

CENTRE FOR ECONOMIC STUDIES



ADELAIDE & FLINDERS UNIVERSITIES

Regional Development Australia Barossa

Overview

Geography

• RDA Barossa is the smallest RDA region covering an area of 3,145 square kilometres or 0.3 per cent of the State's land mass.

Population

- As at 30th June 2010 some 66,468 persons lived in the region accounting for 4.1 per cent of the State's population.
- In 2006 1.0 per cent of the RDAB population identified themselves as Indigenous, compared with 1.6 per cent at the State level.

Economy and Labour force

- The region contributed \$2,155 million in gross value added to the State economy in 2006/07 or 3.2 per cent of gross state product.
- As of June 2011 RDAB had an unemployment rate of 4.5 per cent, well below the State rate of 5.5 per cent and a higher workforce participation rate.
- The three largest employing industries in the RDAB region for 2006/07 are manufacturing (21.2 per cent), retail trade (14.3 per cent) and agriculture, forestry and fishing (11.6 per cent), compared with the overall 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.

Opportunities for growth

- Opportunities to attract more day-trippers and overnight visitors to the Barossa Valley exist with possible development of 5-star accommodation at Seppeltsfield Winery and by marketing the "Barossa brand" which is recognised throughout Australia and internationally as a world class tourist destination offering memorable food and wine experiences.
- New transportation linkages will provide opportunities for local producers in the Barossa region with the planned extension of the Northern Expressway to link directly with the Port River Expressway reducing freight transport costs and improving access to Adelaide airport and seaports.
- Roseworthy is predicted to experience growth of up to 60,000 residents over the next 30 years to become a major residential, educational and commercial centre in the north of Adelaide. The projected population growth to 2026 is almost three times the projected growth rate for the State.

Barriers to future growth

- Infrastructure challenges include; upgrading and sealing local roads in the Barossa Valley, providing improved communication services such as faster internet speeds, upgrading aging health care facilities and constructing new aged care facilities.
- Other challenges include skills shortages, relocation of younger Barossa Valley residents to metropolitan Adelaide for work and education, aging of the workforce and a slower growing domestic market for wine.

Indicators

Geography and Population

	RDA Barossa	South Australia
Geography Land area - square kilometres ¹ Land area as a percentage of the state - per cent Area of agricultural land (2006) - hectares '000	3,145 0.3 269	985,292 100 55,408
Demographics Total population (2010) - all persons Males (2010) - all males Females (2010) - all females Change in population (2001-2010) - per cent change Change in population (2001-2005) - per cent change Change in population (2005-2010) - per cent change Population as a percentage of state population (2010) - per cent Population density (2010) - persons/square kilometre Birth rate (2010) - babies born per 1,000 people Death rate (2010) - deaths per 1,000 people	66,468 33,250 33,218 19.2 8.7 9.6 4.1 21.1 11.6 7.0	1,640,638 810,264 830,374 6.0 2.8 6.0 100.0 1.67 12.2 7.9
Population projections (Dept of Planning and Local Government) 2016 2021 2026 Projected change in population from 2011 to 2026 - per cent CAGR for region, 2011-2026	76,685 86,549 98,586 44.7 2.5	1,770,644 1,856,435 1,935,161 16.1 1.0
Age profile (2010) 0-14 years 15-24 years 25-34 years 35-44 years 45-54 years 55-64 years 65-74 years 75-84 years 85 years and over Indigenous population (2006) - all persons Indigenous population as a percentage of total population (2006) - per cent	19.9 12.8 11.2 14.3 15.4 11.9 7.7 4.8 2.0 597 1.0	17.8 13.6 13.0 13.6 14.0 12.3 8.0 5.3 2.3 24,823 1.6

Note: ¹ RDA Barossa does not comprise any unincorporated areas.

Economy 2006/07

	Gross va	lue ¹ added (\$m)	per c	ue added - ent of total ss regional product	industry -	oyment by per cent of nployment
	RDA Barossa	South Australia	RDA Barossa	South Australia	RDA Barossa	South Australia
Agriculture, forestry and fishing	193	2,603	9.0	3.8	11.6	4.9
Mining	17	2,224	0.8	3.3	0.4	0.9
Manufacturing	567	8,815	26.3	12.9	21.2	13.4
Electricity, gas and water	17	1,884	0.8	2.8	0.3	0.9
Building and construction	124	4,432	5.8	6.5	6.6	6.6
Wholesale trade	86	2,765	4.0	4.0	4.6	4.4
Retail trade	105	3,829	4.9	5.6	14.3	14.9
Accommodation, cafes and restaurants	49	1,476	2.3	2.2	5.4	4.4
Transport and storage	84	3,270	3.9	4.8	3.8	3.9
Communication services	18	1,467	0.8	2.1	0.7	1.3
Finance and insurance	41	3,993	1.9	5.8	1.5	3.9
Ownership of dwellings	258	6,074	12.0	8.9	0.0	0.0
Property and business services	108	6,533	5.0	9.6	5.6	9.3
Public administration and defence	24	2,417	1.1	3.5	2.2	5.4
Education	93	3,144	4.3	4.6	7.9	7.6
Health and community services	94	4,974	4.4	7.3	9.7	13.1
Cultural and recreational services	28	1,039	1.3	1.5	1.7	1.8
Personal services	24	1,547	1.1	2.3	2.7	3.9
Total ²	2,155	68,327	100.0	100.0	100.0	100.0

Note:

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. 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 1 2

final demand. Therefore totals do not sum to 100 per cent.

Supportive Statistics

	RDA Barossa	South Australia
Trade ¹ Exports (2006/07) - \$ billions	1.8	27.4
Imports, (2006/07) - \$ billions	2.3	30.8
Labour force Labour force (June 2011) Total employed (June 2011) Total unemployed (June 2011) Participation rate (2009) Unemployment rate (June 2011) - per cent	35,017 33,435 1,582 67.7 4.5	861,537 814,507 47,030 63.1 5.5
Number of job service/disability employment service providers	23	450
Education Full-time participation in secondary school education at age 16 (2006) - per cent Participation in VET courses (2009) - per 1,000 persons	79.5 82.9	78.4 73.5

Supportive Statistics (continued)

	RDA Barossa	South Australia
NAPLAN results ² (2011) – average score		
Year 3		
Reading	388	402
Spelling	374	392
Numeracy	371	379
Year 5		
Reading	474	478
Spelling	472 460	474
Numeracy Year 7	400	471
Reading	528	534
Spelling	528	533
Numeracy	522	535
Health (Selected LGAs)	5.0	6.9
Low birth weight babies (2006 to 2008) - as a percentage of total births Mothers who reported smoking during pregnancy (2006 to 2008) - per	5.9	6.8
cent	17.9	16.7
Children fully immunised at 12 to less than 15 months of age (2008) -		
per cent	96.4	91.8
Obese persons 18 years and over ³ (2007-08) – per cent	18.0	17.4
Overweight (not obese) persons 18 years and over ³ (2007-08) – per	00.0	00.4
cent	30.0	29.4
Housing characteristics		
Median house price (September quarter 2011) – Gawler - \$	315,000	360,000
Dwelling fully owned (2006) – per cent	34.1	33.7
Dwelling being purchased (2006) – per cent	41.0	33.5
Dwelling being rented (2006) – per cent	19.1	25.6
Rent assistance from Centrelink (March quarter 2011) - per cent of population	6.4	6.5
Average residential valuation (2010) - \$	285,087	344,446
Average rates per residential property (2010) - \$	1,273	1,065
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Income	44.004	44,000
Average wage and salary income (2009) - \$	41,024	41,896
Average own unincorporated business income (2009) - \$ Average investment income ⁴ (2009) - \$	15,564 5,662	19,659 7,651
Average superannuation and annuity income (2009) - \$	22,771	24,793
	,. , , , , , ,	2 1,1 50
Income support (Selected LGAs)		77 5
Age pension recipients (2009) - per cent	80.2	77.5
Disability support recipients (2009) - per cent	6.2	7.1
Single parent payment recipients (2009) - per cent Unemployment benefit recipients (2009) - per cent	5.4 3.4	5.8 4.5
Long-term unemployment benefit recipients (2009) - per cent	2.3	4.5
Youth Unemployment benefit recipients (2009) - per cent	4.8	6.1
Low income and welfare dependant families with children (2009) - per		
cent	8.1	9.5
Children in low income families (2009) - per cent	16.8	22.0
Health care card holders (2009) - per cent	7.4	8.8
Pensioner concession card holders (2009) - per cent	22.4	23.6
Total Centrelink card holders (2009) - per cent	24.2	26.8

Supportive Statistics (continued)

	RDA Barossa	South Australia
Tourism⁵		
Day visitors (2011)		
Number of domestic day trips – ('000)	932	10,472
Total expenditure by day trippers – \$m	53	944
Average expenditure by day trippers – \$	57	90
Number of overnight visitors (2011)		
Intrastate – ('000)	112	3,150
Interstate – ('000)	98	2,167
Domestic – ('000)	209	5,315
International – ('000)	13	530
Total – ('000)	222	5,845
Number of nights stayed (2011)		
Intrastate – ('000)	254	9,473
Interstate – ('000)	256	8,669
Domestic – ('000)	510	18,142
International – ('000)	66	8,454
Total – ('000)	576	26,596
Expenditure by overnight tourists		
Total domestic overnight expenditure (2011) - \$m	128	2,922
Average expenditure by domestic overnight visitor (2011) - \$	612	602
Characteristics of tourist establishments ⁶ (2011)		
Establishments (no.)	10	266
Rooms (no.)	407	12,652
Bed spaces (no.)	1,192	34,583
Persons employed (no.)	307	7,138
Occupancy rate (per cent)	54.5	62.4
Environmental		
Greenhouse gas emissions (2005/06) - tonnes per person	15.9	20.0
Airports		
Passengers per annum (2010/11)	NA	7,756,574
CAGR of passenger numbers (2000/01 – 2010/11)	NA	5.1
	147 (0.1
Gambling		
No. of electronic gaming machines (2009/10)	551	12,684
NGR (2009/10) - \$/adult	485	571
Taxes (2009/10) - \$/adult	158	222
No. of EGM's per 1,000 adults (2009/10)	11.0	9.9

The value of exports and imports at the regional level includes intrastate, interstate and international trade. Note: 2

NAPLAN scores for the Barossa region are based on selection of DECS primary schools in Angaston, Gawler, Kapunda, Lyndoch, Nuriootpa, Tanunda and Two Wells. 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 <u>www.naplan.edu.au</u> Estimates of obese and overweight persons by LGA are based on synthetic predictions using 2001 NHS data 3

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

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.

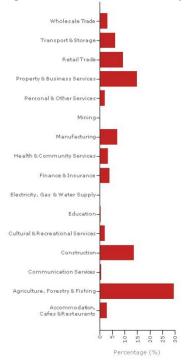


Figure 1: Number of businesses by industry - RDA Barossa, 2006/07

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 Barossa EasyData profile, at the Department of Manufacturing, Innovation, Trade, Resources and Energy regarding number of businesses by industry (boundaries for the Barossa State government region correspond with Regional Development Australia Barossa boundaries). Source: EasyData (ABS, Cat No. 8165.0, Counts of Australian businesses, including entries and exits, Jun 2003 to Jun 2007).

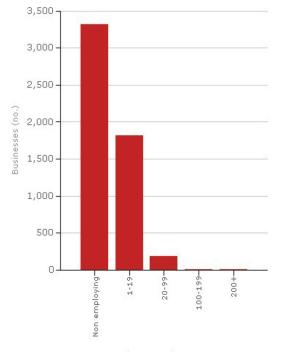


Figure 2: Number of businesses by employee ranges - RDA Barossa, 2006/07

Employee Number Ranges

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 Barossa EasyData profile, at the Department of Manufacturing, Innovation, Trade, Resources and Energy regarding number of businesses by employee ranges (boundaries for the Barossa State government region correspond with Regional Development Australia Barossa boundaries). Source: EasyData (ABS, Cat. No. 8165.0, Counts of Australian Businesses, including entries and exits, Jun 2003 to Jun 2007).

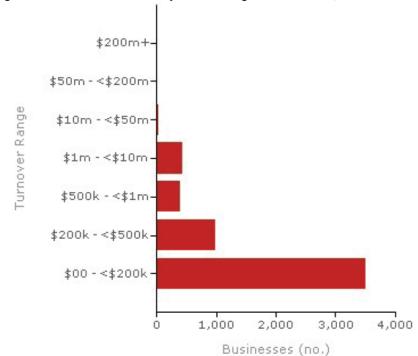
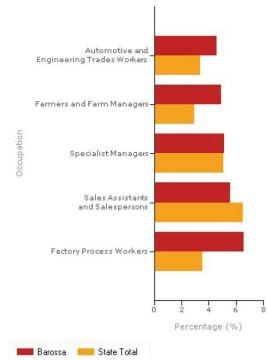


Figure 3: Number of businesses by turnover range - RDA Barossa, 2006/07

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 Barossa EasyData profile, at the Department of Manufacturing, Innovation, Trade, Resources and Energy regarding the number of businesses by turnover range (boundaries for the Barossa State government region correspond with Regional Development Australia Barossa boundaries). Source: EasyData (ABS, Cat No. 8165.0, Counts of Australian Businesses, including entries and exits, Jun 2003 to Jun 2007).





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 Australia Barossa (RDAB) 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.

The LGAs of Light, Barossa and Mallala rank higher than the South Australian average (979) in terms of SEIFA scores, Gawler ranks lowest with a SEIFA score of 969, (refer to Figure 5).

Based on a standardised ratio participation in VET is highest in the Barossa LGA (128) compared to 97 for South Australia and 87 for metropolitan Adelaide. Participation is lowest in Mallala (82), (refer to Figure 6).

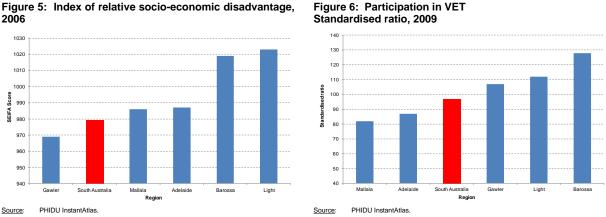


Figure 5: Index of relative socio-economic disadvantage. 2006

Professionals comprise a smaller proportion of the workforce in all LGAs of RDAB compared with South Australia and metropolitan Adelaide where they comprise 18.4 per cent and 20.6 per cent respectively, conversely workers identifying themselves as labourers have a higher representation in the LGAs relative to South Australia and metropolitan Adelaide, (refer to Figures 7 and 8).

Agriculture, forestry and fishing accounts for the highest proportion of workers in the LGAs of Light, Mallala and Barossa, while in Gawler, agriculture, forestry and fishing is a small employer accounting for 2.5 per cent of the workforce, employment in Gawler is focused more on manufacturing and services, (refer to Figure 9).

The proportion of welfare dependent and other low income families with children are below South Australia (9.5 per cent) in the LGAs of Barossa (5.8 per cent) and Light (7.9 per cent), (refer to Figure 10).

Figure 7: Occupation – Professionals Per cent of workforce employed as professionals by local government area, 2006

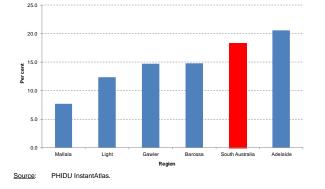


Figure 9: Industry – Agriculture, forestry and fishing Per cent of workforce employed in agriculture, forestry and fishing, 2006

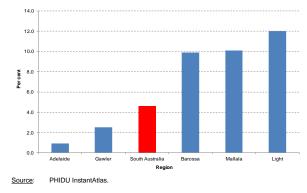


Figure 8: Occupation – Labourers Per cent of workforce employed as labourers by local government area, 2006

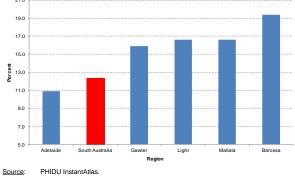
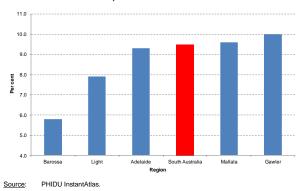


Figure 10: Income support recipients Per cent of welfare dependent and other low income families with children, 2009



Residents claiming Centrelink benefits such as, *inter alia*, the aged pension and allowances are automatically entitled to a health care card. All LGAs in RDAB have a lower proportion of health care card holders than South Australia (8.7 per cent) and metropolitan Adelaide (8.4 per cent) except in Gawler (8.5 per cent), (refer to Figure 11).

Unskilled and semi-skilled workers comprise a higher proportion of workers across all LGAs in RDAB relative to South Australia (18.2 per cent) and metropolitan Adelaide (16.4 per cent), (refer to Figure 12).

Participation in full-time secondary school at age 16 is above the South Australian average (78.3 per cent) and metropolitan Adelaide (79.6 per cent) for the LGAs of Light (85.3 per cent) and Barossa (82.6 per cent), (refer to Figure 14).

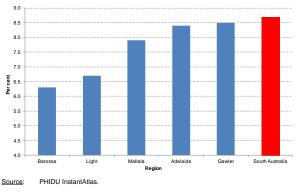


Figure 11: Health care card holders Per cent, 2009



Figure 13: Wages per capita

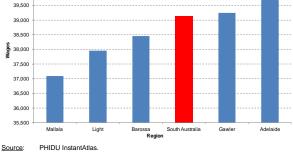


Figure 12: Unskilled and semi-skilled workers Per cent, 2006 35.0 30.0 25. 20. ent

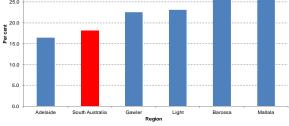
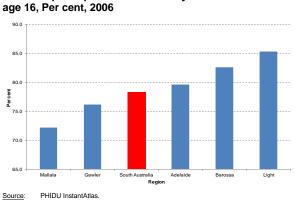


Figure 14: Education Full-time participation in secondary school education at

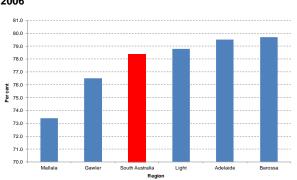


The LGA of Mallala has the lowest proportion of 15 to 19 year olds who are either learning or earning (73.4 per cent) followed by Gawler (76.5 per cent), LGAs of Light and Barossa are similar to the South Australian average (78.4 per cent) and metropolitan Adelaide (79.5 per cent), (refer to Figure 15).

Source:

PHIDU InstantAtlas.

Median age at death for LGAs in RDAB is similar to South Australia and metropolitan Adelaide, (refer to Figure 16).

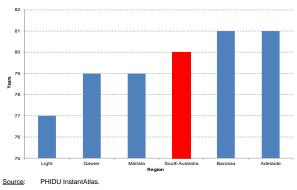


PHIDU InstantAtlas.

Source:

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





About the Barossa regional plan

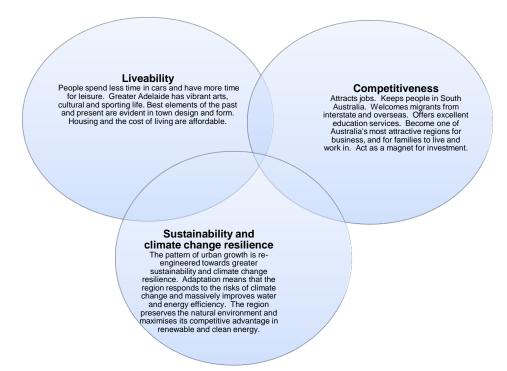
Context: 30 Year Plan for Greater Adelaide

The 30 Year Plan for Greater Adelaide sets out land-use policies for housing, transport services health, schools, community facilities and infrastructure such as energy and water, guiding urban design and the way neighbourhoods and communities are organised. The Plan incorporates the Adelaide metropolitan area plus the outlying areas of Fleurieu Peninsula, Adelaide Hills and Barossa as these regions represent growth poles for the metropolitan area to accommodate edge growth over the next 30 years.

The aim of the plan is to outline how the South Australian government plans to balance population growth and economic growth with the need to protect the environment. 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
- Environmental to drive sustainability and resilience to climate change

Figure 17: Objectives of the 30 Year Plan for Greater Adelaide



Source: The 30 Year Plan for Greater Adelaide, Volume of the South Australian Planning Strategy, August 2011.

The Plan has 14 principles to ensure the greater Adelaide region will achieve its objectives of maintaining its competitiveness, liveability and sustainability and resilience to climate change. These principles have been grouped under the headings of environment and culture, economic development, population and settlements and infrastructure and services provision. Although these principles apply to the Greater Adelaide region as a whole they are also in part or wholly applicable to the greater Adelaide regions on an individual basis.

Region at a glance

The RDAB region covers an area of 3,145 square kilometres comprising four local government areas.

Local government areas:

- The Barossa Council
- Town of Gawler
- Light Regional Council
- The District Council of Mallala

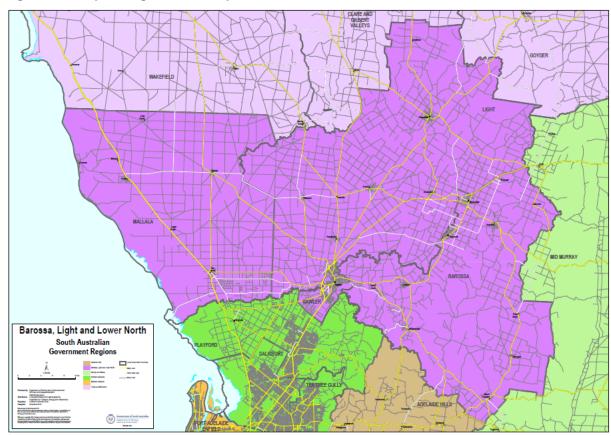


Figure 18: Map of Regional Development Australia Barossa

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

Facts about the Barossa region

- Has an estimated resident population of 66,468 persons (ABS, 2010, preliminary estimate).
- Contains a major regional centre of Gawler with an estimated resident population of 21,041 persons (ABS, 2010, preliminary estimate) and smaller regional centres of Nuriootpa, Tanunda, Angaston, Lyndoch, Kapunda, Freeling and Two Wells, with major growth also planned for Roseworthy.
- Is a significant wine producing region exporting bottled wine to Europe, the United States and increasingly to growing parts of Asia such as China.

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Box 1: Additional information about the Barossa Valley

- Approximately 80 per cent of local economic activity is related to the wine industry employing 41 per cent of the workforce.
- Wine industry workers are vulnerable to economic downturns as employment tends to be either, casual, part-time or seasonal.
- Reduced grape prices have been caused by a combination of factors including reduced competitiveness due to the high Australian dollar and the recent GFC which has reduced exports of Australian wine overseas.
- Sectors providing the most opportunity for economic growth are food and wine tourism, services to food and wine, education, food production, intensive horticulture, racing support industries, and new growth localities such as Roseworthy, Gawler and Two Wells.
- The region's labour market is performing better than the overall state in terms of unemployment and labour force participation.
- Youth unemployment and disengagement from the labour force, lower educational attainment in terms of secondary school and university completions and employment barriers for people with disabilities remain issues to be addressed.

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 governments, 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 region's vision and full potential. Issues, challenges, opportunities and barriers highlighted in the RDA Barossa 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 – Principles and policies

- Create the conditions to become resilient to the effects of climate change;
- Protect, restore and enhance the natural environment and its biodiversity;
- Maintain and improve the health of natural resources through careful planning to minimise adverse impacts on the natural environment;
- Manage resource allocation, in particular water, across social, economic and environmental needs.

A.1 Climate change – Issues identified in RDA Roadmap

- Systems not intensively managed by people are at greatest risk such as coastal systems and native animals and plants.
- Increased frequency of intense storm events, higher coastal storm surges, more frequent and intense bushfires, increased weeds and animal pests and more frequent erosive events.
- Less reliable rainfall and altered seasonal patterns culminating in changes in the timing of flowering and breeding cycles, more variable breaks in the winter growing season, reductions in ground water recharge and reductions in stream flows.
- Strategies for adapting to climate change on the land include: using crop varieties adapted to shorter growing seasons, commercial use of perennial vegetation, reduced tillage in areas likely to experience extreme rainfall events and reduced growing season rainfall, improve knowledge and understanding of weather

patterns, use new crop and garden species, reduce use of irrigation for low value crops and use drip irrigation for parks and gardens.

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

- Several solar farms have been established in the Barossa Valley; across the broader region farmers are investigating the use of small scale or decentralised generation of electricity.
- Potential exists for biomass energy generation using grape marc generated by the wine industry, animal waste from intensive farming and regional green waste.
- Wind farms proposed at fringes of the region.

A.3 Water – Issues identified in the RDA Roadmap

- Expansion of rural urban stormwater schemes required to maximise water resources and improve water quality in waterways, requires reconsideration of regulatory framework.
- Encouraging greater capture, recycling and reuse of water for amenity horticulture, environment and agriculture is a regional priority given expected increases in demand for potable water over the next 30 years.
- Treated water from Bolivar Waste Water Treatment Plant is the main resource for Northern Adelaide Plains (NAP) horticulture with current investigations for expansion of distribution north of the Gawler River.
- Barossa Valley viticulture is more reliant on a combination of private irrigation infrastructure such as Barossa Infrastructure Limited (BIL), Murray River water and Mount Lofty Ranges run-off.
- Barossa Infrastructure Limited (BIL) is privately owned irrigation infrastructure and allows water sources alternate to SA Water to be sought when demanded improving the reliability and quality of water supply for grape growers in the Barossa Valley.
- Ground water is also used for domestic irrigation, industrial use and stock and domestic supplies albeit on a smaller scale.
- More efficient water use is possible through water trading or other market-based instruments, enhancing capacity of transport and storage and further increasing the reuse of stormwater and wastewater.
- Councils should encourage greater water efficiency making rainwater tanks mandatory on every premises.
- Small scale low energy desalination plants could be viable into the future

B. Economic development – Principles and policies

- Create the conditions to enable economic growth and build competitive industries;
- Provide opportunities for local residents to have a say in the planning and development of their region and neighbourhood;
- Leverage regional assets for place based economic activity and drive productivity growth through emphasis on innovation and new business models.

B.1 Mining – Issues identified in RDA Roadmap

- Mining activity is limited to the extraction of limestone, gypsum, quartzite and clay, approximately half the States limestone comes from the Angaston quarry owned and operated by Penrice Soda Holdings Limited.
- Close proximity to Adelaide reduces transport costs and is a major advantage for miners in the Barossa Valley supplying resources to businesses in Adelaide.
- Residential growth in Gawler and the Barossa Valley and subsequent encroachment on mineral resources can affect the viability of existing and new potential operations.
- There is significant concern amongst residents regarding mineral extraction and its impact on the local environment.
- In terms of employment and economic activity the mining industry's role in the region is minor.

B.2 Tourism – Issues identified in RDA Roadmap

- Food and wine tourism attracts most day-trippers and overnight visitors to the Barossa Valley, there is potential for conference tourism and coastal tourism and the development of high end culinary tourism providing memorable eating and drinking experiences.
- The "Barossa brand" is recognised Australia wide and internationally for excellence in food and wine, the region markets itself on these strengths.
- More accommodation for international and interstate visitors is needed and possible development of eco-tourism accommodation would also further enhance visitor appeal.
- More directional signposting for roads and tourist attractions is needed, requiring cooperation and funding from government and the private sector.
- Tourism has suffered under the effects of the 2008 GFC, young travellers have been hardest hit facing issues such as low job security, families are prioritising paying down of debt and retirees have deferred travel because of poorly performing investments and superannuation funds.
- The abundance of low cost carriers with discount airfares and high cost of fuel has encouraged South Australians to make short interstate holidays rather than visiting local regions.
- Increasing cycling infrastructure in the region provides an excellent basis for growth in cycle and recreational tourism, also leveraging the region's heritage assets.

B.3 Agriculture – Issues identified in RDA Roadmap

- Agricultural production includes broad acre cropping of wheat and barley, horticulture, intensive animal farming, game birds, rabbit, beef, fruit, nuts, vegetables, olive oils, citrus and dairy products e.g. cheese.
- The agriculture mix is expanding from the traditional cropping and horticulture base to include capital and resource intensive livestock and hydroponics on the Northern Adelaide Plains.
- Further expansion of agriculture will be enabled by extension of recycled water reticulation, there are also value adding opportunities including processing and potential for development of service industries to agriculture, Roseworthy Campus of University of Adelaide in the area provides potential for research centres of excellence.
- The most common agribusinesses are grape producers followed by sheep farming and cereal and hay producers.

B.4 Viticulture and wine production – Issues identified in RDA Roadmap

- In terms of contributing to total employment, gross regional product and exports, grape and wine production is a significant component of the Barossa region's economy and is home to 120 wine companies located in the Barossa Valley.
- Processing and bottling of wine using locally produced and imported grapes from surrounding regions dominates economic and manufacturing activity, several of Australia's largest wine processors are located in the Barossa Valley.
- On average 80,000 tonnes of grapes are produced in the Barossa Valley annually, or 4 per cent of Australia's total wine grape production (see Barossa Grape and Wine Association Management Plan).
- The Wine Industry Impact Review notes only 16 per cent of grapes processed in the Barossa Valley are grown locally; when grapes from other regions are included, the Barossa Valley processes over 600,000 tonnes of grapes annually.
- Over the next five years growth in wine production is expected to be modest, although targeted growth in value of production is on track, therefore improved broadband and early rollout of the National Broadband Network (NBN) in the region is critical to the prosperity of this important industry.
- Coles and Woolworths account for 60 per cent of table wine sales with the average retail price of a bottle of wine being \$11.11, more expensive premium wines from the Barossa Valley have a narrow market of independent stores, restaurants, cellar doors and the internet to reach customers which is a challenge for Barossa Valley wine producers.
- Reliance on the wine industry for employment, exports and economic growth leaves the Barossa Valley exposed to changes in the global market for wine; at present the high Australian dollar and global market depression have reduced export competitiveness and impacted on grape prices.
- Wine producers have shifted their focus from the declining domestic market to overseas exports, traditional markets such as the UK and US dominate but newly emerging markets in Asia such as China, Hong Kong, Singapore, South Korea, Malaysia and Japan are increasing in importance.
- In July 2006 the Department of Agriculture, Fisheries and Forestry and Wine Grape Growers Association of Australia Inc initiated the Taking Stock and Setting Directions Project focussing on wine grape production issues, the latter project involved a workshop with industry stakeholders to identify issues of most importance.
- key issues identified for the Australian wine industry which are either partly or wholly applicable to the Barossa Valley include the need for, improved marketing of wines, benchmarking against international competitors, adoption of new business models, collaboration between producers, achievement of economies of scale and lower cost of production, increased innovation, improved water use efficiency and adaptation to climate change, implementation of best practice in natural resource management and increasing investment in human capital.
- The Wine Industry Restructure Review indicators for wine regions most likely to succeed in the future place the Barossa Valley as a highly competitive region based on quality, attributes and limited exposure to climate change impacts.

B.5 Aquaculture – Issues identified in RDA Roadmap

• Aquaculture is an insignificant industry but potential exists for aquaculture in the coastal zone outside marine park areas.

C. Population and settlements – Principles and policies

- Ensure a mixture of housing types and choice to cater for the changing needs of new and existing residents including retirees, families and professionals;
- Locate new housing developments within close proximity to townships, jobs and services;
- Ensure new developments are world-class encouraging a vibrant and creative culture;
- Promote social inclusion and fairness ensuring equal access to jobs and services throughout the region and capitalise on rural towns capacity for community building;
- Preserve and enhance the existing history, heritage and character of the region;
- Promote the development of healthy, safe and connected communities incorporating crime prevention through environmental design principles containing accessible and useable open space and sporting facilities;
- Promote affordable lifestyles by designing housing and suburbs to reduce reliance on motor vehicles and minimise water and energy costs.

C.1 Population – Issues identified in RDA Roadmap

- Most residents are settled in smaller townships of up to 4,000 persons, Gawler is the largest regional town with 21,041 persons (ABS, preliminary estimate, 2010)
- The 30 Year Plan provides for an additional 110,000 people to reside in the Barossa Region over the next 30 years principally at Gawler and Roseworthy, with substantial growth also at Two Wells.
- Gawler and surrounds is a growth pole for the Adelaide metropolitan region, new residents are attracted by transport infrastructure i.e. Northern Expressway and metropolitan rail connection providing accessibility to Adelaide's CBD.
- There is community resistance to urban sprawl, many residents are apprehensive about the rapid residential development of the region at the expense of agricultural land, heritage, natural amenity and rural atmosphere, many feel as if land developers will benefit rather than existing residents.
- Long term population growth would be supported by a train service linking Roseworthy to Gawler Central, decreasing city commute times and improving access to jobs and schools in Adelaide's metropolitan area, as well as giving northern Adelaide access to facilities to be developed at Roseworthy including the campus of the University of Adelaide and potentially health facilities.

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

- The proportion of the workforce made up of tradesmen and labourers is higher than the state average but below the state average for professionals.
- Most workers are employed in manufacturing, retail, health and community services and agriculture, forestry and fishing, although employment in agriculture declined between 2001 and 2006.
- The older age structure of the agricultural workforce poses a challenge for food and grape growers of finding young and skilled workers to replace older retiring workers.
- The Parallel Rural Community Curriculum (PRCC) program offers medical students the chance to train in rural practices such as Gawler, Angaston, Nuriootpa, Tanunda and Kapunda, students gain experience and an insight into rural and remote health issues throughout their placement.

- Youth Surveys indicate a quarter of school children plan on leaving the Barossa region, the main reasons cited were to pursue further education and access to greater employment opportunities.
- Promote alternative jobs in knowledge services, especially services to key industries as well as trades to provide for construction related to the growth agenda, and a more diverse economy driven by high value agriculture, online opportunity and new business models.
- Regional amenity and existing university and TAFE facilities provide opportunity for growth in education services, centres of research and centres of excellence.
- The regional unemployment rate is below the state average; labour force participation is above the state average.

D. Infrastructure and services provision – Principles and policies

- Protect and build on the regions strategic infrastructure;
- Leading infrastructure for sustainable development.

D.1 Infrastructure – Issues identified in RDA Roadmap

- The Northern expressway (completed in 2010) provides an alternative transport route across the northern metropolitan area alleviating the impact of freight transport on suburban areas.
- Planning to link the Port River Expressway and Northern Expressway combined with duplication of the Sturt Highway (completed in 2010) will cut commuting times between the Sturt Highway and Outer Harbor by 20 minutes and improve freight transport access to the airport and seaports.
- Upgrades to the Gawler rail line includes new tracks, electrification and new rail cars decreasing rail commute times from Gawler to Adelaide, forming one of five fixed-line transit corridors for Greater Adelaide.
- Rail infrastructure from Gawler to Freeling, Roseworthy and Concordia is in place but currently has no operating passenger train services, upgrades to the Roseworthy track and infrastructure is urgent for the development of walkable, non-car centric development for Roseworthy Garden Town.
- Public transport infrastructure outside of Gawler is limited, only Angaston, Gawler, Nuriootpa and Tanunda receive limited seven-day-a-week bus services connecting to Gawler, Elizabeth and Adelaide.
- Improvements in communications technology are required in most council areas, some critical; Mallala residents have limited broadband access and are restricted to slower and more expensive satellite or wireless services.
- New growth areas around Gawler and towns in the Barossa Valley will require development/upgrading of water and energy infrastructure including water reuse infrastructure.
- Ongoing population growth will strain service delivery at local hospitals in Angaston, Eudunda, Gawler, Kapunda and Tanunda, requiring improved transport to access hospitals and accident and emergency services at Gawler Health Service and expansion and upgrade of all facilities.
- Planned expansion of aged care facilities especially in Gawler.
- There is a need to rethink retail and shopping infrastructure in towns to stem the loss of sales to Adelaide city and surrounding suburbs.
- The new Barossa Recreation and Fitness Centre in Tanunda improves liveability infrastructure and provides opportunities for leverage.

• Broadband backhaul cable to Broken Hill runs via the Barossa Valley providing enormous infrastructure to towns including Gawler, Lyndoch, Tanunda, Nuriootpa, Angaston, Greenock and Kapunda, this infrastructure whilst in place cannot be properly accessed until NBN rollout in the region.

In community consultations residents were asked to identify what infrastructure they believed the Barossa region critically needed in the foreseeable future. Most common responses regarding new infrastructure requirements included.

- New recreational and leisure facilities, artificial hockey pitch, improved recreational and sporting facilities and new cinema complex, upgraded walking and cycling paths and construction of new paths.
- Modern hospital facilities to replace aged health facilities in Tanunda and Angaston and to provide not only for regional population expansion but to service adjacent areas without services or (in the case of northern Adelaide) with services at capacity.
- Aged care and retirement accommodation to keep pace with demand.
- Improved transport corridors, upgraded roads, sealed dirt roads and improved public transport.
- Critical road directional and tourism signage.
- Provision of a digital television service across the entire area, faster internet speeds and wider coverage.

Although development of infrastructure mentioned in community consultation is a high priority many residents are also concerned at the speed of change in the Barossa region and possible impact on rural lifestyles. Comments from residents show a more balanced approach to urban development to prevent the Barossa region becoming another suburb of Adelaide and losing its appeal and value as a wine and tourism destination is needed. Residents of the Barossa Valley viewed additional population growth as a threat to the region's wine industry as prime viticultural land could be sold to make way for residential housing developments. One resident raised the concern *"we want to protect the region from hyper development, ensuring that we don't see the region's world class visual and cultural assets of landscape and agricultural diversity destroyed by large scale residential development"* (community consultations in 2011). Communities in the Barossa region want population growth and associated infrastructure development to be sustainable to maintain the character and attraction of the area.

Major projects

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

Barossa

Project title:	Dorrien 3 rd Transformer
Organisation:	ElectraNet Pty Ltd
Project details:	Proposed construction of a third 60MVA 132/33 kV transformer at the Dorrien substation to ensure service standards in the Barossa Valley, Templers and Gawler area continue to meet requirements of the Electricity Transmission Code beyond 2013/2014.
Project cost:	\$7 million
Estimated completion date:	October 2012
Status:	Pending

Gawler

Project title: Organisation: Project details: Project cost: Estimated completion date: Status:	Gawler East (trading name yet to be determined) Lend Lease Planned construction of a master-planned community in Gawler East housing 6,000 residents in 2,500 homes upon completion. The site is located 37km from Adelaide's CBD and 1.2km from the main street of Gawler along Carlton Road. \$1 billion 2022 Approved
Project title: Organisation: Project details: Project cost: Estimated completion date: Status:	Gawler Racecourse (South) – Gawler Green Shopping Centre Leedwell Property Pty Ltd Development of a new retail shopping centre complex comprising, a supermarket and specialty stores measuring 5,900 sqm, a new hardware and bulky goods store and medical centre. \$30 million Late 2012 Pending

Table 1: Other major projects, RDA Barossa

Project	Project cost (\$m)	Status
Barossa Gawler Bike Path	5.0	Construction underway
D'Vine Ripe Horticulture facility expansion, 10 hectares	31.0	Completed
Five star accommodation at Seppeltsfield Winery	n.a	Under consideration
Gawler Gateway Project	1.3	Funded
Greater Gawler Stormwater Project	20.0	Application submitted for funding
IWS/AGL biogas fired power generation	n.a	Feasibility
Martindale Nursing Homes Gawler	28.0	Development approval
Nitschke Chaff and Freight	1.0	Funded
Roseworthy Garden Town: Masterplanning for a town of 60,000	n.a	Masterplan completed, infrastructure planning underway
Roundabouts at the intersection of Samuel Rd/Seppeltsfield Rd/Stelzer Rd and Samuel/Greenock Rds on freight route for Light Regional Council	4.4	Funding requested
Stockwell Hockey Field	1.2	Funded
Tanunda Lutheran Homes aged care centre 50 new beds	18.0	Construction underway
The Louise Resort	10.0	Approved
Trade Training Centre in Nuriootpa	4.5	Funding approved
Trevu House Gawler additional 24 beds	n.a	Approved
Two Wells residential development: homes for 10,000 people	n.a	Statement of intent lodged
University of Adelaide Vet School at Roseworthy	37.0	Completed

Source: Correspondence with Anne Moroney, CEO of Regional Development Australia Barossa and Barbara Lightburn, Business Investment and Job Creation Manager.

Council	Local government expenditure 2011/12 (\$)
The Barossa Council	8,237,000
Town of Gawler	6,730,000
Light Regional Council	4,846,000
District Council of Mallala	Not available

Source: South Australian Major Developments Directory 2011/12.

Appendix A

Selected Statistics: Labour market outcomes

Barossa

Population	RDA Barossa	% of State Total	South Australia
Estimated Resident Population (ERP): June 2010	66,468	4.0%	1,644,582
Net Change in ERP 2009 to 2010	1,181	-	20,992
Rate of Population Change (%)	1.8%	-	1.3%
		% of Tota	I Population
Youth (15-24)	8,486	12.8%	13.6%
Mature (45-64)	18,105	27.2%	26.3%
Aboriginal – Census 2006	610	1.0%	1.7%
People with a disability (15-64) – Census 2006	1,008	2.6%	2.7%
Labour Force (Dept of Education & Workplace Relations: March 2017	1)		
Total Employed	33,269	-	812,100
Total Unemployed	1,568	-	47,200
Unemployment Rate	4.5%	-	5.5%
Participation Rate (June 2010)	65.5%	-	62.7%
Industry Employment (Census 2006)		% of Total E	mployment
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	mproymont
Manufacturing	5,797	20.6%	13.2%
	5,797 3,728		
Manufacturing		20.6%	13.2%
Manufacturing Retail Trade	3,728	20.6% 13.3%	13.2% 14.7%
Manufacturing Retail Trade Health and Community Services	3,728 2,844	20.6% 13.3% 10.1% 8.3% % of Total	13.2% 14.7% 12.7%
Manufacturing Retail Trade Health and Community Services Agriculture, Forestry and Fishing	3,728 2,844	20.6% 13.3% 10.1% 8.3% % of Total	13.2% 14.7% 12.7% 4.7% Population
Manufacturing Retail Trade Health and Community Services Agriculture, Forestry and Fishing Qualifications (Census 2006)	3,728 2,844 2,337	20.6% 13.3% 10.1% 8.3% % of Total (15 years	13.2% 14.7% 12.7% 4.7% Population s and older)
Manufacturing Retail Trade Health and Community Services Agriculture, Forestry and Fishing Qualifications (Census 2006) Degree or higher	3,728 2,844 2,337 3,895	20.6% 13.3% 10.1% 8.3% % of Total (15 years 14.8%	13.2% 14.7% 12.7% 4.7% Population and older) 13.0%
Manufacturing Retail Trade Health and Community Services Agriculture, Forestry and Fishing Qualifications (Census 2006) Degree or higher Diploma	3,728 2,844 2,337 3,895 2,875	20.6% 13.3% 10.1% 8.3% % of Total (15 years 14.8% 11.0%	13.2% 14.7% 12.7% 4.7% Population and older) 13.0% 6.5%
Manufacturing Retail Trade Health and Community Services Agriculture, Forestry and Fishing Qualifications (Census 2006) Degree or higher Diploma Certificate Level III or IV	3,728 2,844 2,337 3,895 2,875	20.6% 13.3% 10.1% 8.3% % of Total (15 years 14.8% 11.0% 29.4% % of State	13.2% 14.7% 12.7% 4.7% Population 5 and older) 13.0% 6.5% 14.3%
Manufacturing Retail Trade Health and Community Services Agriculture, Forestry and Fishing Qualifications (Census 2006) Degree or higher Diploma Certificate Level III or IV Training (NCVER 2009)	3,728 2,844 2,337 3,895 2,875 7,707	20.6% 13.3% 10.1% 8.3% % of Total (15 years 14.8% 11.0% 29.4% % of State Total	13.2% 14.7% 12.7% 4.7% Population and older) 13.0% 6.5%
Manufacturing Retail Trade Health and Community Services Agriculture, Forestry and Fishing Qualifications (Census 2006) Degree or higher Diploma Certificate Level III or IV Training (NCVER 2009) VET Students	3,728 2,844 2,337 3,895 2,875 7,707	20.6% 13.3% 10.1% 8.3% % of Total (15 years 14.8% 11.0% 29.4% % of State Total	13.2% 14.7% 12.7% 4.7% Population and older) 13.0% 6.5% 14.3%

 $\underline{Source}: \ \ data \ extracted \ from \ Workforce \ Wizard, \ DFEEST, \ November \ 2011$