# Port Augusta Economic Growth & Investment Strategy







# Port Augusta Economic Development Strategy

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# Port Augusta Economic Growth and Investment Strategy



# **Executive Summary**

Port Augusta has two main options for economic growth. On one hand, it can build gradually on its home-grown specialisations as identified below, and role as a regional services centre for the Far North. On the other hand it can, as has been so successful in the past, look to large employers using the area as a base for working with the region's natural resources.

Interviews conducted for this study showed that there is still a strong culture in Port Augusta of waiting for The Next Big (Economic) Thing. There is currently optimism about the Defence expansion at Cultana, renewable energy, and the next OzMinerals mine. But even when Port Augusta is blessed with economic Big Things the lack of core skills, capabilities and industry links mean that the local economic spin-off has not often been maximised. The underlying theme of this Economic Growth and Investment Strategy (EGIS) is to shift the balance towards supporting *local* industry capability. This shift will have two benefits:

- 1. Accelerating endogenous growth the areas in which Port Augusta businesses are already demonstrating highest competitiveness in; and
- 2. Providing a much stronger platform for engagement with externally driven investments.

Similar recommendations for a stronger focus on building local capability have been made in many of the industry studies done on Port Augusta over the last 20 years, but there has been little follow up in the past. With the exception of some businesses in the heavy industry/mining service field, business networks are acknowledged by the businesses themselves to be poor and needing development and maturity.

Port Augusta's growing role as a regional services centre brings a growing reliance on public sector employment. The city's dependence on government support would unravel if major industries were to close down and employers in the private sector looked to exit the region. This scenario emphasises the importance of identifying viable alternatives for private sector investment and/or retaining existing private interests by pursuing opportunities in areas in which existing skill sets could be redeployed.

Given the current pressures on the region, this is not a situation that can be allowed to continue. Action needs to be taken to build local business capabilities, now.

# Strategic Priorities

Many studies have reviewed the leading options for growth:

Traditional strengths such as heavy industry, energy production, mining services, transport and logistics

Tourism: and

New industries like renewable energy, education and intensive horticulture.

Economic analysis undertaken for this study shows that the industries with natural advantages in Port Augusta have been:

Medical (other than hospital)

Food and beverage (not accommodation)

Public administration including waste management

Construction and engineering

Professional services (small but growing)

Real estate and other local services

Transport and transport equipment manufacturing and hiring.

#### Action areas

This study has identified 10 areas for action to drive economic growth and investment in Port Augusta.

# 1 Entrepreneurship and active business networking

Contact new businesses

Explore extent of demand for a Co-working space

Prioritise a series of networking/learning opportunities around new approaches to entrepreneurialism.

Maintain support for existing businesses, responding to local needs to foster re-investment in local business, business retention and business growth Active networking – foundation steps in prospective industries (like transport/logistics, heavy engineering/mining services (with Global Maintenance Upper Spencer Gulf (GMUSG), tourism, health, renewable energy, defence supplies).

Work with GMUSG to improve capability of Port Augusta businesses to supply head contractors (mining & defence)

Prepare network development plans for viable networks and seek funding from State and Commonwealth government programs

# 2 Townscape & amenity

Foreshore and city upgrades

Facilitate new business formation around foreshore

Consolidate CBD revitalisation plan

Improve town entrances

Publicise rolling CBD works program

Engage landowners in townscape improvements

Develop material to support a campaign promoting Port Augusta's lifestyle attributes

Market the Port Augusta lifestyle package.

# 3 Transport & logistics

Improve ability to market capability to head contractors

Re-open discussions with mining companies about local transport services infrastructure needs

Formulate sound cost-benefit analyses for transport capital projects Explore freight flows.

# 4 Heavy industry

Detail supply chain potential

Understand expectations and requirements of large miners in relation to local suppliers in terms of capability and certification

Build on learnings on head/sub contractor positioning from DefenceSA and Defence Teaming Centre

Implement recommendations in KPMG Hub study with a focus on Port Augusta:

R1 Regional coordination and implementation (focusing on Port Augusta) R2 Raise capability of (Port Augusta-based) mining services suppliers to contract with new customers through support from industry, industry bodies, State and Local Governments

R3 Skills training and workforce development (for Port Augusta businesses)

R4 (Evaluate) Common use infrastructure investment (in Port Augusta)

# 5 Renewable energy

Complete Stage 2 of the Renewable Energy Market and Value Chain work:

- a) Identify gaps in capacity
- b) Connect businesses
- c) Provide evidence-based information to potential investors.

Work with State Government to ensure local business spinoffs and long term business capability in renewables

Provide support to design and advocacy of a Port Augusta-based Centre of Renewable Energy R&D

### 6 Education

Revival of RTO-industry links.

Active support of COTEC business case

Continue active support for Port Augusta as a Centre of renewable energy R&D and training.

#### 7 Tourism

Resource, develop and implement a "Stay another day" campaign Incorporate visitor needs into townscape changes Prioritise tourism business operators for entrepreneurship initiatives Facilitate investment to expand local tourism business capability.

## 8 Defence

Active, strategic lobbying/advocacy on behalf of local capability Strengthen involvement in DTC and other SA Defence industry links Develop brokering role between local suppliers and defence procurement.

# 9 Health & aged care

Integrate future aged accommodation needs into land use planning for Port Augusta

Facilitate business-to-business connections amongst public and private health care and aged care services

Review skills needs with employers and RTOs/COTEC

Prepare an action-oriented strategy for growing health and aged care in Port Augusta and maximising local job outcomes.

#### 10 Arid lands horticulture

Facilitate discussions with RTOs around the training need

Facilitate Council and State Government approvals for related projects Integrate Sundrop technical capability into work on the potential renewable energy cluster

Facilitate commercialisation of activities at the Arid Lands Botanic Gardens.



# 1. Introduction

# 1.1 Preparing the Economic Growth and Investment Strategy

RDA Far North is leading a strategic approach to facilitating economic transitions for Port Augusta through an Economic Growth and Investment Strategy. The Strategy will provide a clear and concise framework for economic development activities identified as critical to the future economy of Port Augusta.

This action is timely as Port Augusta's local economy is challenged at present with the closure of the Port Augusta Power Station and the related transition period looming for the region as it grapples with the realities of mining slow down and industry closures.

Port Augusta is well positioned as the gateway or crossroads to the Nullarbor, the outback and northern South Australia, and has traditionally provided a range of support for mining industry exploration in the form of logistics, specialised industry services and labour.

With the investment-heavy capacity expansion phase now winding up for the main mines in the Far North, labour needs are starting to fall rapidly, and this will accentuate into the short and medium-term future as low mineral prices drive further improvements in efficiency and the related loss of direct employment. Mining is a volatile industry, however, and while BHP is undergoing setbacks and a scaledown at present, it is committed to underground mine expansion which may happen within a two year period. This coupled with the OzMinerals' Carrapateena mine project, should they both go ahead, would place Port Augusta once again as a leader in the provision of ongoing support to the mining, energy and resource sector.

But the transition challenge has an upside as well, which is steady (rather than declining) total population numbers and gradual growth in non-mining related businesses in the area. Opportunities may be strong in renewable energy, technology-based agriculture, tourism, logistics and next-phase mining. Which side 'wins' in the next 2-3 years will determine the health of the Port Augusta economy for many years to come.



This *Economic Growth and Investment Strategy* includes the *Port Augusta Economic Context* to assess Port Augusta's economic strengths, weaknesses and potential, and sets out an active Workplan covering short, medium and long term priorities. The Workplan sets out actions for RDAFN and Port Augusta City Council, supported by Business Port Augusta, Global Maintenance Upper Spencer Gulf and the South Australian Government, terms of economic development initiatives that are within their ability to influence.

The Strategy has been prepared following quantitative assessment of Port Augusta's economy, filtering of options and extensive consultation with business and other stakeholders to review emerging directions and recommendations. The analysis and consultations addressed a series of important questions:

- 1) Where is the Port Augusta economy up to, and how does it compare with others?
- 2) Where can the local economy evolve to?
- 3) How can it get there?
- 4) What impediments are there to growth and how do we overcome them?
- 5) What external forces may influence growth?
- 6) How should Port Augusta lead or stimulate this?



The consulting team worked with RDA Far North and other stakeholders to focus on identifying the existing strengths of the local area and building on them to determine initiatives and activities which will be successful and produce results in both the short and long term. Consideration has also been given to achieving outcomes within the limited resource base available.

# 2. Economic Context

The Port Augusta Economic Profile (2014) notes that:

"Located at the upper reaches of the Spencer Gulf in South Australia, Port Augusta is the crossroads of Australia and the gateway to the Flinders Ranges and Outback.

Port Augusta encapsulates an enviable Mediterranean climate ideal for life style, along with being the hub for South Australia's priority resource and transport sector lined by the national transport framework.

Substantial opportunities for economic diversification and growth exist for Port Augusta in the areas of transport, defence, tourism, resources, government and service delivery sectors. Port Augusta is the main service city for the surrounding areas of Coober Pedy, Roxby Downs, Hawker, Quorn, the Flinders Ranges and the unincorporated areas of the "Outback" as well as the Anangu, Pitjantjatjara & Yankunytjatjara Lands (APY Lands)".

The economic profile for Port Augusta 2014 provides a statistical summary of Port Augusta's economy covering housing, labour force and industry data.

The analysis presented here looks deeper into Port Augusta's economic context to understand the internal drivers and strengths of the economy, alongside the external opportunities and threats.

# 2.1 Port Augusta Economic Context

Analysis of jobs growth between 2006 and 2011 shows the areas of 'organic' or 'endogenous' employment growth in Port Augusta.

Endogenous growth is important because it reflects the competitive advantages in the region as determined by market activity over recent decades. An industry or sub-industry that has grown faster in Port Augusta than across South Australia as a whole is building on the competitive strengths of the businesses in that industry or sub-industry. A past history of endogenous growth is not a definitive guide to future growth prospects, but it does clearly separate industries and sub-industries on a growth trajectory in the region from those that are stable or declining – either in relative or absolute terms. The most promising regional industries are those with increasing employment levels in the region, along with an increasing specialisation – meaning that they are growing, and growing faster in the region than across the State as a whole.

The analysis of endogenous growth presented here uses customised tables from the ABS to investigate the changes in the number of jobs located in Port Augusta. The *USG Stocks and Flows* report prepared by SES identified high level industry specialisations in Port Augusta. That work identified the energy, mining, transport, accommodation and public administration sectors as areas in which Port Augusta generates relatively more jobs than the State average, and which are also among the major contributors to regional GRP.

This confirms traditional perceptions of Port Augusta as a supplier of support services for the mining and transport sectors, as well as its specialisation in energy and its role in providing government support services to the city and its regional hinterland.

The Stocks and Flows analysis has now been deepened to look into the 104 industry subsectors (2-digit ANZSIC) with the place of work being Port Augusta for 2006 and 2011, supplemented by some data from 2001 to show longer terms trends as well as shorter term volatility, though there was a reclassification of industries of employment between 2001 and 2006.

The technique uses 'location quotients' – which is the percentage of people employed in an industry subsector in Port Augusta divided by the percentage employed in that subsector in South Australia. It shows whether or not Port Augusta has a higher or lower percentage of people employed in each industry subsector than the state average. For example, in 2011 Port Augusta had 126 people employed in 'Transport Equipment Manufacturing' – amounting to 2.4% of Port Augusta-based jobs. In contrast, that subsector employed 1.3% of jobs in South Australia as a whole. The location quotient for this subsector is 2.4 / 1.3 = 1.9 – indicating that Port Augusta had 1.9 times the percentage employed in it than the state average.

This technique shows the organic strengths of the Port Augusta economy.

Looking at 2006 and 2011 shows industry subsectors that grew in employment (jobs located in Port Augusta). Between 2006 and 2011 Port Augusta lost a total of 173 jobs in the Local Government Area (from 5,413 to 5,240). Only 20 of 104 subsectors showed increases of 5 or more workers – the signs of local specialisation and organic growth:

Table 1 Industry subsector employment changes in Port Augusta 2006-11

	Jobs in PA 2006	Jobs change 2006-11	Location quotient 2011
Medical and Other Health Care Services	208	97	1.5
Food and Beverage Services	293	59	1.3
Public Administration	394	50	1.8
Heavy and Civil Engineering Construction	81	18	3.4
Construction Services	151	18	0.7
Professional, Scientific and Technical Services (except Computer System Design and Related Services)	79	18	0.4
Waste Collection, Treatment and Disposal Services	8	15	1.4
Administrative Services	91	14	1.3
Property Operators and Real Estate Services	38	12	1.0
Social Assistance Services	238	11	1.7
Transport Equipment Manufacturing	117	9	1.8
Preschool and School Education	404	9	1.5
Rental and Hiring Services (except Real Estate)	6	8	0.8
Basic Material Wholesaling	28	7	0.8
Other Transport	0	7	1.6
Auxiliary Finance and Insurance Services	15	6	0.5

Repair and Maintenance	113	6	1.2
Coal Mining	0	5	2.3
Computer System Design and Related Services	0	5	0.1

Source: ABS Census, customised tables

Note: the "Gas Supply" subsector showed growth of 150 jobs in the period, though this seems to be a reclassification of jobs rather than a sign of new jobs in the LGA.

For 10 of the top 12 subindustries, there is a location quotient greater than 1, indicating a higher share of these growing subindustries in Port Augusta than across the State as a whole.

For each of the top20 except one the location quotient also went up between 2006 and 2011 – indicating a growing 'specialisation' in these subsectors. The only one that went down was Social Assistance – indicating that while employment in this went up in Port Augusta, it did not go up as much as it did across the whole State. Many subsectors lost employment over the 5 years – including in the retail, accommodation, education industries and the hospital – evidence of some loss of important local services and capability.

Looking back to 2001 there were 5,039 local jobs so the recent peak was 2006 at 5,413 local jobs. Between 2001 and 2006 there was growth in local jobs in accommodation, government services and health (only government services and health continued growing in the following five years to 2011). Growth in government services employment is consolidating Port Augusta's role as a regional services hub, but needs to be matched by growth in private sector jobs for the medium term economic future to be assured.

Agriculture, retail and wholesale jobs declined from 2001 to 2006. Retail and agriculture show significant 10-year declines in job numbers in Port Augusta through to 2011 – a total of 282 fewer jobs in retail (from 933 in 2001 to 651 in 2011) and 115 fewer jobs in agriculture (from 140 to 25). The agriculture trend mirrors the national trend showing steady declines in agricultural industry employment. In Port Augusta this has been offset to some extent by growth of intensive horticulture.

In 2006 221 people lived in Port Augusta and worked elsewhere – by 2011 this had increased to 504 – probably reflecting deteriorating employment prospects in Port Augusta itself. The nature of these jobs was covered in the *Upper Spencer Gulf Economic Stocks and Flows* report prepared in 2014 for the Common Purpose Group. That report found that:

"Of the three Upper Spencer Gulf Cities, Port Augusta is the biggest exporter of workers – residents working in areas outside Port Augusta – mostly in mining and construction and mostly in areas to the north.

A small number of people lived in one of the three cities and worked in another – under 60 living in Whyalla or Port Pirie and working in Port Augusta. 50 lived in Port Augusta and worked in Whyalla. No-one reported living in Port Pirie and working in Whyalla.

Each city has over 100 residents working in mining in the northern regions. 143 Whyalla residents worked in mining in the Flinders Ranges, while 102 Port Augusta residents and 90 Port Pirie residents worked in mining at Roxby Downs.

Many residents also worked in the northern regions in sectors other than mining:

A total of 225 Port Augusta residents worked in the five outback LGAs and while most were employed in mining directly another 10 worked in construction (high wage), 10 in education (mostly high wage) and six in manufacturing (high wage)."

In summary, the main subsectors showing organic growth in Port Augusta have been:

Medical (other than hospital)

Food and beverage (not accommodation)

Public admin incl waste management

Construction and engineering

Professional services and privately provided administrative, computer and finance services

Real estate and other local services like repair services and pre-schools – but not other education which has shrunk

Transport and transport equipment manufacturing and hiring

It must be remembered that the location quotients are expressed as ratios which obscure the absolute size of each of these industries. In this context, it is worth noting that as a share of actual jobs in Port Augusta the energy, mining, and transport sectors taken together accounted for around 13.5% (one in every seven jobs) done by residents, and 11% (one in every nine jobs) actually located in Port Augusta. Adding construction brings the share of jobs in these four industries done by Port Augusta residents to 21%, and the share of jobs actually located in Port Augusta to 17%.

Predominantly public sector jobs in public administration, health and education accounted for 42% of the jobs located in Port Augusta, based on the figures available for 2011.

This picture is actually common to many smaller regional towns and communities in Australia, i.e., where profitable businesses and industries in the region attracted workers in the past, and where this created a need to provide the types of government services which any community in Australia would feel entitled to – public amenities, schooling, hospitals, etc.

The worst case scenario for such a community is that an exodus of private sector workers could be followed by a drop in public sector workers, leading to a negative spiral as government employees generate much of the demand for other local services.

The city's dependence on government support may therefore seem untenable if major industries were to close down and employers in the private sector looked to exit the region. From the outset, this emphasises the importance of identifying viable alternatives for private sector investment and/or retaining existing private interests by pursuing opportunities in areas in which existing skill sets could be redeployed. Ideally, of course, these areas and jobs would be self-sustaining and would not require further long term government subsidy.

Just ten years ago, there was great optimism and enormous confidence in the growth of Port Augusta as it was riding the wave of the mining boom. Spending on development in Port Augusta almost quadrupled between 2001 and 2005 and there was an expectation that the following decade would see "very significant growth" with

"more than 6000 new jobs ... expected to be created and \$8 billion invested in confirmed and likely developments in Northern South Australia from 2007-2013".

Admittedly, those 6,000 jobs were likely to be scattered around the region, but there was probably an expectation that Port Augusta was going to face a period of growing demand and at least some jobs growth.

Then came the Global Financial Crisis of 2007-08, BHP's shelving of plans for its \$30 billion expansion of Olympic Dam in 2012, and the sharp drop in commodity prices – prices have fallen steeply over the five years to 2015 i.e. by around 50% thus taking them to levels last seen in 2005. It is likely that the weakening of the Chinese economy and uncertainties around global economic growth will continue to depress commodity prices.

Currently the International Monetary Fund forecasts suggest that iron ore prices could drop by a further 25% over the next two years, and the price of several other major metals by 5-10%. This in turn will affect prospecting and future investment decisions. It may also affect projects that are already in the pipeline. Add to this the impending closure of the coal fired power plants in Port Augusta and it is clear that the city is facing some serious challenges.

Sectors and companies that are not directly dependent on the mining or energy sectors need to be recognised as useful in dampening or reducing see-saw movements related to mining.

Government is traditionally seen as one of the last entities to exit in this kind of context; clearly government jobs may scale back more slowly and this will provide some level of cushioning, but the important point is that in the interim period, where the private sector appears to be winding back, every effort is undertaken to minimise that wind-down so that government does not ultimately follow the rush out of the region.

Clearly, within the sectors that are suffering retrenchments or job losses there is an urgent need to look for opportunities where existing skills can be redeployed, or any upskilling or reskilling that may be needed to enable these workers to move from these sectors into other local jobs.

In practical terms what this suggests for Port Augusta is that in order to make smart decisions about where to put the community's next investment dollar, the following information is needed:

What is Port Augusta good at? The sectors that stand out have been identified above, and is there potential to exploit this comparative advantage or existing specialisation? Firms that are identified do not necessarily have to have a big comparative advantage over their rivals, and products do not need to be hugely differentiated from others (it is a fallacy to think that something 'completely new' is needed; more likely building on existing strengths is better).

What types of support do these sectors and companies actually require?

These questions have been addressed through interviews with business owners in the sectors identified as having potential growth. The responses are presented in the following Chapter, and have been integrated into the actions recommended in the Action Plan.

<sup>&</sup>lt;sup>1</sup> http://www.rdafn.com.au/literatureretrieve.aspx?id=46757 accessed 12/1/2016

# 2.2 National Jobs Growth

One influence on Port Augusta's economy is the national medium term pattern of employment growth. Port Augusta clearly has its own specialisations and uniquenesses, and like many regions it has an 'above national average' reliance on primary industries. But alongside these it is also following the broad trends in shifting employment that are being seen nationally. Port Augusta's employment growth in health, education and other services mirrors these national trends. A good summary of what's to come is published annually by the Commonwealth Department of Education in its *Australian Jobs* series.

The current edition shows that over the five years to November 2019 it is the high value service industries that are expected to provide the bulk of new jobs in Australia. Health Care and Social Assistance is expected to provide the largest contribution to national job growth (258,000 or one in every five new jobs), followed by Education and Training (142,700), Construction (137,900) and Professional, Scientific and Technical Services (136,600). Together, these four industries are projected to provide around half of all new jobs.

The industries projected to grow most strongly nationally are *Health Care and Social Assistance* (up by 18.7%), *Education and Training* (15.6%) and *Professional, Scientific and Technical Services* (14.4%).

The two industries which are expected to have lower employment nationally are *Mining* (down by 40,700 or 17.8%) and *Manufacturing* (26,200 or 2.9%). The decline in *Manufacturing* is a long-term structural change in the labour market, while *Mining* employment has peaked after strong rises in the ten years to 2013.

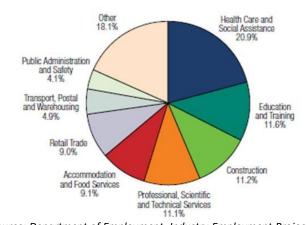


Figure 1 Projected employment growth by industry (% of total growth)

Source: Department of Employment, Industry Employment Projections

If Port Augusta were to follow these forecasts the mix of new jobs at the end of 2019 would include the following additions:

Table 2 Projected employment growth by industry for Port Augusta to 2019

Additional jobs	Industry
169	Health care and social assistance
74	Education and training
71	Accommodation and food services
55	Construction
35	Transport, postal and warehousing
17	Professional, scientific and technical services

As the *USG Stocks* and *Flows* report showed, Port Augusta has below average representation in some of these growth industries, especially Professional, scientific & technical services, so that the actual job growth outcomes in Port Augusta in 2019 will not follow these trends exactly. Nevertheless the national growth pattern does highlight general opportunity industries, with health care likely to be a major source of new jobs in both the public and private sectors

# 2.3 Alinta closures

Currently, Port Augusta is facing the loss of some 300 jobs through the Alinta closures, but this is on top of another 1,500 lost from the Far North in recent years (RDAFN Strategic Plan 2015). Filling the hole left by the Alinta closures is a significant task. The information in this section illustrates that a single replacement business or industry is highly unlikely. It is also undesirable as it would leave the community vulnerable to the loss of that single business in future. To enable comparisons on a common basis, we start by considering the scale of capital investment required to generate 300 jobs in Port Augusta.

Acil Allen modelling of Alinta's socio-economic contribution to Port Augusta and Leigh Creek in early 2015 showed that Alinta's Flinders Operations accounted for 14%-16% of the Port Augusta economy and 97%-99% of the Leigh Creek economy (summing the direct, production and consumption effects). The Flinders Operations also had important social contributions.

The modelling clearly confirms the significance of the jobs and other activity at the power stations and coal mine to the region, and to Port Augusta. The amount of additional economic activity required to catalyse 300 jobs in the Port Augusta economy can be estimated using a local input-output model for Port Augusta available through the University of Adelaide's Economic Impact Assessment Tool<sup>2</sup>. The following table summarises the modelling of increasing the scale of different industries in Port Augusta – based around the objective of generating 300 local jobs. The modelling shows that job generation responses are highest in labour intensive industries like tourism, health care and education. It also shows that utilities is one of

<sup>&</sup>lt;sup>2</sup> The Economic Impact Assessment Tool (EIAT) is a publicly available online input-output (I-O) analysis tool for Local Government Areas across the nation, developed by the Australian Workplace Innovation and Social Research Centre (WISeR) at the University of Adelaide.

the most capital intensive industries in Port Augusta, with the 300 jobs equating to around \$160m value of additional utilities activity.

Table 3 Input output estimates of investment required to yield 300 local jobs

Input Capital Investment (\$m)		Output	
Electricity, gas, water utilities		Direct FTE	
	160	297	
Manufacturing			
	120	297	
Tourism			
Retail \$10m plus Accommodation	\$30m	336	
Health			
	35	309	
Education			
	35	310	

# 3. Overarching Economic Development Priorities

The economic context analysis and the interviews undertaken for this study have highlighted two overarching economic development priorities. These two priorities cut across industries, and if addressed will release business and employment growth opportunities across many parts of the economy. Some actions are underway on both these issues, but this study recommends that they be given a high priority for a set of actions strategically designed to lift local business performance.

# 1. Entrepreneurship and active business networking

Port Augusta has around 650 businesses (June 2013), with most (540) being small businesses employing less than 5 staff<sup>3</sup>. In recent years there have been around 40 new businesses starting in Port Augusta each year, for a business entry rate of 6.2%, below the regional SA average of 7.5%.

Feedback during the interviews undertaken for this study was that much of the business community is feeling tired and lacking of confidence, and that this is one reason for the below-average startup rate. Local businesses report struggling with the cost of freight, having difficulties in finding staff with the right skills, and are often pessimistic about the future following the large industry restructuring and closures in the region.

A common feeling amongst many of the interviewees was the lack of entrepreneurial initiative in Port Augusta, leading to self-imposed constraints on business performance and growth. One interviewee commented that "Port Augusta is small enough to run a good business and while there is lots of goodwill on the ground at first, it gets more complex higher up".

Assistance in available to small businesses, and the SA Government funds a small business website, hotline and a business advisory service – which includes a Business Advisor in Port Augusta under RDA Far North. Building on these resources, some energising of local business entrepreneurs is needed to induce a more positive business mindset, engage more businesses with these growth support services, and make the most of opportunities coming up. Some people interviewed reported that the rollout of the NBN is a good opportunity to create new businesses with innovative ideas, or streamline existing operations and reach new markets. Others reflected on Port Augusta's need to look away from big business and instead focus on smaller businesses in order to improve economic growth.

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<sup>&</sup>lt;sup>3</sup> ABS Port Augusta Regional Profile

Advantages for new businesses include Port Augusta's low entry (real estate) costs and high quality amenity (including fast broadband via the NBN rollout), which complement its location on the north-south and east-west crossroads with accessibility to Adelaide via road and air. This enables quick access to customers in major cities, while retaining the low costs and lifestyle benefits of a regional base.

There are some exciting and creative new businesses emerging. Sundrop Farms is one of the largest and best known, while other examples include the a car industry enterprise using the internet to sell all over Australia, as well as smaller businesses doing well in the building industry, engineering and transport sectors. Consultations revealed a number of new businesses fostering innovation not only in product development but in their systems, processes and procedures. One thing that stood out in this regard was the importance of skill retention in a changing context, as well as keeping an eye out for innovation and creativity in the smaller businesses.

Changing the business mindset takes time, but can be effective when based on business-to-business relationship building. This can be facilitated by the development of active business networks and opportunities to bring people together to share and learn from each other as well as providing opportunities for motivational speakers and local successful innovators to provide inspiration to local businesses. With the closure of Alinta there will be some employees receiving redundancy packages who would benefit from tapping into networks of existing businesses for support during their start up phase and beyond.

A climate of innovation can be nurtured through widespread recognition and celebration of innovative activities (be they in IT, or in products/services, or in processes, systems or new markets). The network building initiatives outlined below are a well recognised conduit for sharing and spreading innovation experiences and messages.

Fostering innovation in IT, for example, will require active promotion and demonstration of the benefits of high speed broadband – and Council, RDA and Business Port Augusta in partnership should consider support through seminars, guest speakers, informal meetings, case studies and demonstrations of local business applications.

There is also scope for innovation in agriculture as demonstrated by Sundrop Farms which brings tangible opportunities to investments in arid land agriculture. The rapid capacity and technology expansion in this enterprise means that other 'next generation' agricultural activities can build on that expertise with a head start into new and more sophisticated approaches. Council and RDAFN may not need to take a strong role in this field as there are other agencies such as the Department of Primary Industries and Regions SA (PIRSA) which are tasked with this responsibility and it is not necessarily considered Council or RDA's role to actively facilitate these initiatives but rather to promote, support and encourage them.

There is concern from businesses that trading conditions will continue to be particularly tough over the next few years. Many of those consulted would like to see activities to help strengthen Port Augusta's businesses such as:

Business training and workshops around service – ie the Aussie Host Customer Service Program. Other training topics mentioned included future options workshops, new generation marketing, and improving business culture – focusing on issues such as valuing employees, ensuring a suitable

work life balance, and mechanisms to ensure employers don't lose employees after significant investment in training.

Business Networking – business breakfasts etc

Efforts to diversify the business base

Better promotion of State Government support resources for small businesses.

It will be important to supplement the seminars and workshops rolled out by the State Government under its program with opportunities that more closely reflect the specific needs and interests of local business.

Several people interviewed for this study raised the idea of creating a Co-workspace in town. The concept has been shown to work in other communities of similar size, and is based on establishment of a place for people where they rent their own workspace (desk and internet connection) or make use of a hot desk with the same capabilities (but shared with other users). The approach is working particularly well in the startup IT/communications technology sector, where users benefit from close proximity to others with similar needs, issues and complementary skills. The better performing co-working spaces involve active facilitation of connections between users to enable rapid resolution of business growth challenges. For somewhat isolated places like Port Augusta, opportunities are emerging so that a small local co-working space could link into a national network to widen the business gene pool and enable fast access to wider networks and related businesses.

#### Active business networks

Local business/industry networks can be strengthened to help participating enterprises capitalise on economic strengths by accelerating the performance of complementary businesses. There are commonly several phases of active network development, and considerable global expertise in activating these networks.

Active business networking is the vital early stage any business cluster development process. It starts with gathering support from potentially participating businesses, determining a shared foundation, and building on this to increase mutual business growth. An example of the network and cluster development path is given below:



Source: www.clusternavigators.com

In practice the early phases focus on network building through information exchange, enabling potential members to share ideas, problems and solutions. This aspect aligns well with the 'entrepreneurial discovery' component of the OECD's successful Smart Specialisation approach. A key learning from the OECD is that this component should not be driven by external parties with a pre-conceived agenda, it needs to be facilitated 'lightly' and allow the directions to emerge with the full participation and agreement of those businesses that will be involved.

The middle phases focus on capacity building through training, seminars and peer review. The latter phases build on the foundations to create the right level of formality for each network, determining whether or not the level of collaboration and trust is enough for some formality of structure of a business cluster. This will depend entirely on the participants, their potential and their trust in each other. Responses range from very soft networks which stay at the level of informal networking discussions, through collaborations within the value chain, through to joint marketing and tendering, and end with hard networks like separate companies formed and capitalised by participants. There is typically a long period of trust building between the early activities and the formation of a sustainable hard network.

In Port Augusta it is clear from the interviews completed with businesses that business-to-business networks are weak, except for businesses still involved in the mining services/heavy engineering network facilitated by Global Maintenance.

An in-depth inquiry into the status and potential for active business networks in the eight industries recommended in this study as having the greatest growth potential would be appropriate for Port Augusta. These comprise:

- 1. Transport & logistics
- 2. Heavy Industry
- 3. Renewable energy
- 4. Education
- 5. Tourism
- 6. Defence
- 7. Health and aged care
- 8. Arid lands horticulture

The approach would focus on the next step for Port Augusta business, which is the foundation work on network building, information exchange and assessing support for potential collaborative work. This involves discussions with the key players in each selected industry on their perceptions of the industry's prospects and competitors, and the potential for greater collaboration amongst complementary businesses in the city and potentially further afield in the Upper Spencer Gulf and Outback. The inquiry net would then be extended to include potential collaborators and review their needs and interests in strengthening the potential network through activities like collaborative research projects, branding and marketing, and identification of next steps.

In the mining services/heavy engineering field it makes sense for the work to be done in conjunction with Global Maintenance USG Inc. Global Maintenance is an organisation that draws its membership from businesses across the Upper Spencer Gulf region involved in engineering and maintenance services to the resource processing sector. It was established to promote the Upper Spencer Gulf as a regional centre of excellence in the provision of "maintenance services" to the local, national and international resource processing sector. Global Maintenance is an active industry-led group which aims to have the Upper Spencer Gulf region recognised as suppliers to the global resource sector. It provides a strong platform

for getting businesses in the supply chain working together and contributing to the region's economic growth and community strength.

Business Port Augusta can play a supporting role by facilitating the establishment of informal network groups. State Government can also assist through existing programs they run and providing advice and input.

#### **ACTIONS**

- 1. Use new business name registrations to make contact with new businesses
- 2. Explore extent of demand for a Co-working space
- 3. Prioritise a series of networking/learning opportunities around new approaches to entrepreneurialism.
- 4. Maintain support for existing businesses, responding to local needs to foster reinvestment in local business, business retention and business growth
- 5. Active networking foundation steps in prospective industries (like transport/logistics, heavy eng/mining services (with GMUSG), tourism, health, renewable energy, defence supplies).
- 6. Work with GMUSG to improve capability of PA businesses to supply head contractors (mining & defence)
- 7. Prepare network development plans for viable networks and seek funding from State and Commonwealth government programs

# 2. Townscape and amenity

One of the main characteristics of Port Augusta mentioned by almost all of the people interviewed was the liveability of the town and surrounding areas. With fishing, the Flinders Ranges, many sports activities for children, and a diverse economy, people felt it was ideal for families and were very happy to live in Port Augusta. What was mentioned as a negative was the lack of knowledge outside Port Augusta about the opportunities, current job insecurity in some industries, and an unfortunate reputation as being an unattractive industrial town. This latter perception could not be further from the truth, however perceptions on amenity are almost as important as job opportunities when trying to attract visitors or people to live in Port Augusta<sup>4</sup>.

The foreshore was mentioned by most as an area in specific need for additional upgrade and beautification works. To take advantage of the waterfront seems to be the first and obvious choice in the process of making the city more attractive. An attractive townscape and high quality amenities throughout the City are important for retaining residents, attracting new residents and attracting visitors, and for retaining visitors for a few more days.

There needs to be a shift in thinking to make Port Augusta a great place to live and somewhere to be proud of, with many attributes that people desire made available. In order to ensure this happens, Council, RDAFN and Business Port Augusta need to drive that lifestyle, cultural and attitudinal change.

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<sup>&</sup>lt;sup>4</sup> See, for example, the high importance given to retail, health and education services as drivers of moves to regional towns reported in WA's *Living in the Regions Survey 2013* (http://www.drd.wa.gov.au/regions/Living-in-the-Regions/Pages/default.aspx).

Further, if Port Augusta develops into a renewable energy research centre and the opportunity to host state games and conferences at the new central oval is further investigated, it is anticipated that more people will come to the region.

Port Augusta could be particularly attractive for the mobile segments of the older population. Aligning planning and works with aged care needs will mean that Council can develop parks and gardens with interest and destination points that will attract and appeal to older people (such as public art, heritage items, landscaped gardens, seating, shading, water features, outdoor fitness areas).

This is an area where economic development crosses over with community development and Council is very active in providing and lobbying for these services. Council should continue to undertake these activities which have a major impact on the town.

Port Augusta has a very attractive set of lifestyle attributes combining the depth of services and facilities available at a regional centre, with affordable housing, in a rural setting. A package of print and electronic resources describing and promoting these lifestyle attributes should be prepared. New residents are crucial for Port Augusta's future, to address emerging demographic and economic challenges, and strong and sophisticated marketing of the Port Augusta lifestyle package is a central feature of future economic development activities.

For marketing to be effective, the positive attributes of Port Augusta as a place to live and work need to be continuously strengthened and recognised. People need access to a range of services available to convince them to move to a new town, including; jobs, education, health services, transport, amenity and lifestyle activities. Council must ensure these services are readily available and widely appreciated. And new job opportunities need to be identified and promoted.

The Town Entrances, are looking increasingly tired and in need of revitalisation and beautification work. The key to long term success of the Town Centre in driving Port Augusta's economic growth will be attracting the right mix of franchise, chain and independent retailers and hospitality businesses to lift the shopping experience in the town centre to a new level.

Port Augusta has some fine old buildings which tend to be lost amongst the main street and other areas. Often they are neglected and overlooked. Streetscape maintenance and upgrades are a very important part of economic development for main street retailers and service providers in Port Augusta, as is any leverage to ensure that building owners are also strongly encouraged to play their part in revitalising the CBD.

From a Council perspective, it would help to establish a rolling, perhaps three year medium term works program that demonstrates to the business community which infrastructure upgrades are scheduled to happen when. The works program schedule then needs to be communicated to the broader community. This will demonstrate that Council wants to build business pride in the area and will show leadership, strategic planning while building trust and confidence.

#### **ACTIONS**

1. Continue with the upgrade of the foreshore and city – ie picnic areas, toilets, camping, recreational fishing, boating, water skiing, walking trails, provision of shelter a marina and a further boat ramp, etc

- 2. Facilitate new business formation around foreshore development including creation of a dining precinct on the foreshore to attract visitors
- 3. Consolidate CBD revitalisation plan
- 4. Improve town entrances
- 5. Publicise rolling CBD works program
- 6. Engage landowners in townscape improvements
- 7. Develop material to support a campaign promoting Port Augusta's lifestyle attributes (eg great social and community infrastructure, airport, good telecoms, great base for home-based professional services, great sporting infrastructure etc)
- 8. Market the Port Augusta lifestyle package through a Port Augusta 'lifestyle living' marketing campaign targeting suitable channels to reach potential new residents and returning ex-residents.



# 4. Priority Industries for Economic Growth

Industry scale prospects for economic growth in Port Augusta have been researched in recent years for six industries with good growth prospects:

- 1. Transport & logistics
- 2. Heavy Industry
- 3. Renewable energy
- 4. Education
- 5. Tourism
- 6. Defence

Two other industries are important, but have not been reviewed for economic potential in recent years:

- 7. Health and aged care
- 8. Arid lands horticulture

Each of these is discussed in detail below. The information presented draws on previous research, quantitative analysis conducted for this study, and qualitative work through interviews with a wide range of people with a stake in the future of the Port Augusta region. Over 40 people were interviewed for this study including:

Business owners in a variety of industries

Managers of social enterprises

Regional economic development practitioners

State government staff

Local government staff.

# 1. Transport and logistics

Transport and logistics is an important economic strength for Port Augusta, with its extensive road and rail facilities, as well as port and airport facilities. This is seen in the business counts and employment data, where Port Augusta had almost twice the share of employment in Transport equipment manufacturing as the state average in 2011 – reflecting growth in specialised manufacturing during the mining boom. Rail employment was also high in 2001, though most of the transport services industry subsectors had lower shares of employment in Port Augusta than across the state as whole – indicating that many of the logistics value-adding service jobs are located elsewhere. Port Augusta has some large transport businesses – some of which were interviewed for this study.

Port Augusta is strategically located as a "genuine crossroads with roads heading north to Alice Springs and Darwin, west to the Nullarbor and the Eyre Peninsula and

south to Adelaide"<sup>5</sup>. It is therefore a busy intersection for both long-haul transport, as well as for tourists crossing the outback.

Most of the people interviewed for this study agreed that Port Augusta had been through a situation similar to the current Alinta closures in the 1990s with job losses at the rail workshops and also at the power stations. Talking to people from the Port Augusta community, a road-rail intermodal facility was often mentioned as a positive possible development. There was agreement among many of those interviewed that rail should be developed, in conjunction with a transport hub, in order to get more trucks off the roads and more transport via rail. There was general agreement that the large trucks needed to get off the road and that rail would be both cheaper and faster.

A study in 2001 looked into the need and support for an industrial estate with an associated road-rail intermodal facility in Port Augusta. Another assessment in 2006 examined the feasibility of a road-rail intermodal facility linked to the then rapid increase in transport activity associated with expansion works at Olympic Dam and Prominent Hill.

The Intermodal feasibility study in 2006 found that there was not enough demand even when need (at that time) was expected to peak due to construction at both Olympic Dam and Prominent Hill. If such a facility were deemed to be unviable during that period it would certainly not be viable in the current period of mining activity slowdown.

As an alternative to an intermodal hub, the 2006 study set out an approach to determining the scale of demand for a heavy equipment assembly and distribution base. The concept was based around expectations of delivery of large scale machinery in parts to Port Augusta where the parts would be stored and assembled. The concept was for a large secure compound to store the wide range of equipment and supplies required for the mine expansions at Olympic Dam and Prominent Hill. The approach recommended was to work closely with the mining companies to determine what might be viable based on their needs, and this does not appear to have been followed and should be revisited in the light of operations at Carrapateena should construction at that site commence in the near future. There may be a need for a similar facility in relation to development at Carrapateena should construction start at that site, and the approach set out for close cooperation in determining the needs of the facility users provides a good model in that scenario.

It would also be useful at this time to refresh knowledge of freight flows (road, rail and especially air) to understand how these have evolved and what the constraints are for future growth. Such a review would enable identification of cost comparators for Port Augusta, and potential efficiency gains.

# **Demonstrating capability**

A consistent theme from both previous studies and the interviews conducted for this study was the need for local transport and logistics companies to be much better at demonstrating their capabilities and winning work with outside clients.

Local transport companies are already reorganising their operations in the wake of the Alinta closures. One company interviewed, for example, is now focusing on reskilling and retraining as well as investing in new machinery to be able to service

<sup>&</sup>lt;sup>5</sup> Davenport/Port Augusta Economic Development Plan 2007/08

wind energy and clean energy businesses. They are also focusing on being able to offer a one-stop service to cover all areas of support a large client may need. They are worried however, that potential new clients will instinctively go to outside firms (non-Port Augusta) to meet their needs for transport and manufacturing. Another firm is diversifying is operations into new areas of technical expertise, and are investing in new premises to support this.

Third party assistance would help local providers bridge between their capabilities and the needs of large clients – who often have stringent compliance requirements and procurement procedures that can be very onerous for a smaller enterprise seeking to supply to them. Third party assistance would also help by demonstrating endorsements of capabilities to head contractors,

Global Maintenance is currently the only active link between local business and outside industry. The most important factor in the establishment of this link is the knowledge among outside industry about the capacity within Port Augusta. One representative from Global Maintenance noted how important it is that local council as well as the local RDA provide the opportunities for outside industry to get to know the local business that could be part of new developments in Port Augusta.

On a smaller scale, the interviews found that there may be a need for a place where truck drivers could stop over to "stop, rest and refuel". A transport hub designed for truck drivers to shower, sleep, eat and refuel, with wash down areas, capacity for unhitching dollies and associated facilities would be a useful asset.

Many of those interviewed also noted that there should be more effort to get tourists and campervans to come into town from the highway instead of just passing through.

## **ACTIONS**

- Work closely with industry to improve ability to market capability to head contractors
- Re-open discussions with BHP Billiton about any local transport services infrastructure needs that would boost performance at Olympic Dam, and also commence discussions with OzMinerals about the pipeline of needs as proving work at Carrapateena is completed, and needs should a mine start be announced.
- 3. In relation to capital works there have been many calls for infrastructure improvements such as the second bridge and Yorkeys Crossing. While the construction phase of these would boost that industry in the short term, there has been no strong case made that outlines ongoing or flow-on economic benefits from this infrastructure. With many competing priorities for infrastructure funding it is important that the short and long term economic benefits (and social benefits such as improved emergency services access) from these road infrastructure investments be assessed and then compared with those from other similar investments to ensure the investments pursued most vigorously are those with the highest expected returns to Port Augusta's economy.
- 4. Explore freight flows (audit if possible), costs and scope for efficiencies.

# 2. Heavy industry

Heavy industry in Port Augusta has strong transport and mining services components – as evidenced by the employment mix which is particularly strong in transport equipment manufacturing which employed 126 people in 2011. Other heavy industry like metals processing is also quite strong, but with a much smaller labour pool (22 workers in 2011). There was no significant employment in minerals processing or other dedicated mining services in Port Augusta, though it is clear that there was a pool of Port Augusta residents who worked in the mining industry in 2011. The *USG Stocks and Flows* report identified over 160 Port Augusta residents working in mining at sites within the Far North. The other large heavy industry has been the power stations.

A key player in growing the heavy industry and mining services sector in Port Augusta is Global Maintenance Upper Spencer Gulf. Global Maintenance is an existing business network with good links across these two sectors, which is looking forward to the next round of mining construction.

Port Augusta is well-positioned to capitalise on the next round, should local businesses be able to demonstrate their capability. Due to previous industry there is still equipment in Port Augusta that could be used in the mining industry, and while the market is not good for this at the moment, this may change and Port Augusta businesses will need to be ready and prepared.

Port Augusta can provide contracting services and is very competitive in these areas, as a "go to place" for a resources. Port Augusta is a base for supplying labour on a 'drive in drive out' basis. Mining companies will first come to Port Augusta so it is important to have training, education and a 'culture of people' willing and able to work. There will for example be a new renewable projects starting up and it is important to not just sit and wait for this to happen but make sure they are ready for when it happens.

Port Augusta businesses must work hard to be involved in the construction phase, getting involved before the tender is locked. It is however tricky to get the timing right. For example Council should get in touch with Global Maintenance every time a suitable potential investor walks in to talk to them. The local RDA can be more involved as well and ensure greater local and small business participation. Relationship building is necessary but it must be backed up with reality, and the local RDA can make international companies easier accessible to company managers. One example is what GMUSG and RDA did recently when they invited international and national company leaders to the region to show them what they can offer. This is a time consuming and expensive process but will be worth it in the end.

It is complicated to involve small businesses, and big industries need complete solutions, in particular in the beginning of a development. Later in this stage there may be more need for smaller businesses and it is then GMUSG's responsibility to make sure the local business gets involved.

According to one of the transport companies, GMUSG has had the role as a broker/link between local companies and outside business for a long time now and it has been a respected position. It would be counterproductive to take this role away from them or to have a competitor in this area. GMUSG would probably welcome further support through funding or adding another person to help out in this role.

It would probably be useful for local business to work together in order to be able to compete with outside business. The past has demonstrated however, that many of the local companies are not in a mature enough position to be able to do this, or agile enough to sell themselves to larger organisations. More formal joint tendering approaches have been tried in the past, with little success, indicating stronger trust foundations are needed before these more ambitious collaborations can be attempted.

There is not a major role for the Council in these processes, but there is definitely a role for the RDA. They would however need sufficient support to be more active in this role would need to engage with someone with good qualifications and experience in procurement, collaborative contracting, project delivery, government bureaucracy and proven contacts across all facets of service industries.

To explore the potential to build on the heavy industry strengths across the Upper Spencer Gulf, the feasibility of an Upper Spencer Gulf Heavy Industry Hub was investigated in 2012. Prepared by the KPMG and GHD, the report presented a number of recommendations involving:

Regional development coordination and implementation Improving the capability of local and South Australian mining services companies to contract with the mining industry Skills, training and workforce development

Common use infrastructure investment.

#### The assessment noted that:

Coordination across businesses in the industry was already in evidence There were no major infrastructure blockages to industry growth (through general upgrades were needed)

Contracting practices need to be improved

The study also noted that it would not be wise to:

Pursue an 'industry hub' based on an industrial land development strategy/approach. Stakeholders and survey respondents did not identify key land-related constraints to growth.

Pursue specific immediate infrastructure investments to remove growth constraints or otherwise facilitate development. The specific investments opportunities identified were undeveloped and lacked an economic business case, or were not identified through stakeholder engagement or in the industry survey.

The USG Heavy Industry Hub Feasibility Study is still on PIRSA's website as a major regional development initiative and its recommendations need implementation. The heavy industry and manufacturing sector is still a key strength for the region, and the existing business network Global Maintenance Upper Spencer Gulf group is a sign of the links and capacity of the industry in the region. New investments at BHP's underground workings or at OzMinerals Carrapateena mine would have an immediate stimulus to this sector

# **ACTIONS**

 Engage GMUSG as an industry partner to detail supply chain potential and resolve growth constraints. Follow advice from several studies to work with BHP Billiton and OzMinerals to map their local and regional service and skills needs, and use this as a basis for business cases for existing or new firms to fill gaps.

- 2. Work with BHP Billiton and OzMinerals to understand expectations and requirements of local suppliers in terms of capability and certification. Where deficiencies in capability or certification exist engage an industry facilitator to resolve and act as a broker between local firms and large mining companies. This model has proven effective in the defence-related industries in Adelaide, where time and resources have been allocated over several years to ensure local Adelaide firms are able to benefit from Defence contracts. The same medium-term, tailored, supply chain development process should be followed in Port Augusta.
- 3. Build on learnings from DefenceSA and Defence Teaming Centre
- 4. Implement recommendations in KPMG Hub study with a focus on Port Augusta:

R1 Regional coordination and implementation (focusing on Port Augusta) R2 Raise capability of (Port Augusta-based) mining services suppliers to contract with new customers through support from industry, industry bodies, State and Local Governments

R3 Skills training and workforce development (for Port Augusta businesses)

R4 (Evaluate) Common use infrastructure investment (in Port Augusta)

# 3. Renewable Energy

Growth in Port Augusta's renewable energy industry fits with South Australia's Greenhouse Strategy and national Renewable Energy Target directions. And it fits well (especially solar technologies) with Port Augusta's natural assets.

This is an exciting new area of opportunity for the region with a number of developments in the pipeline both in solar and wind energy production. However unless local businesses (new or existing) are able to benefit from some generation 'critical mass' it is unlikely that this sector will have a great impact on job creation. At best after the construction phase a handful of ongoing jobs will be created.

A practical assessment of the supply chain in the region is a crucial foundation to understand what firms could (or are) supplying these renewable energy developments and where the industry gaps are that can be supported by the RDA and Government agencies, e.g. Industry Capability Network (ICN) and Department of State Development. This should be coupled with meetings to develop pathways for collaboration with generator firms. Close industry links and a collaborative approach are needed to realise the development of an active renewable energy industry cluster and capture associated benefits.

The Council has expressed strong interest and enthusiasm concerning renewable energy and is also receiving a number of applications for renewable energy projects. DP Energy was mentioned by close to all of those interviewed as a possible company to start up as well as an application from Lincoln Gap for wind energy.

There is potential for further spillover effects in Port Augusta through the possibility of creating a research hub in Port Augusta with focus on renewable energy and new technologies in this field, including in developing arid horticulture by building on capabilities being commercialised by Sundrop Farms.

In 2015 a *Renewable Energy Market and Value Chain* analysis was commissioned by RDAFN to provide a thorough review of the State and National energy markets and the potential for renewable energy.

The aim of the work was to

- 1. Identify gaps in capacity that can be filled through a range of initiatives and activities such as investment, entrepreneurship, innovation, and vocational training
- 2. Develop a platform to investigate, promote, and connect businesses to support and lead clean green enterprises within the region, and ensuring more regional employment
- 3. Provide evidence-based information to potential investors to support decision-making and attract further investment support.

The Stage 1 Report included a description of several renewable energy value chains, and a high level summary of firms active in these value chains across South Australia. It recommended that RDAFN

- Work with the South Australian Government to develop a Distributed Energy Microgrid Strategy for the region, including off-grid areas guaranteed supply through RAES
- 2. Investigate and promote strategic opportunities for the development of Community Owned Renewable Energy (CORE) projects in Port Augusta and the wider region.
- 3. Develop an education strategy to facilitate local growth in technically qualified workers in the clean technology domain.

The first two recommendations help to build demand for renewable energy products and services in the region, and the third helps build local capability to supply these needs. These need to be supplemented by work to connect with the large scale renewable energy projects coming to the region to get more regional economic flow-on from these.

Stage 2 of the analysis is expected to identify the value chain in and around Port Augusta and develop strategies to work with existing businesses or attract new business to capture the opportunities, setting out the potential for growth in the region.

Growth in the renewable energy industry would be supported by a regional industry assessment and growth plan, such as that conducted in Southeast NSW by RDA ACT under the South East Region of Renewable Energy Excellence (SERREE) umbrella. Initially convened by the RDA, SERREE has become a member-led industry cluster. Such an assessment around Port Augusta would identify:

Businesses interested in Port Augusta as a solar power area; Their potential and support needs.

This approach can yield significant dividends. The ACT Government recently announced its second large scale wind power contract. The contract was to buy renewable energy sources from locations outside the ACT (not stimulate new generation facilities in the ACT) and the generation impacts were not specified in the contract as it is up to the contractor to source the renewable energy in their preferred way. As part of the agreement the contractor will provide a \$10.8 million investment package to support growth in the renewable technology value chain in the ACT through:

A \$1 million renewable energy and battery storage training fund;

A \$6.5 million research and innovation and international outreach fund;

A \$2.7 million energy innovation precinct fund.

The key learning for Port Augusta is that in signing the contract the ACT Government secured funds to support the growth of complementary businesses in the ACT – through the training fund, outreach fund and construction of an energy innovation precinct all designed to support growth of new businesses in the ACT related to renewables. This agreement has raised the bar in relation to how to get more locally/regionally from large scale renewables investments.

Another energy matter under consideration is SA's status in relation to nuclear energy as a location for generation or waste storage. Port Augusta will need to keep abreast of recommendations from the Royal Commission.

# **ACTIONS**

- 1. Complete Stage 2 of the Renewable Energy Market and Value Chain work:
  - d) Identify gaps in capacity that can be filled through a range of initiatives and activities such as investment, entrepreneurship, innovation, and vocational training
  - e) Develop a platform to investigate, promote, and connect businesses to support and lead clean green enterprises within the region, and ensuring more regional employment
  - f) Provide evidence-based information to potential investors to support decisionmaking and attract further investment support.
- 2. Work with State Government to ensure that any large scale development or energy supply contracts (or both) include significant components to enhance local business spinoffs and long term business capability in renewables. This should include drive for a renewable energy precinct and a business-to-business renewable energy cluster initiative.
- 3. Provide support to design and advocacy of a Port Augusta-based Centre of Renewable Energy R&D

# 4. Education

There are two secondary schools in Port Augusta (one private and one public) in addition to Port Augusta's special school for children up to Year 12 with disabilities. After this there are few options for people who want to stay in Port Augusta and pursue tertiary education.

TAFE offers courses in a variety of trade skills such as electrical and building etc, as well courses in community services, child care and aged care. TAFE can also offer other vocational skills courses based on consultations with RDA. However, while TAFE is still offering courses in various trade employment areas, the high unemployment rate, the closure of Alinta and the decline in heavy industry has meant

that interest is going down due to less demand for these traditional jobs. As mentioned by one of the people interviewed, "training for training's sake" without the offer of a job in the end is discouraging and a "Band-Aid solution".

For university studies people can either travel to Adelaide or they can undertake some courses in Whyalla through the University of South Australia. As evidenced in other regional areas in Australia it is common for young people to leave Port Augusta for education opportunities and not return. However, experience shows that option of going to Adelaide is becoming more expensive and therefore less of an opportunity for many. This is partly why RDA and the Upper Spencer Gulf Common Purpose Group are currently looking into the development of Community Owned Tertiary Education Campus (COTEC) in Port Augusta. "A key initiative of the Upper Spencer Gulf Common Purpose Group is the active pursuit of a new model of industry, community and skills/research institute collaboration for the region."

COTEC is a community owned education centre aiming to offer students in Port Augusta courses they would normally have to go Adelaide to do. One of the long-term goals for COTEC would be to offer tertiary-level courses in local specialisations such as renewable energy and heavy engineering. Both COTEC and TAFE must be linked to employment and industry for future employment.

The COTEC model is based on a successful initiative in Geraldton WA. The local community provides the hard infrastructure and the social infrastructure, determines the local needs and tenders out the vocational and tertiary education service provision and brokers research partnerships. The successful tenderer will provide a minimum of 10 hours face to face tutoring time. The Geraldton initiative reports that to date they have a retention and graduation rate of 95%

The concept of Port Augusta as a research hub for alternative energy was raised during interviews undertaken for this study. With Sundrop Farms established as well as the possibilities of solar and wind energy projects in the future, e.g. DP Energy's wind/solar farm, Port Augusta could possibly attract researchers from all over the country as a centre for research on renewables. A funding proposal has been submitted and there has been positive interest and positive feedback from ministers, according to one of the people interviewed.

# **ACTIONS**

1. Revival of RTO-industry links. Recognising limitations on RTO funding, there is a need for a rapid response to enable RTOs to offer the short and medium term training needed by current employers, and also sought by retrenched workers. It is a critical time to prepare a genuine 'market ready' course package that links these supply and demand priorities. This should encompass medium term industry skills development in areas likely to grow such as renewable energy, aged, health & child care, specialised manufacturing/assembly linked to heavy industry and mining services, and arid lands horticulture.

The recent RTO training course in cooperation with Sundrop Farms, where 25 people found subsequent employment, shows that this level of collaboration is possible in Port Augusta, provided resources are made available.

 Active support of COTEC business case proposal and participation by senior RDA staff and Board in the communications and lobbying required to progress the initiative.

<sup>&</sup>lt;sup>6</sup> http://usgcpg.wix.com/usgcpg#!community-development/c156m

3. Continue active support for Port Augusta as a Centre of renewable energy R&D and training.

# 5. Tourism

Port Augusta is located on the major transport crossroad for both road and rail. Port Augusta has been the hub of commercial, railroad and government services for the far north of the State since its establishment in 1852. Tourism and related services are seen as significant components of the economy of Port Augusta given its location and the mix of tourist attractions, especially because of proximity of the city to the Flinders Ranges."<sup>7</sup>

People participating in interviews undertaken for this study emphasised the links with the Outback and Flinders Ranges, and locally-based activities including fishing, Arid Lands Botanic Gardens, water activities at the top of the gulf, walking tracks and the Wadlata Tourist Centre and its interactive tour. There is also the Pichi Richi railway that stops in Port Augusta with the Platform Gallery and a new coffee shop being developed for tourists taking the rail journey.

For several decades tourism has been flagged as a potential growth industry for Port Augusta. The 1992 Tourism & Hospitality Strategic Plan noted that Port Augusta's "...future is bleak, though opportunities exist and tourism is a major component of future opportunity." But limitations have also been acknowledged.

In the 1993 Tourism Marketing Plan Port Augusta was described as being "not a destination but a crossroads". And the 1992 Strategic Plan also noted the limited contribution that tourism was expected to make, and that some key building blocks were missing:

"Dependence on tourism income alone for the salvation of Port Augusta is not prudent to rely on tourism alone. What is required is imagination, leadership, engagement & support. The terms "Cross roads" and "Gateway to the Outback" in themselves suggest passing through rather than stopping."

It is very important to understand the extent to which any of the circumstances described have changed. There are currently many tourism activities currently underway for the Outback and Flinders Region, but visitor numbers and spend have been falling.

"Over the last 10 years visitation to the Region has declined some 16% and although this is disappointingly in step with declines in visitation to SA and interstate competitive tourism regions, such as Kakadu and the Red Centre, the lack of an effective organisation to leverage and coordinate tourism activities at a regional level is certainly a very limiting and an absolutely crucial factor to enabling this region to redress issues and return this area to a position of positive tourism activity and growth in the future. (from RDAFN)

The key questions for tourism (as a contributor to jobs growth) are:

What is the potential for visitor numbers and spend to start increasing? What might trigger such a change in trajectory?

What scale of tourism industry investment and activity is needed to start generating additional jobs?

<sup>&</sup>lt;sup>7</sup> Port Augusta economic issues structural changes

Currently (2012-138) there are around 1,000 people employed in 120 tourism businesses in Port Augusta, with a total visitor spend of around \$60 million per annum. This equates to \$60,000 per job servicing 322,000 visitor nights. This ratio can be used to determine the scale of increased tourism activity required to stimulate another 300 jobs (replacing the Alinta workforce) – under the somewhat unrealistic assumption that all current businesses and employees are at full capacity with no ability to cover increased demand within existing resources. In fact, most tourism businesses (but not all) are small operations with considerable flexibility to manage peaks and troughs within existing resources, and considerable demand and turnover growth is needed to trigger increased employment.

Nevertheless, following the option through under this assumption, an additional 300 jobs would require an additional \$18 million turnover and another 100,000 visitor nights. Increasing visitor nights by one third in a declining market is no doubt a challenge – but progress may be made through a 'stay another day' campaign.

# "Stay another day"

It's unlikely that Port Augusta will ever be an iconic tourist destination in its own right, however it does have a very strong role to play in the region as the launching point or Gateway to the Region. Many people, especially the grey nomad and caravan and camping markets, stop in Port Augusta before or after their journey through other parts of the region to rest, refuel, refresh and re-energise. They are already stopping so what needs to be done is encourage travellers to stay another day, or two or three by expanding the menu of 'things to do' for visitors and enhancing the lifestyle and amenity offerings of Port Augusta. Many thousands of visitors are passing through each year, and once in town, there is potential to expand and enhance the visitor experience and extend its visitor experiences in the areas of nature, water activities, sports tourism, culture and heritage to provide a reason for visitors to extend their stay.

Port Augusta already has the right mix of offerings to be able to run a 'Stay Another Day' campaign. There is sufficient tourism product to increase the length of stay by 1 to 2 days through concerted promotion of the breadth of activities – promotion both externally (to visitors before they arrive) and internal cross-promotion amongst tourism and related businesses once visitor reach Port Augusta

## **Tourism investment**

The most valuable private tourism investments for Port Augusta are likely to be not in attempts to create an iconic tourism destination, but attractions and services that build, complement and extend the current offerings. In parallel, the most valuable public investments will tie in to residents amenity benefits as well – CBD revitalisation, townscape improvements, and waterfront development.

As for tourism activities that people interviewed wanted to see developed, a particular focus was on water based activities – kayaks, fishing competition, aquatic centre and more events as well as an increased focus on the botanic gardens and opportunities related to indigenous culture and food.

#### Indigenous tourism

Port Augusta is a gathering point for the Aboriginal population in the area. The Aboriginal community is growing and is currently around 18-20% of the Port Augusta population and covers some 17 – 28 different language or family groups. There are opportunities in developing Aboriginal culture and art for future economic benefits.

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<sup>&</sup>lt;sup>8</sup> Tourism Research Australia Port Augusta LGA Profile 2012-13

Platform Arts Centre was one outlet mentioned by many people interviewed for this study as a great place and starting point for developing the Aboriginal art scene.

In regard to tourism business, the Davenport community suggested the following areas in a 2007/08 report: "cultural tours and development of interpretation that incorporates Port Augusta's traditional owners; bush tucker – possible cooking classes similar to 'Kungas Can Cook' in Alice Springs – collaboration opportunities; Festival entertainment e.g. Dance and Performing Arts Centre, and Language interpretation and cultural liaison."

#### **ACTIONS**

- Resource, develop and implement a "Stay another day" campaign
   Develop a list of activities/material for the 'Stay Another Day' campaign and
   work with SA Tourism Commission to promote it.
- 2. Incorporate visitor needs into townscape changes
- 3. Prioritise tourism business operators for entrepreneurship initiatives
- 4. Facilitate investment to expand local tourism business capability prioritise support for private investment rather than publicly-funded grants

# 6. Defence

Cultana Training Area expansion is underway to support future joint training needs and the capability of 1st Brigade and 7th Battalion, Royal Australian Regiment (7 RAR) established at Edinburgh, South Australia in 2011.

Defence has expanded the existing Cultana Training Area westward, increasing its total size from approximately 50,000 hectares to approximately 209,300 hectares and according to the Minister "Defence will commence infrastructure development of Cultana in 2015 and is hopeful that community and industry from Whyalla and Port Augusta will be involved in the development. Over the next three years it is expected that the Cultana Redevelopment Project will see approximately \$82.3 million invested in the region" <sup>10</sup>.

There is clearly some conflict between the views of the Ministers responsible and the Defence Department in relation to the potential for the project to have flow-on economic benefits for Port Augusta. Ministers<sup>11</sup> have highlighted the significance of the regional economic impact and job creation while the Department itself emphasises the limitations imposed by its strict procurement policies:

"Media reports that suggested there will be large numbers of jobs created as a result of the expanded training area are misleading. The project will generate short-term employment during the construction phase through onsite labour and construction materials fabrication and supply. This will have a positive economic impact on local communities.

The proposed works, including training facilities, camp accommodation and environmental sustainability works will be delivered by one or more Head Contracts. Defence anticipates that local building sub-contractors would be employed on a large proportion of the construction works by the Head

<sup>&</sup>lt;sup>9</sup> Davenport/Port Augusta Economic Development Plan 2007/08

http://www.minister.defence.gov.au/2014/07/31/parliamentry-secretary-to-the-minister-for-defence-defence-eclebrates-expansion-of-cultana-training-area/ accessed 16 March 2016

<sup>&</sup>lt;sup>11</sup> Parliamentary Secretary for Defence Support Media release 18 September 2009

Contractor. Increased use of the expanded Cultana Training Area by the Australian Defence Force will provide further opportunities for the local communities through the purchasing of supplies.

The purchasing of fresh rations is managed by Defence's Garrison Support Service Contractor in South Australia. The contractor is required to utilise local suppliers where possible.

All suppliers must be Hazard Analysis Critical Control Point (HACCP) accredited to comply with Defence contractual requirements.

Basic rations such as bread and milk are currently sourced locally". 12

The 2006 Intermodal study for Port Augusta considered the importance of Defence as a transport user and reported that the impact was likely to be low:

"... the Defence force will be self sufficient in their logistics requirements as they supply their material needs from warehouses in Edinburgh and Warradale in Adelaide. Groceries supplied to the training brigade are picked daily by Woolworths at the store in Port Augusta while fuel is supplied largely from the local Shell Service station by tanker to Cultana (p10).

The Defence Infrastructure group continues to believe that procuring and holding supplies in Moorebank (Sydney) and Townsville ensures the most efficient supply network of sourcing and distributing military supplies. Following last years strategic logistics review Port Augusta isn't considered a strategic option to locate warehousing for Defence (p17)

There is a wealth of difference between an \$82.3 million investment, and a contract to source bread and milk from Port Augusta. The community will need to work hard to make good the Ministers' promises of local involvement.

Resolution will require sophisticated lobbying, as well as borrowing skills and expertise in accessing defence procurement and building local capability to do so as exemplified in the Adelaide-based program resources by Defence SA and the Defence Teaming Centre.

Port Augusta businesses will need to pursue access to infrastructure construction contracts – supplying services and materials – through defence procurement and head contractor Transfield. Significant compliance costs and a competitive market will mean that Port Augusta business will need to be at the top of their game and will require some assistance.

Generating additional local business activity during periods of troop rest and recreation and, in the long term, potentially housing of some permanent Defence staff - including a full battalion - in the Upper Spencer Gulf, are also opportunities Port Augusta could explore

#### **ACTIONS**

1. Active, strategic lobbying/advocacy on behalf of local capability

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<sup>12</sup> http://www.defence.gov.au/id/cultana/faqs.asp#3, accessed 16 March 2016

- Strengthen involvement in DTC and other SA Defence- industry links such as the new Centre for Defence Industry Capability which promises to work for "all SA small and medium businesses".
- 3. Develop brokering role between local suppliers and defence procurement and the lead contractor (Transfield) using the skills of others involved in this in SA

## 7. Health and aged care

Port Augusta has, like the rest of Australia, an ageing population. According to the current demographic picture more than 20% of the population will be over 65 in 2016, a very significant increase from 11.7% in 2001. There are currently two council owned nursing homes in Port Augusta, A.M Ramsey Village and Nerrilda nursing home. Both are today serving low and high care clients and future plans are currently being reviewed.

Interviews undertaken for this study showed that there are gaps in the housing and care mix for older residents which indicate economic opportunities. Most people interviewed agreed that Port Augusta needs an integrated age service system with retirement living including (1) affordable low cost housing and (2) lifestyle retirement living.

What seems to be missing in Port Augusta is a place for people to go and live before they need to go into nursing homes, such as a retirement village or independent living facility. A typical pattern for Port Augusta is often that people leave when they are young for education or for employment, and then they may return later in life. Other situations occur where families leave Port Augusta for other places, leaving their elderly parents with no support.

There seems to be no short term need for more than the two nursing homes that exist there already, though this may change during the ten next years as the ageing trend continues. If Port Augusta can retain the current population, the need for aged care housing will continue to rise. Furthermore, if some retrenched workers who have been caring for older family members in Port Augusta leave the community for work elsewhere they may be increasing demand for home care

In addition to the housing options noted above, a strong growth area is in home care packages services. The Federal Government is currently regulating the number of packages in each region, but this is due to change in 2017 when it will open the market to new players. It is expected that more people will be remaining at home for longer periods of time, increasing the need for assistance in cleaning, house and yard maintenance as well as other care necessary.

At present the aged care industry in Port Augusta is struggling to retain sufficient numbers of suitable qualified staff across all areas such as personal care attendants, Enrolled Nurses and Registered Nurses. The introduction of the NDIS will also have an impact on health services in Port Augusta with more employment opportunities for services provided directly to clients in their home.

In order to cope with the development, there is a need for training of staff as well as further attractions of health professionals to the region.

Both the health care and aged care sub-industries have seen a lot of jobs growth in Port Augusta and nationally, and are forecast to continue to grow strongly nationally.

But there has been no assessment of growth potential and pathways to achieve growth in Port Augusta itself. Both industries are labour intensive, and on strong employment growth paths. Both draw on a mix of public and private funding. Port Augusta may be well placed to facilitate a 'health services precinct' around the hospital – building on its role as regional services centre, and actively fostering private sector health services providers to widen the services available in the city There should be good prospects for private as well as public investment in both industries – most regions have a good spread of private health specialists clustering around the 'base hospital' infrastructure.

Private sector health and aged services in Port Augusta are already quite well established. In Port Augusta in 2011 there was an almost even mix of health jobs in the public and private sectors. The 295 public sector health jobs focused on the hospital, while the 282 private sector jobs were spread across hospital, GPs, diagnostic services, dentists and other specialists.

As with most places, private sector jobs dominate aged care and social assistance services in Port Augusta (286 private sector and 51 public sector jobs).

On two measures there seems to be considerable scope for growth in private health and aged care services in Port Augusta:

- 1. The private/public jobs ratio in Port Augusta is 0.95 (just under 1 private sector health and aged care job per public job in the sector), whereas across non-metropolitan SA it is 1.7 (1.7 private jobs for every public job).
- 2. On a per household basis private service provision is currently more in Port Augusta than the non-metro SA average, but it is less than in other regional centres (Tamworth in NSW for example).

Incomes in Port Augusta are above the non-metro SA average and slightly above those in Tamworth, and the age mix in Port Augusta (percentage of residents over 65) is similar in Port Augusta to the non-metro SA average and to that in Tamworth. So neither incomes nor age mix alone can explain the lower number of jobs in these important sectors in Port Augusta. It may well be an underdeveloped market with room for expansion.

#### **ACTIONS**

- Integrate future aged accommodation needs into land use planning for Port Augusta
- Facilitate business-to-business connections amongst public and private health care and aged care services. From these discussions identify growth potential and any constraints
- 3. Review skills needs with employers and RTOs/COTEC to ensure health and aged care, children's education and NDIS are resourced for local training
- 4. Prepare an action-oriented strategy for growing health and aged care in Port Augusta and maximising local job outcomes

## 8. Arid land horticulture

A new initiative driven by the private sector is arid land horticulture. The Sundrop Farms enterprise uses solar power to desalinate seawater and power a hydroponic vegetable growth system.

Sundrop has a 10 year contract with Coles for the production of truss tomatoes, and if successful is considering expansion into other products. The contract to boost production to 15,000t of tomatoes per annum is underpinning a 100-fold capacity expansion. Scaling up around 100 times means that all the systems need to be more hardy and hi-tech. The facility will move, for example, from a parabolic mirror and plastic greenhouses to glasshouses and a solar tower with a field of 14,000 mirrors as the solar concentrator.

Labour needs will grow with this expansion and Sundrop is looking for a prospective labour pool of 400-500 to provide continuity in the ongoing need for the roughly 200 full-time equivalent jobs needed to support the expansion. There has been strong local interest from people in Port Augusta with 165 expressions of interest in the mid 2015 training program, and new workers were expected to start in early 2016.

Sundrop is aware that it is creating a new industry and is actively supporting skills and labour development – mindful that there may be well be some " ... growing pains along the way"<sup>13</sup>.

RDA and Council are well positioned to assist and pave the way through red tape, planning processes underlying the Development Applications for expansion, and other necessary procedures to ensure the success of the project and potential future stages or applications to other food crops. The new facility will solely produce truss tomatoes for the Australian market.

The new technologies embedded in the systems link with the emerging focus on renewable energy in the region. There is an untapped opportunity for research and development in arid horticulture to take place in Port Augusta with the potential for the city to be a global leader in the development of solar-desal technologies and arid horticulture. Promoting connections with local, national and international universities would provide new opportunities for Port Augusta to be a centre for specialised R&D.

There is also a link to Port Augusta's popular Arid Lands Botanic Gardens, and RDAFN can assist in facilitating the commercialisation of activities at the Gardens.

### **ACTIONS**

- Facilitate discussions with RTOs around the training need significant volume expected
- 2. Facilitate Council and State Government approvals for related projects
- 3. Integrate Sundrop technical capability into work on the potential renewable energy cluster
- 4. Facilitate commercialisation of activities at the Arid Lands Botanic Gardens.

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<sup>&</sup>lt;sup>13</sup> Interview with Managing Director John Phinney available at http://www.abc.net.au/news/2015-05-22/sundrop-farms-training-facility-set-up-for-commercial-venture/6490368

# 5. Investment prospects

The following table presents a high level summary of areas determined to have the highest growth potential, and describes the nature of the investment required to advance each area. It does not prioritise the identified growth areas, as this needs to be done by the RDA Board in consultation with the other key stakeholders: Council, Business Port Augusta and the State Government.

**Table 4 Growth and investment summary** 

Growth potential		Nature of investment	
	Public capital funding	Private capital funding	Staff time
Overall			
Entrepreneurship	Limited – co- workspace	Distributed across businesses	RDAFN team
Townscape and amenity	Council works	Landowners and	
Industry specific	program	new business	Liaison with PACC
1. Transport & logistics	Freight mix review	Scaling up for new	Strengthening
	Treight mix review	contracts	business networks
2. Heavy Industry	No immediate	Scaling up for new	Strengthening
3. Renewable energy	infrastructure needs R&D Centre	contracts Electricity generation and	business networks Strengthening business networks
4. Education	COTEC seed	servicing Course providers	
	funding VET training	Private training	Facilitation
5. Tourism	Limited - marketing collateral	Distributed across businesses	RDAFN team
<ul><li>6. Defence</li><li>7. Health and aged care</li></ul>	No immediate infrastructure needs No immediate	Scaling up for new contracts Pubic private mix	Strengthening business networks
<u> </u>	infrastructure needs	for new options	Facilitation
8. Arid lands horticulture	VET training	Private training Capacity expansion	Facilitation
	VET training	Private training	. asimanon

## Port Augusta Economic Growth and Investment Strategy



# 6. Port Augusta Economic Development Workplan

The workplan has distilled each of the Priority areas as nominated in the Community Consultation process to an achievable set of actions which can be facilitated by the Economic Development Team with Council.

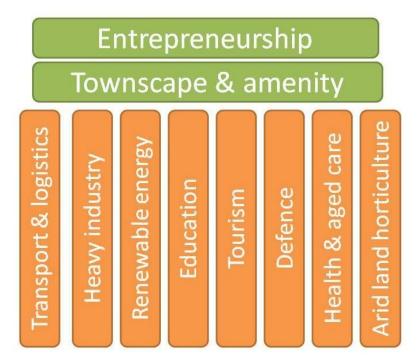
Subject to RDA's endorsement, the Strategies and Actions here need further elaboration – especially on resourcing, funding, timeframes and agreed performance measures. The completed workplan can be used as an Implementation Plan for the Economic Growth and Investment Strategy covering timelines, actions required, KPIs and who should be tasked with them, an estimate of costs (internal and external), along with an assessment of possible funding partners and options for specific initiatives. In our experience this component needs to be concise and actionable, as well as exciting and motivational, and supported by all the players likely to be involved in its delivery.

## Ten priorities for economic growth and job creation

Port Augusta is well positioned to become the hub of economic activity in the Upper Spencer Gulf by implementing a package of initiatives which will assist in accelerating the development and growth of local business and industry strengths. RDA needs to partner with industry and government to drive investment into Port Augusta and attract new settlers.

Much of the baseline work has commenced. RDA Far North and Port Augusta Council have vision and leadership and are keen to support the community in job creation, innovation and economic development. Our focus in this study has been to identify and build on the existing strengths of the local area and identify initiatives that should be implemented as priorities for the town. The activities outlined below are project ready, are able to be undertaken within the limited resource base of the RDA, Council and Business Port Augusta with modest funding allocation as well as staff time.

Ten priorities have emerged from this assessment as the foundations of Council, RDA business and State Government actions to support economic development in Port Augusta:



Strategy Area 1	Stakeholders / Responsibility	Actions	Resources	Timeframes	Key Performance Indicators
Entrepreneurship					
	RDAFN BA* PA Business Centre	Use new business name registrations to make contact with new businesses	2hrs/month	Ongoing	Contacts completed
	RDAFN BA	Explore extent of demand for a co- working space	1 week	Next 3 months	Demand assessment complete
	RDAFN BA RDAFN TSO**	Prioritise a series of networking/ learning opportunities around new approaches to entrepreneurialism	1 day/month	Ongoing	Workshops delivered
	RDAFN BA RDAFN TSO**	Support for existing businesses, responding to local needs	Ongoing	Ongoing	Participation rate & satisfaction
Active business networks	RDAFN BA	Foundation steps in prospective industries (like transport/logistics, tourism, health, renewable energy, defence supplies).	10 days/ industry	Sequential	Interest assessed and foundations established where viable
	RDAFN BA	Work with Global Maintenance to improve capability of PA businesses to supply head contractors (mining & defence)	½ to 1 day/ month	Ongoing	Business engaged and participating
* DDAEND : A L	RDAFN BA	Prepare network development plans for viable networks and seek funding from State and Commonwealth government programs	10 days/ industry	Sequential	Plans endorsed and funding achieved

<sup>\*</sup> RDAFN Business Advisor \*\* RDAFN Training and Skills Officer

Strategy Area 2	Stakeholders / Responsibility	Actions	Resources	Timeframes	Key Performance Indicators
Townscape *& amenity					
	PACC	Accelerate foreshore development	Planning Dep't	1 year	Upgrades complete
	PACC	Engage landowners in townscape improvements	Planning Dep't	3 months	Buildings upgraded
	PACC RDAFN BDO, EDM, TSO	Facilitate new business formation around foreshore development	Planning Dep't	Ongoing	Business established
	PACC	Review CBD revitalisation plan	Planning Dep't	6 months	Review completed
	PACC	Improve town entrances	Planning & Works Dep'ts	2 years	Construction completed
	PACC	Publicise rolling CBD works program	Planning & Works Dep'ts	6 months	Program released
	PACC & RDAFN	Develop material promoting Port Augusta's lifestyle attributes	1 month	6 months	Material prepared
	PACC & RDAFN	Market Port Augusta's lifestyle package	2 days/month	Ongoing	Marketing campaign completed

Strategy Area 3	Stakeholders / Responsibility	Actions	Resources	Timeframes	Key Performance Indicators
Transport & logistics					
	RDAFN EDM*	Work closely with industry to improve ability to market capability to head contractors	10 days	3 months	Businesses engaged and capability improved
	RDAFN EDM	Discussions with BHP Billiton & OzMinerals about local transport services infrastructure needs	2 days then ½ day/ month	3 months then ongoing	Discussions completed and relationship formed
	RDAFN CEO, Board	Ensure infrastructure capital works projects under active consideration for funding have clear economic costbenefit analyses	-	Ongoing	CBA's included where needed
	RDAFN EDM	Explore freight flows, costs & potential for efficiencies	10 days	1 year	Freight flows map

<sup>\*</sup> RDA Far North Economic Development Manager

Strategy Area 4	Stakeholders / Responsibility	Actions	Resources	Timeframes	Key Performance Indicators
Heavy industry					
	RDAFN EDM & BA	Map supply chain potential with GMUSG	10 days	6 months	Capability mapped
	RDAFN EDM GMUSG	Build on learnings from DefenceSA and Defence Teaming Centre	1 day	3 months	Connection made
	RDAFN EDM GMUSG	Work with BHP Billiton and OzMinerals to map their local and regional service and skills needs	5 days	6 months	Needs documents
	RDAFN EDM GMUSG	Work with BHP Billiton and OzMinerals to understand expectations and requirements of local suppliers in terms of capability and certification	5 days	6 months	Requirements documented
	RDAFN EDM	Implement recommendations in KPMG Hub study:  R1 Regional coordination and implementation R2 Raise capability of (Port Augusta-based) R3 Skills training and workforce development R4 (Evaluate) Common use infrastructure investment	2 days/month	2 years	Recommendations implemented

Strategy Area 5	Stakeholders / Responsibility	Actions	Resources	Timeframes	Key Performance Indicators
Renewable energy					
	RDAFN Consultants	Implement recommendations and proceed to Stage 2 of Market & Value Chain Analysis:  Identify gaps in capacity support and lead clean green enterprises within the region, Provide investor support	Consultants	1 year	Analysis complete
	RDAFN	Work with State Government to ensure that any large scale development or energy supply contracts (or both) include significant components to enhance local business spinoffs and long term business capability in renewables	3 days	6 months	Needs understood and agreed
	RDAFN CEO & EDM and Board	Support design of and advocacy for Centre of Renewable Energy R&D	2 days/month	2 years	Support achieved, funding provided

Strategy Area 6	Stakeholders / Responsibility	Actions	Resources	Timeframes	Key Performance Indicators
Education					
	RDAFN EDM RDAFN TSO	Revival of RTO-industry links encompassing medium term industry skills development in areas likely to grow.	2 days	6 months	Linked training available
	RDAFN CEO & Board	Active support of COTEC business case proposal and participation in communications and lobbying required	2 days and ongoing	3 months	COTEC funded
	RDAFN EDM RDAFN TSO	Lobby RTOs/universities for greater depth in renewable energy training	1 day/3 months	Ongoing	Training available

Strategy Area 7	Stakeholders / Responsibility	Actions	Resources	Timeframes	Key Performance Indicators
Tourism					
	RDAFN TPO* PACC	Develop and deliver "Stay another day" campaign	20 days	6 months	Campaign funded & supported
	RDAFN BA RDAFN TPO	Prioritise tourism business operators for entrepreneurship initiatives	1 day/month	Ongoing	High participation rates
	PACC	Incorporate visitor needs into townscape changes	1 day/month	Ongoing	Visible inclusion
* DDA FALT	RDAFN EDM RDAFN BA RDAFN TPO	Facilitate investment to expand local tourism business capability	1 day/month	Ongoing	Capability improved

<sup>\*</sup> RDA FN Tourism Project Officer

Strategy Area 8	Stakeholders / Responsibility	Actions	Resources	Timeframes	Key Performance Indicators
Defence					
	RDAFN EDM	Active, strategic lobbying & advocacy on behalf of local capability	1 day/month	2 years	Capability recognised
	RDAFN EDM	Involvement in DTC and other SA Defence-industry links	1 day/month	2 years	Active involvement
	RDAFN EDM	Broker between local suppliers and defence procurement and the lead contractor (Transfield)	1 day/week	3 months	Local contracts awarded

Strategy Area 9	Stakeholders / Responsibility	Actions	Resources	Timeframes	Key Performance Indicators
Health & aged care					
	PACC	Integrate future aged accommodation needs into land use planning for Port Augusta	Planning Dep't	1 year	Needs integrated
	RDAFN EDM & BA	Facilitate business-to-business connections amongst public and private health care and aged care services.	1 week	6 months	Active participation
	RDAFN EDM & BA & TSO	Review skills needs with employers and RTOs/COTEC to ensure health, aged care, children's education and NDIS are resourced for local training	1 week	6 months	Needs mapped
	RDAFN EDM & BA & TSO	Prepare an action-oriented strategy for growing health and aged care in Port Augusta and maximising local job outcomes	1 month	1 year	Strategy endorsed

Strategy Area 10	Stakeholders / Responsibility	Actions	Resources	Timeframes	Key Performance Indicators
Arid land horticulture					
	RDAFN EDM & TSO	Facilitate discussions with RTOs around the training need – significant volume expected.	1 day/month	1 year	Training needs met
	PACC	Facilitate Council and State Government approvals for related projects	Planning Dep't	Ongoing	Approvals granted
	RDAFN EDM	Integrate Sundrop technical capability into work on the potential renewable energy network	1 day	6 months	Capability integrated
	RDAFN BA & TPO & TSA	Facilitate commercialisation of activities at Arid Lands Botanic Garden	2 days/month	3 months	Commercial operations running



## Appendix 1

## Outline of some 'ready to go' entrepreneurship programs

The Energising Entrepreneurs Program is a structured approach to identifying, mapping and working with entrepreneurial business operators. If offers a suite of high-relevance services to help entrepreneurs grow their businesses – including networking, referrals, marketing and business strategy.

Economic Gardening is package of business services offered to businesses interested in growth. The package includes customer market intelligence and mapping, e-business assistance, marketing assistance and one-to-one mentoring or advice.

The *Springboard Business Development Program* was designed over eight years ago and it has now evolved to be a stand-alone program with a great track record in servicing its target client group. Springboard is a peer-coaching program designed to appeal to and work with the strengths of its target market – growth-oriented small and medium businesses with 2-5 years business experience. The Program is based not on 'chalk and talk' or workshops, but on groups of 8-12 selected participants combined with a trained facilitator who takes them through a 9-week participant-driven program.

Women do business differently to men and are an important part of Port Augusta's economy. Some states have developed specific 'Women in Business Mentoring Programs' which encourage co-operative learning between business people through structured mentoring, practical workshops and networking and has proven to be very successful in its approach.

State Government sponsored small business workshops have been designed to appeal specifically to small and medium business owners with an interest in growth, and to get them thinking tactically and strategically.

Appendix 2: Industry Subsector employment trends 2006-11

Industry subsector Gas Supply <sup>14</sup>	<b>Jobs in PA 2006</b> 0	Jobs change <b>2006-11</b> 150	Location quotient 2011
Medical and Other Health Care Services	208		
		97	1.45
Food and Beverage Services	293	59	1.27
Public Administration	394	50	1.78
Heavy and Civil Engineering Construction	81	18	3.38
Construction Services  Professional Scientific and Technical Services (eyeont	151	18	0.73
Professional, Scientific and Technical Services (except Computer System Design and Related Services)	79	18	0.39
Waste Collection, Treatment and Disposal Services	8	15	1.38
Administrative Services	91	14	1.26
Property Operators and Real Estate Services	38	12	0.98
Social Assistance Services	238	11	1.68
Transport Equipment Manufacturing	238 117	9	1.84
Preschool and School Education	404	9	1.54
Rental and Hiring Services (except Real Estate)	6	8	0.84
Basic Material Wholesaling	28	7	0.78
Other Transport	0	7	1.55
Auxiliary Finance and Insurance Services	15	6	0.53
Repair and Maintenance	113	6	1.23
Coal Mining	0	5	2.26
Computer System Design and Related Services	0	5	0.11
Exploration and Other Mining Support Services	0	4	0.23
Printing (including Recorded Media)	0	4	0.25
Motor Vehicle and Motor Vehicle Parts Retailing	80	4	1.85
Finance	63	4	0.82
Creative and Performing Arts Activities	0	4	0.28
Aquaculture	0	3	0.63
Non-Metallic Mineral Mining and Quarrying	3	3	1.23
Non-Store Retailing and Retail Commission-Based	•	•	
Buying and/or Selling	0	3	0.93
Library and Other Information Services	0	3	0.90
Private Households Employing Staff and other			
Household services	0	3	2.23
Machinery and Equipment Manufacturing	6	2	0.11
Transport Support Services	13	2	0.68
Broadcasting (except Internet)	13	2	1.77
Motion Picture and Sound Recording Activities	3	1	0.52
Insurance and Superannuation Funds	11	1	0.34
Residential Care Services	85	1	0.62
Primary Metal and Metal Product Manufacturing	10	0	0.23
Water Supply, Sewerage and Drainage Services	9	0	0.48

<sup>&</sup>lt;sup>14</sup> Likely to be a category reclassification rather than actual employment growth

Commission-Based Wholesaling         3         0         0.61           Food Product Manufacturing         13         -1         0.13           Non-Metallic Mineral Product Manufacturing         6         -1         0.22           Other Goods Wholesaling         4         -1         0.10           Fuel Retailing         43         -1         2.25           Fabricated Metal Product Manufacturing         14         -2         0.37           Wholesale Trade, nfd         6         -2         0.48           Sports and Recreation Activities         15         -2         0.38           Mining, nfd         3         -3         0.00           Furniture and Other Manufacturing         3         -3         0.00           Construction, nfd         6         -3         0.33           Motor Vehicle and Motor Vehicle Parts Wholesaling         7         -3         0.28           Air and Space Transport         3         -3         0.00           Varehousing and Storage Services         3         -3         0.00           Warehousing and Storage Services         3         -3         0.00           Transport, Postal and Warehousing, nfd         3         -3         0.00	Electricity, Gas, Water and Waste Services, nfd	0	0	0.00
Non-Metallic Mineral Product Manufacturing         6         -1         0.22           Other Goods Wholesaling         4         -1         0.10           Fuel Retailing         43         -1         2.25           Fabricated Metal Product Manufacturing         14         -2         0.37           Wholesale Trade, nfd         6         -2         0.48           Telecommunications Services         16         -2         0.48           Sports and Recreation Activities         15         -2         0.38           Mining, nfd         3         -3         0.00           Construction, nfd         6         -3         0.33           Motor Vehicle and Motor Vehicle Parts Wholesaling         7         -3         0.28           Air and Space Transport         3         -3         0.00           Warehousing and Storage Services         3         -3         0.00	Commission-Based Wholesaling	3	0	0.61
Other Goods Wholesaling         4         -1         0.10           Fuel Retalling         43         -1         2.25           Fabricated Metal Product Manufacturing         14         -2         0.37           Wholesale Trade, nfd         6         -2         0.48           Sports and Recreation Activities         15         -2         0.38           Mining, nfd         3         -3         0.00           Furniture and Other Manufacturing         3         -3         0.00           Construction, nfd         6         -3         0.33           Motor Vehicle and Motor Vehicle Parts Wholesaling         7         -3         0.28           Air and Space Transport         3         -3         0.00           Warehousing and Storage Services         3         -3         0.00           Warehousing and Storage Services         3         -3         0.00           Publishing (except Internet and Music Publishing)         14         -3         0.62           Machinery and Equipment Wholesaling         4         -4         0.00           Postal and Courier Pick-up and Delivery Services         25         -4         0.71           Agriculture, Forestry and Fishing Support Services         25         -4 </td <td>Food Product Manufacturing</td> <td>13</td> <td>-1</td> <td>0.13</td>	Food Product Manufacturing	13	-1	0.13
Fuel Retailing	Non-Metallic Mineral Product Manufacturing	6	-1	0.22
Fabricated Metal Product Manufacturing         14         -2         0.34           Wholesale Trade, nfd         6         -2         0.34           Telecommunications Services         16         -2         0.48           Sports and Recreation Activities         15         -2         0.38           Mining, nfd         3         -3         0.00           Construction, nfd         6         -3         0.33           Motor Vehicle and Motor Vehicle Parts Wholesaling         7         -3         0.28           Air and Space Transport         3         -3         0.00           Warehousing and Storage Services         3         -3         0.00           Publishing (except Internet and Music Publishing)         14         -3         0.62           Machinery and Equipment Wholesaling         4         -4 <td< td=""><td>Other Goods Wholesaling</td><td>4</td><td>-1</td><td>0.10</td></td<>	Other Goods Wholesaling	4	-1	0.10
Wholesale Trade, nfd         6         -2         0.34           Telecommunications Services         16         -2         0.48           Sports and Recreation Activities         15         -2         0.38           Mining, nfd         3         -3         0.00           Furniture and Other Manufacturing         3         -3         0.00           Construction, nfd         6         -3         0.33           Motor Vehicle and Motor Vehicle Parts Wholesaling         7         -3         0.28           Air and Space Transport         3         -3         0.00           Warehousing and Storage Services         3         -3         0.00           Transport, Postal and Warehousing, nfd         3         -3         0.00           Publishing (except Internet and Music Publishing)         14         -3         0.06           Machinery and Equipment Wholesaling         4         -4         0.00           Postal and Courier Pick-up and Delivery Services         25         -4         0.71           Agriculture, Forestry and Fishing Support Services         9         -5         0.36           Agriculture, Forestry and Fishing Support Services         9         -5         0.00           Extile, Clothing and Footwear Manuf	Fuel Retailing	43	-1	2.25
Telecommunications Services         16         -2         0.48           Sports and Recreation Activities         15         -2         0.38           Mining, nfd         3         -3         0.00           Furniture and Other Manufacturing         3         -3         0.00           Construction, nfd         6         -3         0.33           Motor Vehicle and Motor Vehicle Parts Wholesaling         7         -3         0.28           Air and Space Transport         3         -3         0.00           Warehousing and Storage Services         3         -3         0.00           Transport, Postal and Warehousing, nfd         3         -3         0.00           Publishing (except Internet and Music Publishing)         14         -3         0.62           Machinery and Equipment Wholesaling         4         -4         0.00           Postal and Courier Pick-up and Delivery Services         25         -4         0.71           Agriculture, Forestry and Fishing Support Services         9         -5         0.36           Textile, Clothing and Footwear Manufacturing         5         -5         0.04           Polymer Product and Rubber Product Manufacturing         8         -5         0.14           Manufacturing	Fabricated Metal Product Manufacturing	14	-2	0.37
Sports and Recreation Activities         15         -2         0.38           Mining, nfd         3         -3         0.00           Furniture and Other Manufacturing         3         -3         0.00           Construction, nfd         6         -3         0.33           Motor Vehicle and Motor Vehicle Parts Wholesaling         7         -3         0.28           Air and Space Transport         3         -3         0.00           Warehousing and Storage Services         3         -3         0.00           Transport, Postal and Warehousing, nfd         3         -3         0.00           Publishing (except Internet and Music Publishing)         14         -3         0.62           Machinery and Equipment Wholesaling         4         -4         0.00           Postal and Courier Pick-up and Delivery Services         25         -4         0.71           Agriculture, Forestry and Fishing Support Services         9         -5         0.06           Textile, Clothing and Footwear Manufacturing         5         -5         0.00           Polymer Product and Rubber Product Manufacturing         8         -5         0.14           Manufacturing, nfd         16         -5         0.22           Building Construction<	Wholesale Trade, nfd	6	-2	0.34
Mining, nfd         3         -3         0.00           Furniture and Other Manufacturing         3         -3         0.00           Construction, nfd         6         -3         0.33           Motor Vehicle and Motor Vehicle Parts Wholesaling         7         -3         0.28           Air and Space Transport         3         -3         0.00           Warehousing and Storage Services         3         -3         0.00           Warehousing and Storage Services         3         -3         0.00           Publishing (except Internet and Music Publishing)         14         -3         0.62           Machinery and Equipment Wholesaling         4         -4         0.00           Postal and Courier Pick-up and Delivery Services         25         -4         0.71           Agriculture, Forestry and Fishing Support Services         9         -5         0.06           Pextile, Clothing and Footwear Manufacturing         5         -5         0.00           Follymer Product and Rubber Product Manufacturing         8         -5         0.00           Polymer Product and Rubber Product Manufacturing         16         -5         0.22           Building Construction         63         -5         0.49           Heritage	Telecommunications Services	16	-2	0.48
Furniture and Other Manufacturing         3         -3         0.00           Construction, nfd         6         -3         0.33           Motor Vehicle and Motor Vehicle Parts Wholesaling         7         -3         0.28           Air and Space Transport         3         -3         0.00           Warehousing and Storage Services         3         -3         0.00           Transport, Postal and Warehousing, nfd         3         -3         0.00           Publishing (except Internet and Music Publishing)         14         -3         0.62           Machinery and Equipment Wholesaling         4         -4         0.00           Postal and Courier Pick-up and Delivery Services         25         -4         0.71           Agriculture, Forestry and Fishing Support Services         9         -5         0.36           Textile, Clothing and Footwear Manufacturing         5         -5         0.00           Polymer Product and Rubber Product Manufacturing         8         -5         0.14           Manufacturing, nfd         16         -5         0.22           Building Construction         63         -5         0.49           Heritage Activities         16         -5         1.63           Retail Trade, nfd	Sports and Recreation Activities	15	-2	0.38
Construction, nfd  Motor Vehicle and Motor Vehicle Parts Wholesaling Air and Space Transport  Warehousing and Storage Services 3 -3 0.00 Warehousing and Storage Services 3 -3 0.00 Transport, Postal and Warehousing, nfd 3 -3 0.00 Publishing (except Internet and Music Publishing) Publishing (except Internet and Music Publishing) Machinery and Equipment Wholesaling 4 -4 0.00 Postal and Courier Pick-up and Delivery Services 25 -4 0.71 Agriculture, Forestry and Fishing Support Services 9 -5 0.36 Textile, Clothing and Footwear Manufacturing 5 -5 0.00 Polymer Product and Rubber Product Manufacturing 8 -5 0.14 Manufacturing, nfd 16 -5 0.22 Building Construction Heritage Activities 16 -5 1.63 Retail Trade, nfd 24 -6 0.65 Grocery, Liquor and Tobacco Product Wholesaling 29 -9 0.48 Adult, Community and Other Education Wood Product Manufacturing 11 -11 0.00 Tertiary Education 75 -11 0.60 Education and Training, nfd 17 -12 0.52 Education and Training, nfd 17 -17 0.00 Road Transport 154 -18 1.14 Health Care and Social Assistance, nfd Personal Care and Other Services 83 -19 0.59 Food Retailing 234 -20 1.03 Public Order, Safety and Regulatory Services 375 -22 4.00 Building Cleaning, Pest Control and Other Services 79 -62 0.10 Other Store-Based Retailing 377 -88 0.98 Hospitals	Mining, nfd	3	-3	0.00
Motor Vehicle and Motor Vehicle Parts Wholesaling         7         -3         0.28           Air and Space Transport         3         -3         0.00           Warehousing and Storage Services         3         -3         0.00           Transport, Postal and Warehousing, nfd         3         -3         0.00           Publishing (except Internet and Music Publishing)         14         -3         0.02           Publishing (except Internet and Music Publishing)         14         -3         0.02           Machinery and Equipment Wholesaling         4         -4         0.00           Postal and Courier Pick-up and Delivery Services         25         -4         0.71           Agriculture, Forestry and Fishing Support Services         9         -5         0.36           Textile, Clothing and Footwear Manufacturing         5         -5         0.00           Polymer Product and Rubber Product Manufacturing         8         -5         0.14           Manufacturing, nfd         16         -5         0.22           Building Construction         63         -5         0.49           Heritage Activities         16         -5         0.63           Grocery, Liquor and Tobacco Product Wholesaling         29         -9         0.48 <td>Furniture and Other Manufacturing</td> <td>3</td> <td>-3</td> <td>0.00</td>	Furniture and Other Manufacturing	3	-3	0.00
Air and Space Transport       3       -3       0.00         Warehousing and Storage Services       3       -3       0.00         Transport, Postal and Warehousing, nfd       3       -3       0.00         Publishing (except Internet and Music Publishing)       14       -3       0.62         Machinery and Equipment Wholesaling       4       -4       0.00         Postal and Courier Pick-up and Delivery Services       25       -4       0.71         Agriculture, Forestry and Fishing Support Services       9       -5       0.36         Textile, Clothing and Footwear Manufacturing       5       -5       0.00         Polymer Product and Rubber Product Manufacturing       8       -5       0.14         Manufacturing, nfd       16       -5       0.22         Building Construction       63       -5       0.49         Heritage Activities       16       -5       0.22         Building Construction       63       -5       0.49         Heritage Activities       16       -5       0.49         Heritage Activities       16       -5       1.63         Retail Trade, nfd       24       -6       0.65         Grocery, Liquor and Tobacco Product Wholesaling       29	Construction, nfd	6	-3	0.33
Warehousing and Storage Services3-30.00Transport, Postal and Warehousing, nfd3-30.00Publishing (except Internet and Music Publishing)14-30.62Machinery and Equipment Wholesaling4-40.00Postal and Courier Pick-up and Delivery Services25-40.71Agriculture, Forestry and Fishing Support Services9-50.36Textile, Clothing and Footwear Manufacturing5-50.00Polymer Product and Rubber Product Manufacturing8-50.14Manufacturing, nfd16-50.22Building Construction63-50.49Heritage Activities16-50.49Heritage Activities16-50.65Grocery, Liquor and Tobacco Product Wholesaling29-90.48Adult, Community and Other Education26-100.40Wood Product Manufacturing11-110.00Tertiary Education75-110.60Education and Training, nfd17-120.52Rail Transport141-1510.94Public Administration and Safety, nfd17-170.00Road Transport154-181.14Health Care and Social Assistance, nfd24-180.36Personal Care and Other Services83-190.59Food Retailing234-201.03Public Order, Safety and Regulatory Services375-224.	Motor Vehicle and Motor Vehicle Parts Wholesaling	7	-3	0.28
Transport, Postal and Warehousing, nfd Publishing (except Internet and Music Publishing) 14 -3 0.62 Machinery and Equipment Wholesaling 4 -4 0.00 Postal and Courier Pick-up and Delivery Services 25 -4 0.71 Agriculture, Forestry and Fishing Support Services 9 -5 0.36 Textile, Clothing and Footwear Manufacturing 5 -5 0.00 Polymer Product and Rubber Product Manufacturing 8 -5 0.14 Manufacturing, nfd 16 -5 0.22 Building Construction 63 -5 0.49 Heritage Activities 16 Grocery, Liquor and Tobacco Product Wholesaling 29 -9 0.48 Adult, Community and Other Education 26 Grocery, Liquor and Tobacco Product Wholesaling 29 -9 0.48 Adult, Community and Other Education 75 11 0.60 Education and Training, nfd 17 -12 0.52 Rail Transport 141 1-15 10.94 Public Administration and Safety, nfd 17 Road Transport 154 Health Care and Social Assistance, nfd Personal Care and Other Services 83 -19 0.59 Food Retailling Public Order, Safety and Regulatory Services 375 -22 4.00 Building Cleaning, Pest Control and Other Services 62 0.10 Cher Store-Based Retailing 377 -88 0.98 Hospitals	Air and Space Transport	3	-3	0.00
Publishing (except Internet and Music Publishing)14-30.62Machinery and Equipment Wholesaling4-40.00Postal and Courier Pick-up and Delivery Services25-40.71Agriculture, Forestry and Fishing Support Services9-50.36Textile, Clothing and Footwear Manufacturing5-50.00Polymer Product and Rubber Product Manufacturing8-50.14Manufacturing, nfd16-50.22Building Construction63-50.49Heritage Activities16-51.63Retail Trade, nfd24-60.65Grocery, Liquor and Tobacco Product Wholesaling29-90.48Adult, Community and Other Education26-100.40Wood Product Manufacturing11-110.00Tertiary Education75-110.60Education and Training, nfd17-120.52Rail Transport141-1510.94Public Administration and Safety, nfd17-170.00Road Transport154-181.14Health Care and Social Assistance, nfd24-180.36Personal Care and Other Services83-190.59Food Retailing234-201.03Public Order, Safety and Regulatory Services375-224.00Building Cleaning, Pest Control and Other Services62-240.40Accommodation161-502.17 </td <td>Warehousing and Storage Services</td> <td>3</td> <td>-3</td> <td>0.00</td>	Warehousing and Storage Services	3	-3	0.00
Machinery and Equipment Wholesaling4-40.00Postal and Courier Pick-up and Delivery Services25-40.71Agriculture, Forestry and Fishing Support Services9-50.36Textile, Clothing and Footwear Manufacturing5-50.00Polymer Product and Rubber Product Manufacturing8-50.14Manufacturing, nfd16-50.22Building Construction63-50.49Heritage Activities16-51.63Retail Trade, nfd24-60.65Grocery, Liquor and Tobacco Product Wholesaling29-90.48Adult, Community and Other Education26-100.40Wood Product Manufacturing11-110.00Tertiary Education75-110.60Education and Training, nfd17-120.52Rail Transport141-1510.94Public Administration and Safety, nfd17-170.00Road Transport154-181.14Health Care and Social Assistance, nfd24-180.36Personal Care and Other Services83-190.59Food Retailing234-201.03Public Order, Safety and Regulatory Services375-224.00Building Cleaning, Pest Control and Other Services62-240.40Accommodation161-502.17Agriculture79-620.10Other Store-Based Ret	Transport, Postal and Warehousing, nfd	3	-3	0.00
Postal and Courier Pick-up and Delivery Services25-40.71Agriculture, Forestry and Fishing Support Services9-50.36Textile, Clothing and Footwear Manufacturing5-50.00Polymer Product and Rubber Product Manufacturing8-50.14Manufacturing, nfd16-50.22Building Construction63-50.49Heritage Activities16-51.63Retail Trade, nfd24-60.65Grocery, Liquor and Tobacco Product Wholesaling29-90.48Adult, Community and Other Education26-100.40Wood Product Manufacturing11-110.00Tertiary Education75-110.60Education and Training, nfd17-120.52Rail Transport141-1510.94Public Administration and Safety, nfd17-170.00Road Transport154-181.14Health Care and Social Assistance, nfd24-180.36Personal Care and Other Services83-190.59Food Retailing234-201.03Public Order, Safety and Regulatory Services375-224.00Building Cleaning, Pest Control and Other Services62-240.40Accommodation161-502.17Agriculture79-620.10Other Store-Based Retailing377-880.98Hospitals-95	Publishing (except Internet and Music Publishing)	14	-3	0.62
Agriculture, Forestry and Fishing Support Services       9       -5       0.36         Textile, Clothing and Footwear Manufacturing       5       -5       0.00         Polymer Product and Rubber Product Manufacturing       8       -5       0.14         Manufacturing, nfd       16       -5       0.22         Building Construction       63       -5       0.49         Heritage Activities       16       -5       1.63         Retail Trade, nfd       24       -6       0.65         Grocery, Liquor and Tobacco Product Wholesaling       29       -9       0.48         Adult, Community and Other Education       26       -10       0.40         Wood Product Manufacturing       11       -11       0.00         Tertiary Education       75       -11       0.60         Education and Training, nfd       17       -12       0.52         Rail Transport       141       -15       10.94         Public Administration and Safety, nfd       17       -17       0.00         Road Transport       154       -18       1.14         Health Care and Social Assistance, nfd       24       -18       0.36         Personal Care and Other Services       83       -19	Machinery and Equipment Wholesaling	4	-4	0.00
Textile, Clothing and Footwear Manufacturing Polymer Product and Rubber Product Manufacturing Ramufacturing, nfd 16 -5 0.22 Building Construction 16 -5 0.49 Heritage Activities 16 -5 1.63 Retail Trade, nfd 24 -6 0.65 Grocery, Liquor and Tobacco Product Wholesaling 29 -9 0.48 Adult, Community and Other Education 26 -10 0.40 Wood Product Manufacturing 11 -11 0.00 Tertiary Education 75 -11 0.60 Education and Training, nfd 17 -12 0.52 Rail Transport 141 -15 10.94 Public Administration and Safety, nfd 17 -17 0.00 Road Transport 154 -18 1.14 Health Care and Social Assistance, nfd 24 -18 0.36 Personal Care and Other Services 83 -19 0.59 Food Retailing Public Order, Safety and Regulatory Services 83 -19 0.59 Food Retailing Public Order, Safety and Regulatory Services 62 -24 0.40 Accommodation 161 -50 2.17 Agriculture 79 -62 0.10 Other Store-Based Retailing Hospitals	Postal and Courier Pick-up and Delivery Services	25	-4	0.71
Polymer Product and Rubber Product Manufacturing         8         -5         0.14           Manufacturing, nfd         16         -5         0.22           Building Construction         63         -5         0.49           Heritage Activities         16         -5         1.63           Retail Trade, nfd         24         -6         0.65           Grocery, Liquor and Tobacco Product Wholesaling         29         -9         0.48           Adult, Community and Other Education         26         -10         0.40           Wood Product Manufacturing         11         -11         0.00           Tertiary Education         75         -11         0.60           Education and Training, nfd         17         -12         0.52           Rail Transport         141         -15         10.94           Public Administration and Safety, nfd         17         -17         0.00           Road Transport         154         -18         1.14           Health Care and Social Assistance, nfd         24         -18         0.36           Personal Care and Other Services         83         -19         0.59           Food Retailing         234         -20         1.03	Agriculture, Forestry and Fishing Support Services	9	-5	0.36
Manufacturing, nfd       16       -5       0.22         Building Construction       63       -5       0.49         Heritage Activities       16       -5       1.63         Retail Trade, nfd       24       -6       0.65         Grocery, Liquor and Tobacco Product Wholesaling       29       -9       0.48         Adult, Community and Other Education       26       -10       0.40         Wood Product Manufacturing       11       -11       0.00         Tertiary Education       75       -11       0.60         Education and Training, nfd       17       -12       0.52         Rail Transport       141       -15       10.94         Public Administration and Safety, nfd       17       -17       0.00         Road Transport       154       -18       1.14         Health Care and Social Assistance, nfd       24       -18       0.36         Personal Care and Other Services       83       -19       0.59         Food Retailing       234       -20       1.03         Public Order, Safety and Regulatory Services       375       -22       4.00         Building Cleaning, Pest Control and Other Services       62       -24       0.40 <td>Textile, Clothing and Footwear Manufacturing</td> <td>5</td> <td>-5</td> <td>0.00</td>	Textile, Clothing and Footwear Manufacturing	5	-5	0.00
Building Construction         63         -5         0.49           Heritage Activities         16         -5         1.63           Retail Trade, nfd         24         -6         0.65           Grocery, Liquor and Tobacco Product Wholesaling         29         -9         0.48           Adult, Community and Other Education         26         -10         0.40           Wood Product Manufacturing         11         -11         0.00           Tertiary Education         75         -11         0.60           Education and Training, nfd         17         -12         0.52           Rail Transport         141         -15         10.94           Public Administration and Safety, nfd         17         -17         0.00           Road Transport         154         -18         1.14           Health Care and Social Assistance, nfd         24         -18         0.36           Personal Care and Other Services         83         -19         0.59           Food Retailing         234         -20         1.03           Public Order, Safety and Regulatory Services         375         -22         4.00           Building Cleaning, Pest Control and Other Services         62         -24         0.40	Polymer Product and Rubber Product Manufacturing	8	-5	0.14
Heritage Activities       16       -5       1.63         Retail Trade, nfd       24       -6       0.65         Grocery, Liquor and Tobacco Product Wholesaling       29       -9       0.48         Adult, Community and Other Education       26       -10       0.40         Wood Product Manufacturing       11       -11       0.00         Tertiary Education       75       -11       0.60         Education and Training, nfd       17       -12       0.52         Rail Transport       141       -15       10.94         Public Administration and Safety, nfd       17       -17       0.00         Road Transport       154       -18       1.14         Health Care and Social Assistance, nfd       24       -18       0.36         Personal Care and Other Services       83       -19       0.59         Food Retailing       234       -20       1.03         Public Order, Safety and Regulatory Services       375       -22       4.00         Building Cleaning, Pest Control and Other Services       62       -24       0.40         Accommodation       161       -50       2.17         Agriculture       79       -62       0.10	Manufacturing, nfd	16	-5	0.22
Retail Trade, nfd         24         -6         0.65           Grocery, Liquor and Tobacco Product Wholesaling         29         -9         0.48           Adult, Community and Other Education         26         -10         0.40           Wood Product Manufacturing         11         -11         0.00           Tertiary Education         75         -11         0.60           Education and Training, nfd         17         -12         0.52           Rail Transport         141         -15         10.94           Public Administration and Safety, nfd         17         -17         0.00           Road Transport         154         -18         1.14           Health Care and Social Assistance, nfd         24         -18         0.36           Personal Care and Other Services         83         -19         0.59           Food Retailing         234         -20         1.03           Public Order, Safety and Regulatory Services         375         -22         4.00           Building Cleaning, Pest Control and Other Services         62         -24         0.40           Accommodation         161         -50         2.17           Agriculture         79         -62         0.10	Building Construction	63	-5	0.49
Grocery, Liquor and Tobacco Product Wholesaling       29       -9       0.48         Adult, Community and Other Education       26       -10       0.40         Wood Product Manufacturing       11       -11       0.00         Tertiary Education       75       -11       0.60         Education and Training, nfd       17       -12       0.52         Rail Transport       141       -15       10.94         Public Administration and Safety, nfd       17       -17       0.00         Road Transport       154       -18       1.14         Health Care and Social Assistance, nfd       24       -18       0.36         Personal Care and Other Services       83       -19       0.59         Food Retailing       234       -20       1.03         Public Order, Safety and Regulatory Services       375       -22       4.00         Building Cleaning, Pest Control and Other Services       62       -24       0.40         Accommodation       161       -50       2.17         Agriculture       79       -62       0.10         Other Store-Based Retailing       377       -88       0.98         Hospitals       -95       1.29	Heritage Activities	16	-5	1.63
Adult, Community and Other Education       26       -10       0.40         Wood Product Manufacturing       11       -11       0.00         Tertiary Education       75       -11       0.60         Education and Training, nfd       17       -12       0.52         Rail Transport       141       -15       10.94         Public Administration and Safety, nfd       17       -17       0.00         Road Transport       154       -18       1.14         Health Care and Social Assistance, nfd       24       -18       0.36         Personal Care and Other Services       83       -19       0.59         Food Retailing       234       -20       1.03         Public Order, Safety and Regulatory Services       375       -22       4.00         Building Cleaning, Pest Control and Other Services       62       -24       0.40         Accommodation       161       -50       2.17         Agriculture       79       -62       0.10         Other Store-Based Retailing       377       -88       0.98         Hospitals       364       -95       1.29	Retail Trade, nfd	24	-6	0.65
Wood Product Manufacturing       11       -11       0.00         Tertiary Education       75       -11       0.60         Education and Training, nfd       17       -12       0.52         Rail Transport       141       -15       10.94         Public Administration and Safety, nfd       17       -17       0.00         Road Transport       154       -18       1.14         Health Care and Social Assistance, nfd       24       -18       0.36         Personal Care and Other Services       83       -19       0.59         Food Retailing       234       -20       1.03         Public Order, Safety and Regulatory Services       375       -22       4.00         Building Cleaning, Pest Control and Other Services       62       -24       0.40         Accommodation       161       -50       2.17         Agriculture       79       -62       0.10         Other Store-Based Retailing       377       -88       0.98         Hospitals       364       -95       1.29	Grocery, Liquor and Tobacco Product Wholesaling	29	-9	0.48
Tertiary Education       75       -11       0.60         Education and Training, nfd       17       -12       0.52         Rail Transport       141       -15       10.94         Public Administration and Safety, nfd       17       -17       0.00         Road Transport       154       -18       1.14         Health Care and Social Assistance, nfd       24       -18       0.36         Personal Care and Other Services       83       -19       0.59         Food Retailing       234       -20       1.03         Public Order, Safety and Regulatory Services       375       -22       4.00         Building Cleaning, Pest Control and Other Services       62       -24       0.40         Accommodation       161       -50       2.17         Agriculture       79       -62       0.10         Other Store-Based Retailing       377       -88       0.98         Hospitals       364       -95       1.29	Adult, Community and Other Education	26	-10	0.40
Education and Training, nfd  Rail Transport  Public Administration and Safety, nfd  Road Transport  Road Transport  Health Care and Social Assistance, nfd  Personal Care and Other Services  Food Retailing  Public Order, Safety and Regulatory Services  Building Cleaning, Pest Control and Other Services  Accommodation  Accommodation  Other Store-Based Retailing  Hospitals  Accommodation  To 12  0.52  1.03  1.04  1.04  1.05  1.07  1.08  1.09  1.09  1.09  1.01  1.01  1.01  1.02  1.03	Wood Product Manufacturing	11	-11	0.00
Rail Transport       141       -15       10.94         Public Administration and Safety, nfd       17       -17       0.00         Road Transport       154       -18       1.14         Health Care and Social Assistance, nfd       24       -18       0.36         Personal Care and Other Services       83       -19       0.59         Food Retailing       234       -20       1.03         Public Order, Safety and Regulatory Services       375       -22       4.00         Building Cleaning, Pest Control and Other Services       62       -24       0.40         Accommodation       161       -50       2.17         Agriculture       79       -62       0.10         Other Store-Based Retailing       377       -88       0.98         Hospitals       364       -95       1.29	Tertiary Education	75	-11	0.60
Public Administration and Safety, nfd       17       -17       0.00         Road Transport       154       -18       1.14         Health Care and Social Assistance, nfd       24       -18       0.36         Personal Care and Other Services       83       -19       0.59         Food Retailing       234       -20       1.03         Public Order, Safety and Regulatory Services       375       -22       4.00         Building Cleaning, Pest Control and Other Services       62       -24       0.40         Accommodation       161       -50       2.17         Agriculture       79       -62       0.10         Other Store-Based Retailing       377       -88       0.98         Hospitals       364       -95       1.29	Education and Training, nfd	17	-12	0.52
Road Transport       154       -18       1.14         Health Care and Social Assistance, nfd       24       -18       0.36         Personal Care and Other Services       83       -19       0.59         Food Retailing       234       -20       1.03         Public Order, Safety and Regulatory Services       375       -22       4.00         Building Cleaning, Pest Control and Other Services       62       -24       0.40         Accommodation       161       -50       2.17         Agriculture       79       -62       0.10         Other Store-Based Retailing       377       -88       0.98         Hospitals       364       -95       1.29	Rail Transport	141	-15	10.94
Health Care and Social Assistance, nfd24-180.36Personal Care and Other Services83-190.59Food Retailing234-201.03Public Order, Safety and Regulatory Services375-224.00Building Cleaning, Pest Control and Other Services62-240.40Accommodation161-502.17Agriculture79-620.10Other Store-Based Retailing377-880.98Hospitals364-951.29	Public Administration and Safety, nfd	17	-17	0.00
Personal Care and Other Services83-190.59Food Retailing234-201.03Public Order, Safety and Regulatory Services375-224.00Building Cleaning, Pest Control and Other Services62-240.40Accommodation161-502.17Agriculture79-620.10Other Store-Based Retailing377-880.98Hospitals364-951.29	Road Transport	154	-18	1.14
Food Retailing       234       -20       1.03         Public Order, Safety and Regulatory Services       375       -22       4.00         Building Cleaning, Pest Control and Other Services       62       -24       0.40         Accommodation       161       -50       2.17         Agriculture       79       -62       0.10         Other Store-Based Retailing       377       -88       0.98         Hospitals       364       -95       1.29	Health Care and Social Assistance, nfd	24	-18	0.36
Public Order, Safety and Regulatory Services375-224.00Building Cleaning, Pest Control and Other Services62-240.40Accommodation161-502.17Agriculture79-620.10Other Store-Based Retailing377-880.98Hospitals364-951.29	Personal Care and Other Services	83	-19	0.59
Building Cleaning, Pest Control and Other Services62-240.40Accommodation161-502.17Agriculture79-620.10Other Store-Based Retailing377-880.98Hospitals364-951.29	Food Retailing	234	-20	1.03
Accommodation       161       -50       2.17         Agriculture       79       -62       0.10         Other Store-Based Retailing       377       -88       0.98         Hospitals       364       -95       1.29	Public Order, Safety and Regulatory Services	375	-22	4.00
Agriculture       79       -62       0.10         Other Store-Based Retailing       377       -88       0.98         Hospitals       364       -95       1.29	Building Cleaning, Pest Control and Other Services	62	-24	0.40
Other Store-Based Retailing 377 -88 0.98 Hospitals 364 -95 1.29	Accommodation	161	-50	2.17
Hospitals 364 -95 1.29	Agriculture	79	-62	0.10
·	Other Store-Based Retailing	377	-88	0.98
Electricity Supply 235 143 2.98	Hospitals	364	-95	1.29
	Electricity Supply	235	143	2.98