2006).

^{*}The relative dominance of a skill level alone does not provide information on the skill level that is dominant.

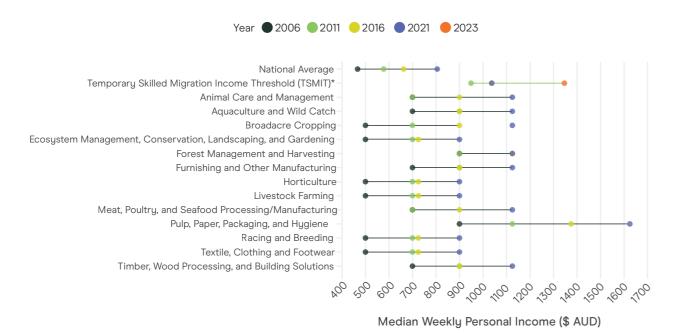
Median weekly income

89

Income mobility over time tends to vary among industries

The TSMIT for employer-sponsored skill visa is designed to ensure that temporary visa holders can support themselves and any dependents financially. It will be increased to \$73,150 (~\$1407 weekly) from 1 July 2024, with future annual indexation. For industries with skill shortages, the recent increase in salary requirements to nominate overseas workers could mean a decreased inflow of skilled migrants into lower wage occupations.

Income mobility impacts on workforce planning strategies to attract and retain a skilled workforce.

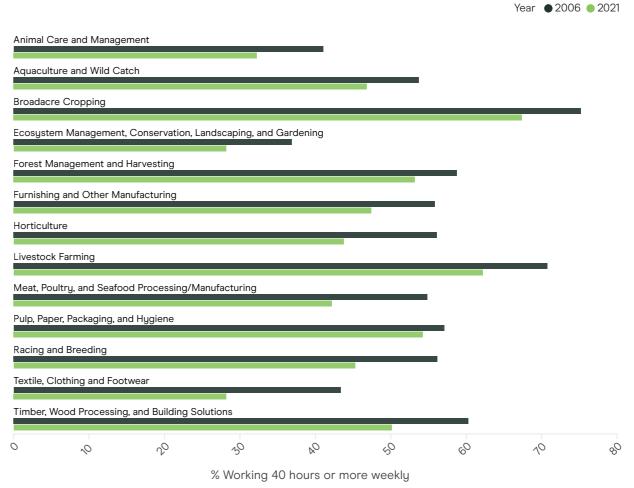


Source: ABS Australian Census Longitudinal Dataset (2006-2011-2016), ABS Census (2021), Azarias (2016).

Weekly Hours Worked

Our workers are working less, but still overtime

The proportion of workers working 40 hours or more has declined since 2006, but many are still working over the national standard of 38 hours weekly. Working hours are one of the key indicators of a labour market supply and demand considered in the analysis of workforce attraction and retention.



Source: ABS Census (2016, 2021)

^{*} Not a median value. Missing years suggest that the median value of the specified year has not increased from the previous recorded value. Median wage data was derived from ABS QuickStats.

Appendix 3

Industry Mapping

This section shows how the industries Skills Insight support are mapped to the ANZSIC Class Codes and Titles (and data categories that are not further defined - nfd - in collections such as the Census) and the training packages most closely associated with them.

Please note: some training packages overlap across multiple industries and occupations, and this mapping is displayed for demonstration purposes only.

AHC

Agriculture, Horticulture, Conservation and Land Management

Conservation, Landscaping, and Gardening Training Package (Under Cover) Nursery Production (Under Cover) Nursery Production (Outdoors) 131							
Offit Nursery Production (Under Cover) Office (Unde	Horticulture Training Package		Ecosystem Management,		Livestock Farming Training Package		
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oloc careful displayed					0159	Other Crop Growing nec	

Additional data categories

Other Crop Growing, nfd

ACM

Animal Care and Management

Animal Care and Management Training Package

Veterinary Services

AMP

MST

Australian Meat Processing

Meat, Poultry, and Seafood Processing/Manufacturing Training Package

1111	Meat Processing
1112	Poultry Processing
1113	Cured Meat and Smallgoods Manufacturing
1120	Seafood Processing

Glass and Glass Product

Manufacturing Training Package

Furnishing and Other

MSF

Furnishings

Manufacturing 2511 Wooden Furniture and Upholstered Seat Manufacturing Metal Furniture Manufacturing 2513 Mattress Manufacturing 2519 Other Furniture Manufacturing

Additional data categories

Furniture and Other Manufacturing, nfd Furniture Manufacturing, nfd

PPM

Paper and Pulp Manufacturing

Pulp, Paper and Paperboard Manufacturing Training Package

Corrugated Paperboard and

Paperboard Container Manufacturing 1522 Paper Bag Manufacturing Paper Stationeru Manufacturing 1524 Sanitary Paper Product Manufacturing 1529 Other Converted Paper Product Manufacturing

Additional data categories

Pulp, Paper and Converted Paper Product Manufacturing, nfd

Converted Paper Product Manufacturing, nfd

Racing Industry

FWP

Textiles, Clothing and Footwear Forest and Wood Products

Textile, Clothing and Footwear Training Package

0521	Cotton Ginning
1311	Wool Scouring
1312	Natural Textile Manufacturing
1313	Synthetic Textile Manufacturing
1320	Leather Tanning, Fur Dressing and Leather Product Manufacturing
1331	Textile Floor Covering Manufacturing
1332	Rope, Cordage and Twine Manufacturing
1333	Cut and Sewn Textile Product Manufacturing
1334	Textile Finishing and Other Textile Product Manufacturing
1340	Knitted Product Manufacturing

Clothing Manufacturing

Footwear Manufacturing

Laundry and Dry-Cleaning

Services Additional data categories

1351

1352

9531

Textile, Leather, Clothing and Footwear Manufacturing, nfd Textile Manufacturing, nfd Clothing and Footwear Manufacturing, nfd Textile Product Manufacturing, nfd

Timber, Wood Processing, and Building Solutions Training Package

1411	Log Sawmilling
1412	Wood Chipping
1413	Timber Resawing and Dressing
1491	Prefabricated Wooden Building Manufacturing
1492	Wooden Structural Fitting and Component Manufacturing
1493	Veneer and Plywood Manufacturing
1494	Reconstituted Wood Product Manufacturing
1499	Other Wood Product Manufacturing nec

Additional data categories

Wood Product Manufacturing, nfd Log Sawmilling and Timber Dressing, nfd Other Wood Product Manufacturing, nfd

Forest Management and Harvesting Training Package

0301 Forestry 0302 Logging

Additional data categories

Forestry and Logging, nfd

RGR

Racing and Breeding Training Package

Horse and Dog Racing Administration and Track Operation Other Horse and Dog Racing Activities

Horse Farming

Additional data categories

Horse and Dog Racing Activities, nfd

SFI

Seafood Industry

Aquaculture and Wild Catch Training Package

0201	Offshore Longline and Rack Aquaculture
0202	Offshore Caged Aquaculture
0203	Onshore Aquaculture
0411	Rock Lobster and Crab Potting
0412	Prawn Fishing
0413	Line Fishing
0414	Fish Trawling, Seining and Netting
0419	Other Fishing

Additional data categories

Aquaculture, nfd Fishing, Hunting and Trapping, nfd Fishing, nfd