



Regional Development Australia Far North

Overview

Geography

- RDA Far North is the largest region covering an area of 696,986 square kilometres or 71 per cent of the State's land mass.

Population

- As at 30th June 2010 the region had a population of 28,726 persons accounting for 1.5 per cent of the State's population. Population growth due to expansion of Roxby Downs is projected to exceed the State average. The Indigenous population was 4,700 persons or 16.7 per cent of the region's population.
- Approximately one fifth of South Australia's Indigenous population live in the Far North.

Economy and Labour force

- The region contributed \$2,495 million to the State economy in 2006/07 or 3.7 per cent of gross state product.
- The three largest employing industries in the Far North region for 2006/07 were mining (19.6 per cent), health and community services (10.9 per cent) and retail trade (10.6 per cent), compared with the State where retail trade (14.9 per cent), manufacturing (13.4 per cent) and health and community services (13.1 per cent) are the three largest employing industries.
- As at June 2011 there were 11,416 employed persons in the region.
- The Far North has an unemployment rate of 7.0 per cent in June 2011, above the State average rate of 5.5 per cent.
- Full-time participation in secondary school was 19 percentage points below the State average although the region has a much higher participation rate in VET courses.

Opportunities for growth

- Mining will spur economic growth in the region. The region contains 72 per cent of South Australia's mineral resources projects; as of August 2011 there were a total of 46 mineral projects in South Australia, seventeen approved and twenty nine developing projects; of the seventeen approved projects fourteen are located in the Far North region and of the twenty nine developing projects nineteen are located in the Far North region.
- The proposed BHP expansion of Olympic Dam will create the world's largest open pit mine, creating 6,000 jobs during construction and 4,000 permanent jobs in the expanded operation.
- The region is home to other major mining companies such as OZ Minerals (Prominent Hill), Santos (Cooper Basin) and Uranium One (Honeymoon Project).
- The demand for further investment and development of ports, road, rail, energy and water infrastructure will require greater cooperation between mining companies and government for infrastructure sharing and greater investment in public infrastructure.

Education and Skills

- Schools in the Far North region, in terms of NAPLAN results and secondary school completion rates are well below the State average and ultimately it is investment in education and social capital that is the engine of growth. Far greater attention to early childhood learning, primary and secondary school assistance, completion and performance is required to ensure gradual and consistent improvement in literacy, numeracy and post-secondary studies. The average reading result for the Far North (NAPLAN) in year 3 was 81.1 per cent relative to State average (set to 100) and by year 7 had improved to 88.6 per cent. Similar comparisons for spelling and numeracy were evident across the region.

Indicators¹

Geography and Population

	RDA Far North	South Australia
Geography		
Land area - square kilometres (includes unincorporated areas)	696,986	985,292
Land area as a percentage of the state - per cent	70.7	100
Area of agricultural land (2006) - hectares '000	41,783	55,408
Demographics		
Total population (2010) - all persons (includes unincorporated areas)	28,726	1,640,638
Males (2010) - all males	15,315	810,264
Females (2010) - all females	13,411	830,374
Change in population (2001-2010) - per cent change	4.6	9.0
Change in population (2001-2005) - per cent change	0.9	2.8
Change in population (2005-2010) - per cent change	3.7	6.0
Population as a percentage of state population (2010) - per cent	1.5	100.0
Population density (2010) - persons/square kilometre	0.04	1.67
Birth rate (2010) - babies born per 1,000 people	15.8	12.2
Death rate (2010) - deaths per 1,000 people	6.8	7.9
Population projections (Dept of Planning and Local Government)		
2016	31,778	1,770,644
2021	33,395	1,856,435
2026	34,910	1,935,161
Projected change in population from 2011 to 2026 - per cent	16.4	16.1
CAGR for region, 2011-2026	1.0	1.0
Age profile (2010)		
0-14 years	21.8	17.8
15-24 years	12.9	13.6
25-34 years	14.4	13.0
35-44 years	14.1	13.6
45-54 years	14.3	14.0
55-64 years	10.9	12.3
65-74 years	7.0	8.0
75-84 years	3.5	5.3
85 years and over	1.1	2.3
Indigenous population (2006) - all persons	4,666	24,823
Indigenous population as a percentage of total population (2006) - per cent	16.7	1.6

Note: ¹ All indicators exclude unincorporated areas of South Australia unless otherwise indicated.

Economy 2006/07

	Gross value ¹ added (\$m)		Gross value added - per cent of total gross regional product		Employment by industry - per cent of total employment	
	RDA FN	South Australia	RDA FN	South Australia	RDA FN	South Australia
Agriculture, forestry and fishing	46	2,603	1.8	3.8	3.7	4.9
Mining	1,131	2,224	45.3	3.3	19.6	0.9
Manufacturing	80	8,815	3.2	12.9	4.6	13.4
Electricity, gas and water	183	1,884	7.3	2.8	3.6	0.9
Building and construction	149	4,432	6.0	6.5	8.6	6.6
Wholesale trade	29	2,765	1.2	4.0	1.9	4.4
Retail trade	65	3,829	2.6	5.6	10.6	14.9
Accommodation, cafes and restaurants	53	1,476	2.1	2.2	6.4	4.4
Transport and storage	78	3,270	3.1	4.8	3.8	3.9
Communication services	11	1,467	0.4	2.1	0.5	1.3
Finance and insurance	21	3,993	0.8	5.8	0.9	3.9
Ownership of dwellings	139	6,074	5.6	8.9	0.0	0.0
Property and business services	79	6,533	3.2	9.6	5.7	9.3
Public administration and defence	49	2,417	2.0	3.5	6.7	5.4
Education	68	3,144	2.7	4.6	7.3	7.6
Health and community services	90	4,974	3.6	7.3	10.9	13.1
Cultural and recreational services	11	1,039	0.4	1.5	1.0	1.8
Personal services	49	1,547	2.0	2.3	4.2	3.9
Total²	2,495	68,327	100	100	100.0	100.0

Note: ¹ The sum of gross value added across all industries plus taxes less subsidies on products equals gross regional/state product at purchasers prices. Gross value added for each region has been estimated by EconSearch using input-output (I-O) models. For additional information on gross value added and definitions of key terms, see ABS, Australian National Accounts, Concepts, Sources and Methods, 2000, Cat. No. 5216.0.

² Total does not include net taxes (i.e. taxes less subsidies on products and production) paid by households and other components of final demand. Therefore totals do not sum to 100 per cent.

Supportive Statistics

	RDA Far North	South Australia
Trade¹		
Exports (2006/07) - \$ billions	2.8	27.4
Imports, (2006/07) - \$ billions	2.4	30.8
Labour force (includes unincorporated areas)		
Labour force (June 2011)	14,246	861,537
Total employed (June 2011)	13,287	814,507
Total unemployed (June 2011)	959	47,030
Participation rate (2009) (excludes unincorporated areas)	64.7	63.1
Unemployment rate (June 2011) - per cent	6.7	5.5
Number of job service/disability employment service providers	15	450
Education		
Full-time participation in secondary school education at age 16 (2006) - per cent	59.7	78.4
Participation in VET courses (2009) - per 1,000 persons	112.7	73.5

Supportive Statistics (continued)

	RDA Far North	South Australia
NAPLAN results² (2011) – average score		
Year 3		
Reading	326	402
Spelling	311	392
Numeracy	321	379
Year 5		
Reading	392	478
Spelling	413	474
Numeracy	405	471
Year 7		
Reading	473	534
Spelling	465	533
Numeracy	466	535
Health (Selected LGAs)		
Low birth weight babies (2006 to 2008) - as a percentage of total births	8.6	6.8
Mothers who reported smoking during pregnancy (2006 to 2008) - per cent	36.6	16.7
Children fully immunised at 12 to less than 15 months of age (2008) - per cent	84.6	91.8
Obese persons 18 years and over ³ (2007-08) – per cent	21.2	17.4
Overweight (not obese) persons 18 years and over ³ (2007-08) – per cent	30.0	29.4
Housing characteristics		
Median house price (September quarter 2011) – Port Augusta - \$	212,000	360,000
Dwelling fully owned (2006) – per cent	27.7	33.7
Dwelling being purchased (2006) – per cent	20.8	33.5
Dwelling being rented (2006) – per cent	37.0	25.6
Rent assistance from Centrelink (March Quarter 2011) - per cent of population	4.5	6.5
Average residential valuation (2010) - \$	208,399	344,446
Average rates per residential property (2010) - \$	1,381	1,065
Income (averages include unincorporated areas)		
Average wage and salary income (2009) - \$	50,137	41,896
Average own unincorporated business income (2009) - \$	13,795	19,659
Average investment income ⁴ (2009) - \$	2,191	7,651
Average superannuation and annuity income (2009) - \$	21,522	24,793
Income support (Selected LGAs)		
Age pension recipients (2009) - per cent	79.9	77.5
Disability support recipients (2009) - per cent	7.7	7.1
Single parent payment recipients (2009) - per cent	7.6	5.8
Unemployment benefit recipients (2009) - per cent	9.5	4.5
Long-term unemployment benefit recipients (2009) - per cent	7.5	3.2
Youth Unemployment benefit recipients (2009) - per cent	15.6	6.1
Low income and welfare dependant families with children (2009) - per cent	15.0	9.5
Children in low income families (2009) - per cent	27.9	22.0
Health care card holders (2009) - per cent	11.7	8.8
Pensioner concession card holders (2009) - per cent	22.1	23.6
Total Centrelink card holders (2009) - per cent	27.7	26.8

Supportive Statistics (continued)

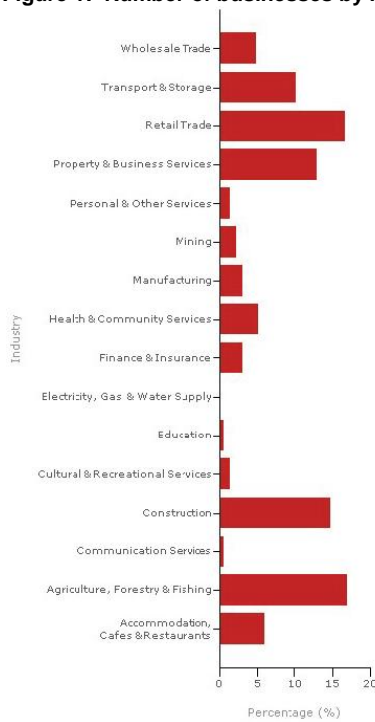
	RDA Far North	South Australia
Tourism⁵		
Day visitors (2011)		
Number of domestic day trips – ('000)	453	10,472
Total expenditure by day trippers ⁶ – \$m	51	944
Average expenditure by day trippers ⁶ – \$	113	90
Number of overnight visitors (2011)		
Intrastate – ('000)	347	3,150
Interstate – ('000)	190	2,167
Domestic – ('000)	537	5,315
International – ('000)	44	530
Total – ('000)	581	5,845
Number of nights stayed (2011)		
Intrastate – ('000)	1,093	9,473
Interstate – ('000)	839	8,669
Domestic – ('000)	1,932	18,142
International – ('000)	228	8,454
Total – ('000)	2,160	26,596
Expenditure by overnight tourists		
Total domestic overnight expenditure ⁶ (2011) - \$m	166	2,922
Average expenditure by domestic overnight visitor ⁶ (2011) - \$	309	602
Characteristics of tourist establishments⁷ (2011)		
Establishments (no.)	31	266
Rooms (no.)	1,212	12,652
Bed spaces (no.)	3,478	34,583
Persons employed (no.)	448	7,138
Occupancy rate (per cent)	60.2	62.4
Environmental		
Greenhouse gas emissions (2005/06) - tonnes per person	199.9	20.0
Airports		
Passengers per annum (2010/11)	94,500	7,756,574
CAGR of passenger numbers (2000/01 – 2010/11)	10.9	5.1
Gambling		
No. of electronic gaming machines (2009/10)	415	12,684
NGR (2009/10) - \$/adult	830	571
Taxes (2009/10) - \$/adult	270	222
No. of EGM's per 1,000 adults (2009/10)	22.1	9.9

- Note:**
- ¹ The value of exports and imports at the regional level includes intrastate, interstate and international trade.
 - ² NAPLAN scores for the Far North region are based on a selection of DECS primary schools in Port Augusta, Woomera, Roxby Downs and Coober Pedy. NAPLAN results are reported using a common scale ranging from 0 to 1000 for years 3, 5, 7 and 9, the scale is divided into ten bands ranging from band one (lowest achievement) to band 10 (highest achievement) as students progress to higher year levels the national minimum standard band level increases reflecting the greater complexity of skills assessed. For more information on interpreting NAPLAN results see www.naplan.edu.au
 - ³ Chronic disease and risk factor estimates not produced for the remote areas of APY Lands and Coober Pedy, estimates of obese and overweight persons for other LGAs are based on synthetic predictions using 2001 NHS data.
 - ⁴ Investment income includes: interest from financial institutions, net rent and dividends or distributions (including imputation credits) from an Australian company, corporate unit trust or public trading trust and distributions from trusts.
 - ⁵ Tourism data on day visits, overnight visits, number of nights stayed, expenditure and characteristics of establishments is based on regional boundaries according to the South Australian Tourism Commission (SATC) and these differ slightly from Regional Development Australia boundaries (see regional and state profiles at <http://www.tourism.sa.gov.au> for maps of regions according to the SATC).
 - ⁶ Excludes Outback SA, not published due to reliability concerns.
 - ⁷ Accommodation includes hotels, motels and guest houses and serviced apartments with 5 or more rooms or units; holiday flats, units and houses of letting entities with 15 or more rooms or units; caravan parks with 40 or more powered sites and visitor hostels with 25 or more bed spaces. The breakdown of tourist establishments by type of accommodation e.g. hotels, motels, guest houses, bed and breakfast etc. is not available.

Summary graphs – businesses and employment by occupation

Figures 1 through 4 show data on the number of businesses by industry sector, number of businesses by employee ranges, number of businesses by turnover range and top five occupations by persons employed relative to South Australia.

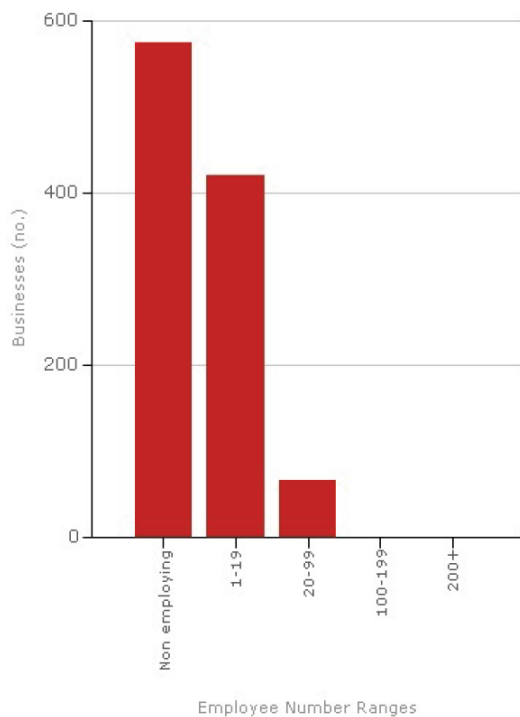
Figure 1: Number of businesses by industry – RDA Far North, 2006/07



Note: Adheres to the Australia New Zealand Standard Industry Classification (ANZSIC) 2006, ABS Cat. No.1292.0. Businesses can operate in more than one state/territory. This data uses the main location determined for the business. For more information on the data source, please refer to the explanatory notes accompanying the Far North EasyData profile, at the Department of Manufacturing, Innovation, Trade, Resources and Energy regarding number of businesses by industry (boundaries for the Far North state government region correspond with Regional Development Australia Far North boundaries).

Source: EasyData, (ABS, Cat No. 8165.0, Counts of Australian businesses, including entries and exits, June 2003 to June 2007).

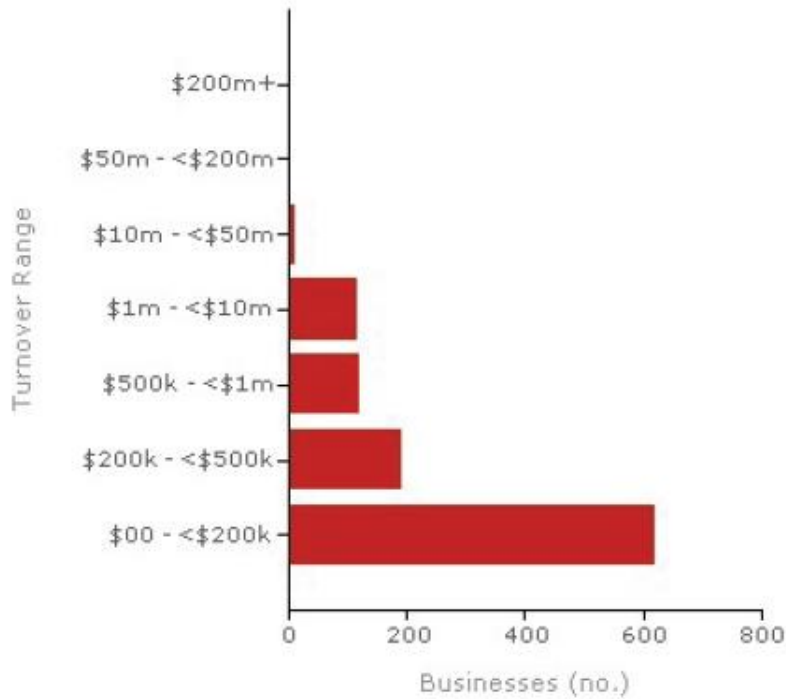
Figure 2: Number of businesses by employee ranges – RDA Far North, 2006/07



Note: Businesses can operate in more than one state/territory. This data uses the main location determined for the business. For more information on the data source, please refer to the explanatory notes accompanying the Far North EasyData profile, at the Department of Manufacturing, Innovation, Trade, Resources and Energy regarding number of businesses by employee ranges (boundaries for the Far North state government region correspond with Regional Development Australia Far North boundaries).

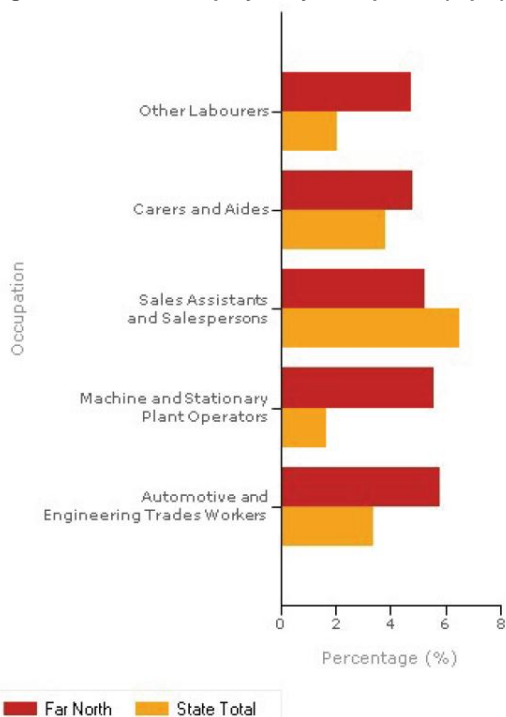
Source: EasyData, (ABS, Cat. No. 8165.0, Counts of Australian Businesses, including entries and exits, June 2003 to June 2007).

Figure 3: Number of businesses by turnover range – RDA Far North, 2006/07



Note: Businesses can operate in more than one state/territory. This data uses the main location determined for the business. For more information on the data source, please refer to the explanatory notes accompanying the Far North EasyData profile, at the Department of Manufacturing, Innovation, Trade, Resources and Energy regarding the number of businesses by turnover range (boundaries for the Far North state government region correspond with Regional Development Australia Far North boundaries).
Source: EasyData, (ABS, Cat No. 8165.0, Counts of Australian Businesses, including entries and exits, June 2003 to June 2007).

Figure 4: Persons employed by Occupation (top 5) – RDA Far North, 2006/07



Note: Adheres to the Australia New Zealand Standard Classification of Occupation (ANZSCO) 2006, ABS Cat. No. 1220.0 Presented at the Sub-Major Group (or 2-digit) level. Applicable to employed persons only.
Source: EasyData (ABS, Census of Population and Housing, 2006).

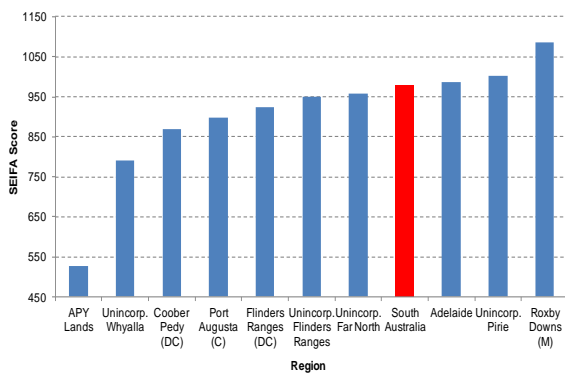
Indicators for local government areas

Figures 5 through 16 show selected indicators for Regional Development Australian Far North (RDAFN) local government areas taken from the Public Health Information Development Unit (PHIDU) InstantAtlas. For comparison South Australia and metropolitan Adelaide are included in each graph. Brief commentary is provided of key trends or stand out characteristics in the data.

Anangu Pitjantjatjara Yankunytjatjara Lands (APY Lands) is ranked lowest in terms of Socio-Economic Index for Areas (SEIFA) scoring 527; compared with the South Australian average (979) and metropolitan Adelaide (987). Roxby Downs is ranked highest with a SEIFA score of 1,085 due to its high income, low unemployment and socio-economic advantage (refer to Figure 5).

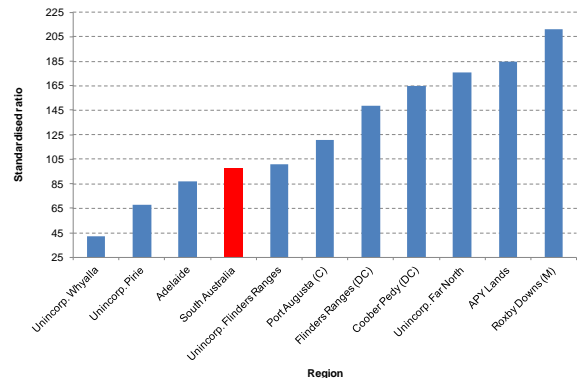
Based on a standardised ratio participation in VET is highest in Roxby Downs (211) and APY Lands (185), compared with the South Australian average (97) and metropolitan Adelaide (87) refer to Figure 6.

Figure 5: Index of relative socio-economic disadvantage, 2006



Source: PHIDU InstantAtlas.

Figure 6: Participation in VET Standardised ratio, 2009



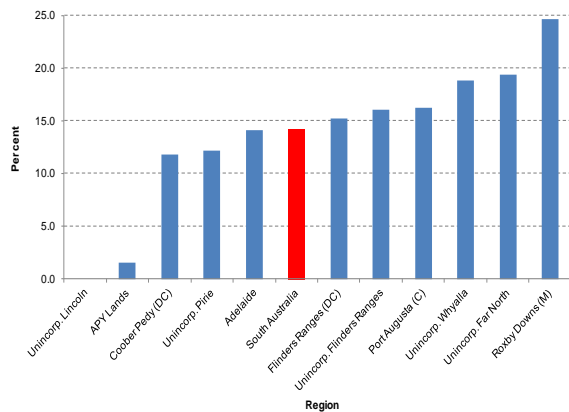
Source: PHIDU InstantAtlas.

Technicians and trade workers and machinery operators and drivers comprise 24.6 per cent and 20.5 per cent respectively of Roxby Downs workforce, APY Lands has relatively few qualified workers in these professions (refer to Figures 7 and 8).

Roxby Downs has the largest proportion of employment in mining at 48.6 per cent, mostly at the Olympic Dam mine adjacent the town, this compares with 0.9 per cent across South Australia and 0.6 per cent in metropolitan Adelaide (refer to Figure 9).

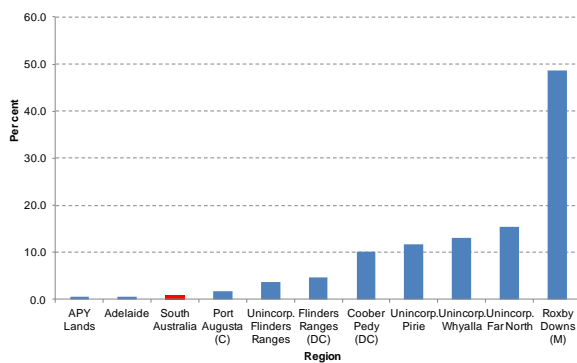
In APY Lands 30.2 per cent of families receive income support followed by Port Augusta (16.8 per cent) and Cooper Pedy (16.1 per cent), compared with the South Australian proportion of 9.5 per cent and metropolitan Adelaide proportion of 9.3 per cent. Roxby Downs has the lowest proportion of welfare dependent families (refer to Figure 10).

Figure 7: Occupation – Technicians and trades workers
Per cent of workforce employed as Technicians and trades workers by local government area, 2006



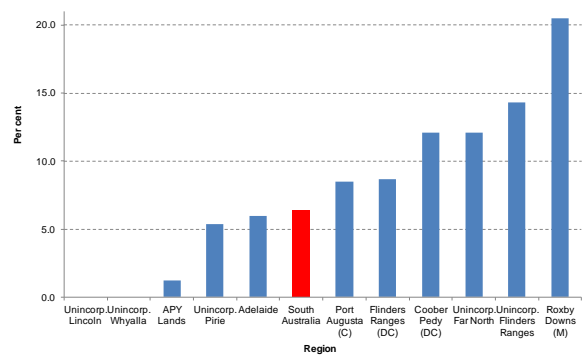
Source: PHIDU InstantAtlas.

Figure 9: Industry – Mining
Per cent of workforce employed in Mining, 2006



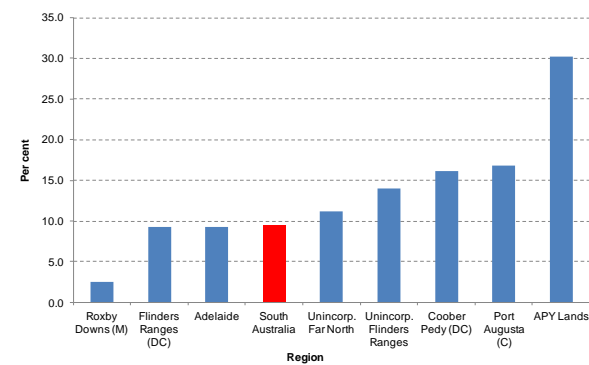
Source: PHIDU InstantAtlas.

Figure 8: Occupation – Machinery operators and drivers
Per cent of workforce employed as labourers by local government area, 2006



Source: PHIDU InstantAtlas.

Figure 10: Income support recipients
Per cent of welfare dependent and other low income families with children, 2009



Source: PHIDU InstantAtlas.

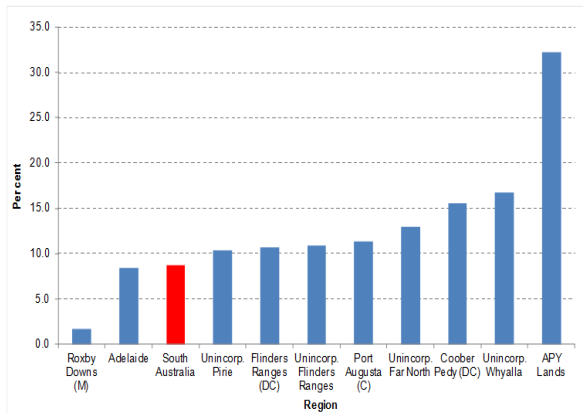
Residents claiming Centrelink benefits such as inter alia the aged pension and allowances are automatically entitled to a health care card. All LGAs and unincorporated areas in RDAFN have a higher proportion of Health Care Card holders than South Australia (8.7 per cent) and metropolitan Adelaide (8.4 per cent) except in Roxby Downs (refer to Figure 11).

Unskilled and semi-skilled workers form a higher proportion of the workforce across all LGAs and unincorporated areas in RDAFN relative to South Australia (18.2 per cent) and metropolitan Adelaide (16.4 per cent). In APY Lands unskilled and semi-skilled workers are 42.5 per cent of the workforce due to high levels of disadvantage and low secondary school completion rates (refer to Figure 12).

Wages per head are highest in Roxby Downs \$62,640 due to employment in the mining industry at Olympic dam and surrounding mines (refer to Figure 13).

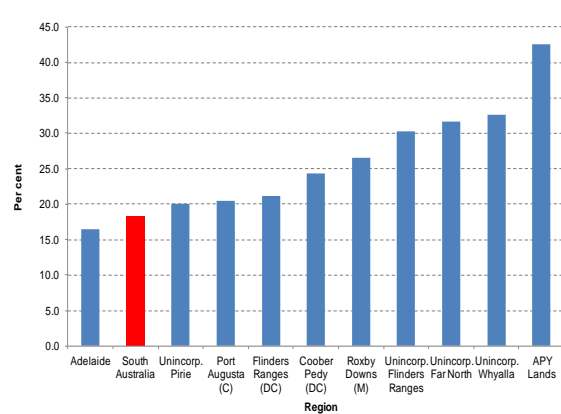
Full-time participation in secondary school at age 16 (at 59.7 per cent) is below the South Australian average (78.3 per cent) and metropolitan Adelaide (79.6 per cent) for all LGA's and unincorporated areas, except Flinders Ranges District Council where participation is 87.0 per cent, refer to Figure 14.

Figure 11: Health care card holders
Per cent, 2009



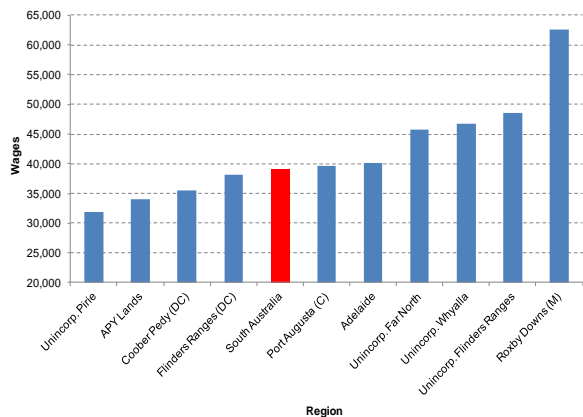
Source: PHIDU InstantAtlas.

Figure 12: Unskilled and semi-skilled workers
Per cent, 2006



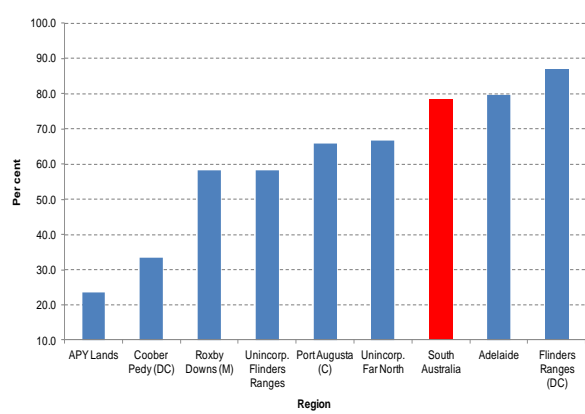
Source: PHIDU InstantAtlas.

Figure 13: Wages per capita
Dollars, 2005/06



Source: PHIDU InstantAtlas.

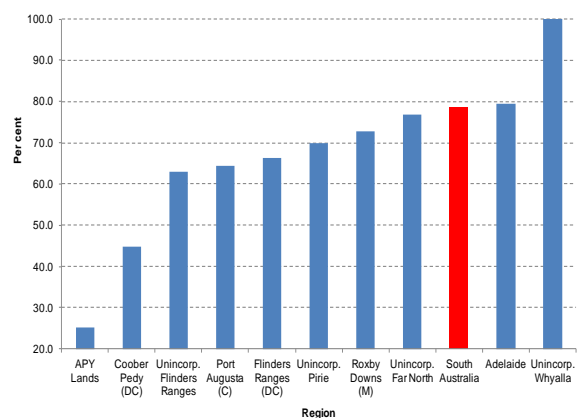
Figure 14: Education
Full-time participation in secondary school education at age 16, Per cent, 2006



Source: PHIDU InstantAtlas.

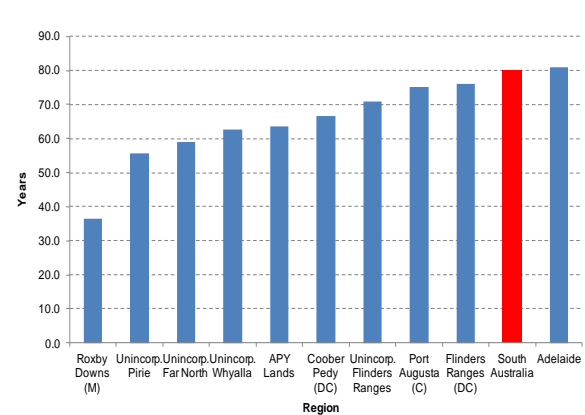
Median age at death is below the South Australian average (80 years) and metropolitan Adelaide (81 years) for all LGAs and unincorporated areas (refer to Figure 16).

Figure 15: Learning or earning
Per cent of 15 to 19 year olds either working or studying, 2006



Source: PHIDU InstantAtlas.

Figure 16: Median age at death, 2003 to 2007



Source: PHIDU InstantAtlas.

About the Far North regional plan

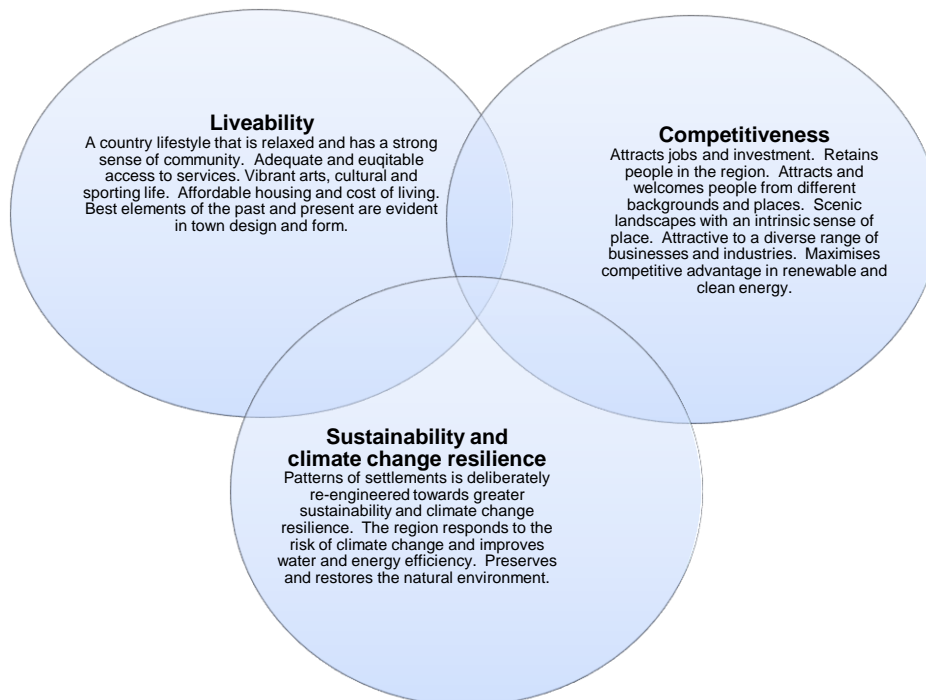
The regional plan sets out the objectives of the region, helping state and local governments to plan for the provision of essential services and infrastructure and guide sustainable economic development and land use in the region.

The plan supports the achievement of a range of economic, social and environmental goals and is closely aligned to South Australia's State Strategic Plan, such that achieving regional goals and targets supports the achievement of state-wide objectives. In addition regional plans tie into state-wide plans for infrastructure, housing, water, natural resources management, waste management and South Australia's economic statement.

The plan has three overlapping objectives representing sustainable community development; these objectives are classified as; social, economic or environmental:

- Social - to maintain and improve liveability;
- Economic - to increase competitiveness; and
- Environmental - to drive sustainability and resilience to climate change.

Figure 17: Objectives of the regional volumes of the South Australian planning strategy



Source: Far North Regional Plan July 2011, Volume of the South Australian Planning Strategy.

Region at a glance¹

The RDAFN region covers an area of 696,986² square kilometres comprising four local government areas, five unincorporated areas serviced by the Outback Communities Authority (OCA)³ and one remote aboriginal area.

¹ Descriptions and key issues relating to the far North region are sourced from the Regional Roadmap and Strategic Plan for the Far North 2010-2013 and the Far North Region Plan, July 2010.

² The area of the Far North region according to Regional Development Australia's Roadmap is 799,850 square kilometres, this includes Maralinga Tjarutja Lands (102,854 square kilometres). According to RDA boundaries Maralinga Tjarutja Lands are part of RDA Whyalla and Eyre Peninsula and once subtracted the RDA Far North covers a land area of 696,986 square kilometres.

³ The Outback Communities Authority acts as a management authority for the outback. For more details about the Outback Communities Authority (OCA) functions and objectives see <http://www.oca.sa.gov.au>

Local government areas

- Coober Pedy
- Flinders Ranges
- Port Augusta
- Roxby Downs

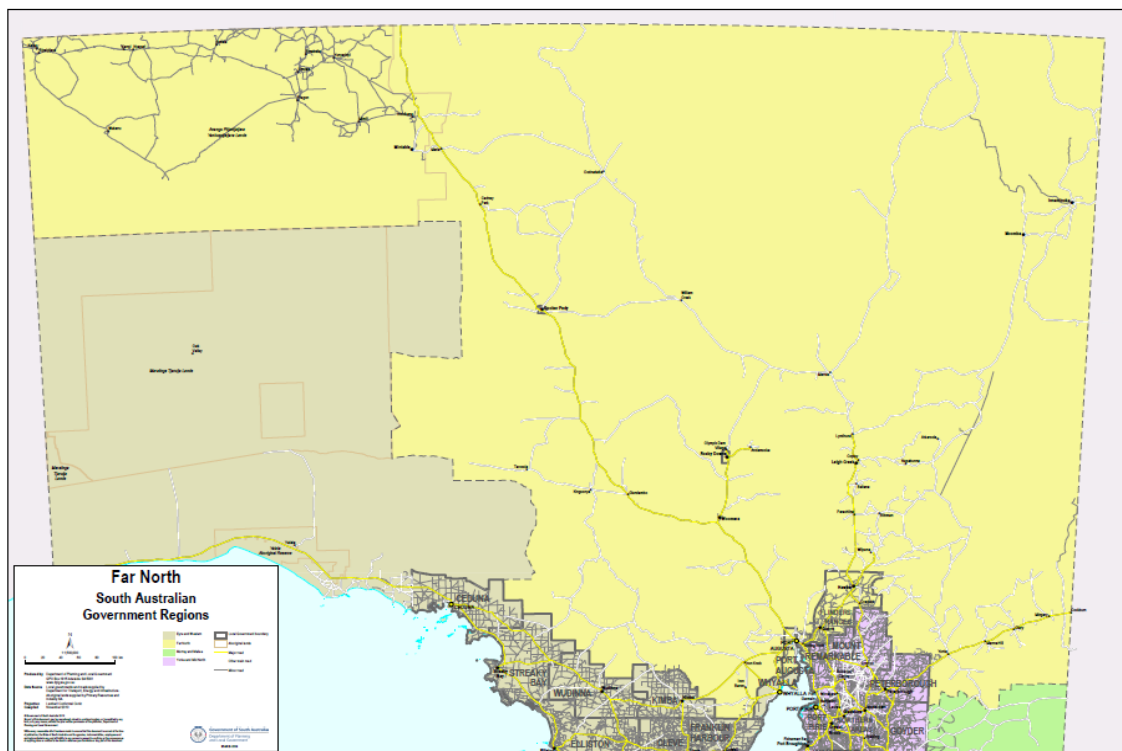
Unincorporated areas

- Unincorporated Far North
- Unincorporated Flinders Ranges
- Unincorporated Lincoln
- Unincorporated Pirie
- Unincorporated Whyalla

Aboriginal Lands

- Anangu Pitjantjatjara Yankunytjatjara (APY Lands)

Figure 18: Map of Regional Development Australia Far North



Source: Department of Planning and Local Government of South Australia.

Facts about the region

- The estimated resident population of the region inclusive of unincorporated areas is 28,726 persons (ABS, 2010, preliminary estimate).
- The economy relies principally on mining; the region is rich in uranium, copper, gold and iron ore, producing 70 per cent of the states mining output.
- Other important industries include tourism, agriculture and defence, containing aerospace and defence facilities of strategic importance to the state.

- Olympic Dam located near Roxby Downs has the world's largest known reserves of uranium and fourth largest reserve of copper potentially providing employment to over 4,000 workers.
- Port Augusta is the region's largest city with a population of 14,784 persons (ABS, 2010, preliminary estimate) comprising major commercial, retail and educational facilities. Other major commercial and service centres include Leigh Creek, Coober Pedy and Roxby Downs.

Box 1: Additional information about the Far North

- Mining developments will require significant investment in new infrastructure to support mining production the accommodation of workers families and in response to household consumption expenditure.
- Skilled workers in construction and plant operation need to be attracted to the region to live either permanently or on a temporary basis as fly-in fly-out workers.
- Mining towns such as Roxby Downs have numbers of un-skilled and semi-skilled workers above the state average, although many are employed in full-time work. Any downturn in mining makes this group vulnerable to job losses.
- Opportunities exist to up-skill or re-skill long-term unemployed and disadvantaged workers for employment in mining and related industries.
- Over reliance on mining for local employment and export income makes the region vulnerable/sensitive to fluctuations in the global economy affecting the demand for resources and continuation of the current mining boom.
- A focus on improving education outcomes for Indigenous and non-indigenous students is needed to increase secondary school retention rates.
- Approximately 20 per cent of the state's Indigenous population live in the Far North and there is a need to provide more workforce opportunities.
- Workforce opportunities are needed for residents aged 15-19 years with 28.9 per cent not in full-time education of employment compared with the state average of 21.6 per cent.

Source: Skills for jobs, The Training and Skills Commission's five year plan for skills and workforce development, 2011.

Key Issues for the region

Consultation with local government, industry groups and communities revealed issues of most concern. Together these issues can be grouped under four themes, (A) environment and culture, (B) economic development, (C) population and settlements and (D) infrastructure and service provision.

Underlying each theme are principles and policies (e.g., as in A Environment and Culture) to help realise the regions vision and full potential. Issues, challenges, opportunities and barriers as highlighted by the RDAFN Regional Roadmap are grouped under each of the four themes and commentary is drawn from the RDA roadmap (as in A.1, A.2, B.1 etc).

A. Environment and culture

- *Recognise, protect and restore the regions environmental assets;*
- *Ensure the efficient use of water and energy;*
- *Protect people, property and environment from exposure to hazards;*
- *Effectively manage waste, wastewater and stormwater;*
- *Identify and protect places of heritage and cultural significance, and desired town character;*
- *Create the conditions for the region to adapt and become resilient to the impacts of climate change*

A.1 Climate change – Issues identified in RDA Roadmap

- The impacts of climate change are not widely discussed in the RDAFN Roadmap.
- More generally the likely effects would be more frequent and severe heat waves, fires, floods and droughts resulting in reduced productivity of the agriculture and pastoral sectors.
- The introduction of a carbon tax may have a detrimental effect on Port Augusta's energy sector, although the region is well placed for large scale investment in renewable energy technologies.
- The region anticipates that the carbon tax will also affect towns and communities using diesel power generation for their electricity supply because of the reduced off-road diesel fuel rebate.

A.2 Renewable energy – Issues identified in the RDA Roadmap

- Opportunities exist for the development of alternative energy sources such as solar, wind and geothermal energy which are abundant in the region.
- For businesses and residents in remote settlements using off-grid power sources such as diesel generators and gas turbines, alternative power sources i.e. renewable energy have been explored and diesel generation currently remains the only cost effective power generation for their needs.

A.3 Water – Issues identified in the RDA Roadmap

- Potable water from the River Murray is piped to the Upper Spencer Gulf region via the Morgan-Whyalla pipeline distributing a reliable water supply from Port Augusta to Woomera.
- Several Aboriginal communities are provided with reticulated water by agreement with Coober Pedy and Ceduna councils but other remote communities are reliant on desalinated groundwater.
- In the Far North Outback and Aboriginal communities the high cost of water (up to \$14 per kilolitre) is a major issue posing health risks to residents as they try to conserve water.
- Remote settlements and Aboriginal communities in the APY Lands often have the poorest service in terms of cost and standard relying on progress associations for their supply or alternatively collecting water themselves.
- Inadequate and unreliable water supply presents difficulties for remote communities in attracting new investment in mining; it also leads to unsustainable communities.

B. Economic development

- *Protect and build on the regions strategic infrastructure;*
- *Provide and protect well-sited industrial land to meet projected demand;*
- *Safeguard mineral, oil and gas resources, and support further exploration, extraction and processing;*
- *Reinforce the Flinders Ranges and the Outback as iconic tourist destinations;*
- *Retain and support ongoing aerospace and defence industry operations;*
- *Retain and strengthen the economic potential of pastoral lands;*
- *Focus commercial development in key towns and ensure it is well sited and designed;*
- *Foster sustainable alternative energy and water supply industries;*
- *Support aquaculture and fishing industries at Port Augusta.*

B.1 Mining – Issues identified in RDA Roadmap

- Approximately 50,000 square kilometres of the Outback is under exploration leases, the region possesses deposits of lead, nickel, zinc, gold, copper, magnetite, chromium, tin, coal, diamonds, heavy mineral sands, iron ore and uranium.
- Contains 72 per cent of South Australia's mineral resources projects; as of August 2011 there were a total of 46 mineral projects in South Australia, seventeen approved and twenty nine developing projects; of the seventeen approved projects fourteen are located in RDAFN and of the twenty nine developing projects nineteen are located in RDAFN.
- Essential infrastructure of roads, rail, airports, energy and water are insufficient to meet the needs of the resources sector.
- Rural roads linking mines with major arterial roads are unsealed and poorly maintained.
- Much of the region lacks a cheap and reliable electricity supply because it is not connected to the national power grid.
- Governments are reluctant to invest in infrastructure in RDAFN because they receive a limited return on their investment; instead the burden of paying for infrastructure rests with councils, Outback Communities Authority (OCA), communities and residents and mining companies.
- Opportunities exist for governments and mining companies to share infrastructure costs providing benefits to both mining companies and the community.
- Governments could use royalty revenue to cover some of the costs of infrastructure development.

B.2 Tourism – Issues identified in RDA Roadmap

- Visitors to RDAFN come most frequently as day-trippers from other parts of South Australia supporting approximately 300 tourism businesses.
- There is growth in through traffic from “caravaners and grey nomads”, especially via Port Augusta which is the central point for east-west travel and travel up through the north of the State into Alice Springs and beyond.
- Lack of basic tourist infrastructure in outback areas e.g. toilets and signs, limited aviation infrastructure and unsealed tourist roads are barriers to the industry reaching its full potential.

- While the Flinders Ranges region benefits as a whole from increased visitors with Hawker and Quorn becoming tourist service centres, maintenance of some tourist roads promoted by SATC, are funded by councils from their own revenue streams (i.e. rates), with approximately 500,000 visitors utilising these roads each year the burden of upkeep rests with only a few thousand rate payers.

B.3 Agriculture – Issues identified in RDA Roadmap

- Agricultural activity comprises some cropping in the southern areas and pastoralism in the north.
- According to the Economic and Environmental Indicators for South Australia and its regions, 2006/07 DTED report, the total value of output in Agriculture, Forestry and Fishing was \$83 million (1.8 per cent of total output for SA and 2 per cent of regional SA output)
- Gross value added for the same year was \$46 million (2.0 per cent of regional gross state product and 1.8 per cent of total SA gross state product).

B.4 Aquaculture – Issues identified in RDA Roadmap

- Opportunity exists to diversify into the aquaculture industry in the Spencer Gulf near Port Augusta.

B.5 Defence – Issues identified in RDA Roadmap

- The expansive area of the Far North is suited to defence activities and is home to the Cultana Training Area located between Port Augusta and Whyalla and the Woomera Test Range located in central South Australia.
- A planned expansion of the Cultana Training Area from 50,000 hectares to 200,000 hectares will further integrate the area into the Australian Army's training network and support future training needs of the defence force.
- The Woomera Test Range is the largest land-based range in the world designated for military test activities comprising 127,000 square kilometres; it also supports civilian and commercial aerospace activities.

C. Population and settlements – Principles and policies

- *Reinforce the role, functionality and vibrancy of towns and settlements;*
- *Strategically plan and manage township growth;*
- *Design towns to provide safe, healthy, accessible and appealing environments;*
- *Provide residential land for a supply of diverse, affordable and sustainable housing to meet the needs of current and future residents;*

C.1 Population – Issues identified in RDA Roadmap

- The LGAs of Roxby Downs and Port Augusta account for a large portion of RDAFN's population growth.
- A shortage of accommodation exists in Roxby Downs due to insufficient land set aside and designated for residential housing.
- Smaller outback centres such as Andamooka have grown to accommodate workers from Olympic Dam.
- Andamooka has approximately 800 residents growing by more than 50 per cent since 2006. The town supports future growth in Roxby Downs acting as its "outer suburb".

- Andamooka's population is expected to double in size within several years further straining the town's limited infrastructure.

C.2 Education, skills and unemployment – Issues identified in RDA Roadmap

- The challenge of attracting and maintaining quality staff is considered the most pressing issue for employers in the RDAFN region.
- Barriers faced attracting workers to the region include limited housing, insufficient training facilities and inability of small businesses to compete with high wages offered by the resources sector.
- High unemployment in the APY Lands and Coober Pedy is caused by low secondary school retention rates and limited employment opportunities especially amongst the Indigenous community.
- The proportion of residents with certificate level qualifications is above the state average but below the state average for bachelor degrees and post-graduate degrees.
- Programs for local residents linking skills training to mining careers need further development.
- The establishment of a regional campus at Port Augusta by the University of Adelaide will allow greater retention of younger residents in the city and surrounding region providing skills training leading to employment outcomes.

C.3 Housing – Issues Identified in RDA Roadmap

- Residential housing and rental accommodation in Roxby Downs is expensive and in short supply, to maintain township growth and address the housing shortage further residential accommodation is needed.

D. Infrastructure and services provision

- *Protect and build on the regions strategic infrastructure;*

D.1 Infrastructure – Issues identified in RDA Roadmap

- Residents in outback communities lack basic services such as a reliable water and electricity supply, waste disposal and communications e.g. internet, radio and phone and need new infrastructure.
- Water quality, quantity and cost vary in remote areas due to insufficient water infrastructure; a more reliable water supply is needed to meet the minimum standards of public health requirements.
- Demand for new infrastructure is also driven by the mining industry requiring significant investment in road, rail, energy, airports and water infrastructure.
- Commercially funded infrastructure of this nature is not viable due to the geographic size and sparse population of RDAFN leaving the burden of infrastructure development with councils, communities, residents and mining companies.
- Growth of the resources sector presents the opportunity for mining companies to provide capital for essential infrastructure that will not only serve their purposes but benefit the community.
- Most of the region is not connected to the national electricity grid because it is not cost effective due to the sparse population and large geographical area.
- Opportunities exist for further improvement of the outback's power supply using solar technology with the Outback representing 30 per cent of installations as part of the Solar Schools program.

- Infrastructure challenges for the township of Andamooka relate to the need for cheaper and more reliable energy supplies, expanded health care services, improved roads and additional industrial facilities for contractors to service Olympic Dam as its population increases.

Table 1 summarises the demographic composition of towns and local government areas in the Far North region relative to South Australia.

Table 1: Demographic summary Far North region, 2006

	Far North Regional Balance	Port Augusta	APY Lands	Roxby Downs	Cooper Pedy	Flinders Ranges Council Area	Far North Region Total	South Australia
Population	2,925	13,874	2,230	4,054	1,913	1,731	26,727	1,514,336
Under 14 years (%)	18	21	27	28	17	20	22	19
24-54 years (%)	49	42	41	55	42	37	44	41
Over 65 years (%)	7	12	5	0.5	13	20	10	15
Indigenous (%)	13	17	85	2	14	8	19	2
Workforce participation (%)	72	56	52	82	48	50	58	59
Unemployment rate (%)	3.9	6.0	7.6	0.3	6.4	2.9	7.5	5.2
Median weekly household income (\$)	894	795	891	2,033	533	655	967	887

Source: ABS Census of Population and Housing 2006 and Department of Employment and Workplace Relations, 2007, quoted in Far North Regional Plan July 2010, Volume of the South Australian Planning Strategy.

Major projects

The following section contains a list of major projects in the RDAFN region which have been approved, are in progress or are under consideration as outlined in the South Australian governments Major Developments Directory 2011/12.

Port Augusta

Project title: Lincoln Gap Wind Farm
Organisation: Lincoln Gap Wind Farm Pty Ltd
Project details: Installation of 59 wind turbine generators at Lincoln Gap, Port Augusta. The capacity of each turbine is to be finalised but expected to be between 2.5MW and 3MW.

Project cost: \$360 million

Estimated completion date: May 2014

Status: Approved

Project title: Common Ground – Port Augusta (Augusta Terrace)
Organisation: Department for Families and Communities (Housing SA)
Project details: Construction of 35 rental units for disadvantaged individuals on low incomes or at risk of becoming homeless.

Project cost: \$5.6 million

Estimated completion date: January 2013

Status: Cabinet then Public Works Review

Project title: Port Augusta Secondary School
Organisation: Department of Education and Children Development
Project details: Upgrade and extension of existing buildings at the Stirling Campus
Project cost: \$5.6 million
Estimated completion date: December 2011
Status: Included in 2011/12 Capital Investment Statement

Project title: Carrapateena
Organisation: OZ Minerals
Project details: The Carrapateena deposit is an iron oxide copper-gold uranium deposit located 250km southeast of the existing Prominent Hill mine. The project is at feasibility stage and will be at bankable feasibility stage in four years.
Project cost: Undisclosed
Estimated completion date: Not available
Status: In progress

Project title: Sundrop Farms Expansion Project
Organisation: Sundrop Farms Pty Ltd
Project details: Expansion of Sundrop Farm's existing greenhouse using sunlight and seawater to grow high value crops.
Project cost: \$25 million
Estimated completion date: Early 2013
Status: Investment approved.

Project title: Acquasol Point Paterson Solar Thermal Hybrid Power and Water Desalination Plant
Organisation: Acquasol Infrastructure Pty Ltd
Project details: Proposed construction of a 200MW combined solar cycle/solar thermal power and water desalination plant with land based brine harvesting, located 7 km south of Port Augusta.
Project cost: \$550 million
Estimated completion date: November 2014
Status: Under consideration

Coober Pedy

Project title: Arckaringa Coal to Liquids and Power Plant ('The Arckaringa Project')
Organisation: Altona Energy Plc
Project details: Project is at feasibility study stage, involving construction of an integrated 10 million barrel per year coal to liquids plant and 560MW co-generation power facility north of Coober Pedy.
Project cost: \$3.5 billion
Estimated completion date: December 2017
Status: Under consideration

Project title: Cairn Hill Phase II
Organisation: IMX Resources Limited
Project details: Located 55km Southeast of Coober Pedy mining of Cairn Hill phase I began in May 2010. Mining of Phase II will commence in 2012.
Project cost: \$5 million - \$10 million
Estimated completion date: 2015 (concurrent with phase I)
Status: Approvals pending

Roxby Downs

Project title: Olympic Dam Expansion
Organisation: BHP Billiton Olympic Dam Corporation Pty Ltd
Project details: Expansion of mining and processing at Olympic Dam mine site together with associated infrastructure in the north of the state. The expansion is planned to occur in stages and will involve the world's largest open cut operation. Production of copper would be increased to 750,000 tonnes per year.
Project cost: BHP has not released an official project cost figure as yet. An independent valuation by Deutsche Bank estimates the expansion cost to be around \$27.4 billion (assuming \$1.00 USD = \$1.00 AUD).
Estimated completion date: Not available
Status: Approved

Project title: Government Employee Housing
Organisation: Department of Planning, Transport and Infrastructure
Project details: Procurement of additional government employee housing in Roxby Downs to support the expansion of government services.
Project cost: \$15.5 million
Estimated completion date: June 2012
Status: 2011/12 Capital Investment Statement

Flinders Ranges

Project title: Beverley North
Organisation: Heathgate Resources
Project details: The Beverley North mine is located 10km north of the existing Beverley Uranium mine (550km north of Adelaide) and will capture uranium near the existing ore body. Processing will be carried out at the existing Beverley mine.
Project cost: \$50 million
Estimated completion date: January 2011 – Pepegoona Satellite mine
 July 2011 – Panikan Satellite mine
Status: In progress

Project title: Four Mile
Organisation: Quasar Resources
Project details: Four Mile uranium mine is located adjacent the Beverley Uranium mine and is a joint venture between Quasar Resources and Alliance Resources.
Project cost: \$112 million
Estimated completion date: Not available
Status: Pending

Project title: Paralana Geothermal Energy Joint Venture Project
Organisation: Petratherm Limited
Project details: Petratherm with joint venture partners Beach Energy and TRUenergy Geothermal have started construction of a geothermal power station in the Mount Painter region in the Flinders ranges.
Project cost: \$50 million
Estimated completion date: End 2012
Status: In progress

Curnamona

Project title: Crocker Well Uranium Project
Organisation: SinoSteel PepinNini Curnamona Management Pty Ltd
Project details: Joint venture project between SinoSteel Uranium SA Pty Ltd (60 per cent) and PepinNini Resources Curnamona Pty Ltd (40 per cent) to develop a uranium deposit in the Curnamona region of South Australia.
Project cost: Undisclosed
Estimated completion date: Not available
Status: Under consideration

Cooper Basin

Project title: Cooper Basin – Strike Energy
Organisation: Strike Energy Ltd
Project details: Proposed exploration and development of coal seam gas (CSG) in the Southern Cooper Basin. Drilling in 2010 confirmed gas in 21m of Permian Coal Seams along with thermogenic and biogenic gas. Technical reviews by CSG specialists confirm a prospective resource of 3,700 to 9,300 petajoules of gas. Unconventional shale gas/liquids are being evaluated alongside the CSG exploration program but its potential is yet to be finalised.
Project cost: Undisclosed
Estimated completion date: Not available, dependent on exploration program results. Anticipate 2014 onwards.
Status: Exploration

Project title:	Cooper Basin – Acer Energy
Organisation:	Acer Energy Limited (formerly Innamincka Petroleum Limited)
Project details:	Acer Energy is involved in identifying, exploring and developing oil and gas opportunities focused on the Cooper Basin. The company has a balanced tenement portfolio providing exposure to both oil and gas exploration and development opportunities. The company's exploration program for the next few years includes 3D seismic acquisition and the drilling of wells.
Project cost:	Undisclosed
Estimated completion date:	Not available
Status:	In progress and ongoing
Project title:	Cooper Basin – Beach Energy
Organisation:	Beach Energy Limited
Project details:	Beach Energy has a 21 per cent interest in the Cooper Basin operating 19 oil fields in the region with five gas discoveries awaiting development.
Project cost:	Financial year 2011/12 estimate of Beach's share of capital costs is \$64 million.
Estimated completion date:	Ongoing
Status:	Producing fields plus ongoing exploration on surrounding acreage.
Project title:	Cooper Basin – Senex Energy
Organisation:	Senex Energy Limited
Project details:	Senex is an independent oil producer in the Cooper Basin, targeting significant increases in oil reserves and short to medium term oil production. In 2011/12 Senex will undertake a large oil exploration program in the Cooper Basin Western Flank and Growler Oil field. Senex will also joint venture with other major producers to build and operate new oil flowlines and trunklines to more efficiently transport oil from the western margin to Moomba processing plant.
Project cost:	\$ 50 million
Estimated completion date:	Continues
Status:	Approved
Project title:	Geodynamics, Demonstration HFR Plant
Organisation:	Geodynamic Limited
Project details:	A renewable energy project in the Cooper Basin using geothermal energy, 'hot fractured rocks', to produce 1-2 MW of power from a pilot plant built on a single injection and production well. If successful the plant will be expanded to a large scale commercial operation producing 500MW of clean energy for sale to the national grid.
Project cost:	\$40 million
Estimated completion date:	December 2012
Status:	In progress

Project title: Cooper Basin Unconventional Gas Exploration
Organisation: Senex Energy Limited
Project details: During 2011/12 Senex will carry out coring, logging and testing within the southern Cooper Basin to assess the potential of the Permian sands, coals and shales for tight sands, gas coal seam gas and shale gas.
Project cost: \$60 million
Estimated completion date: June 2012
Status: In progress

Other Far North

Project title: Honeymoon Uranium Project
Organisation: Joint venture between Uranium One Australia Pty Ltd (51 per cent) Mitsui & Co Uranium Australia Pty Ltd (49 per cent)
Project details: This mining development uses an in-situ leach process to recover uranium. Leach testing occurred over an 18 month period through an on-site demonstration plant and field leach trial.
Project cost: \$146 million
Estimated completion date: Construction completed Q4 2010
Status: Commissioning in progress

Project title: Kalkaroo Copper-Gold-Molybdenum Project
Organisation: Havilah Resources NL.
Project details: A large copper-gold-molybdenum discovery containing a JORC measured resource of 62.5 million tonnes. The resource can sustain annual production of 30,000 tonnes of copper and 95,000 ounces of gold for 12 years.
Project cost: \$ 200 million
Estimated completion date: Not available
Status: Preparation of all documentation required for mine permitting

Project title: Mutooroo Copper-Cobalt Project
Organisation: Havilah Resources NL.
Project details: Open-pittable copper-cobalt deposits containing an estimated JORC resource of 13.1 million tonnes with potential for triple this resource along strike and down dip. The open pit operation could produce high-grade copper concentrate along with sulphuric acid, cobalt and iron ore. The operation possesses very favourable logistics.
Project cost: \$ 25 million (for mine, crushing and handling facilities only)
Estimated completion date: 2012
Status: Preparation of all documentation required for mine permitting

Project title:	Prominent Hill Underground Expansion (Ankata)
Organisation:	OZ Minerals
Project details:	A commitment has been made to expand the existing Prominent Hill copper and gold operation by expanding the mine from its existing open-pit operation to an underground mine.
Project cost:	\$ 135 million
Estimated completion date:	Q3 2012
Status:	In progress
Project title:	Portia Gold Project
Organisation:	Havilah Resources NL
Project details:	Small open pitable gold deposit with a JORC inferred resource of 720,000 tonnes of 2.9g/t gold. Gold is recovered through a low cost gravity separation plant.
Project cost:	\$26 million (for mining overburden, gravity processing plant, other infrastructure)
Estimated completion date:	Second half of 2014
Status:	Mining lease granted and project at advanced stage of preparation of documentation required for an open-pit mining operation.
Project title:	Maldorky Iron Ore Project
Organisation:	Havilah Resources NL.
Project details:	A magnetite iron ore discovery containing a Joint Ore Reserves Committee (JORC) indicated resource of 147 million tonnes, located in the Braemar Iron Province 300km east of Port Pirie. The flat/shallow ore body is easily exploitable by a low-cost open mining process and contains low levels of impurities.
Project cost:	\$35 million
Estimated completion date:	Not available
Status:	Preparation of all documentation required for mine permitting.
Project title:	Amata and Mimili Water Infrastructure and Conservation Project
Organisation:	Department of Water
Project details:	Approved water infrastructure upgrades and implementation of a water conservation program to aboriginal communities of Amata and Mimili in the APY Lands.
Project cost:	\$5.5 million
Estimated completion date:	June 2012
Status:	Approved
Project title:	Hawker Desalination Plant
Organisation:	SA Water Corporation
Project details:	Proposed desalination plant Hawker to improve potable water supply.
Project cost:	\$8.1 million
Estimated completion date:	June 2013
Status:	2011-12 Capital Investment Statement

Table 2: South Australian local government capital expenditure for 2011/12

Council	Local government expenditure 2011/12 (\$)
Port Augusta City Council	4,244,000
Cooper Pedy District Council	74,000
Municipal Council of Roxby Downs	Not available
Flinders Ranges Council	Not available

Source: South Australian Major Developments Directory 2011/12.

Appendix A

Selected Statistics: Labour market outcomes

Regional Development Australia Far North

Population	RDA Far North	% of State Total	South Australia
Estimated Resident Population (ERP): June 2010	28,713	1.7%	1,644,582
Net Change in ERP 2009 to 2010	166	-	20,992
Rate of Population Change (%)	0.6%	-	1.3%
% of Total Population			
Youth (15-24)	3,669	12.8%	13.7%
Mature (45-64)	7,453	26.0%	26.3%
Aboriginal – Census 2006	5,046	18.7%	1.7%
People with a disability (15-64) – Census 2006	474	2.6%	2.7%
Labour Force (Dept of Education & Workplace Relations: March 2011)			
Total Employed	13,048	-	812,100
Total Unemployed	916	-	47,200
Unemployment Rate	6.6%	-	5.5%
Participation Rate (June 2010)	63.1%	-	62.7%
% of Total Employment			
Industry Employment (Census 2006)			
Mining	1,492	12.7%	0.9%
Retail Trade	1,446	12.3%	14.7%
Health and Community Services	1,403	11.9%	12.7%
Education	953	8.1%	7.4%
% of Total Population (15 years and older)			
Qualifications (Census 2006)			
Degree or higher	1,443	6.9%	13.0%
Diploma	837	4.0%	6.5%
Certificate Level III or IV	3,420	16.3%	14.3%
% of State Total			
Training (NCVER 2009)			
VET Students	2,682	2.2%	121,851
Students reporting Disability	5.6%	-	6.2%
Aboriginal Students	23.0%	-	3.6%
Commencing Apprentices and Trainees (2008)	418	1.9%	21,960

Source: data extracted from Workforce Wizard, DFEEST, November 2011