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Online Work in Regional Western Australia
Executive Report

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FOR THE GOOD OF AUSTRALIA

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The Regional Australia Institute

Independent and informed by both research and ongoing dialogue with the community, the Regional Australia Institute (RAI) develops policy and advocates for change to build a stronger economy and better quality of life in regional Australia – for the benefit of all Australians.

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Executive Summary

Advances in information and communications technology (ICT) are changing the nature of many jobs in Australia, as they enable both new types of work and new working arrangements to emerge.

Knowledge-based work can potentially be undertaken in any place with sufficient connectivity, equipment and workforce capability. This unties many jobs from a single site of production. The term online work can collectively be used to describe work delivered from a home-based office, a mobile work site, a call-centre, a tele-centre or digital hub, or a remote operations centre.

Technology in the workplace offers opportunities to deepen the connection of Western Australian regions to the rest of the world. This offers potential for regional residents and businesses to have new or easier access to national and international markets for goods, services and employment. It also offers challenges, as existing regional markets are simultaneously opened up to new competitors.

This report assesses opportunities and challenges for online work in regional Western Australia to better inform regional development strategies and policy.

Understanding the Opportunity

Online work is occurring in regional Western Australia, but limitations in data currently restrict our understanding of the scale of this practice. A critical mass of people moving into online work roles will be required for this trend to have a discernible impact on a regional economy.

The potential for the expansion of online work in any region depends upon four key factors:

- Workforce capacity;
- Industry mix;
- Broadband connectivity; and
- Business capacity.

Workforce capacity - Online work is best suited to professional, administrative, managerial, or creative roles. Work tasks most suited include ICT, communications, research/analysis, sales, graphic design, report writing, and administrative activity. Approximately 35 per cent of the regional workforce in Western Australia is currently employed in occupations with at least some potential to engage in online work.

Furthermore, 51 per cent of the Perth workforce has at least some potential for online work, with 16 per cent of the workforce having high potential for online work. This provides an opportunity for more Perth people to move to regional areas and keep the same job.

Industry mix – Industries based on the exchange of knowledge have the highest uptake of online work. These are currently concentrated in metropolitan Perth rather than in regional areas of Western Australia. The core regional industries, such as agriculture, retail, food and accommodation services, tend to be those with much lower potential for online work. The exception to this trend is mining which has both high levels of regional employment and high levels of digital access.

Broadband connectivity – Sufficient speed, bandwidth capacity and reliability is needed to make online work commercially viable. While it is possible to use slower connections for some online work, such connections are not viable for roles requiring the transmission of large packets of data, such as design work, high quality video, or multi-channel data access. The evidence indicates that connectivity in regional Western Australia is highly variable. Despite an evident lag in the development of high speed fibre-based broadband connectivity, there is wider coverage through mobile networks.

Business capacity –Regional businesses tend to lag behind in the uptake of online work opportunities, but are also more likely to generate sales through the internet. While this could reflect lower levels of industry and occupational suitability, it is evident that lower connectivity is a barrier in many regions. Availability of ICT and business supports are also highly variable across regional Western Australia. Larger regional population centres tend to have more supports available to assist businesses to expand their technical capacity and employee skills.

Potential for Online Work: Hotspots in Regional Western Australia

Several local government areas (LGAs) in regional Western Australia have significant opportunities to tap into online work as a regional development strategy:

- Good connectivity, existing workforce skills, and an availability of labour offers potential for digital hubs to be established in places such as Bunbury, Geraldton, Mandurah and Pinjarra;
- Proximity to metropolitan areas and the availability of labour offers potential for the development of call-centres or back-office processing in the inner Wheatbelt and Peel region, if sufficient connectivity is available;
- The existing workforce skills level and business supports available in Albany offer prospects for targeted development of ICT services, subject to available connectivity;
- The Pilbara, Kimberley and Goldfields/Esperance regions currently face challenges due to high competition for labour from the mining sector, but opportunities may exist for partners of people in mining to have higher workforce engagement through online work, and in the development of specialist knowledge industries; and
- Remote operations centres are possible in areas with high connectivity and workers with knowledge of mining activity, such as Busselton and Mandurah.

Lack of high speed broadband connectivity risks creating bottlenecks to growth in regions with potential to develop and engage with the knowledge economy. Areas with substantial populations and no planned improvements in connectivity risk the creation of a digital divide which will inhibit their long term economic growth.

Most other areas of regional Western Australia exhibit a combination of poor connectivity, low levels of ICT workforce capacity, and limited business capacity. Although some online work will occur in these areas it is unlikely that it will be to an extent that will drive regional development outcomes.

These patterns of opportunity will be challenging for governments and regions to shape. The most important role for government lies in:

- Ensuring the development of telecommunications networks in regional areas that are sufficient to enable online work engagement;
- Assessing if any potential barriers exist in legislation or policy which may inhibit the development of online work and e-business¹ in regional areas;
- Supporting the development of digital literacy in regional workforces; and
- Promoting the productivity benefits of online work to business.

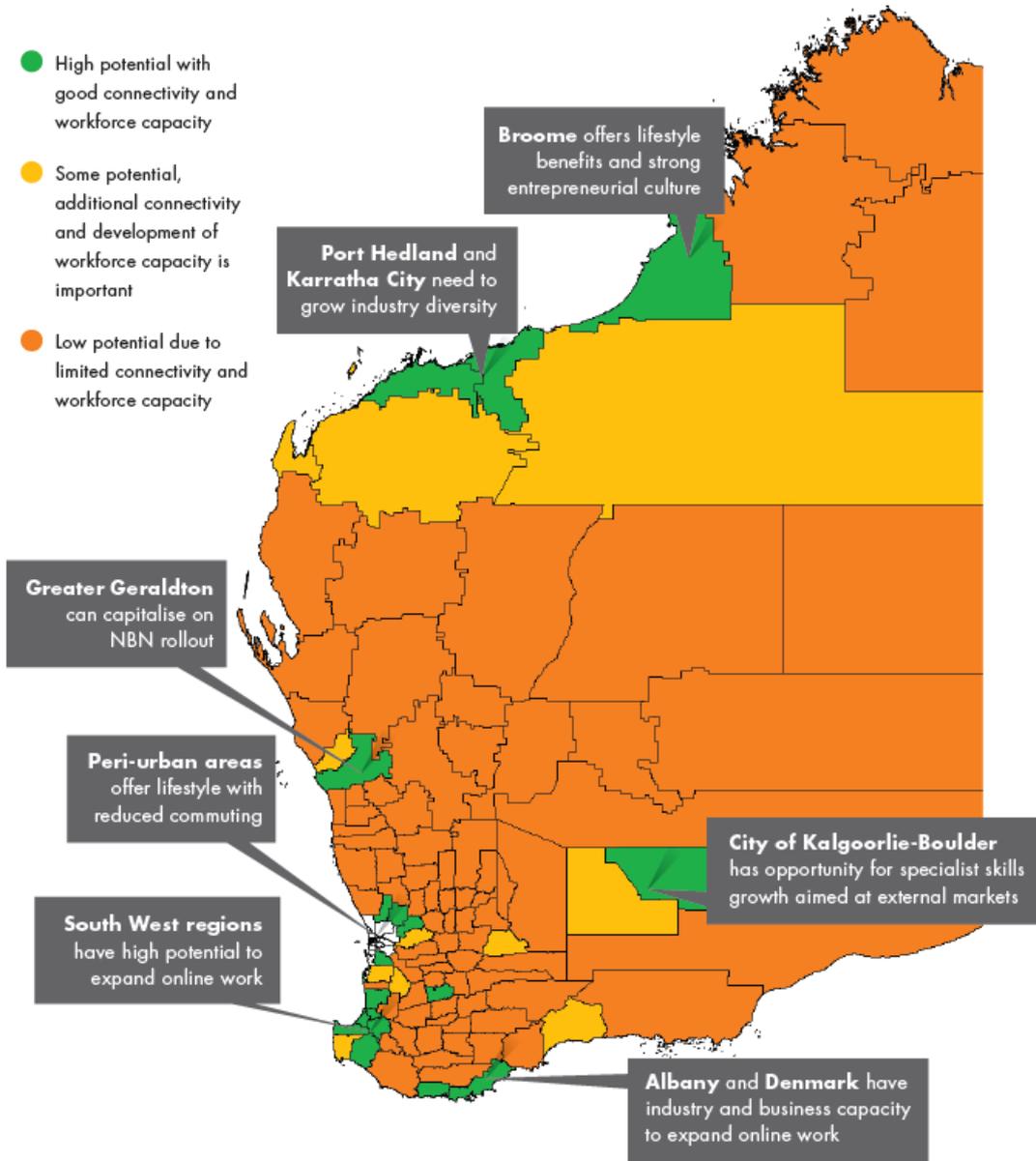
Future Options

As profiled in this report, online work opportunities are under developed in regional Western Australia. A collaborative approach is required between government, regional organisations and industry to act on current opportunities. The research in this report offers several potential pathways for further development of online work in regional Western Australia:

1. The development of online work as a regional development strategy should be prioritised in Bunbury, Geraldton, Mandurah and Pinjarra, including consideration of the feasibility of establishing digital hubs in these areas in association with the private sector;
2. Increasing the quality of broadband to meet the minimum requirements for online work should be a priority for Albany, Denmark, and the peri-urban areas² in the Wheatbelt, with the consideration of regional development initiatives focused on online work to coincide with the introduction of better services; and
3. That the potential benefits of online work initiatives in the Gascoyne, Goldfields/Esperance, Kimberley, and Pilbara regions, are further explored.

The essential elements for expanding online work in regional Western Australia are:

- A skilled and internet ready workforce;
- Knowledge-based jobs and industries;
- Access to broadband; and
- Business capacity.



Top 20 LGAs in regional Western Australia with potential for online work

Albany (C)	Chittering (S)	Harvey (S)	Narrogin (S)
Broome (S)	Dardanup (S)	Kalgoorlie/Boulder (C)	Northam (S)
Bunbury (C)	Denmark (S)	Karratha City (C)	Port Hedland (T)
Busselton (S)	Donnybrook-Balingup (S)	Mandurah (C)	Serpentine-Jarrahdale (S)
Capel (S)	Greater Geraldton(C)	Nannup (S)	Toodyay (S)

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End Notes and References

¹ e-business is commerce carried out through online portals, such as online shopping or online knowledge services delivery. This may be a main activity for the business or supplementary to the main business activity in the local or regional areas. Research by the Small Business Development Corporation indicates that regional small business in Western Australia were more likely to generate income from internet sales in 2014 compared to small businesses in the Perth metropolitan region (SBDC (2014) *2014 State of small business survey*).

² Peri-urban areas refers to the regional fringe surrounding a major city. Typically a peri-urban area has close transport connectivity to the city which results in a high functional economic relationship for its residents with the city, such as through access to employment markets, shopping and access to services. The challenge for peri-urban regional areas exists in maintaining a regional identity. Over time, many peri-urban areas become absorbed by a larger metropolis, while others maintain a degree of separate identity and become a satellite city in their own right.