This report has been prepared on behalf of Regional Development Australia Far North and the Outback Communities Authority

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Executive Summary

Informed and Strategic Planning for Economic Development in the Outback

Regional Development Australia Far North (RDAFN) and the Outback Communities Authority (OCA) commissioned the preparation of this OCA Region Economic Growth and Investment Strategy to help address the region’s challenges and to capitalise on new opportunities for growth and investment in the Outback.

The Strategy addresses the OCA Region’s economic development challenges and prospects with a focus on providing opportunities for investment to support long-term growth. It includes a comprehensive and up-to-date analysis of the region’s economic stocks and flows - both in and out of the region - identifying the Outback’s connections and interrelationships with the broader South Australian, national and global economies.

The Economic Growth and Investment Strategy promotes the notion that economic development is about the mutually-reinforcing and complementary relationship between improvements in economic activity, community wellbeing, cultural diversity, a sense of ‘place’ and the environment.

Articulating how this holistic approach to economic development can directly translate into the organisational priorities of RDAFN and the OCA, it informs a strategic and targeted approach to facilitate change towards a prosperous future for the Outback. It does this by providing the evidence base to support the OCA’s objective to have a greater say in decisions being made for the Outback, and the region’s engagement with both State and Federal Governments on matters of regional significance which require further attention.

By taking an informed, strategic and targeted approach to the identification of opportunities and priorities for growth, the Economic Growth and Investment Strategy informs the short-term work planning of the OCA and RDA Far North as well as longer-term opportunities for economic development which need to be planned for now.

Meeting the Challenges and Building Opportunities for Growth

The Outback Region of South Australia (the Outback) is undergoing a period of unprecedented change and adjustment following the resources sector slowdown and the resulting reduction and cessation of mining activity in the Far North Region, where the bulk of South Australia’s mining activity is located. The scale of subsequent job losses highlights the vulnerability of the Outback to a downturn in mining, with the majority of the region’s industry activity directly or indirectly dependent on the prosperity of the region’s resources sector.

Compounding the region’s reliance on mining is the fact that a large share of the wealth generated by the resources sector is captured elsewhere due to industry expenditure and dividends flowing to areas outside the Outback and the wider Far North Region.

The challenges associated with the OCA Region’s heavy reliance on one industry and the fact that a large proportion of the wealth generated by that industry is captured outside the region are
exacerbated by the Outback’s remoteness. The OCA Region has a population of just 4,350 spread over a vast area of almost 625,000 square kilometres. It includes small towns and settlements which grew out of the need to serve the mining industry such as Coober Pedy, Leigh Creek and Roxby Downs, other settlements built on the defence industry, namely Woomera, and a number of smaller ‘satellite’ communities including William Creek, Andamooka, Pimba, Iron Knob and Oodnadatta.

Together, these factors - isolation and an over-reliance on mining - create challenges for the communities of the Outback, including: vulnerability to sudden economic shocks caused by downturns, particularly in ‘one-industry towns’; susceptibility to demographic changes, notably in-migration and out-migration from smaller towns; dis-economies of scale hampering the delivery of physical infrastructure such as information and communications technology as well as community services like health care and education; and distance from ports, by road and rail and from suppliers and markets, leading to relatively higher costs of goods and services and limited market reach for many local businesses.

**Key Industries and Opportunities for Growth**

Despite the challenges, the Outback is presented with good prospects for economic growth and development based on existing comparative and competitive advantages and opportunities to diversify the region’s economic activity.

Mining is the OCA Region’s principal economic driver accounting for by far the largest share of the industry output, jobs and exports out of the region. Despite the industry’s decline, mining remains the anchor of the Outback economy and the sector will continue to be a significant employer and economic contributor into the future. The mining industry’s backward linkages through other sectors in the Outback economy however are not strong when compared to other industries. This suggests more could be done to facilitate import replacement in the local resources sector.

Agriculture is a traditional mainstay industry of the Outback, based on sheep, grains and beef cattle production. The OCA Region’s agricultural sector is a key industry in the OCA Region given its notable contribution to industry value-added, employment and regional exports, coupled with strong local linkages throughout the Outback economy.

Tourism is another industry with a solid base and potential for growth in the OCA Region as national and international market trends support opportunities to capitalise on demand for outback experiences. Tourism employs local residents across a diversity of sectors including accommodation and food services, arts and recreation services, retail and transport. Importantly, the tourism industry displays strong backward linkages into the local economy.

In order to address the challenges and to capitalise on new opportunities for growth, the OCA Region Economic Growth and Investment Strategy puts in place an informed and strategic plan of action. The Economic Growth and Investment Strategy identifies activities and projects which will have immediate, medium and long-term economic benefits for the communities of the OCA Region. It highlights planning and project priorities to facilitate change towards a robust and sustainable economic future for the OCA Region.
Strategy Themes and Actions

The OCA Region Economic Growth and Investment Strategy is defined by a set of principles which guide the preparation and implementation of the actions contained in this strategy. In essence, it:

1. Prioritises initiatives and activities that support the growth and development of the OCA Region’s traditional industries in agriculture and mining, with an emphasis on new opportunities in value-added economic activities which target existing, new and emerging markets.

2. Promotes a partnership approach to tourism development, working in collaboration with other tiers of government and the industry to enhance regional branding, marketing, product development, visitor servicing and support infrastructure.

3. Prioritises activities that support local industry diversification and the growth of ‘knowledge-intensive’ industries in, for example, ‘new generation’ industries such as alternative energy production and scientific, technical and professional services to mining and agriculture.

4. Pro-actively promotes the region to prospective investors, using a strategic, informed and targeted approach.

5. Focuses on activities where there are likely to be positive and measurable outcomes for the Outback community and long-term strategic economic benefits.

The Economic Growth and Investment Strategy provides the framework and directions for economic development, with the focus being on 33 individual actions across four strategic activity areas that can be achieved over the next three years. The Action Areas, which have been informed by the research, consultation and analysis undertaken to prepare this strategy, are illustrated below.

**Economic Growth and Investment Strategy Themes**

- **Action Area 1:** Support the Growth of a Sustainable Pastoral Industry
- **Action Area 2:** Support Growth and Development of Mining and Mining Services
- **Action Area 3:** Support the Development of the Outback Region’s Visitor Economy
- **Action Area 4:** Articulate and Address the Region’s Strategic Infrastructure Priorities
In summary, the actions are:

**Support the Growth of a Sustainable Pastoral Industry**

1.1 Work with the OCA Region’s pastoral industry to investigate education and training delivery models to support traineeships and ongoing development for station staff.

1.2 Collaborate with industry stakeholders, Port Augusta City Council and the State Government to progress the opportunity to establish cross-loading facilities at Port Augusta.

1.3 Continue to provide business advisory services to pastoralists looking to diversify into tourism and other businesses.

1.4 Explore the potential for an agricultural research and training facility targeting new and emerging value-added industry opportunities.

1.5 Continue to implement the Regional Climate Change Adaptation Plan for the Far North Region.

**Support Growth and Development of Mining and Mining Services**

2.1 Facilitate working relationships between resource companies and communities of interest in the Outback throughout the mining lifecycle to encourage a sustainable future for the region’s mining towns.

2.2 Investigate place-based community development opportunities to promote the Outback as a location of choice for working and living beyond mining, with a focus on Leigh Creek as a pilot project.

2.3 Investigate means for informing a regional policy position on support for local procurement targets within the OCA Region’s mining sector.

2.4 Work with BHP Billiton and Oz Minerals on current expansion and development projects to gain an understanding of workforce requirements and identify opportunities for additional training programs to support local employment opportunities.

2.5 Undertake a full community baseline assessment of the Outback to better inform the community engagement priorities of the major mining companies operating in the OCA Region.

**Support the Development of the Outback Region’s Visitor Economy**

3.1 Design and implement an Outback / OCA Region visitor needs and satisfaction survey.

3.2 Review case studies and document learnings from ‘best practice’ region or town-based tourist attraction strategies, such as Harrow in Victoria’s Wimmera Region, which reinvented itself with the establishment of the ‘Harrow Sound and Light Show’.

3.3 Prepare a regional wayfinding strategy for the Outback with an emphasis on consistent, branded signage throughout the Outback and the wider Far North Region.

3.4 Undertake a short-term accommodation needs analysis for the Outback, identifying the types of accommodation currently lacking in the region.
3.5 Collaborate and co-ordinate Outback tourist destination management and marketing; formalise roles and relationships regarding conduits for State and Federal funding to help develop industry skills and investment in specific projects and tourism infrastructure.

3.6 Work with the South Australian Tourism Commission to develop a Queensland-focused marketing initiative for Outback tourism in South Australia.

3.7 Progress investigation of a business case to upgrade / seal the Strzelecki Track to serve the growing drive tourism market.

3.8 Showcase and promote the Outback through locally-produced digital and cultural content.

3.9 Investigate the feasibility and potential benefits of providing free Wi-Fi zones in selected town centres (as pilot projects) to help improve the Outback visitor experience and retain visitors for longer.

3.10 Explore funding two tourism development officers in the OCA Region - one for the Outback and one for the Flinders Ranges - to engage, liaise with and support small business operators.

3.11 Explore potential for private businesses to take over accommodation and services at Leigh Creek after the closure of Alinta, focussed on opportunities to accommodate tourists and tapping into opportunities for mine tours.

3.12 Promote excellence in visitor customer service as a priority to develop the Outback tourism industry.

**Articulate and Address the OCA Region’s Strategic Infrastructure Priorities**

4.1 Support and promote a regular forum of all transport business leaders to discuss, agree and collaborate on the OCA Region’s transport industry priorities.

4.2 Undertake an assessment of all industry infrastructure needs in the region to identify cross-industry linkages and opportunities to help prioritise projects that will provide the greatest economic, environmental and social returns to the OCA Region.

4.3 Continue to collaborate with relevant State and Federal Government departments and agencies to progress the Strzelecki Track upgrade and sealing project proposal.

4.4 Continue to review, assess and prioritise the Outback’s other strategic regional road upgrade needs using standard assessment criteria; agree on priorities and advocate needs to State and Federal Governments.

4.5 Support ongoing investigations into the feasibility of establishing an intermodal hub at Leigh Creek.

4.6 Ensure there are long-term and integrated plans in place for freight.

4.7 Continue to support the rollout of the National Broadband Network (NBN) in the OCA Region.

4.8 Continue to actively pursue the extension of mobile and satellite phone coverage throughout the Outback through support for the Blackspots Program.
4.9 Promote and utilise existing State and Federal government programs to build the capability of businesses and communities to utilise digital technology.

4.10 Implement the recommendations from the 2015 market and value chain analysis of renewable energy and clean technology opportunities for the Far North Region.

4.11 As part of consideration of community owned projects, investigate the business case for a Far North Region co-operative energy purchasing arrangement.

Priorities for Action – Informing a Year 1 Work Plan

Priority projects and activities for implementation as part of a Year 1 work plan are identified based on the application of two broad sets of assessment criteria – benefit assessment and capacity to implement. They reflect priorities that the OCA and RDAFN should advance (in association with identified partners where relevant) as short-term priorities. The Year 1 priorities are:

1. Continue to provide business advisory services to pastoralists looking to diversify into tourism and other businesses.
2. Investigate place-based community development opportunities to promote the Outback as a location of choice for working and living beyond mining, with a focus on Leigh Creek as a pilot project.
3. Design and implement an Outback visitor needs and satisfaction survey.
4. Prepare a regional wayfinding strategy for the Outback with an emphasis on consistent, branded signage throughout the Outback and the wider Far North Region.
5. Progress investigation of a business case to upgrade / seal the Strzelecki Track to serve the growing drive tourism market.
6. Undertake an assessment of all industry infrastructure needs in the region to identify cross-industry linkages and opportunities to help prioritise projects.
7. Continue to collaborate with relevant State and Federal Government departments and agencies to progress the Strzelecki Track upgrade and sealing project proposal.
8. Continue to support the rollout of the National Broadband Network (NBN) in the OCA Region.
9. Continue to actively pursue the extension of mobile and satellite phone coverage throughout the Outback through support for the Blackspots Program.
10. Promote and utilise existing State and Federal government programs to build the capability of businesses and communities to utilise digital technology.

In progressing these actions, cultivating collaborative partnerships will be key.

Continuing Collaborative Partnerships for Effective Implementation

Promoting economic growth and investment in the OCA Region requires both leadership and the formation of partnerships. Using the Economic Growth and Investment Strategy as a plan of action, RDA Far North and the OCA will take the lead, working together with other stakeholders to address opportunities for improved integrated planning and management concerning matters arising from the interface of natural resources management, economic development and community wellbeing.

To this end, the Economic Growth and Investment Strategy guides the efforts of RDA Far North and the OCA to facilitate opportunities for investment to support the region’s long-term growth. Using the evidence presented in this report, it also supports the OCA’s objective to have a greater say in decisions being made for the Outback, and the region’s engagement with both State and Federal Governments on matters of regional significance.
1. Introduction
1. Introduction

1.1 Strategy Background

Regional Development Australia Far North (RDAFN) and the Outback Communities Authority (OCA) commissioned the preparation of this Economic Growth and Investment Strategy for the OCA Region. Informed by a comprehensive and up-to-date analysis of the local and regional economy, a review of the economic development policy and strategy environment and targeted consultation with selected stakeholders, the Economic Growth and Investment Strategy identifies future activities and ‘focal’ areas in support of the region’s economic growth and development.

The Outback Region of South Australia (the Outback) is undergoing a period of unprecedented change and adjustment following the resources sector slowdown and the resulting reduction and cessation of mining activity in the Far North Region, where the bulk of South Australia’s mining activity is located. The scale of subsequent job losses highlights the vulnerability of the Outback to a downturn in mining, with the majority of the region’s industry activity directly or indirectly dependent on the prosperity of the region’s resources sector. Compounding the region’s reliance on mining is the fact that a large share of the wealth generated by the resources sector is captured elsewhere due to industry expenditure and dividends flowing to areas outside the Outback and the wider Far North Region.

The challenges associated with the OCA Region’s heavy reliance on one industry and the fact that a large proportion of the wealth generated by that industry is captured outside the region are exacerbated by the Outback’s remoteness. The OCA Region has a population of just 4,350 spread over a vast area of almost 625,000 square kilometres. It includes small towns and settlements which grew out of the need to serve the mining industry such as Coober Pedy, Leigh Creek and Roxby Downs, other settlements built on the defence industry, namely Woomera, and a number of smaller ‘satellite’ communities including William Creek, Andamooka, Pimba, Iron Knob and Oodnadatta.

Together, these factors - isolation and an over-reliance on mining - create challenges for the communities of the Outback, including: vulnerability to sudden economic shocks caused by downturns, particularly in ‘one-industry towns’; susceptibility to demographic changes, notably in-migration and out-migration from smaller towns; dis-economies of scale hampering the delivery of physical infrastructure such as information and communications technology as well as community services like health care and education; and distance from ports, by road and rail and from suppliers and markets, leading to relatively higher costs of goods and services and limited market reach for many local businesses.

In order to address the challenges and to capitalise on new opportunities for growth, the OCA Region Economic Growth and Investment Strategy puts in place an informed and strategic plan of action.

1.2 Strategy Purpose

The OCA Region Economic Growth and Investment Strategy addresses the region’s economic development challenges and prospects with a focus on providing opportunities for investment to support the region’s long-term growth. It includes a comprehensive and up-to-date analysis of the region’s economic stocks and flows - both in and out of the region - identifying the Outback’s connections and interrelationships with the broader South Australian, national and global economies.
The strategy provides the evidence base to support the OCA’s objective to have a greater say in decisions being made for the Outback, and the region’s engagement with both State and Federal Governments on matters of regional significance which require further attention.

As well as identifying priorities for the region’s future, the Economic Growth and Investment Strategy articulates the role of the Outback Communities Authority and other key ‘agents of change’ - RDA Far North, local Councils and others - in facilitating economic development and attracting investment to ensure growth in the region is managed and sustainable.

By taking an informed, strategic and targeted approach to the identification of opportunities and priorities for growth, the Economic Growth and Investment Strategy informs the short-term work planning of the OCA and RDA Far North as well as longer-term opportunities for economic development which need to be planned for now.

1.3 Strategy Outcomes

The Economic Growth and Investment Strategy identifies activities and projects which will have immediate, medium and long-term economic benefits for the communities of the OCA Region. It highlights planning and project priorities to facilitate change towards a robust and sustainable economic future for the OCA Region.

By documenting the region’s economic stocks and flows, the Economic Growth and Investment Strategy informs a targeted approach to project selection to maximise the economic benefits of any form of funding packages or other resources directed to the region within the OCA’s boundary.

In short, the Economic Growth and Investment Strategy:

1. Provides an understanding of how the OCA Region connects economically and socially and the interdependencies across local communities;

2. Shows how the region contributes to the state and national economies and the level of outflow or leakage from the region to other centres such as Adelaide;

3. Identifies projects that have good prospects to contribute positive employment outcomes for the OCA Region and which should help improve economic diversification and links to regional growth sectors;

4. Identifies priority infrastructure needs to enable economic development to occur; and

5. Informs how funding and other resources that may come into the OCA Region need to be targeted to maximise positive investment, economic development and employment outcomes.

The Economic Growth and Investment Strategy identifies the OCA Region’s existing and potential supply chain links, between local business and industry and economic activity located external to the region. It recognises and promotes the OCA Region’s strategic comparative and competitive advantages and its ‘investment-ready’ projects, in key sectors or areas of activity which build on this advantage.

In this regard, the Economic Growth and Investment Strategy reflects the vision and strategic priorities for the region and it articulates the Outback’s attributes and challenges. This ensures the OCA and RDA Far North have the information and resources in place to prioritise activities and proactively seek-out and facilitate new investment and economic activity in the OCA Region.
1.4 Strategy Partners

The Outback Communities Authority

The Economic Growth and Investment Strategy provides important information to assist the Outback Communities Authority in meeting its organisational objectives, goals, strategies and actions.

The OCA is established pursuant to the Outback Communities (Administration and Management) Act 2009 to manage the provision of, and promote improvements in, public services and facilities for outback communities. The OCA articulates the views, interest and aspirations of the 4,500 people who call the region home, in essence by giving it a voice.

The OCA’s objectives are to “grow our economy, grow our community and grow our influence and presence”. The region covered by the Outback Communities Authority is 624,339 square kilometres, which makes the idea of traditional ‘local government’ impracticable, so the OCA model is a hybrid between local government and community self-management.

The OCA’s role is to support Outback communities to achieve their goals. This is done by providing (and maintaining) infrastructure, advocacy and governance support along with managing the flow of information in and out of the region.

By delivering an informed assessment of economic development challenges and opportunities for the Outback, the Economic Growth and Investment Strategy provides the OCA with an important information tool to guide its ongoing engagement with community stakeholders throughout the region, with industry and with its partners in government, including RDA Far North.

Regional Development Australia Far North SA

Regional Development Australia Far North (RDAFN) is a partnership between the Australian and local governments to support the growth and development of the regions of Far North South Australia.

The RDAFN region is home to 28,000 people and covers an area of approximately 800,000 square kilometres, which is 80% of South Australia’s land mass. The region takes in the Local Government Areas of the City of Port Augusta, The Flinders Ranges Council, District Council of Coober Pedy, Roxby Downs Council and the Outback Communities Authority.

RDAFN supports development and attraction of new enterprises to the region, assists the growth of strong and viable businesses and skills to support the resources sector, identifies innovative ways of increasing activity, supports and delivers a viable and robust emerging industry sector, addresses infrastructure gaps and works towards attracting new business investment to grow the economy of the region.

RDAFN also plays an important role in fostering business attraction, commencement, growth and retention in South Australia’s Far North Region.

The OCA Region Economic Growth and Investment Strategy is one of five economic growth and investment strategies that have been prepared for the Far North Region of South Australia. The OCA Region Economic Growth and Investment Strategy, along with those prepared for Coober Pedy, Flinders Ranges, Port Augusta and Roxby Downs will inform the regional priorities and a renewed Regional Roadmap and RDA Far North’s short-term work planning across its various operational streams of activity, for the following 12 months.
Figure 1. Outback Communities Authority Region

Source: Outback Communities Authority
1.5 Strategy Framework: Addressing the Determinants and Enablers of Regional Development

The OCA Region Economic Growth and Investment Strategy recognises ‘economic development’ as the continuous process of growing the OCA Region’s level of income and capital (wealth) and distributing that wealth (through expenditure and employment) to the community. While measured in terms of income (or gross regional product) and employment, economic development also encapsulates improvements in education, health, culture, community wellbeing, a sense of place and the environment.

Efforts to stimulate economic growth and investment in the OCA Region must be cognisant of the determinants and enablers of regional economic development. These provide the ‘pre-conditions’ for prosperous businesses and a healthy economy and they are the foundations upon which economic interaction and exchange takes place.

While there is no uniformly-agreed definition of what constitutes the determinants or enablers of economic development, broadly-speaking, they include:

1. Regional Comparative Advantage and Business Competitiveness;
2. Human Capital (Skills);
3. Strategic Infrastructure;
4. Access to Local, National and International Markets; and
5. Effective Regional Partnerships.

Each is explained in turn below.

Regional Comparative Advantage and Business Competitiveness

Comparative advantage is an area of relative strength or specialisation. Efforts to develop regional economies are most successful when they focus on building on such strengths.

Businesses can also use a region’s comparative advantage to build a competitive advantage, which is developed through the combination of factors such as knowledge, resources, skills and the ability to innovate.

A region’s comparative advantage can stem from various sources, such as its geographic location, availability of natural resources, the existence of industry clusters, access to infrastructure or the skill profile of the local population. These underlying attributes influence the types of economic activity that are likely to be successful. They also have implications for development initiatives, which are generally more effective where they build on an existing strength.

A critical input to the OCA Region’s economy, and central to its competitiveness, is its natural resources. Much of the economic activity in regional Australia is directly linked to local natural resources. The Regional Australia Institute (2015) asserts that access to natural resources can create economic opportunities through offering inputs to production (such as access to water or good quality soil), and can be used to generate production outputs (such as minerals or extractives), or as a foundation for services such as tourism and recreation.

In the case of the Outback, it follows that natural resource management is critical to developing and maintaining a comparative economic advantage as it underpins the region’s ‘driver’ industries of agriculture, tourism and mining. Key inputs to these industries include conservation of biodiversity,
management of regional landscapes, water quality, soil quality, water planning and management. These, in-turn, contribute to key outputs that include visitor experiences and satisfaction, sustainable pastoralism, management of mining impacts and sustainable water resources for communities.

This does not mean regions such as the Outback cannot diversify their economies. Rather, the communities of the Outback can benefit if the region can leverage its natural assets and strengthen current areas of specialisation, and it can diversify by developing new ways to capitalise on these assets, resources and knowledge.

**Human Capital (Skills)**

Human capital is the stock of knowledge, expertise and abilities of a region’s population. It is one of the most important inputs to economic activity because it is crucial to supporting local businesses to be competitive and drive economic growth. Businesses need access to workers with appropriate skills. Access to human capital is influenced by workforce participation and the mobility of labour.

Developing a skilled and educated workforce assists with building the resilience of the local economy. Individuals with greater education and skills can pursue a wider range of employment opportunities and adapt to new processes and technologies which enhances productivity and improves living standards.

An appropriately skilled and educated workforce can help places such as the OCA Region take advantage of new opportunities, overcome challenges and make the region more attractive to investment.

Government agencies such as RDA Far North and the Outback Communities Authority, and employment service providers can play a role in supporting the development of local skills to meet industry needs. For example, they can liaise with local businesses (and prospective new investors in the OCA Region) to identify apparent labour shortages or skills gaps and they can engage with education and training providers to help fill those gaps.

**Strategic Infrastructure**

Efficient and effective infrastructure underpins economic activity and is fundamental to a prosperous regional economy. It includes ‘physical’ infrastructure (like roads, seaports and airports, information technology and telecommunications, power and water) and quality ‘community’ infrastructure (like recreation and leisure facilities, cultural services and facilities and community services and facilities).

Together these elements should offer good physical and functional links that support social, cultural and economic interaction and exchange in the community.

RDA Far North, the OCA and other government agencies and service providers can help ensure these fundamentals for investment and economic development are addressed by identifying the region’s infrastructure challenges and shortfalls, and liaising with private infrastructure and service providers on matters of regional significance and opportunities for development. Identifying the region’s infrastructure investment priorities is essential if economic development opportunities are to be strategically pursued and to ensure any critical gaps can be addressed.
Access to Local, National and International Markets

Access to international, national and local/regional markets includes access to trading partners, clients and labour. Improving the OCA Region’s access to markets will broaden trade, allow both existing and potential new competitive industries to grow and increase the availability of goods and services to the communities of the Outback.

Access to markets is facilitated by physical and non-physical connections. Reducing transport costs can improve physical access to markets and enable businesses to move goods more quickly. Other ‘soft’ infrastructure, such as strong business relationships and networks, supported by good access to quality communications technology, is equally important.

Some businesses, by their nature, are focused on the local market. For example, demand for retail and personal services is driven by local consumption. Hence local retailers will typically serve specific local needs, and focus on relatively small local markets. These businesses are important and should be encouraged. Other industries like tourism for example, are outward-oriented and have stronger export potential. Growth in these sectors is greatly aided by building connections to larger trade markets throughout the Far North Region, South Australia and beyond.

Greater access to markets provides local businesses with opportunities to grow by trading more goods and services. Producing on a larger scale can help local businesses to bring down their costs through economies of scale, making them more competitive. Importantly, greater access to markets opens the door to new investment and innovation, through the sharing of information, knowledge and technology.
**Effective Regional Partnerships**

Promoting partnerships and collaborative regional planning is the key to successful implementation of activities, projects and initiatives designed to meet the OCA Region’s priorities for economic development.

No one agency can be all things to all people and no one level of government can fully respond to the diverse needs and circumstances of the communities of the OCA Region. Hence, collaborative partnerships - between the OCA, RDA Far North and others - are essential for co-ordinating the activities and investments of different stakeholders.

The OCA Region Economic Growth and Investment Strategy and the activities which inform it play an important role in articulating a shared understanding of the Outback’s social, environmental and economic development priorities and opportunities for investment.

As noted above, a critical input to the OCA Region’s economy, and central to the its competitiveness, is its natural resources. Natural Resources SA Arid Lands (SAAL) is the organisation responsible for ensuring the sustainable use of the region’s resources, including water, soils, plants and animals. As noted on the Natural Resources SAAL website, the natural systems and human activities in the SAAL NRM Region make it fundamentally different from other NRM regions in South Australia, containing a greater percentage of intact ecosystems and natural biological diversity than any other region in the State.

Engaging Natural Resources SAAL (and others) will therefore be critical to facilitating and promoting a holistic approach to the Outback’s sustainable economic development. Effectively promoting and facilitating economic development in the OCA Region will require all key stakeholders to work in partnership with each other, communities and the private sector, to focus on the challenges and opportunities for the region and its communities. To do this effectively requires a strategic, informed and targeted approach.

The recommended actions presented in this Strategy are themed, each theme reflecting the region’s priorities as informed by the research, data analysis and targeted consultation with selected stakeholders.

Importantly, the actions presented under each theme reflect the roles and capacities of RDA Far North and the Outback Communities Authority by focussing on those determinants and enablers of regional economic development which each organisation can influence, to varying degree, either in its own right or in collaboration with others.

1.6 **Economic Growth and Investment Strategy Themes**

The OCA Region Economic Growth and Investment Strategy responds to RDA Far North’s and the OCA’s commitment to promoting and facilitating the region’s economic development. It is defined by a set of principles which guide the preparation and implementation of the actions contained in this strategy.

In essence, the Economic Growth and Investment Strategy:

1. Prioritises initiatives and activities that support the growth and development of the OCA Region’s **traditional industries in agriculture and mining**, with an emphasis on new opportunities in value-added economic activities which target existing, new and emerging markets.
2. Promotes a partnership approach to tourism development, working in collaboration with other tiers of government and the industry to enhance regional branding, marketing, product development, visitor servicing and support infrastructure.

3. Prioritises activities that support local industry diversification and the growth of ‘knowledge-intensive’ industries in, for example, ‘new generation’ industries such as alternative energy production and scientific, technical and professional services to mining and agriculture.

4. Pro-actively promotes the region to prospective investors, using a strategic, informed and targeted approach.

5. Focuses on activities where there are likely to be positive and measurable outcomes for the Outback community and long-term strategic economic benefits.

Informed by the findings from the economic research and analysis, the Economic Growth and Investment Strategy provides the framework and directions for the region’s economic development, with the focus being on 33 individual actions across four strategic activity areas that can be achieved over the next three years.

The Strategy will be implemented by RDA Far North in collaboration with the Outback Communities Authority as the lead agents, working in partnership with other key stakeholders including industry bodies, non-government organisations, local Councils and government agencies.

**Figure 3. Economic Growth and Investment Strategy Themes**
Effective planning and strategy implementation requires an understanding of the structure and dynamics of the Outback economy and its interrelationships with the wider Far North Region as well as the State, national and global economies.

By identifying priorities for growth, the OCA Region Economic Growth and Investment Strategy is designed to help facilitate investment in the region and encourage established businesses to invest further into developing the local economy.

To do this effectively requires an informed and targeted approach. Hence, understanding the OCA Region’s economic stocks and flows - both in and out of the region - is essential.
2. Economic Stocks and Flows
2. Economic Stocks and Flows

2.1 Overview of the OCA Regional Economy

The Gross Regional Product (GRP) of the Outback Communities Authority Region is estimated at $1.7 billion, which is 54% of the wider Far North Region’s GRP and approximately 2% of South Australia’s Gross State Product (GSP). GRP per worker in the OCA Region is $297,000 and GRP per capita is $392,000. This compares to South Australia’s GSP per capita of $58,300. The Outback’s relatively high GRP per capita reflects the strength of the region’s mining industry and the capital-intensive nature of that sector. As shown below, despite the size of the region’s mining industry, a significant proportion of the industry’s wealth that is generated in the region ‘escapes’ in the form of income and expenditure directed to other parts of South Australia, Australia and overseas.

While capital-intensive in nature, the resources sector is a large employer in mining regions like the Far North. Employment in the OCA Region has been concentrated in mining and related manufacturing (processing), utilities, construction, agriculture, transport, public administration and hospitality. The resources sector drives the Outback economy and, with the exception of agriculture, the activities of these other industries is underpinned by the success or otherwise of mining.

The Outback is facing a significant period of transition as a result of the mining slow-down and industry closures. Some of these are related, such as the winding back of rail services across the region as mining activity decreases and there is less demand for minerals haulage. There has also been a decline in retail and property market activity as wages and salaries fall or individuals and families leave the region in search of work elsewhere.

Over the 12 months to 2015, approximately 1,500 jobs have been lost across the wider Far North Region. Mining particularly, has played a major role in the economic prosperity of South Australia, and much of that activity has been centred in the Far North with the returns from minerals extraction in the Outback benefiting businesses and residents throughout the State and beyond. Further job losses will occur, with mines coming to the end of their production.

Factors impacting upon the broader Far North Region include decreasing demand for fossil fuels, increasing globalisation of agriculture, the fall of the Australian dollar and technological change. Whilst some of these impacts have the potential to be negative, there are also opportunities upon which the Outback and wider Far North Region can capitalise. Small business constitutes an important plank in the economy of the region and enhancing this sector’s capacity to ‘do business’ will be critical to supporting economic diversification and growth.

Agriculture is a traditional mainstay industry of the Outback, based on sheep, grains and beef cattle production. Tourism is another industry with a solid base and potential for growth in the region as national and international market trends support opportunities to capitalise on demand for outback experiences.

The significance of mining and related industries, tourism and agriculture as traditional drivers of the OCA Region economy and as potential pillars of future economic prosperity, is illustrated in the economic stocks and flows analysis.
2.2 The OCA Region’s Socio-Economic Structure and Dynamics

Population

The Outback Communities Authority Region has an estimated resident population of 4,350 dispersed across an area of more than 620,000 square kilometres. As illustrated below, the resident population of the OCA Region has fluctuated on a downward trend since 2001.

The estimated resident population (ERP) is the official Australian Bureau of Statistics (ABS) measure of the population of areas in Australia according to a usual residence. The OCA Region estimates are based on local government area and statistical area level 1 (SA1) data sourced from the ABS.

The fortunes of the mining sector have a significant bearing on the size of the population as demand for employment impacts on population levels and demand for housing. Over the past five years, the population of the Outback has shown a steady decline, from 4,534 in 2010 to 4,351 in 2015.

Figure 4. Population Trend, OCA Region, 2001 to 2015

Source: Australian Bureau of Statistics (2016)
Unemployment Trends

Like population, the availability of jobs in the OCA Region is highly dependent on the fortunes of the mining industry. According to data sourced from the Department of Employment, between March 2011 and June 2014, the unemployment rate in the OCA Region increased from 3.3% to 5.3%.

Figure 5. Unemployment Rates, OCA Region, South Australia and Australia, March 2013 to December 2015

Between June 2014 and December 2015, the region’s unemployment rate fell, down to 3.4%, much lower than the unemployment rate for South Australia (7.1%) and Australia at that time (5.6%).

With the recent power station closure in Port Augusta and mining still in a state of relative uncertainty, unemployment rates will need to be monitored over the coming six months.
2.3 Economic Stocks and Flows

Employment by Industry

Figure 6 illustrates the OCA Region’s profile of employment by industry (that is, the number of employees whose place of work is located within the OCA Region). The data is the latest available (March 2016) sourced from REMPLAN, which uses 2011 ABS Census Journey to Work data as a base and adjusts employment numbers to current estimates based on the latest (2012/13) national input-output tables and June 2015 Gross State Product data.

As illustrated below, mining provides for the majority of jobs located in the OCA Region, accounting for over half (53%) of the total, compared to 26% of jobs located in the Far North Region. As the majority of South Australia’s mining activity takes place in the Far North, this highlights the significance of mining to economic activity in the Outback. Although mining is a large employer in the region, the drive-in drive-out and fly-in fly-out nature of employment in the mining industry is reflected in journey to work movements, which show only 22% of mining workers reside in the OCA Region.

Figure 6. Employment by Industry, OCA Region and Far North Region, 2016

The employment data presented in this report represents the number of people employed by businesses / organisations in each of the industry sectors in the OCA Region. The employment data is place of work data and represents total numbers of employees without any conversions to full-time equivalence. Retail jobs for instance represent typical employment profiles for that sector, i.e. some full time, some part time and some casual.
Other major contributors to employment in the OCA Region are construction (9% of all jobs in the OCA Region), agriculture (5% of all jobs) and electricity, gas, water and waste services – otherwise referred to as utilities (5%).

The significance of the OCA Region’s tourism sector is reflected in the size of the retail trade, transport, arts and recreational services and accommodation and food services sectors, which combined, account for a similar share of employment in the Outback as agriculture. However, these industries collectively and in their entirety account for activity other than tourism.

To better capture the true size and value of tourism, REMPLAN quantifies the tourism sector as a stand-alone industry. The tourism industry is an amalgam of activities across various sectors including Retail Trade, Accommodation and Food Services, Arts and Recreational Services and Transport, Postal and Warehousing. REMPLAN’s Tourism Analysis Module estimates the total number of jobs and the value of tourism for the local economy and incorporates a ‘Tourism Sector’ into the output and employment data.

The total value of the OCA Region’s tourism output is estimated at $52 million, which is 1.2% of the value of the region’s total output. As illustrated in Figure 6, the Outback’s tourism industry is one of the area’s largest employers, accounting for 5 per cent of jobs located in the OCA Region (and 7% of jobs across the wider Far North Region). Employment numbers in this sector are higher than in the OCA Region’s other service industries including Public Administration and Safety, Health Care and Social Assistance and Education and Training.

The REMPLAN modelling estimates that for each dollar spent by a tourist in OCA Region, $0.74 is spent on accommodation and food services, $0.11 on ownership of dwellings and $0.08 on transport, postal and warehousing. Visitation in the OCA Region is underpinned by mining activity.

**Industry Output and Value-Added**


The economic modelling estimates the OCA Region’s total value of economic output, that is, gross revenue generated by businesses and organisations in the OCA Region, at approximately $4.4 billion. The region’s mining sector accounts for three-quarters of the OCA Region’s economic output.

The economic model also calculates industry value-added, which is the value that is added by industry sectors in the OCA Region to intermediate inputs. Value-added is considered to be a better reflection of the strength or otherwise of a local or regional economy because it refers to only the value of output generated in the region less the cost of inputs such as the purchase of machinery and equipment and other non-labour inputs used in the production process.

The total value-added estimate for the OCA Region is $1.7 billion, which is 55% of the total for the whole Far North Region. The majority of the OCA Region’s industry value-added is attributable to mining, which accounts for around three-quarters (74%) of the region’s total value-added. Other notable contributors, which are closely linked to the region’s mining activity, include utilities (7% of total value-added), which is underpinned by electricity generation and distribution, and construction (7%).
As a proportion of total value-added, manufacturing - which consists largely of metal product manufacturing directly associated with mining in the region - is more pronounced in the wider Far North Region as a share of total value-added compared to that for the OCA Region. This suggests a large share of processing activity takes place outside of the Outback, in Port Augusta.

Source: REMPLAN, April 2016
**Inter-regional Exports**

Economic modelling shows the value of goods and services produced by industry sectors in the OCA Region that are sold to consumers, businesses, and governments based outside the region’s boundaries. This includes ‘exports’ to locations in other parts of South Australia, Australia and overseas. The total estimated value of regional exports for the OCA Region is $3.6 billion, which is 84% of the region’s economic output.

Mining is by far the largest contributor to regional exports (85% of total export value compared to 72% for the wider Far North Region), followed by construction (5%), utilities (3.5%) and manufacturing (2.5%). The contribution of manufacturing to regional exports in the Far North Region (17% of total export value) is comparatively high compared to that for the OCA Region at just 2.5% of total export value.

Compared to the wider Far North Region, the OCA Region’s utilities sector makes a proportionally higher contribution to inter-regional exports.

Agriculture, which is the OCA Region’s fourth-largest employer (5% of jobs) is also the region’s fifth-largest contributor to regional exports, accounting for 1.4% of the total. The OCA Region’s agricultural industry has strong backward (local) expenditure linkages with activity centred on livestock, grains and other agriculture.

**Figure 9.** **Inter-regional Exports by Industry, OCA Region and Far North Region, 2016**

Source: REMPLAN, April 2016
Import Replacement Opportunities

Figure 10 shows the value of expenditure by industries in the OCA Region by geographic location of purchase. In other words, for selected industries, it shows the amount businesses located in the Outback collectively spend on goods and services which are purchased from within the region, imported from the elsewhere in Australia and imported from overseas, respectively. Only those industries which generate $20 million or more in industry value-added are shown in the chart.

Of the $1.9 billion spent by the OCA Region’s mining industry on goods and services, 19% is spent locally in the Outback, the remainder being spent elsewhere in Australia (55%) or overseas (26%). The construction industry also sources the majority of its inputs from outside the region, with 75% of purchases made elsewhere in Australia. The remainder is spent in the OCA Region itself with only a negligible amount (less than one per cent) spent overseas. Manufacturing on the other hand purchases the bulk of its inputs (51%) from overseas suppliers with the remainder split fairly evenly between local suppliers and those located elsewhere in Australia.

This suggests there may be scope to replace expenditure on imports in some industry sectors with local goods and services, particularly in mining and related manufacturing activities as well as in the construction industry. This will depend on which imports are ‘contestable’, that is, those items that can be produced and supplied using local capabilities. This would require further investigation. The utilities sector (electricity, gas, water and waste services) makes a significant share of its input purchases (65%) from within the region, with the remainder sourced from elsewhere in Australia.

Figure 10. Selected Industry Expenditure Breakdown by Location, OCA Region, 2016

Source: REMPLAN, April 2016 with interpretations by SC Lennon & Associates
The OCA Region’s ‘Driver’ Industries

The industry sectors which are the key drivers of the OCA Region’s economy in terms of regional exports, employment, value-added and local expenditure on goods and services (backward linkages) are detailed below.

Mining is the OCA Region’s principal economic driver accounting for by far the largest share of the industry output, jobs and exports out of the region. The mining industry’s backward linkages through other sectors in the Outback economy however are not strong when compared to other industries. This suggests more could be done to facilitate import replacement in the local resources sector.

Figure 11. OCA Region’s ‘Driver’ Industries

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Source: REMPLAN, April 2016 with interpretations by SC Lennon & Associates

The agricultural sector is a key industry in the Outback given its notable contribution to industry value-added, employment and regional exports, coupled with strong local linkages throughout the local economy.

Tourism employs local residents across a diversity of sectors including accommodation and food services, arts and recreation services, retail and transport. Importantly, the tourism industry displays strong backward linkages into the local economy.

Mining continues to drive the wealth of the OCA Region with the majority of the Outback’s industry activity directly or indirectly dependent on the prosperity of the region’s resources sector.

The construction and utilities sectors also display all of the attributes of ‘driver’ industries in the local economy and for this reason, further attention should be paid to these sectors in efforts to diversify and grow the Outback economy.
3. Economic Development Priorities
3. The OCA Region’s Economic Development Priorities

3.1 Support the Growth of a Sustainable Pastoral Industry

Challenges and Opportunities for Growth

Agriculture is a traditional mainstay industry of the Outback, with the region’s sheep and cattle stations covering more than 400,000 square kilometres, or over half the Far North Region’s land mass (source: Know Your Outback – Pastoralism, undated). As shown in Section 2, the Agriculture, Forestry & Fishing sector contributes $59 million or approximately 1.3% of the OCA Region’s total output. The sheep, grains, beef and dairy cattle sector accounts for 90% of the region’s agricultural industry output, or $54 million. Agriculture is one of the Outback’s largest employers, accounting for 5% of the region’s jobs, the majority of which (more than 95%) are employed in sheep, grains, beef and dairy cattle production.

The ongoing importance of agriculture to the Outback is acknowledged in the South Australian Government’s Far North Region Plan (2010), which establishes the principle to “retain and strengthen the economic potential of pastoral lands”. The Plan notes that sheep and cattle production will continue to play an important role in the regional and South Australian economies and provide ongoing employment to many people across the Far North.

According to IBISWorld (2015), nationally, following years of losses, Australia’s sheep farming industry returned to growth for most of the past five years. Increased rainfall during 2010-11 improved pasture feed, reducing the cost of keeping livestock and allowing farmers to expand production. Industry revenue however, has remained volatile, moving in line with fluctuations in commodity prices, rainfall and production. Industry revenue is forecast to grow nationally at an annualised 1.5% over the five years through 2015-16, to reach $3.4 billion.

Despite a number of challenges facing the beef cattle industry in South Australia (and nationally) in recent years - varying weather patterns, volatile operating costs, fluctuating turnoff rates and declining commodity prices - the global market outlook for meat products is improving, with demand expected to grow as increasing meat consumption coincides with higher incomes, particularly in emerging Asian economies.

According to IBISWorld (2016), Australia’s beef cattle industry revenue is expected to grow at an annualised 3.1% over the five years through to 2015-16. The industry’s prospects are expected to further strengthen over the next five years and revenue is expected to grow at an annualised 2.4% through 2020-21, to reach $15.2 billion. The volume of Australia’s live cattle exports is projected to increase in line with growing demand in Asian and Middle Eastern markets and higher prices. Exports will be further aided by the expected ongoing depreciation of the Australian dollar.

Capitalising on new opportunities for industry growth and investment will require the Outback’s agricultural sector to address current constraints on growth - including some critical infrastructure shortfalls and limited access to education and training - to become more efficient and competitive, nationally and globally.

The Use of New Information and Communications Technology

Efficiency gains in the OCA Region’s agricultural sector can be achieved through lower production costs and improved access to markets, facilitated by the use of digital technology in pastureland and stock management. For example, the use of new technology to aid remote monitoring and walk-over weighing technology are just two examples of how the industry can improve production efficiencies.

With improved communications infrastructure, the OCA Region’s pastoralists would be able to access geospatial mapping technologies coupled with time-series satellite remote sensing of ground cover, as offered through the
NRM Spatial Hub: A limiting factor for pastoralists who want to adopt these and other new production practices however, is the very limited or absent mobile and broadband connectivity affecting outback stations of the OCA Region.

**Natural Resource Management**

An ongoing challenge for pastoralists is the difficulty in maintaining a consistent supply of product to market. The Outback is part of the South Australian Arid Lands (SAAL) region, which includes some of the driest parts of the state. It is characterised by irregular rainfall and other episodic weather events that rarely follow predictable annual cycles. At times, these factors have been accentuated by periods of severe drought, and such dynamics directly affect the Outback’s pastoral activities and its water supplies.

Climate change predictions indicate that diminished rainfall will continue to affect the region in the future and adapting to environmental change is a challenge for the OCA Region’s pastoral industry.

Unlike agricultural regions further south, healthy native vegetation is critical to the Outback pastoral industry, providing valuable fodder for fattening cattle and sheep (Government of South Australia, 2016). Natural resource management is therefore critical for ensuring the sustainability of the region’s pastoral industry through maintaining the soils, native vegetation and native wildlife.

**Access to Skilled Labour**

Access to skilled labour is a critical input to the OCA Region’s pastoral industry, specifically for supporting the need for pastoralists to continually train staff. Most stations utilise foreign labour in their workforces. Investigations suggest there are employment opportunities in the OCA Region’s pastoral industry, however access to education and training is limited. The region has no campus-based access to accredited training (previously, there was a Certificate 2 in Agriculture offered through Port Augusta TAFE) and poor internet connectivity makes it difficult to access online learning.

**Transport Infrastructure**

Freight transport infrastructure is of strategic importance to primary industries generally, and critical to the outback pastoral industry in accessing supply chain nodes. The majority of the region’s stock is transported by road train to either Murray Bridge or Naracoorte for slaughter, or to the saleyards at Dublin, approximately 1,000 kilometres to the south.

A recently released Productivity Commission report found a lack of significant transport, overall infrastructure inefficiencies and ineffective regulation is damaging the competitiveness of Australia’s beef industry. The report recommended that Australian, State and Territory governments pursue road reforms to improve the efficiency of road infrastructure investment and use. While improvements to the Outback’s road network is an ongoing opportunity to increase industry efficiency, a current impediment to the timely, safe and effective access to markets is the absence of cross-loading facilities at Port Augusta to transfer cattle from road trains to trucks.

Currently, stock begin their journey in a triple road train but have to be transferred to B-doubles at Port Augusta to complete the trip. This is carried out in unsafe circumstances on the side of the road, sometimes in the middle of the night and in all weather conditions. This part of the journey could be accomplished safely and efficiently with the construction of cross-load facilities. At a minimum, safe ramp facilities are required. Ideally, the facility would incorporate a spelling yard, with hay and water facilities, and facilities for drivers to shower and make a coffee.

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2 The NRM Spatial Hub is a web-based tool that allows Australia’s rangelands to be managed through the latest geospatial mapping technologies combined with time-series satellite remote sensing of ground cover mapping and imagery technology.
Diversification into New Agricultural Products and Markets

As noted above, agriculture is a traditional economic mainstay of the OCA Region and one of its comparative advantages. Efforts to develop the regional economy will be most successful by building on such strengths. Local businesses (as well as new investors) can also use the region’s comparative advantage to build a competitive advantage, which is developed through the combination of knowledge, resources, skills and the ability to innovate.

This does not mean Outback cannot diversify its economy. Rather, the OCA Region will benefit by strengthening current areas of specialisation and diversifying through new ways to capitalise on existing assets, resources and knowledge. Using the region’s agricultural know-how to branch out into new products and markets provides an opportunity worth exploring.

Diversification is an important consideration in the ongoing economic development of pastoral lands in the Outback, and many farm businesses are already supplemented by off-farm income. Common diversification options are eco-tourism and ‘station stays’. The Pastoral Board has been supportive of this trend to diversify and, in keeping with aspects of its charter, has been prepared to consider applications relating to more diametrically different land uses. These have included inquiries relating to: the harvest of native fauna; growing bush tucker (e.g. Quandongs); commercial fishing of watercourses; and aquaculture.

These and other opportunities should continue to be explored and supported.

Actions

Recommended actions are as follows:

1.1 Work with the OCA Region’s pastoral industry to investigate education and training delivery models to support traineeships and ongoing development for station staff.

1.2 Collaborate with industry stakeholders, Port Augusta City Council and the State Government to progress the opportunity to establish cross-loading facilities at Port Augusta.

1.3 Continue to provide business advisory services to pastoralists looking to diversify into tourism and other businesses.

1.4 Explore the potential for an agricultural research and training facility targeting new and emerging value-added industry opportunities.

1.5 Continue to implement the Regional Climate Change Adaptation Plan for the Far North Region.

Performance Measures

- Steady growth in the agricultural sector’s contribution to the OCA Region’s gross regional product (GRP) over the next three years.

- An increase in the number of agricultural enterprises operating in the OCA Region over the next three years.

- A greater diversity of agricultural enterprises operating in the OCA Region over the next three years.

- Increased employment in the Outback’s pastoral sector over the next three years.
3.2 Support Growth and Development of Mining and Mining Services

Challenges and Opportunities for Growth

Mining is a key component of the South Australian economy, and most of the State’s major mining and gas operations and its priority mineral exploration areas are located in the Far North Region. The Far North’s major mining operations include Olympic Dam (copper, uranium, silver and gold), Prominent Hill (copper and gold), and Moomba (oil and gas).

As illustrated in Section 2 of this report, mining provides for the majority of jobs located in the OCA Region, over half (53%) of the total, and it accounts for three-quarters of the region’s total industry value-added. As the majority of South Australia’s mining activity takes place in the Far North, this highlights the significance of mining to the economic wellbeing of the Outback.

The region’s mining operations have benefitted from unprecedented resource sector growth experienced in Australia over the past decade, with the rapid industrialisation of China and India driving demand for natural resources and industrial commodities. As global demand surged, many Australian mining companies, including those operating in the Far North Region of South Australia, committed to new projects, resulting in a swell of capital investment and mining volumes. This flow of investment worked its way down the supply chain, through the exploration and mining services industries, and increased mining output. However, increased supply contributed to large price declines for many mining industry goods over the five years through 2015-16.

More recently, the global resources sector slowdown has resulted in a reduction and cessation of mining activity in the Far North Region. In keeping with the moderation of mining sector growth experienced in the last few years, mine expansions in the Far North have slowed, production has been scaled back and job numbers have fallen substantially. Compounding the region’s reliance on mining and the recent downturn, is the fact that a large share of the wealth generated by the region’s resources sector is captured elsewhere due to industry expenditure and dividends flowing to areas outside the Outback and the wider Far North Region.

According to IBISWorld (2016), mining in Australia remains in a decline phase of its economic lifecycle, following commodity pricing falls that were only partly offset by increased investment to expand production. Despite major year-to-year fluctuations, mining’s share of total economic output is projected to remain relatively stable in the decade through 2020-21. Over these years, the mining industry’s value-added (the contribution to national GDP) is expected to decrease at a compound annual rate of 0.1%. This is in contrast to the projected compound annual growth rate of Australia’s national GDP of 2.6% over the same period. This indicates that the contribution of mining to the overall economy will continue to fall.

Despite the industry’s decline, mining remains the anchor of the Outback economy and the sector will continue to be a significant employer and economic contributor into the future. In discussing the role of mining as a key industry for Australia’s future prosperity, Deloitte (2014) conclude that the sheer size of the mining sector and its continuing potential will ensure it remains central to Australia’s economy for many years to come.

Notwithstanding the challenges associated with the industry’s recent downward trends, IBISWorld (2016) reports that over the next five years, capital expenditure in the mining sector is actually expected to increase. Most Australian mining companies are also expected to focus on cost control and efficiency improvements over the course of the next five years, allowing them to remain globally competitive and well-placed to prosper in the market over the medium term. With a renewed focus on costs and productivity, mining sector profitability is expected to increase over the next five years, driven by strong growth in key export markets (IBISWorld, 2016).

Over the next three to five years, mining industry growth in the Outback is expected to be driven by two projects in particular – Olympic Dam and Carrapateena. Carrapateena (Oz Minerals) is an iron-oxide copper-gold deposit
located on the eastern margin of the Gawler Craton. The project represents one of Australia’s largest undeveloped copper deposits and is located relatively close to key infrastructure. The current outlook is for a long mine life with low operating costs, and it is estimated that about 400 jobs would be created in the construction stage and a similar number when the project becomes operational from 2019.

BHP Billiton has recently announced plans to increase production at Olympic Dam, much more quickly and cheaply than previously expected, and in time to fully capitalise on a predicted shortfall in global copper supply (Stevens and Saunders, 2016). Changes to the mine plan triggered by the decision in 2012 not to proceed with a $US20 billion open cut mine make it possible for Olympic Dam to target high-grade zones previously isolated from the existing mine plan. While current plans are well short of the scope of previous expansion plans, future operations could still lead to moderate jobs growth in the next few years.

Such consideration of the boom and bust dynamics of resources projects highlights not only the consequences of the Outback’s high degree of economic exposure to the resources sector, but also the relative lack of control that communities and regional organisations have over their development. By and large, resource projects will develop as their financial viability permits, and associated major infrastructure developments will result from private sector investment and / or through partnership agreements with governments.

On the one hand, such dynamics emphasise the need for a more diversified regional economy in the Outback. They also highlight an imperative for a more proactive and collaborative regional approach to identifying and capitalising on opportunities throughout the mining lifecycle. Considering this, there are three main points of influence for the OCA and RDAFN in relation to resource projects in the region, as summarised below.

**Planning for New Projects**

RDA Far North and the OCA will need to work with other stakeholders in the region to prepare and plan for new resource projects and expansions of existing operations where activities are likely to have significant impacts on nearby communities. Key potential points of impact / opportunity for communities at this stage are through workforce planning and worker accommodation strategies. Resource companies begin workforce planning for construction and operations phases early in the feasibility stage, and this in turn informs the accommodation strategies for these respective workforces.

This represents an opportunity to facilitate timely joint planning between communities and companies and to utilise this process to ensure that communities are fully informed of potential benefits and dis-benefits of different workforce and accommodation models and to have informed input into the planning process. This stage also allows for the necessary lead time that is critical to infrastructure planning for communities and for early exploration of funding models, including negotiations for shared investments.

**Local Supply Chain Opportunities**

In the lead-up to and during the operations phase of projects, employment and supply chain opportunities may exist for local communities. Key potential opportunities for communities at this stage arise from local employment and local content (business and industry) strategies. Opportunities might include, for example, the provision of mining services, catering and land management advice. Opportunities may differ between the construction and operations phases of a major project, as supply chain requirements are different in these two periods.

**Planning for Post-Mining Needs and Opportunities**

In the wind-down phase of operations, there may be opportunities to plan for closure and manage the human resources and community impacts. Potential opportunities for communities at this stage centre around: future land use; beneficial re-use of buildings and infrastructure; and re-training and re-deployment of employees. Realising these opportunities throughout the mining lifecycle requires the development and maintenance of good
working relationships between companies, government, other organisations and communities, and the development of good will and trust.

**Actions**

Recommended actions are as follows:

2.1 Facilitate working relationships between resource companies and communities of interest in the Outback throughout the mining lifecycle to encourage a sustainable future for the region’s mining towns.

2.2 Investigate place-based community development opportunities to promote the Outback as a location of choice for working and living beyond mining, with a focus on Leigh Creek as a pilot project.

2.3 Investigate means for informing a regional policy position on support for local procurement targets within the OCA Region’s mining sector. Engage with local mining services companies and the mining companies to develop a local procurement policy with support from all stakeholders.

2.4 Work with BHP Billiton and Oz Minerals on current expansion and development projects to gain an understanding of workforce requirements; map skills requirements against existing training available in the region and identify opportunities for additional training programs to support local employment opportunities.

2.5 Undertake a full community baseline assessment of the Outback to better inform the community engagement priorities of the major mining companies operating in the OCA Region. This should cover a raft of relevant topics impacting on community well-being including the legislative environment, regional history and governance, socio-demographic and economic profile of communities of interest, natural infrastructure, physical infrastructure and community infrastructure audits. The information should be used by OCA, RDAFN and the resource companies collaboratively to better inform sustainability planning.

**Performance Measures**

- Steady growth in the mining sector’s contribution to the OCA Region’s gross regional product (GRP) over the next three years.

- An increase in mining industry expenditure in the OCA Region over the next three years.

- An increase in the number of mining service providers operating in the OCA Region over the next three years.

- An increase in the number of mining workers living in and working in the OCA Region over the next three years.
3.3 Support the Development of the Outback Region’s Visitor Economy

Challenges and Opportunities for Growth

Tourism is a key contributor to the Outback economy with strong backward linkages to other local industry sectors. For each dollar spent by a tourist in OCA Region, $0.74 is spent on accommodation and food services, $0.11 on ownership of dwellings and $0.08 on transport, postal and warehousing. The total value of the OCA Region’s tourism output is estimated at $52 million, which is 1.2% of the value of the region’s total output.

The Outback’s tourism industry is one of the region’s largest employers, accounting for 5 per cent of jobs located in the OCA Region (and 7% of jobs across the wider Far North Region). Employment numbers in the region’s tourism sector are higher than in the Outback’s other service industries such as Public Administration and Safety, Health Care and Social Assistance and Education and Training.

According to IBISWorld (2016), Australia’s tourism industry has exhibited strong revenue growth over the past five years, due primarily to a healthy increase in international visitor arrivals as the Australian dollar has depreciated. According to Tourism Research Australia, China has become Australia’s second-largest source of international visitors. As a result, industry revenue is expected to increase at an annualised 3.7% over the five years through 2016-17, to total $123.7 billion, with 4% growth anticipated in the current year.

According to the South Australian Government, total tourism expenditure in South Australia increased from $3.9 billion in 2005 to $5.1 billion in 2013. The 2013 level of tourism expenditure was 2% higher than the expenditure in 2012.

Despite rising demand from international visitors, the tourism industry heavily relies on domestic visitors, with Australian households and businesses accounting for more than 70% of the industry’s revenue. Over the five years through 2021-22, tourism industry revenue is expected to increase by an annualised 2.6% to total $141 billion. Over the next five years, the industry is expected to further enhance its online capabilities as consumers increasingly use the internet to research and organise trips.

Drive Tourism

The tourism industry’s outlook is positive, and outback tourism is growing rapidly with the region’s natural landscape the major drawcard. International visitors are seeking new experiences and the domestic drive market is growing each year. The ‘grey nomad’ phenomenon is generating new income opportunities for many regions throughout the Australian outback. While visitation in the OCA Region is underpinned by mining activity, there is scope to expand on this.

Regions elsewhere in Australia are taking full advantage of the growth in demand for drive tourism experiences by promoting touring routes and providing the facilities and services that visitors seek. The Savannah Way in the north is a case in point. Many opportunities are created to grow business enterprises in hospitality and unique offerings such as Indigenous art.

According to the South Australian Tourism Commission (2015), 93 per cent of visitors to the Flinders Ranges and Outback are domestic visitors; almost half (47 per cent) of domestic visitor nights in the Flinders Ranges and Outback are spent either with friends or relatives or in hotels and similar accommodation. The average length of stay is 4.4 nights. Domestically, caravan and camping is also popular with 36 per cent of visitors preferring this accommodation. Around one-third of domestic visitors are from interstate, predominantly Victoria and New South Wales, suggesting an opportunity to grow the market for visitors from elsewhere in Australia.

Regional and remote communities such as those in the OCA Region can benefit from the income generated from drive tourists (on stopovers), as those passing through often buy local tourism products and services, and basic
travel necessities like fuel, food and other supplies. Drive tourism provides a number of benefits to businesses, including: opportunities for new business start-ups; increased demand for new products and services; opportunities for business collaboration; and additional income and employment.

Key measures of success for Outback South Australia’s drive tourism market include the number of tourists embarking on self-drive journeys, the length of their journeys, the time they spend in particular places and the amount of money they spend. This market is expected to experience significant growth due to Australia’s ageing population and a corresponding increase in retirees who travel around Australia.

**Road Infrastructure Upgrades**

The OCA Region has direct access to some major tourist attractions including Lake Eyre and the Flinders Ranges to the south. Touring routes in the northern parts of the region and beyond are well known to the serious four-wheel drive fraternity, but there is a potential to build on this and to widen the area’s appeal. Research by the South Australian Tourism Commission has shown visitors generally enjoy their time in the Outback, with 75% finding travelling to more than one place in the region appealing. A lack of adequate directional signage however, has been reported as an issue for the region.

One possibility is to focus on drive tourism opportunities along the Gunbarrel Highway corridor to the north-west (subject of course to the full support of the APY land owners) and the Strzelecki Track to the north-east. While the Gunbarrel Highway is largely outside the OCA Region, the links to this are potentially very important to the economic development of the Far North Region.

The Strzelecki Track, which extends from Lyndhurst in the south to Innamincka in the north, is largely unsealed and, if upgraded, would present opportunities not only for tourism in the OCA Region but also for improved intra-regional links to support mining and related industrial activity throughout the Far North.

**Actions**

Recommended actions are as follows:

3.1 Design and implement an Outback / OCA Region visitor needs and satisfaction survey. This could be undertaken via a combination of measures including web-based feedback, on-line surveys and in-person surveys. The intelligence gathered via these surveys would be invaluable in identifying wants and expectations (such as information, directional signage, accommodation, facilities, infrastructure, services and attractions) and perceived or experienced barriers to travel to and throughout the OCA Region, such as any deficiencies in attractions, infrastructure, services, accommodation and customer service, and how these can be addressed.

3.2 Review case studies and document learnings from ‘best practice’ region or town-based tourist attraction strategies, such as Harrow in Victoria’s Wimmera Region, which reinvented itself with the establishment of the ‘Harrow Sound and Light Show’.

3.3 Prepare a regional wayfinding strategy for the Outback with an emphasis on consistent, branded signage throughout the Outback and the wider Far North Region.

3.4 Undertake a short-term accommodation needs analysis for the Outback, identifying the types of accommodation currently lacking in the region.

3.5 Collaborate and co-ordinate Outback tourist destination management and marketing; formalise roles and relationships regarding conduits for State and Federal funding to help develop industry skills and investment in specific projects and tourism infrastructure.
3.6 Work with the South Australian Tourism Commission to develop a Queensland-focused marketing initiative for Outback tourism in South Australia, targeting opportunities to boost demand for air travel to increase flight potential to Port Augusta and the drive tourism market between Queensland and South Australia (via the Strzelecki Track) as an integral component.

3.7 Progress investigation of a business case to upgrade / seal the Strzelecki Track to serve the growing drive tourism market.

3.8 Showcase and promote the Outback through locally-produced digital and cultural content.

3.9 Investigate the feasibility and potential benefits of providing free Wi-Fi zones in selected town centres (as pilot projects) to help improve the Outback visitor experience and retain visitors for longer.

3.10 Explore funding for two tourism development officers in the OCA Region - one for the Outback and one for the Flinders Ranges - to engage, liaise with and support small business operators.

3.11 Explore potential for private businesses to take over accommodation and services at Leigh Creek after the closure of Alinta, focussed on opportunities to accommodate tourists and tapping into opportunities for mine tours.

3.12 Promote excellence in visitor customer service as a priority to develop the Outback tourism industry. Specifically, work collaboratively with industry stakeholders / local businesses, leverage potential funding support from the State and Federal governments, co-ordinate access to training and awareness programmes for service providers and provide a conduit for government assistance for tourism project proposals.

Performance Measures

- The appointment of two tourism development officers within the next 12 months.
- Completion of a tourism accommodation needs assessment within the next 12 months.
- Increased State and Federal government funding for tourism projects in the OCA Region.
- Increased average length of stay for visitors to the Outback from 4.4 nights to 7 nights.
- A 25 per cent increase in the number of drive tourists from Queensland over the next three years.
- A 15 per cent increase in the number of people visiting the Outback for a holiday as the primary purpose of their visit (compared to visiting friends and relatives or for other reasons).
- An increase in the number of ‘fly-in’ tourists to the OCA Region via Port Augusta Airport.
- Steady growth in the tourism sector’s contribution to the OCA Region’s gross regional product (GRP) and employment over the next five years.
- Consistent improvement in customer satisfaction ratings via co-ordinated surveys.
3.4 Articulate and Address the OCA Region’s Strategic Infrastructure Priorities

Challenges and Opportunities for Growth

Efficient and effective infrastructure underpins economic activity and is fundamental to a prosperous regional economy. It includes ‘physical’ infrastructure (like roads, rail, seaports and airports, communications, energy (power) and water) and quality ‘community’ infrastructure (like recreation and leisure facilities, cultural facilities and community services and facilities). Together these elements should offer good physical and functional links that support social, cultural and economic interaction and exchange.

Ensuring the timely delivery of strategic infrastructure will require the collaborative efforts of local agents of change including the OCA and RDA Far North to identify the priorities and then get the message across, allowing the communities of the Outback – via the OCA – to take greater control of the region’s priorities.

Regional Road Transport Infrastructure

Transport links - which are essential to ongoing participation in the national and global economies - also provide the conduits for the outward movement of activity from regional areas. Distance from ports, by road and rail, inevitably increases costs of goods and services, placing remote communities like the Outback at a comparative disadvantage.

The National Land Transport Network (roads and rail) in the OCA Region provides critical transport links across the nation and connects South Australia with interstate markets and major export ports. The capacity of the region to physically connect with national and international markets however, is limited by generally poor road conditions, with much of the region’s network unsealed. For example, there is no sealed road connection from the OCA Region to the east, limiting trade and travel in and out of Queensland.

The proposed Strzelecki Track upgrade and sealing project is a key recommendation in the Roadmap for Unconventional Gas Projects in South Australia, released in 2012. The Strzelecki Track upgrade is also identified as a priority project in South Australia’s Integrated Transport and Land Use Plan, released in July 2015. The project will involve the upgrade and sealing of the Strzelecki Track and the Adventure Way road link from Innamincka to the Queensland border.

In February 2014, the South Australian Government submitted to Infrastructure Australia for assessment, a business case for the Strzelecki Track upgrade. On 29 September 2015, Infrastructure Australia announced the Strzelecki Track upgrade and sealing project achieved an "early stage" rating on its Infrastructure Priority List. On 17 February 2016 the Australian 15-Year Infrastructure Plan and Infrastructure Priority List was released. The Strzelecki Track sealing and mobile coverage project was identified as a priority initiative.

The South Australian Government continues to work with Infrastructure Australia to advance the project, which has potential for significant private sector involvement in both capital and operating expenditures. If upgraded, the Strzelecki Track would present opportunities not only for tourism in the OCA Region but also improved intra-regional links to support mining and related industrial activity throughout the Far North.

Another project being explored is the Leigh Creek intermodal hub. Bowmans Intermodal, a joint venture between Toll Group, Balco and Australian Grain Technologies (AGT), has signed a contract with Archer Exploration to support rail infrastructure at Leigh Creek. Under the proposed deal, Bowmans will develop a new rail facility to help Archer transport magnesite ore from its Leigh Creek site. The planned shared rail facility will be close to the existing rail loop at the Leigh Creek Coalfield. Under the agreement Archer and Bowmans will work together to assess the feasibility of developing and sharing of rail infrastructure at Leigh Creek.
Digital Connectivity

Quality connections to information and communications technology (ICT) networks are an important enabler of economic and community development. The emergence of the digital economy has increased the propensity for individuals and businesses to use information and communications technologies to interact and trade with suppliers, partners and customers anywhere in the world. Broadband has become a fundamental enabler of regional economic development. Given the remoteness of the Outback, accessibility to ICT is critical.

The OCA Region currently lacks high-speed broadband infrastructure, limiting the capacity of local businesses and individuals to interact with the global economy. For businesses in the Outback to remain competitive and for the communities of the region to remain connected, the rollout of high-speed broadband must be extended to all communities as a priority.

Information and communications technologies vary across the region with a heavy reliance on satellite communications. Mobile phone and ADSL broadband are limited to the major towns and spot mobile phone coverage along the major highways. Most towns have dial-up internet access while major mines have comprehensive ICT networks to meet operational needs.

Improved ICT networks, particularly broadband, will be critical to sustaining the pastoral industry and supporting the expansion of mining and tourism and delivering services to remote communities in the Outback. As well as facilitating access to new technologies and global markets, ICT can reduce the time and cost of travel as well as the cost of accessing finance, health, education and other government services.

It is anticipated that the rollout of the NBN across the Outback will go a long way to addressing current service inequalities and will help open up new opportunities for economic growth and investment - in effect potentially reducing some elements of remoteness for Outback communities.

Energy Security

An affordable, accessible and reliable energy supply is a key factor in sustaining communities, maintaining and growing economies and promoting investor confidence. In the Far North Region, Port Augusta, Woomera, Roxby Downs and some towns along the transmission line to Leigh Creek are connected to the national electricity grid. Most Outback communities however, rely on diesel generators to provide power, particularly the small remote towns across the region, including Glendambo, Pimba, Innamincka, William Creek, Marree, Oodnadatta and Yunta.

South Australia has recently been in the media and political spotlight for its high and rising electricity prices and concerns around a growing risk of supply disruptions throughout the state. Highly favourable subsidies and ideal local conditions have led South Australia to secure high levels of intermittent supply from renewables (wind and solar power) under the Renewable Energy Target Scheme (RET) (Wood, 2016).

South Australia’s reliance on intermittent power generation increased after Alinta Energy closed the last coal power stations in Port Augusta in May 2016. About 40 per cent of South Australia’s power generation is now created by wind and solar. To ensure reliability, South Australia has increased its dependency on its transmission interconnection with Victoria and switched back on an old gas generator at Pelican Point near the Adelaide CBD as back up base-load power.

The Olympic Dam mine has been highlighted as an example of the economic risks of rising energy prices and supply disruptions in South Australia, and BHP Billiton has expressed concerns about the security and reliability of the mine’s electricity supply. While BHP has not gone so far as to say it will close Olympic Dam, it is known to be deeply concerned about the instability and a future in which South Australian electricity costs look set to remain uncompetitive (FitzGerald, 2016).
Regardless of the reasons being debated for the current uncertainty around South Australia’s electricity supply - the intermittent nature of wind and solar, perceived failure of the wholesale market, inadequate transmission planning or energy and climate change policy - there is little that an economic growth and investment strategy focusing on the Outback can do to directly address this State-wide and national issue. Nevertheless, large multinational companies, such as BHP Billiton, carry a lot of political power to influence change on what is a medium to long-run issue.

Alternative Power Generation and Purchasing Arrangements

Approximately 120 companies are involved in clean technology across the value chain in South Australia. Clean technology involves goods and services in renewable energy, water, recycling, construction materials, energy efficiency, carbon trading and environmental services.

For the OCA Region, in the short-term, there are potential localised solutions for the provision of a cost-effective and reliable power supply, such as the solar farms that have been successfully developed to provide power for large mining operations in Western Cape York (Queensland) and the Pilbara in Western Australia.

Targeted consultation which helps inform this Economic Growth and Investment Strategy identified another idea for a local response to high energy costs - the establishment of a Far North Region co-operative energy purchasing arrangement. This concept involves utilising the collective purchasing power of communities to buy cheaper electricity either straight from a retailer (e.g. Big Switch) or to underwrite the construction of a local power plant (e.g. utilising existing infrastructure at Leigh Creek).

Opportunities for industries based on renewable energy have been consistently raised through consultation for this report and documented in previous strategies. While much of the focus has been on Port Augusta, the Outback is home to Australia’s most advanced geothermal power project located at Innamincka and hot-rock geothermal power is being investigated near Moomba, with further proposals near Olympic Dam.

Hybrid renewable energy plants have been proposed as options for small, isolated communities. An attempt to pilot a project in William Creek after a 2008 study into sustainable water and power supply options, recommended solar power with a solar hot water service for the energy supply. Unfortunately, the pilot project did not proceed, but only because the water supply component of the project did not meet Environment Protection Authority (EPA) requirements.

With significant advances in technology since 2008, particularly the capacity advances in battery storage and energy efficient technologies, it is timely to revisit the opportunities for sustainable power supply options for remote outback communities. A report commissioned by RDAFN in 2015 states that renewable energy generation can play a key role in distributed energy systems in regional and remote areas, that is, energy generated onsite or near energy consumers that can be connected to the grid or be off-grid.

Such systems may be part of a micro-grid that can operate independently of the larger grid where necessary but will normally operate in collaborative exchange with the grid. The report makes a key recommendation that RDAFN work with the South Australian Government to develop a Distributed Energy Micro Grid Strategy for the region, including off-grid areas guaranteed supply through the Remote Areas Energy Supply Scheme (RAES).

The report further recommends that RDAFN investigate and promote strategic opportunities for the development of Community Owned Renewable Energy (CORE) projects in Port Augusta and the wider region. Finally, the report emphasises the importance of educating stakeholders on renewable energy technology, engineering, and associated information technology, which will be critical to developing a robust industry in Port Augusta and the Far North, including the OCA Region.
Actions

Recommended actions are as follows:

4.1 Support and promote a regular forum of all transport business leaders to discuss, agree and collaborate on the OCA Region’s transport industry priorities.

4.2 Undertake an assessment of all industry infrastructure needs in the region to identify cross-industry linkages and opportunities to help prioritise projects that will provide the greatest economic, environmental and social returns to the OCA Region.

4.3 Continue to collaborate with relevant State and Federal Government departments and agencies to progress the Strzelecki Track upgrade and sealing project proposal.

4.4 Continue to review, assess and prioritise the Outback’s other strategic regional road upgrade needs using standard assessment criteria; agree on priorities and advocate needs to State and Federal Governments.

4.5 Support ongoing investigations into the feasibility of establishing an intermodal hub at Leigh Creek.

4.6 Ensure there are long-term and integrated plans in place for freight. This includes recognising the need for integrated, long-term planning, identifying important freight routes and places, and protecting corridors and precincts from encroachment by sensitive uses.

4.7 Continue to support the rollout of the National Broadband Network (NBN) in the OCA Region; promote the rollout to the region’s residents and businesses and include in the region’s investment prospectus material as a key competitive advantage.

4.8 Continue to actively pursue the extension of mobile and satellite phone coverage throughout the Outback through support for the Blackspots Program.

4.9 Promote and utilise existing State and Federal government programs to build the capability of businesses and communities to utilise digital technology.

4.10 Implement the recommendations from the 2015 market and value chain analysis of renewable energy and clean technology opportunities for the Far North Region: that RDAFN work with the State Government to develop a Distributed Energy Micro Grid Strategy for the region, including off-grid areas guaranteed supply through RAES; investigate a pilot project in an off-grid community; investigate and promote strategic opportunities for the development of Community Owned Renewable Energy (CORE) projects in Port Augusta and the region; and develop an education strategy to facilitate local growth in technically qualified workers in the clean technology domain.

4.11 As part of consideration of community owned projects, investigate the business case for a Far North Region co-operative energy purchasing arrangement.
Performance Measures

- The first forum on the OCA Region’s transport industry priorities held within the next 12 months.
- Confirmation of cross-industry infrastructure priorities within the next 12 months.
- Completed upgrade / sealing of the Strzelecki Track within three years.
- Full rollout of the NBN to the OCA Region over the next three years.
- A measurable increase in the uptake of digital technology by households and businesses in the Outback.
- Improved mobile phone and satellite coverage throughout the OCA Region.
- The recommendations of the 2015 market and value chain analysis of renewable energy and clean technology opportunities for the Far North Region implemented over the next three years.
- Increased investment in alternative / renewable energy in the OCA Region.
4. Economic Growth and Investment Strategy

Work Plan
4. Economic Growth and Investment Strategy Work Plan

4.1 Assessing and Prioritising Actions

The challenges and opportunities presented in this Economic Growth and Investment Strategy have been determined as a result of the findings from comprehensive research and data analysis coupled with targeted consultation with selected stakeholders.

While all of the recommended actions are considered valid and worthwhile, it is acknowledged that resource constraints will make it impossible for RDAFN, the Outback Communities Authority and their partners to act on all issues and opportunities immediately. This makes it necessary to prioritise activities for short-term implementation.

The prioritisation of actions is guided by two broad sets of assessment criteria – benefit assessment and capacity to implement, as outlined below.

Figure 12. Opportunity Assessment Matrix

Using this criteria, it can be determined to what extent the project or activity in question concerned is a high priority. It is acknowledged that other criteria can also be applied with the use of local knowledge and consideration of other related objectives.
Potential Economic Development Benefits

1. Does the opportunity build on the OCA Region’s existing business and employment profile, capabilities and comparative advantages?
2. Does the opportunity demonstrate the potential to support endogenous growth factors (e.g. increase the number of viable businesses, jobs and expenditure within the region)?
3. Is the opportunity likely to help create more jobs in the OCA Region’s ‘focal industries’?
4. Is there a ready market for the opportunity’s product or service?

Capacity to Implement (and Organisational Fit/Role)

1. Do we, as a region, have the capacity (funds, people, skills, technology and the programs in place) to facilitate and/or drive the opportunity?
2. Is the infrastructure available to enable the business opportunity to develop (or can the infrastructure in question be realistically built / accessed)?
3. Does the opportunity / business proposal have the political will and the support of local communities?

Organisational Fit / Role

1. Does the opportunity align with the charter / mission of the OCA and RDAFN?
2. Does the opportunity align with broader government policies and funding priorities?
3. What role should the OCA and RDAFN take in progressing the opportunity (management, lobbying / advocacy, awareness raising, partnering, funding, training, etc.)?
4. Which agency (other than RDAFN or the OCA) should have lead responsibility for this opportunity?
5. Who else should be involved?

Other Considerations

Environmental Benefits

Creates environmental benefits through:
1. Reducing greenhouse gas emissions through adoption of renewable energy sources and through energy conservation.
2. Conservation and enhancement of native flora and fauna.
4. Conservation of water resources.
5. Conservation of land resources.
6. Enhancing urban and rural liveability.

Social Benefits

Creates social benefits through:
1. Creating a more inclusive and cohesive community.
2. Addressing housing affordability.
3. Improving education and training outcomes (links to economic benefits).
5. Enhances comfort and lifestyle.
6. Improves quality of social support services.

Applying the assessment criteria and effectively ‘rating’ and ‘ranking’ each action determines those which are considered the highest priority and which, as a result, are short-term actions to be progressed over the next one to three years.

The assessment outcomes are shown in the table below.
Figure 13. Summary of Action Assessment Outcomes

<table>
<thead>
<tr>
<th>Action</th>
<th>Benefit Assessment</th>
<th>Capacity to Implement</th>
<th>Overall Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Support the Growth of a Sustainable Pastoral Industry</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 Work with the pastoral industry to investigate education and training delivery models</td>
<td>High</td>
<td>Medium</td>
<td>Medium/High</td>
</tr>
<tr>
<td>1.2 Collaborate with industry and government stakeholders to progress the opportunity to establish cross-loading facilities at Port Augusta</td>
<td>High</td>
<td>Medium</td>
<td>Medium/High</td>
</tr>
<tr>
<td>1.3 Continue to provide business advisory services to pastoralists looking to diversify into tourism and other businesses</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>1.4 Explore potential for an agricultural research and training facility targeting new and emerging value-added industry opportunities</td>
<td>High</td>
<td>Medium</td>
<td>Medium/High</td>
</tr>
<tr>
<td>1.5 Continue to implement the Regional Climate Change Adaptation Plan for the Far North Region</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td><strong>Support Growth and Development of Mining and Mining Services</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 Facilitate working relationships between resource companies and communities of interest in the Outback throughout the mining lifecycle to encourage sustainable future for the region’s mining towns</td>
<td>High</td>
<td>Medium</td>
<td>Medium/High</td>
</tr>
<tr>
<td>2.2 Investigate place-based community development opportunities to promote the Outback as a location of choice for working and living beyond mining, with a focus on Leigh Creek as a pilot project.</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>2.3 Investigate means for informing a regional policy position on support for local procurement targets within the OCA Region’s mining sector</td>
<td>High</td>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td>2.4 Work with BHP Billiton and Oz Minerals on current expansion and development projects to gain an understanding of workforce requirements</td>
<td>High</td>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td>2.5 Undertake a full community baseline assessment of the Outback to better inform the community engagement priorities of the major mining companies operating in the OCA Region</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td><strong>Support the Development of the Outback Region’s Visitor Economy</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1 Design and implement an Outback visitor needs and satisfaction survey</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>3.2 Review case studies and document learnings from ‘best practice’ region or town-based tourist attraction strategies</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>3.3 Undertake a short-term accommodation needs analysis for the Outback</td>
<td>Medium</td>
<td>High</td>
<td>Medium/High</td>
</tr>
<tr>
<td>3.4 Collaborate and co-ordinate Outback tourist destination management and marketing</td>
<td>High</td>
<td>Medium</td>
<td>Medium/High</td>
</tr>
<tr>
<td>3.5 Prepare a regional wayfinding strategy for the Outback with an emphasis on consistent, branded signage throughout the Outback and the wider Far North Region</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>3.6 Work with the South Australian Tourism Commission to develop a Queensland-focused marketing initiative for Outback tourism</td>
<td>Medium</td>
<td>High</td>
<td>Medium/High</td>
</tr>
</tbody>
</table>
### Outback Communities Authority Region

#### Economic Growth and Investment Strategy

**3.7 Progress investigation of a business case to upgrade / seal the Strzelecki Track to serve the growing drive tourism market**

<table>
<thead>
<tr>
<th>Progress</th>
<th>High</th>
<th>High</th>
<th>High</th>
</tr>
</thead>
</table>

**3.8 Showcase and promote the Outback through locally-produced digital and cultural content**

<table>
<thead>
<tr>
<th>Progress</th>
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**3.9 Investigate the feasibility and potential benefits of providing free Wi-Fi zones in selected town centres**

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**3.10 Explore funding for two tourism development officers in the OCA Region**

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**3.11 Explore potential for private businesses to take over accommodation and services at Leigh Creek after the closure of Alinta**

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**3.12 Promote excellence in visitor customer service as a priority to develop the Outback tourism industry**

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### Articulate and Address the OCA Region’s Strategic Infrastructure Priorities

**4.1 Support and promote a regular forum of transport business leaders on the OCA Region’s transport industry priorities**

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**4.2 Undertake an assessment of all industry infrastructure needs in the region to identify cross-industry linkages and opportunities to help prioritise projects**

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**4.3 Continue to collaborate with relevant State and Federal Government departments and agencies to progress the Strzelecki Track upgrade and sealing project proposal**

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**4.4 Continue to review, assess and prioritise the Outback’s other strategic regional road upgrade requirements using standard assessment criteria**

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**4.5 Support ongoing investigations into the feasibility of establishing an intermodal hub at Leigh Creek**

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**4.6 Ensure there are long-term and integrated plans in place for freight**

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**4.7 Continue to support the rollout of the National Broadband Network (NBN) in the OCA Region**

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**4.8 Continue to actively pursue the extension of mobile and satellite phone coverage throughout the Outback through support for the Blackspots Program**

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**4.9 Promote and utilise existing State and Federal government programs to build the capability of businesses and communities to utilise digital technology**

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**4.10 Implement the recommendations from the 2015 market and value chain analysis of renewable energy and clean technology opportunities for the Far North Region**

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**4.11 As part of consideration of community owned projects, investigate the business case for a Far North Region co-operative energy purchasing arrangement**

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Source: SC Lennon & Associates
4.2 Priorities for Action – Informing a Year 1 Work Plan

As noted above, resource constraints will make it impossible for RDAFN, the Outback Communities Authority and their partners to act on all issues and opportunities immediately.

Priority projects and activities for implementation as part of a Year 1 work plan are identified based on the application of the above broad set of assessment criteria. They reflect priorities that the OCA and RDAFN should advance (in association with identified partners where relevant) as short-term priorities.

The Year 1 priorities are:

1. Continue to provide business advisory services to pastoralists looking to diversify into tourism and other businesses.

2. Investigate place-based community development opportunities to promote the Outback as a location of choice for working and living beyond mining, with a focus on Leigh Creek as a pilot project.

3. Design and implement an Outback visitor needs and satisfaction survey.

4. Prepare a regional wayfinding strategy for the Outback with an emphasis on consistent, branded signage throughout the Outback and the wider Far North Region.

5. Progress investigation of a business case to upgrade/seal the Strzelecki Track to serve the growing drive tourism market.

6. Undertake an assessment of all industry infrastructure needs in the region to identify cross-industry linkages and opportunities to help prioritise projects.

7. Continue to collaborate with relevant State and Federal Government departments and agencies to progress the Strzelecki Track upgrade and sealing project proposal.

8. Continue to support the rollout of the National Broadband Network (NBN) in the OCA Region.

9. Continue to actively pursue the extension of mobile and satellite phone coverage throughout the Outback through support for the Blackspots Program.

10. Promote and utilise existing State and Federal government programs to build the capability of businesses and communities to utilise digital technology.

In progressing these actions, cultivating collaborative partnerships for effective implementation will be key.
4.3 Continuing Collaborative Partnerships for Effective Implementation

Collaborating to cultivate regional economic development partnerships is key to successful strategy implementation. Civic leadership and partnerships, what is otherwise known as ‘collaborative governance’ is a theme underlying all matters concerning the sustainable economic development of the OCA Region.

A fundamental enabler of regional growth, it is characterised by collaborative and cooperative approaches to research, community engagement, knowledge-sharing, planning, project design and implementation of strategies for the good of the region and its communities.

While RDA Far North and the OCA will take the lead in addressing priority actions as articulated in this document, collaboration will be fundamental to the successful implementation of this Economic Growth and Investment Strategy. Promoting economic growth and investment in the OCA Region therefore, requires both leadership and the formation of partnerships. And it requires a holistic approach, one that embraces the notion of ‘economic development’ as the mutually-reinforcing and complementary relationship between improvements in economic activity, community wellbeing, cultural diversity, a sense of ‘place’ and the environment.

In progressing the Strategy, the OCA and RDA Far North will pro-actively engage with other key agents of change. Some existing working relationships will need to continue to be progressed in light of this Strategy, as a priority. The work of Natural Resources SA Arid Lands (SAAL), in terms of its funding, participatory projects and consultation, incorporates a broad range of stakeholders that cross-over with those of RDA Far North and the OCA. These activities include working with government, pastoralists, mining and petroleum companies, tourism groups, progress associations, non-government organisations and other community groups. The SAAL NRM Board also holds important regional relationships with Aboriginal communities through partnership projects on Aboriginal managed lands and with National Parks South Australia.

The strong linkages between the environment and the OCA Region’s culture, history, economy and society, coupled with the cross-over of objectives between the OCA, RDA Far North and Natural Resources SAAL, highlights the importance of these three organisations working together at a planning and implementation level. While relationships between each function well at a project officer level, there is scope for more proactive, strategic level integrated planning and implementation of partnership projects between these three organisations.

Using this Economic Growth and Investment Strategy as a plan of action, RDA Far North and the OCA will take the lead, working together with other stakeholders to address opportunities for improved integrated planning and management concerning matters arising from the interface of natural resources management, economic development and community wellbeing in the Outback.

The Economic Growth and Investment Strategy guides the efforts of RDA Far North and the OCA, working together and with others, to facilitate opportunities for investment to support the region’s long-term growth. Importantly, using the evidence base from the economic stocks and flows analysis and intelligence gathered through targeted consultation and engagement, it informs a plan of action to support the OCA’s objective to have a greater say in decisions being made for the Outback, and the region’s engagement with both State and Federal Governments on matters of regional significance.
References


Australian Bureau of Statistics (2016), Regional Population Growth, Cat. 3218.0

Australian Bureau of Statistics (2011), Census Data, Canberra


Coober Pedy Tourism and Events Committee (2015), Coober Pedy - Strategic Tourism Plan 2015 – 2020

Deloitte (2014), Building the Lucky Country #3 - Positioning for prosperity? Catching the next wave


Government of South Australia (2014), South Australian Regional Mining and Infrastructure Plan

Government of South Australia, Department of State Development (2015), Leigh Creek Community Views – A Summary Report. Social aspects and opportunities of the closure of Leigh Creek Coal Mine and Port Augusta Power Station

Government of South Australia (2015), South Australian Tourism Plan 2015-2020 (Draft)


Government of South Australia - South Australian Department of Planning, Transport and Infrastructure and the Commonwealth Department of Infrastructure and Regional Development (2013), Regional Mining and Infrastructure Project - Far North


Government of South Australia, Department of Planning and Local Government (2010), *Far North Region Plan – A Volume of the South Australian Planning Strategy*

Government of South Australia, Tourism South Australia (2008), *Flinders Ranges and Outback SA Region Integrated Strategic Tourism Plan 2008-2014*

Government of South Australia, Outback Areas Community Development Trust (2005), *State of the Outback Report Prepared by URS*

Government of South Australia (undated), *Upper Spencer Gulf and Outback Infrastructure Plan*


IBISWorld (February 2016), *Beef Cattle Farming in Australia*, www.IBISWorld.com.au


Productivity Commission (July 2016), *Regulation of Australian Agriculture Draft Report*, Canberra

REPLAN, (June 2016), unpublished data

Regional Australia Institute (2015), *[In]Sights for Competitive Regions: Natural Resources*

Regional Development Australia Far North (2012), Report A - Project Report - Regional Workforce and Skills Project – SA Far North Region, prepared by Gibber Plain Solutions


Regional Development Australia Far North (2015), *Renewable Energy and Clean Technology Opportunities for Port Augusta and the Far North Region*
South Australian Tourism Commission (2015), *Flinders Ranges and Outback Regional Profile, December 2015*


Unauthored (undated), *Know Your Outback – Pastoralism*


