

Australian Labour Market Analyses - Prioritisation of industries and regions

Pacific Labour Facility
Final Report
September 2020



Executive summary

Background

The Pacific Labour Scheme (PLS) and the Seasonal Worker Programme (SWP) are circular labour mobility initiatives that give employment opportunities for workers from Pacific Island countries and Timor-Leste while assisting Australian employers to fill labour shortages. The Pacific Labour Facility (PLF) administers the PLS under the direction of the Department of Foreign Affairs and Trade (DFAT) and provides targeted support to the SWP. As part of their remit, the PLF engages with industries as a means of bringing on board employers to the PLS. To enable a strategic targeting of regions and industries, the PLF requires access to up-to-date labour market data to inform their engagement with industry.

PricewaterhouseCoopers Consulting (Australia) Pty Limited (PwC) was engaged by the PLF to undertake an assessment of the Australian labour market, with the following objectives:

- Identify industries and regions that are likely to have a high growth in demand for low or semi-skilled labour and are therefore suitable for engagement by the PLF.
- Provide a transparent and data-informed evidence base that supports the case for PLF's engagement.

Approach

Aligned to the objectives above, our analysis is broken into two parts. These are:

- Part 1 - Industry analysis in which we identify industries with the characteristics of showing a growth in demand for labour and having evidence of labour shortages.
- Part 2 - Regional labour market assessment in which we identify and prioritise regions with a conducive economic and labour environment for an identified industry segment.

While both parts are underpinned by comprehensive data analysis drawing on public and subscription sources, the manner in which the data were used differ.

In Part 1, data measures are used as criteria to enable a qualitative appraisal of industries at a national level to identify those with a demand for labour and/or shortages.

In Part 2, we use geographical disaggregated data measures as indicators to prioritise regions for the PLFs consideration. To enable this prioritisation, we have adopted a scoring approach which objectively compares regions according to those indicators.

Labour shortages, while seemingly a straightforward concept, are difficult to demonstrate. The OECD themselves state *'There is no universally applied definition of labour shortages.'*¹ Given this challenge, it is common for labour market research to instead use indirect indicators of labour market disequilibrium. However, as no single indicator can be expected to provide adequate information on their own, a combination of indicators are required. We leveraged established approaches for labour market assessments to develop our own indicators on whether an industry experienced a labour shortage or not.^{2,3,4,5}

Further considerations were made in the development of our labour market analysis approach. This included whether:

- we can access granular or current data
- an established labour market indicator can be informed by data available in the Australian context and derived from secondary sources including publicly available sources or paid subscriptions.

Determining industry labour shortages

With the above approach in mind, we have applied the following indicators for this labour market assessment:

- future employment projections
- an analysis of historical labour force status trends including unemployment (for youth and total population) and underemployment
- industry signals of shortages including:
 - wage growth trends
 - hours worked trends
- vacancy trends for select occupations (expressed as a ratio over employment).

¹ OECD (Organisation for Economic Co-operation and Development) 2003, OECD employment outlook, OECD Publishing, Paris.

² Workforce Connections Key approaches to Labor Market Assessment. March 2018. USAID

³ Mavromaras, Kostas, Healy, J., Richardson, S., Sloane, P., Zhang Wei, and Rong Zhu (2013) A System for Monitoring Shortages and Surpluses in the Market for Skills, National Institute of Labour Studies.

⁴ Iredale, R. R., Toner, P., Turpin, T., & Fernández-Esquinas, M. (2014). A Report on the APEC Region Labour Market: Evidence of Skills Shortages and General Trends in Employment and the Value of Better Labour Market Information Systems. Retrieved from http://publications.apec.org/publication-detail.php?pub_id=1533

⁵ MAC (2017) Assessing labour market shortages, UK Migration Advisory Committee, London.

⁶ Richardson, Sue. What Is a Skill Shortage? [online]. *Australian Bulletin of Labour*, Vol. 35, No. 1, 2009: 326-354. Availability: <<https://search.informit.com.au/documentSummary;dn=727834843845178;res=IELBUS>> ISSN: 0311-6336. [cited 12 Aug 20].

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Part 1: Industry analysis

Analysis of labour shortages and prioritising industries for the PLF

In the five years leading up to 2019 there were various signs that showed that the Australian labour market was experiencing a mild undersupply. These included:

- a downward trend in both general and youth unemployment across most jurisdictions
- mild increases in underemployment across most jurisdictions
- wage growth observed across all industries (though some were subdued)
- increases in hours worked across several industries
- increasing trends in the vacancy to employment ratio across several industries.

To increase the relevance of the analysis of vacancies, we explored the vacancy to employment ratio for select low or semi-skilled occupations. This analysis revealed some signs of a shortage for various trade, care and labourer occupations.

From the analysis of industry level indicators, we detected stronger signs of pre-pandemic labour shortages in Other Services; Construction; Health Care and Social Assistance; and Mining. There were also some signals of a shortage in Public Administration and Safety; Agriculture, Forestry and Fishing; and Transport, Postal and Warehousing.

The COVID-19 pandemic has significantly impacted the labour market, including labour force participation, unemployment and underemployment. This has effectively reversed all signals of labour shortages and instead is pointing towards an oversupply. This will have ramifications for the PLF given its objectives of filling labour gaps.

The context of the COVID-19 pandemic created challenges in effectively appraising and identifying industries with labour shortages for the PLF's consideration.

Therefore, for the purposes of achieving the objectives of this research, we segmented our industry appraisal into two periods of time with different appraisal approaches. These are:

- **The COVID-19 recovery period** - The appraisal for the COVID-19 recovery period emphasises an opportunistic targeting of industries and sectors based on how they were affected by the pandemic and the extent of disruption on their workforce. It has less of a focus on identifying industries with labour shortages (given the circumstances around the Australian labour market today).
- **The long-term period** - The appraisal of industries and sectors over the long-term (i.e. beyond the immediate pandemic) focusses on finding evidence of structural labour shortages prior to the pandemic as an indication of future shortages. This appraisal operates under the assumption that future industry trends will resume and reflect pre-COVID-19 levels. Other considerations include growth potential in terms of employment and strategic factors such as the reliance on low or semi-skilled occupations.

As a result of the pandemic and the resultant recession we note that there is little indication of a shortage of workers at an economy-wide macro level. However, our analysis shows that at an industry sub-sector and local specific context, there are indications of gaps in the supply and demand for labour.

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Part 1: Industry analysis conclusion

Through the appraisal process, we identified several industries and sectors for the PLFs prioritisation during the COVID-19 recovery and long-term period. In some instances, the identified industries overlap between the two periods.

COVID-19 recovery period

Industries and sectors as an opportunistic priority

- Agriculture, Forestry and Fishing
 - Shearing, Cropping and Other Agricultural Support Services
 - Opportunities may be present in other Agricultural sectors given labour shortages from international border closures
- Manufacturing
 - Poultry Processing
 - Tea, Coffee and Other Food Manufacturing
- Construction
 - Road and Bridge Construction
 - Heavy Industry and Other Non-Building Construction
- Healthcare and Social Assistance
 - Personal Welfare Services
 - Child Care Services.

Long term period

Industries and sectors as a priority to fulfill labour shortages

- Agriculture, Forestry and Fishing
 - Outdoor Vegetable Growing
- Mining
 - Black Coal Mining
- Construction
 - Multi-Unit Apartment and Townhouse Construction
 - House Construction
- Healthcare and Social Assistance
 - Personal Welfare Services
 - Child Care Services
 - Aged Care Residential Services
- Other Services
 - Motor Vehicle Body, Paint and Interior Repair
 - Motor Vehicle Engine and Parts Repair and Maintenance

Industries to monitor

- Transport, Postal and Warehousing
- Administrative Support Services
- Accommodation and Food Services

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Part 2 - Regional labour assessment

Appraisal - the COVID-19 recovery period

The regional labour assessment is an objective scoring tool that identifies and prioritises regions with the most conducive economic and labour environment for employment and are therefore strong candidates for the PLF's consideration. A conducive region is one with a combination of high industry growth and weakness in the local labour supply.

Using the scoring approach, we identified a subset of regions that consistently achieved high scores for as many of the industries and sectors identified in the COVID-19 recovery period as possible. This included Agriculture, Forestry and Fishing, Food Manufacturing, Heavy Construction and Social Assistance Services. We also broadened our search to capture other agricultural sectors to identify further opportunities for the PLF.

This holistic review of a region's activity for multiple industries will enable the PLF to maximise their engagements. The regional labour assessment identified three regions as conducive for those industries. These include:

- Griffith, NSW
- Swan Hill, VIC
- Adelaide - North, SA*

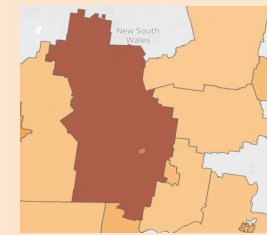
These regions were identified on the basis of:

- their high scores assigned by the regional labour assessment for the above industries
- having supporting evidence of labour shortages
- being able to form gateways to the surrounding regions, and therefore form a hub of activity.

The use of these regions as a hub would strategically open the PLF to opportunities in the broader surrounds including:

- the Riverina (via Griffith)
- the Barossa (via Northern Adelaide)
- the Mallee (via Swan Hill).

Research undertaken at the region level has shown evidence of structural labour shortages prior to the pandemic. This further promotes these regions as a priority for the PLF.



Griffith, NSW

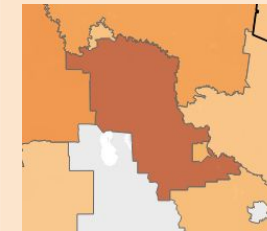
This region appears in the top 10 for several agricultural industries including Cotton Growing, Cotton Ginning, Poultry Meat Farming Shearing, Cropping and Agricultural Support Services, Grape Growing, Stone Fruit Growing, Citrus Fruit Growing, Egg Farming, Other Fruit and Tree Nut Growing, Beef Cattle Feedlots

It is also in the top 5 of the highest scoring regions for Poultry Processing (Baiada Poultry is the Riverina's largest employer) and Tea, Coffee and Other Food Manufacturing.

3,484 employed in Agriculture
Forestry and Fishing

3,577 employed in
Manufacturing

1,922 employed in Healthcare
and Social Assistance



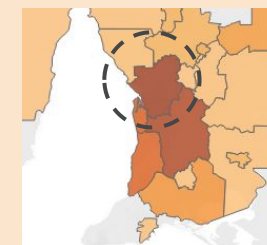
Swan Hill, VIC

This region appears in the top 10 for several agricultural industries including Stone Fruit Growing, Other Fruit and Tree Nut Growing, Floriculture Production and Citrus Fruit Growing.

1,455 employed in Agriculture
Forestry and Fishing

1,014 employed in
Manufacturing

1,375 employed in Healthcare
and Social Assistance



Adelaide - North, SA

The Northern Adelaide region is ranked in the top 10 for several agricultural sectors including Outdoor Vegetable Growing, Shearing, Cropping and Agricultural Support Services and Undercover Vegetable Growing. It is also within the top 10 for Poultry Processing.

Adjacent to it is the Adelaide Hills region that ranks in the top 10 for Personal Welfare Services, Aged Care Residential services and Apple and Pear Growing.

3,557 employed in Agriculture
Forestry and Fishing

24,095 employed in
Manufacturing

34,570 employed in Healthcare
and Social Assistance**

Data current as of 2017

*Note: While the analysis identified Adelaide-North as a priority region we note that its proximity to a larger metropolitan population base may pose a risk as identified employment opportunities may more easily be addressed by people outside the region.

** Note: This is inflated by the presence of metropolitan hospitals captured in this region

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Recommendations

We strongly encourage the PLF to undertake its own prioritisation of effort based on the data provided in this report. This can include broader considerations of the objectives for the PLS and SWP as well as their end-of-program outcomes (none of which are the subject of this analysis). We have, however, developed a number of recommendations to further guide the PLF's future strategy. These have been grouped into industry and region recommendations and were detailed below.



Industry recommendations

Recommendation 1

The PLF should stage its approach and engagement with industry into two periods. The first is the COVID-19 recovery period where the PLF should take an opportunistic focus, followed by the long-term period where the PLF looks to fill structural labour shortages.

Recommendation 2

During the COVID-19 recovery phase, the PLF should leverage its existing strengths and current presence in agriculture and food manufacturing. Opportunities were identified in Shearing, Cropping and Other Agricultural Support Services, Poultry Processing and Tea, Coffee and Other Food Manufacturing.

Recommendation 3

Also during the COVID-19 period and following the application of Recommendation 2, the PLF should explore new opportunities in Construction (in particular Road and Bridge Construction and Heavy Industry and Other Non-Building Construction) and Health Care and Social Assistance (specifically Personal Welfare Services and Child Care Services). The PLF should note some risks for these industries and should manage them accordingly.

Recommendation 4

The PLF should lay the foundation for the long-term by engaging with the industries identified in the long-term period. This can include consultations to confirm whether the occupations in shortage prior to the pandemic are likely to return to be in-demand and what (if any) are the challenges to recruit them. The PLF can then plan for and prepare the future Pacific workforce accordingly.



Region recommendation

Recommendation 5

The PLF should concentrate its efforts on the Griffith region of NSW, the Swan Hill region of Victoria and the Northern Adelaide region of SA (noting that Northern Adelaide has a higher degree of risk from competing labour from Adelaide). These regions will likely maximise the opportunities in the industries identified under the COVID-19 period and can also form gateways to surrounding areas.

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