



# Riverina Skills Study



Regional  
Development  
Australia Riverina  
Charles Sturt  
University

Partially funded by the Charles  
Sturt AgriPark Seed Fund



An Australian Government Initiative

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Larissa Bambergy

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## Message from Chair



### Chair RDA Riverina

Regional Development Australia Riverina (RDA Riverina) is part of a national network of organisations fostering regional economic development. RDAs work with all three tiers of government, regional business and the wider community to boost the economic capability and performance of their regions.

In 2019, following previous skills surveys and an audit into Horticulture Skills Gaps, RDA Riverina was partially funded by the Charles Sturt AgriPark Seed Fund to conduct a Riverina Skills Study in collaboration with Charles Sturt University. The skills shortage across the Riverina has been exacerbated by COVID-19. The regional renaissance is an incredible opportunity for the Riverina, however, current employment vacancies have reached a ten year high and unemployment in the region is trending down.

In the study it was identified that 78% of respondents reported having difficulty filling vacancies and almost 50% of all vacancies in the past 12 months were unable to be filled. This is the immediate challenge. However, 74% of respondents felt that it was highly or somewhat likely that the skills needs would change in the next five years, leading to a requirement for reskilling the workforce and a shift in employment pathways and education.

Since 2018 RDA Riverina has implemented a region wide workforce strategy that is multifaceted and created to address many of the issues highlighted in this report.

It has never been more imperative for government, industry and community to understand what skills are in short supply, what future skills will be needed and to collaborate on delivering solutions to meet the projected growth of the region.

RDA Riverina look forward to working with others to bring these recommendations to reality for the economic benefit of our region.

▴  
**Dianna Somerville**

Focused on the economic, social and environmental issues affecting its communities, **RDA Riverina** plays a pivotal role in ensuring the long-term sustainability of the Riverina.

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## Executive Summary

Regional skills shortages occur when there is an imbalance between supply and demand for skilled workers in a particular region. This study looked at skills shortages in the Riverina region of south-west New South Wales.



There were three stages to the study: a **desktop review** of existing data and information, a **survey** of the experiences of local business owners and operators, followed by **interviews and focus groups** to delve further into the survey findings.



## Key survey findings

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- 78.04% of respondents reported difficulty filling vacancies.
- 
- Top five industries reporting difficulties were:
    - Accommodation and Food Services
    - Agriculture, Forestry and Fishing
    - Health Care and Social Assistance
    - Manufacturing
    - Professional, Scientific and Technical Services
- 
- An average of 48.26% of all vacancies in the last 12 months were unable to be filled.
- 
- The occupations most commonly cited as being difficult to fill were:
    - Hospitality Workers
    - Health Professionals
    - Farm, Forestry and Garden Workers
    - Engineering, ICT and Science Technicians
    - Design, Engineering, Science and Transport Professionals
- 
- Ongoing unfilled vacancies can have significant flow on effects within a community. The impacts on businesses and organisations most commonly cited included:
    - an increase in workload on available staff
    - decreased capacity to take on new work
    - decreased productivity
    - increased stress on owners, managers
    - increased stress on available staff
- 
- Business owners and operators felt that they were unable to fill vacancies due to:
    - a lack of qualified candidates
    - a lack of experienced candidates or candidates with appropriate technical abilities
    - candidates being unwilling to live and work in regional areas



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- The strategies most often employed to try to fill ongoing vacancies were:
    - new recruitment methods such as moving to digital jobs platforms
    - advertising positions for longer
    - re-advertising the position
    - hiring less qualified staff
    - training existing staff
- 
- The most successful strategies for filling ongoing vacancies were:
    - training of existing staff
    - outsourcing work
    - skilled migration
    - new recruitment methods
    - restructuring their business around the skills that were available
- 
- 78.67% of respondents felt that soft skills were always or often important when hiring new staff.
- 
- The soft skills rated as most important and most difficult to find by employers were:
    - communication
    - team-work
    - people skills
    - time management
    - problem solving
- 
- 73.88% of respondents felt that it was highly or somewhat likely that their skills needs would change in the next five years.
- 
- The occupations most likely to be in need in the next five years were:
    - ICT Professionals
    - Design, Engineering and Science Professionals
    - Business, Human Resource and Marketing Professionals
    - Automotive and Engineering Trades Workers
    - Specialist Managers
- 
- Most respondents felt that the soft skills that they would require would not change in the next five years.





### Key focus group and interview findings

- Attracting and retaining skilled workers in the region remains a key challenge with participants citing the need for:
  - greater focus on the perceptions of the regional labour market
  - strategies used to attract and retain workers
  - innovation and technology
  - education and training
- Participants felt that solutions to the difficulties in attracting skilled workers needed to focus on improving perceptions of the regions, promoting innovation and skills in the region and addressing wages, conditions and job security.
- Participants felt that the region could focus on better utilisation of the existing and future workforce with key issues being: improved youth retention; education; training and upskilling; addressing the gender segregation of the workforce; and utilising the skilled migrant workforce.
- To improve the retention of skilled workers, participants discussed the need for a holistic family approach to recruitment, community involvement, affordable housing and workplace inclusivity.



## Recommendations

Solutions for workforce development are multi-faceted. In order to repair the skills shortages faced in the Riverina, attraction and retention, training, skilled migration and other strategies must all be implemented. No single strategy will solve the skills shortage.



## General

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- Further develop the already successful Riverina 'place based' programs - build upon and support groups in our communities already making a difference.
- Embrace workforce development strategies such as RDA Riverina's which includes Grow Our Own, Country Change, Skilled Migration and Refugee Resettlement programs. Resource these programs sufficiently so that more people can benefit.

## Attracting and Retaining Workers

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- Utilise the increased level of travel and visitation to regional Australia facilitated by COVID-19 international travel restrictions to promote the region as a great place to live and work.
- Build, promote and celebrate inclusive workplaces, by sharing good practice stories where inclusivity, gender and cultural diversity has improved productivity and generated economic growth.
- Build stronger links between industry and regional training organisations to improve credentials, recognise skills and develop career-long learning opportunities and development.
- Identify good practice examples of regional training organisations working with industry to develop credentials and recognise skills, and promote these both within the region and more broadly to attract skilled workers.
- Address perceptions of regional work as itinerant, seasonal and low skilled, by providing improved career focussed job security with improved working conditions. Present the Riverina region as an innovation zone that is actively addressing and responding to climate change and other challenges.
- Identify good practice examples of innovation in a range of regional industries, and use these as resources for attracting more skilled workers and promoting the region.

## Aging Workforce and Youth Retention

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- Develop a long-term, holistic, multi-generational strategy to attract and retain skilled workers and young people within the region by building inclusive, supportive communities and workplaces, and embedding workers in social networks within the region.
- Work with schools, parents and career advisors to change narratives that link academic success with leaving regional areas to instead emphasise that regions can provide vibrant, long-term, cutting edge careers in science and technology for men and women in all regional industries.
- Change the narrative that trades are undesirable careers, or that universities provide better career opportunities and instead recognise that hands-on skills provide good careers and can open pathways to lifelong learning.
- Support regional TAFES, Universities, Country University Centres and other training and vocational education providers in regional areas, and encourage the development of courses that provide qualifications required to fill regional skills shortages.

## Better Utilise Skilled Migration to Address the Gaps

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- Enable employers to be permitted to continue to employ migrants that are already working in a business, where the business is happy with their work, and encourage pathways to permanent residency in these cases.
- Streamline visa processing, decrease visa processing times, enable special consideration regarding border entry for sponsored skilled migrants if supported by a regional authority.
- Build inclusive and welcoming communities that celebrate difference and value cultural diversity, gender diversity and a range of sexualities.
- Progress the DAMA (Designated Area Migration Agreement) for the Riverina to enable employers experiencing skills and labour shortages to sponsor skilled and semi-skilled overseas workers with different parameters to current conditions.

# Acknowledgements



**Regional Development Australia Riverina** and **Charles Sturt University** acknowledge the Traditional Custodians of country throughout the Riverina, the Wiradjuri people, and the Traditional Custodians of the land where all CSU campuses are located. We pay our respect to their elders past and present and extend that respect to all Aboriginal and Torres Strait Islander peoples.

## Disclaimer

The data, figures and analyses within this report are not assumed to be generalisable to wider populations or regions. Opinions and stories are not assumed to be generalisable to wider populations or other people in similar situations. Pseudonyms have been used to protect the identity of participants, but all quoted data is unaltered to accurately reflect participant opinions. Copyright and data in this report are owned by Regional Development Australia Riverina. Reproduction is not permitted without the prior written consent. While all efforts have been made to ensure that the data and information presented in this report are accurate, we do not warrant or make representations in relation to its accuracy. The information is made available on the understanding that neither Regional Development Australia Riverina nor Charles Sturt University have a liability for any loss whatsoever that might arise as a result of use of the information by the reader or by third parties who receive information directly or indirectly. It is the user's responsibility to make their own investigations, decisions and enquiries about the accuracy and completeness of the information.

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## Research Team

### Regional Development Australia Riverina

**Melanie Renkin** has a background in data analytics and agricultural and health research. She is the Research Officer at Regional Development Australia Riverina and is experienced in data collection, analysis and communication. She holds a Bachelor of Science (UNSW) and a Master of Applied Data Analytics (ANU).

**Rachel Whiting** is the CEO and Director of Regional Development at RDA Riverina. She has lived in regional communities in NSW, Western Australia and Queensland throughout her professional career. Rachel is passionate in her quest for others to understand the need for skilled workers in regional Australia and the benefits of living regionally. 'More Jobs than People' has become her mantra. Rachel is an Adjunct Professional Staff Member at Charles Sturt University and a Fellow of Leadership WA. Rachel holds a Bachelor of Education (Secondary) (QUT), a Graduate Certificate in Animal Studies (UQ) and Master of Communications (CSU). RDA Riverina concerns itself with research that informs government and community about the Riverina region and the support it needs to encourage economic prosperity for people of the Riverina.

### Faculty of Business Justice & Behavioural Sciences, Charles Sturt University

**Professor Oliver Burmeister** specialises in information systems. He leads the cross-faculty Health Services Research area at CSU. He is also the Presiding Officer of the CSU Human Research Ethics Committee.

**Associate Professor Larissa Bamberry** has extensive experience researching organisations, labour markets and gender relations in regional Australia. She has undertaken a range of qualitative and quantitative research projects for government and industry. In particular, she has recently undertaken projects with young people in regional and metropolitan locations, exploring their experiences of education, training, employment and unemployment, and with women in the skilled trades in regional Australia.

**Dr Jenni Greig** has a background in psychology. She has a broad interest in the way people think and behave, how they are shaping and being shaped by social processes. Jenni has worked for many years as a Research Officer across a variety of research projects. Her interests lie in designing high-quality research, both qualitative and quantitative, to have real-world impacts on people's lives and further knowledge

### Spatial Data Analysis Network (SPAN), Charles Sturt University

**Gail Fuller** has a varied background with a wide range of experience covering business, education and research. She has managed the Spatial Data Analysis Network, a research support unit at Charles Sturt University, since 2003 and during that time has been involved in research projects across all disciplines of the university. She has been designing questionnaires and implementing surveys for research for more than 10 years and conducts workshops on creating effective surveys. Gail holds Bachelor of Science, Diploma of Education and Master of Applied Science (GIS & Remote Sensing) degrees as well as a Graduate Certificate in University Leadership and Management.

# Definitions



## Aging Population

An increase in the average or median age of a population over time. Some causes of ageing populations include declining fertility rates, increased life expectancy and youth outmigration.

## Children

People under the age of 15. See also: working age and retirement age.

## Common Planning Assumptions

Common Planning Assumptions are agreed information assets (data sets, models and analytical tools) for use by NSW Government, and others, to prepare proposals, business plans and strategies that rely on projections. They ensure that information is shared and used across Government. This reduces duplication of effort and provides a consistent basis for policy development and service delivery planning. Common Planning Assumptions are not targets or scenarios. The data sets include population growth, economic growth, housing supply, metropolitan transport demand, and freight demand. There are also guidelines for employment projections, and future temperature and climate events. They are used in the development of new policies, strategies or business cases. (NSW Treasury)

## Employed

All people aged 15 years and over who met one of the following criteria during the reference week:

- Worked for one hour or more for pay, profit, commission or payment in kind, in a job or business or on a farm (employees and owner managers of incorporated or unincorporated enterprises).
- Worked for one hour or more without pay in a family business or on a farm (contributing family workers).

- Were employees who had a job but were not at work and were:
  - away from work for less than four weeks up to the end of the reference week; or
  - away from work for more than four weeks up to the end of the reference week and received pay for some or all of the four week period to the end of the reference week; or
  - away from work as a standard work or shift arrangement; or on strike or locked out; or on workers' compensation and expected to return to their job.
- Were owner managers who had a job, business or farm, but were not at work. (ABS)

## Estimated Resident Population

ABS measure of the Australian population. Estimates of the Australian resident population are generated on a quarterly basis by adding natural increase (the excess of births over deaths) and net overseas migration (NOM) occurring during the period to the population at the beginning of each period. (ABS)

## Hard Skills

Skill sets and abilities gained through education, training and experience usually specific to a job or occupation. Simple to assess and quantify.

## Higher Education

Education completed after high school or secondary education, also known as tertiary education.



### Key Propulsive Sectors

The industry sectors which are the key drivers of a region's economy in terms of regional exports, employment, value-added and local expenditure on goods and services. (REMPPLAN)

### Labour Force

People who are employed or unemployed, as defined. (ABS)

### Projections

Projections indicate what future values would be if the assumed patterns of change were to occur. They are not a prediction. A projection simply indicates a future value for the outputs if the set of underlying assumptions occur. (NSW Treasury)

### Retirement age

People over the age of 65 (These people may or may not have retired from the workforce)

### Riverina

There are multiple working definitions of 'The Riverina'. Unless otherwise stated, for the purposes of this report 'The Riverina' is defined by the boundaries of the following Local Government Areas: Bland Shire Council, Carrathool Shire Council, Coolamon Shire Council, Cootamundra-Gundagai Regional Council, Griffith City Council, Hay Shire Council, Junee Shire Council, Leeton Shire Council, Lockhart Shire Council, Murrumbidgee Council, Narrandera Shire Council, Snowy Valleys Council, Temora Shire Council, Wagga Wagga City Council.

### Skilled Migration Program

The Skilled stream of the Migration Program is designed to attract migrants who make a significant contribution to the Australian economy, and fill positions where no Australian workers are available. Skilled migrants have very high participation rates in the workforce, helping to stimulate economic growth, which results in more jobs. The Skilled stream also plays an important role in

regional development through providing skills and labour which cannot be sourced locally, as well as encouraging investment and promoting local spending in regional areas. (Department of Home Affairs)

### Skills Shortage

An imbalance between the supply and demand for skilled workers.

### Soft Skills

Interpersonal skills or skills associated with how you relate to and interact with other people. Difficult to assess or quantify.

### Unemployed

People aged 15 years and over who were not employed during the reference week, and:

- had actively looked for full time or part time work at any time in the four weeks up to the end of the reference week and were available for work in the reference week; or
- were waiting to start a new job within four weeks from the end of the reference week and could have started in the reference week if the job had been available then. (ABS)

### Working age

People aged 15 – 65 (These people may or may not be engaged in the workforce)

### Abbreviations

<b>RDA</b>	Regional Development Australia
<b>ABS</b>	Australia Bureau of Statistics
<b>LGA</b>	Local Government Area

## Introduction

The 2006 Inquiry into skills shortages in rural and regional NSW defined skills as **'an ability to perform a task at a certain level of competence'**. The report continued to describe a skill as typically being attained through formal education and training such as university, TAFE or other higher education providers, with refinement through on-the-job experience (Standing Committee on State Development, 2006).



**Skills shortages represent an imbalance between the supply and demand for skilled workers. "A shortage occurs when the demand for workers for a particular occupation is greater than the supply of workers who are qualified, available and willing to work under existing market conditions" (Shah and Burke 2003).**



A 2004 review of Australian Government policy added the following points to the definition: specific industry needs at a point in time, especially in rapidly expanding sectors, specific industry needs at a particular time of year and specific locations of need (McKenzie, 2004).

Regional skills shortages are an imbalance between supply and demand of skilled workers in a particular location. Reported impacts of skills shortages on businesses and organisations include but are not limited to: reduced capacity for growth; reductions in productivity, credibility, and the quality of goods and services; increases in turnaround time; staff burnout and running costs (Sharma et al., 2016, Sharma et al., 2017).

The Riverina is an agricultural region of south-western New South Wales, which extends from the foothills of the Snowy Mountains north west through the Murrumbidgee River catchment area to the flat dry inland plains of Hay and Carrathool. The RDA Riverina region covers an area of 80,545 km<sup>2</sup> with an estimated resident population of 171,855 people in 2020 (ABS).

A study into skills shortages in the Riverina conducted in 2015 (Sharma et al., 2016, Sharma et al., 2017) found that 47.8% of businesses reported shortages, with the vacancy rate highest in trades. Employers reported that there was a shortage of applicants who were qualified for the position, appropriately experienced or had the appropriate technical ability for the available vacancies. The report found that skills shortages led to lower productivity and higher running costs. However, the authors cautioned that given the small sample size and the spatial and demographic distribution of the responses, the results likely over and under-represented particular local government areas, industries and business sizes.

In 2018 RDA Riverina conducted a study into skills shortages in the horticulture industry in the Riverina (Muller, 2018). The study found that the industry had difficulty attracting and maintaining a skilled workforce, available training facilities and programs were not being fully utilised, and that positions and career pathways were not well promoted.

This study takes a broader look into current skills shortages across all industries in the **Riverina** as well as examining skills needs into the future.



# Methodology

This study was comprised of **three** phases:

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## Desktop Research

To ascertain background information and data about the Riverina and what is already known about skills shortages within the region.

The desktop research phase was completed from late 2019 to early 2020.



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## Survey

To collect data from businesses and organisations in the region.

The survey was open from the 5th of March to the 6th of July 2020.



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## Focus Groups and Interviews

To validate and explore findings from the survey in more detail.

Interviews and focus groups were held between September and November 2020.





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Data sources included the Australian Bureau of Statistics (ABS), REMPLAN, Centre for Education Statistics and Evaluation, My School, TAFE NSW, Labour Market Information Portal, NSW Department of Planning, Industry and Environment. Data retrieved was analysed using statistical computing software R and Microsoft Excel.

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The survey instrument was developed in conjunction with Gail Fuller at the Spatial Analysis Unit at Charles Sturt University (CSU). Previous skills studies conducted by RDAs from across the country were reviewed in order to determine appropriate and relevant questions for the instrument. The survey was built and hosted on the Survey Monkey platform and was open from the 5th of March 2020 to the 6th of July 2020. This period of time unfortunately coincided with significant social and economic restrictions imposed by the state and federal government in response to the COVID-19 pandemic, as such the survey was kept open for longer than originally intended and answers to open responses

questions were analysed with this in mind. The survey instrument was distributed via email networks held by RDA Riverina and our stakeholders as well as being advertised via RDA Riverina's website, newsletter and social media. The target population for the survey were business owners, operators and human resources managers for businesses in the Riverina, currently employing or wanting to employ staff. Local newspapers, social media groups and business networks were also used to distribute the survey instrument. Data from the survey was analysed using statistical computing software R and Microsoft Excel.

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In response to the COVID-19 pandemic (declared in March 2020 by the World Health Organisation) the face-to-face focus groups and interviews were conducted via video conference in collaboration with Dr Jenni Grieg and Professor Oliver Burmeister at Charles Sturt University.

Two online focus groups with a total of 8 participants, and 6 in depth interviews with a total of 7 participants were conducted, providing a total of 15 participants. Participants were purposively selected for their knowledge and experience within their industries and within the region.

Interviews and focus groups were audio recorded and transcribed. Transcripts were analysed and coded by Associate Professor Larissa Bamberg at Charles Sturt University utilising NVivo qualitative analysis software. The coding frame for analysis drew on the findings of the survey data and the key research themes but was also flexible enough to incorporate the themes and issues that emerged from the discussions with participants.

Where anonymity or confidentiality was a concern, member-checking was used to ensure participants were comfortable with the quotes included in this report.



# Background

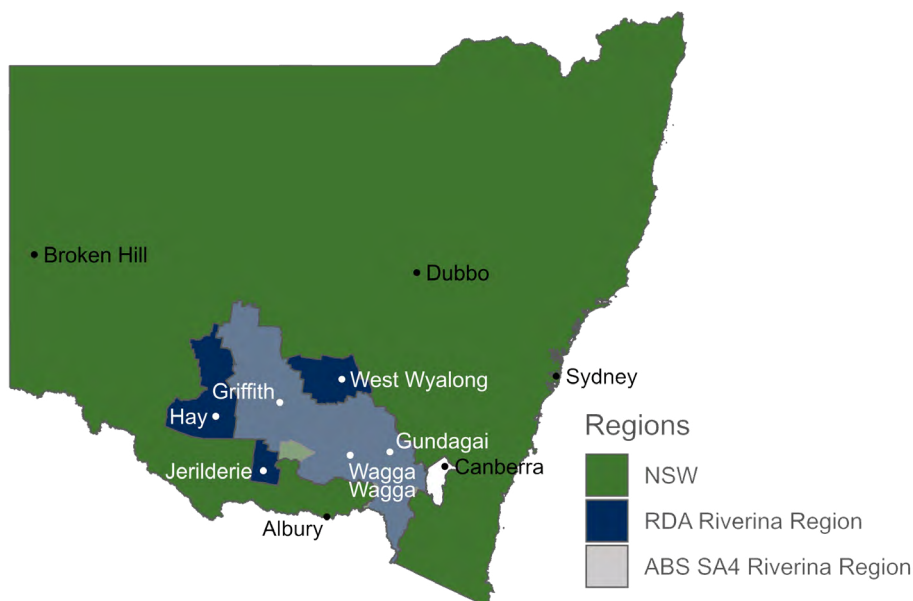
The Riverina, located in south-west New South Wales, does not have a defined and agreed upon definition. The exact boundaries vary depending on the needs and requirements of the organisation setting them.



## Defining the Riverina

The ABS defines the Riverina by its Statistical Area Level 4 (SA4) region. These regions are designed for the ABS's Labour Force Survey. Each SA4 region has at least 100,000 people and is designed, where possible, to reflect a region in which people both live and work. They are built by aggregating smaller statistical area units. The SA4 Riverina region differs slightly from the Riverina as defined by Regional Development Australia (RDA) Riverina, which is defined by local government areas. Where available, data for the Riverina in this report

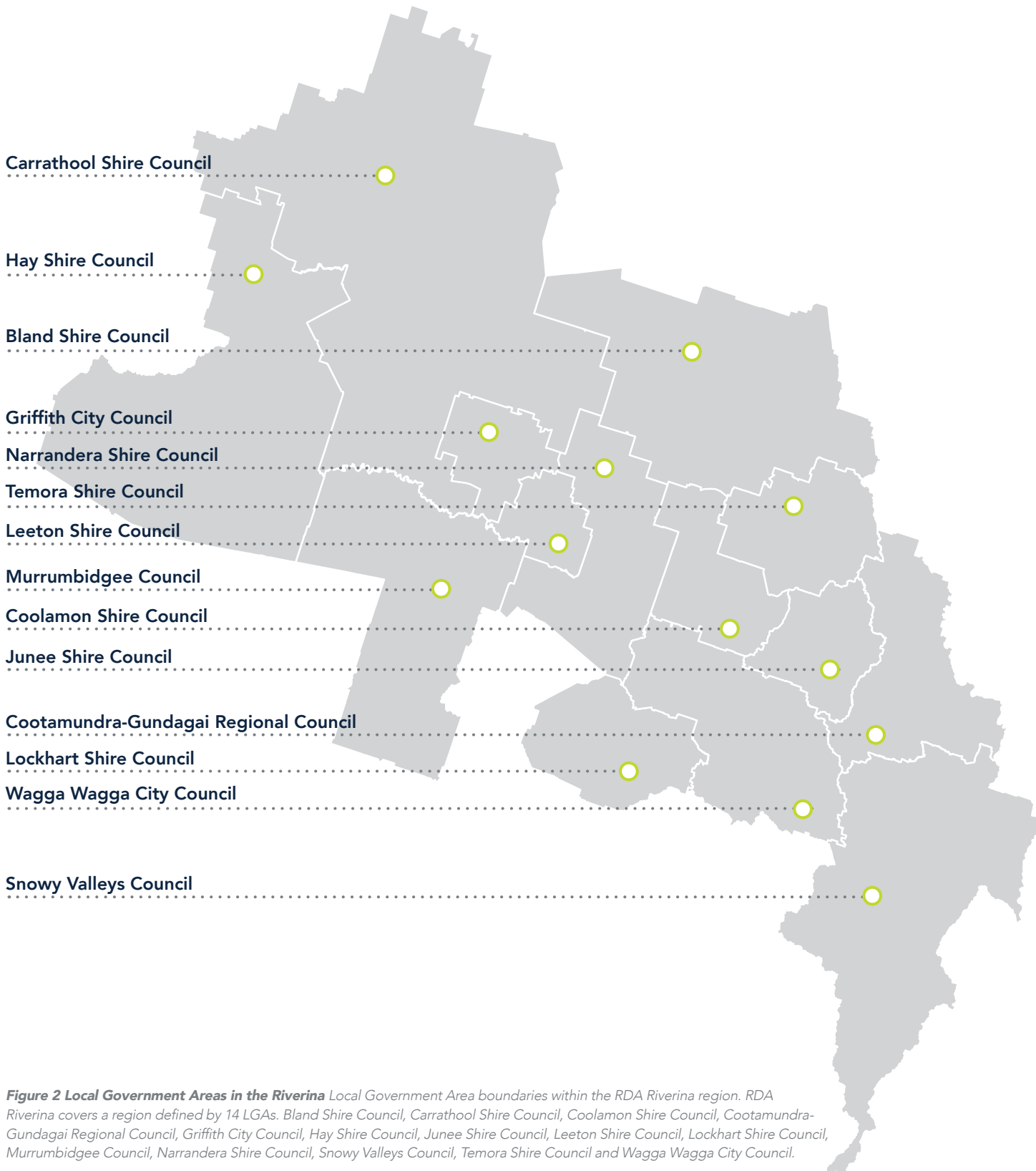
has been aggregated from data on local government areas. Unless otherwise specified LGA data has been used. Where LGA data was not available, SA4 data has been used. SA4 data excludes Bland Shire Council, Hay Shire Council and parts of Murrumbidgee Council and Carrathool Shire Council. It includes part of Federation Council not covered by RDA Riverina (Figure 1).



**Figure 1 Boundaries of the Riverina** The boundaries of the RDA Riverina region and the ABS SA4 Riverina region. The SA4 region is similar to the RDA Riverina boundary however, it excludes Bland Shire Council, Hay Shire Council and parts of Murrumbidgee Council and Carrathool Shire Council and includes part of Federation Council not covered by RDA Riverina.

## Local Government Areas

RDA Riverina defines the Riverina by the fourteen local government areas that we represent (Figure 2). These are:



**Figure 2 Local Government Areas in the Riverina** Local Government Area boundaries within the RDA Riverina region. RDA Riverina covers a region defined by 14 LGAs. Bland Shire Council, Carrathool Shire Council, Coolamon Shire Council, Cootamundra-Gundagai Regional Council, Griffith City Council, Hay Shire Council, Junee Shire Council, Leeton Shire Council, Lockhart Shire Council, Murrumbidgee Council, Narrandera Shire Council, Snowy Valleys Council, Temora Shire Council and Wagga Wagga City Council.



### Bland Shire Council

Bland Shire Council lies on the northern side of the Riverina, bordering Temora, Coolamon, Narrandera and Carrathool Shire Councils. The LGA covers an area of 8,558 km<sup>2</sup> and includes the towns West Wyalong, Ungarie and Barmedman, and the villages Weethalle, Tallimba and Mirrool. In 2020 Bland Shire Council had an estimated resident population of 5,937 people. Children (0-14) make up 20.3% of the population, 58.2% are of working age (15-64) and 21.5% are of retirement age (65+). The key propulsive sectors in Bland Shire Council are agriculture, forestry and fishing, mining, and construction.

### Carrathool Shire Council

Carrathool Shire Council, in the north-west of the Riverina is the largest LGA in the region covering a land area of 18,932 km<sup>2</sup>. With an estimated resident population of just 2,796 people in 2020, it also has the smallest population in the region. 20.9% of the population are children, 64.6% are of working age and 14.6% are of retirement age. Carrathool borders Hay Shire Council, Murrumbidgee Council, Griffith City Council, Narrandera Shire Council and Bland Shire Council. It includes the town of Hillston and the villages of Goolgowi, Merriwagga, Carrathool and Rankins Springs. The key propulsive sectors in Carrathool Shire Council are agriculture, forestry and fishing and public administration and safety.

### Coolamon Shire Council

Coolamon Shire Council lies in the centre of the region and is bordered by Wagga Wagga City Council, Junee, Temora, Bland and Narrandera Shire Councils. It covers a land area of 2,431 km<sup>2</sup> and includes the towns of Coolamon, Ganmain, and Ardlethan and the villages of Matong, Marrar, and Beckom. Coolamon Shire Council had an estimated resident population of 4,291 people in 2020, 20.3% of the population were children, 57.3% were of working age and 22.4% were of retirement age. The key propulsive sectors in the region are agriculture, forestry and fishing and construction.

### Cootamundra-Gundagai Regional Council

Cootamundra-Gundagai Regional Council was formed in 2017 through the merger of Cootamundra Shire Council and Gundagai Shire Council. Cootamundra-Gundagai Regional Council lies on the eastern edge of the Riverina bordered by Temora and Junee Shire Councils, Wagga Wagga City Council

and Snowy Valleys Council. The LGA covers a land area of 3,981 km<sup>2</sup> and includes the towns Cootamundra and Gundagai and the villages Stockinbingal, Coolac, Wallendbeen, Nangus, Tumbalong, Muttama and Adjungbilly. In 2020 the estimated resident population of the LGA was 11,225 people with 18.4% of the population being children, 55.9% of working age and 25.7% of retirement age. The key propulsive sectors in Cootamundra-Gundagai Regional Council are agriculture, forestry and fishing and manufacturing.

### Griffith City Council

Griffith City Council, in the centre of the western Riverina is one of two main population centres in the region. The LGA covers just 1,639 km<sup>2</sup> and has an estimated resident population of 27,155 people in 2020 giving the LGA the highest population density in the region. Griffith City Council is bordered by Carrathool, Leeton and Narrandera Shire Councils and Murrumbidgee Council. It includes the city of Griffith, towns of Hanwood, Yoogali, Yenda and Lake Wyangan and the villages of Beelbanger, Bilbul, Tharbogang and Nericon. The population of Griffith City Council is made up of 21.1% children, 63.1% working age and 15.9% retirement age people. The key propulsive sectors in Griffith City Council are agriculture, forestry and fishing and construction.

### Hay Shire Council

Hay Shire Council on the western border of the Riverina covers an area of 11,326 km<sup>2</sup> and is bordered by Carrathool Shire Council and Murrumbidgee Council. It includes the town Hay and villages Booligal and Maude. Hay Shire Council had an estimated resident population of 2,943 people in 2020, 18.8% of which were children, 60.3% were of working age and 20.9% were of retirement age. The key propulsive sectors in the LGA are agriculture, forestry and fishing and construction.

### Junee Shire Council

Junee Shire Council lies in the centre of the eastern Riverina covering an area of 2,030km<sup>2</sup>. The LGA shares borders with Temora and Coolamon Shire Councils, Wagga Wagga City Council and Cootamundra-Gundagai Regional Council. It includes the town of Junee and the villages Bethungra, Illabo, Wantabadgery and Old Junee. In 2020 Junee Shire Council had an estimated resident population of 6,676 people, of whom 17.8% were children, 66.7% were of working age and 15.5% were of retirement age. The key propulsive sectors in Junee Shire Council are manufacturing and transport, postal and warehousing.

### Leeton Shire Council

Leeton Shire Council, in the centre of the Riverina borders Griffith City Council, Narrandera Shire Council and Murrumbidgee Council. It covers an area of just 1,167 km<sup>2</sup> and is the smallest LGA in the Riverina. It includes the towns of Leeton, Yanco and Whitton and the villages of Wamoon and Murrami. In 2020 Leeton Shire Council had an estimated resident population of 11,343 people of whom 21.3% were children, 61.3% were of working age and 17.5% were of retirement age. The key propulsive sectors in the region are manufacturing, agriculture, forestry and fishing, electricity, gas, water and waste services, and education and training.

### Lockhart Shire Council

Lockhart Shire Council, on the southern border of the Riverina, shares boundaries with Wagga Wagga City Council and Narrandera Shire Council. It covers an area of 2,896 km<sup>2</sup> and includes the towns Lockhart and The Rock and the villages of Yerong Creek, Pleasant Hills and Milbrulong. In 2020 the estimated resident population was 3,259 people, 21.6% were children, 56.7% were of working age and 21.7% were of retirement age. The key propulsive sectors in Lockhart Shire Council are agriculture, forestry and fishing and healthcare and social assistance.

### Murrumbidgee Council

Murrumbidgee Council was formed in 2016 after the merger of Murrumbidgee Shire Council and Jerilderie Shire Council. On the southern border of the Riverina, it covers an area 6,883 km<sup>2</sup> and shares borders with Hay, Carrathool, Leeton and Narrandera Shire Councils and Griffith City Council. Murrumbidgee Council includes the towns of Coleambally, Darlington Point and Jerilderie. The estimated resident population was 3,916 people in 2020 21.2% were children, 61.0% were of working age and 17.7% were of retirement age. The key propulsive sectors in Murrumbidgee Council are agriculture, forestry and fishing and manufacturing.

### Narrandera Shire Council

Narrandera Shire Council, in the centre of the Riverina, shares borders with eight other LGAs including Murrumbidgee Council, Griffith and Wagga Wagga City Councils, and Leeton, Carrathool, Bland, Coolamon and Lockhart Shire Councils. The LGA covers an area of 4,117 km<sup>2</sup> and includes the town Narrandera and the villages Grong Grong and Barellan. 5,858 people were estimated to be residents of the LGA in 2020, 21.1% were children, 57.7% were of working age and 21.2% were of retirement age. The key

propulsive sectors in Narrandera Shire Council are agriculture, forestry and fishing and construction.

### Snowy Valleys Council

Snowy Valleys Council was formed in 2016 from the merger of Tumut Shire Council and Tumbarumba Shire Council. On the south eastern border of the region, it is the southern-most LGA of the Riverina. It shares a border with Wagga Wagga City Council and Cootamundra-Gundagai Regional Council and includes the towns Adelong, Batlow, Tumbarumba and Tumut and the villages Brungle, Jingellic, Khancoban, Rosewood, Talbingo and Tooma. The LGA spans an area of 8,959 km<sup>2</sup> and had an estimated resident population of 14,412 people in 2020. Of the total population in Snowy Valleys, 19.3% were children, 58.6% were of working age and 22.1% were of retirement age. The key propulsive sectors in the Snowy Valleys are manufacturing, agriculture, forestry and fishing, and electricity, gas, water and waste services.

### Temora Shire Council

Temora Shire Council lies on the northern border of the Riverina and covers a land area of 2,802 km<sup>2</sup>. The LGA shares borders with Bland, Coolamon and Junee Shire Councils and Cootamundra-Gundagai Regional Council. Temora Shire Council includes the town of Temora and the villages of Springdale, Aria Park and Reefton. In 2020 the estimated resident population was 6,274, 19.6% were children, 56.4% were of working age, and 24.0% were of retirement age. The key propulsive sectors in Temora Shire Council are agriculture, forestry and fishing, electricity, gas, water and waste services, and education and training.

### Wagga Wagga City Council

Wagga Wagga City Council is the largest population centre of the Riverina. It lies in the south east of the Riverina and shares borders with Snowy Valleys Council, Cootamundra-Gundagai Regional Council, Lockhart, Narrandera, Coolamon and Junee Shire Councils. Wagga Wagga City Council covers a land area of 4,824 km<sup>2</sup> and includes the regional city of Wagga Wagga and the villages of Collingullie, Currawarna, Galore, Humula, Ladysmith, Mangoplah, Oura, Tarcutta, and Uranquinty. In 2020 the estimated resident population was 65,770 people, 20.6% were children, 64.3% were of working age and 15.1% were of retirement age. The key propulsive sectors in Wagga Wagga City Council are construction, public administration and safety, education and training, and healthcare and social assistance.



## Estimated Resident Population

The Riverina covers a land area of 80,545 km<sup>2</sup>. In 2020 the estimated resident population (ERP) of the Riverina was 171,855 people with most of the population concentrated in Wagga Wagga City Council (38%) and Griffith City Council (16%) (Table 1). Men made up 49.9% of residents and women 50.1%. Figure 3 shows the distribution of the Riverina's population across age groups. Compared to NSW, the Riverina has a higher proportion of children (aged under 15) and people of retirement age (aged over 65) and a lower proportion of people of working age (aged 15 to 65).

Table 1 Estimated Resident Population of the Riverina

Local Government Area	2020 ERP	Percent of Riverina (%)
Bland Shire Council	5,937	3.45
Carrathool Shire Council	2,796	1.63
Coolamon Shire Council	4,291	2.50
Cootamundra-Gundagai Regional Council	11,225	6.53
Griffith City Council	27,155	15.80
Hay Shire Council	2,943	1.71
Junee Shire Council	6,676	3.88
Leeton Shire Council	11,343	6.60
Lockhart Shire Council	3,259	1.90
Murrumbidgee Council	3,916	2.28
Narrandera Shire Council	5,858	3.41
Snowy Valleys Council	14,412	8.39
Temora Shire Council	6,274	3.65
Wagga Wagga City Council	65,770	38.27
<b>Riverina</b>	<b>171,855</b>	<b>100.00</b>



Figure 3 Age Distribution in the Riverina Compared to NSW

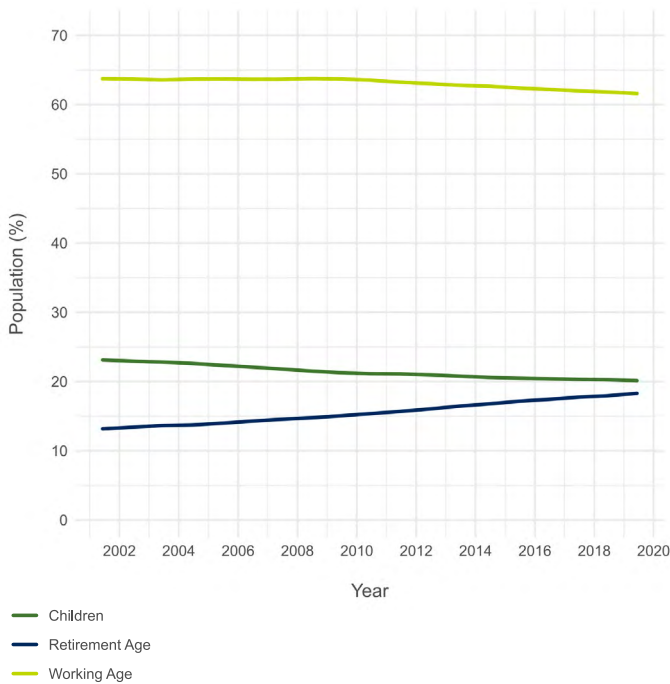
The Riverina has an aging population, with higher proportions of people aged 55 or over, lower proportions of people aged between the ages of 20 and 55 and higher proportions of people under the age of 20 as compared to New South Wales.

ABS.Stat ERP 2019



## Ageing Population

The Riverina has an aging population (Figures 4 and 5). Over time, the proportion of people of retirement age has increased and the proportion of people of working age has decreased. This effect can be seen at both an individual LGA level and across the whole region (Figure 5). Ageing populations can contribute to skills shortages as workers with particular skills retire but are not replaced by younger workers. Over the period from 2001 to 2018 the distribution of people of working age has shifted from 63.7% to 61.6% of the population being between the ages of 15 and 64. The proportion of people of retirement age has increased from 13.2% to 18.3% of the population.

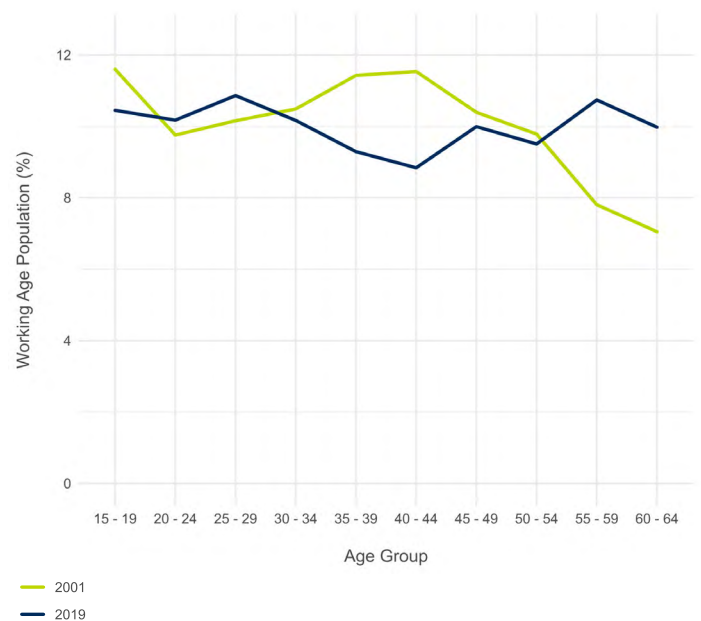


**Figure 4 Breakdown of Children, Workers and Retirees in the Riverina from 2001 to 2019**

Throughout the Riverina the proportion of people working age (15yrs to 64yrs) has decreased over time while the proportion of people of retirement age (65yrs and over) has increased.

## Indigenous Population

Five percent of Riverina residents identified as Indigenous at the 2016 census. Of these residents, 50.1% identified as Aboriginal, 0.1% as Torres Strait Islanders and 0.08% as both Aboriginal and Torres Strait Islanders. 50.1% of Indigenous people in the Riverina are male while 49.9% are female. The age distribution of the Indigenous population of the Riverina differs to that of the population as a whole. There is a higher proportion of Indigenous people under the age of 25 and a lower proportion of people over the age of 30 (Figure 6).



**Figure 5 Ageing Workforce in the Riverina**

Between 2001 and 2019 the proportion people aged between 40yrs and 64yrs has increased while the proportion of people aged between 25yrs and 40yrs has decreased.



## Population Projections

Population projections for LGAs are publicly available from the NSW Department of Planning, Industry and Environment and were last updated in 2019. The series presents three sets of assumptions for each LGA these are low, high and common planning assumptions. The low assumptions include a lower total fertility rate, life expectancy at birth, level of net interstate migration and level of net overseas migration. The high assumptions are produced using higher levels of these factors. Common planning assumptions may or may not fall in between the two. Figure 7 shows the sums of the three population projection series for LGAs in the Riverina alongside the current estimated resident population as of 2020.

The populations of Bland Shire Council, Cootamundra-Gundagai Regional Council, Hay Shire Council, Narrandera Shire Council and Snowy Valleys Council are all predicted to decline over the period of 2021 to 2041, regardless of the assumptions made in the scenario, while the populations of Wagga Wagga City Council and Leeton Shire Council are both predicted to increase regardless of the assumptions made. All other LGAs vary depending on which set of assumptions are used.

Based on these projections the Riverina will continue to face an aging population into the future. The proportion of residents of retirement age, that is over the age of 65, is expected to increase from 19.3% to 26.7% between 2021 to 2041 (Figure 8). This has the potential to exacerbate current skills shortages if they are not addressed as more and more older workers begin to retire and further reduce the availability of skills in the workforce.

## Cultural and Linguistic Diversity

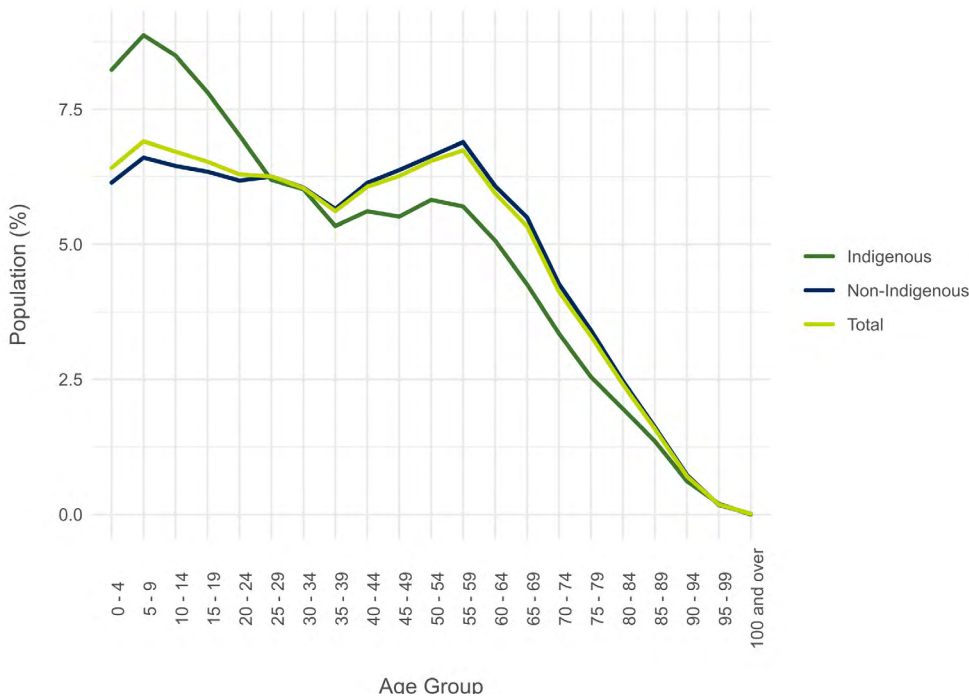
81.62% of people living in the Riverina were born in Australia. Of those born outside Australia, the top five countries of birth were England (1.26%), India (1.16%), New Zealand (0.93%), Italy (0.84%) and the Philippines (0.57%). 84.45% of residents speak English at home. The top five languages other than English spoken at home in the Riverina are Italian (1.47%), Punjabi (0.61%), Mandarin (0.45%), Malayalam (0.30%) and Tagalog (0.23%)

## Higher Education and Training

Access to higher education in the Riverina is variable. TAFE NSW has locations spread throughout the Riverina as well as in surrounding areas, but that still leaves some local government areas without access to vocational education and training within their regions. Murrumbidgee Council, Lockhart Shire Council, Coolamon Shire Council and Junee Shire Council all rely on external TAFE centres (Figure 9).

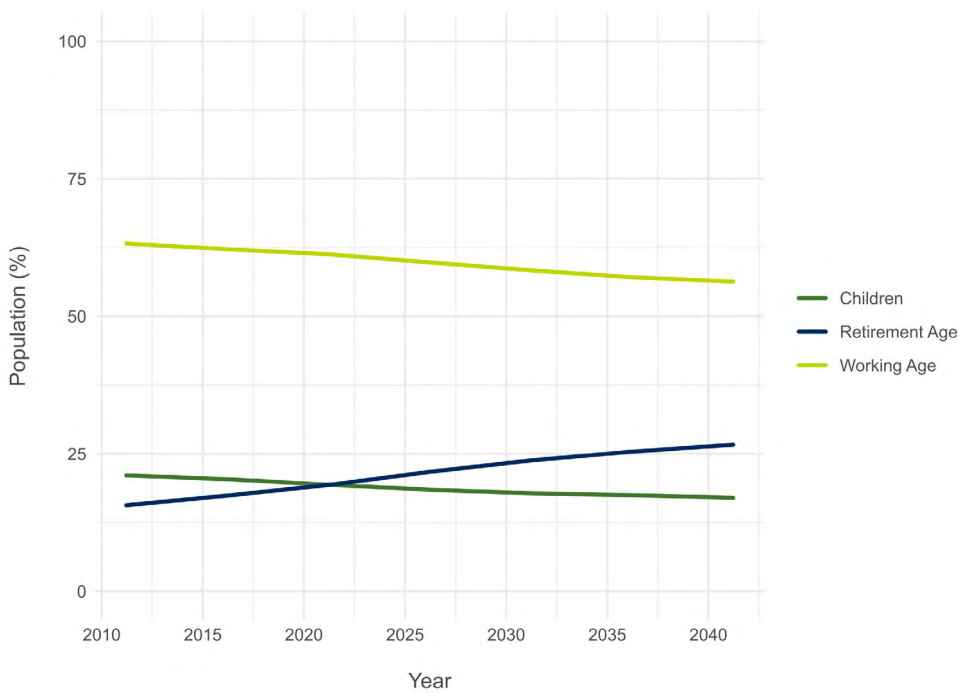
There are three community colleges in the region, The Riverina Community College in Wagga Wagga City Council and the Western Riverina Community College with campuses in Leeton and Griffith.

Charles Sturt University has a campus in the Riverina in Wagga Wagga City Council and just outside the Riverina in Albury. La Trobe University also has a campus in Albury. Country Universities Centre also has two locations in the Riverina with one in Griffith and one in Leeton.



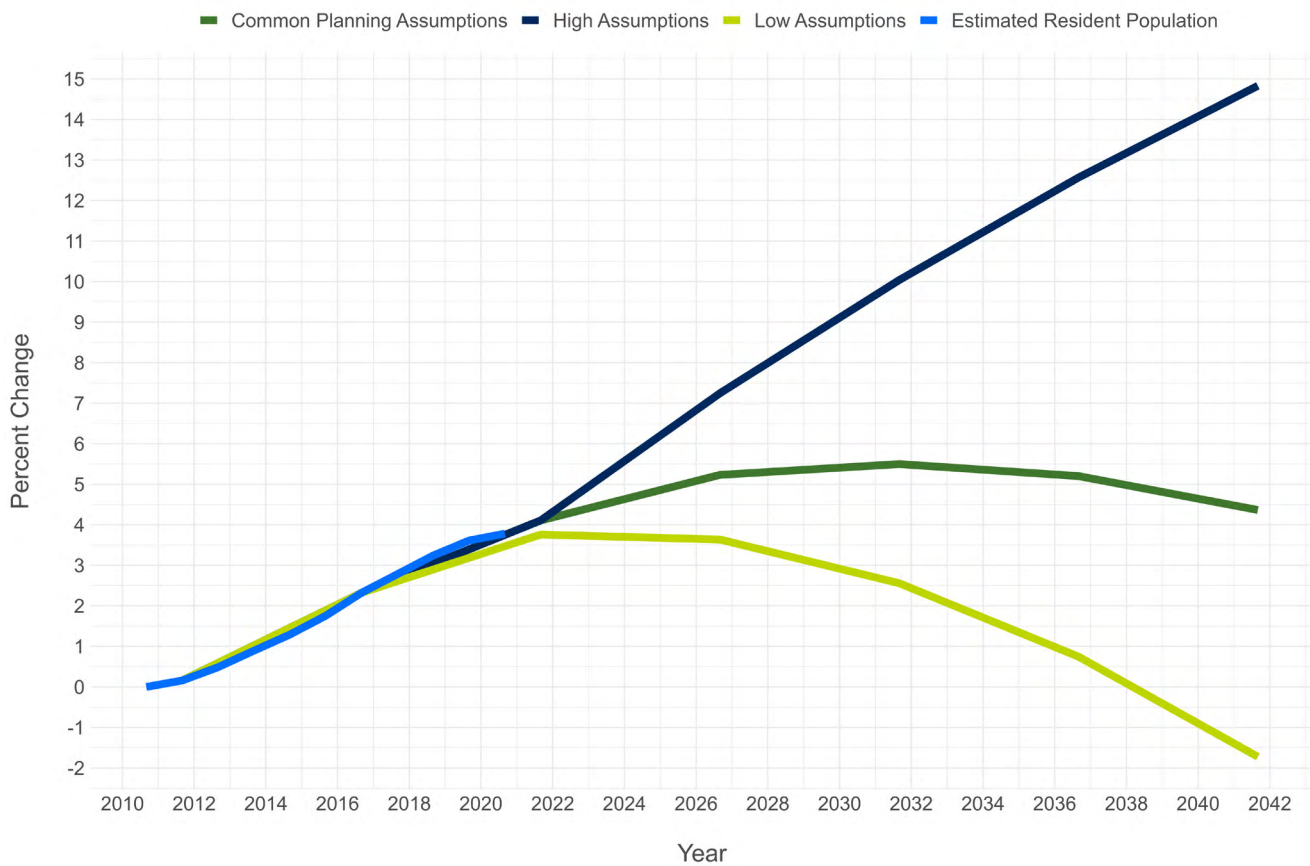
**Figure 6 Age distribution of Indigenous vs Non-Indigenous Populations**

In the Riverina there is a lower proportion of Indigenous people aged over 25yrs as compared to the non-Indigenous population and the combined population.



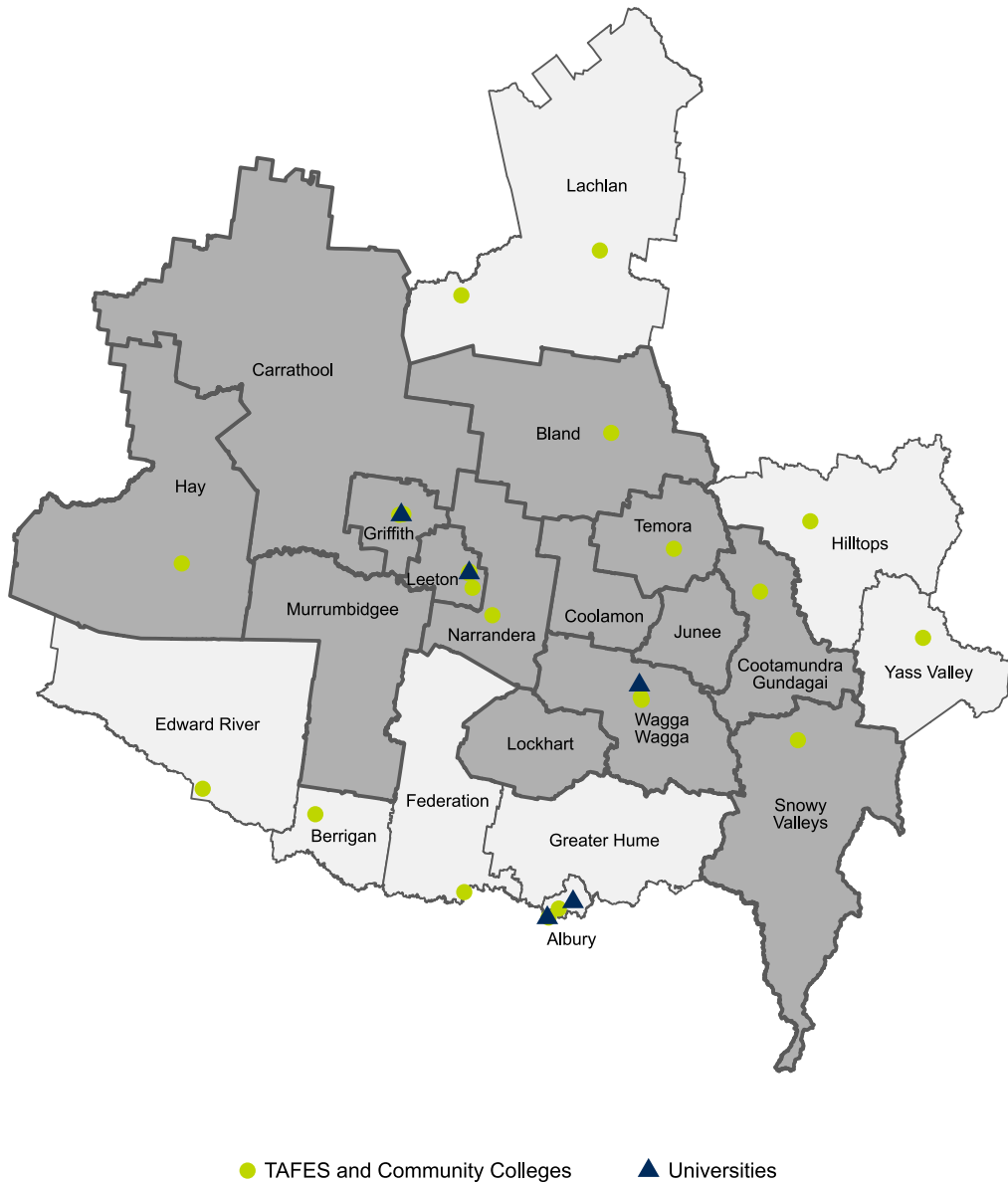
**Figure 8 Riverina Population Projection by Age Group**

Population projections for the Riverina for children (under 15yrs), those of working age (15yrs to 64yrs) and those of retirement age (over 65 yrs). The proportions of children and those of working age are expected to decrease by 2041 while the proportion of people of retirement age is expected to increase.



**Figure 7 NSW Government Population Projections**

Population Projections from NSW Planning showing projections for the population in the Riverina out till 2041. There are three sets of assumptions, low, high and common planning. Low assumptions include a lower total fertility rate, life expectancy at birth, level of net interstate migration and level of net overseas migration. Higher assumptions include a higher total fertility rate, life expectancy at birth, level of net interstate migration and level of net overseas migration. Common planning assumptions are used by government and may or may not fall in between the two. The current estimated resident population is also shown for comparison.



**Figure 9 Tertiary Education Locations in and Around the Riverina**

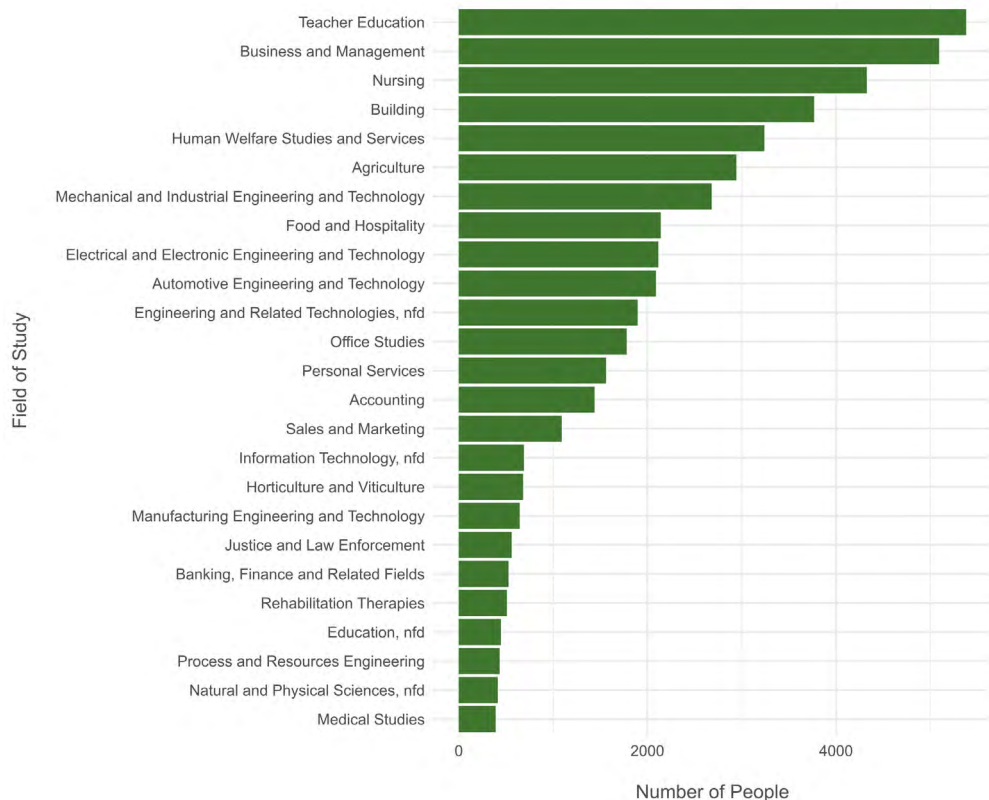
The map shows the locations of TAFE, community college and university campuses in and around the Riverina. Carrathool Shire Council, Murrumbidgee Council, Lockhart Shire Council, Coolamon Shire Council, and Junee Shire Council do not have any of these options within their boundaries. University level courses can be accessed at three locations, with one within the Riverina at Wagga Wagga and two nearby in Albury. Griffith and Leeton both have country universities centres to assist regional university students locally.



## Qualifications

Field of study data describes the field of a person’s highest completed non-school qualification. While this data is useful to ascertain the number of people in a region who may hold a particular skill, it does not necessarily represent the availability of that skill to employers in the region with qualified workers potentially retired, working in other fields or out of the workforce either temporarily or permanently. For example, the most commonly held qualification in the Riverina is a teaching qualification with 5380 people holding such a qualification. This accounts for 9.66% of all people with a qualification in the

Riverina and 3.24% of the population of the Riverina. This includes special education, primary, secondary, early childhood and higher education, vocational education and training, school librarians and English as a second language education. In the Riverina however, only 3453 people worked as education professionals at the time of the last census. Similarly, nursing qualifications are held by 4327 people in the Riverina, 7.77% of people with a non-school level qualification and 2.61% of the population of the Riverina. In contrast 1977 people living in the Riverina reported their occupation as nursing or midwifery at the time of the last census.



**Figure 10 Field of Qualifications Held by Riverina Residents at the 2016 Census**

The main field of study of non-school qualifications held by Riverina residents at the 2016 census. The most common qualifications held are teaching, business and management, nursing, and building. These figures do not necessarily reflect the availability of skills in the region as people holding a particular qualification may be working in other fields or be out of the workforce.

Data Source: REMPLAN Community 2016 Release  
Qualifications held by less than 5 people have been excluded

## Labour Force

The average unemployment rate for the Riverina was **3.8%** in **2019** and **4.9%** in **2020**, down from **5.5%** in **2018**.

Across the region the lowest unemployment rate in 2020 was in Bland Shire Council at 2.5% and the highest was in Narrandera Shire Council at 6.7%. Workforce participation rates across the region in 2020 varied from a low of 53.6% in Junee Shire Council to a high of 74.9% in Carrathool Shire Council. The workforce participation rate for the Riverina was 67.2% (Table 2) in 2020.

The top industry of employment in the Riverina is Agriculture, Forestry and Fishing, however this does vary by LGA. Agriculture Fishing and Forestry is in fact the top employing industry in Bland, Carrathool, Coolamon, Cootamundra-Gundagai, Hay, Junee, Lockhart, Murrumbidgee, Narrandera, Snowy Valleys and Temora, ranging from 16.1% of jobs in Cootamundra-Gundagai Regional Council up to 59.1% of jobs in Carrathool Shire Council. Manufacturing is the top employer in both Griffith City Council and Leeton Shire Council, while Health Care and Social Assistance leads in Wagga Wagga City Council.

Agriculture, Forestry and Fishing is one of the top employing industries in all LGAs, with the exception of Wagga Wagga City Council. In some LGAs the percentage of jobs in the industry is more than double that of the second most employing industry (Figure 13) indicating a strong reliance of the local economy on the industry. These LGAs include Bland, Carrathool, Coolamon, Hay, Lockhart and Murrumbidgee. Manufacturing also plays a significant role, being one of the top employers in five LGAs,

Griffith, Leeton, Cootamundra-Gundagai, Junee and Snowy Valleys.

In the Riverina, Bland Shire Council is unique in that the second highest employing industry is Mining with 12.9% of jobs. In all other LGAs Mining accounts for 1% of jobs or less. Wagga Wagga City Council also has a different profile to most of the region with a large regional hospital and university in the LGA.

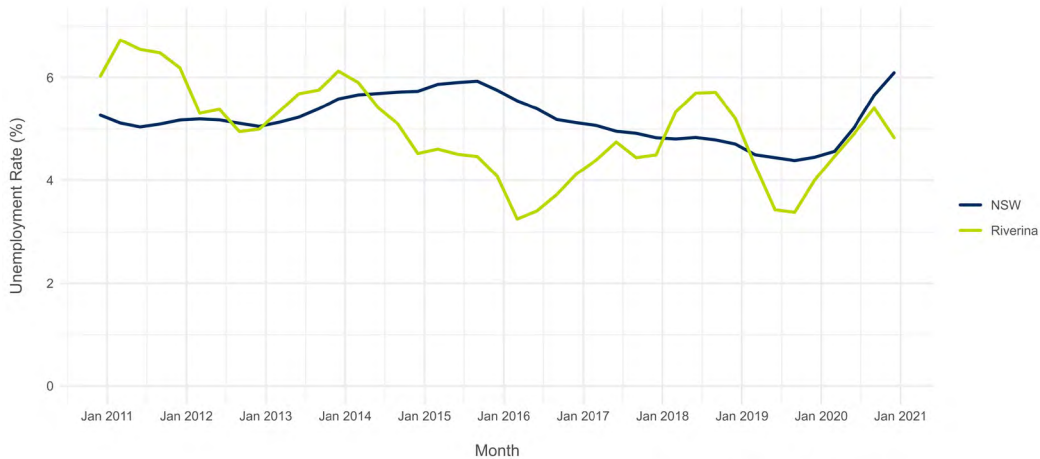
LGAs in the Riverina can be divided into four groups, those where employment in Agriculture, Forestry and Fishing is significantly higher than any other industry, those led by Agriculture Fishing and Forestry but where it is less than double the proportion of the next highest industry, those led by Manufacturing, and those led by Healthcare and Social Assistance. This final category only includes Wagga Wagga City Council, which is home to a large regional hospital, and a university as well as services that support industries such as agriculture and manufacturing.



Table 2 Unemployment Rates and Labour Force Participation Across the Riverina

Local Government Area	Unemployment Rate (%) 2018 Average	Unemployment Rate (%) 2019 Average	Unemployment Rate (%) 2020 Average <small>* rates may be impacted by COVID-19</small>	Workforce Participation Rate (%) 2020 <small>* Using 2019 ERP</small>
Bland Shire Council	3.7	3.1	2.5	69.4
Carrathool Shire Council	3.8	2.3	3.3	74.9
Coolamon Shire Council	3.4	2.4	3.3	71.4
Cootamundra-Gundagai Regional Council	6.7	4.3	5.2	58.0
Griffith City Council	4.6	3.0	3.9	70.6
Hay Shire Council	7.5	4.8	3.7	64.6
Junee Shire Council	5.2	4.0	5.0	53.6
Leeton Shire Council	6.0	4.3	5.4	65.5
Lockhart Shire Council	3.1	2.1	3.1	71.2
Murrumbidgee Council	4.6	2.7	3.3	69.0
Narrandera Shire Council	8.4	5.7	6.7	62.5
Snowy Valleys Council	5.5	3.6	5.4	62.6
Temora Shire Council	6.0	4.0	4.8	60.1
Wagga Wagga City Council	5.8	4.1	5.6	70.3
Riverina	5.5	3.8	4.9	67.2
NSW	4.8	4.4	5.3	65.3

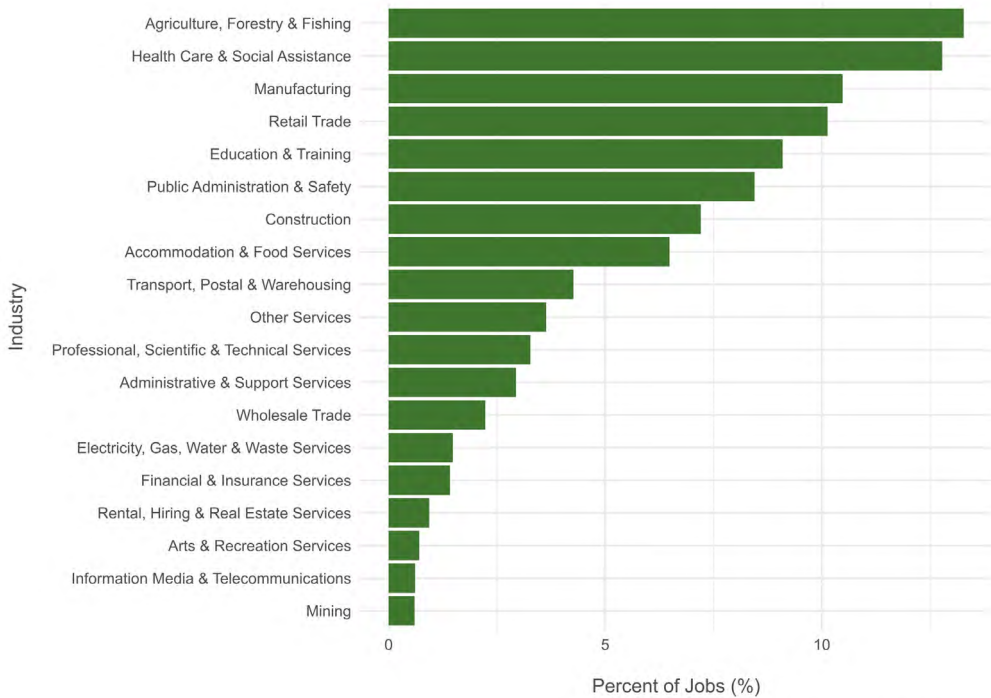




**Figure 11 Unemployment Rates in the Riverina and NSW from December 2010 to December 2020**

The unemployment rates for the Riverina and NSW. Data for the Riverina and NSW has been aggregated from the LGA from data provided by the Small Area Labour Markets publication from the Department of Education, Skills and Employment. The unemployment rate for the Riverina is currently lower than that of NSW.

Data Source: Small Area Labour Markets publication



**Figure 12 Number of Jobs by Industry in the Riverina**

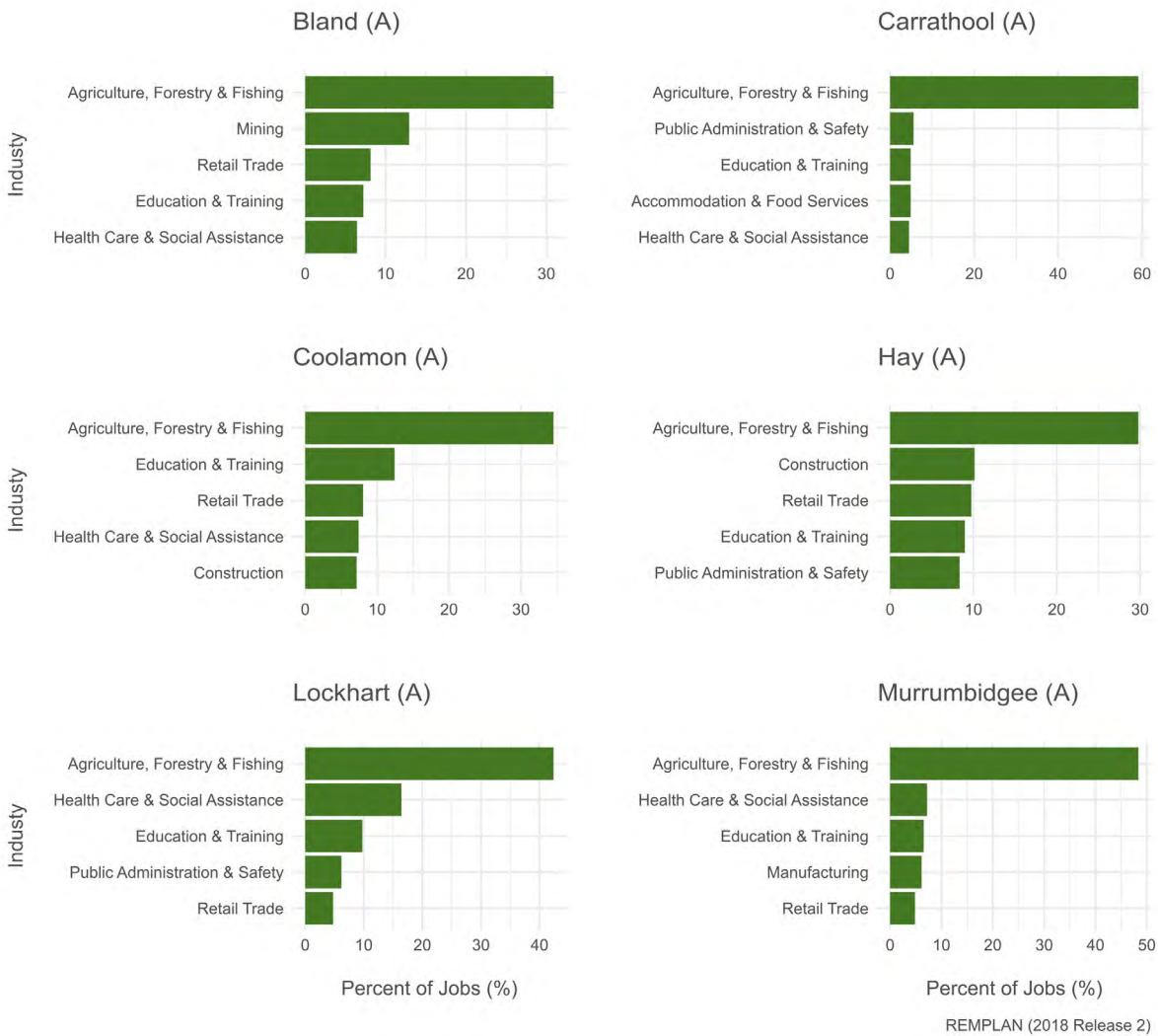
Agriculture, Forestry and Fishing provides the highest number of jobs in the Riverina followed by Health Care and Social Assistance, Manufacturing, Retail Trade, and Education and Training.

Data Source: REMPLAN Economy 2019 Release 2



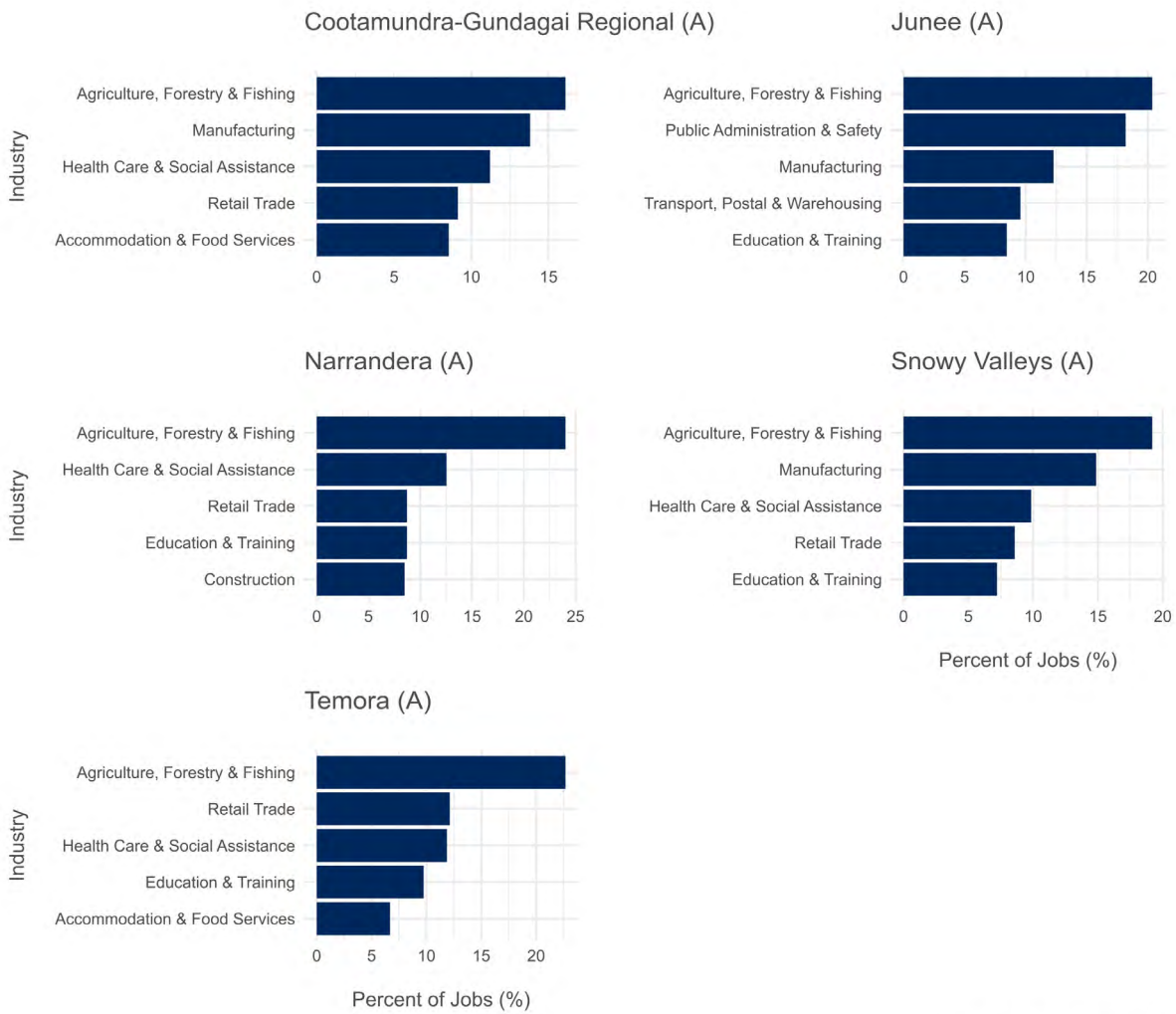
**Figure 13 LGAs With Significant Levels of Employment in Agriculture, Forestry and Fishing**

Bland Shire Council, Carrathool Shire Council, Coolamon Shire Council, Hay Shire Council, Lockhart Shire Council and Murrumbidgee Council all have levels of employment within the Agriculture, Forestry and Fishing industry that are more than double that of the next most employing industry. Carrathool Shire Council is unique in that over half of all employment in the LGA is in Agriculture, Forestry and Fishing.



**Figure 14 Employment led by Agriculture, Forestry and Fishing**

While not quite as high as the previous group, employment in Cootamundra-Gundagai Regional Council, Junee Shire Council, Narrandera Shire Council, Snowy Valleys Council and Temora Shire Council is led by Agriculture, Forestry and Fishing.

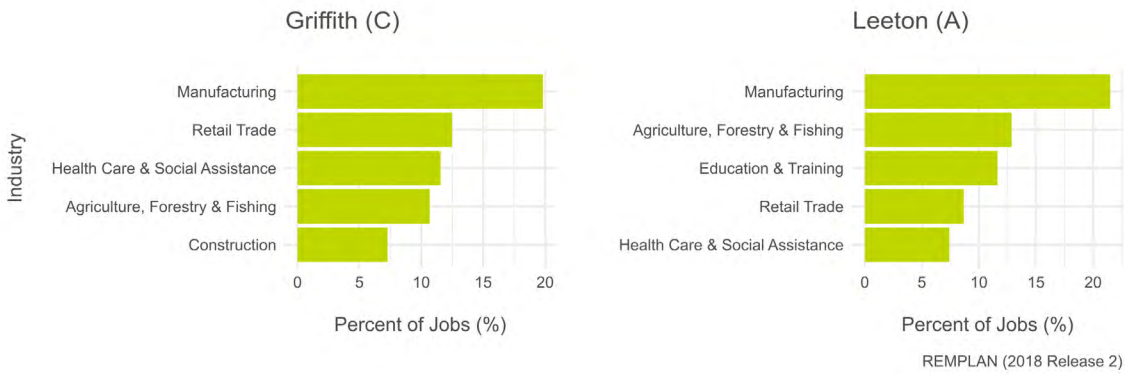


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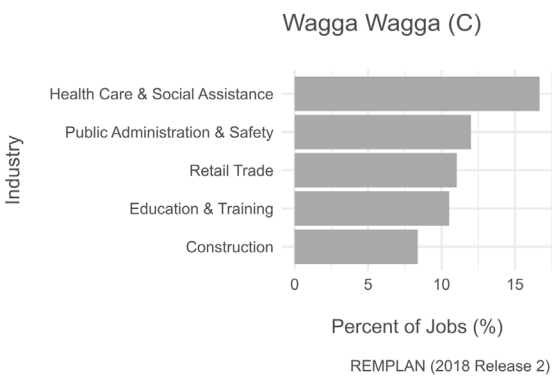
**Figure 15 Employment Led by Manufacturing**

In Griffith City Council and Leeton Shire Council the highest employing industry is manufacturing.



**Figure 16 Employment Led by Health Care and Social Assistance**

Due to the presence of a major regional hospital, employment in Wagga Wagga City Council is led by Health Care and Social Assistance. While Agriculture, Forestry and Fishing, and Manufacturing are not in the top five industries in terms of employment, the region still provides many services that support the industries and manufacturing contributes the largest amount of money to total output for the LGA at \$1.7 billion a year.



# Labour Force Age and Sex Breakdown

## Occupation

Across the Riverina occupations filled by more women than men include Clerical and Administrative Workers (83.24% of workers in the occupation), Community and Personal Service Workers (73.44%), Professionals (63.52%), and Sales Workers (64.81%) while occupations filled by more men than women include Labourers (62.87%), Machinery Operators and Drivers (92.29%), Managers (67.49%), and Technicians and Trades Workers (83.66%). The top three occupations women are employed in are Professionals (20.77% of employed women), Clerical and Administrative Workers (20.03%), and Community and Personal Service Workers (16.93%). The top three occupations men are employed in are Technicians and Trades Workers (22.36% of employed men), Managers (20.96%), and Labourers (16.56%) (Appendix Table 23).

Occupations with an older workforce include Clerical and Administrative Workers, Machinery Operators and Drivers, and Managers. Younger workforces include Labourers, Professionals and Sales Workers.

In the Riverina, the occupations with the highest proportion of Indigenous workers are Community and Personal Service Workers (5.54% of the occupation), Labourers (5.30%), and Machinery Operators and Drivers (4.52%). The top five occupations that Indigenous workers are employed in within the Riverina are Labourers (21.56% of employed Indigenous workers), Community and Personal Service Workers (17.6%), Technicians and Trades Workers (14.39%), Professionals (11.26%), and Machinery Operators and Drivers (9.47%) (Appendix Table 24).

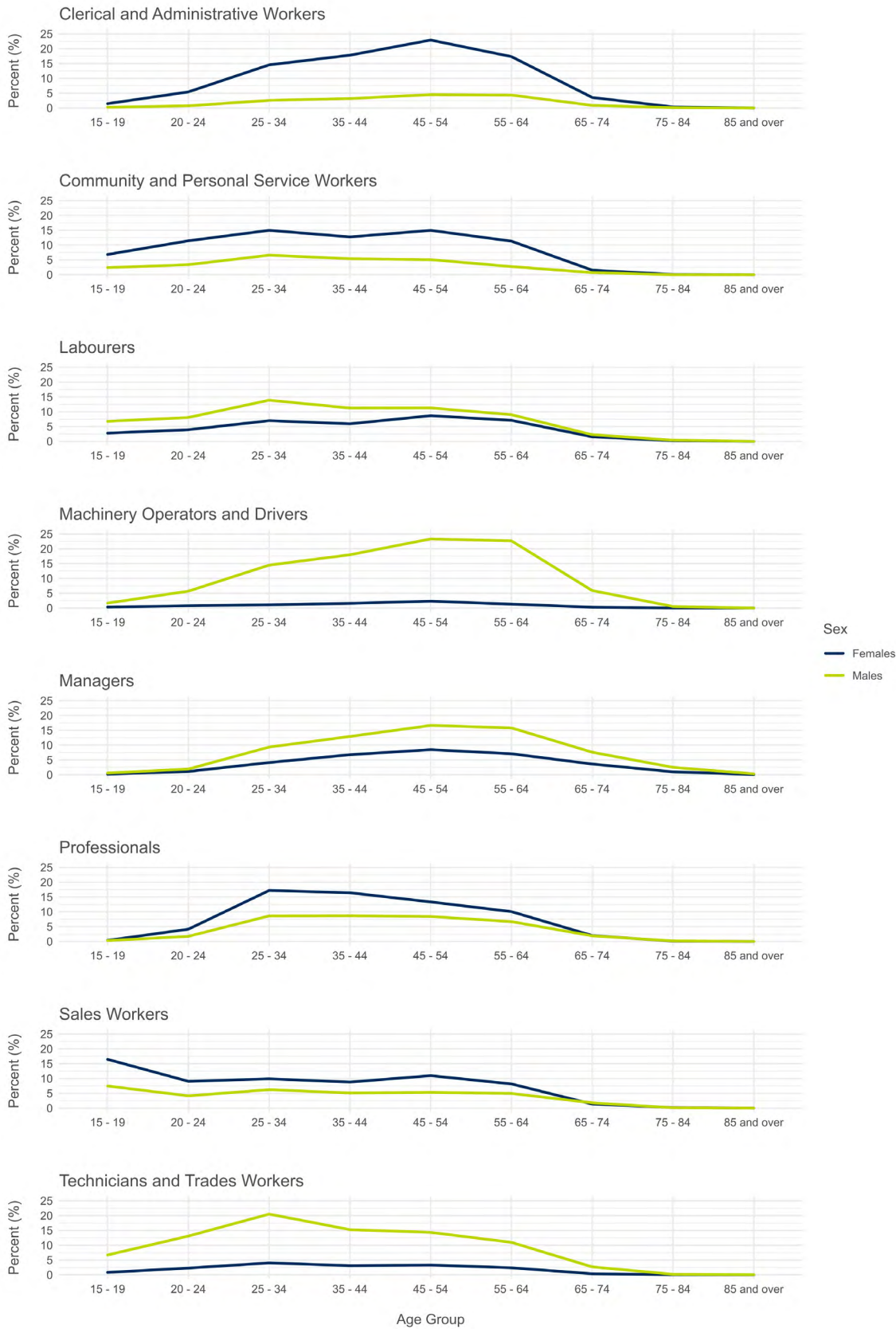
## Industry

Industries in the Riverina that employ more women than men include Accommodation and Food Services (65.89% of workers in the industry), Administrative and Support Services (61.27%), Education and Training (74.79%), Financial and Insurance Services (68.01%), Health Care and Social Assistance (83.44%), Professional, Scientific and Technical Services (56.37%), Rental Hiring and Real Estate Services (57.40%), and Retail Trade (61.68%). Industries that employ more men than women include Agriculture, Forestry and Fishing (73.35%), Arts and Recreation Services (55.81%), Construction (88.61%), Electricity, Gas, Water and Waste Services (86.63%), Information Media and Telecommunications (59.02%), Manufacturing (73.63%), Mining (83.87%), Other Services (59.20%), Public Administration and Safety (61.35%), Transport, Postal and Warehousing (77.57%), and Wholesale Trade (73.74%).

The top three industries of employment for women in the Riverina are Health Care and Social Assistance (21.59% of employed women), Education and Training (14.06%), and Retail Trade (12.99%). The top three industries of employment for men in the Riverina are Agriculture, Forestry and Fishing (17.36% of employed men), Manufacturing (13.90%), and Construction (11.57%).

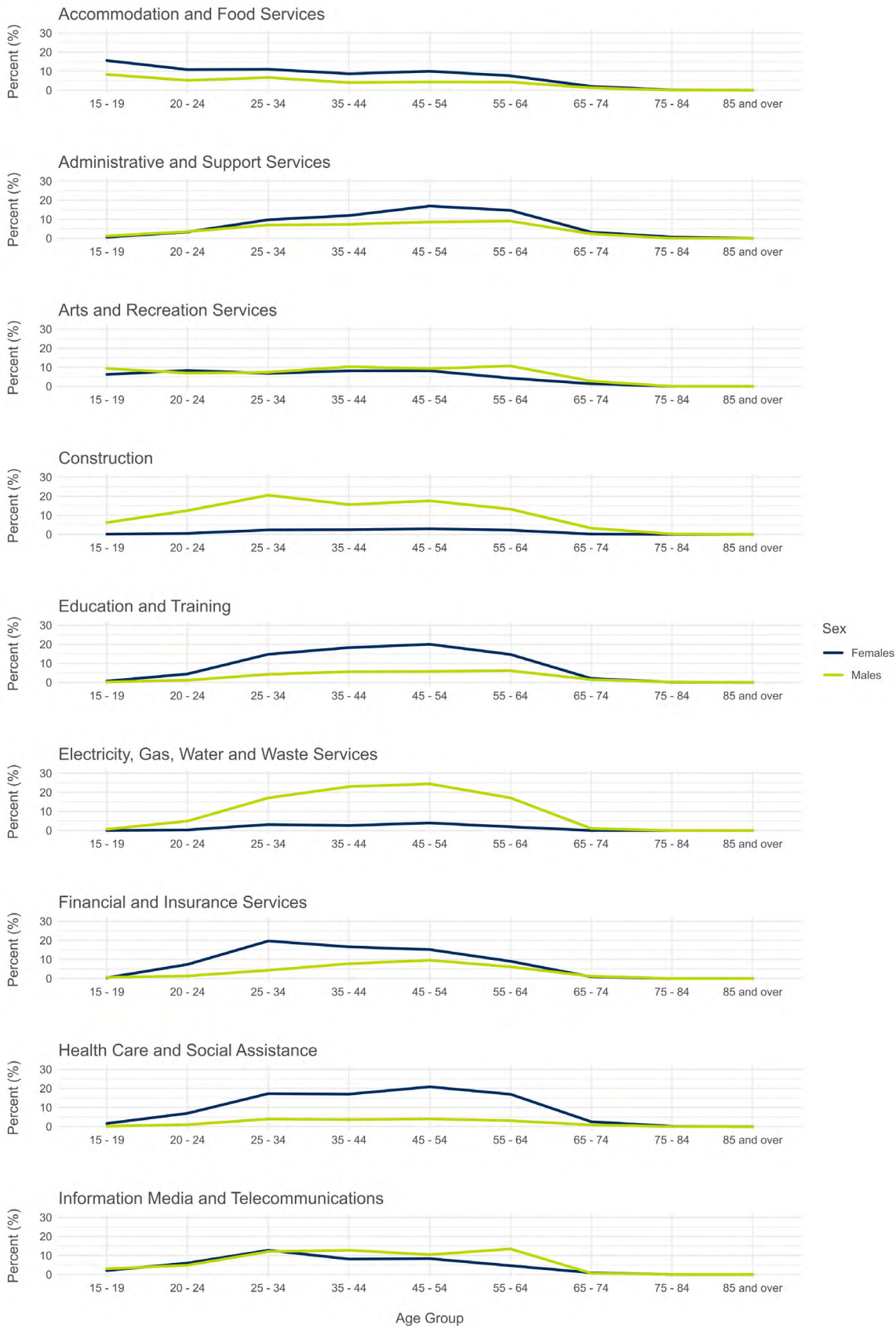
Industries with an older workforce include Administrative and Support Services, and Transport Postal and Warehousing, while industries with a younger workforce include Accommodation and Food Services, Manufacturing, and Retail Trade (Appendix Table 22).

The industries of employment with the highest proportion of Indigenous workers includes Arts and Recreational Services (5.44% of the industry), Accommodation and Food Services (4.60%), and Administrative and Support Services (4.84%). The top five industries of employment for Indigenous workers are Health Care and Social Assistance (15.35% of employed Indigenous workers), Manufacturing (9.92%), Public Administration and Safety (9.05%), Education and Training (8.80%), and Retail Trade (8.67%) (Appendix Table 25).



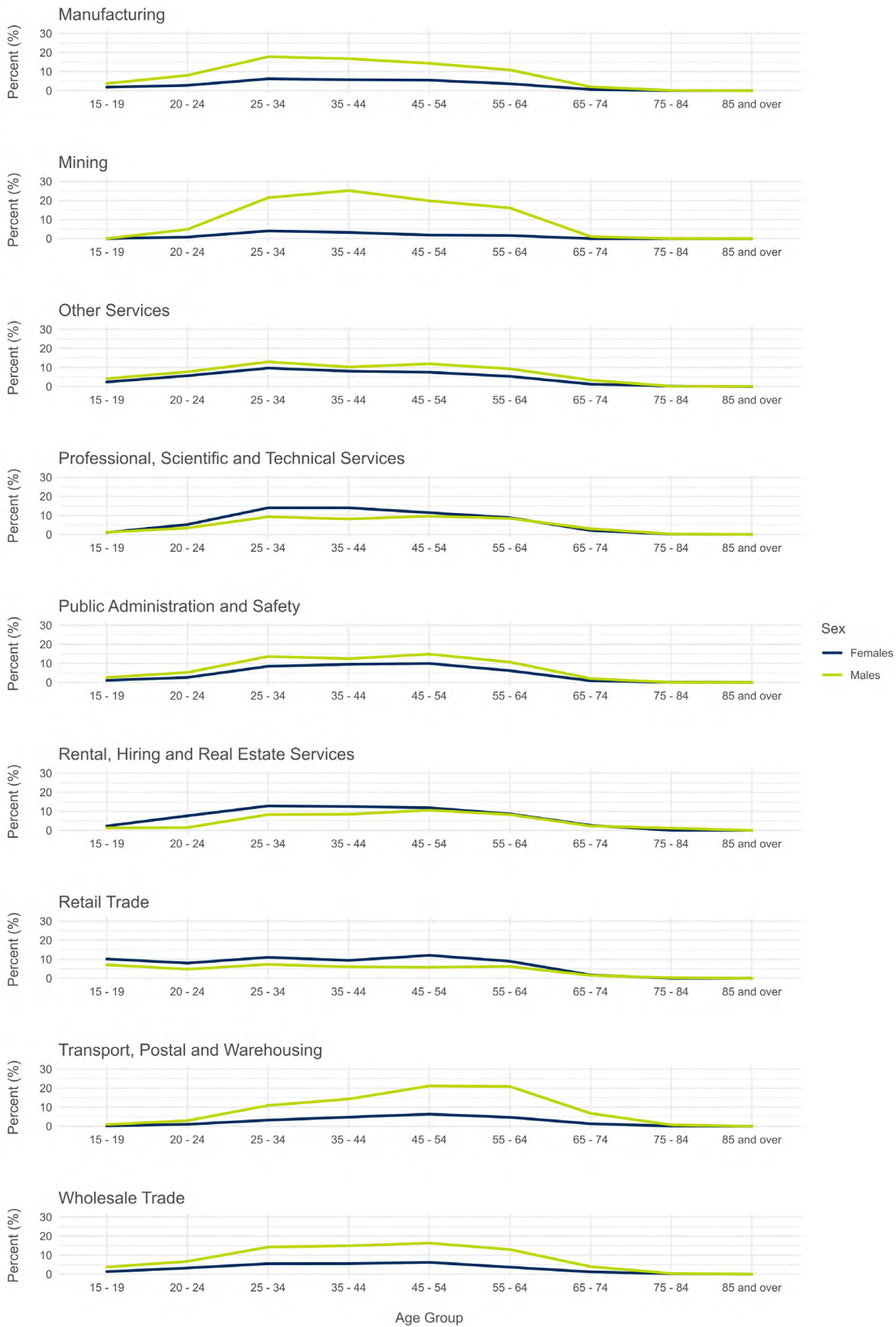
**Figure 17 Age and Gender Breakdown of Occupations in the Riverina**

Occupations in the Riverina are split down traditional gender lines with Labourers, Machinery Operators and Drivers, Managers, and Technicians and Trades Workers more likely to be male and Clerical and Administrative Workers, Community and Personal Service Workers, Professionals, and Sales Workers more likely to be female. Managers, and Machinery Operators and Drivers are older workforces while Sales Workers, Professionals, and Technicians and Trades Workers are younger.



**Figure 18a Age and Gender Breakdown of Industries in the Riverina (A-L)**

The Construction, and Electricity, Gas, Water and Waste Services industries generally employ more men than women, while the Health Care and Social Assistance, and Education and Training industries generally employ more women than men. The Accommodation and Food Services industry generally employs a very young workforce.



**Figure 19 Age and Gender Breakdown of Industries in the Riverina (M-Z)**

The Mining, Manufacturing, Transport, Postal and Warehousing, and Wholesale Trade industries generally employ more men than women. The Transport, Postal and Warehousing industry also has an older workforce.



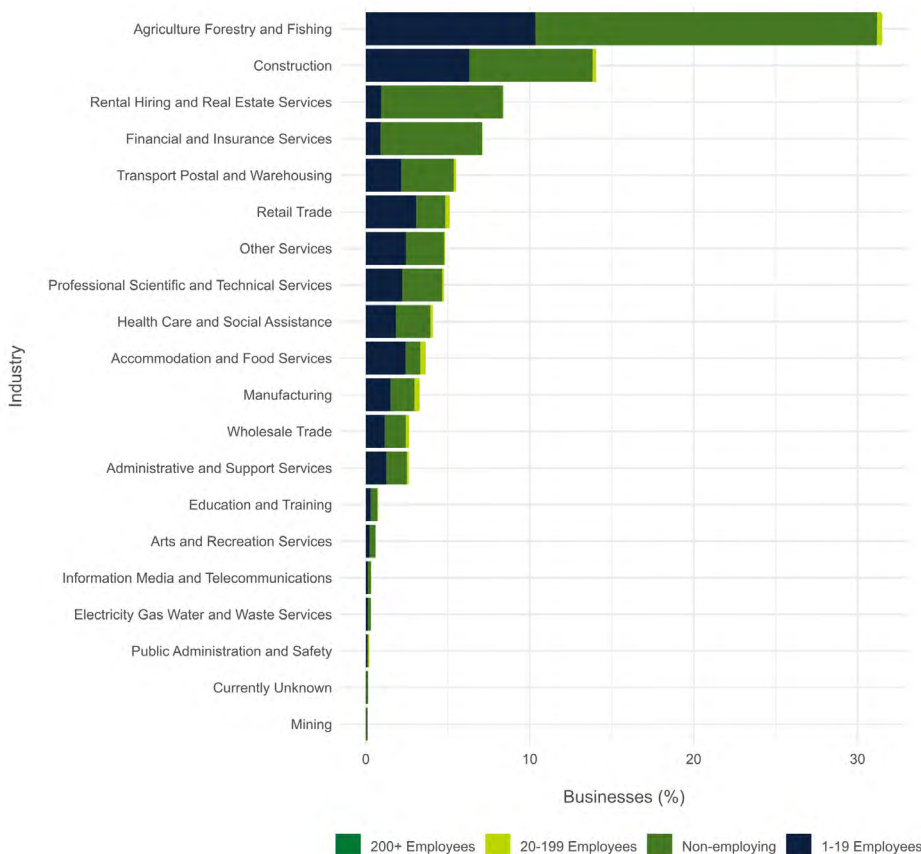
## Business Counts Riverina

There are over **17,200** businesses in the Riverina, **60.1%** are non-employing, **37.5%** have **1 to 19** employees, **2.34%** have **20 to 199** employees and just **0.03%** have over **200** employees.

This means that 97.6% of businesses in the region are small businesses with fewer than 19 employees.

Most businesses are in Agriculture, Forestry and Fishing at 31.4% followed by Construction at 13.9% and Rental, Hiring and Real Estate Services at 8.37%.

The majority of businesses in the Riverina are located in Wagga Wagga and Griffith with 32.49% and 19.19% of businesses respectively, however Bland and Murrumbidgee have more businesses per worker. In Bland there are 4.9 businesses for every ten people who work in the LGA, while in Murrumbidgee there are 4.1 businesses for every ten people who work in the LGA. This is compared to Wagga Wagga and Griffith where there are 1.7 and 2.6 businesses for every ten people who work in these LGAs (Table 3).



**Figure 19 Business Counts by Industry and Size in the Riverina**

More than 30% of businesses in the Riverina are in the Agriculture, Forestry and Fishing industry and of these 65% are currently non-employing businesses.

Data Source: Counts of Australian Businesses, including Entries and Exits



Table 3 Businesses in the Riverina by Local Government Area

LGA	Businesses	Percent of Businesses in the Riverina (%)	Workers*	Businesses per 10 Workers
Bland (A)	811	4.71	1668	4.9
Carrathool (A)	420	2.44	1288	3.3
Coolamon (A)	337	1.96	1118	3.0
Cootamundra-Gundagai Regional (A)	1141	6.63	4239	2.7
Griffith (C)	3303	19.19	12616	2.6
Hay (A)	387	2.25	1282	3.0
Junee (A)	485	2.82	1882	2.6
Leeton (A)	946	5.50	4687	2.0
Lockhart (A)	245	1.42	840	2.9
Murrumbidgee (A)	693	4.03	1694	4.1
Narrandera (A)	547	3.18	2123	2.6
Snowy Valleys (A)	1568	9.11	6143	2.6
Temora (A)	739	4.29	2351	3.1
Wagga Wagga (C)	5593	32.49	32334	1.7

\*The number of people working in the region. They may or may not live in the region

Table 4 Proportion of Businesses by Industry

Industry	Percent of Riverina Businesses
Agriculture Forestry & Fishing	31.39%
Construction	13.93%
Rental Hiring & Real Estate Services	8.37%
Financial & Insurance Services	7.17%
Transport Postal & Warehousing	5.34%
Retail Trade	5.06%
Professional Scientific & Technical Services	4.83%
Other Services	4.73%
Health Care & Social Assistance	4.18%
Accommodation & Food Services	3.63%
Manufacturing	3.43%
Administrative & Support Services	2.68%
Wholesale Trade	2.64%
Education & Training	0.78%
Arts & Recreation Services	0.67%
Electricity Gas Water & Waste Services	0.35%
Information Media & Telecommunications	0.31%
Public Administration & Safety	0.22%
Mining	0.16%
Currently Unknown	0.12%

## Internet Vacancy Index

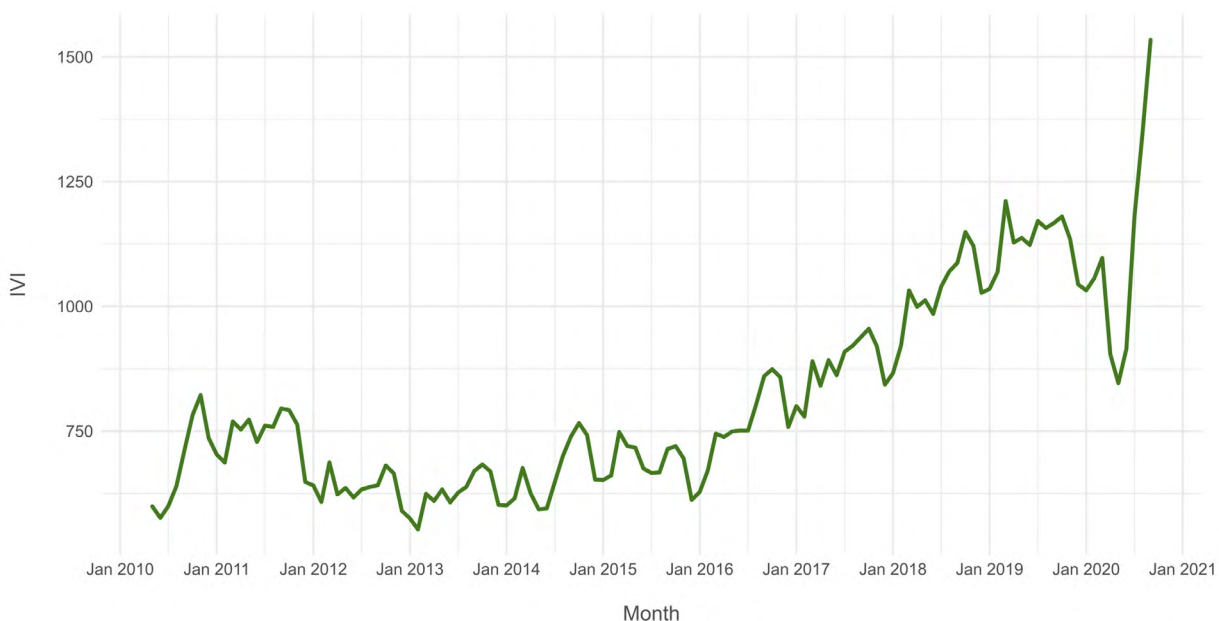
The Internet Vacancy Index (IVI) is calculated by the Department of Jobs and Small Business. It is based on a count of new jobs advertised on three online jobs platforms, SEEK, CareerOne and Australian Job Search.

The IVI is not available at an LGA level but is divided into regions. The Riverina-Murray region is reported here. It should be interpreted as indicative only as the absolute numbers refer to a region that is larger than the Riverina as defined in this report.

For the Riverina-Murray region the IVI has been increasing over the last ten years (Figure 20). However, this may not necessarily represent an increase in the number of jobs available, it may reflect the greater move of businesses towards online recruitment methods.

The top five jobs on the increase are Health Diagnostic and Therapy Professionals, Health and Welfare Support Workers, Legal, Social and Welfare Professionals, Carers and Aides, and Mobile Plant Operators. In contrast the jobs that are decreasing the most are Numerical Clerks, Sales Representatives and Agents, Hairdressers, Printing, Clothing and Wood Trades Workers, Sports, Travel and Personal Service Workers and Protective Service Workers (Figure 21).

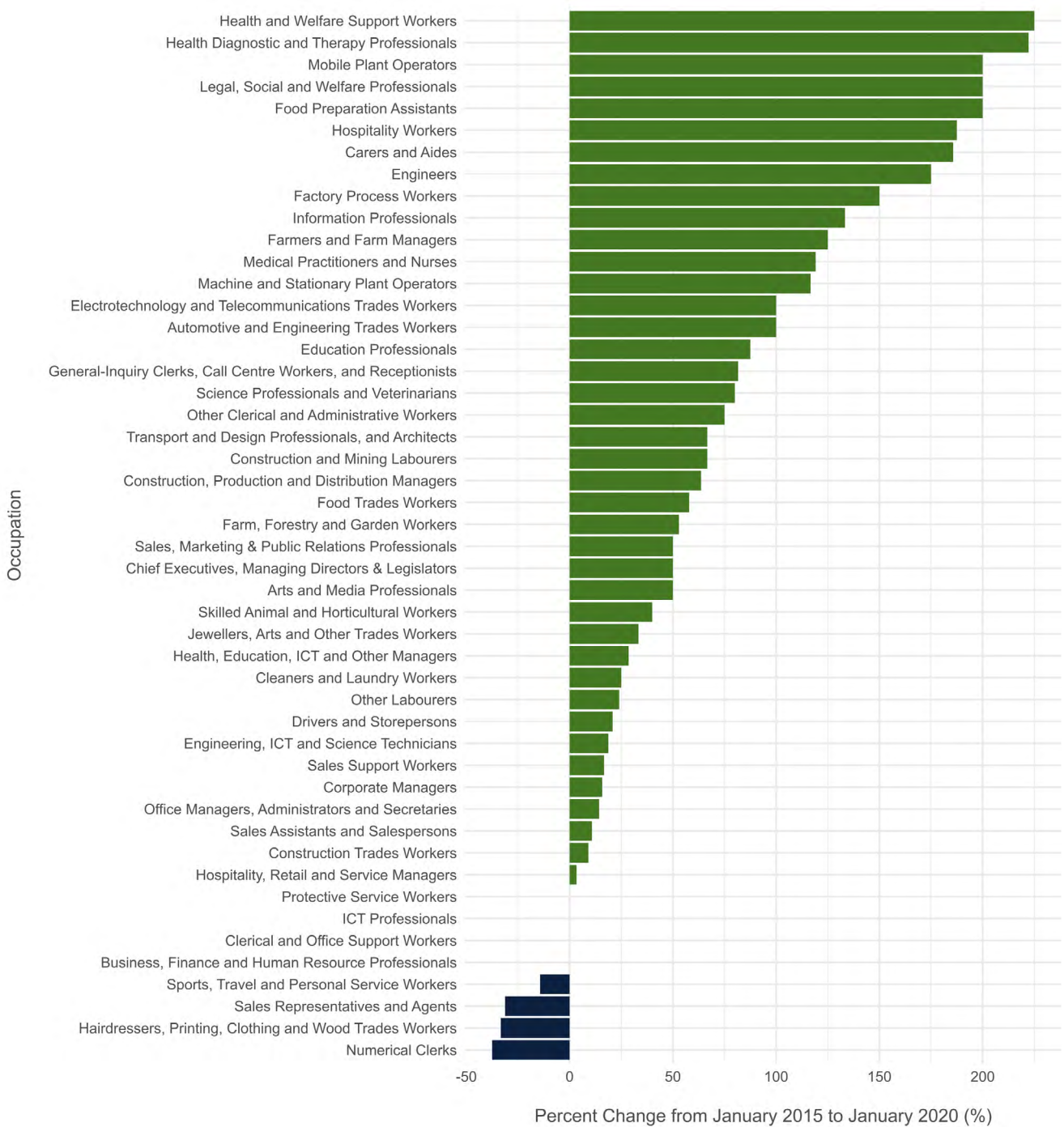
The IVI does not tell us how many of these jobs are filled and how many go unfilled, or how difficult it is to find appropriate candidates for certain positions. Nor does it tell us the reason for the increase or decrease.



Data Source: Labour Market Information Portal Vacancy Report

**Figure 20 Internet Vacancy Index (IVI) from 2010 to 2020**

The IVI for the Riverina Murray region has been steadily climbing over the last five years. This may be due to a general move towards online recruitment techniques and/or an increase in the number of jobs available. While there was a drop in the IVI due to COVID-19, the index has recovered and increased from pre-COVID-19 levels.



Data Source: Labour Market Information Portal Vacancy Report  
The percent change in IVI is reported to January 2020 due to COVID-19

**Figure 21 Percent Change in the IVI Over the Last Five years by Industry**

Between 2015 and 2020 the IVI for Health and Welfare Support Workers, and Health Diagnostic and Therapy Professionals has more than doubled, while the IVI for Numerical Clerks has decreased.





# Survey Findings



## Margin of Error

As of June 2019, there were 17,215 businesses in the Riverina. The survey instrument was targeted to owners, operators and human resources managers of these businesses. After data cleaning there were 164 responses to the survey. With a sample size of 164 and a population size of 17,215 the margin of error was calculated using the margin of error for finite populations formula below, a margin of 0.5 and a confidence level of 95%.

At a confidence level of 95% the margin of error is 7.62%. This means that if this survey was conducted 100 times the values in obtained would be within 7.62% of the true values 95 times out of 100.

$$\text{Margin of Error} = z \times \frac{\sqrt{p(1-p)}}{\sqrt{\frac{(N-1)n}{(N-n)}}}$$

Where:

$$z = \text{Z Score (1.96)} \quad N = \text{Population size (17215)}$$

$$p = \text{Margin (0.5)} \quad n = \text{Sample size (164)}$$

## Sources of Error

Respondents for the survey were recruited via a number of methods including online via email, and social media. Our sample is likely biased towards businesses that RDA Riverina have had contact with in the past or who follow or otherwise engage with RDA Riverina on social media. This will have impacts on questions regarding skilled migration as RDA Riverina is involved in two regional visa programs. To try to mitigate this, various online channels were used to advertise the survey, including multiple social media platforms and reaching out to local groups and organisations to share and advertise the survey to businesses that had not had contact with RDA. It also may exclude businesses and respondents who have little to no online presence. It must also be considered that people representing businesses affected by skills shortages may be more likely to engage with the survey than those representing businesses that have not.

## LGA Representation

To ensure that the data reported in this study represents the Riverina as accurately as possible, the survey instrument was distributed widely across the region. After comparing the proportion of Riverina businesses in each LGA to the proportions of respondents it was found that this dataset may over-represent Bland Shire Council, Cootamundra-Gundagai Regional Council and Temora Shire Council, while it may under-represent Griffith City Council, Hay Shire Council, Junee Shire Council and Wagga Wagga City Council. There were no respondents operating businesses solely within Hay or Junee, however, these two LGAs were represented by businesses that operated over multiple LGAs.

Table 5 Survey Respondents by Local Government Area

LGA	Respondents operating in single LGA (%)	Respondents operating in multiple LGAs (%)	ABS Business Count for LGA (%)
Bland Shire Council	8.73	8.66	4.71
Carrathool Shire Council	3.17	5.07	2.44
Coolamon Shire Council	0.79	5.37	1.96
Cootamundra-Gundagai Regional Council	9.52	7.76	6.63
Griffith City Council	8.73	8.96	19.19
Hay Shire Council	0.00	2.39	2.25
Junee Shire Council	0.00	4.18	2.82
Leeton Shire Council	5.56	6.57	5.50
Lockhart Shire Council	1.59	4.78	1.42
Murrumbidgee Council	3.17	4.48	4.03
Narrandera shire Council	5.56	6.27	3.18
Snowy Valleys Council	10.32	7.46	9.11
Temora Shire Council	18.25	13.43	4.29
Wagga Wagga City Council	24.60	14.63	32.49

## Demographics of Respondents

### Role

Most respondents were owners / co-owners (53%) of the business that they were representing or manager / directors (29%). A further 9% were HR managers / representatives and 5% were employees. 3% of respondents selected 'other', these responses included Network Support Consultant, Program Manager, Marketing Coordinator – Labour Mobility, Chair, and Tourism and Economic Development Officer, with the exception of managers and chair, most of these respondents would fall under the category of employee.

### Town Size

The majority of respondents were from medium size regional towns. These are towns with a population between 1,000 and 15,000 people. They tend to be the main population centres for smaller LGAs in the region. 50% of respondents were from medium sized towns and 34% were from large towns. Large towns are regional towns or cities that have a population greater than 15,000, they would be major population centres for the Riverina.



Table 6 Respondents by Town Size

Town Size	Percent of Respondents (%)
<b>Large Town - Population greater than 15,000</b> (Major population centres for the Riverina)	33.54
<b>Medium Town - Population between 1,000 and 15,000</b> (Main population centres for a local government area)	50.00
<b>Small town - Population less than 1,000</b> (Smaller towns that are generally not the main population centres for a local government area)	6.71
<b>Rural - Less than one hour out of town</b> (Not within a small, medium or large population centre but less than one hour away from one)	4.88
<b>Remote - More than one hour out of town</b> (Not within a small, medium or large population centre and more than one hour away from any population centre)	2.44
<b>Other</b> (please specify)	1.83
<b>Question not answered</b>	0.61

Table 7 Respondents by Industry

Industry	Percent of Respondents (%)	Percent of Businesses (%)
<b>Agriculture, Forestry and Fishing</b>	13.41%	31.39%
<b>Construction</b>	5.49%	13.93%
<b>Rental, Hiring and Real Estate Services</b>	1.22%	8.37%
<b>Financial and Insurance Services</b>	3.05%	7.17%
<b>Transport, Postal and Warehousing</b>	1.83%	5.34%
<b>Retail Trade</b>	9.76%	5.06%
<b>Professional, Scientific and Technical Services</b>	7.93%	4.83%
<b>Other Services</b>	4.27%	4.73%
<b>Health Care and Social Assistance</b>	10.98%	4.18%
<b>Accommodation and Food Services</b>	17.07%	3.63%
<b>Manufacturing</b>	6.71%	3.43%
<b>Administrative and Support Services</b>	1.83%	2.68%
<b>Wholesale Trade</b>	1.22%	2.64%
<b>Education and Training</b>	1.83%	0.78%
<b>Arts and Recreation Services</b>	3.66%	0.67%
<b>Electricity, Gas, Water and Waste Services</b>	4.88%	0.35%
<b>Information Media and Telecommunications</b>	2.44%	0.31%
<b>Public Administration and Safety</b>	2.44%	0.22%
<b>Mining</b>	0%	0.16%



### Industry

The most commonly reported industry was Accommodation and Food Services at 17% followed by Agriculture, Forestry and Fishing at 13%, Health Care and Social assistance at 11%, Retail Trade at 10%, and Professional, Scientific and Technical Services at 8%. Based on this breakdown the data may underrepresent Agriculture, Forestry and Fishing, Construction and Rental, Hiring and Real Estate Services and may over represent Retail Trade and Health Care and Social Assistance.



**Figure 22 Survey Respondents by Industry**

The most common industry represented by respondents was Accommodation and Food Service followed by Agriculture, Forestry and Fishing, Health Care and Social Assistance and Retail Trade. Table 7 explores how this representation compares to business counts in the region.



### Time in Operation

More than half of respondents have been in operation for between 10 and 50 years with a mean of 28 years and a median of 20 years.

### Business Size

67% of businesses represented in the survey are small businesses with 1 to 19 employees, 25% are medium businesses with 20 to 199 employees, and the rest are non-employing or large businesses with more than 200 employees. Only non-employing businesses that were looking to start employing staff were targeted for the survey, therefore the proportional breakdown of respondents by business size does not reflect the breakdown of all businesses in the Riverina by size.

### Seasonal Workers

Respondents were asked if there were seasonal variations in their skills needs. 79.27% of respondents did not have seasonal variations while 20.12% did, 0.61% did not answer the question. While this study does not focus on seasonal workers, respondents were given the opportunity to discuss issues relating to seasonal workers. Issues raised included difficulty finding workers for harvest, difficulty attracting and retaining seasonal workers to the region, difficulty with accommodation for seasonal workers and difficulty finding seasonal workers with specific skills.

*Table 8 Respondents by Duration of Business Operation*

Years in Operation	Percent of Respondents (%)
<b>Less than 1 year</b>	1.83
<b>1 – 5 years</b>	14.02
<b>5 – 10 years</b>	12.20
<b>10 – 25 years</b>	23.78
<b>25 – 50 years</b>	26.22
<b>50 – 100 years</b>	9.15
<b>100 – 150 years</b>	4.88
<b>Question not answered</b>	7.93

*Table 9 Respondents by Business Size*

Size	Percent of Respondents (%)
<b>Non-Employing</b>	2.44
<b>1 – 19 Employees</b>	67.68
<b>20 – 199 Employees</b>	25.00
<b>200 or more Employees</b>	4.88

# Vacancies

## Total Number of Positions

Respondents were asked how many positions, both filled and unfilled there were in their businesses. The median was 5 positions. The number of positions ranged from 0 to 950 with an interquartile range of 2 to 18. Three respondents did not answer the question. 78.04% ( $\pm 6.33$ ) of respondents reported having had difficulty finding staff to fill a vacancy in the business or organisation at some point while 21.95% ( $\pm 6.33$ ) had not. Figure 23 shows the industries of respondents who reported having had difficulties filling positions. Accommodation and Food Services topped the list at 17.19% ( $\pm 6.54\%$ ), followed by Agriculture, Forestry and Fishing at 14.06% ( $\pm 6.02\%$ ) and Health Care and Social Assistance at 11.72% ( $\pm 5.57\%$ ) (Appendix Table 26).

## Vacancies in the Last 12 Months

The median number of vacancies reported in the last 12 months was 2. The range was 0 to 155 with an interquartile range of 4 (from 1 to 5). Five respondents did not answer the question. The number of vacancies varied depending on the number of employees in the business, with smaller businesses reporting fewer vacancies in the last 12 months.

## Unfilled Vacancies

Of the vacancies reported in the last 12 months the median number of vacancies that were unable to be filled by the business or organisation was 1. The range was 0 to 25 with 50% of values falling between 1 and 2. Of all the vacancies reported in the survey 30.47% ( $\pm 7.04$ ) were unfilled. Each business was unable to fill an average of 48.26% ( $\pm 7.65$ ) of vacancies reported over the last 12 months. For businesses that reported having difficulties filling vacancies this average was 50.63% ( $\pm 7.65$ ). Where businesses reported that they did not have difficulties filling vacancies this average dropped to 26.92% ( $\pm 6.79$ ).

At the ANZSCO sub major group (or 2 digit code level) the most commonly cited occupations that were difficult to fill were Hospitality Workers followed by Health Professionals, Farm, Forestry and Garden Workers, Engineering, ICT and Science Technicians and Design, Engineering, Science and Transport Professionals (Appendix table 27).

Smaller businesses had more difficulty filling vacancies than larger businesses. Businesses with between 1 and 19 employees were unable to fill 53.1% of vacancies, businesses with 20 to 199 employees were unable to fill 39.5%, while large businesses with 200 or more employees were unable to fill 36.2% of vacancies. Rural and remote towns had greater difficulty filling vacancies, with 71.8% of vacancies unfilled. Older businesses had less difficulty filling vacancies.

Respondents were also asked to describe the positions that they have had trouble filling. Engineers, Chefs and Truck Drivers topped the list with 3.57%, 2.98% and 2.98% of respondents reporting difficulty in filling these positions respectively (Appendix Table 28).



**Figure 23 Most Common Industries Reporting Difficulties in Filling Vacancies**

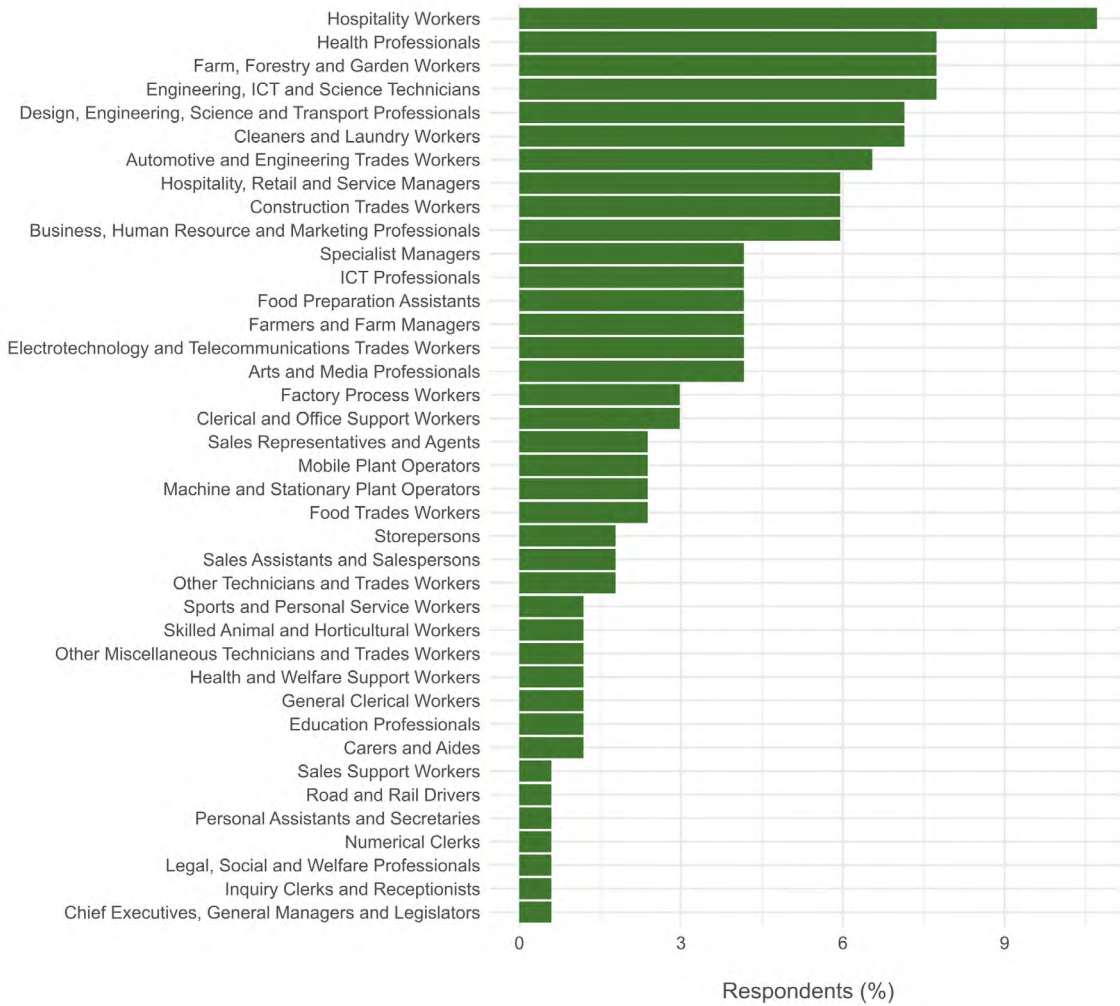
78.04% ( $\pm 6.33$ ) of respondents reported having difficulties filling vacancies. Of these, Accommodation and Food Services was the most common industry represented by the respondent, followed by Agriculture, Forestry and Fishing and Health Care and Social Assistance.

**Table 10 Vacancies Reported in the Last 12 Months by Business Size**

Years in Operation	Mean Number of Vacancies	Median Number of Vacancies
1 - 19	1.76	1
20 - 199	10.3	8
200 or more	52.1	25
Unknown	2.33	6

**Table 11 Unfilled Vacancies by Number of Employees**

Number of Employees	Number of respondents	Percent of vacancies unable to be filled
1 - 19	109	53.1% ( $\pm 7.6\%$ )
20 - 199	41	39.5% ( $\pm 7.5\%$ )
200 or more	<10	36.2% ( $\pm 7.4\%$ )



**Figure 24 Occupations Most Reported as Difficult to Fill**

Hospitality Workers, Health Professionals, Farm Forestry and Garden Workers, and Engineering, ICT and Science Technicians were the most commonly reported occupations that were difficult to fill.

**Table 12 Unfilled Vacancies by Town Size**

Town Size	Number of respondents	Percent of vacancies unable to be filled
Large Towns	55	45.0% (±7.6%)
Medium Towns	82	50.1% (±7.7%)
Small Towns	11	30.6% (±7.1%)
Rural and Remote Towns	12	71.8% (±6.9%)

**Table 13 Unfilled Vacancies by Time Operating**

Time operating	Number of respondents	Percent of vacancies unable to be filled
Less than 5 years	23	58.5% (±7.5%)
5 – 10 years	20	48.2% (±7.7%)
10 – 25 years	39	49.7% (±7.7%)
25 – 50 years	43	50.5% (±7.7%)
50 – 100 years	15	39.1% (±7.5%)
More than 150 years	8	35.6% (±7.3%)



## Impacts of Unfilled Vacancies

The most frequently cited impacts of ongoing unfilled vacancies were an increase in workload on available staff, decreased capacity to take on new work, decreased productivity, and increased stress for owners, managers, and available staff (Figure 26 and Table 14). Additional impacts reported by respondents in the free text responses included a reduction in the ability to grow the business and the inability to support the local economy and provide services to local community. All of these impacts would have significant flow-on effects for local communities. Some examples of these effects include increased pressure on health services, financial impacts and losses and reduced levels of participation within the community.

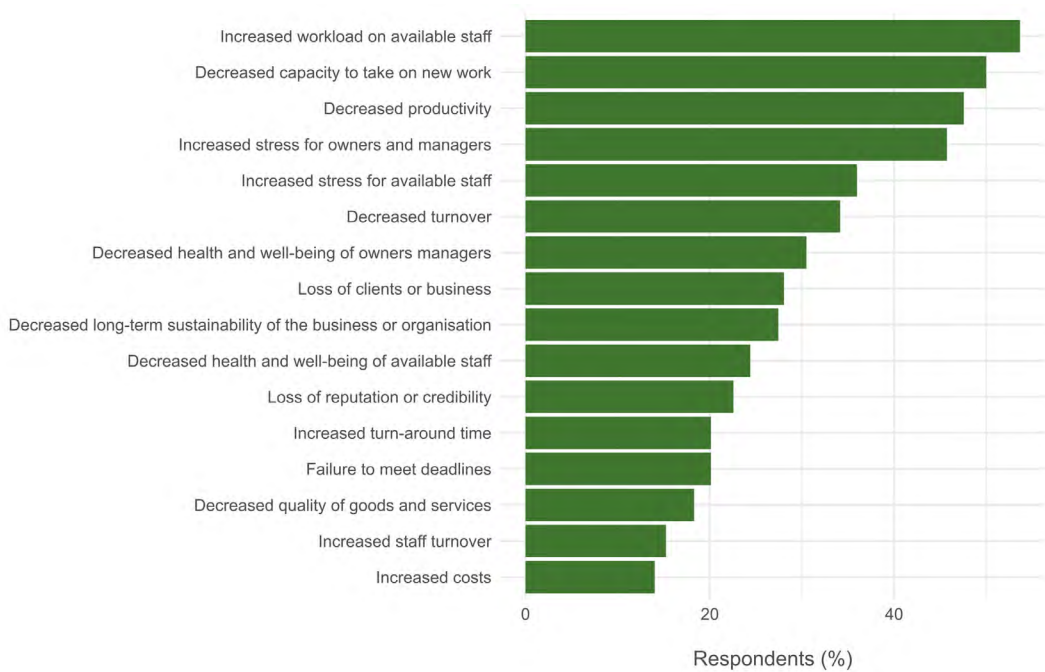
## Causes of Unfilled Vacancies

The most common causes reported for being unable to fill vacancies were a lack of qualified candidates, a lack of experienced candidates or candidates with appropriate technical abilities and candidates being unwilling to live and work in regional areas (Figure 27 and Table 15). Additional causes cited by respondents in the free text responses included jobs that are necessary but undesirable and perceived issues with relying on young workers.



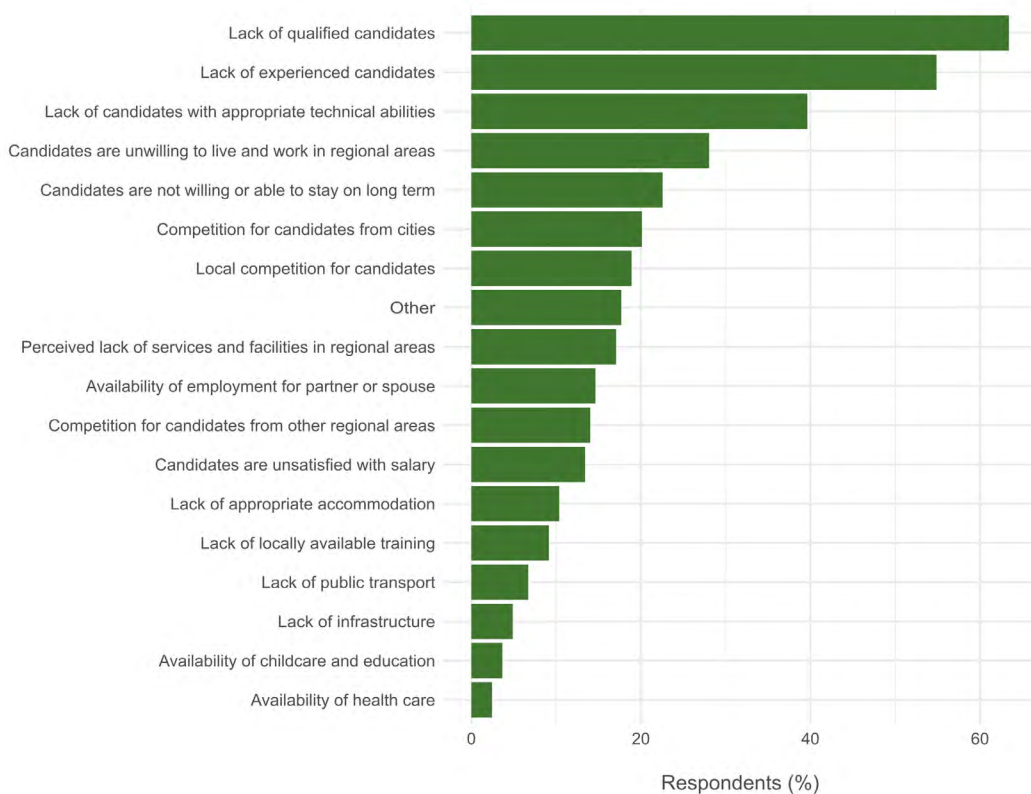
**Figure 25 Position Descriptions for Difficult to Fill Occupations**

Respondents were asked to describe the occupations that were difficult to fill. These descriptions were cleaned and categorised. Engineers, truck drivers and chefs were most common. A full table is provided in the appendix (Table 28).



**Figure 26 Impacts of Ongoing Unfilled Vacancies**

The most commonly reported impacts of ongoing unfilled vacancies was an increased workload on available staff, decreased capacity to take on new work and decreased productivity.



**Figure 27 Perceived Causes of Unfilled Vacancies**

While the exact causes for unfilled vacancies can be difficult to determine, the most commonly reported causes that respondents believed were behind unfilled vacancies were a lack of qualified candidates, a lack of experienced candidates and a lack of candidates with appropriated technical skills.



Table 14 Impacts of Ongoing Unfilled Vacancies in the Riverina

Impacts of Unfilled Vacancies	Percent of Respondents (%)
Increased workload on available staff	53.66 (± 7.63)
Decreased capacity to take on new work	50.00 (± 7.65)
Decreased productivity	47.56 (± 7.64)
Increased stress for owners and managers	45.73 (± 7.62)
Increased stress for available staff	35.98 (± 7.35)
Decreased turnover	34.15 (± 7.26)
Decreased health and well-being of owners managers	30.49 (± 7.05)
Loss of clients or business	28.05 (± 6.88)
Decreased long-term sustainability of the business or organisation	27.44 (± 6.83)
Decreased health and well-being of available staff	24.39 (± 6.57)
Loss of reputation or credibility	22.57 (± 6.40)
Failure to meet deadlines	20.12 (± 6.14)
Increased turn-around time	20.12 (± 6.14)
Decreased quality of goods and services	18.29 (± 5.92)
Increased staff turnover	15.24 (± 5.50)
Increased costs	14.02 (± 5.31)

Table 15 Perceived Causes of Difficulty Filling Vacancies in the Riverina

Causes of Unfilled Vacancies	Percent of Respondents (%)
Lack of qualified candidates	63.41 (± 7.37)
Lack of experienced candidates	54.88 (± 7.62)
Lack of candidates with appropriate technical abilities	39.63 (± 7.49)
Candidates are unwilling to live and work in regional areas	28.05 (± 6.88)
Candidates are not willing or able to stay on long term	22.56 (± 6.40)
Competition for candidates from cities	20.12 (± 6.14)
Local competition for candidates	18.90 (± 5.99)
Other please specify	17.68 (± 5.84)
Perceived lack of services and facilities in regional areas	17.07 (± 5.76)
Availability of employment for partner or spouse	14.63 (± 5.41)
Competition for candidates from other regional areas	14.02 (± 5.31)
Candidates are unsatisfied with salary	13.41 (± 5.22)
Lack of appropriate accommodation	10.37 (± 4.67)
Lack of locally available training	9.15 (± 4.41)
Lack of public transport	6.71 (± 3.83)
Lack of infrastructure	4.88 (± 3.30)
Availability of childcare and education	3.66 (± 2.87)
Availability of health care	2.44 (± 2.36)



## Strategies

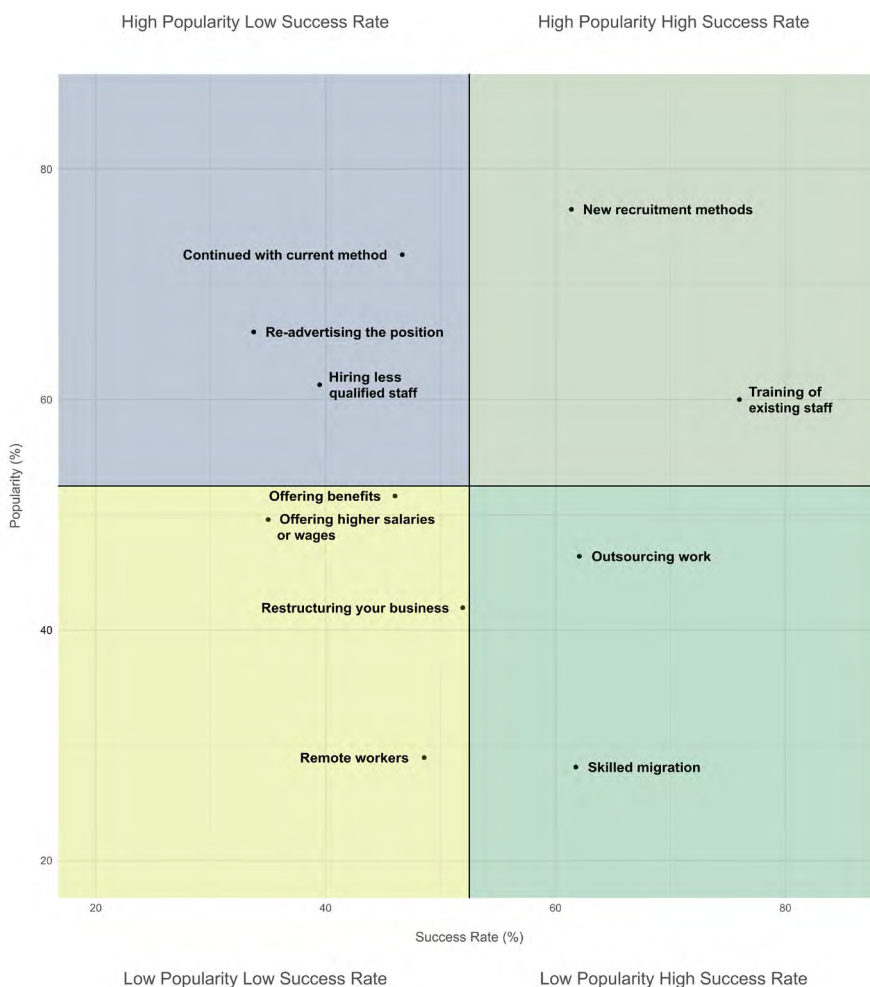
The strategies attempted by the most respondents included new recruitment methods such as moving to digital jobs platforms, continuing to advertise the position, re-advertising the position, hiring less qualified staff and training existing staff. While these strategies were the most popular, they did not necessarily have the highest success rates. The most popular strategy, moving to digital media, had a success rate of 61.39%, continuing to advertise the position 46.67%, re-advertising had the lowest success rate at just 33.73%, hiring less qualified staff 39.47% while training of existing staff had the highest success rate at 76.52%.

Meanwhile the least popular strategy, skilled migration, had one of the higher success rates at 61.76%, outsourcing work, towards the

bottom of the list in terms of popularity had the second highest success rate of 62.07%. Training of existing staff had the highest success rate at 76.00%.

Other strategies listed by respondents in free-text responses included, job-sharing, radio advertisement, word of mouth, networking, mentoring, mail outs, social media and using recruitment agencies.

Respondents who trained existing staff were often hindered by the lack of formal qualifications available locally or were concerned about the time and cost investment required for training their own staff.



**Figure 28 Success Rate of Recruitment Methods Versus Popularity of the Method**

This comparison produces four categories of recruitment methods, low success rate and low popularity, low success rate and high popularity, high success rate and low popularity and high success rate and high popularity. Methods with a low success rate but high popularity were continuing with the current methods, re-advertising the position and hiring less qualified staff. Those with a high success rate but low popularity were skilled migration and outsourcing work, while training of existing staff and new recruitment methods were both popular and successful.



Table 16 Proportion of Respondents Who Had Attempted to or Succeeded in Filling Vacancies Using Various Recruitment Methods

Strategy	Attempted (%)	Successful (%)
Training of existing staff	60.00 (± 7.50)	76.00 (± 6.54)
Outsourcing work	46.40 (± 7.63)	62.07 (± 7.43)
Skilled migration	28.10 (± 6.88)	61.76 (± 7.44)
New recruitment methods	76.52 (± 6.49)	61.39 (± 7.45)
Restructuring your business	41.94 (± 7.55)	51.92 (± 7.65)
Remote workers	28.93 (± 6.94)	48.57 (± 7.65)
Continued with current method	72.58 (± 6.83)	46.67 (± 7.64)
Offering benefits	51.64 (± 7.65)	46.03 (± 7.63)
Hiring less qualified staff	61.29 (± 7.45)	39.47 (± 7.49)
Offering higher salaries or wages	49.59 (± 7.65)	35.00 (± 7.30)
Re-advertising the position	65.87 (± 7.26)	33.73 (± 7.24)

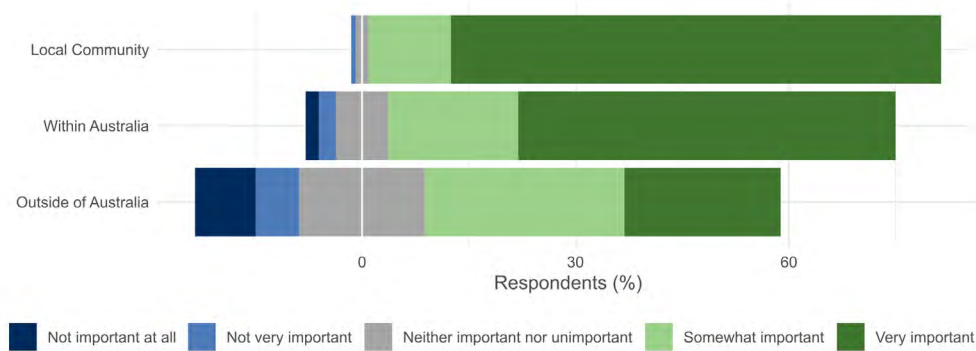


Figure 29 Importance of Local, Australian and Overseas Workers to Fill Vacancies

Respondents were asked to rate how important it was to develop skills in from their local community to fill vacancies, to attract people from outside their community but within Australia to fill local vacancies and to attract people from outside of Australia to fill local vacancies. Respondents generally preferred to employ from within their local communities. Bars further to the right of the zero show more positive sentiment while bars to the left of the zero show more negative sentiment.

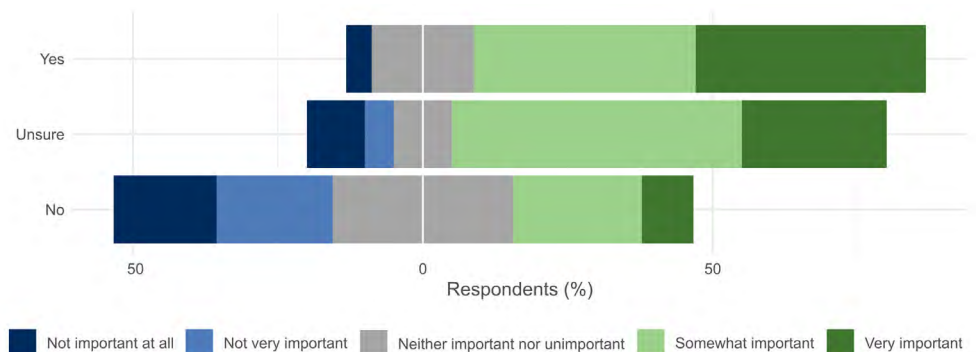


Figure 30 Breakdown of Importance of Overseas Workers by Respondents Experience with Skilled Migration

Respondents who had utilised skilled migration in the past were much more likely to rate it as important than those who had not.

## Communities

Respondents were asked how important they felt it was to develop skills in people from within their local community to fill vacancies, to attract people from outside of their community but within Australia to fill vacancies, and to attract people from outside of Australia to fill vacancies. There was a strong desire to fill vacancies with local people before recruiting externally. Employers were more reluctant to look overseas for employees (Figure 29).

Much of the sentiment towards filling vacancies from overseas may be associated with employers having previous experience with skilled migration (Figure 30). Those who had used skilled migration in the past were more likely to find it important than those who had not. 50.75% of respondents had used skilled migration in the past, 34.33% had not, while 14.93% were unsure if they had or not.

### Local Communities

The majority of respondents felt it was important to develop skills in people from within their local communities to fill vacancies as they felt that locals were more likely to stay in the position. Respondents also felt strongly that employing locals was supporting the local communities, however, they did express concerns about the availability of training options regionally (Figure 31).

### Within Australia

Respondents were asked if they felt it was important to attract people from outside of their local community but within in Australia to fill local vacancies. Most respondents felt that this was somewhat or very important. Compared to employing locals, there was a larger number of respondents who felt that it was neither important nor unimportant as well as respondents who felt it was not very or not at all important. Free text responses indicated that this sentiment was due to the desire to employ and support locals. Where it was considered important, respondents felt that if skills were not currently available locally, they would need to employ externally. They also felt that new people would bring new ideas, skills and experience to town. Attracting and retaining skilled workers to regional areas however was a significant issue, as was the cost investment required for training their own staff.



**Figure 31 Sentiments Regarding Employing Locally**

Respondents were asked to provide further information on how they ranked the importance of developing skills in people within their local community to fill local vacancies. Most respondents felt that employing locals better supported the community and that they were more likely to stay in the position.



**Figure 32 Sentiments Regarding Employing from Within Australia**

Respondents were asked to provide further information on how they ranked the importance of employing from within Australia. Respondents reported concerns about retention of people from metropolitan areas as well as welcoming new ideas and talent.

### Outside Australia

Respondents were asked how important they felt skilled migration was to filling local vacancies. A larger proportion of respondents were ambivalent or felt that it was not very or not at all important (39.26%) in comparison to local workers and workers from within Australia. Reasons for this sentiment included concerns about whether or not their education and training met Australian standards, a preference for engaging and supporting local communities and misconceptions that Australians would be overlooked in favour of the skilled migration process.

For those that felt it was somewhat or very important, the primary reason was that they had been unsuccessful in filling the role through any other means and that the business or organisation relied on this skill. Respondents also felt that skilled overseas workers could bring new ideas, skills and experiences to regional communities (Figure 33).



**Figure 33 Sentiments Regarding Employing from Outside Australia**

Respondents were asked to provide further information on how they ranked the importance of employing from outside of Australia. Respondents felt that employing locals was the priority but where skills shortage where an issue, skilled migration could be of benefit.



## Soft Skills

79% of respondents reported that soft skills were always or often important when hiring new staff. The remaining 21% felt that soft skills were sometimes, rarely, or never important (Table 17).

The soft skills most reported as important were communication, team-work, people skills and time management. Other soft skills reported as important by respondents included initiative, work ethic, motivation, reliability, responsibility and honesty. Some respondents reported technical or job specific skills such as client management, project management, mental health first aid and counselling, and customer service.

41% of respondents reported that communication was important and difficult to find in potential employees while 37% reported that the skill was important but not difficult to find in a potential employee. 41% of respondents felt that time management was important but not difficult to find, 50% felt that team-work was important but not difficult to find (Table 18). Soft skills that were most reported as difficult to find in a potential employee were communication followed by people skills, time management and problem solving (Figure 34).

**Table 17 Importance of Soft Skills When Hiring New Staff**

Importance	Percent of Respondents (%)
<b>Always important</b>	54.67
<b>Often important</b>	24.00
<b>Sometimes important</b>	15.33
<b>Rarely important</b>	4.00
<b>Never important</b>	2.00

## Future

Respondents were asked how likely it was that their business' or organisation's skills requirements would change in the next five years. 38.81% of respondents reported that it was highly likely their skills needs would change, a further 35.07% reported that it was somewhat likely, 17.91% felt it was unlikely, 2.99% felt it was highly unlikely and 2.24% were unsure (Figure 35).

Medium and large businesses were more likely to report that their skills needs were somewhat or highly likely to change in the next five years than small businesses.

### Skills and Occupations

Respondents were asked what skills they would need more of in the future. The most common skills required in the next five years by ANZSCO sub major group were ICT Professionals, followed by Design, Engineering and Science Professionals, Business, Human Resource and Marketing Professionals, Automotive and Engineering Trades Workers and Specialist Managers. More specific job titles are shown in Table 19 (responses with a samples size < 3 were excluded).

### Soft Skills

Respondents were asked what soft skills they would need more of in five years. The most reported skills were communication, people skills, team-work, problem solving and time management. While the order has changed, these are the same top five skills reported as currently needed (Figure 38). Most respondents felt that there were no soft skills that they would need less of in the future.





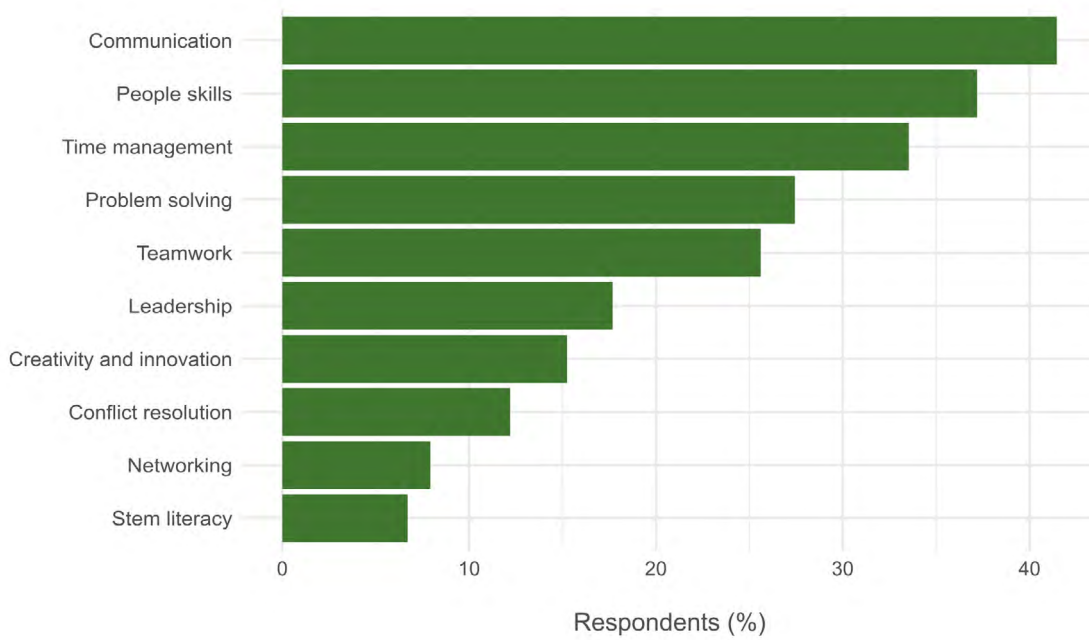
Table 18 Importance of and Difficulty Finding Soft Skills

Skill	Important (%)	Difficult to find (%)	Important AND Difficult to Find (%)	Important but not Difficult to Find (%)
Communication	78.66	42.68	41.46	37.20
Time management	74.40	34.76	33.54	40.85
Team-work	75.61	26.22	25.61	50.00
People skills	75.00	39.02	37.20	37.80
Problem solving	64.02	30.49	27.44	36.59
Stem literacy	15.24	8.54	6.71	8.54
Leadership	30.49	22.56	17.68	12.80
Networking	25.61	9.15	7.93	17.68
Conflict resolution	29.88	14.63	12.20	17.68
Creativity and innovation	40.85	18.90	15.24	25.61

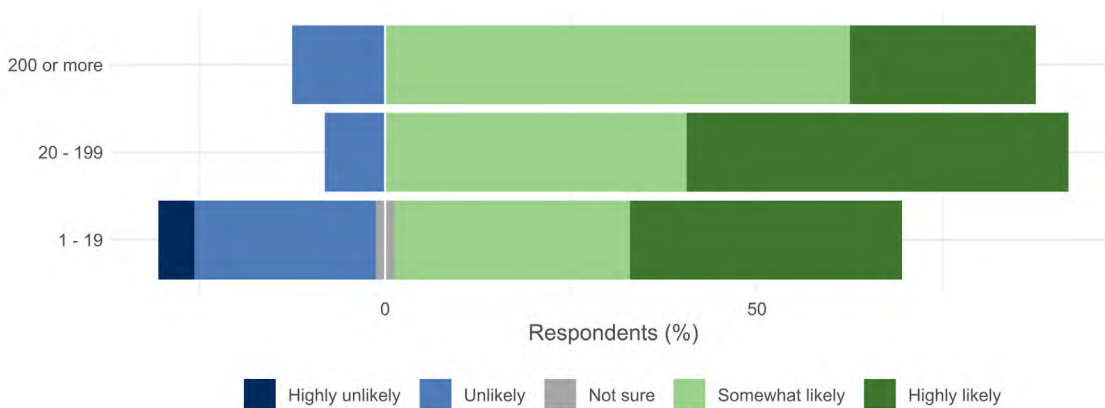
Table 19 Occupations Likely to be Required in the Next Five Years

Job	Percent of Respondents (%)
IT Professionals	11.50
Managers	7.96
Marketing (especially digital and social media)	7.96
Engineers	4.42
Automotive Technicians (including diesel)	3.54
Trades	3.54
Welders	3.54
Automation Technicians	2.65
Chefs	2.65
Farm Hands	2.65
Fitters and Turners	2.65
Front of House	2.65
Website Designers	2.65

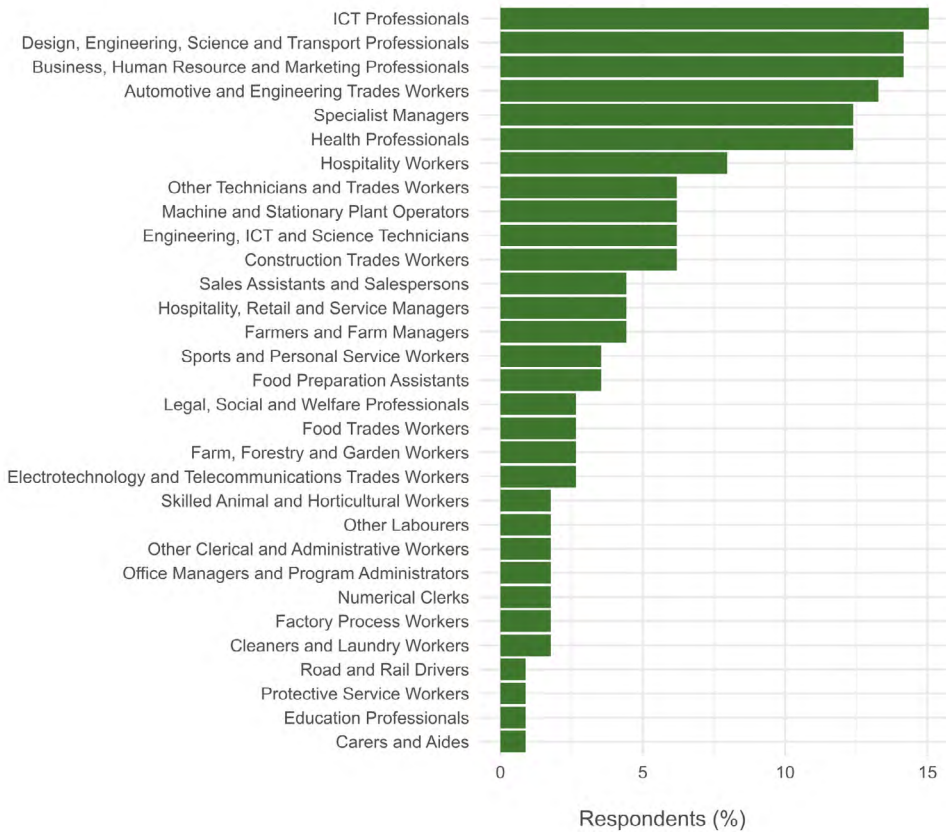




**Figure 34 Soft Skills Reported to be Both Important and Difficult to Find**  
 The skill that the most respondents reported as important and difficult to find was communication, followed by people skills and time management.

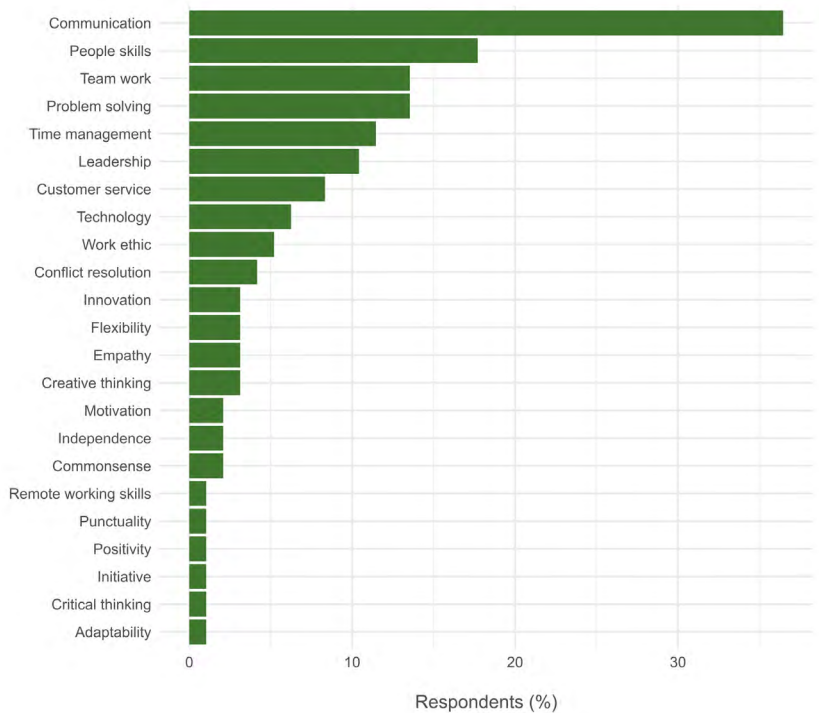


**Figure 35 Likelihood That Skills Needs Would Change in the Next Five Years by Business Size**  
 Larger businesses were more likely to report that their skills needs were somewhat or highly likely to change than smaller businesses.



**Figure 36 Occupations Required in the Next Five Years**

ICT professionals were the most commonly reported occupation required in the next five years, followed by Design, Engineering, Science and Transport professionals, and Business, Human Resources and Marketing Professionals.



**Figure 38 Soft Skills Required in the Future**

Respondents felt that the importance of soft skills would not change over the next five years and the soft skills that would be needed most would not change much. The top five soft skills needed in the next five years are the same as those needed now.



**Figure 37 Job Descriptions of Occupations Required in the Next Five Years**

*IT professionals were the most commonly described job that would be needed in the next five years, followed by managers and marketing.*

# Focus Groups and Interviews



## Participants

Interviews and focus groups were audio recorded and transcribed. Transcripts were analysed and coded utilising NVivo qualitative analysis software. The coding frame for analysis drew on the findings of the survey data and the key research themes but was also flexible enough to incorporate the themes and issues that emerged from the discussions with participants.

**Emerging from the analysis, three key elements have been drawn out for this report:**

- **Challenges**
- **Solutions and strategies**
- **Opportunities**

**These are explored in the following sections of the report.**

## Challenges

The focus group and interview participants identified a range of challenges that employers within the Riverina face in attracting and retaining skilled workers into the region. These included the broader perceptions of regional labour markets and regional culture, the strategic approach adopted by many businesses and industries, including a lack of innovation in many industry sectors, regional access to training opportunities and training pathways that incorporate future skill needs. These broader challenges were also exacerbated by recent complications and events such as the 2019/20 bushfires and the 2020 COVID19 pandemic.

As well as the identification of more general challenges, participants also identified a range of specific challenges in recruiting to particular roles or occupations within industries. There appeared to be some variation between industries and even across particular locations, however most participants identified significant challenges in recruiting higher skilled occupations such as managers, professionals and skilled trades' workers. There were fewer challenges in recruiting within the region to lower skilled occupations, although participants in the Griffith region identified difficulties in recruiting farm labourers and there were some organisations that noted difficulties in recruiting plant and machinery operators and drivers.

Each of these challenges is explored in more detail in this section.



Table 20 Summary of Key Features of Focus Group and Interview Participants

Interview /FG number	Industry	Occupation	Gender
OB_RDA_FG_1	<b>Agriculture</b>	Operations Manager	M
OB_RDA_FG_1	<b>Disability Services</b>	HR manager	F
OB_RDA_FG_1	<b>Horticulture</b>	General Manager	M
OB_RDA_FG_2	<b>Agriculture</b>	HR manager	F
OB_RDA_FG_2	<b>Agricultural equipment sales and service</b>	CEO	F
OB_RDA_FG_2	<b>Manufacturing/Services to Agriculture</b>	Managing Director	M
OB_RDA_FG_2	<b>Local Government</b>	Manager Economic Development	M
OB_RDA_FG_2	<b>Agriculture (water services)</b>	HR manager	M
OB_RDA_Int_1	<b>Recruitment</b>	Immigration agent	M
OB_RDA_Int_2	<b>Transport</b>	Operations Manager	M
OB_RDA_Int_3	<b>Forestry/Timber processing (manufacturing)</b>	HR manager	F
OB_RDA_Int_4	<b>Local Government/tourism</b>	Manager	F
OB_RDA_Int_4	<b>Local Government/tourism</b>	Trainee	F
OB_RDA_Int_5	<b>Resources</b>	HR manager	M
OB_RDA_Int_6	<b>Manufacturing</b>	BEC/Consultant	M

### Perceptions of regional labour markets

Participants identified that a key challenge to attracting skilled workers to the region is the overall perception of regional labour markets and the types of jobs that can be found in regional locations throughout Australia. While it has been recognised that regional labour markets do tend to have a narrower range of industries and a narrower depth of occupation or skill level (Argent & Walmsley, 2008), and do tend to be more highly gender segregated with a higher average age (Alston, 2004; Alston & Kent, 2009), compared to metropolitan labour markets, these factors do not limit the potential of regional labour markets to provide successful, long-term careers.

Acknowledging that perceptions of regional labour markets may be based on outdated and misinformed stereotypes, it may however, be necessary to address these perceptions across the region as a whole in order to improve the recruitment of skilled workers from metropolitan and other external locations.

Participants identified that there are perceptions that work in regional Australia is low-skilled, itinerant, physically demanding, poorly paid, lacking in sound working conditions, employment security and an inclusive culture, lacking in skill development and long-term career paths.



A participant who has had a long-term career in local government, working to attract skilled workers to the region noted that media images of the area are often not flattering, stating:

“[W]e go through seasonal cycles out here, when it’s hot, it’s very hot, it’s very dry and the place it’s the wide brown country. And you get these sorts of images on metropolitan TV from time to time of either all these areas being under flood or being burnt and sheep dying and stuff like that. The imagery of regional, proper regional, we’ll call it outer region New South Wales is, is not as attractive as we all know it is, those of us that have lived here for longer periods of time.”

*Male, Manager, Local Government*

Similarly, a female manager from the horticulture sector felt that high profile media stories on wage theft or poor accommodation for fruit pickers was not representative of the industry as a whole, but damaged perceptions of all employers in the industry.

“I think also in agriculture that for our lowest skilled jobs in agriculture that, that the wage underpayments for a lot of the ... work is that we get in, really harms our reputation, particularly in horticulture. I don’t think that helps at all. Why would you want to come and work in agriculture in the country if you see those sorts of headlines?”

*Female, HR Manager, Agriculture*

While a male manager in the agriculture sector noted that it was challenging for the agricultural sector to compete with other industries on the basis of wages.

“Look it is and it’s mainly because, without being rude, you don’t – agriculture doesn’t pay very well on general versus other industries; so it’s a lot harder and people have to travel.... it’s probably not perceived as sexy until you get out there and find out it’s not really that bad, but [for] people that are not used to working in a farming environment that might be challenging

and confronting to them.”

*Male, Operations Manager, Agriculture*

Further participants identified the perception that work in regional Australia is low-skilled with limited opportunity for skills development or a long-term career. A local government manager noted the perception that the range of industries and occupations were limited:

“The range of industry and opportunity that we’ve got in the regional areas, couple that with the desire or trying to generate the desire for people who live in metro or suburban metro to actually make that, that quantum leap of faith to come to the country areas.”

*Male, Manager, Local Government*

While a manager from a manufacturing sector employer noting the need to overcome ‘the country bumpkin perception that’s out there’, further noted that:

“Often you can, you can talk them around once you get them here and show them what you’re about and what your company’s doing. And they realise, that hang on there is opportunity here and I can advance my career and we are doing great things out here.”

*Male, Managing Director, Manufacturing*

While a skilled recruitment officer noted that to attract skilled workers you needed to overcome perceptions of pay as well as perceptions about the regional community as a whole:

“There is different salary levels. There is different facilities, hospitals, roads but there is a lot of advantages as you well know in terms of travel to work - 5-10 minutes sometimes; lower cost of living; lower housing and everything”

*Male, Immigration Agent, Recruitment Industry*

### Perceptions of the culture in regional towns and cities

Participants also identified that in attracting skills to the region, a significant barrier was the perceptions of regional cities and towns and the culture of regional Australia. The participants noted that once they were able to get potential employees to the regions they could showcase the local communities and demonstrate that the region is welcoming and inclusive, but the challenge remained in overcoming the perceptions and stereotypes.

For some participants the issue was as simple as potential employees from metropolitan locations not even knowing the geography of the Riverina region, as noted by the CEO of an agricultural equipment sales and service company:

“We do have lots of problems if you get someone from the city, quite often you say, okay I’ll see you in Temora, can you imagine that people go, okay what bus gets me to Temora? And we look at them and go, you, you need to be able to drive. Do you know where it is? Even Wagga, Griffith all those places.”

*Female CEO Agricultural equipment sales and service*

The HR Manager of a forestry industry organisation went further, to identify the attitudes towards change in regional Australia as a barrier to recruitment:

“and, if I may say this as respectfully as possible, there’s a real mindset of regional communities that is – they struggle to, or are struggling to embrace new challenge with change, so just trying to connect that change is good, growth is good.”

*Female HR Manager, Forestry Industry*

The experience of a manufacturing industry consultant who had recently relocated to the Riverina from a metropolitan location reinforced this perception:

“I think maybe the metro areas are more advanced in that regard than we are here, simply because of the demographic that’s been here for so long. It’s very, very white male dominated work environment and as the

diversity arrives and it will continue to grow, we’re going to need to be able to embrace that and accommodate the cultural diversity as well as the – just the fact that people look different. But the cultural expectations and what’s offensive and what’s not, because I think the ‘I was here first mentality’, we’ve encountered that quite a lot in [regional centre] as we’ve – the small sort of adversarial encounters we’ve had, we’ve found that argument thrown back at us quite often, which is quite confronting because it’s a fairly retrograde attitude.”

*Male, Consultant, Manufacturing*

An HR Manager from the mining industry also noted that it was about managing the expectations of workers who were recruited from metropolitan locations:

“You know, the town you know, the [Shire name] in totality is about 6,500 people. So if you’re looking for a... you know, a 3 star Michelin restaurant and a nightclub you’re not going to find it at [small regional town].”

*Male, HR Manager, Mining*

### Business strategies

Participants noted that many regional industries adopt business strategies that are based on a low-skilled labour-intensive workforce and utilise a cost minimisation strategy to maximise profit rather than developing skills to improve innovation and productivity, in order to increase both profits and wage outcomes. An HR Manager from the timber industry noted that both external recruitment processes and internal training processes need to be aligned with the strategic directions of regional businesses:

“It’s important that what you do is in line with your strategy and your strategic plan. There’s no point training yourself up to be a high-end quality manufacturer if you’re just a – if you’re a pile it high, sell it cheap, output manufacturer.”

*Female, HR Manager, Timber Industry*



Changing regional business strategies to focus on skilled recruitment and internal skill development could support greater innovation. Promoting the Riverina region as a high-skill, innovation region would overcome significant barriers to recruitment and help to attract skilled workers, while also supporting the retention of younger workers within the region.

### Innovation

Participants noted that a significant barrier to attracting skilled workers to the Riverina region is the perception that many industries are stagnating and unable to adopt innovative approaches. A number of participants acknowledge that low staff turnover in the past, in combination with a reliance on low-skilled workers has resulted in a workforce that is holding them back and preventing innovation.

“And I’ve got the same problem, I’ve got people out in the field, they’ve been there for a long time, they know what they’re doing but they don’t seem to want to go any further or do any more than what they’re currently doing; so how do we get them to just spark that little bit more interest in the work they’re doing? And if we’re taking the businesses forward and growing the business they have to change with it and at the moment that’s holding us back because we don’t have alternatives, we don’t have an influx of people, we can’t just go up to the shelf and grab another person off the shelf and put them in there because they’re a little bit better; what we have is what we have and what we should be doing is helping them go forward.”

*Female, HR Manager, Timber Industry*

To position the Riverina as a high-skill, innovation region in a range of industries, employers need to explore the potential for upskilling and better utilising the existing workforce as well as attracting high skilled workers and retaining potentially skilled workers from the emerging generation.

### Regional training opportunities

A lack of regional training opportunities was identified as one of the key reasons why the Riverina region may be losing the next generation of skilled workers and also why employers may be unable to upskill or recognise the skills of their existing workforce or even attract career-focused skilled employees. The challenges for young people to find training opportunities in regional centres have been well documented for many years (Human Rights and Equal Opportunity Commission, 2000; Downes and Fuqua, 2018, Halsey, 2018). A local government tourism manager identified that this was a particular issue in the smaller regional towns within the Riverina, and that even those who are able to gain skills locally often find they need to leave the region to find entry level employment related to their training:

“A lot of our younger, our younger employment have to go out of town to get jobs especially we are sort of lucky in Cootamundra we have the TAFE campus there, so that sort of keeps a few of our younger generation in Cootamundra for a little bit longer instead of going to either Wagga or Canberra or somewhere to go to do extra training or schooling I guess you could say. So that sort of keeps them a little bit longer but as soon as they’re qualified, a lot of people do leave, leave the community just based on the fact that they don’t have the jobs available in the community.”

*Female, Manager, Local Government*

The HR Manager of a Disability Services Organisation identified that it was challenging for her to access basic short courses needed in the workforce:

“I guess it comes back to ... the accessibility of training and how easy it is to access staff and [I’ve been trying to contact] an RTO out here since I’ve been here and it was just – I was just trying to sign up some people for first aid and it was just a nightmare ... And I even spoke with an organisation in Albury actually the other day and they said they’re having the same issues with training organisations; they come out to



you and say we've got this free course and then there's inconsistent communication and it's really confusing for us and for the staff. And I think... in the metro areas... there is a lot more access into those training opportunities."

*Female, HR Manager, Disability Services*

Other participants identified that they would like to work with local training and education facilities to improve the credentials of their workers and develop improved certification processes, however these options were not currently available:

"Probably something we'd be looking for is how can we review what training resourcing is out there to support the businesses. Is there training that we can actually be supported by/ accompanied by the unis like Charles Sturt or other training facilities and organisations that could be even applied and get the right combination of training between online, between supportive modules/broken down modules through to more advanced specific courses. Have we got the balance right for the type of people in our industries?"

*Male, Managing Director, Agriculture*

One of the most significant challenges identified by participants is pre-empting future training needs and working with bureaucratic structures to develop needed training when the apparent demand is limited. A manufacturing consultant noted that the need for training was present in the region but had not yet been recognised by training providers:

"I've become involved in] a project to bring online a course in process manufacturing and competitive skills. So process manufacturing is... how you operate a production line and all the things around that like safety and quality, using the equipment, writing procedures, following procedures, that sort of thing... What was surprising to me is that there were no students, there were no courses offered at the moment through TAFE... The problem is that

they don't have any material to deliver either. And the way that TAFE's structured, they can't take on any teachers until there's students to have revenue streams projected. But they can't have students until there's a teacher in a course. So, they're stuck in this crazy feedback loop".

*Male, Consultant, Manufacturing*

Particular skill needs that are not currently addressed by regional training facilities were identified by participants and included improved logistics training, practical aspects of long-haul driving, underground mining skills, mechatronics – including automation and artificial intelligence skills and process manufacturing. Other participants noted that improved processes for recognising and certifying workforce skills continue to be needed, in conjunction with basic literacy and numeracy skills for older workers.

Addressing the broad range of training issues across the region, would help to overcome existing skill shortages and would also work to increase attraction of skilled workers as well as retention of the next generation of skilled workers.

### **Bushfires, COVID19 and Climate Change**

While the individual events of bushfires, COVID and climate change had not necessarily created new skills gaps or particular shortages, many participants acknowledged that the combination of these factors had exacerbated the issues and created overall problems for their business strategy.

"We're in a manufacturing sector and the downward pressure on price is significant because of the global market. The moment coronavirus hit, one of our biggest customers literally said, no worries, export, come on in. And they bought in hundreds of thousands of cubes of timber, and so that just – the flow on effects to us is huge on the back of bushfires, it's just... it's significant."

*Female HR Manager, Timber industry*



For others, COVID actually increased demand and led to a boom within particular industries. The Operations Manager of a transport and logistics organisation identified that COVID had stimulated demand:

“The 3PL [Third Party Logistics] space has absolutely boomed during this, obviously COVID, with people requiring – they just realised that you can’t – that Just in Time mentality isn’t going to work when there’s delays with shipping lines or there’s manufacturing issues in other countries. So, it’s really helped us there.”

*Male, Operations Manager, Transport and Logistics*

In the health sector, there was a perception that COVID might support or encourage migration to regional areas, however this had not translated to an improvement within the past twelve months:

“[F]or allied health, we’ve found that really difficult. We thought with COVID maybe things might have improved, but we’ve found that allied health is still really struggling to get people here and yeah, same as you, we get some people that come out here for six months or twelve months and then don’t really want to stick around in the Riverina.”

*Male, Immigration Agent, Recruitment Industry*

However, other participants noted that immigration was an important element in attracting skills to the region, and contributed strongly to regional economic growth. In the light of the pandemic they were concerned that skilled migration to the region had been interrupted and would have a long-term impact on the region.

“I have to temper my comments with the current [COVID] dilemma we all find ourselves in, and what the future might hold with, with migrants. But as a general principle I have always been strongly supportive of the initiatives to get skilled migrants. The feedback that I received in my time of being actively involved in that role over 10 years was always extremely positive.”

## Solutions and strategies

The second key element arising from the findings is in relation to solutions and strategies. While participants identified a number of key challenges for the Riverina region they also had a range of suggestions for addressing the problems and these included a broad range of strategies for the region as a whole, for industries, employers, training providers and local, state and federal government agencies.

The strategies included a three-pronged approach directed at:

1. Attracting skilled workers
2. Better utilising the existing and future regional workforce
3. Improving the retention of skilled workers within the region.

### Strategies for attracting skilled workers

Strategies for attracting skilled workers included the need to recruit from metropolitan and other regions of Australia, as well as international skilled migration. Participants identified a range of ways in which the poor perceptions of the regions could be addressed to improve the attractiveness of all industries, including poor perceptions of the culture within regions, of particular industries within the regions and of particular jobs in the region. A key strategy was to focus on promoting the region as an innovative location where many industries were moving from cost-minimising strategies dependent on low-skilled jobs, to a high productivity strategies based on new technologies and skilled workers who were able to develop cutting edge and responsive approaches to adapt to challenging factors such as climate change, bushfires and the COVID19 pandemic.

### Improving perceptions of regional industries/jobs

A manager from a Local Government Authority noted that it was important to address the overall perception of regional communities, and to promote a more positive perception of the region. He recognised that there was already excellent work being undertaken by the RDA to address this issue:

“So it’s as much about - and this is what the Country Change program, excellent program ... is about - to pretty much convince the

people that not only that there are jobs here, and in skilled areas, but there's a, a lifestyle that complements that job level... So you've got to try and match the, in my view, the availability of the skills, the availability of the jobs, with a lifestyle that they can fully enjoy not losing downtime, having to commute and sustain yourself in a suburban city environment."

*Male, Manager, Local Government*

The same local government manager highlighted that when addressing perceptions it may be necessary to take a long-term approach by ensuring that the positive messages about regions are communicated to young people in schools and educational institutions to make significant change.

Particular industries also identified that they need to address the perceptions of jobs within their sector. For example, the HR Manager from the mining sector noted that young people have a perception of mining as having poor environmental credentials, and the industry as a whole has been working to address these perceptions at the high school and graduate level for a number of years now. All participants identified that it was important to address workers' perceptions of the community and the region during the recruitment process:

"[To] find the right person you need the right recruiting. They need to be interviewed from obviously skill level, but also a community level and partner and the family what do they do and are they school age? ... So yeah you really have to look – there are many factors – not just purely on a skill."

*Male, Immigration Agent, Recruitment Industry*

However, a more strategic approach to promoting regional industries and jobs could improve the pool of talent from which they are able to recruit. Other factors that could improve the perceptions of regional jobs would be to address issues of job security, working conditions and pay. These issues are explored in the section titled 'Generating long-term careers by creating high-skilled, multi-skilled regional jobs and addressing wages, conditions and job security', below.

### **Focusing on innovation and skills for change/improving productivity**

Promoting the Riverina region as a high-skill, technology and innovation driven region represents an important strategy for building up the attractiveness of the regions. Almost all of the participants were able to identify both how they were becoming more innovative and how they needed skilled workers to help drive and implement future innovation. The general manager of a horticultural organisation noted:

"The Australian apple industry is going through a bit of a revolution, it's rationalising its packing area, it's changing its product base, it's moving more and more to an intellectually based product, so all of the new apple varieties that are now out there tend to be owned by particular corporate groups. The corporatisation of the industry itself brings with it a whole raft of specialist jobs

*Male, General Manager, Horticulture*

Within the agricultural services, one HR manager noted that technology to address climate change was going to be crucial to the sector:

"In irrigation there's a lot more focus on the use of renewable energy and the – we will need more electricians. And electricians who have got more of – are good with computers and IT. And both those skillsets I would, I find it impossible to get anyone with IT, apart from getting a software engineer which is, is not what we need. Just the lower level experts in IT, I think that will be a major skill shortage, short from offering huge salaries, I don't know how I will attract them off the east or south coast."

*Male, HR Manager, Agricultural Services*



Similarly, a transport industry operations manager highlighted that innovation in the sector means that there will be a need to recruit a broader range of skills than simply driving skills:

“There’s digital transformation at the moment is, yeah, it’s sort of front of mind of our minds, as far as the business is concerned, a project that we’re currently undertaking is in that digital transformation space and we’re starting to have a look at their, look at what’s available in that IT space – business, analytics, there is so much that’s happening in our industry, it’s very – it’s a broad, really broad skillset, and a lot of opportunities for school leavers, it’s not just about being a truck driver”

*Male, Operations Manager, Transport*

A timber industry HR Manager also emphasised the importance of automation in the sector:

“We are all about automation right now ... So it’s all about automation right now, and so it’s the computerised skills ... but upskilling our current is really challenging, but the automation that comes with that, it is all the computer race, the programming. Even our electricians, the folks who do the trades, we require them to do a deeper level of programming that their trade provides, but they’re not a full-blown IT person, so it’s this sort of in-between capability... [Future needs are all] in computers programming concepts in our majority workforce, even our finance team members need to get into more automation. We have just hired a systems accountant to help automate reports and things like that, and so it’s all about automation...”

*Female, HR Manager, Timber Industry.*

Even those involved in more traditional farming endeavours noted that technology was allowing them to capture more data, but that they needed skilled analysts to make better use of the data available:

“We’re looking at, we’ve hired a couple of data scientists because we’ve got so much data asset related data that we actually need that, that skill to actually decipher the amount of information and actually base our business decisions on, on that, on those, on the data analysis side of things.”

*Female, HR manager, Agriculture*

To support these processes, an innovation strategy that builds on industry clusters and supports the development of a skills ecosystem may be integrated into any future strategies to address skills shortages. A manufacturing consultant highlighted that significant development in developing innovative industry clusters is already underway within the region:

“[The] Activation Precinct if you’re aware of it, it’s happening here at the moment. So they’re attracting skilled those companies, innovative companies and that will attract skilled, people with technical skills to the regions.”

*Male, Consultant, Manufacturing*

### **Generating long-term careers by creating high-skilled and multi-skilled regional jobs and addressing wages, conditions and job security**

A number of participants highlighted the need to communicate to potential skilled workers that not all jobs in regional areas are temporary or seasonal, nor are they poorly paid with poor employment conditions. By addressing wages, conditions and job security, they are more likely to attract workers who are seeking long-term careers and an inclusive, supportive community. This may require some change in business strategy by employers in some regional industries.

Other industries may choose to emphasise the innovation within their industry that is driving the demand for higher skilled workers. The mining sector has recently reconsidered their approach to recruitment and whether to rely on locally embedded workers or fly-in, fly-out workers. The HR manager of a mining sector employer noted that there was a need to utilise a range of strategies:

“So we do prefer our people to live locally and that is something that still remains [a challenge], we try to get a [75/25] mix of people who live locally versus who drive-in-drive-out or fly-in-fly-out”

*Male, HR Manager, Mining*

The lessons learned by the mining industry, which have led them back to a more integrated local workforce, may be of interest to other industries that have built up a reliance on seasonal or transitory workforces. Within the agriculture sector, it may be possible to improve attraction to the industry by addressing job security, wages and employment conditions of seasonal workers. By up-skilling or multi-skilling workers to take on a range of roles throughout the year employers may be able to reduce the reliance on seasonal workers for a single task such as fruit picking. The general manager of a horticultural organisation noted the range of skills that his workers needed:

The corporatisation of the industry itself brings with it a whole raft of specialist jobs, you know the apple industry isn't a picker and a packer anymore; it involves export, it involves compliance, you've got health and safety, you've got HR; all of those skills are becoming a greater and greater demand within the industry as we move away from Dad and Dave style orcharding into the more corporate style.

*Male, General Manager, Horticulture*

He went on to identify the need for workers who have skills in pruning, irrigation, netting, pest control and quality control, and the need for certification and credentialing processes to support skill development and a long-term career approach to working within the industry.

Others in the agriculture sector have also tried innovative approaches with similar industries in different regions to share skilled workers across peak times:

“We just, we also tried to partner with either other countries or other parts of Australia where they had a downtime in their industry with mechanics and welders. So we offered that you can bring – we'd pay for particular staff members of theirs to come over and

work for us in our really busy times and then we promised we would send people back. So basically offering a vacation so when Perth was in drought we were bringing them over and we'd give them somewhere to stay and we'd be able to charge them out. And we'd pay for them to come over and back but we found was, we weren't holding up our part of the bargain because we were so busy, we couldn't send people back. So we even tried that with America, when they're in snow, we had a few from Europe that they had to have a year's worth of experience overseas.”

*Female, HR Manager, Agriculture*

These strategies can be used to attract a higher calibre of skilled workers to the industry, but may also contribute to the long-term retention of skilled workers within the region, as will be discussed in the section on retaining skilled workers below.

### Strategies for better utilisation of existing/future regional labour market

A range of strategies were identified by the participants for better utilising the existing regional labour force. In particular, participants identified the need to keep young people within the region, to better utilise the skills within the workforce by drawing more locals into the workforce, including reducing gender segregation of industries and utilising women returning to the workforce after having children. Other participants emphasised the importance of recognising the skills of the existing workforce, improving their skills and providing better credentials for their skills. While skilled migration is an important element of attraction, a number of participants also identified a number of recent migrants to the region had skills that were not recognised formally and these could be better utilised.

### Improving youth retention/reducing youth outmigration

Retention of young people in regional labour markets has been a long-term issue, and has been documented for many years (Alston, 2004; Alston & Kent, 2009; Argent & Walmsley, 2008; Bamberly, 2017a; Bamberly 2018; Corbett, 2007; Cuervo & Wyn, 2012). A trainee in the local government sector highlighted



how her friends had left the region in order to seek training and educational opportunities, with many young people in smaller towns attending high school in regional centres in order to complete their compulsory education.

“Well there’s two- ... like big sized coaches, two buses leave every day taking two loads of students from Gundagai to Wagga to school. And even a lot of kids have been choosing ... Wagga ... over Gundagai as well if they’re in Gundagai because our, like I know our high school doesn’t offer a lot in the year 11 and 12 years because you’re very limited ... so when you go to those bigger schools, again you have more opportunities so yeah.”

*Female, trainee, local government*

The trainee also highlighted the factors that made it more likely for young people to stay in regional locations:

“My family’s here- I still live at home at the moment. My boyfriend he’s here as well, he works here and I don’t know, he doesn’t really plan on really going anywhere because his family’s here so it’s kind of the whole family keeping the family here and we do have a very close family so kind of keeping everyone together is a thing that’s always happened so yeah.”

*Female, trainee, local government*

This is supported by research in a range of other regions including North West Tasmania and Central and Northern Victoria (Bamerry 2017a) which found that young people who are more embedded within their community are more likely to stay in regional locations. While many young people who stay in regional areas lack the resources to leave, it is important to create opportunities within regions that provide young people with greater opportunities and skill-based reasons to stay. Improving the credentialing and career structures of regional jobs may create better incentives for young people to stay within the region.

Many of the participants identified that they were looking at ways to build young people from the local region into their workforces. The General Manager of a Horticultural employer noted that the organisation was exploring how they could improve succession planning and career pathways:

“[We need] succession planning but also career pathways. We all want to have the young intelligent driven passionate people coming into our industry to make things better for the industry itself and we have to have a mechanism to make that happen. We’ve got a very aged demographic within our industry and we need to keep the younger succession growers coming along. We formed a group, we call it the [GG] Group but you have to be – we’re age discriminate, you’re not allowed to be in the old age group... we want the younger passionate people because they understand what changes are required and they’re willing to take on the risk and make things happen. But they’re an intelligent group of people that there’s again, no qualification for them and that’s the thing that from a career path you won’t attract those people unless there’s something in it for them.”

*Male, General Manager, Horticulture*

However, he also highlighted that without strong qualifications and credentials and a career pathway it is difficult to encourage young people to stay in the region.

Others noted that there were significant problems with an education system that values university qualifications over trade qualifications. As a result there have been significant changes in the way that trades are valued and the types of students who undertake trades training.

“I do believe over the last let’s go back 20 years, the value of a trade has fallen in the perception of young people, teachers, career advisors all that sort of good stuff, 20 years ago people that took on trades would very intelligent they ended up running businesses, they were very successful people and all that sort of stuff. What we’re seeing now and is, the mainly the people that are taking up trades are those that are dropping out of school. So the calibre of the student taking up the trades is decreasing every single year. I think we really need to promote and the solution is promote that if you do take

on a trade you have an opportunity to be a business manager, in the near future and be a very successful business manager.”

*Male, Managing Director, Services to Agriculture*

Participants suggested that in order to keep more young people in the regions we need to value trades skills more and ensure that trades are not seen as a job of last resort for those with no other option. It is important to recognise that these skills will be important for improving innovation and economic development within the regions.

#### **Addressing gender segregation of the labour market/ industries**

Research has shown that addressing gender inequality at a regional level has the potential to improve labour market productivity and support regional growth (Bamberry, 2017b; Bose 2015). Simply incorporating more women of child bearing age into the labour force has acted to significantly reduce the average age within ageing regional work forces. This strategy could better utilise the skills that are embedded in regional communities. Industries with poor female representation could target women returning to the workforce for skills upgrades and recognition of prior learning.

Many participants highlighted that creating gender and culturally inclusive workplaces was a significant part of their business strategy. It may be necessary to recognise these changes and promote these values in regional workplaces beyond the regional workforce.

“When I, when I came and took over this position here it was 5 years ago, it was very much a company full of white males, Australian, like to drink beer. The Australian, the typical Australian camaraderie, we needed to expand and we have with 3 times the size of what we were back then. To expand we’ve had to change our mindset, and so the big one that I pushed forward is this inclusiveness. So if you don’t have an open mind and you’re not willing to accept the different cultures that are coming through the door you’re stuck in your ways, you don’t belong here. So we hire on talent, we hire on effort, we hire on all that sort of good

stuff and the core values of the company. But out of everything that was said, we’ve also, we’ve recognised that we’ve had to change; we weren’t going to survive with just the culture that we had. And so we opened it up, we have cultural days, cultural lunches and all that sort of stuff. But you have to be inclusive, and that stretches from not only gender, [to age, nationality or ethnicity], you name it, I’m very proud to say that we’d put on a welder that’s actually changed gender in the last 3 years. You ever think of doing that 20 years ago? So it’s a – we’ve just to create an inclusive environment for all of our workers.”

*Male, Managing Director, Services to Agriculture*

Similarly, the HR manager of a mining sector employer noted that a significant barrier to growing his workforce and creating a more inclusive workplace was the lack of childcare facilities within the local township:

“[We know], there is part of the population in our surrounding communities that would be willing to work here just unable to because of childcare and that’s clearly an impediment. ... when we talk to the local childcare providers, they say well, there’s actually a shortage of childcare [workers]. So even if we did open up more slots ..., we actually don’t have the people trained at the moment to run those facilities.”

*Male, HR Manager, Mining*

An HR Manager from an agricultural machinery supplier also noted that they needed to address the homogeneity of their workforce by attracting a more diverse workforce:

“But that means, at the moment if you look at our workforce they’re 20 to 40 year old boy, men and that’s why we’re thinking we need to spread our net or be able to explain somehow to a lot of different other groups, that hey there’s a job here for you, it’s a great job, it’s a great life....”

*Female, HR Manager, Agriculture*



Recent research on women in the skilled trades in regional New South Wales (Bridges et al, 2019) has explored the persistent barriers to women's recruitment and retention and has investigated how women can pursue successful, meaningful careers in the trades in regional locations. The report found that improving women's participation in these occupations produced a range of positive outcomes for industry including:

- Diversifying the regional workforce increases business profitability.
- Workplace cultures that promote and strive for diversity (based on gender and ethnicity) have greater social cohesion, less conflict and embrace change more readily. This affects both women and men positively and creates a feeling of safety for all workers.
- Employing women in trade roles resulted in all trades workers embracing safer work practices, improving workplace health and safety outcomes for all.
- Encouraging the employment of mature age women who have been found to be successful, resilient and able to manage challenging industry culture improved the age-structure of the workforce and created a more flexible and responsive workforce.

Promoting gender and culturally inclusive workplaces within the Riverina region would address the dual strategies of better utilising local skills and attracting more skilled workers from outside the region.

#### **Upskilling, training and development of existing low-skilled workers, soft skills and management skills**

A number of participants highlighted that they could also make better use of the local workforce by recognising their skills and utilising more of the soft skills within the community:

"So how do we get more and more people, local people engaged, recognising prior learning as well as have an opportunity for them to learn and to grow in particular areas within the business... it's not just learning how to pack, most of our people require tractor experience, they have to have equipment and machinery experience when they're doing it or tree husbandry or quality

control or HR; you know, you're dealing with quite large numbers of people and very short periods of time and you need to have good HR skills to be able to do that. How do we get locals into that position? And that happens I think in every aspect of most businesses in that agricultural and horticultural area."

*Male, Managing Director, Services to Agriculture*

Others also highlighted the importance of improving the credentials of the existing workforce, by working with training providers to develop certificates at Australian Qualifications Framework (AQF) levels one and two to recognise and certify existing skills within the region and build these into career structures for a broader range of occupations:

"if you train them you need a national qualification to back that training and that means micro credentials; there's a lot of people out there and especially in the agriculture and the horticulture industry where they don't come straight out of university or out of higher level of education and then they're ready to go; you have to grow them into the business and to grow them into the business having levels of micro credentials – I mean ...we should have certificates starting from level one available to be done from every part of the business and say look, we recognise this person's got a great skill, do this course, we'll help you do it, we'll mentor you through it, we'll go through that, you go to university online and you register and you do all the things and then you get a national qualification once it's all been signed off."

*Male, General Manager, Horticulture*

Others were keen to partner with universities and registered training organisations to develop appropriate industry credentials:

"Probably something we'd be looking for is how can we review what training resourcing is out there to support the businesses. Is there training that we can actually be supported by/ accompanied by the unis like Charles Sturt



or other training facilities and organisations that could be even applied and get the right combination of training between online, between supportive modules/broken down modules through to more advanced specific courses. Have we got the balance right for the type of people in our industries? And there's a lot of things like [Horticulturalist] needs tractor drivers, so do we; we have almost a ridiculous amount of training material, but we're all rowing our own boat; I've been writing work instructions and procedures on how to drive a tractor... so are the sellers and so is everyone else ... most of the training you do in cert level twos they're all very generic; can there be a bit more generic training and recognition of that training that can be easily passed from even business to business, doesn't have to be – could be apples to chickens, it doesn't matter."

*Male, Managing Director, Services to Agriculture*

For others, it is the need to recognise and develop soft skills and help entry level staff move into managerial roles that is the key priority:

"I'd really like to look at in the disability sector is how we can connect some soft skills training, but also connect it to the certificate and set them up for success; so whether that be we just do a few modules for them and they do it down the path, but actually showing them that this is where they need to get to. And that's something internally for us to look at for career pathways and things like that, but I guess I think it's just overall looking at how we deliver the training of certificates and how we can make that accessible for support workers and things like that. It'd be the same for farm hands like [G....] was saying, how do we set them up for success and attract them to wanting to move up to like a manager level or a leadership level."

*Female HR Manager, Disability Services.*

The need to develop credentials for regional jobs and to build stronger career paths suggests the need to build stronger relationships between regional training bodies and regional industries.

### **Better utilising/recognising skills of migrant workers**

Participants highlighted that prior to the COVID-19 pandemic, immigration strategies were important for most regional businesses. Most employers have dual strategies that include temporary and seasonal migration as well as sponsoring skilled migration from a range of countries and regions internationally:

we have sponsored quite a few people from overseas, we have Philippines and South Africa tends to be a very good market for us, they have industries there with similar operational perspective, they seem to assimilate quite well into our culture or into Australia and with the operations we run. So we've probably sponsored about 20 people in the last four years/five years as we've grown and obviously we're required to advertise online as proof of evidence there as well; so it's the easiest way for us to do that. [Male, Managing Director, Services to Agriculture]

For some, the barriers related to the complexities of government policies and the challenges of negotiating the bureaucracy surrounding immigration. As the managing director above noted, employers need to demonstrate a shortage of particular skills by documenting their advertising processes. Many employers struggle to negotiate the processes and seek help from recruitment agencies:

"[As] a registered immigration agent and my business is about connecting and we do international recruitment and immigration. And our sector specialisations include blue collar skills, medical health care, scientific, ag recruit and we do a little bit in IT and so a lot of skilled immigration roles. We do pure skill visas and we do also predominantly sponsored visas is our expertise... most of our work is outside of



Sydney, [in the regions]... We are sort of the last stop wave – they have exhausted local means; they have exhausted local candidates and someone – the last resorts to have to sponsor. So they try and find themselves, so they try and find the people themselves. There are geographical areas that sort of engage us to do dual recruitment on the immigration side”

*Male, Immigration Agent, Recruitment*

Others have drawn on the resources provided by RDA and similar support agencies:

“We found the RDA very useful ... in particular helping us ... finding skilled migrants. And we have found various professions through that, we’ve found a welder through RDA. We also have a lot of skilled migrants coming to Griffith because they already have family in Griffith and we have a few staff members who we’ve started as casuals and then we’re working with RDA to put them through the various regional visa [processes] so they’re a bit more permanent. So we would be lost without [that support from RDA]”

*Female, HR Manager, Agriculture*

While others agreed that the range of skills included within government policy was too limited and did not address the specific needs of regional industries. When asked if it would be useful to include more trade based qualifications on a regional skills list, participants were extremely supportive. A number of participants had found that their temporary migrants, brought in for low-skilled jobs were actually more skilled than they had imagined, and this had led to improved retention of such workers:

“And we’ve, and we’ve had, we’ve had a few backpackers coming through who we’ve, they’ve come in as labourers and then we’ve worked out that they were much more skilled than labourers. So and we’ve – where we’ve kept them on or we’re trying to keep them on”

*Female, CEO, Agricultural services.*

Retention of such workers was also highlighted as a concern, with some participants questioning whether skilled migrants would be willing to settle in regional areas in the long-term, or might eventually move to more metropolitan regions. However those working as migration agents within the recruitment industry are aware of this concern and design their recruitment strategies to address the issue:

**I:** I know one of the things that people are often concerned about in regional areas, is that if somebody is recruited from outside of a region they don’t stay very long. Do you experience that?

**A:** Not if you find the right person, so you need the right recruiting. They need to be interviewed from obviously skill level, but also a community level and partner and the family what do they do and are they school age? .... So yeah you really have to look – there are many factors – not just purely on a skill. [Otherwise] we do typically find if someone is coming out of a big cities whether it’s London, Dublin, China they tend not to go and stay in regional areas, or may stay a few years and make their way back to the bit city maybe when they have completed a certain tenure and maybe have obtained permanent residency

*Male, Immigration Agent, Recruitment.*

There may be opportunities to learn from other regional locations in New South Wales, with examples provided of strategies adopted in the Orana region:

What Orana area has done has basically marketed that whole Orana area. Because of Orana it’s been an acid marketing tool for that area. Education, you know whether it’s job shows; job fairs; online stuff and a lot of areas are competing with each other for the same skills.

*Male, Immigration Agent, Recruitment.*

These approaches to recruiting and retaining skilled migrants can also be utilised when exploring strategies for retaining a broad range of skilled workers in all regional industries, as discussed in more detail in the next section.

### Strategies for retaining skilled workers

Amongst the participants there was recognition that strategies for retaining skilled workers in the industry need to be multi-pronged, multi-generational long-term approaches.

#### A holistic, family, multi-generational approach

Almost all participants identified that their recruitment strategies frequently take into consideration the needs of workers' partners and families, with strategies to support partners in finding employment, and placing children in schools:

"When you do get them down, you look at who's in the car, so is the wife in the car because if she's not, you know that you've got 10% chance of success. So if they, if they haven't turned up with their wife who's not even willing to have a look at the town, you struggle, you've lost the game before it even start in our experience. Then most of the interview we spent around what does the wife do and how can we help her get a job. So it's been said already but we actively go out and look for work for the wives and put them in touch with people, because they're the ones that you've got to convince. And sometimes it's the other way around, sometimes you're talking to the female and you've got to get the male across to Wagga. So if you don't find them work, you're beat before you even start. Then generally they'll say yes, like the role, like the company, like everything you're doing, I'm going to do this and I'm going to travel down during the week and go home for the weekends. As soon as you start hearing that you know you've lost the battle as well. So you can try all of that, most of the time it's a failure, I can see people chuckling in the background here, so hopefully we're not alone. The strategy is it's got to be a family, you've got to put them onto the schools early, you've got to put them onto the, you find out their interests and show them what Wagga's got to offer.

*Male, HR Manager, Services to Agriculture*

While many employers are cognisant of the need to attract partners of skilled workers, and to identify potential employment opportunities, there has been less focus on retaining the children of skilled workers by emphasising the education and training opportunities for young people that can be found in the region:

"So we're on a constant cycle of training our apprentices, that's the only that we can fill that, that slot. And I'm not sure how to address that because it's just what we're finding is that the young folk today, particularly with the careers advisor that they go through school will steer them towards universities and the lustre has gone off the trades."

*Male, Managing Director, Manufacturing Services to Agriculture*

Research on youth outmigration (Bambrery 2017a) has shown that often the youth who do stay in regions are those who do not have the resources to leave. In order to retain more younger workers and build their skills, regions need to become a destination of choice, not a choice of last resort.

The Riverina has significant educational and training resources, and this is a comparative advantage compared with many other regions where such resources are not available to young people. More could be done to raise young people's awareness of the range of career opportunities, training and education available in the region. Emphasising the options for hands-on technical training, ongoing career pathways and lifelong learning, linked to the range of careers and roles in regional industries could help to change perceptions.

Corbett's (2007) research in rural Canada found that schools were actively training young people to leave the regions, with academic success and perceptions of achievement linked to metropolitan training and careers. Similar patterns may be found in schools in regional Australia. Industry bodies may need to work more closely with schools and career advisors to promote a broader range and meaning of successful careers for young women and men, emphasising the importance of science-based, technical skills for all.

Such strategies may need a long-term approach. A participant from a local government authority provided an example of a long-term strategy adopted in Hawaii to improve the attitudes of local residents to the tourism industry within their region.



“[P]robably 30 years, 20-30 years ago where tourism was a dirty name there. And the locals even got to a stage of stoning tourist buses and things like that because of some downside in events. And what they did, they went into the schools, the tourism people who were interested in tourism and the local tourism operators actually introduced a program into the local schools where they educated the children virtually through say, asking the children to identify what their parents did if they were chicken farmers or whether they grew, had orchards or whatever. And realising that their livelihoods fully depended on servicing the visitors, the visitor industry in the hotels and the cafes and the restaurants. And progressively through this influence, through the children in the schools, back to their parents, they turned the tourism around to be what we know it to be today.”

*Male, Manager, Local Government*

It may be necessary for regional industries to adopt such a long-term strategy, both to improve perceptions of regional industries, but also to improve understanding of the opportunities those industries provide for young people’s careers. Further research on the approaches adopted in other regions may also support this process. Of note, in North East Victoria in the Beechworth local government area, a long term strategy to address youth outmigration has been developed through the introduction of entrepreneurship programs into the curriculum at the primary school level, to encourage young people to think outside formal education and training structures and give them the resources to be able to think about starting their own businesses based on existing regional industries (Anderson and Beavis, 2017).

### **Community, networks, affordable housing**

Significant research has been undertaken in a number of regional areas throughout Australia into the factors that both attract workers to a region and those that keep them embedded in the region (Courvisanos et al 2016; Eversole 2012; Fairbrother et al 2012; Fairbrother et al 2013). Economic growth and stability, regional development, secure employment that builds long-term careers, opportunities for partners and future careers for children

have all been identified as important. However, a number of studies have also explored why workers stay in a region despite declining economic conditions (Fairbrother et al 2012; Fairbrother et al 2013; Walker and Fairbrother 2015). These studies found that workers who are embedded within communities, who have connections with volunteer and sporting organisations, who have ageing parents, adult children or other extended family within the region are unlikely to leave, even to seek better employment opportunities elsewhere.

A further factor identified by Fairbrother and colleagues is the nature of regional housing markets. Affordable housing is a factor that attracts skilled workers to regional locations, and workers who have sunk costs into the regional housing market are less likely to relocate.

Strategies designed to not only welcome skilled workers, but also to embed them within the community and encourage them to develop social and familial networks within the region, will support their retention and the multi-generational development of skills within the region. Secure employment and long-term careers will enable workers to invest in the affordable housing within the region and contribute to long-term retention and stimulate regional economic stability.

### **Inclusivity and cultural change in the workplace**

A key factor that is likely to discourage skilled workers from staying in the region, or that may drive young people to leave the region is a lack of inclusivity, both in the workplace and in the community more generally. Strategies to build inclusive communities that welcome all cultures, genders and sexualities will achieve greater retention of skilled workers. Much work on cultural change is already underway as identified by the Managing Director from Services to Agriculture in the section on gender segregation above, who noted:

“We weren’t going to survive with just the culture that we had. And so we opened it up, we have cultural days, cultural lunches and all that sort of stuff. But you have to be inclusive, and that stretches from not only gender, [to age, nationality or ethnicity]... ”

*Male, Managing Director, Services to Agriculture.*

Such good practice examples may need to be promoted more broadly in schools and workplaces across the region and to potential skilled workers outside the region.

## Opportunities

The third key element to the findings relates to opportunities. While many participants recognised COVID19, Bushfires and climate change as significant challenges to be overcome, a number also identified that these challenges, and the challenge of promoting the region as a significant innovation zone also presented them with opportunities for change. Participants acknowledged that regions that could address these issues and leverage them into competitive advantage would be able to attract more skilled workers than other regions.

### COVID19

While COVID19 has interrupted regular patterns of skilled and temporary migration that present significant challenges for regional industries, the pandemic has also created an opportunity for many workers to take stock of their lives and reassess their careers and other lifestyle issues. In the last 6 months regional housing prices have risen, reflecting increased demand as many metropolitan workers have realised that their work can successfully be undertaken online, or alternatively that they no longer wish to live in crowded metropolitan regions where social distancing creates impediments to developing a sense of community and connectedness. Other metropolitan workers who have lost metropolitan employment have sought alternative careers in regional areas. Both of these groups of 'tree change' workers will bring the partners and families, creating new and future potential skilled workers. These workers are already beginning to discover the benefits of the relatively more affordable regional housing market and the community amenity provided by the regions. To secure this workforce, the Riverina region needs to be sure to provide good quality infrastructure to support such workers, including reliable internet services, roads and transport services as well as continuing to provide education and training facilities for lifelong learning.

Low-skilled workers who have lost employment in the hospitality, tourism and retail sectors as a result of COVID19, may provide an opportunity for regional industries to attract such workers looking for alternative employment options. To attract such workers to the lower skilled roles in regional industries and to maximise retention of such workers who come to the regions for temporary employment, employers may need to consider offering greater job security and long-term careers. While they may not be able to compete on wages, offering such workers, who may have relied on casual or seasonal employment in tourism, more permanent

and ongoing work, may encourage them to stay. Addressing job security may enable temporary and seasonal workers to seek mortgages, invest in the local (relatively affordable) property market and become embedded in regional communities. This may require some industries to redesign and upskill particular roles in order to attract this pool of workers.

### Climate change

Similarly, climate change has the potential to be a significant challenge to attracting skilled workers to the Riverina region, and could have a dramatic impact on the economically propulsive industries of the region. Nationally screened images of bushfires, dust storms and floods in regional areas do little to reduce negative perceptions. However, climate change also presents a significant opportunity for the Riverina to promote itself as a region that is currently utilising skilled workers, and needs more skilled workers, to develop industries that are adaptive and responsive to the effects of climate change while exploring ways in which these regional industries can mitigate and remediate the effects of climate change. Participants in this study have already identified how employers in the horticulture, agriculture, forestry and transport sectors are working towards these ends. Providing good practice examples of these efforts and promoting them within and beyond the region would contribute to promoting the region as an innovative and responsive region that would be attractive to many skilled workers from outside the region, while also attracting young people to stay in the region to make an important contribution to national and international responses to climate change.

### Innovation

Recasting the challenges of COVID19 and climate change as opportunities presents us with the potential to exhibit the Riverina region as an important innovation zone in regional Australia that is utilising workers to create innovative and responsive industries, with opportunities to develop skills, long-term careers and fulfilling lifestyles into the future.

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## Data Sources

ERP by LGA

Australian Bureau of Statistics  
<http://stat.data.abs.gov.au/>

Census 2016, Indigenous Status by Age by Sex (LGA)  
 Australian Bureau of Statistics  
<http://stat.data.abs.gov.au/>

B43 Industry of Employment by Age by Sex (LGA)  
 Australian Bureau of Statistics  
<http://stat.data.abs.gov.au/>

Census 2016, G57 Occupation by Age by Sex (LGA)  
 Australian Bureau of Statistics  
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Counts of Australian Businesses, including Entries and Exits  
 Australian Bureau of Statistics  
<https://www.abs.gov.au/statistics/economy/business-indicators/counts-australian-businesses-including-entries-and-exits/latest-release>

Population Projection Scenarios by LGA (ASGS 2019)  
 NSW Department of Planning, Industry and Environment  
<https://www.planning.nsw.gov.au/Research-and-Demography/Population-projections/Projections>

REMPPLAN Economy 2019 Release 1 and 2  
 REMPLAN  
<https://www.rempln.com.au>

REMPPLAN Community 2016  
 REMPLAN  
<https://www.rempln.com.au>

NSW public schools master dataset  
 Centre for Education Statistics and Evaluation  
<https://data.cese.nsw.gov.au/>

NSW non-government school locations (2017) – Discontinued  
 Centre for Education Statistics and Evaluation  
<https://data.cese.nsw.gov.au/>

My School  
<https://www.myschool.edu.au/>

TAFE NSW  
<https://www.tafensw.edu.au/>

Charles Sturt University  
<https://www.csu.edu.au/>

La Trobe University  
<https://www.latrobe.edu.au/>

Country Universities Centre  
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Small Area Labour Market Estimates  
 Labour Market Information Portal  
<https://lmip.gov.au/default.aspx?LMIP/Downloads/SmallAreaLabourMarketsSALM/Estimates>

Internet Vacancy Index  
 Labour Market Information Portal  
<https://lmip.gov.au/default.aspx?LMIP/GainInsights/VacancyReport>

## Further Reading

Current and Future Skill Requirements on the Mid North Coast of NSW RDA Mid North Coast 2017

Far West NSW Workforce Development Study RDA Far West NSW 2016

Regional Skills Demand Profile, The Mallee Victorian Skills Commissioner 2017

NSW Central West Agriculture Innovation Skills and Capability Analysis Report RDA Central West 2017

Prospects and challenges for the Hunter region A strategic economic study RDA Hunter Deloitte Access Economics 2013

Skills Shortages in the Greater Brisbane Labour Market 2012-2021 RDA Brisbane Synergies Economic Consulting 2011

Skills for the Future A study into the skill needs of businesses in the Northern Inland region of New South Wales RDA Northern Inland NSW

South Coast Skills Audit RDA Far South Coast 2016

Skills Audit Report RDA Southern Inland 2018

Workforce Participation in the Illawarra RDA Illawarra IRIS Research 2017

Bamberry, G. The Influence of Technology on Regional Development: Case Studies From The Riverina Region, *Australasian Journal of Regional Studies*, Vol. 12, No. 2, 2006

Schirmer, J., Gibbs, D., Mylek, M., Magnusson, A., Morison, J. and Peel, D., Socio-economic impacts of the softwood plantation industry South West Slopes and Bombala region, NSW Second edition, December 2017

Cameron, R., Responding to Australia's Regional Skill Shortages Through Regional Skilled Migration, *Journal of Economic and Social Policy*, Vol 14, No. 3, 2011

Ibrahim, M., Kahandawa, G., Choudhury, T. and Mazid, A., Industry-led Mechatronics Degree Development in Regional Australia, 2017 IEEE International Conference on Mechatronics (ICM), 2017





Table 21 Field of Study of Highest Non-School Qualification by Indigenous Status.

Field of Study	Indigenous	Non-Indigenous	Not Stated
Fisheries Studies	23.81%	76.19%	0%
Employment Skills Programmes	10.81%	89.19%	0%
Complementary Therapies	10.71%	89.29%	0%
Public Health	10.43%	89.57%	0%
Other Education	10.15%	88.32%	1.52%
Studies in Human Society	9.56%	90.44%	0%
Creative Arts, nfd	9.2%	90.8%	0%
General Education Programmes	8.46%	88.56%	2.99%
Health, nfd	8.43%	90.7%	0.87%
Human Welfare Studies and Services	7.74%	91.86%	0.39%
Other Health	5.41%	94.59%	0%
Civil Engineering	5.12%	94.88%	0%
Horticulture and Viticulture	4.86%	94.69%	0.46%
Society and Culture, nfd	4.64%	95.36%	0%
Justice and Law Enforcement	4.6%	95.4%	0%
Food and Hospitality	4.45%	94.7%	0.85%
Field of study not stated	4.36%	39.3%	56.34%
Political Science and Policy Studies	4.17%	95.83%	0%
Environmental Studies	4.04%	94.17%	1.79%
Other Engineering and Related Technologies	3.83%	96.17%	0%
Education, nfd	3.76%	96.24%	0%
Geomatic Engineering	3.7%	96.3%	0%
Forestry Studies	3.66%	96.34%	0%
Tourism	3.65%	96.35%	0%
Building	3.62%	95.38%	1%
Sales and Marketing	3.58%	95.76%	0.66%
Personal Services	3.39%	95.74%	0.86%
Business and Management	3.2%	96.49%	0.31%
Dental Studies	3.04%	96.96%	0%
Banking, Finance and Related Fields	2.84%	97.16%	0%
Mechanical and Industrial Engineering and Technology	2.8%	96.24%	0.96%
Other Management and Commerce	2.74%	97.26%	0%
Automotive Engineering and Technology	2.54%	96.95%	0.51%
Communication and Media Studies	2.45%	97.55%	0%
Nursing	2.37%	96.51%	1.11%
Engineering and Related Technologies, nfd	2.32%	96.83%	0.85%
Information Technology, nfd	2.28%	96.51%	1.21%
Teacher Education	2.26%	97.09%	0.65%
Process and Resources Engineering	2.15%	96.9%	0.95%
Electrical and Electronic Engineering and Technology	2.11%	96.86%	1.03%
Sport and Recreation	2.11%	97.89%	0%
Librarianship, Information Management and Curatorial Studies	1.99%	98.01%	0%
Aerospace Engineering and Technology	1.95%	98.05%	0%
Performing Arts	1.8%	98.2%	0%

Table 21 Field of Study of Highest Non-School Qualification by Indigenous Status. cont.

Field of Study	Indigenous	Non-Indigenous	Not Stated
Manufacturing Engineering and Technology	1.78%	97.73%	0.49%
Visual Arts and Crafts	1.71%	97.26%	1.03%
Rehabilitation Therapies	1.61%	98.39%	0%
Office Studies	1.53%	98.23%	0.24%
Law	1.35%	97.3%	1.35%
Other Natural and Physical Sciences	1.28%	98.72%	0%
Agriculture	1.27%	98.11%	0.62%
Accounting	1.06%	98.15%	0.78%
Natural and Physical Sciences, nfd	1.03%	98.21%	0.77%
Behavioural Science	0.99%	97.35%	1.66%
Veterinary Studies	0.95%	98.11%	0.95%
Field of study inadequately described	3.62%	95.31%	1.07%
Not applicable	7.07%	89.78%	3.14%
Total	5.42%	87.22%	7.36%

Table 22 Industry of Employment by Sex

Industry of Employment	Females (%)	Males (%)	Persons (%)
Accommodation and Food Services	8.78	4.04	6.25
Administrative and Support Services	3.6	2.05	2.76
Agriculture, Forestry and Fishing	7.21	17.36	12.58
Arts and Recreation Services	0.72	0.8	0.76
Construction	1.66	11.57	6.94
Education and Training	14.06	4.17	8.82
Electricity, Gas, Water and Waste Services	0.38	2.27	1.39
Financial and Insurance Services	2.1	0.85	1.45
Health Care and Social Assistance	21.59	3.8	12.15
Inadequately described and not stated	2.9	4.93	3.96
Information Media and Telecommunications	0.57	0.71	0.64
Manufacturing	5.69	13.9	10.03
Mining	0.16	0.93	0.59
Other Services	3.11	4.03	3.62
Professional, Scientific and Technical Services	4.03	2.75	3.35
Public Administration and Safety	6.06	8.55	7.41
Rental, Hiring and Real Estate Services	1.11	0.75	0.91
Retail Trade	12.99	7.21	9.88
Transport, Postal and Warehousing	1.95	6.18	4.23
Wholesale Trade	1.33	3.17	2.28

Table 23 Occupation by Gender

Occupation	Females (%)	Males (%)	Persons (%)
Clerical and Administrative Workers	20.03	3.54	11.27
Community and Personal Service Workers	16.93	5.37	10.8
Inadequately described & Not stated	1.2	1.91	1.57
Labourers	11.14	16.56	14
Machinery Operators and Drivers	1.24	12.87	7.4
Managers	11.41	20.96	16.5
Professionals	20.77	10.5	15.32
Sales Workers	12.37	5.93	8.94
Technicians and Trades Workers	4.91	22.36	14.19

Table 24 Occupation by Indigenous Status

Occupation	Indigenous	Non-Indigenous	Not Stated
Managers	1.18%	98.09%	0.68%
Professionals	2.49%	97.05%	0.47%
Technicians and Trades Workers	3.49%	95.66%	0.82%
Community and Personal Service Workers	5.54%	93.79%	0.68%
Clerical and Administrative Workers	2.74%	96.72%	0.56%
Sales Workers	3.16%	96.02%	0.78%
Machinery Operators and Drivers	4.52%	94.82%	0.68%
Labourers	5.3%	93.59%	1.12%
Inadequately described	5.58%	93.53%	0.54%
Not stated	3.99%	91.83%	4.18%
Not applicable	6.99%	80.33%	12.67%
Total	5.42%	87.23%	7.36%

\* ABS Table Builder – Riverina SA4 Region. Aboriginal, Torres Strait Islander and Both Aboriginal and Torres Strait Islander has been aggregated due to small values.

Table 25 Industry of Employment by Indigenous Status

Industry	Indigenous	Non-Indigenous	Not Stated
Agriculture, Forestry and Fishing	1.9%	97.32%	0.79%
Mining	3.24%	95.83%	0%
Manufacturing	3.27%	95.9%	0.74%
Electricity, Gas, Water and Waste Services	2.89%	96.01%	0.4%
Construction	3.96%	95.15%	0.95%
Wholesale Trade	1.79%	97.71%	0.25%
Retail Trade	3.01%	96.28%	0.74%
Accommodation and Food Services	4.6%	94.37%	0.82%
Transport, Postal and Warehousing	3.22%	95.86%	0.88%
Information Media and Telecommunications	1.76%	96.7%	0%
Financial and Insurance Services	2.05%	97.66%	0%
Rental, Hiring and Real Estate Services	3.61%	96.55%	1.41%
Professional, Scientific and Technical Services	1.86%	98.06%	0.38%
Administrative and Support Services	4.48%	94.69%	0.46%
Public Administration and Safety	4.18%	95.48%	0.58%
Education and Training	3.41%	96.04%	0.49%
Health Care and Social Assistance	4.26%	95.11%	0.58%
Arts and Recreation Services	5.44%	92.74%	0.54%
Other Services	3.11%	96.37%	0.6%
Inadequately described	5.47%	93.15%	1.38%
Not stated	5.17%	90.72%	3.53%
Not applicable	6.99%	80.33%	12.67%
Total	5.42%	87.23%	7.36%

\* ABS Table Builder – Riverina SA4 Region. Aboriginal, Torres Strait Islander and Both Aboriginal and Torres Strait Islander has been aggregated due to small values.

**Table 26 Percent of Respondents Reporting Difficulty Filling Vacancies by Industry**

<b>Industry</b>	<b>Percent of respondents reporting difficulties filling vacancies</b>
Accommodation and Food Services	17.19% ( $\pm 6.54\%$ )
Administrative and Support Services	1.56% ( $\pm 2.15\%$ )
Agriculture, Forestry and Fishing	14.06% ( $\pm 6.02\%$ )
Arts and Recreation Services	4.69% ( $\pm 3.66\%$ )
Construction	3.91% ( $\pm 3.36\%$ )
Education and Training	1.56% ( $\pm 2.15\%$ )
Electricity, Gas, Water and Waste Services	3.91% ( $\pm 3.36\%$ )
Financial and Insurance Services	3.13% ( $\pm 3.01\%$ )
Health Care and Social Assistance	11.72% ( $\pm 5.57\%$ )
Information Media and Telecommunications	2.34% ( $\pm 2.62\%$ )
Manufacturing	8.59% ( $\pm 4.86\%$ )
Other Services (Repair and maintenance, and personal services)	3.91% ( $\pm 3.36\%$ )
Professional, Scientific and Technical Services	8.59% ( $\pm 4.86\%$ )
Public Administration and Safety	2.34% ( $\pm 2.62\%$ )
Rental, Hiring and Real Estate Services	0.78% ( $\pm 1.53\%$ )
Retail Trade	8.59% ( $\pm 4.86\%$ )
Transport, Postal and Warehousing	2.34% ( $\pm 2.62\%$ )
Wholesale Trade	0.78% ( $\pm 1.53\%$ )

**Table 27 Occupations that are Difficult to fill in the Riverina**

<b>Occupation</b>	<b>Percent of Respondents Reporting Difficulty Filling Occupation</b>
Hospitality Workers	10.71%
Engineering, ICT and Science Technicians	7.74%
Farm, Forestry and Garden Workers	7.74%
Health Professionals	7.74%
Cleaners and Laundry Workers	7.14%
Design, Engineering, Science and Transport Professionals	7.14%
Automotive and Engineering Trades Workers	6.55%
Business, Human Resource and Marketing Professionals	5.95%
Construction Trades Workers	5.95%
Hospitality, Retail and Service Managers	5.95%
Arts and Media Professionals	4.17%
Electrotechnology and Telecommunications Trades Workers	4.17%
Farmers and Farm Managers	4.17%
Food Preparation Assistants	4.17%
ICT Professionals	4.17%
Specialist Managers	4.17%
Clerical and Office Support Workers	2.98%
Factory Process Workers	2.98%
Food Trades Workers	2.38%
Machine and Stationary Plant Operators	2.38%
Mobile Plant Operators	2.38%
Sales Representatives and Agents	2.38%
Sales Assistants and Salespersons	1.79%
Storepersons	1.79%
Other Technicians and Trades Workers	1.79%
Carers and Aides	1.19%
Education Professionals	1.19%
General Clerical Workers	1.19%
Health and Welfare Support Workers	1.19%
Skilled Animal and Horticultural Workers	1.19%

Table 27 Occupations that are Difficult to fill in the Riverina (cont.)

Occupation	Percent of Respondents Reporting Difficulty Filling Occupation
Sports and Personal Service Workers	1.19%
Other Miscellaneous Technicians and Trades Workers	1.19%
Chief Executives, General Managers and Legislators	0.6%
Inquiry Clerks and Receptionists	0.6%
Legal, Social and Welfare Professionals	0.6%
Numerical Clerks	0.6%
Personal Assistants and Secretaries	0.6%
Road and Rail Drivers	0.6%
Sales Support Workers	0.6%
Construction and Mining Labourers	0%
Protective Service Workers	0%

Table 28 Descriptions of Positions that are Hard to Fill in the Riverina

Positions	Percent of Respondents Reporting Difficulty Filling Positions
Engineer	3.57%
Chef	2.98%
Truck Driver	2.98%
Administration	2.38%
Cleaner	2.38%
Machinery Operator	2.38%
Marketing	2.38%
Welder	2.38%
Civil Engineer	1.79%
Fabricator	1.79%
Farm Hand	1.79%
Front of House	1.79%
It Professional	1.79%
Labourer	1.79%
Occupational Therapist	1.79%
Accountant	1.19%
Baker	1.19%
Beauty Therapist	1.19%
Customer Service	1.19%
Draftsperson	1.19%
Electrician	1.19%
Factory Worker	1.19%
Fitter And Turner	1.19%
Hairdresser	1.19%
Harm Hand	1.19%
Hotel Workers	1.19%
Kitchen Hand	1.19%
Kitchen Staff	1.19%
Manager	1.19%
Mechanic	1.19%
Physiotherapist	1.19%
Plumber	1.19%
Project Manager	1.19%
Psychologist	1.19%
Quality	1.19%
Registered Nurse	1.19%
Sales	1.19%
Signwriter	1.19%
Spare Parts Interpreter	1.19%

Table 28 Descriptions of Positions that are Hard to Fill in the Riverina (cont.)

Positions	Percent of Respondents Reporting Difficulty Filling Positions	Positions	Percent of Respondents Reporting Difficulty Filling Positions
Speech Therapist	1.19%	Meat Processor	0.6%
Surveyor	1.19%	Medical Receptionist	0.6%
Tiler	1.19%	Optometrist	0.6%
Tradespeople	1.19%	Orchard Hand	0.6%
Wait Staff	1.19%	Orchard Worker	0.6%
Website Designer	1.19%	Panel Beater	0.6%
Accessory Fitter	0.6%	Pharmacist	0.6%
Aged Care Worker	0.6%	Picture Framer	0.6%
Agricultural Workers	0.6%	Pine Planter	0.6%
Aircraft Engineer	0.6%	Plasterer	0.6%
Allied Health	0.6%	Primary School Teacher	0.6%
Apiarist	0.6%	Project Manager (Arts And Communication)	0.6%
Assets Engineer	0.6%	Quality Assurance Manager	0.6%
Assistant In Nursing	0.6%	Retail Manager	0.6%
Bar Staff	0.6%	Scaffolder	0.6%
Bus Driver	0.6%	Security	0.6%
Car Detailer	0.6%	Shearer	0.6%
Care Staff	0.6%	Speech Pathologist	0.6%
Carpet Layer	0.6%	Spray Painter	0.6%
Data Scientist	0.6%	Tow Truck Driver	0.6%
Diesel Mechanics	0.6%	Trainee Accountant	0.6%
Driving Instructor	0.6%	Trainer	0.6%
Environmental Consultant	0.6%	Video Producer	0.6%
Farm Manager	0.6%	Water Quality Technician	0.6%
Financial Advisor	0.6%	Weed Sprayer	0.6%
Fire Technician	0.6%	Winemaker	0.6%
Fitter	0.6%	Gardener	0.6%
General Practitioner	0.6%	Instrumentalist	0.6%
Health Care Professional	0.6%	Fitness Instructor	0.6%
Heavy Diesel Mechanic	0.6%	Financial Planner	0.6%
Helicopter Winch Crew	0.6%	Practice Manager	0.6%
Hotel Manager	0.6%		
Hydrologist	0.6%		
Industrial Electrician	0.6%		
Irrigation	0.6%		
Logistics	0.6%		
Machinery Driver	0.6%		
Maintenance	0.6%		
Massage Therapist	0.6%		



## Riverina Skills Shortage Survey

### Participant information

Regional Development Australia (RDA) Riverina, in partnership with Charles Sturt University (CSU) are conducting research into skills shortages in the Riverina.

A skills shortage occurs when the demand for workers with a particular set of skills or training is greater than the supply of workers who are qualified, available and willing to fill the available positions [1].

The following survey is one component of our research into skills shortages in the Riverina.

#### Who Should Complete this survey?

RDA Riverina and CSU invite business owners and recruitment managers of businesses and organisations in the Riverina to complete this survey.

For the purposes of this research the Riverina is the region that is represented by the following local government areas:

- Bland Shire Council
- Carrathool Shire Council
- Coolamon Shire Council
- Cootamundra-Gundagai Regional Council
- Griffith City Council
- Hay Shire Council
- Junee Shire Council
- Leeton Shire Council
- Lockhart Shire Council
- Murrumbidgee Council
- Narrandera Shire Council
- Snowy Valleys Council
- Temora Shire Council
- Wagga Wagga City Council

#### Consent / Data / Privacy

Participation in this research is voluntary and all data obtained from the survey will be kept confidential. [Any responses entered in this online survey is protected under SurveyMonkey's privacy policy and security statement.](#)

Data obtained via this survey will be used for the purposes of this study and may be presented in publications and at conferences. Names of participants and organisations will not be linked to any transcripts, papers or reports without prior permission.

If you have further questions regarding this research, please contact Melanie Renkin at [research@rdariverina.org.au](mailto:research@rdariverina.org.au) or Rachel Whiting at [ceo@rdariverina.org.au](mailto:ceo@rdariverina.org.au)

[i] Shah, C and Burke, G. (2003). Skilled shortages: concepts measurement and implications, Working Paper no.52, November 2003, Centre for the Economics of Education and Training, Monash University.





## Riverina Skills Shortage Survey

### Consent and qualifier questions

1. Do you own or manage a business that employs staff, or do you manage staff recruitment within an organisation?

Yes

No



## Riverina Skills Shortage Survey

### Qualifier questions

2. Do you own or manage a business or manage recruitment within an organisation that would like to employ staff?

- Yes
- No



## Riverina Skills Shortage Survey

### Demographics

3. Please select the option that best describes your role:

- Owner / Co-owner
- Manager / Director
- HR manager / representative
- Employee
- Other (please specify)

4. Which Local Government Area does your business or organisation operate in?

If you operate in multiple LGAs, please select all of the locations in which you operate.

- |  |   |
|--|---|
| <input type="checkbox"/> Bland Shire Council                   | <input type="checkbox"/> Leeton Shire Council     |
| <input type="checkbox"/> Carrathool Shire Council              | <input type="checkbox"/> Lockhart Shire Council   |
| <input type="checkbox"/> Coolamon Shire Council                | <input type="checkbox"/> Murrumbidgee Council     |
| <input type="checkbox"/> Cootamundra-Gundagai Regional Council | <input type="checkbox"/> Narrandera Shire Council |
| <input type="checkbox"/> Griffith City Council                 | <input type="checkbox"/> Snowy Valleys Council    |
| <input type="checkbox"/> Hay Shire Council                     | <input type="checkbox"/> Temora Shire Council     |
| <input type="checkbox"/> Junee Shire Council                   | <input type="checkbox"/> Wagga Wagga City Council |
| <input type="checkbox"/> Other (please specify)                |   |

**5. How would you describe the location of your business or organisation?****If there is more than one location, please select for the main / largest operational site.**

- Large Town - Population greater than 15,000  
(Major population centres for the Riverina)
- Medium Town - Population between 1,000 and 15,000  
(Main population centres for a local government area)
- Small town - Population less than 1000  
(Smaller towns that are generally not the main population centres for a local government area)
- Rural - Less than one hour out of town  
(Not within a small, medium or large population centre but less than one hour away from one)
- Remote - More than one hour out of town  
(Not within a small, medium or large population centre and more than one hour away from any population centre)
- Other (please specify)



## Riverina Skills Shortage Survey

### Demographics

#### 6. What is the main industry of your business or organisation?

- |  |  |
|--|--|
| <input type="radio"/> Agriculture, Forestry and Fishing          | <input type="radio"/> Financial and Insurance Services                               |
| <input type="radio"/> Mining                                     | <input type="radio"/> Rental, Hiring and Real Estate Services                        |
| <input type="radio"/> Manufacturing                              | <input type="radio"/> Professional, Scientific and Technical Services                |
| <input type="radio"/> Electricity, Gas, Water and Waste Services | <input type="radio"/> Administrative and Support Services                            |
| <input type="radio"/> Construction                               | <input type="radio"/> Public Administration and Safety                               |
| <input type="radio"/> Wholesale Trade                            | <input type="radio"/> Education and Training   |
| <input type="radio"/> Retail Trade                               | <input type="radio"/> Health Care and Social Assistance                              |
| <input type="radio"/> Accommodation and Food Services            | <input type="radio"/> Arts and Recreation Services                                   |
| <input type="radio"/> Transport, Postal and Warehousing          | <input type="radio"/> Other Services (Repair and maintenance, and personal services) |
| <input type="radio"/> Information Media and Telecommunications   |  |
| <input type="radio"/> Other (please specify)                     |  |

#### 7. Please provide a brief description of the nature of your business or organisation.

This description will help us to understand your business in greater detail than the Australian and New Zealand Standard Industrial Classification (ANZSIC) list above allows for.



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## Riverina Skills Shortage Survey

### Demographics

8. How long has your business or organisation been in operation?

(If you are not sure, please leave blank and continue to the next question)

9. How many employees (including full-time, part-time or casual) does your business or organisation currently have?

- 1 - 19
- 20 - 199
- 200 or more
- Unknown (please provide more information)

10. Are there regular seasonal variations in the number of employees in your business?

- Yes
- No

11. This survey will not focus on seasonal workers, however, if you have difficulty finding seasonal workers, please tell us about it below.



## Riverina Skills Shortage Survey

### Unfilled positions

For the following questions, please think about your full-time, part-time and casual (non-seasonal) employees and vacancies.

12. How many positions in total, (counting both filled and unfilled), does your business or organisation currently have?

13. Have you ever had difficulty finding staff for any positions in your current business or organisation?

Yes

No

14. How many vacancies in total (inc. full time, part time or casual) have you had in the last 12 months?

15. How many of these vacancies have you been unable to fill?

**16. Which of the following positions do you have trouble filling within your business or organisation?**

**(Please select all that apply)**

- |   |   |
|---|---|
| <input type="checkbox"/> Arts and Media Professionals                             | <input type="checkbox"/> Health Professionals                     |
| <input type="checkbox"/> Automotive and Engineering Trades Workers                | <input type="checkbox"/> Hospitality Workers                      |
| <input type="checkbox"/> Business, Human Resource and Marketing Professionals     | <input type="checkbox"/> Hospitality, Retail and Service Managers |
| <input type="checkbox"/> Carers and Aides   | <input type="checkbox"/> ICT Professionals                        |
| <input type="checkbox"/> Chief Executives, General Managers and Legislators       | <input type="checkbox"/> Inquiry Clerks and Receptionists         |
| <input type="checkbox"/> Cleaners and Laundry Workers                             | <input type="checkbox"/> Legal, Social and Welfare Professionals  |
| <input type="checkbox"/> Clerical and Office Support Workers                      | <input type="checkbox"/> Machine and Stationary Plant Operators   |
| <input type="checkbox"/> Construction and Mining Labourers                        | <input type="checkbox"/> Mobile Plant Operators                   |
| <input type="checkbox"/> Construction Trades Workers                              | <input type="checkbox"/> Numerical Clerks                         |
| <input type="checkbox"/> Design, Engineering, Science and Transport Professionals | <input type="checkbox"/> Personal Assistants and Secretaries      |
| <input type="checkbox"/> Education Professionals                                  | <input type="checkbox"/> Protective Service Workers               |
| <input type="checkbox"/> Electrotechnology and Telecommunications Trades Workers  | <input type="checkbox"/> Road and Rail Drivers                    |
| <input type="checkbox"/> Engineering, ICT and Science Technicians                 | <input type="checkbox"/> Sales Assistants and Salespersons        |
| <input type="checkbox"/> Factory Process Workers                                  | <input type="checkbox"/> Sales Representatives and Agents         |
| <input type="checkbox"/> Farm, Forestry and Garden Workers                        | <input type="checkbox"/> Sales Support Workers                    |
| <input type="checkbox"/> Farmers and Farm Managers                                | <input type="checkbox"/> Skilled Animal and Horticultural Workers |
| <input type="checkbox"/> Food Preparation Assistants                              | <input type="checkbox"/> Specialist Managers                      |
| <input type="checkbox"/> Food Trades Workers                                      | <input type="checkbox"/> Sports and Personal Service Workers      |
| <input type="checkbox"/> General Clerical Workers                                 | <input type="checkbox"/> Storepersons                             |
| <input type="checkbox"/> Health and Welfare Support Workers                       |   |
| <input type="checkbox"/> Other (please specify)                                   |   |

**17. In your own words, please describe the positions that you have difficulty filling.**

This description will help us to understand your skills needs in greater detail than the Australian and New Zealand Standard Classification of Occupations (ANZSCO) list above allows for.





## Riverina Skills Shortage Survey

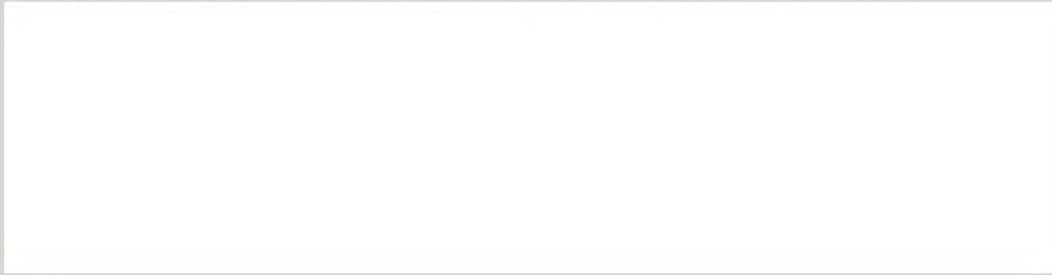
### Impact of unfilled positions

**18. What impact do these unfilled positions have on your business or industry?**

**(Please select all that apply)**

- Decreased productivity
- Decreased turnover
- Decreased health and well-being of owners / managers
- Decreased health and well-being of available staff
- Decreased capacity to take on new work
- Decreased quality of goods and services
- Decreased long-term sustainability of the business or organisation
- Failure to meet deadlines
- Loss of clients or business
- Loss of reputation or credibility
- Increased turn-around time
- Increased costs
- Increased workload on available staff
- Increased staff turnover
- Increased stress for owners and managers
- Increased stress for available staff
- Other (please specify)

19. Please add any other comments you have on the impact of unfilled positions:





## Riverina Skills Shortage Survey

### Causes

**20. Which of the following reasons have prevented you from finding and hiring appropriately qualified staff?**

**(Please select all that apply)**

- Lack of qualified candidates
- Lack of candidates with appropriate technical abilities
- Lack of experienced candidates
- Competition for candidates from cities
- Competition for candidates from other regional areas
- Local competition for candidates
- Candidates are unsatisfied with salary
- Candidates are unwilling to live and work in regional areas
- Candidates are not willing or able to stay on long term
- Perceived lack of services and facilities in regional areas
- Availability of employment for partner or spouse
- Availability of health care
- Availability of childcare and education
- Lack of infrastructure
- Lack of appropriate accommodation
- Lack of public transport
- Lack of locally available training
- Other (please specify)

**21. Please add any other comments you have on what has prevented you from hiring appropriately qualified staff?**

A large, empty rectangular box with a white background, intended for the respondent to provide comments on what has prevented them from hiring appropriately qualified staff. The box is positioned below the question text and is surrounded by a light gray border.



## Riverina Skills Shortage Survey

### Soft skills

**22. When hiring new staff, how often are 'soft skills' (non-technical skills) important?**

- Always important
- Often important
- Sometimes important
- Rarely important
- Never important



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## Riverina Skills Shortage Survey

### Soft skills

23. Which of the following soft skills are important to your business?

(Please select all that apply)

- Communication
- Time management
- Teamwork
- People Skills
- Problem solving
- STEM literacy
- Leadership
- Networking
- Conflict resolution
- Creativity and innovation
- Other (please specify)

**24. Which of the following soft skills do you have trouble finding staff with:  
(Please select all that apply)**

- Communication
- Time management
- Teamwork
- People Skills
- Problem solving
- STEM literacy
- Leadership
- Networking
- Conflict resolution
- Creativity and innovation
- Other (please specify)



## Riverina Skills Shortage Survey

### Recruitment methods

For the following questions, please think about recruitment methods or strategies you have used once your initial attempt to fill a position was unsuccessful.

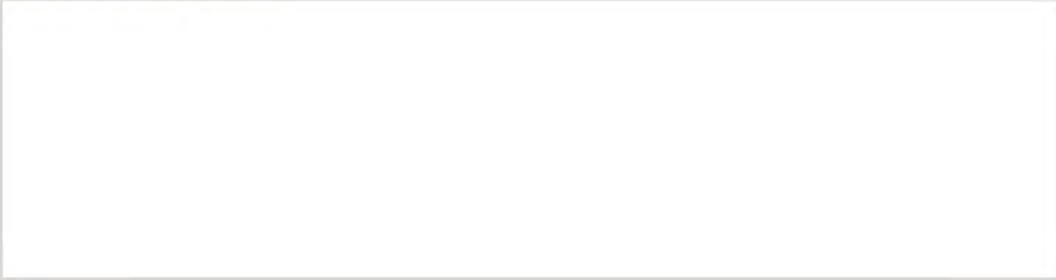
**25. Of the following recruitment methods or strategies, which have you used to try to fill these positions?**

**(Please indicate the result)**

	Successful	Unsuccessful	Have not tried	Not applicable
New recruitment methods (e.g. moving from print to digital media)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Continued recruitment with existing method	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Re-advertising the position	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Training of existing staff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hiring less qualified staff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Restructuring your business or organisation around the skills you have access to	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Outsourcing work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Remote / off-site / 'working from home' workers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Offering higher salaries or wages	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Offering benefits other than increased salaries or wages	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Skilled migration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



**26. Please add any other comments you have regarding recruitment methods or strategies you used to fill these positions:**





## Riverina Skills Shortage Survey

### People

**27. How important do you think it is to develop skills within your local community to fill local vacancies?**

- Very important
- Somewhat important
- Neither important nor unimportant
- Not very important
- Not important at all

**28. Please explain your answer in more detail:**

**29. How important do you think it is to encourage people outside of your community, but within Australia, who have the right skills to relocate to the Riverina to fill local vacancies?**

- Very important
- Somewhat important
- Neither important nor unimportant
- Not very important
- Not important at all

**30. Please explain your answer in more detail:**

**31. How important do you think skilled migration is to fill local vacancies?  
(i.e. overseas skilled workers migrating to, or living in, Australia to work)**

- Very important
- Somewhat important
- Neither important nor unimportant
- Not very important
- Not important at all

**32. Please explain your answer in more detail:**

**33. Have you ever employed or considered employing appropriately qualified and experienced skilled migrants in unfilled vacancies?**

- Yes
- No
- Unsure

**34. Please explain your answer in more detail:**



## Riverina Skills Shortage Survey

### Future

The next set of questions ask about the future of your businesses skills needs. Please respond thinking about the next 5 years.

**35. How likely is it that your business' or organisation's skills requirements will change in the next five years?**

- Highly likely
- Somewhat likely
- Unlikely
- Highly unlikely
- Not sure
- Not applicable (please explain):

**36. What positions do you think you will need more of in the future?**

**37. What 'soft skills' do you think you will need more of in the future?**

**38. What positions do you think you will need less of in the future?**

**39. What 'soft skills' do you think that you will need less of in the future?**

**40. Please add any further comments about skills shortages in your business, organisation, or in general:**



## Riverina Skills Shortage Survey

### Follow up

41. Would you be willing to discuss this topic further?

- Yes
- No



## Riverina Skills Shortage Survey

### Follow up contact details

Thank you for your willingness to participate in further discussion about skills shortages.

**42. To facilitate this discussion, please provide your contact details below so we can contact you to arrange asuitable time:**

**(This is optional)**

Your name:

Email:

Phone:



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**RDA support for Riverina projects**

RDA Riverina is involved in the development and implementation of projects across the region. This involvement may be as initiator, facilitator, supporter, or implementer depending on the nature of the project.

RDA Riverina values community driven, innovative, inclusive, and sustainable initiatives.

We develop close partnerships with many stakeholders from the three tiers of Government, business, industry, and communities when working on projects in the Riverina.

If you wish to enable this support for a regionally significant project, go to [www.rdariverina.org.au/projects](http://www.rdariverina.org.au/projects) and complete the Project Outline Form.



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