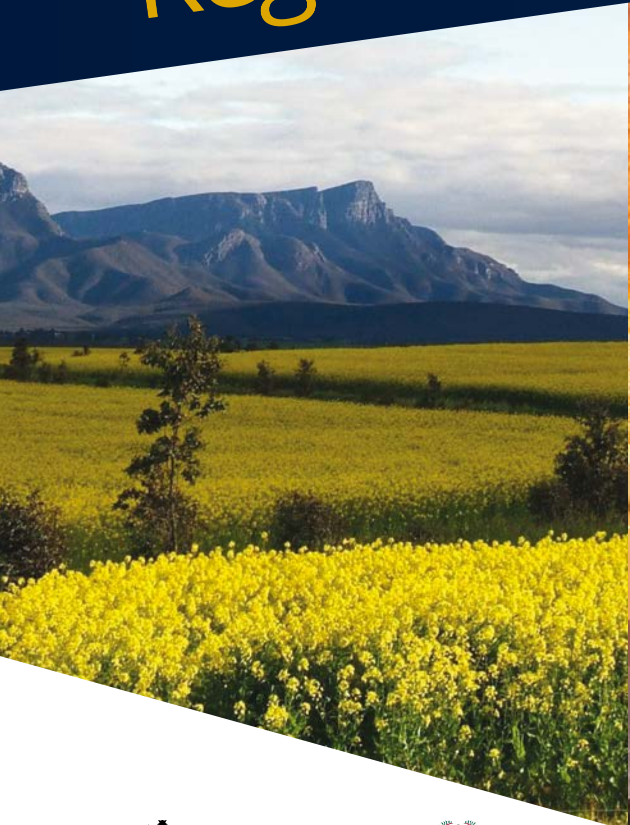
Great Southern

Regional Investment Blueprint



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Great Southern
Regional Investment Blueprint

GREAT SOUTHERN DEVELOPMENT COMMISSION

REGIONAL DEVELOPMENT AUSTRALIA - GREAT SOUTHERN

OCTOBER 2015

Acknowledgements

The *Great Southern Regional Investment Blueprint* is the culmination of more than two years of focused effort. This reflects not only the degree of consultation, research and analysis that has been invested in it, but also the fact that, at the time of its commencement, there was no widely accepted template for what constituted a sound regional blueprint.

In this context, the Great Southern Development Commission acknowledges and appreciates the contribution of a number of individuals and organisations to its production. These include Dr Richard Ball of Keston Technologies, Sue Middleton of WA Grassroots Development, Rebecca Weadon of Croker Lacey Graphic Design, the Office of the Minister for Regional Development, Bill Scanlan of ACIL Allen, Dr Karen Nichol, RPS and extensive consultations with a broad cross-section of the region's stakeholders. The latter, either in groups or as individuals, included the elected or appointed representatives from all local governments in the Great Southern, who gave up their time to be interviewed and provide feedback as part of the consultation process.

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Document Status

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Beneficial development of a region arises from sound investment decisions made with a clear understanding of strategic objectives and long-term consequences. Through this document, the Great Southern Development Commission (GSDC) and Regional Development Australia–Great Southern (RDA-GS) aim to provide a blueprint for the future development of the Great Southern that will guide and inform investment decisions to benefit current and future residents of the region.

People of the Great Southern hold rich and varied aspirations for their personal lives, their families and their communities. Ambitions and plans that emerge at personal and grass-root levels form the character of communities and local governments. Together these shape the activity and enterprise of the region, with all its requirements for infrastructure and services.

As a Western Australian State Government agency with a leadership role in the economic development of the Great Southern, the GSDC is committed to ensuring that regional growth serves the aspirations of the people who choose to live and work in the region. RDA-GS works to the same end from the Commonwealth Government perspective.

From local characteristics to global trends, the *Great Southern Regional Investment Blueprint* examines the context of the regional economy and identifies ways in which its people and institutions can progress. Outside factors that drive or inhibit the regional economy are assessed and key actions are identified to chart an optimal course for the region's future.

Setting up such a framework for growing the Great Southern is a welcome task for the GSDC and RDA-GS, taken as a significant responsibility on behalf of the people of a precious part of Western Australia. The Great Southern has a proud Noongar history and holds the heart of the European settler story in this state. It is a beautiful and benevolent area that naturally nurtures a strong sense of regional identity in its residents.

Through the *Great Southern Regional Investment Blueprint*, the GSDC and RDA-GS are committed to continuing the sustainable development of the Great Southern.

Peter Rundle
Chair, Great Southern Development Commission

Greg Stocks
Chair, Regional Development Australia–Great Southern

GSDC Chair Peter Rundle

RDA-GS Chair Greg Stocks

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ENVISAGE THE GREAT SOUTHERN IN 2040...

A diversified economy aligned to national and international opportunity supporting healthy, safe and resilient communities.

ECONOMIC GROWTH AND DIVERSIFICATION

The region is delivering:

- A range of innovative and profitable commercial enterprises within each industry sector
- Visionary companies that recognise the economic value of the region's natural capital
- A workforce of 60,000 highly skilled contractors and employees
- Efficiency driven agri-business growth, with secure access to final markets

INFRASTRUCTURE AND SERVICES

The region is delivering:

- Timely, effective and efficient infrastructure and services that are meeting the needs of the region's residents
- High quality transport, energy, water and IT infrastructure that is enabling the region to leverage its comparative advantages
- Serviced industrial hubs to support a wide range of commercial enterprises
- Systems to optimise the diversion of all regional waste to productive use

KNOWLEDGE AND INNOVATION

The region is delivering:

- Tertiary level education to over 3,000 region based students from Australia and around the globe
- Access to world standard learning technologies from early childhood to tertiary level
- Specialist trades training and professional skills through institutes that are linked to the needs of local, national and international markets
- Strengthened links between education, training, industry and employment sectors

COMMUNITY AND ENVIRONMENT

The region is delivering:

- Thriving communities that appreciate the value of the region's natural capital as an integral part of their businesses and institutions
- The physical resources and social infrastructure to support a population of 100,000 that is continuing to grow
- A mix of world class public and private sector options in health care, housing, recreation, sporting and cultural activities
- A community culture that values and has embraced lifelong learning

EXECUTIVE SUMMARY

People in the Great Southern live in a wonderful region and enjoy a stunningly beautiful natural environment. Great Southern people are industrious, creative and welcoming, and take pride in their rich heritage. The sense of community spirit is evident region-wide.

The outcome of widespread consultation and research, the *Great Southern Regional Investment Blueprint* reflects how people of the region see their lives, their values and their hopes for the future in relation to the development of their region. The resulting vision and mission form guiding principles within this document for the region over the coming decades.

VISION

THE
GREAT SOUTHERN
IS RECOGNISED
INTERNATIONALLY
AS A NATURAL CHOICE
FOR OPPORTUNITY
AND LIFESTYLE

MISSION

RESPECT AND ENHANCE THE REGION’S ENVIRONMENT AND HERITAGE ASSETS

GROW AND DIVERSIFY THE REGION’S ECONOMY THROUGH ENHANCED ENGAGEMENT WITH EXISTING AND EMERGING MARKETS

IMPROVE AND MAINTAIN ESSENTIAL INFRASTRUCTURE AND SERVICES

ENCOURAGE KNOWLEDGE AND INNOVATION THAT BENEFITS THE REGION

BUILD STRONG COMMUNITIES

Figure 1 Logic of the Regional Blueprint

PURPOSE AND PROCESS

This *Great Southern Regional Investment Blueprint* will guide the region's progress towards its vision for the period to 2040. To do this, it establishes a strategic framework for development across the region in all facets of life. It seeks to transform the way the different levels of government coordinate infrastructure development and service delivery, while attracting an increasing level of investment from the private and not-for-profit sectors to drive job creation, economic growth and community sustainability.

Achieving the vision will mean building on existing areas of comparative advantage, leveraging beneficial outcomes from emerging global trends, maximising connections to national and international markets, and improving social and environmental outcomes in a time of dynamic change.

Developing the Regional Blueprint involved more than two years of research and analysis that included assessing regional issues, cross-regional connections and global trends, and conducting a strategic review of the region's comparative advantages and challenges. Concurrent with this research and analysis, key stakeholders were consulted from private enterprise, community service providers and government.

This process built a vision for the future, established a range of aspirational targets and identified transformational opportunities to meet these targets. Local government was a key contributor and will have a vital role in realising these opportunities.

Figure 1 depicts the logic of the Regional Blueprint development process.

Figure 2 Great Southern local government areas and adjoining regions

REGIONAL IMPERATIVES

Analysing the state of the region, assessing global trends and weighing the Great Southern's advantages and challenges leads to four regional imperatives that are fundamental to the region's economic and social development, growth and prosperity to 2040:

ECONOMIC GROWTH AND DIVERSIFICATION – Increasing the diversity of economic drivers of the Great Southern will support dynamic and sustainable growth of the economy and communities in the medium to long term.

ESSENTIAL INFRASTRUCTURE AND SERVICES – Critical investments in essential infrastructure and services capacity are necessary in order to support growth in the Great Southern.

KNOWLEDGE AND INNOVATION – Future improvements in industry productivity, business profitability and household incomes will be underpinned by greater focus on knowledge-intensive services and innovation across all sectors.

COMMUNITY AND ENVIRONMENT – Growing the prosperity and quality of life of residents is the primary objective of economic development in the Great Southern. This includes protecting the region's natural capital, that is, the environment, and generating amenity through the delivery of quality services to local communities.

The regional imperatives are interlinked and all need to be pursued in order to achieve the vision that the Great Southern is recognised internationally as a natural choice for opportunity and lifestyle. The regional imperatives define what the region is attempting to achieve.

In order to identify the scope of possible responses to the regional imperatives, information was gathered about relevant planned and potential projects from across the region and collated into a project inventory. From this comprehensive (and continually evolving) inventory, key initiatives were identified as collectively the most effective options for realising the Great Southern's vision and were grouped into a series of transformational projects (see Figure 3).

TRANSFORMATIONAL PROJECTS

Seven transformational projects lie at the heart of this Blueprint. Each is a compilation of key initiatives from the project inventory and together they have the potential to positively transform the Great Southern over the decades to come.

Connection with the natural environment is integral to the lives of Great Southern people. Accordingly, consideration of environmental and heritage values underpins all of the region's transformational project opportunities.

GROWING VALUE	Premium Food Production and Value Adding: Further expand production, value adding and international marketing of the region's food products.
ACCESS TO ENERGY	Energy Security: Ensure the Great Southern has access to a range of energy sources that are affordable and secure and able to meet the requirements of industry and the community.
WATER FOR GROWTH	Water Security: Ensure the long-term security of the Great Southern's water supply to meet industry and community requirements.
AVENUES TO OPPORTUNITY	Transport and Industry Hubs: Ensure the region's transport network has the capacity to safely and efficiently provide connections to domestic and export markets, and provide industry hubs for regional enterprises.
CONNECTED GREAT SOUTHERN	Thriving in the Digital Age: Integrate and expand the Great Southern's engagement with the global digital environment in order to develop learning and research initiatives with national and international connections and maximise the region's capacity to harness business and investment opportunities.
DESTINATION OF NATURAL CHOICE	Iconic and Creative Tourism: Further develop the Great Southern's iconic tourism product and its marketing to prospective visitors, and support the growth of a dynamic arts and creative sector with links to the tourism industry.
STRONG COMMUNITIES	Community Development and Amenity: Maintain and enhance the region's communities to ensure the Great Southern is recognised as a preferred region in which to live, work and invest.

Figure 3 Transformational Projects

MEASURING SUCCESS

Listing and initiating projects, transformational or otherwise, is not sufficient to meet community expectations for the development of a region. This Blueprint sets directions in governance to maintain the integrity of the implementation process. Further, it establishes criteria by which successful implementation can be measured.

ECONOMIC GROWTH AND DIVERSIFICATION

Envisage, by 2040, the Great Southern will have:	Success will be measured by:
A strong, resilient economy,	The region's gross regional product (GRP) will have grown by at least 5 per cent compounded annually.
Which is diversified,	The region's industry sectors will be more diversified since: • Tourism as a percentage of regional turnover will have doubled to 20 per cent. • Horticultural production will have doubled in value to more than $50 million annually. • The value of aquaculture production and fishing will have increased three-fold. • Mineral exports by volume will have exceeded 3.5 million tonnes per annum.
Adding value to its primary production,	The value of the regional manufacturing sector as a percentage of regional turnover will have increased to 20 per cent. A quarter of the volume of forestry produce will be used for secondary processing in the region.
And supplied by a strong workforce	The region's workforce will have increased to 60,000, and will have an unemployment rate below the state average. The region will be a base for 2,000 fly-in fly-out (FIFO) workers.
Which is rewarded for its efforts.	The region will have a mean personal taxable income in line with the state average.

ESSENTIAL INFRASTRUCTURE AND SERVICES

Envisage, by 2040, the Great Southern will have:	Success will be measured by:
Secure energy supplies across the region,	The region will have access to natural gas in key locations, including Albany and Mount Barker. The region's electricity network will be as reliable as the network that services the Perth metropolitan area (reliability as measured by the System Average Interruption Duration Index) with sufficient capacity for an expanded industrial sector and a resident population of up to 100,000. The region will supply at least 250MW of renewable energy.
Secure water supplies across the region,	The region will have secure, sustainable water supplies sufficient for an expanded industrial sector and a resident population of up to 100,000. The region will recycle 100 per cent of its wastewater.
Safe and efficient transport links,	The Port of Albany will have expanded capacity to accommodate new export trades in minerals and value added products, with the capacity to service a container trade. The region's roads will efficiently and safely accommodate traffic needs including the capacity to cater for increased volumes associated with industry and tourism. The use of rail for transporting bulk commodities to the Port of Albany will have increased from 50 per cent of export product to 70 per cent. Passenger numbers through Albany Regional Airport will grow 3.5 per cent annually to 150,000.
With access to quality industrial sites	There will be sufficient serviced industrial land to attract increased industry activity across the region.
And high standard digital links.	The region will have telecommunications infrastructure comparable to services in the Perth metropolitan area. High speed broadband will be available to 100 per cent of residents and businesses, and access to digital delivery of services will be above regional Australian averages.

KNOWLEDGE AND INNOVATION

Envisage, by 2040, the Great Southern will have:	Success will be measured by:
Excellent educational opportunities,	The Australian Early Development Census (AEDC) scores for the region will be above the state average. Educational outcomes (including the proportion of students completing high school and attainment of qualifications) for all Great Southern students will be comparable to those achieved in metropolitan schools.
With a vibrant tertiary education sector	The region will have a tertiary education sector that hosts over 3,000 full-time equivalent tertiary students, 30 per cent of whom will be from overseas. The region's tertiary education sector will be recognised as adding value to regional industry and the wider community through engagement with artistic, scientific and cultural activities.
That services the region's industries	Trade skills requirements for key regional industries will be fully provided from vocational training and apprenticeship programs in the region. The region's tertiary and research organisations will be recognised for excellence in marine, agricultural, natural resource management and health economics and research. The region's research base will be fully engaged with industry and community, as evidenced through the extent of innovation, collaborative research and development programs and outcomes.
And drives innovation	Measures of innovative activity (including research and development spend, network membership and activity levels, new product and service development) among regional businesses will be higher than regional Australian averages.
And entrepreneurial activity.	The region will have the highest levels of small business creation and operation in Western Australia.

COMMUNITY AND ENVIRONMENT

Envisage, by 2040, the Great Southern will have:	Success will be measured by:
A critical mass of residents,	The region's population will have grown to 100,000 and will be distributed across the region. Katanning's Regional Centres Development Plan (RCDP) vision and targets will have been achieved, sustaining a key service hub for the central Great Southern.
Who are healthy,	Access to health infrastructure and services will be comparable to that in the metropolitan area. The region will have comparable health outcomes to the metropolitan area.
Active and engaged,	The region will have sport and recreation infrastructure that meets Australian standards for core sporting codes. The region will host more than 12 national and/or international sporting events per year. Physical activity rates will be comparable with those for Western Australia as a whole. The Great Southern will be recognised as the premier region for arts and culture in Western Australia. Over 30 per cent of the population will be engaged as volunteers in activities that benefit the community.
And concerned for the region's environment,	The region will be recognised as an exemplar for best practice management of its heritage assets, and natural resources across land, water, coastal and marine assets. 100 per cent of recyclable waste will be converted into alternative uses or energy.
Leading to a strong sense of wellbeing.	The region will offer a range of affordable public and private housing options that have the capacity to cater for a projected population of up to 100,000. Seniors will be able to remain living independently in communities across the region through a choice of quality and affordable accommodation, and home-based support services. The region's residents will feel safe and secure, with measures of both perceptions of safety and incidence of crime comparable with Western Australia as a whole.

WIDER BENEFITS

Meeting these aspirational targets will have wider benefits for Western Australia and for Australia. They are designed to significantly impact the key areas of regional export income and amenity.

Expanding the economic base through a greater range and diversity of industry activity and improved efficiencies will assist in increasing the level of exports of goods and services from the region. This, in turn, will create additional employment and educational opportunities for the region's prospective, new and existing residents.

Employment opportunities are an important influence on people's choices about where to live but lifestyle and quality of life will also continue to be significant factors. Western Australia's population is anticipated to grow strongly to approximately 4.2 million by 2040. Growth of the sort envisaged in the Regional Blueprint has the potential to induce step changes in regional population growth beyond the 'business as usual' forecasts of bodies such as the Western Australian Planning Commission.

Ensuring residents of the Great Southern have access to services and amenities comparable to the metropolitan area will therefore remain a priority in offering an alternative to living in Perth or other major cities. Thus, the Great Southern will play its part in easing population pressure on these environments.

Private enterprise, the public sector and the Great Southern community all have a part to play in making the sound investments that will realise the Great Southern's vision for a confident, robust region in 2040. Working together, guided by an agreed Blueprint, will help to build a Great Southern that is recognised internationally as a natural choice for opportunity and lifestyle.

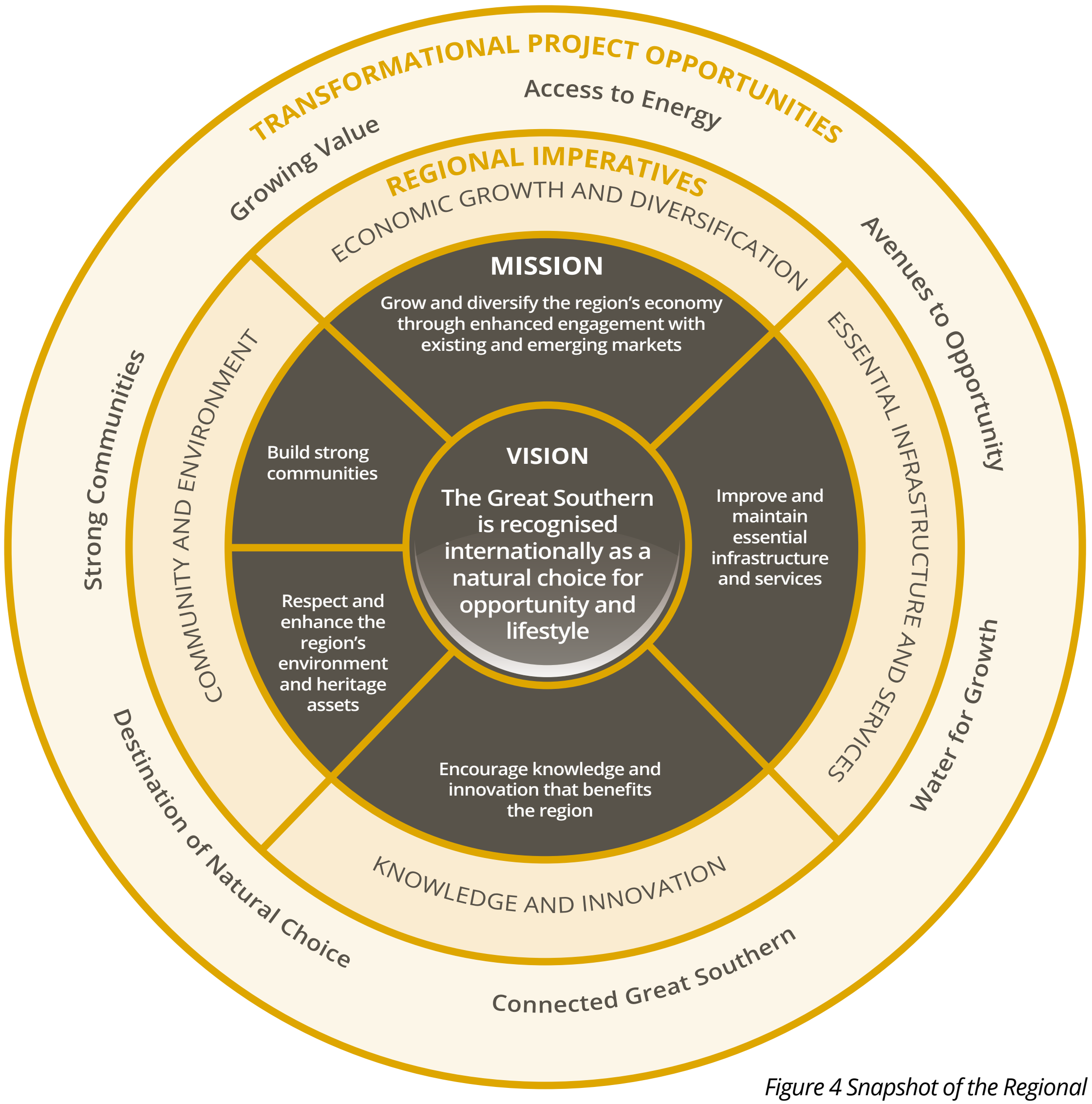

Figure 4 Snapshot of the Regional Blueprint


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INTRODUCTION

PURPOSE OF THE REGIONAL BLUEPRINT

Regional Blueprints provide a strategic framework and evidence base to support future economic development and strategic planning at the local area level. Blueprints have the potential to transform the way local, state and Commonwealth government agencies coordinate investment and service delivery in the regions of Western Australia.

The *Great Southern Regional Investment Blueprint* establishes the priorities for the development and growth of the Great Southern. It provides not only the public sector but also private investors, businesses and the community with an aspirational, evidence-based strategic direction for the region.

Structuring Regional Development for the Future (the Duncan Review) in 2010 first identified the benefits of Regional Blueprints for Development Commission areas across the state. A Regional Blueprint is a strategy that outlines regional growth and development aspirations, transformational projects and investment opportunities and an integrated and comprehensive approach to regional planning. Blueprints provide structures to respond to change, and to plan and implement transformative initiatives in a region in a strategic and comprehensive manner. They will be used to coordinate resources to address challenges and opportunities that arise, and they contain measures to track progress towards set goals and imperatives. Essentially, a Blueprint is a tool that helps a region to achieve its vision.

Local government is an important stakeholder in the facilitation and management of economic growth in the Great Southern. The *Great Southern Regional Investment Blueprint* seeks to provide a holistic, region-wide framework within which the unique comparative advantages, opportunities and challenges of local communities can be contextualised and addressed.

The *Great Southern Regional Investment Blueprint* was prepared concurrently with the Western Australian Planning Commission's *Great Southern Regional Planning and Infrastructure Framework*. This Regional Blueprint complements the Framework and aims to provide guidance to government agencies and local government on land use, supply and development, environmental protection, infrastructure investment and the delivery of physical and social infrastructure for the region. It also provides a framework for the preparation of subregional and local planning strategies.

METHODOLOGY

The *Great Southern Regional Investment Blueprint* is based on the "4Ps" of effective and practical development strategies for an economic unit, in this case a regional economy. The 4P analysis looks at four components:

- PROFILE – An outline of the characteristics of the region, including population, demographic, socioeconomic, industry, business, social and community features and attributes is presented in this Blueprint's Regional Analysis. In developing the Regional Analysis, the most recent publicly available data has been used. It should be recognised that there are variations in the release dates of different data sets.

- PERSPECTIVE – A study of the context within which the regional economy is positioned, including consideration of external and global factors and trends that will influence future economic development, is presented in the Megatrends section of the Regional Blueprint.

- POTENTIAL – An assessment of the drivers and challenges facing the economy and outline of the future economic opportunities of the region is in the Competitiveness and Connectivity section of this Blueprint.

- PRACTICAL – Key actions, initiatives, projects and investments required of all of the region's stakeholders in order to support the realisation of the aspirational vision are in the Regional Intent section of this Blueprint.

Figure 5 Logic of the Regional Blueprint

Characteristics, drivers and challenges facing the Great Southern economy to 2040 were assessed and analysed to profile the region and identify its comparative advantages in the context of internal and external influences. Consultations with stakeholders in local communities, key regional organisations and all tiers of government took place throughout the development of the Regional Blueprint.

Transformational actions, projects and initiatives required to achieve the vision for the region are also outlined to inform the practical efforts of government, the private sector and regional communities, to maximise the prosperity, sustainability and dynamism of the Great Southern economy into the future.

Figure 5 depicts the Regional Blueprint development process.

REGIONAL IMPERATIVES

Various aspirations for the future of the region emerged from the Regional Blueprint development process. People in the region want to create a Great Southern with more opportunity and more global connection while retaining the unique advantages of this select area of Western Australia. The Great Southern's vision for its future as an internationally recognised natural choice for opportunity and lifestyle is captured in four regional imperatives:

ECONOMIC GROWTH AND DIVERSIFICATION – Increasing the diversity of economic drivers of the Great Southern will support dynamic and sustainable growth of the economy and communities in the medium to long term.

ESSENTIAL INFRASTRUCTURE AND SERVICES – Critical investments in essential infrastructure and services capacity are necessary in order to support growth in the Great Southern.

KNOWLEDGE AND INNOVATION – Future improvements in industry productivity, business profitability and household incomes will be underpinned by greater focus on knowledge-intensive services and innovation across all sectors.

COMMUNITY AND ENVIRONMENT – Growing the prosperity and quality of life of residents is the primary objective of economic development in the Great Southern. This includes protecting the region's natural capital, that is, the environment, and generating amenity through the delivery of quality services to local communities.

These imperatives were developed through regional analysis and consultation and represent the priorities of the Great Southern over the period to 2040. This Blueprint seeks to engage these priorities by rallying government, business, community group and resident support through a diverse range of interrelated actions, projects and initiatives.

PLANNING AND POLICY FRAMEWORK

This Blueprint has not been developed in isolation; it has been guided by an extensive range of policies, strategies, plans and frameworks covering a diversity of issues and opportunities in the Great Southern, regional Western Australia and Australia. In particular, this Blueprint seeks to complement the work of the Commission's federal partner in regional development in the Great Southern, Regional Development Australia–Great Southern (RDA-GS). Thus, RDA-GS's *Regional Plan 2013-2018* has been a key source document in the development of the Regional Blueprint. The GSDC and RDA-GS take a collegiate approach in addressing regional development issues.

THEMES OF STRATEGIC IMPORTANCE

Five themes of strategic importance were identified in 2011 by the Council of Australian Governments, the peak intergovernmental forum in Australia. These five themes are still relevant and lie at the intersection of jurisdictional responsibilities:

- A long-term strategy for economic and social participation
- A national economy driven by our competitive advantages
- A more sustainable and liveable Australia
- Better health services and a more sustainable health system for all Australians
- Closing the gap on Indigenous disadvantage.

These themes represent fundamental issues for the Australian economy and are acutely relevant to the growth and development of the Great Southern to 2040. This Blueprint seeks to contribute to achieving lasting solutions to these national themes in the region and establishes a dynamic framework for regional priorities to be identified, considered and addressed on an ongoing basis.

REGIONAL DEVELOPMENT POLICY FRAMEWORK AND STATE PLANNING STRATEGY

This Regional Blueprint operates under the Regional Development Policy Framework of the Regional Development Council and the Western Australian State Planning Strategy. Its development was supported by Royalties for Regions funding.

A major purpose of the Regional Blueprint is to identify significant public and private sector investment opportunities. This includes identifying potential transformational projects that can help to prioritise Royalties for Regions funding. The Western Australian Regional Development Council and Regional Development Trust have identified focus areas for such projects, including:

- Water
- Energy
- Transport and infrastructure corridors
- Affordable housing
- Health
- Education
- Information and communications technology
- Human capacity building in regional Western Australia (Aboriginal resident focus)
- Regional land and food strategy and planning.

The vision, regional imperatives and transformational projects and actions established in this Blueprint speak directly to these priority areas.

The State Planning Strategy is the primary strategic plan for the state and was an important reference guide for the preparation of the Regional Blueprint. A number of factors identified in the strategy will drive socioeconomic change in the state in the medium to long term, including:

- Population structure and growth
- Workforce structure and growth
- Growth and changes in the global economy
- Social and economic diversification
- Urban and regional expansion
- Increasing use of technology in business and community
- Climate change.

These factors are captured in this Blueprint through an assessment of the national and global megatrends that will influence the Great Southern's development to 2040 and the factors are also captured in the identified regional imperatives. This ensures alignment of the Regional Blueprint to the State Planning Strategy.

REGIONAL PLANS AND STRATEGIES

Development and growth in regional Western Australia generally, and in the Great Southern specifically, are the subject of a range of documents, policies, plans and strategies. Documents assessed for this Blueprint include:

- *State Planning Strategy 2050* – Western Australian Planning Commission, 2014
- *Lower Great Southern Strategy 2015* – Western Australian Planning Commission, 2015
- *Great Southern Regional Planning and Infrastructure Framework* – Western Australian Planning Commission, March 2014 (Draft)
- *Great Southern Housing Needs Analysis* – Department of Housing, LandCorp, GSDC, February 2014 (Draft)
- *Great Southern Regional Water Supply Strategy* – Department of Water, 2014 (Draft)
- *Regional Development Australia Great Southern Regional Plan 2013 to 2018* – Regional Development Australia - Great Southern, 2014
- *Great Southern Workforce Development Plan 2013 to 2016* – Department of Training and Workforce Development and Great Southern Workforce Development Alliance, 2013
- *Great Southern Tourism Development Discussion Paper* – GSDC, October 2013
- *State Aviation Strategy* – Western Australian Department of Transport, August 2013 (Draft)
- *Western Australian Regional Freight Transport Network Plan* – Western Australian Department of Transport, May 2013
- *Regional Education, Skills and Jobs Plan, Western Australia* – Great Southern - Department of Education, Employment and Workplace Relations, July 2013
- *Great Southern Regional Investment Blueprint Stage 1* – GSDC, June 2013
- *Great Southern Regional Economic Development Discussion Paper* – GSDC, June 2013
- *Katanning SuperTown Growth and Implementation Plan* – Shire of Katanning, March 2013
- *Regional Centres Development Plan* - Department of Regional Development, 2009
- *Central Great Southern Economic Development Strategy* – GSDC, March 2012
- *Great Southern Strategic Plan for Maritime Heritage Tourism* – GSDC, August 2010.

LOCAL GOVERNMENT PLANS

In 2010 the State Government introduced the Integrated Planning and Reporting Framework for Local Government. Each local government authority was required to prepare a Strategic Community Plan and Corporate Business Plan that would outline the aspirational vision for the local government over the next 10 years and guide the decision-making for major projects. Local government documents as listed in Appendix 4 were reviewed as part of the Regional Blueprint development process.

REGIONAL ANALYSIS

A rich understanding of the history of the Great Southern's culture, geography and economic development informs this Blueprint

MEGATRENDS

Global shifts in demographics, resources, the environment, movement and communication are transforming the way we live, work and interact with one another

COMPETITIVENESS AND CONNECTIVITY

Prosperity and economic sustainability in a region is increasingly determined by a combination of its competitiveness with and connectivity to national and global markets

REGIONAL INTENT AND IMPERATIVES

Four imperatives are fundamental to the region's economic development, growth and prosperity: Economic Growth and Diversification; Essential Infrastructure and Services; Knowledge and Innovation; and Community and Environment

IMPLEMENTATION AND MONITORING

Progress on public sector and joint investments will be measured as the Great Southern Regional Blueprint is implemented

REGIONAL ANALYSIS

A rich understanding of the history of the Great Southern's culture, geography and economic development has informed this Blueprint and its regional imperatives. Gaining an overview of the characteristics of the region – including population, demographic, socioeconomic, industry, business, social and community features and attributes – is integral to the analysis and identification of transformational initiatives and projects.

Chief characteristics of the Great Southern are outlined in this section to establish the context in which the *Great Southern Regional Investment Blueprint* was developed. Key metrics are used to summarise the current state of relevant areas of focus.

GEOGRAPHICAL CONTEXT

The Great Southern extends along the picturesque southern coast of Western Australia and encompasses productive rural lands and communities approximately 200 kilometres inland. It covers more than 39,000 square kilometres, or 1.5 per cent of the state's total land area, and its land types range from mallee scrub in the north-east to karri forests in the south-west of the region. The Stirling and Porongurup Ranges rise in the central Great Southern. Bluff Knoll, in the Stirling Range, is the highest peak in the southern half of Western Australia.

The Great Southern enjoys a milder climate than much of the rest of Western Australia, owing to its coastal orientation and southern latitudes. The entire region is within productive agricultural climate zones, with rainfall decreasing along the coast west to east and inland away from the coast.

Early settlers recognised the primary industry potential of the region. Agriculture, horticulture, livestock and timber still remain fundamental to the regional economy. Much of the arable land in the region was cleared in the early to mid-20th century. Great Southern landholders and managers now pride themselves on a strong land care ethic and seek continuously to implement sustainability principles.

The Great Southern comprises 11 local governments:

- Albany (City)
- Gnowangerup
- Kojonup
- Broomehill-Tambellup
- Jerramungup
- Plantagenet
- Cranbrook
- Katanning
- Woodanilling
- Denmark
- Kent

The region can be considered as two distinct subregions (ABS 2007):

- King – includes coastal and hinterland communities, centred around Albany, with a cooler, more temperate climate, stronger population growth and an economy based on horticulture/poultry, seafood, timber and tourism
- Pallinup – northern and eastern agricultural communities, characterised by smaller rural communities with a strong focus on grain and livestock production.

Each subregion possesses distinct characteristics and drivers that are highly interrelated in terms of future growth prospects.

Figure 6 Key features of the Great Southern

The estimated resident population of the Great Southern was over 59,000 in 2013, representing 2.4 per cent of Western Australia's total population. The local government area catchment of the City of Albany is the largest, with approximately 36,000 persons or 61 per cent of the region's population. According to the Australian Bureau of Statistics (ABS), the Aboriginal estimated resident population is 5 per cent of the region's population.

LOCAL GOVERNMENT AUTHORITY	2003	2013	% SHARE 2013	AAGR* 2003-2013 %	ABORIGINAL % share 2011
GREAT SOUTHERN	54,367	59,234	100.0	0.9	5%
Albany (C)	32,020	36,262	61.2	1.3	4%
Broomehill-Tambellup (S)	1,237	1,167	2.0	-0.6	16%
Cranbrook (S)	1,102	1,101	1.9	0.0	2%
Denmark (S)	4,837	5,748	9.7	1.7	1%
Gnowangerup (S)	1,523	1,303	2.2	-1.5	12%
Jerramungup (S)	1,237	1,085	1.8	-1.3	2%
Katanning (S)	4,460	4,407	7.4	-0.1	11%
Kent (S)	629	528	0.9	-1.7	0%
Kojonup (S)	2,300	2,022	3.4	-1.3	6%
Plantagenet (S)	4,622	5,182	8.7	1.2	4%
Woodanilling (S)	400	429	0.7	0.7	1%

*Table 1 Estimated resident population change by local government area 2003-13 (*AAGR: Average Annual Growth Rate)*

In the decade to June 2013, the population of the Great Southern increased by slightly less than 1 per cent per year and the Western Australian Planning Commission forecast in 2012 that the population of the Great Southern would continue to rise steadily to approximately 70,500 by 2026. This forecast represents the best estimate of future population size based on current fertility, mortality and migration trends.

NOONGAR PEOPLE

The Noongar people are acknowledged as the traditional custodians of the lands of the Great Southern. The Great Southern supported a significant population of Aboriginal people for tens of thousands of years before Europeans started exploring the Southern Hemisphere. Excavations beside the Kalgan River show continued habitation by Aboriginal people from about 20,000 years ago.

ECONOMIC GROWTH AND DIVERSIFICATION

Economic growth in the Great Southern is strong. Figure 7 shows that primary production is the backbone of the region's economy through agriculture, timber and, to a lesser degree, fishing. Continued growth brings demand for skilled people to fill positions in the professional, trades and services sectors. The manufacturing and fabrication sectors are driven by the requirements of agriculture, but also have the capacity to respond to the demands of a diversifying economy.

Retail trade, construction and tourism also make significant contributions to the economy. Quality wine grapes produced in the Great Southern's five wine subregions and the high level of technology available to wine producers, have generated a need for specialist skills and opportunities in a growing sector.

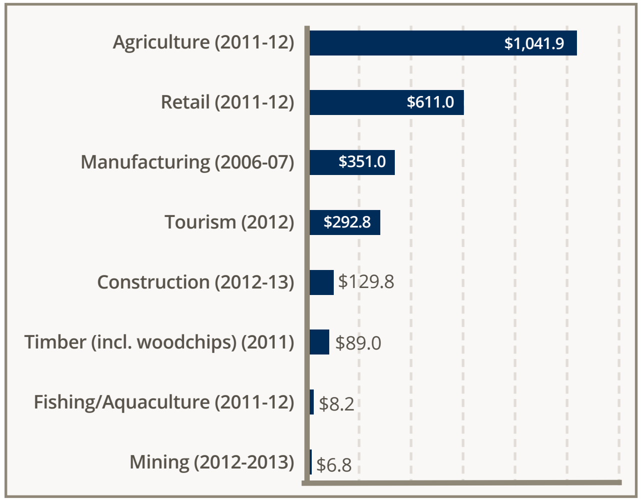


Figure 7 Value of industrial activities in the Great Southern ($m)

(Note: The figure for manufacturing comes from the Manufacturing Census of 2006-07 and is the most recent available.)

In 2012-13, the Great Southern economy was worth approximately $4.2 billion, as measured by GRP. The regional economy more than doubled in size over the previous decade, as illustrated in Figure 8 (DRD 2013b). This is a notable feat for a region that lacks a significant presence of mining and resource projects.

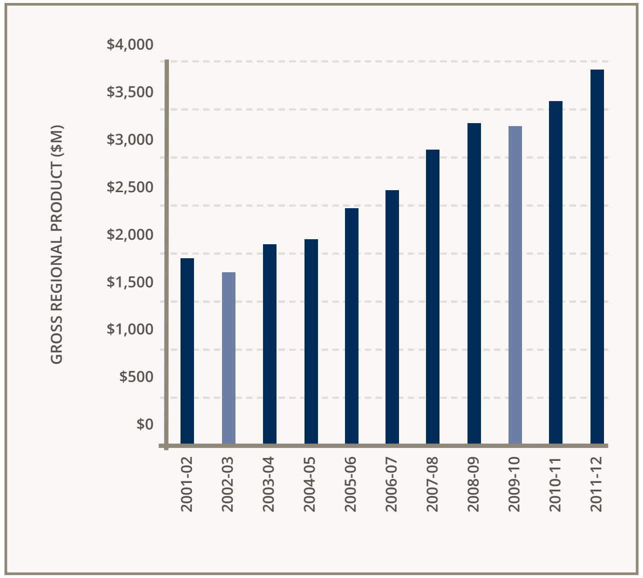


Figure 8 Gross regional product, 2002-03 to 2012-13

Employment rose in Western Australia over the past decade, driven by population and industry growth and international demand for raw material exports. The Great Southern recorded its highest level of employment at approximately 33,000 persons in 2012 and this remained strong in 2013.

INDUSTRY OF EMPLOYMENT	2011	2006
Agriculture, Forestry and Fishing	15.4%	19.2%
Retail Trade	11.5%	11.5%
Health Care and Social Assistance	10.7%	9.3%
Education and Training	8.7%	8.0%
Construction	8.5%	8.1%
Manufacturing	7.1%	7.0%
Public Administration and Safety	6.6%	5.9%
Accommodation and Food Services	5.7%	5.8%
Transport, Postal and Warehousing	4.0%	3.7%
Real Estate, Administrative and Support Services	3.8%	3.7%
Other Services	3.5%	3.4%
Professional, Scientific and Technical Services	3.5%	3.5%
Wholesale Trade	3.0%	3.5%
Mining	1.6%	0.9%
Financial and Insurance Services	1.5%	1.9%
Electricity, Gas, Water and Waste Services	1.1%	0.8%
Inadequately described/not stated	2.0%	2.5%
Arts and Recreation Services	0.9%	0.7%
Information Media and Telecommunications	0.6%	0.7%

Table 2 Employment by industry breakdown

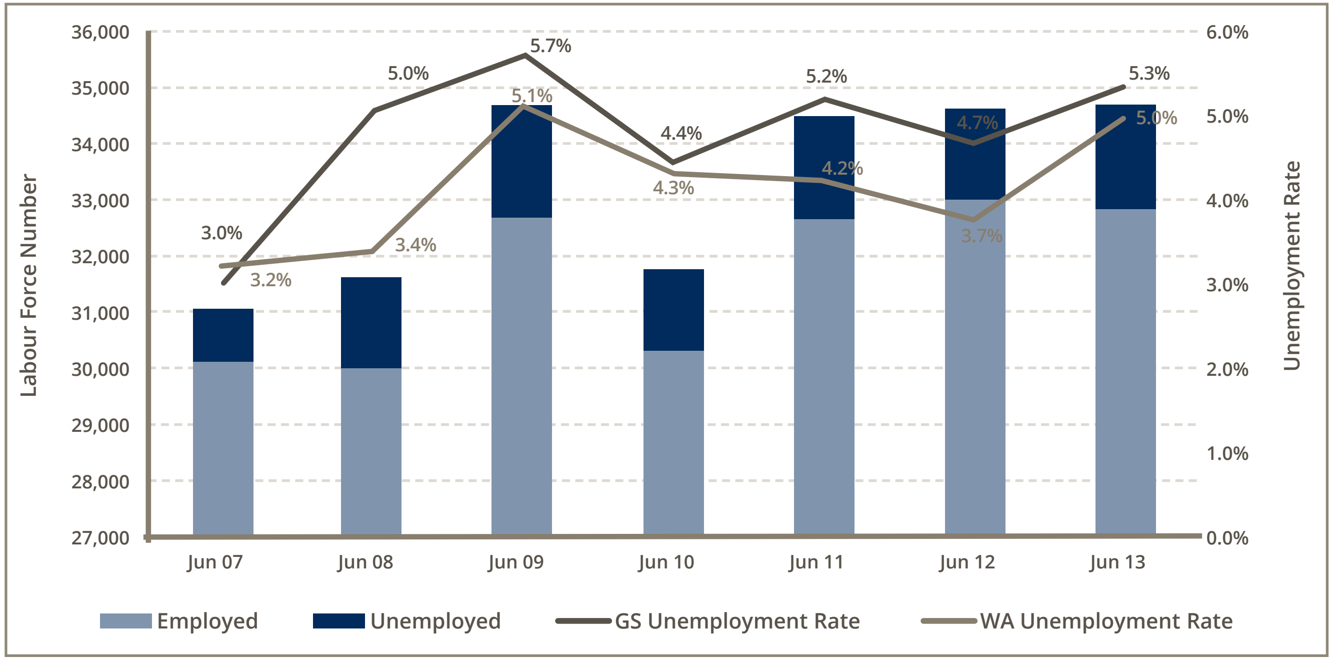


Figure 9 Great Southern labour force employment and unemployment

The ABS 2011 Census reported that the primary industries of agriculture, forestry and fishing are the major industry employment category in the region at 15.4 per cent, a decline from the 19.2 per cent recorded in the 2006 Census. The largest growth occurred in health care and social assistance, education and training, public administration and safety, and mining.

The unemployment rate has fluctuated over the decade to 2012-13, with a low of 3.0 per cent in 2006-07 (Figure 9). In June 2013, the Great Southern unemployment rate was 5.3 per cent (up 0.6 points from June 2012). The state average at the time was 5.0 per cent.

The Great Southern has one of the more dynamic small business sectors in the state. In 2012, there were 145 small businesses (0-19 employees) per 1,000 residents in the region (Figure 10), well above the Perth average of 83 and the highest of any region in Western Australia (Department of Industry, Innovation, Science, Research and Tertiary Education 2013). This reflects the region's strong commercial and entrepreneurial culture, a critical mass of industry sectors that are dominated by small business and, in many cases, the need to generate self-employment. Because of this strength, the Great Southern is not structurally reliant on a few large employers. This factor contributes to the region's economic resilience.

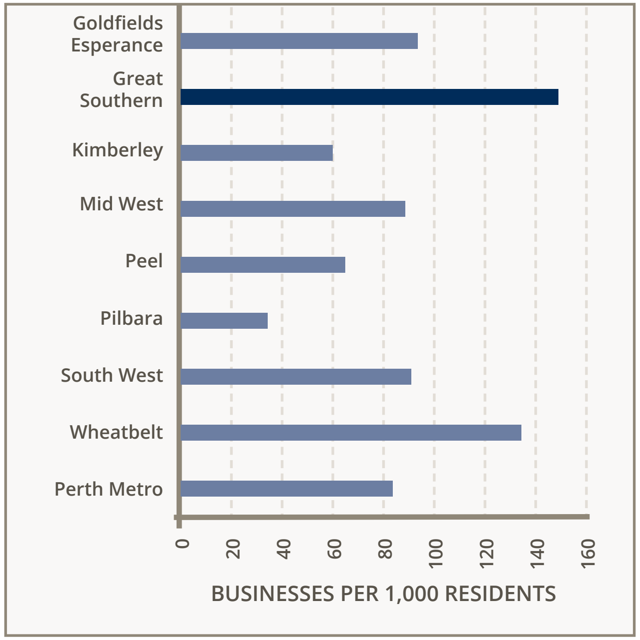


Figure 10 Small businesses per 1,000 residents by regions

On a range of comparative economic indicators, the Great Southern faces some challenges. In 2011-12 the region's mean taxable income was $56,856, while the state average was $74,512. This reflects several key structural factors in the local economy:

- The agriculture and tourism/hospitality sectors are seasonal and generally have lower average levels of income.
- There is a lack of local mining employment opportunities.
- The region is a lifestyle and retirement destination for older residents (i.e. households with fixed incomes).

During the previous decade, however, income growth averaged 6 per cent per year. This was driven by an expanding labour force, a wider range of employment opportunities, an increase in hourly wages and longer work hours.

These same overall structural factors have also resulted in the socio-economic status of Great Southern residents being generally lower than the national average. The ABS has ranked all local governments in Australia by socio-economic status and, based on the 2011 Census, the majority of the region's shires are in the lower half (ABS 2013d).

However, balancing this, the Great Southern is also Western Australia's most affordable region in terms of cost of living. Through a standard measurement of goods and services, it is ahead of the South West and significantly more affordable than the Pilbara and Kimberley (DRD 2014). While the cost of living generally offsets lower average incomes and makes the region an attractive place to live, issues such as housing affordability and the availability of services present ongoing challenges to maintaining a steady rate of population and economic growth.

In 2012-13, the Great Southern continued to demonstrate that it is a highly attractive destination for investment. During the year major projects valued at approximately $500 million were completed or under construction in the region (GSDC 2013a). The scope of these projects included housing, road infrastructure, tourism ventures, water, and community facilities. Into the future, this investment will not only increase the economic capacity of the Great Southern, but will also drive industry and employment diversification (see Appendix 3). Such investment supports a growing population, expanding economic opportunities and a dynamic business community.

	Median Weekly Personal Income 2011	Mean Taxable Income 2011-12
Albany (C)	$522	$57,714
Broomehill - Tambellup (S)	$473	$53,260
Cranbrook (S)	$485	$46,384
Denmark (S)	$470	$62,005
Gnowangerup (S)	$612	$57,997
Jerramungup (S)	$597	$63,176
Katanning (S)	$526	$52,625
Kent (S)	$611	$59,288
Kojonup (S)	$528	$71,864
Plantagenet (S)	$470	$55,286
Woodanilling (S)	$566	$58,522

Table 3 Personal income in the Great Southern (median weekly personal income is from the 2011 ABS Census; mean taxable income for 2011-12 is from the Australian Tax Office and Department of Regional Development)

AGRICULTURE AND FOOD PRODUCTION

The Great Southern is the second largest agricultural region in the state by gross value of production. In 2011-12, the Great Southern contributed approximately $1.04 billion of Western Australia's total agricultural production, or 14 per cent (ABS 2013k). Grains and livestock are the main commodities produced (Figure 11) and represent comparative advantages for the region, particularly in the Pallinup subregion.

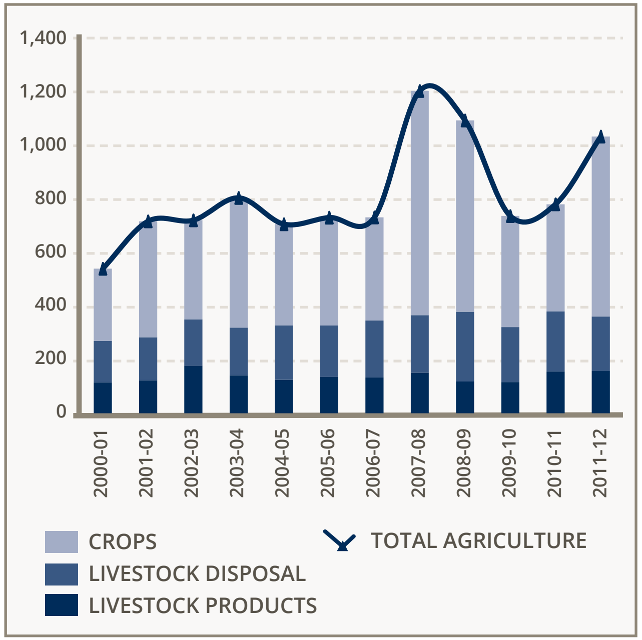


Figure 11 Value of agriculture in the Great Southern

Production reached a peak of $1.2 billion in 2007-08, as a result of a bumper harvest for broad acre crops, such as wheat, barley and canola. Crops contributed 65 per cent of the value of agriculture in 2011-12, at $677.7 million (Figure 11). The highest value was cereal crops with wheat contributing $249.0 million and barley $159.8 million (Figure 12). The region accounts for 12 per cent of the total value of crop production in Western Australia, and this is primarily made up of wheat and barley. The value of agricultural production in the region over the past decade is shown above.

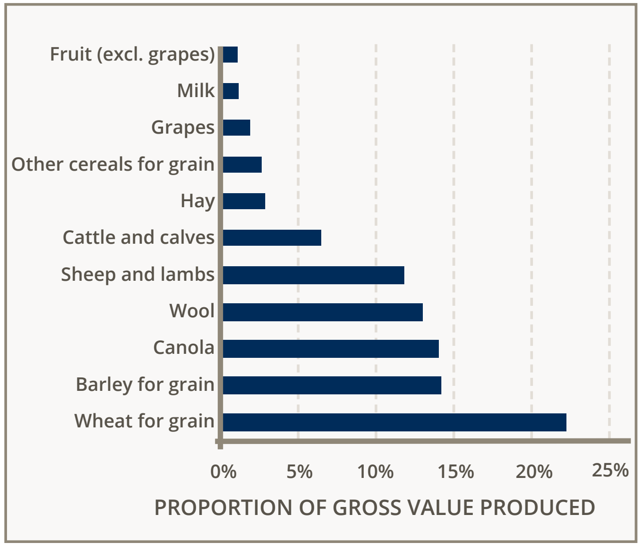


Figure 12 Proportion of agricultural production by gross value, Great Southern, 2007-08 to 2010-11

Horticulture in the King subregion has emerged in recent decades as a significant contributor to the region's food production. In 2011-12, the region produced $2.8 million worth of vegetables and $23.8 million of fruit (including grapes). Fruit and vegetables are produced in commercial quantities in the Shires of Plantagenet and Cranbrook and in the City of Albany. These areas have the highest production value per hectare in the Great Southern. The future expansion of horticulture in the western coastal parts of the Great Southern will depend on sufficient rainfall and access to groundwater supplies for irrigation.

In 2011-12, livestock disposals and products were respectively valued at $204.9 million and $159.5 million. Sector diversification in recent decades has resulted in a relative increase in the production of poultry and pork, thereby adding to the region's strength in cattle and sheep (for both wool and meat). The Plantagenet district has a growing reputation for the production of free range chicken meat (ABS 2013a), and chicken consumption in Australia is one of the fastest growing meat markets (Australian Bureau of Agricultural and Resource Economics 2013). Increased poultry and pork production, for which innovative operational models are in place, presents considerable export opportunities for the region and complements traditional cattle and sheep farming in the region. The region's sheep flock is continuing to grow and cattle numbers, mainly located in the southern part of the Great Southern and adjoining regions, are estimated to be in excess of 375,000 head.

Major livestock management infrastructure in the region includes the Katanning Regional Sheep Saleyards (the largest undercover sheep saleyard in the southern hemisphere) and the Mount Barker Regional Saleyards (cattle).

Significant levels of new corporate and local investment in the agricultural sector are occurring or are under consideration. At the farm level, corporations are investing in agricultural land for a range of reasons including rising valuations (capital gains), efficiency-driven improved returns from production, positioning to realise the benefits of economies of scale, favourable tax treatments or opportunities to capitalise on strategic global trends associated with food security.

Key factors associated with the Great Southern's agricultural sector are:

- Climate change will continue to influence the type of crops and where they are grown. For example, traditional grain production areas are forecast to shift westward and, through a process of adjustment that will draw on plant science and research, new varieties will be introduced in the drying areas in the eastern parts of the region.
- Salinity, acidity and the full range of soil health indicators are closely monitored because of their impact on agricultural productivity and their potential for future effects on the agriculture sector.
- Production costs are projected to rise, particularly relating to capital equipment, energy and inputs such as fertiliser. The sector is also broadly reliant on finance for operating capital and for servicing debt. These cost pressures are contributing factors to a steady increase in farm sizes and corporate entities buying or leasing farms. This trend is expected to continue.
- A shortage of skilled and unskilled labour, particularly in the inland areas, has been an issue over the past decade due to competition from other sectors of the national economy, particularly mineral resources development.
- Growth in regional sheep numbers is expected to continue, mainly driven by demand in final markets.
- Investment and growth in the horticultural production sector will require certainty in water supply and quality.
- Agricultural products can be marketed into the northern hemisphere. Counter-seasonal production advantages, a capacity to rotate crops, easy access to Albany's deepwater port and a reputation for safe, high quality products provide opportunities for an increased export of agricultural produce.
- Downstream processing of agricultural products can increase. The income, employment and value-added multipliers for secondary agricultural industry are notably higher than those for primary agriculture.

The agriculture and food production sector is also in the process of responding to the opportunities created by global developments. Food-related commodities are expected to experience a broad and sustained growth in demand in response to rapid population and income growth, particularly in Asia. The impacts and potential benefits of this significant change are analysed in the following reports:

- The *National Food Plan*, released in May 2013 by the Department of Agriculture, Food and Forestry, identifies key priority areas for the food industry including competition strategies to capture market share, productivity targets, food security and the importance of maintaining clean, green credentials.
- The *Asian Century White Paper* assesses international drivers of Australia's potential and their impacts on Australian industries and notes that rural regions will have new opportunities for prosperity as the Asian middle class grows and demands higher value food (Regional Australia Institute 2013).
- ANZ's *Greener Pastures: The Global Soft Commodity Opportunity for Australia and New Zealand* notes the shift in economic growth from the developed world to the developing world provides an opportunity for Australian agricultural products provided Australia can maintain its competitiveness. Specific growth limiters discussed included sourcing capital, attracting skilled labour, accessing land and water, focusing research and development, improving supply chains and targeting key markets. Between 2005 and 2011 the nation's annual surplus in food trade has averaged $17 billion (Productivity Commission 2011).
- *Agrifood 2025+*, an initiative of the Department of Agriculture and Food Western Australia (DAFWA), addresses immediate and longer-term needs with a clear focus on growth, aiming to double the value of the sector by 2025. Key activity areas in the overall strategy are business and supply chain development, and biosecurity and resource management. Transformational initiatives in these areas are being implemented through the 'Seizing the Opportunity' projects funded through Royalties for Regions.

RETAIL

The Western Australian economy has been robust over the past decade with the international demand for the state's commodities generating a sustained lift in consumer confidence, which is reflected in retail turnover. Retail activity for the region was estimated at $647 million in 2012-13. Growth averaged 4.8 per cent for the decade.

The retail sector is predominantly focused on local demand, albeit with an important proportion catering for tourists and visitors. The City of Albany, as the largest population centre, is the centre of business activity in the Great Southern and, therefore, is the hub of regional retail trade. The sector is expected to grow in line with regional population increases and has the opportunity to develop further markets through on-line trading.

MANUFACTURING

The Manufacturing Census of 2006-07 (the most recent figures available) reported regional sales of goods and services in the sector at $351 million across 269 business locations. Those businesses employed 1,345 people. Fabricated metal product manufacturing plants were the most numerous.

The Great Southern uptake of Manufacturing Skills Australia training packages has broadly mirrored the participation rate in other regions across Australia. The Metal and Engineering Training Package is the most popular in terms of year on year student numbers. This package has consistently accounted for nearly 65 per cent of all students undertaking Manufacturing Skills Australia training in the lower Great Southern.

The manufacturing sector makes a valuable contribution to the region's economy with the majority of business establishments based in Albany. The sector employs about 7 per cent of workers in the Great Southern and contributes approximately 14 per cent to regional turnover. The sector is focused primarily on supplying equipment and machinery to the agricultural sector and to the processing of commodities. Meat processing through the region's export abattoirs is measured as a manufacturing output.

With the future potential development of the region's mineralised zones (e.g. Badgebup and Wellstead), the engineering and fabrication sectors should be well positioned to provide goods and services locally and at competitive rates.

TOURISM

A diverse natural environment and a range of world class tourist attractions and activities underpin a resilient and dynamic tourism sector in the Great Southern. In addition to internationally recognised ecotourism assets, the region's tourism sector is supported by a range of major events, activities and attractions.

The region's tourism market is well positioned internationally, being part of Australia's South West which, in 2010, was chosen by Lonely Planet as one of the world's Top 10 tourism regions (GSDC 2012). The new National Anzac Centre in Albany was named as one of the world's top new travel experiences by Lonely Planet in 2015. In 2014, the National Geographic magazine named the Bibbulmun Track (a 1,000 km walk trail between Albany to the Perth hills) as one of the world's top 20 'epic hikes', the only Australian trail included.

Since 2007, the number of day trips to the Great Southern has grown steadily (increasing by 105,300 visitors between 2007 and 2013). This is positive considering the distance of the region from major day trip origins. Over the same period, there has been an average of 470,500 domestic and international overnight visitors to the Great Southern region, spending between 1.6 and 2.0 million nights in the region annually. In line with state trends, the estimated average length of stay for international visitors was higher than domestic visitors. Between 2007 and 2013, international visitors stayed an average 6.8 nights in the Great Southern compared to 3.8 nights for domestic visitors.

While the total number of international and domestic overnight visitor has declined slightly over this period, a strong increase in visitor expenditure of 12.3 per cent (across day and overnight visitors) has been experienced. Growth in expenditure from the international market has been the greatest at 24.1 per cent.

With more than a million visitors (day and overnight) and $315 million in expenditure in 2013, there are strong opportunities for the tourism market to expand in the region.

The United Kingdom, Germany, other European countries and New Zealand represent the largest sources of international visitation to the region, collectively accounting for 67.1 per cent of visitors and 64.0 per cent of visitor nights. This is broadly in line with state trends. The number of visitors from Asian countries is lower and has remained steady, with falls in visitation from established Asian markets (Japan, South Korea, Singapore) being offset by growth in emerging markets (Malaysia, Indonesia, Taiwan, Thailand and China). The mix of visitors and visitor nights is illustrated in Figure 13.

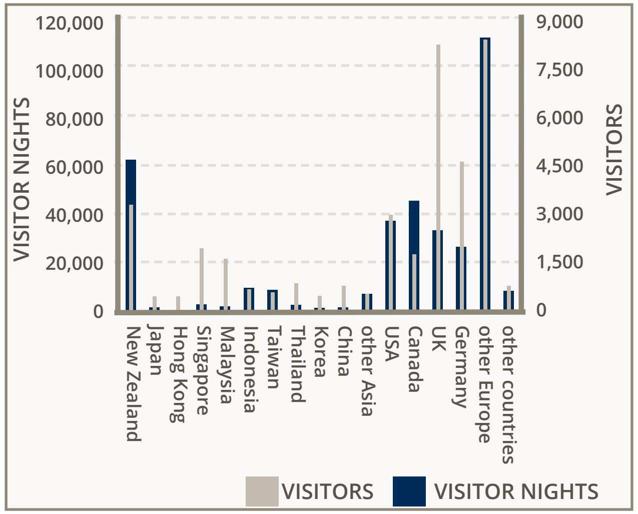


Figure 13 International visitors and visitor nights, by country, Great Southern, 2012-13

The Great Southern is a holiday and leisure tourism destination. In 2012-13, 85 per cent of international visitors and 58 per cent of visitor nights were for holidays (Figure 14). The next largest group was visiting friends and relatives, comprising 11 per cent of visitors and 23 per cent of visitor nights. This group is directly related to the size of the residential population of the region (i.e. the number of friends and relatives for people to visit). Employment and business visitor numbers were comparable, though people travelling for employment stayed in the region almost four times longer.

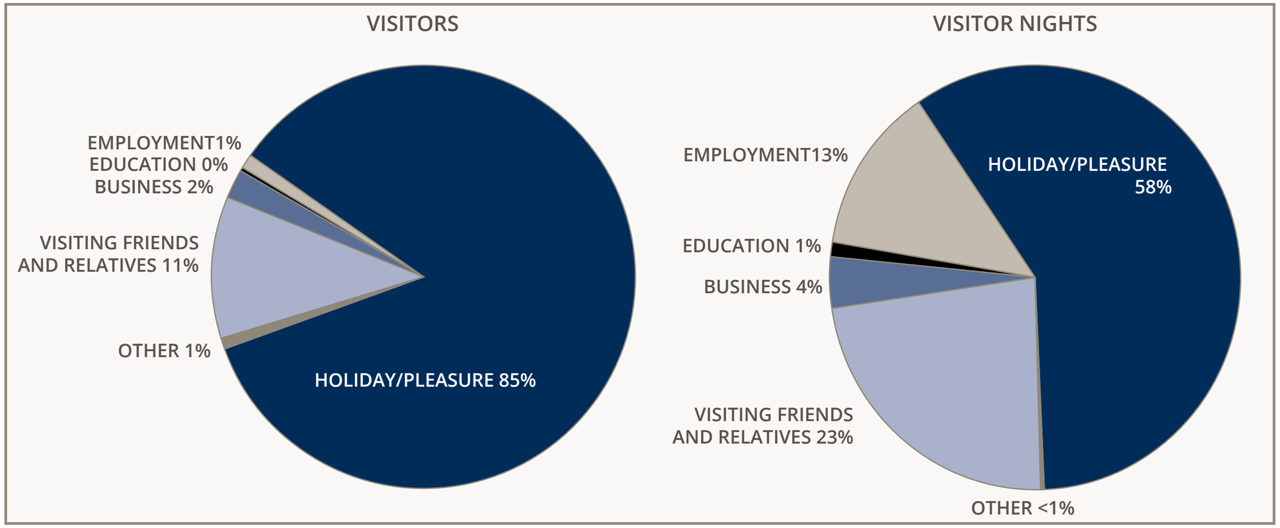


Figure 14 International visitors and visitor nights, by reason, Great Southern, 2012-13

Tourism trends in the Great Southern (Figure 15) have broadly reflected gross visitor numbers for Western Australia as a whole. The state remains a relatively remote destination for many potential visitors and it is the natural environment, with a mix of active and passive activities, which has been identified by Tourism WA as the key factor that will motivate people to consider a visit to the region. The principal final destinations for visitors to the Great Southern are Albany, Denmark and Bremer Bay, although the wine producing districts of Plantagenet and Cranbrook (specifically, Frankland River wine region) have noted an increase in visitors in recent years.

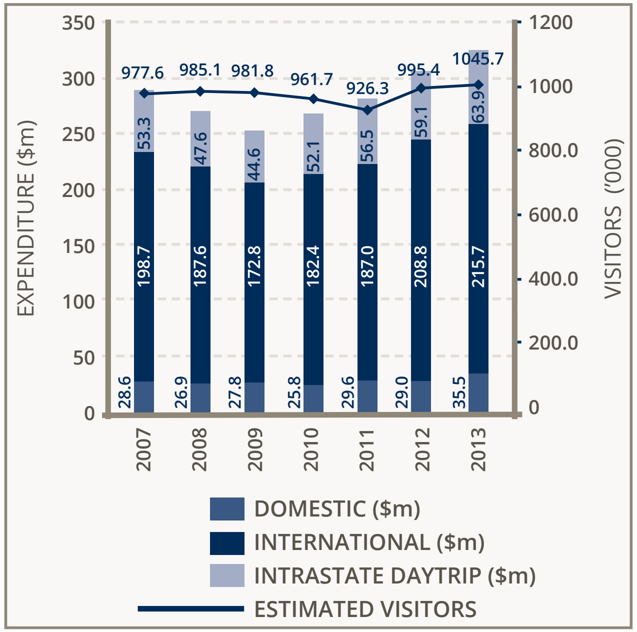


Figure 15 Tourism trends in the region

The view for Australian tourism potential to 2020 is the need to focus on improvement of performance and competitiveness. The Great Southern will need to embrace its potential within the framework of the National Long-Term Tourism Strategy launched in 2009 by the Commonwealth Department of Resources, Energy and Tourism. Over the past decade, Australia's international competitiveness has not kept pace with global trends and its international market share has decreased. Domestic tourism has also declined as Australians choose international travel over regional and national destinations. This has been driven to an extent by a period of strength for the Australian dollar but another key trend is competition from offshore locations that has included the development of well marketed tourism product and packages.

Tourism WA considers that the intrastate and interstate visitor markets continue to hold the greatest unrealised potential for bringing visitors to Great Southern. Therefore, these markets provide a focus for future marketing aimed at increasing visitor numbers, the average length of stay and per capita spending.

Tourism product categories that are being further developed include:

- FOOD AND WINE TOURISM: The coastal Great Southern has an enviable capacity to produce an amazing variety of quality food and wine. Initiatives such as Taste Great Southern provide key promotional opportunities to boost visitor numbers to the region.
- NATURE TOURISM: The nature-based tourism sector includes ecotourism, experiential and adventure tourism. The region has a superb natural environment and significant assets such as the Bibbulmun Track (1,000 kilometres bushwalking) and the Munda Biddi Trail (also 1,000 kilometres and the longest off-road cycle trail in the world). New trails are planned to complement the Bibbulmun and Munda Biddi, particularly in the Walpole Wilderness Area. Nature or experiential tourism is the fastest growing segment of the international tourism market. In recognition of the region's potential to develop ecotourism, the University of Western Australia (UWA) initiated a Master in Ecotourism degree in 2015.
- HERITAGE AND CULTURAL TOURISM: The region has a range of heritage and cultural assets that provide the basis for expansion of this important sector. Initiatives such as the Southern Art and Craft Trail, Hidden Treasures Bloom Festival and the Great Southern Festival (a program of Perth International Arts Festival events) are key products that could be expanded and further value-added. The National Anzac Centre is gaining an international profile and initiatives associated with the Anzac Centenary commemoration events are being developed, providing the potential to boost tourism in the Great Southern. The regional arts sector is also strongly linked with the tourism industry. Many galleries and studios are located along visitor routes, and there is a trend towards the inclusion of local arts and crafts at tourist facilities.

The region is well serviced by a number of local, member-based tourist organisations (for example, Denmark Tourism Inc.) and location-specific marketing websites. Hidden Treasures of the Great Southern, for example, is a subregional tourism organisation based in the northern part of the region and is regarded as a best practice partnership model.

The main regional destination marketing focus of Tourism WA is through regional tourism organisations. In the past decade the number of regional tourism organisations was reduced from eleven to five and the Great Southern was included in Australia's South West (ASW). The ASW Board includes representation that is drawn from the Great Southern. Working with ASW, the region has opportunities to further develop and market the three tourism product categories identified above at a cross-regional level. Initiatives such as the Great South West Edge National Landscape, the Bibbulmun Track and the Munda Biddi Trail are examples of initiatives where cross-regional collaboration is leading to mutual benefits.

Key stakeholders have indicated that they favour the establishment of a complementary subregional tourism organisation on the south coast. As per the role of the Hidden Treasures group in the northern part of the region, a single tourism organisation that represents, coordinates and plans for the interests of the industry on the south coast could be effective in terms of managing relationships with the various levels of government and entities with relevant marketing responsibilities, such as Tourism WA and ASW.

Growth of international tourism in the region is likely to come from a diversification of holiday visitors from emerging Asian countries. This will be built on the Great Southern's strengths of having a superb and accessible natural environment, a reputation for quality food and wine and an expanding range of products in experiential adventure and ecotourism. Growth is also likely to occur in the visiting friends and relatives market as the population of the Great Southern increases over time. Significant opportunities exist in the education and business sectors and the region has the potential to rapidly grow both of these segments.

ANZAC CENTENARY

Albany played an important practical and symbolic role in the transport of Anzac soldiers to Egypt and Gallipoli during World War I. Recent infrastructure upgrades increased the capacity of Albany, Denmark and Mount Barker to host visitors and tourists attending the Anzac Centenary. Commemoration events between 2014 and 2018 present a significant opportunity for the region to develop a range of products (e.g. accommodation, tours, packages, interpretation) that will yield long-term benefits. The new National Anzac Centre in Albany hosts interactive displays and exhibits prepared by the Western Australian Museum in partnership with the Australian War Memorial and the New Zealand National Army Museum.

MIRAMBEENA TIMBER PROCESSING PRECINCT

The Mirambeena Timber Processing Precinct is designed to cater for businesses involved in value-adding to the region's vast plantation blue gum resource. The 82-hectare site comprises seven large industrial blocks at the west end of Down Road adjoining the woodchip mill. The region already has a reputation as an exporter of premium woodchips and the timber processing precinct provides the potential for more timber value adding activities.

TIMBER

From the early 1990s the plantation timber industry expanded strongly to become a significant sector in the regional economy. The establishment of plantations and value adding capacity was driven mainly by buoyant final demand for high quality woodchips and taxation benefits that flowed to investors through managed investment schemes. Even with the 2009-10 rationalisation of the sector, a large area of the region is still committed to plantation forestry. The existing plantation forestry area is estimated to be in excess of 130,000 hectares producing some 1.1 million tonnes of woodchip exports, worth approximately $89 million in 2013 (Albany Port Authority 2014). Woodchip production increased to 1.4 million tonnes in 2014. The majority of the output is exported to the fine paper industry in Japan and China. However, it is estimated a sustainable plantation timber industry in the future may consolidate to less than 100,000 hectares.

Woodchip producers face challenges in remaining competitive. In general, the delivered wood cost in Australia tends to be higher than international benchmark levels, although processing and infrastructure costs are usually in line. This higher production cost and a fluctuating Australian dollar could affect Australian producers' capacity to compete against international suppliers of feedstock for manufacture and processing in final markets.

However, Australia's *Eucalyptus globulus* is regarded as a better quality woodchip resource compared to species grown in the tropics. This quality advantage and the Great Southern's proximity to South-East Asia, low sovereign risk and political stability are strong positives for the industry. The region's infrastructure, efficiencies and industry knowledge have improved, and international companies recently started replanting harvested areas.

CONSTRUCTION

Building approvals for the Great Southern grew steadily in value from 2003-04 before a substantial decline in 2011-12.

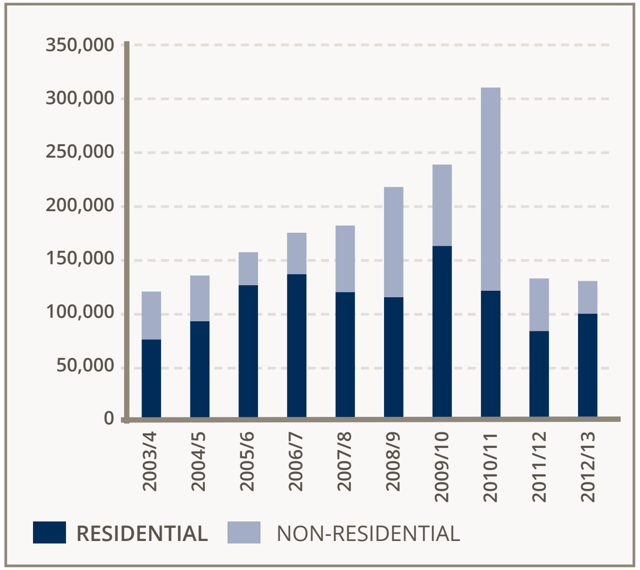


Figure 16 Value of construction approvals

Residential approvals increased in value from $92 million in 2004-05 to a peak of $162 million in 2009-10 (Figure 16). The decline in 2011-12 was consistent with state trends and coincided with the introduction of new building legislation in April 2012 which changed the approvals process. The majority of the regional building activity, generally over 70 per cent per year, takes place in the City of Albany.

Relatively recent major non-residential building projects within the region include the Albany Health Campus ($170 million), the Albany Entertainment Centre ($70 million) and the Katanning Regional Sheep Saleyards ($25 million).

SOUTHDOWN MAGNETITE DEPOSIT

Grange Resources and its minority Japanese partners Sojitz Corporation and Kobe Steel propose to develop an iron ore mine at Wellstead, 90 kilometres east of Albany. At the time of securing environmental and other approvals for the mine to proceed, Grange expected the mine to produce 10 million tonnes per year of the crushed and concentrated ore and to generate 2,000 construction and 600 operational jobs. It was also anticipated that the magnetite concentrate would be pumped via a 105-kilometre slurry pipeline to Albany Port.

If the mine were to proceed on this basis, the Albany Port will require the construction of a new berth for storage, new ship loading infrastructure and a widening and extension of the shipping channel for Cape-size vessels. Under this mining model, the Southdown project would add $1 billion per year to the value of the sector in the region when fully operational.

Grange Resources is currently reviewing the project, however, on the basis of a reduced scale start-up, with concomitant impacts on capital costs, production and employment.

MINING

The Great Southern has a small mining sector producing silica sand, spongolite and lime sand. However, the value of mining to the region has the potential for a large step-change, with two mineral deposits awaiting investment decisions: Grange Resources' Southdown magnetite deposit north-east of Albany and Ausgold's gold prospect near Katanning.

There are also a number of undeveloped mineral deposits in the Great Southern including heavy mineral sands, gold, copper, iron ore and silica sand (DRD 2011). At some level, there is mineral exploration taking place in every local government area in the Great Southern.

FISHING AND AQUACULTURE

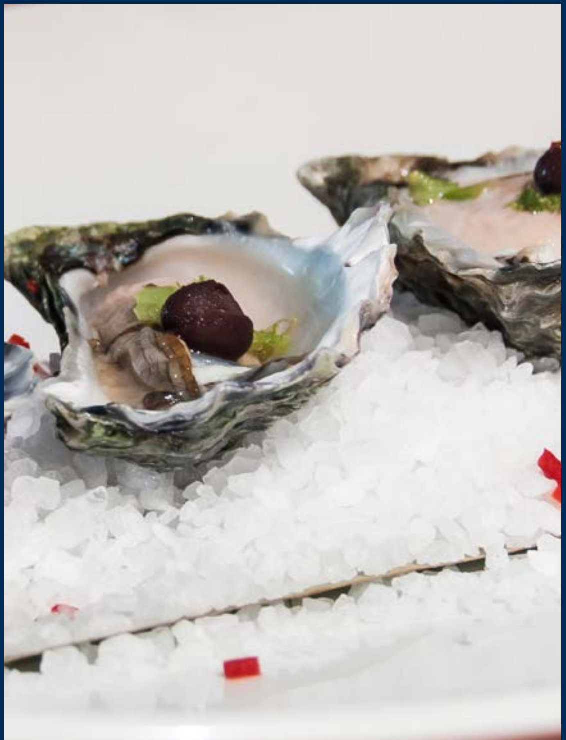
The value of the Great Southern fishing industry increased to $6 million in 2011-12 after remaining steady over the past decade. The 38 per cent increase from 2010-11 was largely attributed to a greater finfish catch. The 2,759 tonnes accounted for nearly all of the region's catch with a value of $5 million. Commercial fishing methods used to target finfish include gill nets and haul nets, for a catch that mainly comprises pilchard, salmon, herring and shark. Crabs, molluscs and rock lobsters are products fished off the coast on a smaller scale.

The value of the region's aquaculture production has fluctuated, reaching $2.1 million in 2011-12, which was 26 per cent higher than the $1.7 million of the previous year. The development of aquaculture is affected by species and production technology factors, climate, and government licensing and regulations.

AQUACULTURE

Abalone: The South Coast has some of the world's best aquaculture sites, with deep bays providing consistent water quality and temperature. A land-based abalone farm at Bremer Bay primarily supplies the export market.

Oysters: Albany produces premium oysters, with local and export sales. Operations commenced in the Albany region in 1990, growing Sydney rock oysters and blue mussels. There is significant potential for further expansion into Asian markets.



VITICULTURE

Viticulture is a mature industry in the region. Approximately 25 per cent of the state's land area under vine is located in the Great Southern, with Frankland River and Mount Barker accounting for the majority of current production (GSDC 2013b).

REGIONS	AREA (ha)	% WA
Margaret River	5960	42.0
Great Southern	3647	25.7
Geographe	1447	10.2
Pemberton	1093	7.7
Swan Districts	829	5.8
Blackwood Valley	606	4.3
Manjimup	409	2.9
Perth Hills	96	0.7
Peel	88	0.6
TOTAL	14175	100.0%

Table 4 Wine grape planting areas in Western Australia

Regional wine producers and grape growers have traditionally focused on production, with only minor involvement in tourism and hospitality developments. The quality of the environment and the productive capacity of the region are nationally recognised and are key areas of comparative advantage but producers have identified some challenges in their industry including labour supply, water and telecommunications.

Great Southern wineries are ideally located for cool-climate viticulture and produce distinctive regional wines in a wide range of red and white varieties. For example, an unprecedented 16 Great Southern wines feature among the 28 "best of the best" of Australia's rieslings, as identified in the 2013 *Australian Wine Companion* (Halliday, J 2013). This achievement attains greater significance when it is considered that the selection was made from across Australia's 63 formal wine regions.

WINE SUBREGIONS	AREA (ha)	%
Frankland River	1812	49.7%
Mount Barker	1398	38.3%
Denmark	165	4.5%
Porongurup	137	3.8%
Albany	103	2.8%
Non Subregion	32	0.9%
TOTAL	3647	100.0%

Table 5 Viticulture land area, Great Southern

Australia's wine industry is expected to continue to face strong competition in generating sales in both the domestic and export markets. Excess supplies of wine on the world market, the global economic slowdown and a period of strength for the Australian dollar have put downward pressure on the demand for Australian wine. As a result, wine grape prices have been subdued.

EQUINE INDUSTRY

In 2011, the equine industry contributed $19.8 million to the regional economy, with an associated 230 full-time employees in a range of positions (Racing and Wagering Western Australia 2012). Industry activities in the region include thoroughbred and harness racing, eventing, dressage, polo-cross, showing, camp drafting, riding for the disabled, and horse breeding.

More than $750,000 was invested in the Albany Racing Club in 2011, including an allocation of $413,560 from the State Government's Racing Infrastructure Grants Program and $220,000 from the Great Southern Regional Grants Scheme.

Thoroughbred horse production offers significant potential for the region. Western Australia's largest producer of thoroughbred horses is in the Great Southern, south of the Porongurups.

E-COMMERCE AND SERVICE EXPORTS

Financial, professional and other "white collar" services do not contribute significantly to Western Australia's international services exports, with technical, trade-related and other business services the only other category of note. Knowledge-intensive service exports represent a significant opportunity for Western Australia and its regions; the adoption of e-commerce facilitated by new information technologies is a critical enabler which has the potential to not only enhance existing industries but also to attract new industries.

Consultations with regional businesses indicated that technological change has in many cases diminished the viability of service enterprises in the Great Southern. Where there is a rise in the on-line delivery of professional services, the size of the market required to support those businesses may increase significantly. This, in turn, suggests that the population and associated demand for services in the Great Southern may lack the critical mass necessary to support the current size of the sector.

Increasing the effective reach of professional and knowledge-intensive service businesses is therefore critical. Great Southern businesses need to be web-enabled, based on both current and emerging technologies. It is also important to adopt integrated e-commerce platforms and a web-presence tailored to Asian and other global markets.

IN 2040...

GROWTH AND DIVERSIFICATION

Picture the Great Southern in 2040, after decades of developing a growing and more diverse economy.

A regional population of 100,000 is supported by an economy with more jobs in more industries. The regional workforce numbers 60,000, unemployment is below the state average and mean personal taxable incomes are above the state average.

Agriculture continues its major contribution to the economy but it is more diverse, with new initiatives in horticulture and food processing adding value to the output of primary producers. Aquaculture has developed a strong presence in the regional economy and produces significant volumes of quality seafood for domestic and export markets.

The relative value of tourism to the region has doubled as investment in new, and enhancement of existing tourism products and services, takes full advantage of the increasing appeal of the region's superb natural assets to domestic and international experiential and adventure tourists.

INTRODUCING KEY METRICS

Key metrics scorecards are used in the four sections of the Regional Analysis. A 'traffic light' approach shows the current status of the Great Southern in each focus area. Green, yellow and red traffic lights are used as follows:

- GREEN — Indicators are broadly positive and/or above averages
- YELLOW — Indicators are broadly neutral or in line with averages
- RED — Indicators are broadly negative or below averages

The trend over recent years for change in a metric is also identified:

▲ ▶ ▼

An arrow pointing up shows that the trend in the indicator is positive, down means a negative trend and sideways means the situation is static or equivocal. See Appendix 6 for detailed data used in the analysis of key metrics.

KEY METRICS

Table 6 summarises the key metrics related to the ECONOMIC GROWTH AND DIVERSIFICATION regional imperative. These metrics are measured across a number of relevant areas of focus related to the objective of increasing the variety and diversity of economic drivers of the Great Southern. These drivers should support dynamic and sustainable growth of the economy and communities in the medium to long term.

AREA OF FOCUS	MEASURES	STATUS	TREND	COMMENTS
Employment	Unemployment rate Post-school qualifications Change in employment diversity	Yellow	▶	Unemployment rose over the past year, though it remains comparable with state averages. Post-school qualifications are biased towards certificate level, reflecting the industry structure of the region. Employment diversity has become more balanced, with the growth of the population-servicing sector offsetting declines in agriculture, forestry and fishing.
Comparative Advantage	Gross value of agricultural production Food production diversity/ Industry diversity International tourist visitors	Green	▲	The Great Southern is the second largest agricultural region in Western Australia in terms of production value. Food production in the region is increasingly diverse, with aquaculture, horticulture and viticulture complementing established livestock/poultry, grain and wild capture seafood production. International tourist visitor numbers continue to grow strongly, albeit off a small base.
Resilient Economy	Non-employing, micro and small business numbers Local business registrations Personal Incomes	Green	▶	Small business numbers have rebounded from 2010 lows and remain at stable levels. Great Southern has the highest level of small business ownership in Western Australia with 145 small businesses per 1,000 residents. Personal incomes remained resilient during the global financial crisis and this has been broadly sustained.

Table 6 Key Metrics Scorecard – Economic Growth and Diversification

ESSENTIAL INFRASTRUCTURE & SERVICES

Infrastructure quality is a critically important factor affecting the capacity of a regional economy to grow, remain resilient in the face of challenges and quickly leverage opportunities. Infrastructure is central to the Western Australian Regional Development Trust's identified priority areas and is fundamental to the future success of the Great Southern.

WATER SECURITY

The Great Southern has multiple town potable water schemes. Albany, Narrikup, Mount Barker and Kendenup are serviced by the Lower Great Southern Towns Water Supply Scheme (LGSTWSS), which sources its water from the Albany groundwater area and Angove Creek. The Great Southern Towns Water Supply Scheme (GSTWSS) services towns in the north of the region, including Woodanilling, Katanning, Kojonup, Broomehill, Gnowangerup, Tambellup, Nyabing and Pingrup. Water for this scheme is sourced from Harris Dam near Collie.

The remaining settlements in the Great Southern receive their water supplies from a number of different sources. Bremer Bay's water supply is sourced from groundwater and Denmark receives its supply from a river and dam. Further away from the coast, inland settlements are mainly supplied from dams with constructed catchments in independent town water supply schemes. Due to the issues with water quality and maintaining local catchments, the Water Corporation is seeking to extend the integrated water networks to several of the inland towns. Those towns which cannot be connected to integrated schemes rely on well-maintained local catchments with appropriate treatment or carting from other schemes.

The Water Corporation is the main water service provider for towns in the region, with the exception of Peaceful Bay which is presently supported by a non-potable supply managed by the Shire of Denmark. Many of the smallest settlements have no scheme water supply, instead relying on self-supply using rainwater tanks (Department of Water 2012).

Water demand is expected to double in the Great Southern over the next 30 years due to population growth and economic development. Conversely, the availability of water is projected to decline as the region's climate becomes drier. The increase in demand due to population growth will be particularly significant in Albany, Denmark, Mount Barker and Katanning. There is also the potential for an increase in agricultural crops that require irrigation and for minerals extraction and processing.

The Water Corporation implemented an integrated water efficiency program between 2010 and 2012 to reduce demand on scheme water supplies and help delay the need for new water sources. Desalination is identified as a water supply option in the Water Corporation's *Water Forever: Lower Great Southern* (2010).

GROUNDWATER

Fresh groundwater sources in the region are limited to the Bremer Basin near Albany, a narrow sedimentary basin. Royalties for Regions funding has been used to direct hydrogeological drilling for groundwater to supplement the LGSTWSS. A four-year assessment program commissioned by the Department of Water confirmed that an additional 0.5 Gl/yr is available on a sustainable basis from existing production fields, and there is potential for a further 1 Gl/yr which would meet scheme requirements on current planning beyond 2030.

Aerial electro-magnetic surveys have identified potential sources of fresh groundwater in the Albany hinterland that will provide diversification options for industry and agriculture for the long term. Studies indicate that both potable and fit-for-purpose groundwater supplies may be available in the order of 10 Gl. The area represents the most significant 'hot spot' for competing water demand in the Great Southern. However, significant work and investigation is required before the actual yield and water quality is proven, enabling an application for use to be made to the Department of Water. These sources will be further investigated through a $1.6 million Royalties for Regions-funded program of exploratory drilling and analysis to determine volumes and quality (Department of Water 2014).

ENERGY

The South West Interconnected System (SWIS) has two key medium to longer term capacity and operational issues: to continue to improve the reliability of the power supply and to plan for capacity increases that will address growth in industry demand. In this, Western Power also has the task of managing the ongoing safety and efficiency of power infrastructure and the cost of upgrades and maintenance.

The capacity of the existing power infrastructure and the cost of upgrading feeder lines have the potential to limit development in the region, particularly at edge-of-grid locations including Gnowangerup, Jerramungup, Frankland River, Amelup and Albany to Walpole. Proposed infrastructure support for the Southdown mining project includes a 330kV transmission power line from Muja to Wellstead.

Research by the Chamber of Minerals and Energy has found that the SWIS will require 1,000 MW of additional generation capacity by 2025 (Chamber of Minerals and Energy 2014).

The Dampier to Bunbury Natural Gas Pipeline extends from Dampier to Capel with a lateral to Busselton. The lower south-west areas of the state are not currently serviced with natural gas, although a proposal to deliver a natural gas pipeline from Bunbury to Albany is being progressed. The State Government has endorsed a preferred pipeline route and planning for the project is under way. The provision of a stable and reliable energy source could be a major factor if regional centres such as Albany and Katanning are to encourage new business and industry (GSDC 2013b). The extension of the gas pipeline has the potential to provide significant flow-on benefits across both the Great Southern and South West regions with the selected route running from Bunbury to Albany via Manjimup and Mount Barker.

Future stages, including the construction of laterals to other regional centres, such as Denmark and Katanning, may be considered based on growth in demand.

In 2011-12, 9.2 per cent of electricity delivered by the SWIS was from renewable sources (Department of Finance 2013). This equates to 545 MW of electricity generation from a combination of solar, wind and landfill gas. Currently, most of the renewable energy generated in Western Australia is from wind. With anticipated progress of solar and wave power technologies, there should be scope for the future adoption of these sources of renewable power into the grid. Table 7 includes the recent expansion of wind power generation capacity in Albany to 35.4 MW.

ENERGY SOURCE	LOCATION	OPERATOR	PLANT CAPACITY (MW)
Wind	Collgar	Investec	206
Wind	Walkaway	Alinta	90
Wind	Emu Downs	APA Group	80
Wind	Mumbida	Synergy	55
Wind	Albany (incl. Grasmere expansion)	Synergy	35.4
Hydro	Ord River	Pacific Hydro	30
Solar PV	Greenough River	Synergy	10
Other Minor Generation Facilities			39
Total			545

Table 7 Western Australia's major renewable energy generation sources, locations and capacities

The Great Southern has an established profile in renewable energy generation including large scale wind power and the scope for wave, biomass and solar energy.

WIND: There are four towns in the region currently with wind farms: Albany (35.4 MW), Mount Barker (800 kW), Bremer Bay (660 kW) and Denmark (1.6 MW). A 150 MW farm is proposed for Flat Rocks 25 kilometres south-east of Kojonup. The project is currently going through Western Power approvals processes.

WAVE: Carnegie Wave Energy has a licence for approximately 30,000 hectares of offshore wave resource and an adjacent onshore area near Albany for the future development of near shore commercial wave energy generation and associated water desalination. The southern coast of Australia has significant potential for wave energy due to the proximity to the circumpolar Southern Ocean and the West Wind Drift (RPS Metocean 2008, Greenstream2Mainstream 2012).

BIOMASS: Several projects are under way exploring the potential for bio-mass power generation associated with industrial uses.

SOLAR: The owners of the Mount Barker wind energy facility are planning to add solar power generation.

ROAD AND RAIL

A comprehensive network of transport infrastructure serves a range of users and industry sectors in the Great Southern, including the following major transport routes.

- Albany Highway is the region's main strategic freight, tourist and inter-town route. Running from Perth to Albany, it is a road train route that carries grain, woodchips, wool, livestock, fuel and general freight. It is also a significant route for the tourism industry. Continued investment in additional passing and dual lanes will improve the safety and operational efficiency of this infrastructure asset.
- South Coast Highway (west of Albany) and Hassell Highway (east of Albany) together comprise the major east-west inter-regional and heavy haulage route for the agro-forestry, agriculture and mining sectors. The out-loading task associated with the plantation timber and grain sectors will continue to be characterised by seasonal peaks and will place significant pressure on road infrastructure and access to the Port of Albany.
- Great Southern Highway is a strategic freight, tourist and inter-town route running north-south in the central part of the region. As a road train route it carries grain, wool, livestock, fuel and general freight. Traffic volumes are less than those on the Albany Highway, but investment in more passing lanes would improve safety and operational efficiency.
- Chester Pass Road links the south/central Wheatbelt to the Port of Albany. It provides access to the Port for agricultural producers in the Gnowangerup, Kent and Lakes districts local government areas. While there is a progressive investment program in place for Chester Pass Road, the age of the pavement, seal width, limited passing opportunities and the structure of some curves present constraints to its safe and efficient use. The road is also a significant tourist route, linking a wide range of nature-based tourism products that are set to increase in popularity.
- Great Southern Rail Line provides a link to the Perth metropolitan area, including Kwinana, and the Port of Albany. The Great Southern Rail Line carries grain from strategic receival bins at Cranbrook, Broomehill, Katanning and Wagin. With additional investment, there is the potential to expand the service into the transport of general freight (GSDC 2013b).

Further cross-regional benefits could emanate from improved east-west transport connections between the Great Southern and the South West including, for example, an upgrade of east-west links between Katanning, Kojonup and Collie for livestock transport. Muir Highway provides a connection to the South West region via Mount Barker and Manjimup. Wingebellup Road is an alternative to Muir Highway linking to the South West via Boyup Brook and is also a timber cartage and tourism route to the region.

Under a general economic growth scenario built on an expansion of agricultural products, food processing, tourism and minerals development, there would be an impact on existing road infrastructure. A significant amount of investment would be required on major and minor roads and for rail infrastructure if an efficient, integrated system is to be further developed.

The *Western Australian Regional Freight Transport Network Plan* (Department of Transport 2013) articulates the Western Australian State Government's planning, policy and project priorities to ensure the regional transport network continues to perform effectively. The Plan identifies four freight priorities in the region:

- Progress expansion plans at the Port of Albany, subject to a satisfactory private sector funding model; construction of an additional berth and associated dredging program for Cape size vessels to service emerging resource development opportunities (2015+)
- Roll out a road renewal program for the Albany-Lake Grace Road (Chester Pass Road) (2015+)
- Complete the Albany Ring Road – Stages 2, 3 & 4 (2020+)
- Duplicate the Albany Highway within the City of Albany from Federal Street to LeGrande Avenue (2020+).

PORT OF ALBAN Y

The Port of Albany is in one of the best natural harbours in the southern hemisphere. Exports through the port include woodchips, wheat, canola, barley and silica sand. Imports include fertiliser and petroleum products. Port throughput exceeded 4 million tonnes in 2012-13, an increase of 15 per cent on the previous year (Figure 17).

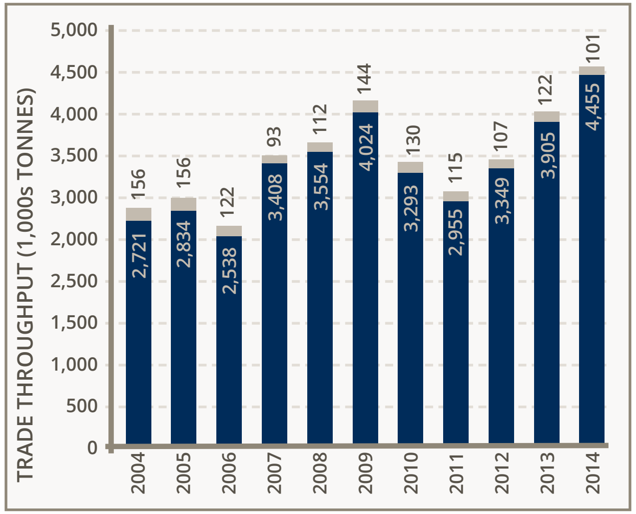


Figure 17 Albany Port throughput 2003-04 to 2013-14

The Port is primarily export-oriented, providing a channel for the flow of agricultural products from the Great Southern to global markets. The Port currently does not have a containerisation facility and this limits its role of in relation to manufacturing and other containerised export opportunities, constraining market access for some sectors. (It should be noted that other regional ports in Western Australia, including ports with much larger manufacturing bases such as Bunbury, generally do not handle containers.)

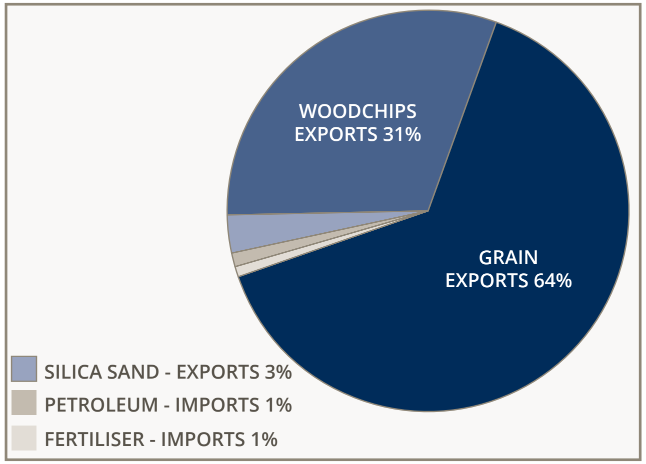
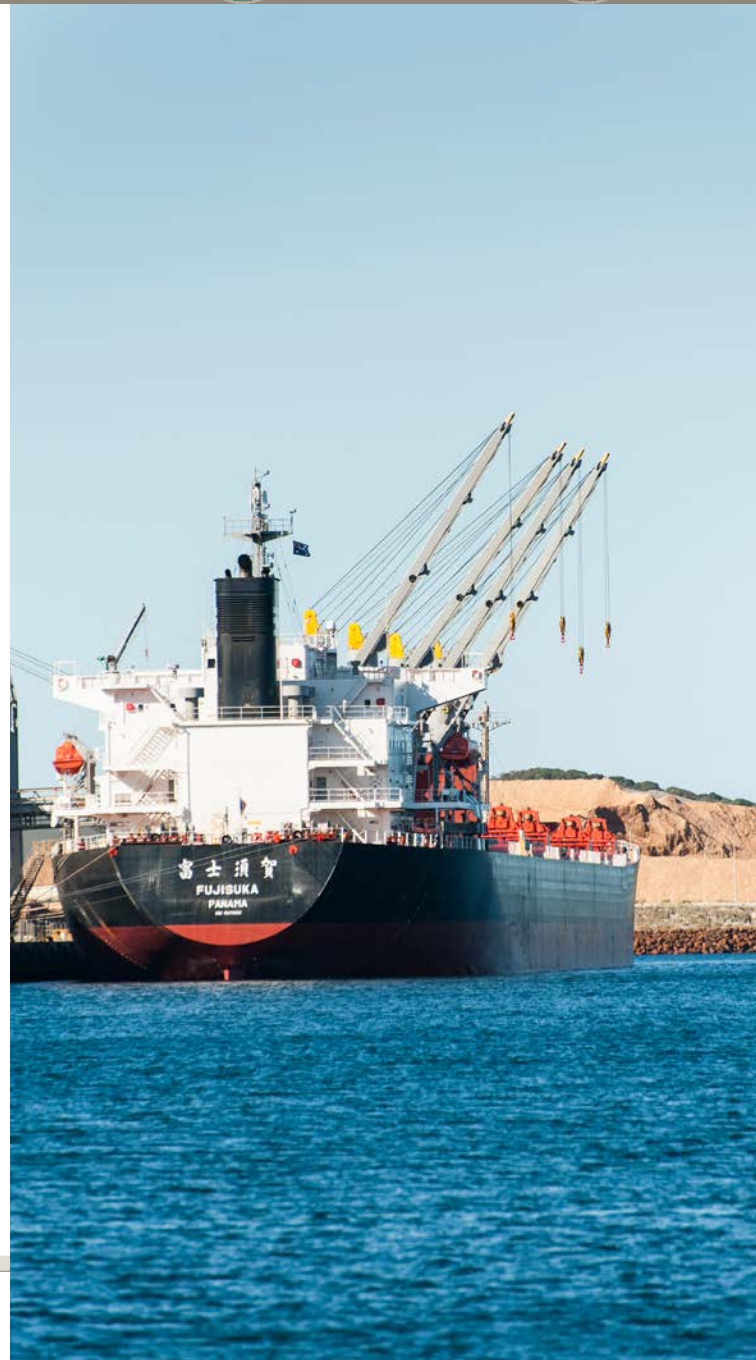


Figure 18 Albany Port throughput by commodity 2013-14

Woodchips and wheat are currently the largest export commodities by throughput tonnage (Figure 18). This commodity mix may change in the future with the establishment and operation of major mining investments for the region. A range of port capacity expansion investments will be required to facilitate this commodity diversification.



Additionally, the Port was visited by six cruise vessels in 2013-14 (Figure 19), some 7 per cent of total cruise vessel arrivals in the state. This is down from recent highs of 13 vessels in 2009-10 but remains above visitation levels earlier last decade. The decline may reflect the impact of the bankruptcy of a Fremantle-based cruise ship line in 2010. A new cruise line introduced in 2014 is expected to increase cruise ship visits and therefore tourist visitation levels in the region.

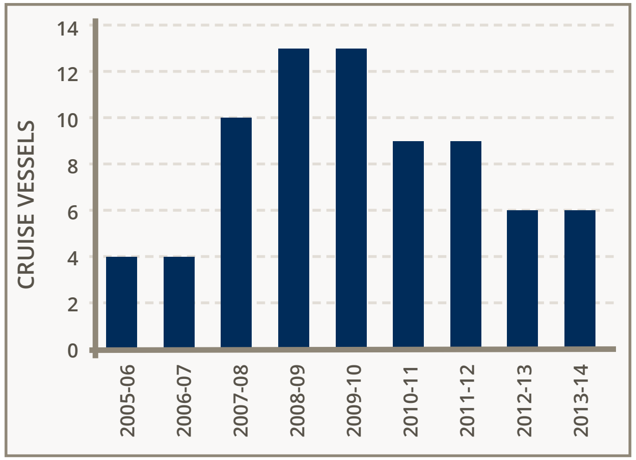


Figure 19 Cruise vessels, Port of Albany

A major advantage of the Port of Albany is that it has spare capacity in terms of the shipping channel, berths and land. However, the Port also has capacity constraints in the efficiency of loading operations, particularly in its road/rail mix and its capacity to deal with deliveries of bulk and break bulk commodities. The capacity of the Port is critical to capitalising on potential export opportunities, including iron ore and secondary processing industries. Investment in infrastructure to address operational capacity constraints would enable the Port to leverage further export-related growth and respond quickly to trade opportunities that emerge.

In summary, the Port of Albany provides a strong connection to global markets for local agricultural production and plays a secondary tourist visitation role. Its economic contribution in Western Australia is probably understated in broader measures due to the lack of mining related outputs. However, it remains critically important for market access in the state's second largest agricultural region.

TRANSPORT SERVICES

Regular passenger transport (RPT) air services to the Great Southern operate primarily through the Albany Regional Airport, with up to three flights daily by Virgin Airlines to Perth. Total annual flights increased considerably over the past decade (a reduced schedule was announced in late 2014) and total passenger throughput rose from 30,000 in 2001-02 to almost 60,000 in 2012-13 (Bureau of Infrastructure, Transport and Regional Economics 2013). Steady growth in passenger throughput in recent years (Figure 20) places Albany as the 48th largest airport in Australia and the 10th largest airport in the state (Bureau of Infrastructure, Transport and Regional Economics 2013). Currently, all services are classified as regional, with no direct interstate or international connections to the airport.

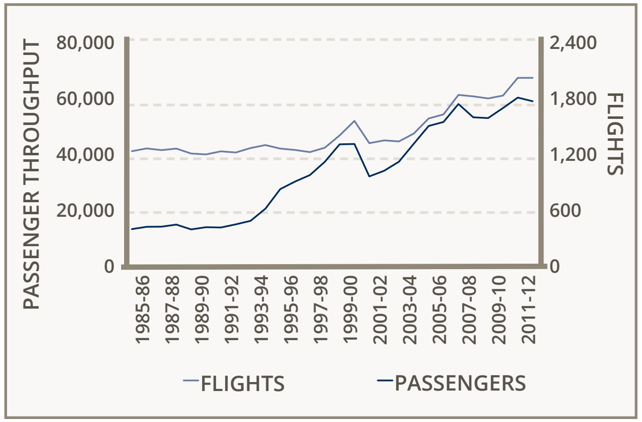


Figure 20 Passenger throughput and flights, Albany Regional Airport

Albany is route regulated, although this was being assessed by the state in late 2014. The need for, and level of, regulation is to be further periodically assessed should the Perth-Albany route remain regulated (Department of Transport 2013). Some stakeholders believe the lack of carrier competition, due to the regulation of the route by the state, contributes to relatively high airfares compared to other regional destinations in Australia. The high cost of airfares is particularly relevant to the Great Southern as it is very likely to be impeding the development of tourism and visiting friends and relatives traffic within the region.

The Albany Regional Airport is the only regional airport in Western Australia with a fully-certified instrument landing system, which extends the range of weather conditions during which the airport can remain open to receive flights.

The draft Albany Regional Airport Masterplan details the real growth of passengers utilising the airport over the past 10 years, and offers new forecasts over the coming 20 years which reflect the anticipated growth of FIFO customers and tourist travel. These forecasts outline a need for gradual expansion of aviation and terminal facilities.

Although the airport can operate medium-sized jet aircraft, it is unlikely that direct interstate or international flights to Albany will be justifiable in the short to medium term with deregulated expansion of intrastate connections providing the best potential for the capture of interstate and international visitors through Perth. It is possible that deregulation may assist to reduce the cost of flights to Albany, which, like many destinations in regional Western Australia, is not cost competitive with similar tourist destinations in the eastern states, particularly Queensland (Department of Transport 2013). The high cost of airport security at regional airports also contributes to higher fares.

Rio Tinto has a fly-in fly-out service from Albany direct to Paraburdoo. The Great Southern's lifestyle advantages make it attractive as a base for FIFO workers. Growth of the economy and population will lead to a rise in the demand for air services to Albany.

Denmark, Gnowangerup, Jerramungup, Kojonup and Katanning have well-maintained airstrips. The Katanning facility is utilised extensively by the Royal Flying Doctor Service to service the regional hospital at Katanning. The Katanning airstrip has a designated instrument landing approach and the Shire is in the process of improving the airstrip to allow larger aircraft to land, potentially making the strip suitable for aircraft chartered for FIFO operations. There may be opportunities, albeit through investment in upgrades, for these district airstrips to be used for a greater range of aviation activities.

Bus services link the Great Southern to the metropolitan area and towns in neighbouring regions. Public transport services within and between towns in the Great Southern are limited. There is the potential to better connect communities through the development of scheduled bus services.

SERVICED INDUSTRIAL LAND

Serviced industrial land provides an opportunity for industry to deliver projects that play an important role in the growth of the regional economy. The Great Southern has two major industrial estates zoned for Special Industry. Mirambeena Industrial Estate is 15 kilometres north of Albany and Yerriminup Industrial Estate is seven kilometres south of Mount Barker. Both estates have been subject to detailed environmental planning and are surrounded by one-kilometre buffer zones.

The Mirambeena Timber Processing Precinct near Albany was established to cater for industries involved in value adding to the region's plantation timber resource. The Katanning SuperTown Growth and Implementation Plan identified a need for industrial land, which could include a significant food precinct contiguous with the Western Australian Meat Marketing Cooperative processing complex. Other areas identified as needing more industrial land include Denmark, Mount Barker, Gnowangerup and Cranbrook.

The availability of project-ready industrial land, including buffers and infrastructure, is recognised by the State Planning Strategy as a key component for economic development. However, the cost of servicing the land (e.g. power, water, telecommunications and roads) in order to make the estates project-ready can be a significant impediment.

COMMUNICATIONS

Most of the Great Southern's towns have access to digital telecommunications at some level. A conventional range of mobile phone services, mobile broadband and fixed-line broadband is available in the urban areas of Albany and the region's larger towns.

Community Resource Centres (CRCs) are a key resource in that they provide networked facilities in twelve communities across the region. However, there remain gaps in full access to electronic and digital infrastructure and this can constrain the operational competitiveness and efficiency of a range of rural enterprises.

Provision of broadband and mobile phone coverage is variable across the rural areas of the Great Southern. The Regional Mobile Communications Project expanded mobile phone coverage at five sites in the region in 2012-2013 but there are still significant gaps and further investment is required. In 2013, the GSDC mapped existing telecommunications infrastructure in the region in preparation for future telecommunications infill programs and to assist in tracking the roll-out of the National Broadband Network (NBN).

The State Government conducted a State Telecommunications Needs Assessment in 2013 that identified potential sites for new mobile phone infrastructure to improve coverage in the regions. In early 2015, the Regional Telecommunications Project started with the announcement of an initial list of 22 priority sites, including five in the Great Southern. By the time it is finished, the four-year, $45 million Regional Telecommunications Project is expected to fund 85 sites, including a further tranche in the Great Southern. More potential sites may be identified as new infrastructure is rolled out.

Although telecommunications services have generally improved across the region, stakeholder consultation noted bandwidth capacity as a key factor. Bandwidth and quality concerns are impacting numerous sectors, including, but not limited to:

- E-commerce
- Access to on-line education and peer coaching in schools
- On-line conferencing
- Ambulance on-line despatch systems
- On-line health services.

Katanning is the site of a telecommunications backup system for Western Australia. Katanning is also a point of interconnect for the NBN, which may provide opportunities to attract data-intensive enterprises (GSDC 2013b). Maximising the reach of the preferred modes of delivery of the NBN (fibre over wireless, wireless over satellite) is a critical task for the region.

The need to 'future proof' the rural communities of the Great Southern is a high priority and requires improved information and communications technology (ICT) support and the capacity to utilise technology. In the current and future environment for business and community services, high levels of telecommunications will be required for all business, including professional and community services. High quality, consistent broadband is essential to attract new businesses to the region and digital awareness is essential for existing operators to stay competitive.

IN 2040...

INFRASTRUCTURE AND SERVICES

Picture the Great Southern in 2040, after decades of strategic investment in essential infrastructure and services. Existing industries have grown and new ones have been established, enabled by ready access to the necessary energy, water, transport and communications. Serviced industry hubs in all major towns of the region support a wider range of manufacturing and other enterprises.

By 2040, natural gas has long been providing energy for industry and there is a robust electricity network drawing on conventional and renewable sources. Water supplies are assured, despite the vagaries of the climate, and include full recycling of wastewater.

Albany Regional Airport is on national and international routes with price-competitive carriers bringing greater numbers of visitors to the region. Roads throughout the region are safe and capable of handling higher volumes of commercial and private traffic. Much of the transport task is taken up by an efficient rail network.

Albany Port handles bigger volumes of exports, including minerals, serviced by efficient transport and transfer facilities.

Visitors and residents have seamless access to quality digital communications. New enterprises in Katanning take advantage of it being an NBN point of interconnect. Digital infrastructure enables new opportunities in health, education and commerce across the region.

KEY METRICS

Table 8 provides a summary of the key metrics related to the ESSENTIAL INFRASTRUCTURE AND SERVICES regional imperative. These metrics are measured across a number of relevant areas of focus related to the imperative for critical investments in essential infrastructure and services that will support growth and development in the Great Southern. *(Refer to page 39 for Key Metrics legend)*

Table 8 Key Metrics Scorecard – Essential Infrastructure and Services

AREA OF FOCUS	MEASURES	STATUS	TREND	COMMENTS
Transport	Trade throughput of Albany Port Albany Regional Airport passenger numbers Road connectivity	●	▶	Expanded Port capacity needed to support mineral and container exports. A lack of carrier competition to Albany Regional Airport contributes to relatively high airfares and constrains tourism. Albany, South Coast and Great Southern Highways are all strategic freight, tourist and inter-regional transport routes. Significant investment is required in the road network including east-west links in the medium term to meet the needs of residents, tourists and industry.
Energy	Energy production and transmission	●	▼	Major concerns exist in the region about power supplies, including reliability issues and lack of capacity to meet growing industry demand. Significant investment is required in capacity in the SWIS over the next decade including for emerging resource projects. The region is not currently serviced by natural gas, although the State Government is progressing planning for a natural gas pipeline from Bunbury to Albany. This would increase the energy mix and diversity of the region.
	Renewable energy	●	▶	Wind power production in the Great Southern contributes to the SWIS. Opportunity exists to significantly expand renewable energy production in the region.
Water	Rainfall patterns and water security	●	▶	Rainfall decreases along the coast west to east and inland. Major upgrades of the Great Southern Water Supply Scheme pipeline from Harris Dam may be required to support future population growth. The impacts of climate change are expected to be less severe in the Great Southern than in many other parts of regional Western Australia but declining rainfall will affect cropping patterns and require an adjustment of farming practices in some areas.
Industrial Land	Number of locations that have relevant zoning and services	●	▶	While the estimated cost of extending services is a significant impediment to making zoned industrial land project-ready, identifying niche industry opportunities associated with competitive advantage assists in overcoming any impediment.
Communications	Broadband and mobile phone coverage	●	▶	Katanning is a point of interconnect for the NBN. Government support required to address gaps in mobile phone coverage. Bandwidth and quality concerns are impacting numerous sectors across the region.

KNOWLEDGE & INNOVATION

Promoting innovation and growing knowledge-intensive sectors of the economy are key drivers of productivity growth for Australia as a whole, and for the Great Southern.

EDUCATION

Certificate level qualifications represented 52 per cent of non-school qualifications in the region in 2011 compared to the state-wide proportion of 43 per cent (ABS 2012). That the most common post-school qualifications among Great Southern residents are at the certificate level tends to reflect the region's industry structure.

Attracting, retaining and developing highly qualified staff and accessing specialist services is a challenge in many education regions, according to the Department of Education. Limited access to reliable internet services inhibits the opportunity for regional teachers to network with teachers across the state and to participate in professional development. Departmental sources have also highlighted the importance of local access to teacher training in attracting and retaining high quality teaching staff.

Despite a significant tertiary education presence in the region, the trend is for young adults to leave the Great Southern to pursue education and employment opportunities. This loss of young people has an effect on the region's post-school education participation rates, with only 4 per cent of the Great Southern's population enrolled in university or technical and further education in 2011. Participation rates among older age groups are above average, particularly in the 40-49 and 50-64 groups. This may also indicate a strong commitment to lifelong learning, helping to reinforce both the resilience of the regional economy and promoting entrepreneurship and productivity.

The capacity and quality of some secondary education assets in the region is considered by some stakeholders to be the primary factor undermining tertiary education participation and qualification levels. In 2013, the Great Southern had 38 school facilities, including 24 primary schools and 8 high schools (Table 9). According to Departmental sources, the region is under-represented in terms of the number of Independent Public Schools and therefore community input to the public schooling system is not optimal. These sources have a target for all public schools to be Independent Public Schools by 2040.

SCHOOL TYPE AND NUMBERS		TOTAL STUDENTS
Agricultural Colleges & Schools	1	99
District High Schools	4	1,184
Education Support	2	62
Primary Schools	24	4,499
Senior High Schools	3	1,750
Community Kindergarten	3	107
High Schools	1	301

Table 9 Capacity of schools in the region (2014 data - in 2015, Denmark High School became a senior high school and high schools took in Year 7 students, but total student numbers for 2015 were not available at the time of publication)

It remains a common trend for a significant number of families to either leave the region or to send their children away for secondary education. This is particularly common in the Pallinup subregion, where smaller rural communities lack the population critical mass to support secondary or upper secondary education. Losing some young people from the region for their education means the Great Southern's tertiary education offering lacks a pipeline of new students from local schools. Those that leave for their secondary schooling tend to also stay in Perth for their tertiary studies.

Unlike most regions in Western Australia, the Great Southern has a significant tertiary and higher education sector with the UWA Albany Centre and the Great Southern Institute of Technology (GSIT) providing quality tertiary education and training to residents. The *University of Western Australia (Albany) Strategic Plan 2011-2015* contains a number of strategies to increase access, expand the number of courses available and enhance student support at the Albany campus, in order to attract students from outside the region to study in the Great Southern.

The largest registered training organisation is the GSIT which has four campuses that operate in the main regional centres of Albany, Denmark, Mount Barker and Katanning. It also has service agreements with CRCs at Kojonup, Gnowangerup, Walpole, Tambellup and Wellstead. The wider CRC network also provides support to students.

The GSIT works regularly with secondary schools in the region to provide vocational education and training options for Years 10, 11 and 12 as part of the VET in Schools program. This program provides students with skills and knowledge to successfully transition into the workplace or onto an alternate pathway into higher education through an academic foundation year.

INTERNATIONAL STUDENTS

Despite a correction, following changes in the regulatory environment in 2010, the international education sector is still the second largest service export from Western Australia, accounting for $1.4 billion in 2012 (ABS 2013f). However, Western Australia has historically received a below average share of international students enrolments, accounting for only 8.1 per cent of national numbers in 2012, as illustrated in Table 10.

STATE	2010	2011	2012
NSW	37.3%	37.3%	37.5%
VIC	29.5%	29.0%	28.7%
QLD	16.7%	16.7%	16.7%
SA	5.5%	5.5%	5.4%
WA	7.9%	8.0%	8.1%
TAS	0.8%	0.8%	0.9%
NT	0.2%	0.2%	0.3%
ACT	1.8%	2.0%	2.1%
NAT	0.2%	0.3%	0.4%

Table 10 International student enrolments by state, 2010 to 2012

Western Australia has consistently attracted students from South East Asian countries (namely Singapore and Malaysia) and the state receives relatively high shares of student enrolments from the United Kingdom, Brazil, Norway, Pakistan and Indonesia (Australian Education International 2011). However, as shown in Figure 21, the shares from the major markets of China and India are very low. Considering the volume of growth expected from these countries in coming years, this lack of exposure presents a challenge for Western Australia's international education market.

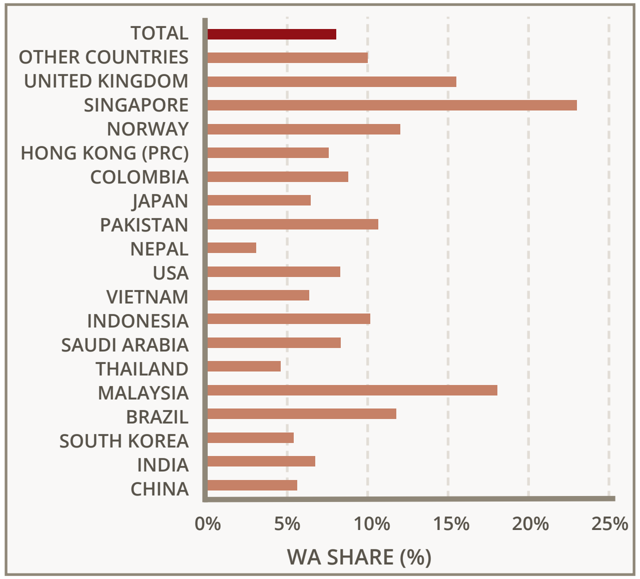


Figure 21 Western Australia's share of international students by country of origin, 2011

The Great Southern is well-serviced in terms of tertiary education facilities, hosting the UWA Albany Centre and the GSIT. The GSIT has a policy of seeking a balanced increase in the number of international students and has had some success in this through a program of marketing through Education Training International. UWA similarly recognises the benefits of income and student diversity that can be gained for the region by recruiting from offshore. The long-term physical presence of these tertiary education institutions provides the opportunity for international students to be recruited and to complete their education in the region.

In terms of its current enrolments of international students, UWA is well placed to steadily increase numbers at its Albany campus. That is, with approximately 20 per cent of its undergraduates and 40 per cent of its postgraduates from overseas, the overall percentages approximate those attending the other major Australian universities. As it is UWA's intention to at least maintain the ratio of national to international students in future years, with a steady expansion of in-demand courses at Albany, the number of both under and postgraduates from offshore should increase. The GSIT will also continue to grow its vocational and university degree enrolments over future years. Current targets are that by 2040, the region's tertiary education sector will be hosting 3,000 full-time equivalent students, over a third of whom will come from overseas.

INNOVATION

Innovation is the creative process that transforms new and existing knowledge and technology into commercial value, and reconfigures existing processes in new ways. Innovation is a multi-dimensional process that includes, but is not confined to, research and development and its commercialisation or diffusion. Innovation is a key driver of economic growth and directly influences a region's economic profile by changing, for example, the number, size, growth rate and industry profile of businesses, and socioeconomic measures such as employment and income levels.

In turn, the economic profile of a region also influences the nature of innovation within that region. It provides the context for innovation and directly influences the constitution and behaviours of knowledge networks. For example, the people who work in the region, and the skill sets (and mindsets) they possess, represent a potential pool of members for the regional innovation knowledge networks. Diversity in a regional economy can also influence the nature and effectiveness of these knowledge networks – the more diverse the economy, the less network members are in direct competition with each other, and the higher the levels of trust and cooperation within knowledge networks (Saur, I, Marques, MJ and Alves, J 2005).

Although the Great Southern depends on primary industries, like much of regional Western Australia, regional business can be very innovative. In fact the ABS notes that, nationally, 39 per cent of non-capital city businesses are innovative compared with 36 per cent in the capitals (ABS 2012). However, studies show that innovation in regional Western Australia is seen by entrepreneurs to be riskier and more costly than in metropolitan areas and barriers related to the lack of expertise and skills are greater (Mazzarol, T 2003). Further, it is found that there is generally a low engagement by regional businesses in innovation funding schemes.

A comprehensive study of innovation in the state's regional areas (Keston Technologies 2013) found that the most commonly identified factors for innovation are: access to new technology, information and finance; strong business and political leadership; regional infrastructure (physical infrastructure such as transport, and virtual infrastructure such as ICT and internet access); and access to skills and expertise (Figure 22). Common barriers to innovation were identified as lack of access to funding, the cost of innovation, shortage of skills, lack of access to knowledge or technology, and government regulations and compliance. On the other hand, the most helpful mechanisms for supporting innovation included networking, State and Commonwealth innovation initiatives, grants, education and training schemes, and collaboration with higher education and/or research and development centres.

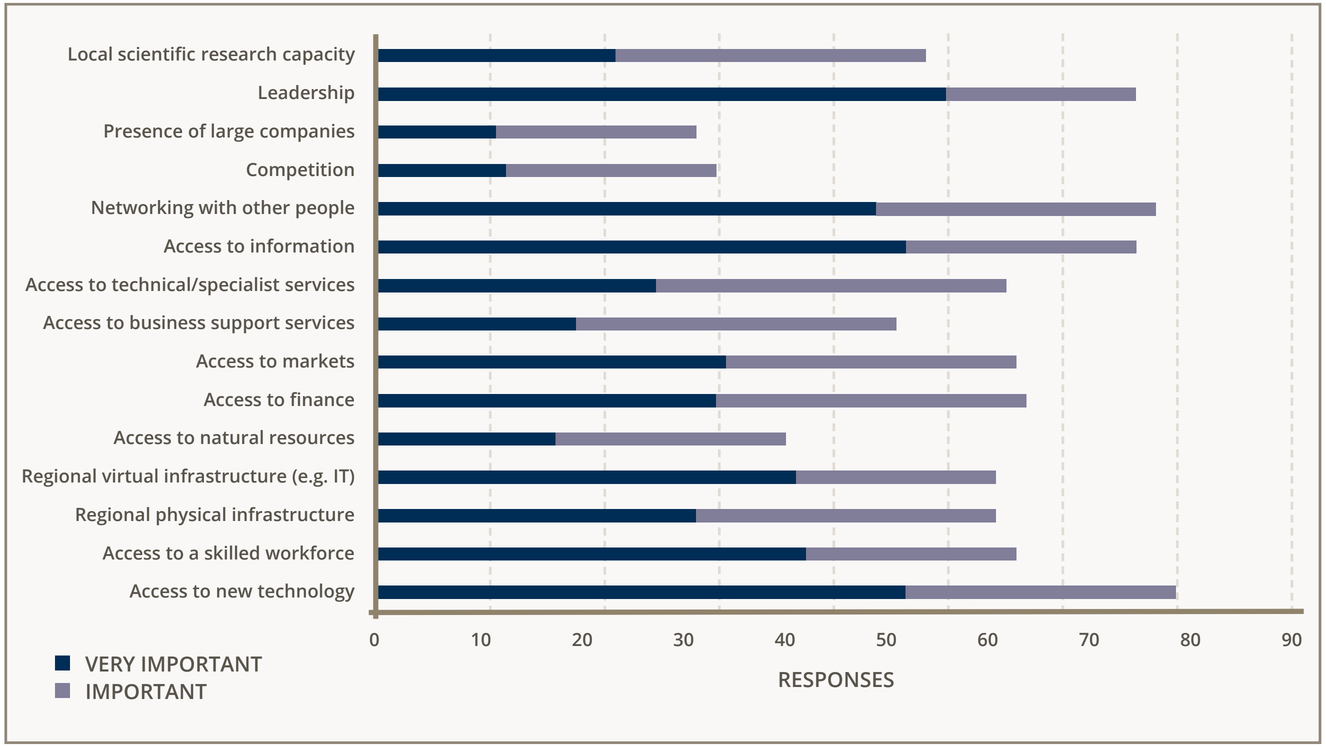


Figure 22 Importance of factors in regional business innovation activities in Western Australia

UWA ALBANY CENTRE

The University of Western Australia is internationally recognised for its excellence in teaching and research, and has offered undergraduate programs through the Albany Centre since 1999. The centre provides a personalised, friendly and supportive environment which helps school-leavers and mature-age students alike adjust to the challenges of university studies. The centre offers courses in arts, science and education as well as transition programs for entry into courses at the UWA Perth campus.

RESEARCH

As highlighted in the previous section, having a robust and growing tertiary education sector presents a number of opportunities to drive innovation in the Great Southern. Regional university campuses and other higher education institutions, such as GSIT, can play a major role as innovation catalysts in the region. For innovation, there is a need for mutual understanding between higher education institutions, innovators and communities to match research and development capabilities with problems and challenges specific to the region, and to align the different objectives of the stakeholders in business and research and development collaboration. The Centre of Excellence in Natural Resource Management (CENRM) is an Albany-based research centre of the UWA. Since its inception, CENRM has attracted research funding for a wide range of regional, national and international initiatives, including the Tropical Rivers and Coastal Knowledge program, climate change projects, International Water Centre projects on river health and plant conservation biology.

Research activities in the Great Southern are also undertaken by, among others:

- Rural Clinical School of Western Australia (RCSWA)
- Department of Parks and Wildlife
- Department of Agriculture and Food Western Australia.

IN 2040...

KNOWLEDGE AND INNOVATION

Picture the Great Southern in 2040, after decades of development in knowledge and innovation.

Continued investment in programs in early childhood learning has eliminated learning deficits for Great Southern children, who now achieve AEDC scores above the state average. School students at all levels and right across the region achieve results comparable to their metropolitan counterparts.

Beyond compulsory schooling, students have more options within the region to take up further education in technical or tertiary fields. Students are more prominent in the community, including 3,000 tertiary students (full-time equivalent), 30 per cent of them from overseas.

Specialist training programs are in place to maintain workplace skills including trades qualifications. Great Southern training includes preparing skilled workers to be part of the FIFO workforce on resources projects.

Local businesses have teaching partnerships with education and training institutions. Businesses in the region are innovative and creative. Their innovation takes place in a context of achievement at tertiary level, where there is internationally recognised research taking place in agriculture, health economics and environment.

KEY METRICS

Table 11 provides a summary of the key metrics related to the KNOWLEDGE AND INNOVATION regional imperative. These metrics are across a number of knowledge intensive services and areas of innovation that have the capacity to underpin future improvements in productivity, profitability and incomes. *(Refer to page 39 for Key Metrics legend)*

AREA OF FOCUS	MEASURES	STATUS	TREND	COMMENTS
Infrastructure	Education and health provision	●	▶	Evidence of early years development issues in hinterland areas. Some primary and secondary education services are perceived to face challenges in terms of capacity and quality. Albany has one of the most significant tertiary education institution presences in regional Western Australia with the UWA Albany Centre and GSIT. Health service provision tends to be better resourced in areas of higher population, and there is increased connectedness to smaller settlements and regional populations. Outreach and virtual service delivery is increasing the in region, particularly from Albany into the Pallinup subregion.
Skills	Post-school qualifications Research	●	▶	Post school qualifications are below average and with higher shares of certificate level qualifications, reflecting the economic structure of the region. CENRM is an Albany-based research centre of the UWA.
Innovation	New business registrations Collaborative research programs with tertiary institutions in the region Engagement with Commonwealth/state innovation funding schemes	●	▶	The Great Southern has the highest level of small business ownership in Western Australia with 145 small businesses per 1,000 residents. There is generally a low engagement by regional businesses in various State and Commonwealth Government funding mechanisms. Businesses in Australia do not have a natural propensity to collaborate, requiring a focus on encouraging collaborative work and strengthening cross-industry understanding of collective needs.

Table 11 Key Metrics Scorecard – Knowledge and Innovation

COMMUNITY & ENVIRONMENT

POPULATION AND DEMOGRAPHICS

Population growth in the King subregion over the past decade contrasts with population decline in many of the communities in the Pallinup subregion (Figure 23). Katanning is the largest population centre in the Pallinup subregion and is expected to grow in the medium term with the town's role in the RCDP and the supporting investments being made by the public and private sectors. However, balancing the management of growth in coastal towns with improving the sustainability of northern and eastern rural communities represents a major challenge for the region.

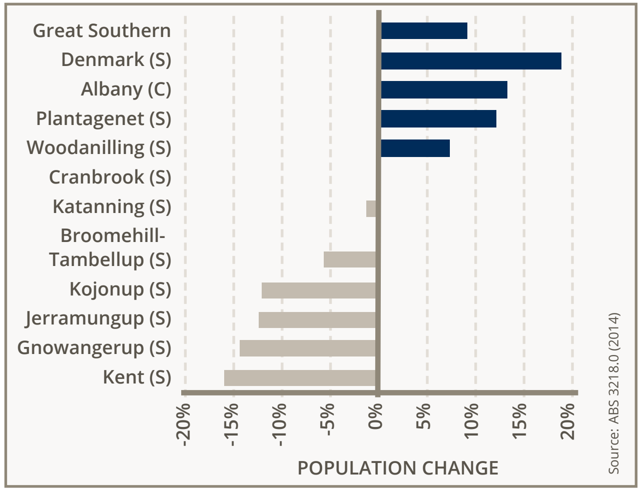


Figure 23 Population change, Great Southern local government areas, 2003 to 2013

Current projections are for the Great Southern's population to reach 70,500 people by 2026 (Western Australian Planning Commission 2012). This is equivalent to an average annual population growth of 1.4 per cent from 2012 onwards compared with the 0.7 per cent achieved over the last decade.

In Western Australia, coastal town growth continues to be dominated by those seeking a 'sea-change' lifestyle. This long-term population trend is being fuelled by people moving from Perth and from inland regional areas. There is some evidence that higher demand for coastal properties reflects a trend for more affluent, working age people to relocate to the higher-priced local government areas on the coast. This results in a greater number of retirees settling in the nearby, and usually cheaper, inland local government areas within the wider coastal region. This trend is particularly evident in the South West region. The exception to this pattern is the Great Southern region where there is stronger evidence of people 'ageing in place' in Albany and Denmark. In this region, there is a trend for retirees to move 'into town', usually seeking suitable housing options, services and support (Regional Australia Institute 2014).

In recognition of the importance of the ageing population across all regional areas the Regional Development Council, on behalf of all Regional Development Commissions, is currently undertaking a detailed planning project entitled "Ageing in the Bush". This will identify aged care models for regional Western Australia that best enable residents to age in their community. It provides an important opportunity to inform the Commonwealth and State Government's aged care reform agendas and support local governments' decision-making in relation to the provision of local services, infrastructure and governance.

The strength of this project is that it is regionally focused, evidence-based, aligned to state and Commonwealth reform initiatives and intended to involve all key stakeholders including local, state, regional and Commonwealth agencies and a range of aged care providers. The outcomes of this regional planning initiative are expected in 2015 and will be used to inform future decision-making in the Great Southern and other regions.

The Great Southern's natural amenity, milder climate and lifestyle attributes have long attracted retirees to the region. In 2012, the Great Southern had an older population profile than the state as a whole, with a higher proportion of people aged 55 and over. This age profile will lead to increased demand in the aged care, housing, retail, recreation and lifestyle industries. It will also require a skilled service sector workforce, drawn from existing unemployed or under-employed residents and from attracting additional workers to move into the region.

COMMUNITY RESILIENCE

The spirit of Great Southern communities remains strong as demonstrated by high levels of volunteerism, active sporting associations and willingness to work together and with their local governments for the common good. Notable recent examples of small town community partnerships and resilience include:

- When Ongerup lost its post office and local store in 2012, it lost its community hub. In response the Ongerup Community Development group, in partnership with the Shire of Gnowangerup, set up a post office in the community's library. In early 2014, a group of 18 local families jointly purchased the store, which will hold a liquor licence and will stock farm supplies, hardware and groceries.
- Nyabing's Progress Association annual community cropping program funds improvements to the town's community facilities such as a theatre system for its town hall. Proceeds from future harvests will support additional community facilities and events.
- Tambellup Progress Association's community cropping program generates funds for the future redevelopment of its sports club.

Higher fertility rates in the region also support a larger share of children from birth to 14 years. In 2011, the Great Southern had a fertility rate of 2.79 compared to the Western Australian rate of 1.93 births per 1,000 women aged 15-49 (ABS 2013b). However, the region's proportion of young adults (20-34) is considerably below the state proportion, as illustrated in Figure 24, and reflects the loss of young people to employment and education opportunities elsewhere (ABS 2013j). Attracting young people to the region and retaining them is fundamental to the success of the Great Southern economy, providing a critical mass of skilled labour for established and emerging industries and businesses and supporting the renewal of local communities.

This Blueprint refers to a population of approximately 100,000 by 2040. Notwithstanding current above average fertility rates in the region, this anticipates increased net migration and accelerated population growth rates. This will involve both higher inflows into the region and reduced population outflows (i.e. retention of young adults). A healthier population which lives longer is also an important component.

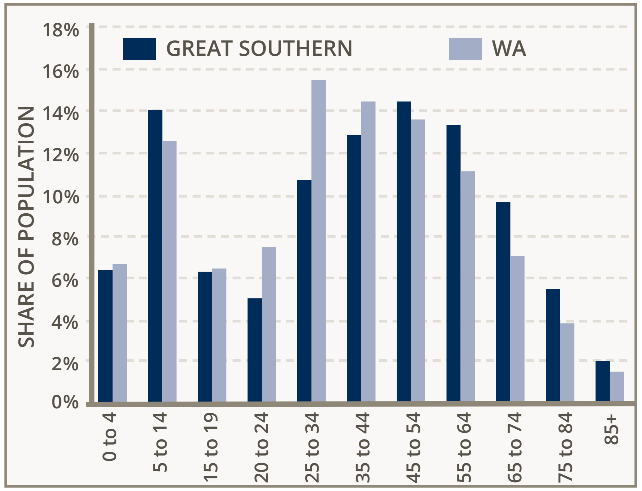


Figure 24 Age profile

COMMUNITY WELLBEING

Community cohesion is at the heart of a safe, strong society. Cohesion must be delivered locally through creating strong community networks, based on principles of trust and respect for local diversity, and nurturing a sense of belonging and safety. The Department of Regional Development's *Living in the Regions 2013* community research was based on the responses of a survey of almost 8,000 non-retirees and it included questions on perceptions of sense of community and safety in regional areas. The survey results, as illustrated in Figures 25 and 26, rated the Great Southern above regional averages in terms of perceptions of safety and sense of community.

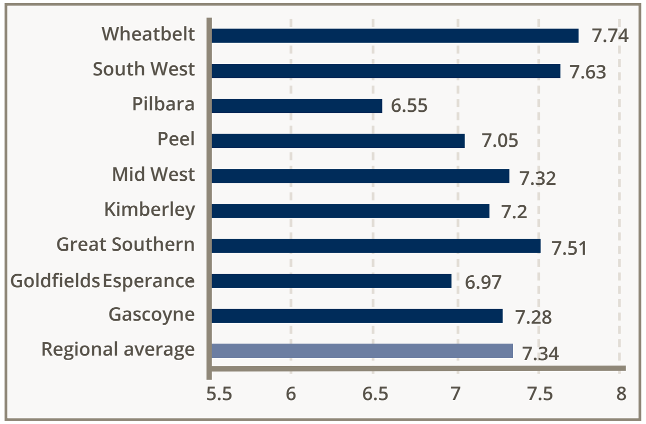


Figure 25 Sense of community by region (against score out of 10)

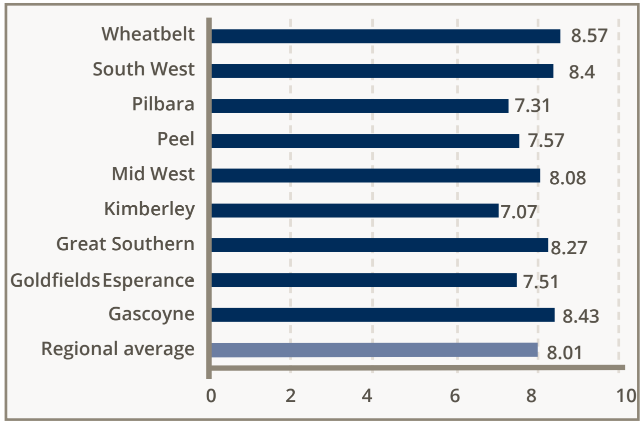
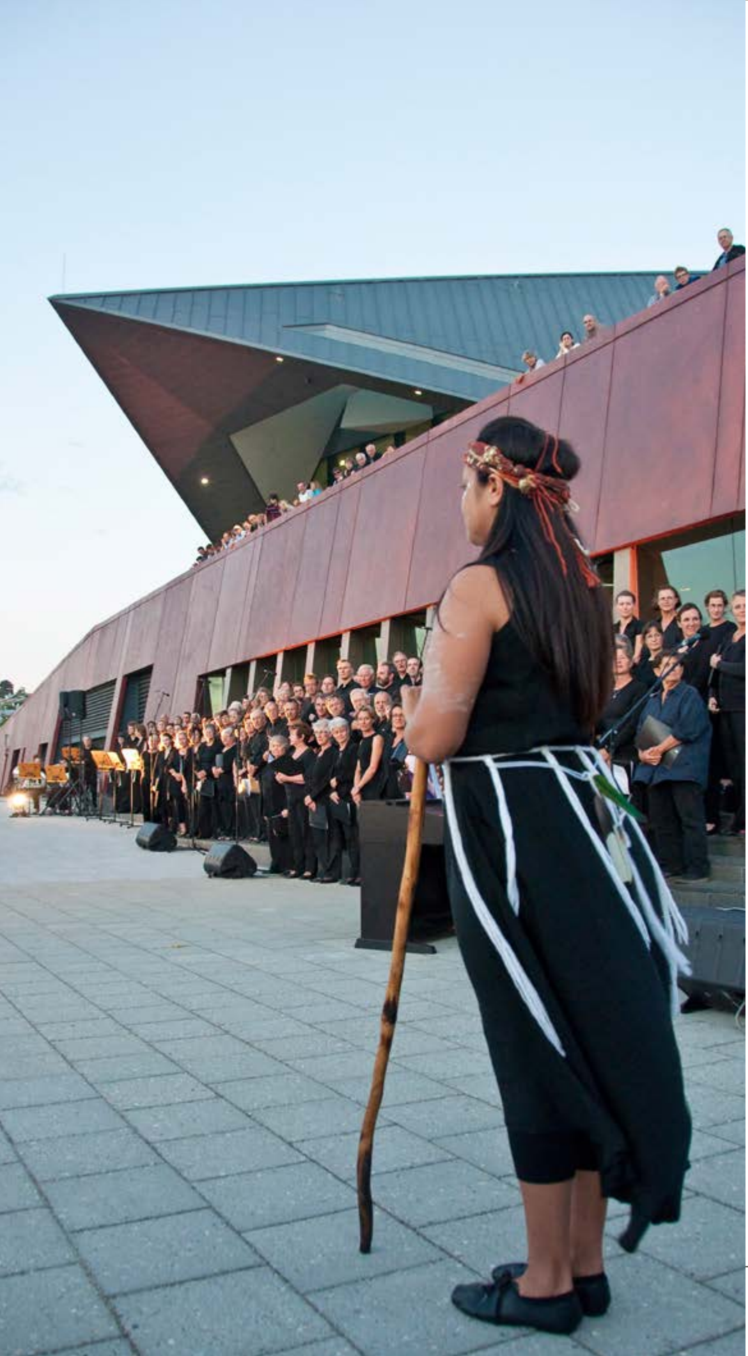


Figure 26 Sense of community safety by region (against score out of 10)



CULTURAL DIVERSITY

Across the Great Southern, there are communities in which a high percentage of the population was born overseas and, of this group, a significant number are from non-English speaking countries. Almost a quarter of residents in major centres such as Albany, Mount Barker and Katanning were born overseas. Katanning's overseas born population is significantly more culturally diverse than other regional towns in Western Australia. This immigration has been associated with employment opportunities in a range of industries and associated services, and this continues to be the case, particularly in reference to agriculture and its service providers. For example, employment opportunities at the region's export abattoirs generated a steady stream of workers and their families under sponsored migration programs. A more recent trend has been an inflow of trades workers and skilled professionals, again reflecting the demand for these services in the region and the Commonwealth Government's response through specific working visa programs.

The Great Southern is also home to a diverse range of people who have gained permanent residency in Australia after being accepted under the humanitarian visa program. While most of this group are able to find work and settle, some continue to experience difficulties. They have generally suffered trauma in their home countries, are poorly skilled, have minimal English and continue to experience health issues. Families from Myanmar, Afghanistan and Burundi are among those in this group who are struggling to become active members of the community. Settlement services currently available through the Commonwealth's program cover the first five years in Australia. In a number of instances there is a significant reliance on local communities and employers to provide ongoing support.

Aboriginal people are a significant part of the Great Southern community. It is estimated that 5 per cent of the region's residential population identify as Aboriginal or Torres Strait Islander. This is above the national figure of 3.8 per cent (ABS 2013e). The distribution of Noongar people varies widely between local government areas, including significant percentages in Broomehill-Tambellup (16.4 per cent), Gnowangerup (11.8 per cent) and Katanning (10.8 per cent).

In terms of jobs and incomes, the region's Aboriginal workforce is employed across the full range of professions, trades and other occupations in both the private and public sectors. The statistics also reveal Aboriginal people to suffer a significantly higher overall level of disadvantage in terms of socioeconomic status and resources (ABS 2013d). Initiatives that will grow economic and employment opportunities for Aboriginal residents are therefore fundamental to the long-term prosperity of the region. Also contributing to this outcome is a focus on a range of effective education, skills training, health and community services that are designed to address social disadvantage. This Blueprint takes a comprehensive approach in proposing actions and investment, in that all initiatives are inclusive without being stand-alone. Over the next twenty to thirty years, with the further development of agriculture, services, culture-based tourism and mineral resources, there will be significant opportunities for Aboriginal people who have the skills to secure permanent jobs in these areas of the economy.

The South West Native Title Settlement (SWNTS) is a negotiated agreement that is set to be finalised by mid-2015. The projected benefits of the settlement to the Aboriginal residents of the Great Southern are significant and range from recognition as the traditional owners, through to efficiencies in the delivery of programs and services, and enhanced employment and business development opportunities.

NOONGAR GROUPS

1. Amangu
2. Yued
3. Balladong
4. Whadjuk
5. Bindjareb
6. Wilman
7. Nyakinyaki
8. Wardandi
9. Ganeang
10. Goreng
11. Wudjari
12. Bibulmun
13. Mineng
14. Njunga

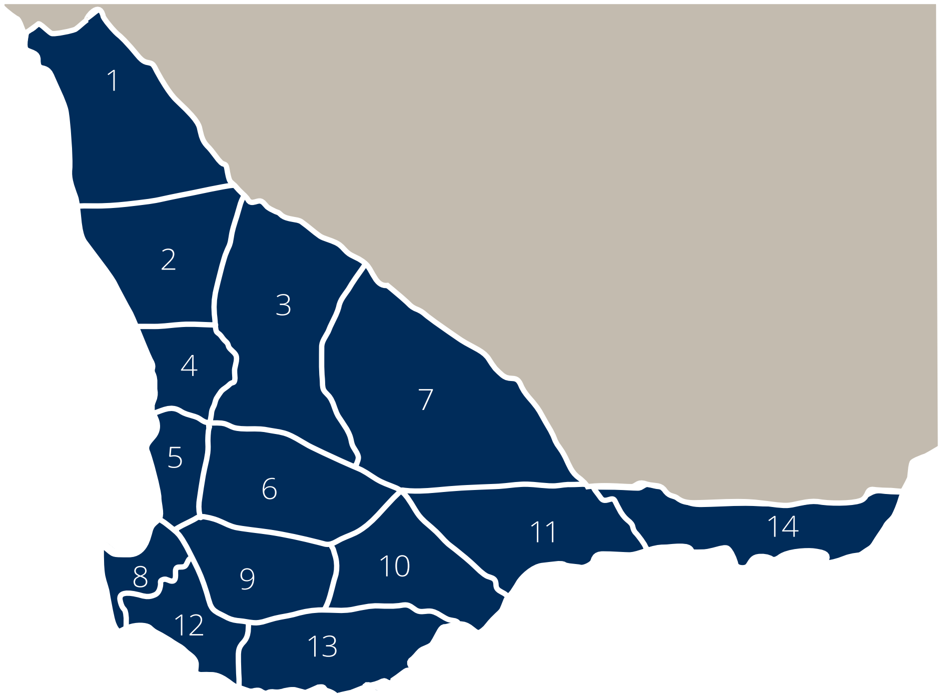


Figure 27 Aboriginal groups of Western Australia's south-west

Source: Tindale; Department of Aboriginal Affairs

NOONGAR CULTURE AND LAND

The Traditional Country of the Noongar peoples covers the entire south-western portion of Western Australia. This extends from Leeman in the north-west to beyond Cape Arid in the south-east. Archaeological evidence establishes that the Noongar people (alternative spellings: Nyungar / Nyoongar / Nyoongah / Nyungah / Nyugah / Yunga) have lived in the area and had possession of tracts of land on their country for at least 45,000 years. The Noongar people (Noongar meaning 'person') are one of the largest Aboriginal cultural blocks in Australia. There is no evidence that there has been any other Indigenous group than Noongar in the South West.

Noongar are made up of fourteen different language groups (which may be spelt in different ways): Amangu, Yued / Yuat, Whadjuk / Wajuk, Binjareb / Pinjarup, Wardandi, Baiardong / Baliardong, Nyakinyaki, Wilman, Ganeang, Bibulmun / Piblemen, Mineng, Goreng and Wudjari and Njunga. Each of these language groups correlates with different geographic areas with ecological distinctions.

(South West Aboriginal Land and Sea Council, 2011)

HOUSING STOCK AND AFFORDABILITY

Currently across the region, there is a sufficient supply of housing for the population. However, there are deficits in housing mix and quality. In particular, smaller affordable dwellings, in both the general and public housing market, are in demand. This demand is projected to increase with an ageing population (Department of Housing, Landcorp, GSDC 2013).

Great Southern dwelling and land prices are broadly lower than the averages in the Perth metropolitan area. However, lower cost housing does not necessarily translate to greater affordability. It is estimated that an additional 17,000 dwellings will be required to meet the region's aspirational population of 100,000 by 2040.

Worsening affordability could be a major detractor for both retirees and educated young adults, and could lead to reduced population growth. This would put more pressure on service delivery in the region, particularly rural communities. Conversely, if the relative affordability of the region improved, including lower construction costs for new dwellings (currently considerably higher than the Perth metropolitan area), it would become a more attractive destination not only to residents in other locations but also to export businesses.

REGIONAL CENTRES DEVELOPMENT PLAN (SUPERTOWNS)

The RCDP aims to support regional centres and SuperTowns by enhancing their strategic positioning, facilitating private and public sector partnerships, overcoming barriers to economic growth through innovative methods and translating well-researched aspirations into investment. The intention is that this investment will generate employment opportunities and deliver long-term economic and social growth in regional Western Australia. The RCDP encourages regional communities to build on their unique strengths, advantages and economic drivers and was initiated by the State Government in 2011 to enable the state and regional communities to plan and prepare for the predicted doubling of Western Australia's population to almost 4.2 million by 2040.

In 2011-12 Katanning was one of nine regional towns identified in the first stage of the program (RCDP1) for which $85.5 million was allocated through Royalties for Regions. The investment was to support the development of growth and implementation plans and to fund priority projects. Katanning is a strategic, well-connected service centre situated a three-hour drive from Perth, and a two-hour drive from Bunbury and Albany. It has a culturally diverse town population in excess of 4,200 people but anchors a wider region of more than 12,500 people.

The Katanning SuperTown Growth and Implementation Plan posited an aspirational population target of 15,000 people by 2040 for this regional centre. The employment and economic drivers have been identified and include:

- Development of an identified gold resource
- Development of an integrated food processing precinct
- Establishing Katanning as an NBN services hub for the south-west of Western Australia
- Leveraging the town's vibrant multiculturalism to develop a range of tourism products.

The Growth and Implementation Plan includes two stages of mainly infrastructure projects:

- The Katanning Town Square (opened in February 2015)
- Extensive road works, including the Great Southern Highway-Clive Street entry
- The refurbishment of the heritage Roller Flour Mill
- The renovation of the historic Unit Hotel
- Structure planning to facilitate land release for industrial purposes through LandCorp and private developers, including planning for an expanded meat processing precinct and for a dedicated food precinct adjacent to the Western Australian Meat Marketing Cooperative
- Remediation of Piesse Dam
- Civil works including roads and extensive landscaping (Piesse Dam etc.).

Future projects include:

- Multicultural Interpretive Centre
- Language Learning Centre (opened in 2014)
- Noongar Interpretive Centre and Park
- Planning for a range of community projects including Early Childhood Learning
- Youth Services Hub
- Redevelopment of the Katanning Country Club.

Katanning is therefore recognised in the Regional Blueprint as a subregional centre within the Great Southern that is actively developing projects that will generate and support population growth, investment and an enhanced level of economic activity.

For other communities in the Great Southern, the lessons learned from the development of the Katanning SuperTown Growth and Implementation Plan include the need to ensure that contemporary planning documents are in place (e.g. local planning strategies, town planning schemes) and that a bank of residential and industrial land is available to capitalise public and private sector investment opportunities.

In 2015 the State Government formalised an expansion of the initiative to RCDP2. In a two-stage process, over two years, a further nine regional centres will be included in the network of gateways to the global economy and as service hubs to surrounding communities. The State Planning Strategy 2050 had previously identified these towns as strategically important to the economy and to regional communities. RCDP2 will require investment in the capacity of regional centres to drive economic and social outcomes into the future. The Regional Development Council will lead the initiative, in close collaboration with the relevant local governments, regional development commissions, agencies, the private sector, traditional owners and communities.

HEALTH AND COMMUNITY SERVICES

Health facilities in the Great Southern include the new Albany Health Campus, which serves the whole region, along with district hospitals and smaller health centres. Rural communities face continuing challenges in attracting and retaining medical practitioners. There are 251 hospital beds in the Great Southern. The largest share is located in the Albany local government area with 116 beds. In the district hospitals, including Mount Barker (54) and Katanning (36), the bed totals include a significant commitment to long-term aged care and accommodation (Department of Health and Ageing 2012). This breakdown is illustrated in Figure 28.

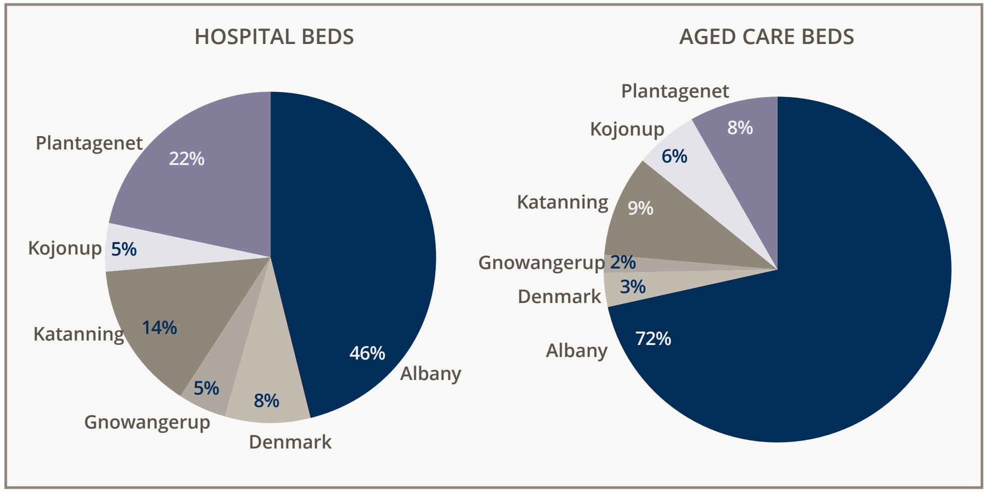


Figure 28 Distribution of hospital and aged care beds

The distribution of aged care beds is similar to that of hospital beds, though it is even more concentrated in Albany. There are 12 aged care establishments in the Great Southern providing a total of 474 aged care places, consisting of 223 high care places and 251 low care places (Department of Health and Ageing 2013).

On most measures reported by the WA Country Health Service, people in the Great Southern have a similar health profile to residents of the rest of Western Australia. There is no significant difference in mortality rates, and the hospitalisation rate for the region's residents is lower than the state average. However, measures of relative socio-economic disadvantage can reveal areas at risk for poor health outcomes. In the Great Southern, more than 5,000 people live in areas with disadvantage scores placing them in the lowest 10 per cent nationwide. Katanning, Tambellup and other areas show relative disadvantage and may benefit from targeted health programs. Aboriginal health programs are in place in the region but face pressure for resources.

There has also been extensive research conducted into the importance of early childhood years from birth to four years, and the influence into adulthood on a person's learning and behaviour, and biological processes impacting physical and mental health. In the Great Southern, the results of the AEDC reveal that a significant proportion of children are considered 'developmentally vulnerable' in one or more of the developmental domain areas tested, particularly in comparison with the state average.

There are a number of services and programs delivered in the region by government and non-government agencies, though these tend to be situation-specific and reactive to family needs. There is a need for a coordinated approach integrating existing government and community services and programs, with strong locally based engagement for families with young children. A number of community based initiatives are being developed, or currently exist, in the region which attempt to address this issue. These include the 'A Smart Start' early intervention and family support program (currently delivered in all local government areas outside of Albany), the Mount Lockyer Primary School Parent and Child Centre (Albany), and the upper Great Southern Early Childhood Hub (Katanning and surrounds). The ongoing challenge for the managers of these initiatives is to put in place a sustainable business model and secure operational resources.

CULTURE AND ARTS

Participation in artistic and cultural activity is one of the building blocks of sustainable regional communities, as it builds social amenity and helps communities attract and retain an engaged and vibrant workforce. *Creating Value – An Arts and Cultural Sector Policy Framework*, from the Department of Culture and the Arts identifies three imperatives for long-term engagement with artistic and cultural activity: appropriate infrastructure; networks and communications; and quality arts and cultural experiences.

Cultural infrastructure in the Great Southern includes the $70 million, 620-seat Albany Entertainment Centre, Western Australian Museum Albany, Vancouver Arts Centre, Katanning Art Gallery, the Katanning Regional Entertainment Centre and a wide variety of museums and other venues across the region. Aboriginal cultural interests feature at the Mungart Boodja Art Centre, Kodja Place and the Gnowangerup Heritage Centre.

Operating income is usually insufficient to meet the significant long-term costs of regional cultural infrastructure, implying a continuing need for support. Great Southern people engage in cultural and artistic pursuits through local, regional and state-wide networks. The wide variety of events in the region includes the Great Southern Festival, which is the only regional program of Perth International Arts Festival events, and Great Southern Taste, a large-scale celebration of regional produce. The City of Albany Art Prize draws entries from across Australia.

The Denmark Arts Council is the peak arts body within the Shire of Denmark and also offers services throughout the region to Walpole, Mount Barker and Albany. Since the Council's inception, an annual program has been established that provides a diverse range of arts activities for the community and visitors. Southern Edge Arts is recognised as one of Western Australia's leading regional youth performing arts organisations. With more than 25 years' experience in successful community engagement, Southern Edge Arts champions creativity and quality in arts practice in young people as a means of social development.

Total audience numbers for Great Southern Festival events were almost 20,000 in 2012, of which 10 per cent came from outside the region. Using an Australian Research Council for Arts and Culture multiplier, the festival was estimated to have had an economic impact of $2 million in 2012. Event funding is highly sought-after and most events operate on the goodwill of volunteers.

The continuing popularity of the Great Southern Festival, which was established by the GSDC and the Perth International Arts Festival in 2003, is testament to the fact that the region is home to a strong band of both practitioners and patrons of all mainstream art forms. For example, the Great Southern enjoys a rich tradition of music and literature, and a strong interest in cinema has emerged in recent years. Although there have been notable successes in the past decade (e.g. the production of the TV series *Lockie Leonard* and more recently the filming of part of the film *The Turning* in the Stirling Range) there is significant opportunity to take advantage of the region's natural capital through the attraction of more film production projects to the region.

SPORT AND RECREATION

Active involvement in sport and recreation is part of sustaining a healthy population. Sports facilities available to Great Southern residents include swimming pools, sports grounds, golf courses, skate parks, netball and tennis courts, and equine and motor sports tracks. National parks host outdoor recreation activities and the region has two major 1,000 kilometre trails linking it to Perth: the Munda Biddi Trail for off-road touring cyclists and the Bibbulmun Track for bushwalkers. Much of the region's outdoor activity gravitates to the coast, in surfing, fishing, diving, boating and sailing. Rock climbing, gliding, bushwalking and off-road cycling are all popular activities in the region, thanks to excellent natural assets such as the Stirling Range and the Fitzgerald Biosphere. Lake Ewlyamartup, near Katanning, is being rehabilitated and developed as a central inland venue for water recreation.

Current developments include major upgrades to the central sporting precincts in Albany and Mount Barker. A feasibility study and a business plan have been prepared for a Centre of Outdoor Recreation Excellence.

Community expectations are generally increasing with respect to the range and quality of sporting facilities planned or being developed across the region. The Department of Sport and Recreation has a commitment to support the equitable funding of infrastructure based on the projected feasibility and viability of the initiative and the population being serviced. In all cases projects must have been identified and included in the relevant local authority's forward plans for sport and recreation infrastructure and have a robust business case. This is a structural issue for local and state government and for the community-based clubs that provide the funding to establish and maintain sports and recreation facilities.

ENVIRONMENT

The Great Southern is nationally and internationally recognised for its biodiversity, high value ecological assets, pristine coastal and marine environments and attractive landscapes. The amenity of the region and its ecological characteristics are a key comparative advantage and underpin economic activity, population growth and tourism visitation.

The Great Southern contains parts of three major bio-regions: Warren (shared with the South West), Mallee (shared with Goldfields Esperance and Wheatbelt) and Jarrah Forest (shared with South West and Peel). The combination of these bio-regions underlies the diversity of the landscape and environment as it combines coastal, forest and non-forest settings.

As a predominantly non-forested region, the proportion of Great Southern land protected under conservation frameworks is relatively high, at 15.9 per cent (Department of Parks and Wildlife 2011). The proportion in the Wheatbelt is 9.6 per cent and in Goldfields Esperance it is 11.6 per cent. The Great Southern falls within the globally significant South West Biodiversity Hotspot. It also contains a number of national parks, including the Stirling Range, Fitzgerald River and Porongurup Range National Parks, together with significant nature reserves which contribute greatly to the area's rich biodiversity. Recent research has also identified high levels of botanical richness in private land adjoining these reserves.

The Stirling Range stretches for 65 kilometres from east to west and contains over 1,500 species of plants (of which nearly 90 are endemic), several endangered fauna species and a few short range endemic invertebrates (Department of Parks and Wildlife 2014). The unique climate of the Porongurup Range, 30 kilometres south of the Stirlings, has led to the establishment of vineyards which enjoy longer rainy periods and balmy summers resulting in an extended maturation period.

The Fitzgerald River National Park is on the eastern edge of the region, across the Shires of Jerramungup and Ravensthorpe. The park is one of the most diverse botanical regions in the world and has more than 1,800 species of flowering plants, lichens, mosses and fungi, including 62 plant species that are endemic to the area. The Fitzgerald has further conservation significance in that there is minimal infestation of the *Phytophthora* dieback fungal disease, which affects native vegetation. *Phytophthora cinnamomi* infestation is a key environmental issue that, if unchecked, has the capacity to negatively impact the region's biodiversity and the core natural assets upon which eco-tourism products are being built. The South Coast has a total of 4.2 million hectares that is susceptible to dieback and within this there are significant areas of disease presence.

In contrast to the Fitzgerald River National Park, the Stirling Range has been significantly impacted with approximately 70 per cent of its total area infested (Project Dieback 2009). The Fitzgerald River National Park forms the core of the Fitzgerald Biosphere, one of Western Australia's two internationally recognised Biosphere Reserves, designated under the UNESCO Man and the Biosphere Program.

The Great Southern region has approximately 250 kilometres of coastline along the Southern Ocean. This ocean zone is where cold, northward flowing waters from the Antarctic mix with warmer sub-Antarctic waters brought by the Leeuwin Current. This area includes whale calving grounds, inshore and offshore reefs, shallow sand and weed banks, islands, and interactions with estuarine systems. Fish stocks include Western Australian dhufish, pink snapper, tailor, herring, sand whiting, King George whiting, black bream and Australian salmon (Department of Fisheries 2014). Investigations are beginning into potential eco-tourism assets in offshore natural phenomena such as the Bremer Canyon.

CASE STUDY: LAKE EWLYAMARTUP

The restoration of Lake Ewlyamartup in the Shire of Katanning is driven by the community. Over 130 people including landowners adjacent to the lake, birdwatchers, naturalists, waterskiers and general community attended a forum in September 2010 to support the need for and to plan for works to improve water quality for conservation and recreation purposes. The lake was becoming increasingly degraded as a result of salinity levels and sedimentation. A committee was formed under the auspices of the local Landcare Group which has overseen the development of an engineering plan to improve water quality, revegetation and drainage on adjacent farmland, research on the values of the lake including cultural and natural, and development of a recreation area plan. Much of the work completed to date has had significant volunteer input by the community. The level of community involvement was a key factor in the lake's inclusion as one of three selected under the Department of Regional Development's 'Living Lakes' program.

NATURAL RESOURCE MANAGEMENT

A strong land care ethic has developed among landholders and managers in the region in response to issues raised by the human impact on the environment. These include dryland salinity and soil acidification, which impact both production and biodiversity, and *Phytophthora* dieback.

Until the early 2000s, rising groundwater, which causes salinity, was addressed by increasing water use in the landscape through tree plantings as a long-term strategy (Clarke, CJ et al. 2002). In addition to tree plantings, a range of land care initiatives have been applied including the establishment of perennial pastures and the protection of existing remnant bush. It is now generally recognised that plant-based activities are only part of the on-farm solution, with low productivity returns from a large investment and only localised containment (George, RJ et al. 1999; Barrett-Lennard, EG et al. 2005). The issue has continued to be a focus of a range of subregional projects that are consistent with the measures outlined in the State Salinity Framework, but has generally only received minimal government program investment.

Acidic soils are an acknowledged problem in Western Australia, particularly in the Wheatbelt, but also in south coastal areas. Soil acidification is a natural process that is accelerated by agricultural activity. With regard to agriculture, the issue is being addressed at a farm level through changes in practice, new fertiliser regimes and the application of lime, presenting an opportunity for the Great Southern to further develop its lime deposits.

Lime use by grain growers has increased since the mid-1990s but adoption is less than required and most soils have continued to acidify. Growers indicate overall cost and time to recoup costs from liming as barriers to adoption. A draft strategy for all of Western Australia was completed in 2013, but a full review of the 2006 State Lime Supply Strategy will be required if an effective program to access lime deposits is to be achieved, including those on the south coast. Acidic soils can affect native flora and fauna, including those found in wetland and estuarine ecosystems of the south coastal plain west of Bremer Bay to Walpole.

A different issue is that of acid sulphate soils. These naturally occurring iron sulphides are generally found in a layer of waterlogged soil or sediment and are benign in their natural state. However, when disturbed and exposed to air, they oxidise and produce sulphuric acid, iron precipitates and mobilise high concentrations of dissolved heavy metals such as aluminium, iron and arsenic. If not managed, acidic drainage has the potential to seriously impact wetlands and river systems.

The *Phytophthora* Dieback Management Plan (2010-2017) for the south coast is being used by South Coast Natural Resource Management to direct strategic investment and as a technical guide for all stakeholders.

There are many land care, production and environmental groups in the region researching, developing and applying innovative and best practice principles of natural resource management to a range of water, marine, land and biodiversity issues, including key organisations whose work extends beyond the Great Southern:

- CENRM is a tertiary education and research facility that plays a key role in delivering investigative and applied research for sustainable management in order to address emerging local issues (Centre of Excellence in Natural Resource Management 2009).
- South Coast Natural Resource Management is one of 56 regional natural resource management (NRM) organisations across Australia. South Coast NRM coordinates and administers funding provided by the Commonwealth Government and Western Australian State Government for NRM across five theme areas: land, biodiversity, water, marine and culture. South Coast NRM's *Southern Prospects 2011-2016 – the South Coast Strategy for Natural Resource Management* outlines strategies and provides guidance for funding and resource allocation. The South Coast region extends from east of Esperance to Walpole along the coast, and inland approximately 150 kilometres.
- The Gondwana Link program is the organisational structure built and operated to support the work of achieving 'Gondwana Link'. The project is an ambitious collaboration between organisations to reconnect natural habitat from the karri forests of the south west to the woodland and mallee bordering the Nullarbor. The program commenced with the connection of the Stirlings to Fitzgerald districts and now operates across all of the south western part of Australia. With a goal of 1,000 kilometres of connected bushland, Gondwana Link has achieved over 900 kilometres to date (Gondwana Link 2014).

Reflecting the importance of NRM and the strong land care ethic, innovation, research and development under way to sustainably manage the region's natural resources, the GSDC provides a biennial award. The GSDC Medal rewards outstanding individual achievement and leadership in NRM, and includes a sizeable grant to support medallists in furthering their work.

Recent changes in funding arrangements for regional and subregional natural NRM groups, however, suggest there is a need to ensure there is appropriate continuity in human resources across the breadth of the region to sustain and enhance existing NRM effort.

CLIMATE

For the Great Southern, there is a trend toward an overall decline in annual rainfall and increase in mean temperature, as illustrated in Figure 29. At a local level, the degree of change over the past seven decades is variable with average rainfall increasing by 2 per cent in Bremer Bay and decreasing by 14 per cent in Mount Barker (see Table 12, sourced from the Bureau of Meteorology and Department of Water).

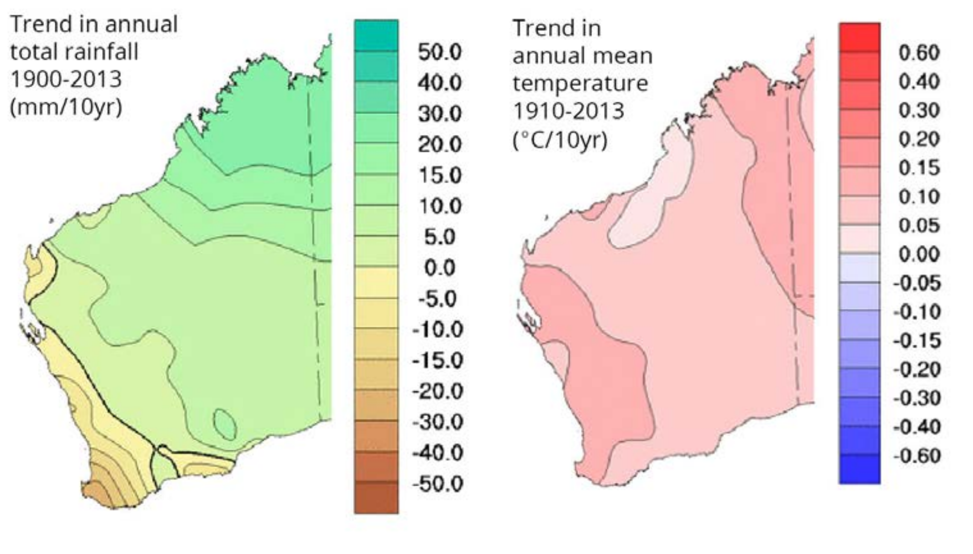


Figure 29 Long-term trends in annual total rainfall and mean temperature (Bureau of Meteorology 2014)

RAINFALL STATION	ANNUAL AVGE (1941-75)	ANNUAL AVGE (1975-2012)	% CHANGE
Albany (9500)	863	795	-8
Bremer Bay (9654)	630	640	2
Broomehill (10528)	450	424	-6
Cranbrook (10537)	520	468	-10
Denmark (9531)	1065	1000	-6
Gnowangerup (10558)	400	388	-3
Jerramungup (10707)	434	447	3
Katanning (10579)	509	458	-10
Kojonup (10582)	525	492	-6
Mount Barker (9581)	776	671	-14
Pingrup (10627)	366	333	-9
Woodanilling (10659)	467	413	-12

Table 12 Trends in average annual rainfall across the Great Southern

The Great Southern has also experienced a long-term shift in seasonal rainfall patterns, with reduced rainfall in winter, and increased rainfall in summer, as illustrated in Figure 30.

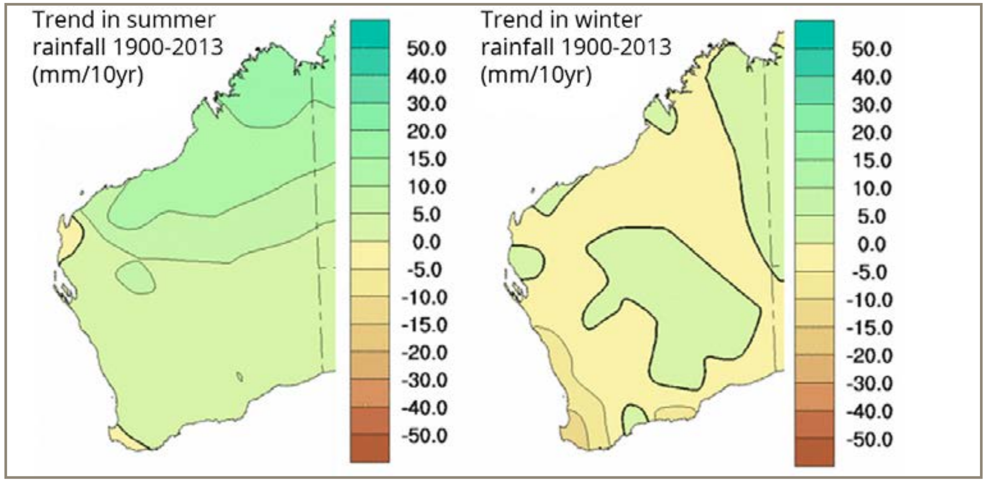


Figure 30 Long-term trends in seasonal rainfall 1900-2013 (Bureau of Meteorology 2014)

IN 2040...

COMMUNITY AND ENVIRONMENT

Picture the Great Southern in 2040, when the regional population, growing at 1.7 per cent per annum, has swelled to 100,000 people who enjoy a healthy social environment and a beautiful natural setting.

Affordable public and private housing options and home-based support services are available for residents, including seniors' accommodation in communities across the region. Access to health infrastructure and services is comparable to that in the metropolitan area, and health outcomes for people in the region are also comparable to the metropolitan area. Katanning has achieved its RCDP targets.

Residents of the region are active in volunteering and have access to quality facilities for culture, recreation and sport. By 2040, the Great Southern is recognised as the premier region in Australia for arts and culture. It hosts more than 12 national and/or international sporting and lifestyle events each year.

This active and engaged regional population thrives in an environment that receives responsible care, so that the region is seen as an exemplar of best practice in the management of natural resources.

KEY METRICS

Table 13 provides a summary of the key metrics related to the COMMUNITY AND ENVIRONMENT regional imperative. These metrics are related to factors which, over time, should improve the prosperity and quality of life of residents and simultaneously protect the region's pristine natural environment and amenity while ensuring the delivery of quality services. *(Refer to page 39 for Key Metrics legend)*

AREA OF FOCUS	MEASURES	STATUS	TREND	COMMENTS
Social Dynamics	Population growth Net migration Fertility rates	● (green)	▶	The Great Southern has experienced consistent population growth, though this is highly concentrated in Albany and coastal locations. Towns in the Pallinup subregion are experiencing flat or declining populations in line with regional Australian tends. Net inward migration has been positive over the past five years but has slowed recently. Fertility rates are strong and above state averages across all local government areas.
Social Structure	Age profile Share of population aged 65+ Indigenous disadvantage	● (yellow)	▶	Population of the Great Southern is older than the state and national averages and is ageing at a faster rate. Share of population in young adulthood (15-30) is below average, reflecting emigration from the region for post-school education and/or employment opportunities. People of Aboriginal and Torres Strait Islander descent comprise 5 per cent of the region's residential population.
Infrastructure	Culture and arts Sport and recreation	● (yellow)	▲	Cultural infrastructure in the Great Southern includes the $70 million, 620-seat Albany Entertainment Centre, Western Australian Museum Albany, Vancouver Arts Centre and a wide variety of museums and other venues across the region. Aboriginal cultural interests feature at the Mungart Boodja Art Centre, Kodja Place and the Gnowangerup Heritage Centre. Capacity of local government and community groups to support the ongoing management and maintenance of major facilities is problematic. Total audience numbers for Great Southern Festival events were almost 20,000 in 2012, of which 10 per cent came from outside the region. Sports facilities available to Great Southern residents include swimming pools, sports grounds, golf courses, skate parks, and netball and tennis courts. National parks host outdoor recreation activities and the region has two major 1,000 kilometre trails linking it to Perth: the Munda Biddi Trail for off-road touring cyclists and the Bibbulmun Track for bushwalkers.
Conservation	National parks and environmental protections Agricultural activity	● (green)	▶	The Great Southern has strong natural amenity including extensive national park and reserve coverage. However, threats to the region's environment include dieback, feral animals and invasive weeds. The Fitzgerald River National Park was declared a UNESCO Biosphere in 1978 in recognition of its botanical diversity. The environmental character of the region's agricultural land is favourable with a below average share of land at risk of shallow water tables and secondary salinity. This is despite extensive clearing of arable land in the 20th century. Recent research has highlighted the opportunity presented by access to significant groundwater resources that, with appropriate development planning, should not compromise environmental values.

Table 13 Key Metrics Scorecard – Community and Environment

REGIONAL ANALYSIS
A rich understanding of the history of the Great Southern's culture, geography and economic development informs this Blueprint

MEGATRENDS
Global shifts in demographics, resources, the environment, movement and communication are transforming the way we live, work and interact with one another

COMPETITIVENESS AND CONNECTIVITY
Prosperity and economic sustainability in a region is increasingly determined by a combination of its competitiveness with and connectivity to national and global markets

REGIONAL INTENT AND IMPERATIVES
Four imperatives are fundamental to the region's economic development, growth and prosperity: Economic Growth and Diversification; Essential Infrastructure and Services; Knowledge and Innovation; and Community and Environment

IMPLEMENTATION AND MONITORING
Progress on public sector and joint investments will be measured as the Great Southern Regional Blueprint is implemented

MEGATRENDS

Global shifts in demographics, resources, the environment, movement and communication are transforming the way we live, work and interact with one another. Established economic systems, governance models and business processes need to evolve and adapt to this changing global environment to ensure future growth and prosperity.

Global shifts or "megatrends" are relevant to all communities and regions in Australia, including the Great Southern. The Great Southern is exposed to the global economy through trading in food products, investment trends and tourism services. It is further anticipated that climate change will present challenges but also opportunities for the region.

The analysis to follow examines global megatrends that will influence the trajectory of the Great Southern economy over the next thirty years, including:

- The Asian Century
- Global Food Consumption
- Mineral Resource and Energy Investment
- Climate Change
- International Tourism
- Ageing Population
- Broadband and the Digital Age.

THE ASIAN CENTURY

The United Nations projects a rapid increase in the size of the middle class in Asia over the coming decades, with the population in Asia expected to grow from around 4.3 billion people in 2013, to over 5.1 billion by 2050 (United Nations 2013). Most of Asia's population, in fact the world's population, is shared amongst the two most populous countries, China and India. In 2013, China and India account for 60 per cent of Asia's population and this is projected to remain the case until 2050. India is expected to surpass China's population by that time (see Figure 31).

In March 2011, Oxford Economics estimated the BRIC (Brazil, Russia, India and China) economies share of global gross domestic product would rise from 16.1 per cent in 2000 to 32.3 per cent in 2020, compared to the decline of the share of world gross domestic product among the G7 countries (USA, Canada, United Kingdom, Germany, France, Italy and Japan) from 48 per cent to 33 per cent over the same period (Oxford Economics 2011). As illustrated in Figure 32, it is anticipated that the economies of China and India will generate the majority of this growth.

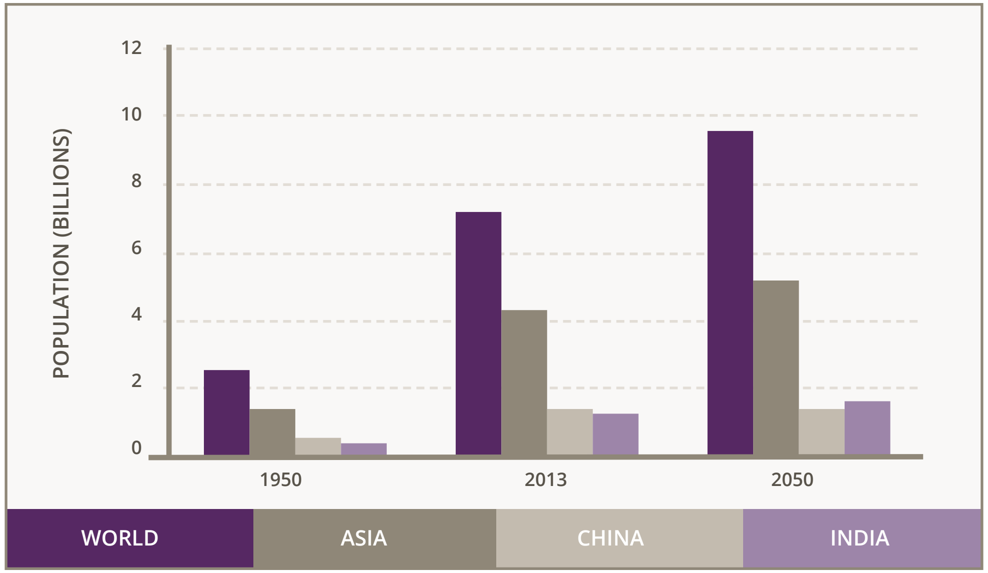


Figure 31 World population, 1950 to 2050

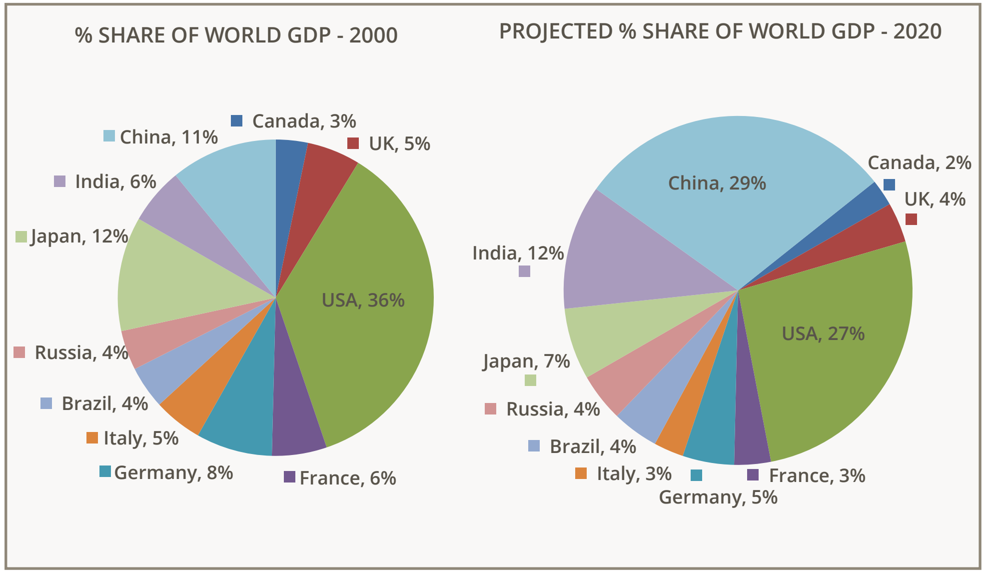


Figure 32 Projected change in share of world GDP 2000-2020

The increase in population and growth in the Asian economies is expected to trigger a surge in trade activity between Australia and Asia. The industrialisation of developing economies in Asia is also driving incomes higher and creating an emerging middle class. Key industry sectors expected to benefit from this newly empowered market segment include clean energy, food and beverages, health and medical, infrastructure and building materials.

The Great Southern has the potential to benefit from the growth of the global population and the emergence of a true middle class in Asia with significantly higher disposable incomes that will support a much broader range of goods and services. The shift in buying power will drive change in the three key areas of food, education services and tourism. The Great Southern possesses an incomparable breadth of natural, environmental and tourism assets across an environmentally diverse region and realising the latent potential of these assets represents a major opportunity.

A growing global population will also increase demand for quality food, which also represents major direct and indirect opportunities for the Great Southern.

GLOBAL FOOD CONSUMPTION

Global food production will need to increase by 60 per cent by 2050 to meet projected demand levels (FAO 2012a). Demand is already outpacing supply in international markets, with food price volatility increasing dramatically since 2006 and prices trending upwards from 2000 lows, after decades of real food price declines resulting from increased productivity (FAO 2012b).

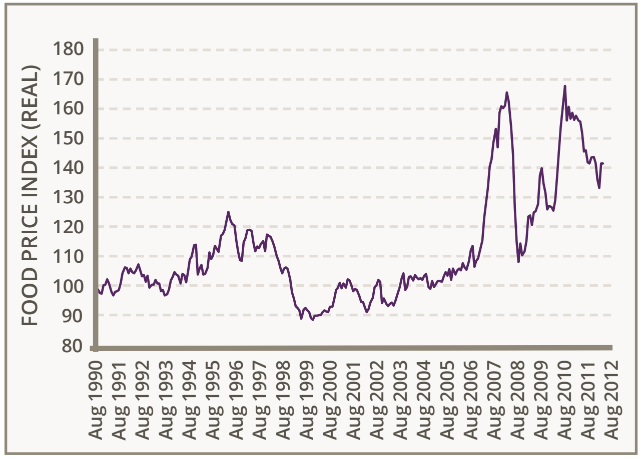


Figure 33 Food price index, real, 1990 to 2012

The experience of three food price spikes in five years (Figure 33) highlights the vulnerability of international markets to supply and demand shocks when stock-to-use ratios are low. The resulting 'excessive' price volatility was associated with lower stock levels that were not adequate to cushion the impact of shocks. However, the current global market for most foodstuffs is characterised by abundant supplies and less uncertainty than in recent years (FAO 2014).

Fish and seafood is a major component of global food consumption and is particularly favoured in many Asian countries. The increased need for protein in developing countries (Figure 34), driven by increases in both population and income levels, has underpinned this growth and is expected to support a 15 per cent growth in seafood consumption over the next 10 years (FAO 2012a).

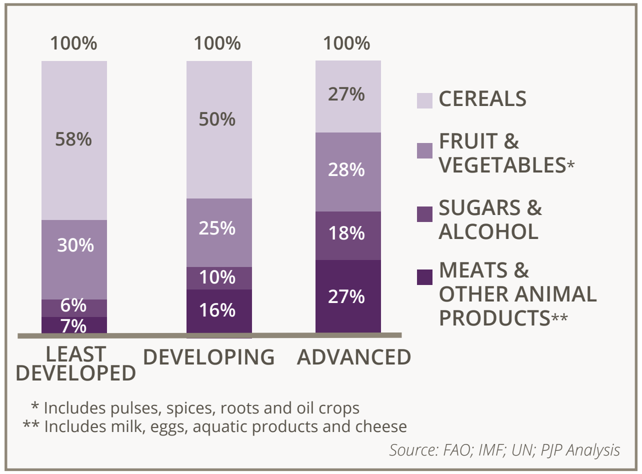


Figure 34 Percentage of daily caloric intake (Source: ANZ Bank)

As demand for food (and premium food) grows on the back of a growing and wealthier Asian markets, prices of food products are expected to grow unless there is a commensurate lift in supply. As prices of food products increase, investment will begin to flow more strongly into regions that are geopolitically stable, have reliable supply-chains and infrastructure and strong reputations. The Great Southern wheat and livestock markets can be the obvious beneficiaries, but so too could be aquaculture, agri-tourism and niche high value products.

With the region's access to Asian and global markets through the Port of Albany, the Great Southern has the potential to capitalise on these trends and to expand, diversify and add value to food production.

MINERAL RESOURCES AND ENERGY INVESTMENT

Capital expenditure by the resources sector in Australia (Figure 35) peaked in the December quarter of 2012, reaching $26 billion or 2.5 times the previous 2008 peak (ABS 2013i). Despite this peak, expenditure by resource companies has not fallen precipitously as some commentators predicted. In fact the June and September 2013 expenditure levels rebounded after the March 2013 quarter fall, both approaching historical highs. The standout sector has been oil and gas, with expenditure reaching its highest level in the September 2013 quarter at $16.1 billion, or 60 per cent of total expenditure. This has offset falls in iron ore and coal expenditure.

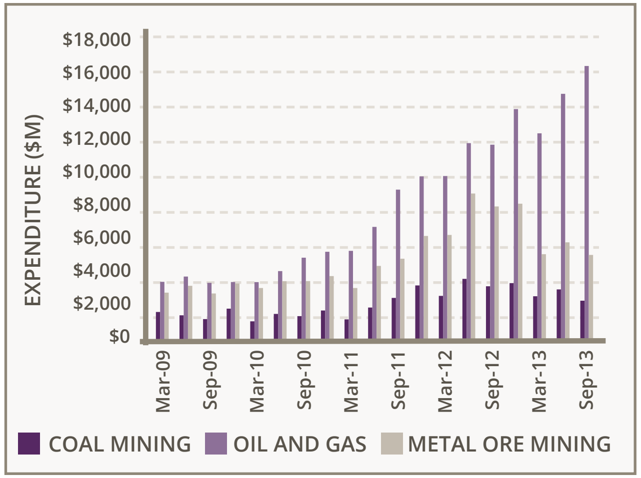


Figure 35 New capital expenditure by commodity, Australia

Due to the contribution of oil and gas, new expenditure has been concentrated in Western Australia and to a lesser extent Queensland. In September 2013, capital expenditure by the resource sector in Western Australia was at $12.4 billion, or approximately 50 per cent of national expenditure.

As of April 2013, $270 billion of resource projects in Australia were either under construction or committed. Of these committed projects, over $200 billion worth are in LNG, gas and petroleum, demonstrating that the recent dominance of gas in Australia's resource sector is expected to continue at least for the next three to five years.

As major mining companies have shifted focus from investment to production, export throughput from Australia has increased markedly. Rio Tinto, BHP and Fortescue have continued to announce record production and exports, with increased production and greater certainty about continued growth in China. Port Hedland Port Authority, one of the two main iron ore export ports in the Pilbara region of Western Australia, experienced record export volumes in 2012-13, reaching 280 million tonnes per annum (Ports Australia 2013). This is up from just over 150 million tonnes per annum in 2008-09.

Exploration expenditure (Figure 36) is a leading indicator of future resource project activity. Despite recent uncertainty in the sector, total exploration expenditure in Australia has continued to grow strongly since 2010. From 2010 to 2012, both minerals and gas/petroleum exploration contributed to this growth. Since late 2012, exploration expenditure levels in minerals (mainly iron ore and coal) have declined but this has been more than offset by a sharp increase in gas exploration, taking total exploration expenditure close to $2 billion a quarter for the first time.

The Great Southern currently lacks direct exposure to substantial mining investment and operations in the region. A significant magnetite deposit awaits development at the Southdown lease north-east of Albany and a gold mine is a prospect for Katanning. Continued growth in global demand is expected to increase exploration and development of the region's resource base in the medium and long term. The Great Southern is a mineralised zone that comprises mainly freehold land. Regional communities and stakeholders have an informed appreciation of the economic and social benefits of mining and minerals processing. Mineral exploration in some form is under way in all local government areas of the Great Southern.

Investments in major projects in regional Western Australia will continue to support strong workforce mobility, particularly FIFO workers. The amenity of the Great Southern, and improved accessibility through Albany's airport, is expected to result in more FIFO workers calling the region home. There is potential to establish a trades training centre in the Great Southern to equip young people for employment in mining, particularly young Aboriginal people who already have family members working in the sector (ABS 2013h).

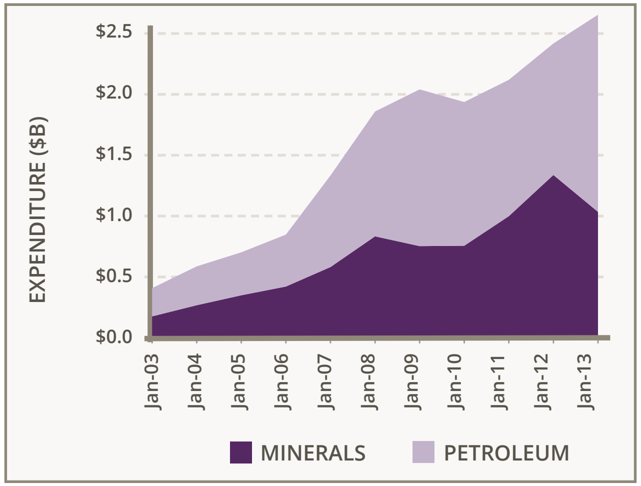


Figure 36 Exploration expenditure by commodity, Australia

CLIMATE CHANGE

The average global surface temperature has risen around 0.8°C since 1850 and is likely to continue to rise further in the coming decades (Pearlman, G 2008). Australian average temperatures have increased 0.9°C since 1950, with significant regional variations. The frequency of hot days and nights has increased and the frequency of cold days and nights has declined (Climate Change in Australia 2015). If global greenhouse gas emissions continue to grow at rates consistent with past trends, warming is projected to be in the range of 2.2 to 5 ºC by 2070, and 3 to 6 ºC by 2100. Sea levels are projected to rise one metre by 2100, a phenomenon that will be largely driven by the rate of Arctic and Antarctic ice sheet melt. The deterioration of the Western Antarctic Ice Sheet is an important factor in these calculations. Global and national assessments show that a changing climate will affect food production, disturb coastal margins, displace species, and result in changes to the structure of the economy.

The impacts of climate change will affect the region's biodiversity values and ecology, agriculture and nature based tourism sectors and water supply. According to climate modelling, even if extreme mitigation can be achieved resulting in zero net emissions, the impacts of climate change will continue, though at a lesser rate. Without adaptation, climate change will provide a major challenge to the region's economic base. Adaptation is the key to the region being able to expand the economy and utilise opportunities such as renewable energy, alternative food production, water capture and reuse technology, and carbon farming.

At a national level, the decline in water supply associated with climate change will be a critical issue (Hennessy, K 2011). Water resources in the Great Southern are already being impacted by climate change and increasing demand from population growth, affecting irrigation, domestic and industrial water supply. Ongoing impacts are likely to include:

- Water supply reliability across southern Australia will decline as a result of reduced rainfall and increased evaporation.
- Declining rainfall will lead to reduced recharge to groundwater, especially unconfined aquifers.
- Communities dependent on local dams and catchments will experience more regular water deficiencies.

The extent of the impact of climate change on ecosystems and the biodiversity value of the region are still being explored. Based on current climate change projections, impacts relevant to the Great Southern will include:

- Disruption of function and loss of associated ecosystem services (inland, coastal and marine)
- Southerly shifts of native fauna and flora species not previously found in the region, and of marine species along the coastline
- Declines in seagrass meadows and seaweed beds
- Reduced wetland habitat with median stream flow in south-western Australia estimated to decline by 25 per cent by 2030 (CSIRO 2009)
- Possible extinctions of species with restricted habitats and/or biological traits susceptible to climate change (Australian Museum 2015).

Protecting native bushland and maintaining connections between habitats at a landscape scale are considered critical to enabling native species to readily relocate as the climate changes. Habitat connections facilitate gradual genetic and species interchange. The Gondwana Link project in the Great Southern should be seen as important in this context.

In response to climate change, as well as energy security, renewable energy production has been increasing globally. While per capita energy production in OECD countries has declined in recent years, due to depressed economic activity and enhancements in energy efficiency, this has been more than offset by rapid increases in energy usage in developing regions including the Middle East, China, South East Asia, Central Europe and Latin America (BP 2012). Like Australia, global energy production is dominated by fossil fuels, with a market share in 2011 of 87 per cent. This includes both base load power and transport fuel energy use. In contrast, renewable energy contribution is at 2 per cent, or some 194.8 of 12,274.4 million tonnes of oil equivalent.

Increasing focus on 'clean' power in the future has the potential to see further investment in the region. The Great Southern has the opportunity to capture the significant economic benefits if several large projects are constructed in the region. The obvious benefits accrue to the construction sector but there are significant manufacturing, maintenance and research/development roles associated with renewable energy investment.

INTERNATIONAL TOURISM

Demand for tourism product remains strong with the number of worldwide tourists growing. Recent analysis shows a significant improvement in confidence, with prospects for future growth continuing to strengthen.

The Australian tourism investment pipeline was estimated at $44.1 billion in 2012, up 22 per cent from 2011 (Tourism Research Australia 2013b). These levels indicate the enormous potential of the tourism sector and highlight the importance and attractiveness of investing in Australia's key tourism-related activities. Since the beginning of this century, international visitors' trips and nights have increased by 34.5 per cent and 96.9 per cent respectively (Figure 37). This is an annual average growth rate of 2.3 per cent for international visitor trips and 5.4 per cent for international visitor nights.

Figure 37 International visitors' nights and trips, Australia, 2000 to 2013

Tourist visitation to Western Australia has continued to grow over the past decade despite global economic conditions and a static domestic tourist market. Recent research work suggests an increasing awareness of, and demand for, quality ecotourism experiences by the growing middle class in China and other emerging Asian countries. The Great Southern is well placed to tap into this expanding international tourism market. The diversity of natural amenity and destinations within the Great Southern, coupled with strong connectivity to Perth (airport, cruise ships, Albany Highway), provides an opportunity for increased international tourist visitation to be captured. However, the region will continue to experience strong competition from other parts of Western Australia, including the South West, and will require an increase in the quality and mix of accommodation and an integrated differentiated tourist package offering. Collaboration on cross-regional projects with the neighbouring South West region through ASW has the potential to leverage off brand recognition and result in an increase in visitor numbers and spend for the Great Southern.

International tourists are the highest spending cohort and a region that can consistently attract international tourism attracts commensurate private investment that permeates throughout an entire economy.

AGEING POPULATION

One of the major issues facing regional Australia is the ageing of the labour force. In many sectors, an increasing proportion of the population is within 10 years of the official retirement age of 65 years. In the Great Southern, there are a number of sectors where the ageing of the population is a significant issue, notably agriculture and health care. These sectors risk losing a significant proportion of their workforce over the next 10 years. The ageing population is common across Australia; approximately 3 million people in Australia were aged 65 years and over in 2011 representing over one in eight Australians (ABS 2012b; Australian Government 2010). This was an increase of 28 per cent over the last decade with an annual average growth rate of 2.5 per cent. Looking forward, as illustrated in Figure 38, the number of people aged 65 years and over is projected to increase by 83.6 per cent over the next two decades with an annual average growth rate of 3.1 per cent (ABS 2008b; ABS 2013c). This is significantly faster than in the past, representing acceleration in the ageing of Australia's population. By 2050, the number of people aged 65 and over is expected to reach one in five people, presenting one of the most significant challenges for policy makers, industry and the community.

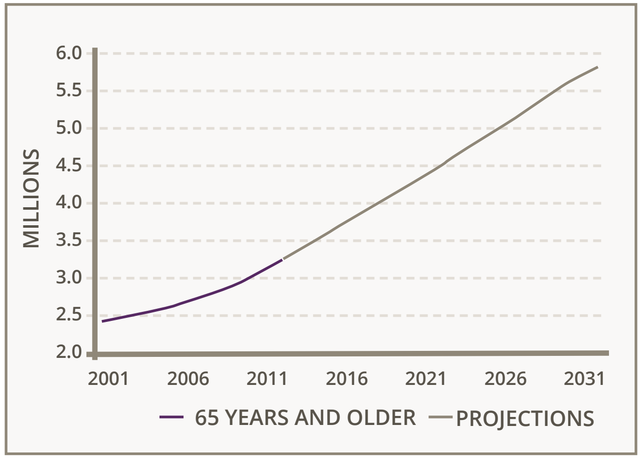
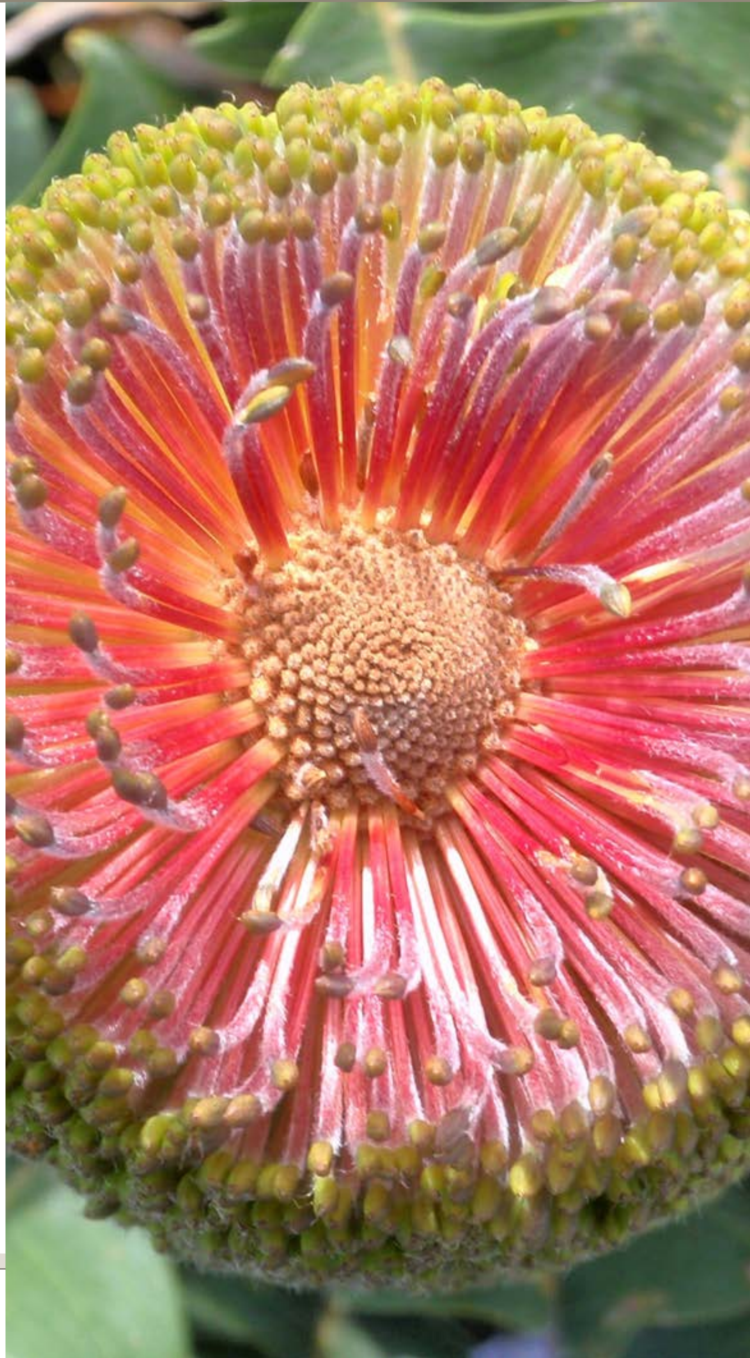


Figure 38 Historical and projected population, 65 years and over, Australia, 2001 to 2031

Demand for seniors' housing, aged care and housing provision services is expected to increase throughout the developed world. Therefore, there are potential opportunities for the region's providers to develop best practice expertise and services.



BROADBAND AND THE DIGITAL AGE

Technology has played a central role in the globalisation of markets by increasing the reach and speed of communication and reducing costs. This has facilitated the flow of goods, capital, people and information across borders. These trends have profound implications. The future evolution of the internet will include increased speeds and cloud-based computing and applications, increasing popularity of social media and trends for businesses to strategically utilise 'big data', that is, integrating different data sets to generate knowledge or understanding about a system, environment or activity. These trends will result in business and lifestyle benefits that are widely felt in regional locations.

The share of Australian businesses using the internet has increased as e-commerce gains momentum. Between 2007-08 and 2011-12, the proportion of businesses using the internet increased from 86.8 per cent to 91.9 per cent, while the share of Australian businesses with a web presence increased from 36.3 per cent in 2007-08 to 44.6 per cent in 2011-12 (ABS 2013c). This increase in the use of technology has not been limited to only businesses as Australian households have also been increasing their use of the internet. In the five years to 2010-11, the share of households using the internet has increased by almost 20 per cent. Increased adoption of broadband internet and e-commerce by Great Southern businesses and households is viewed as critical to further enhancing the integration of the region with the global economy.

As much as the knowledge-based economy and the increasing adoption of e-commerce provide opportunities for growing knowledge-based businesses in the region, they also challenge traditional forms of conducting business in the retail sector and other industry sectors. Responding to this requires new business practices, greater vertical integration of services and the adoption of new forms of partnerships and knowledge-sharing between businesses.

Facilitating home-based businesses and attracting industry are high priorities which require improved information technology access and support. In the current and future business environment, high levels of telecommunications are required for all businesses and professional services. To attract new businesses to a region, high quality consistent broadband is essential.

Educational institutions regard access to high standard ICT as a critical factor in their capacities to deliver education services that are of comparable quality to that in the metropolitan area. Moving to a student-based funding model means that equal access to ICT will be essential in delivering equal standards of education in regional areas.

The development and roll-out of the NBN presents significant opportunities for the Great Southern to provide residents and businesses access to services that would otherwise be unavailable, cost prohibitive or inefficient. These include:

- More reliable base telecommunications
- On-line retail and shopping
- On-line education
- On-line health services
- Telecommuting and virtual work opportunities
- E-commerce and web-based business activity
- Digitally enabled tourism sector
- On-line entertainment, music and movies.

IN 2040...

MEGATRENDS

Picture the Great Southern in 2040, when it has responded effectively to major trends of the early 21st century.

A better educated and more connected regional population thrives on strong trade engagement with huge markets in China and India. Trading activity includes conventional primary produce, premium foodstuffs and minerals. Great Southern residents engage with the digital economy, selling and buying on-line services.

International and domestic visitors are offered quality tourism experiences in an environment that is renowned for its biodiversity and grandeur.

Climate change has affected the Great Southern but its residents have made practical adjustments to retain agricultural productivity and worked hard to manage the region's natural resources to maintain biodiversity.

Overall, the Great Southern population is skewed towards older age groups, but migration and a focus on retaining young adults in the region has mitigated the effect of this trend. Seniors are well accommodated and supported, and can access quality health services in person and online.

REGIONAL ANALYSIS

A rich understanding of the history of the Great Southern's culture, geography and economic development informs this Blueprint

MEGATRENDS

Global shifts in demographics, resources, the environment, movement and communication are transforming the way we live, work and interact with one another

COMPETITIVENESS AND CONNECTIVITY

Prosperity and economic sustainability in a region is increasingly determined by a combination of its competitiveness with and connectivity to national and global markets

REGIONAL INTENT AND IMPERATIVES

Four imperatives are fundamental to the region's economic development, growth and prosperity: Economic Growth and Diversification; Essential Infrastructure and Services; Knowledge and Innovation; and Community and Environment

IMPLEMENTATION AND MONITORING

Progress on public sector and joint investments will be measured as the Great Southern Regional Blueprint is implemented

COMPETITIVENESS & CONNECTIVITY

The prosperity and economic sustainability of a region is increasingly determined by a combination of its competitiveness with and connectivity to national and global markets. Identifying and leveraging the comparative advantages of the Great Southern requires concerted, coordinated efforts of business, residents and government.

COMPETITIVENESS ASSESSMENT

The competitiveness of a region can be assessed through the application of Porter's Diamond Model of Competitive Advantage. Developed by Michael Porter in his book *The Competitive Advantage of Nations*, the Diamond Model was originally applied to the analysis of competitiveness at a national level but it has since been widely applied to regions and industry clusters. Porter identified four interrelated determinants of regional competitiveness:

- FACTOR CONDITIONS – referring to the factors of production such as land, resources, labour and infrastructure and their relative quality, accessibility and suitability. Porter distinguished between 'basic factors', such as natural resources and climate, and 'advanced factors', such as communications infrastructure, specialised skills and innovation and research capacity. Porter concluded that basic factors, whilst remaining important for industries based in agriculture or resource extraction, were of lower importance for the future than advanced factors.
- DEMAND CONDITIONS – referring to the state of the domestic market for goods and services. Strong local domestic markets with sophisticated and quality-focused consumers provide businesses with incentives to innovate and grow into exporting firms, while access to enabling infrastructure (ports, airports) provides businesses with access to regional and international markets.
- RELATED AND SUPPORTING INDUSTRIES – referring to the depth and diversity of businesses that input into the supply chain of the principal activity. The availability of vertically and horizontally related industries provides the potential for knowledge spillovers and economies of scale and scope. This can include direct inputs to production as well as activities that enhance business performance and operation.
- FIRM STRATEGY, STRUCTURE AND RIVALRY – representing the impact of local competition on the propensity of businesses to innovate and the suitability of their strategies and corporate structures to facilitate this innovation.

In addition, Porter considered there to be two exogenous factors of Government (which influences the four core factors) and Chance (which can create discontinuities that reinforce or damage competitive advantage).

Adjustments to Porter's model are appropriate for regional Australia, where key industries are often resource-based with high exports but weak interactions in terms of the factors defined above (Yetton, P et al. 1992). These adjustments are also required to counteract the tendency in regional development policy to focus on advanced factors (such as technology, research and communications) at the expense of basic factors (such as natural resources, climate and location) for future competitive advantage (Rugman, AM 1991). However, much of the Great Southern's economy has been built on a comparative advantage in natural resources to develop sustainable competitive advantages in a number of industries, and this will continue to be important for the future.

The comparative advantage created by natural resources is real and continuing in the Great Southern and provides a firm base for continued economic growth. The importance of this comparative advantage requires greater emphasis than is generally given in Porter's analysis (where such a basic factor is downplayed). Land, climate and minerals produce the large, export-driven industries that represent economic hubs in regional Australia. For tourism and viticulture, they also provide resources that create a sustainable competitive advantage.

Although natural resources are one of the Great Southern's key strengths, the region faces challenges in the face of rising globalisation and the knowledge economy. In common with Australia as a whole, the region's exports are dominated by primary products while its imports are dominated by manufactured goods (Houghton, J and Sheehan, P 2000). A lack of critical mass and weak domestic demand together can result in weak and un-resilient industry sectors in regional Australia.

Adjustments to Porter's model have therefore been proposed to reflect the assessment of regions in Australia (Keston Technologies 2006). The role of government is given a central position, and 'Factor Conditions' are separated into 'Basic Infrastructure' and 'Specialised Infrastructure' to emphasise the importance of the former in economic development in regional Australia. Basic infrastructure includes the comparative advantages offered by natural resources together with the basic infrastructure requirements of power, water, roads etc. The adjusted model is illustrated in Figure 39.

The adjusted model therefore recognises the central importance of basic infrastructure to economic development in regional Australia, where the lack of such infrastructure often represents a barrier to growth. In this sense, regional Australia straddles the transition between traditional economics and the 'new economics of competition' that rely on networks and knowledge flows to create a sustainable competitive advantage.

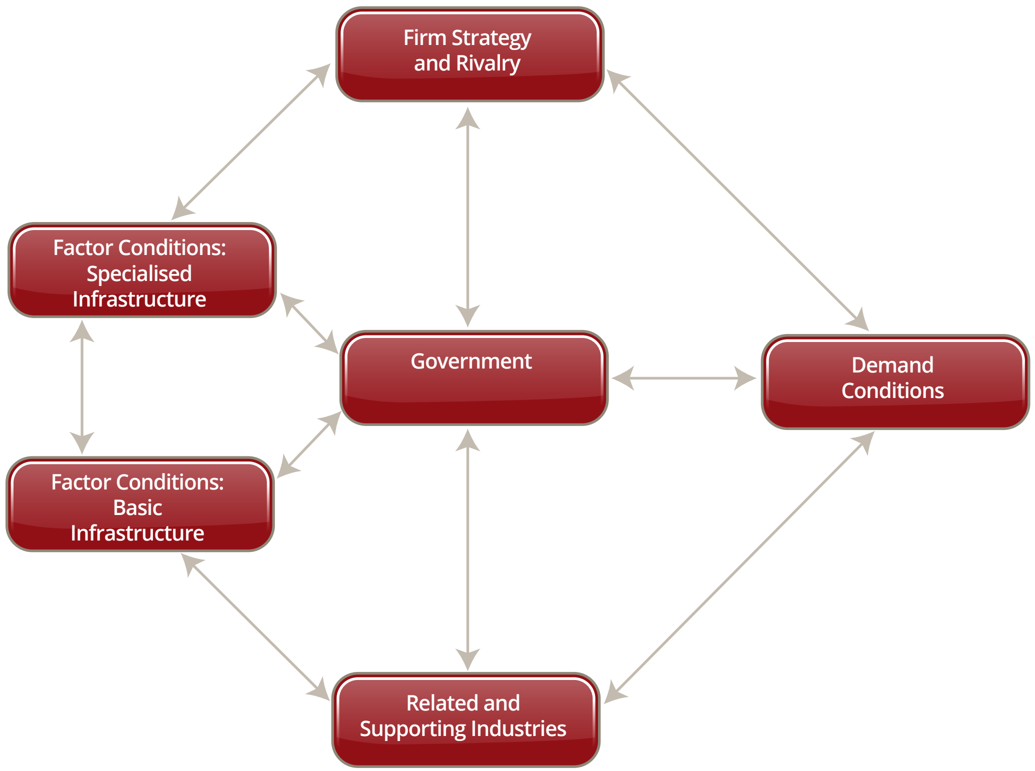


Figure 39 Adjusted Porter's Diamond

Furthermore, the adjusted model reflects the fact that the role of government is more central in regional Australia (Wickham, M 2005). In particular, government plays a key role in the encouragement and funding of infrastructure and diversification. Consultations have highlighted varying roles for the different tiers of government in facilitating the region's economic development and this Blueprint is itself a recognition of the need for government to take a central role in such efforts.

The competitiveness assessment undertaken in this Blueprint involves the identification of the strengths and associated issues drawn from each of the core factors of the adjusted Diamond model. The results of this competitiveness assessment inform the analysis of the regional imperatives. This assessment was undertaken through stakeholder consultation with key representatives from private enterprise, health and community services and government, in addition to a regional economic analysis.

Appendix 2 provides the detail of the competitiveness assessment. The key current industry sectors in the region have been analysed in terms of their international competitiveness (or export attractiveness), growth potential and current size. Key sectors on which to focus economic development initiatives are identified as primary agriculture, tourism, viticulture and minerals extraction. In addition, there are strategic growth sectors that are important for their potential for diversifying the economic base of the region – specialised manufacturing and secondary processing of agricultural products. These sectors were then further analysed in relation to the adjusted Diamond model, examining the factors that underpin the competitiveness of the particular sector, as also summarised in Appendix 2. The analyses indicate clear development priorities for these sectors, embodied in a range of strategic opportunities identified in Appendix 2 and the SWOT analyses for each sector that are presented in Appendix 1.

On a regional basis, the core factors that underpin, or present a barrier to, the competitiveness of the key industry sectors can be summarised in terms of the regional strengths and associated issues in Table 14.

Table 14 Great Southern competitiveness assessment

	STRENGTHS	ASSOCIATED ISSUES
Factor conditions: Basic infrastructure	State and nationally significant agricultural region High amenity, diverse natural environment with high biodiversity and a range of environments Moderate temperatures and reliable rainfall Diverse range of tourist activities and attractions Major heritage assets, including Aboriginal cultural heritage, earliest European settlement in Western Australia, Anzac heritage The region has identified mineralised zones, notably the gold near Katanning and the Southdown magnetite resource Attraction of visitors and residents through lifestyle and climate, natural assets and beauty	Major centres are remote from the Perth metropolitan area – key barriers to visitation include the perceived high cost for transport and accommodation and the significant amount of travel time required Current over-dependence on the agriculture industry, and its inherent seasonality and commodity nature Lack of housing and serviced industrial / commercial land in rural towns Lack of water, power and ICT infrastructure in parts of the region, with the potential to stifle economic and population growth Upgrades of road and rail networks are essential for improving efficiency and safety of transport Tourism transport and accommodation infrastructure gaps
Factor conditions: Specialised infrastructure including knowledge and innovation	The region benefits from strong tertiary education and training resources, including a GSIT presence across the region and the growing UWA Albany campus Albany Health Campus is a teaching hospital	The regional industry structure is dominated by public and population serving sectors Collaborative working is underdeveloped, including networks and knowledge-sharing Weak linkages between the research base and industry Tourism industry perception that the region would benefit from increased marketing, both nationally and internationally. The region is covered by ASW as the regional tourism organisation.
Demand conditions	Growing population supporting goods and services demand Direct access to global markets through Albany Port, which has spare capacity Regular intrastate passenger services through Albany Regional Airport Ageing population is generating demand for a range of health services Lower cost of living Tourist visitation resilient	Lower household and personal incomes In terms of per capita GRP, the region ranks low in comparison with the rest of Western Australia No interstate passenger services through Albany Regional Airport Business consumption impacted by below average economic diversity and knowledge intensive activity Retention of youth is a key objective for maintaining a healthy economy and local demand
Related and supporting industries	Supply chain value adding occurring in agriculture Strong amenities supporting net migration in coastal areas Strong access to government services and facilities in coastal areas Access to local tertiary education and research and development activity, particularly relating to agriculture and natural resource management	Many rural areas characterised as agricultural mono-economies Supply chain value adding through business improvement limited Population centre focus in provision of Government services Tertiary education services lack critical mass Collaborative working is underdeveloped, including networks and knowledge-sharing
Firm strategy, structure and rivalry	Export-oriented economy promotes competition and innovation, particularly in agriculture Resilient business community based on entrepreneurial and innovative practices Whole-of-region branding that encourages collaboration Development of knowledge-based businesses across the region	Relatively small size of business community limits competition for consumers Adoption of e-commerce and web activity by businesses slow Agricultural sector consolidation Access to finance for essential projects / competition for funding

In summary, the adjusted Diamond model analysis shows that the Great Southern possesses a diverse range of strengths, including:

- High quality agricultural (food and fibre) production with comparatively stable and resilient climatic conditions
- A concentration of diverse tourist activities and amenities
- Highly attractive residential locations
- High quality regional tertiary education and training facilities
- Major export-oriented infrastructure, including a regional port and airport with the capacity for future development
- A high concentration of government services and facilities
- High levels of small business creation and operation
- Superb natural environment and high biodiversity.

However, the capacity of the regional economy to capture and leverage these advantages will be constrained and impacted by a number of critical issues, including:

- Remoteness from metropolitan Perth
- Consolidation of government regional services providers
- Rising trend in structural unemployment and below average skills profile
- Restricted economic diversification
- Lack of key infrastructure in some districts, including transport, housing and serviced industrial/commercial land, water, telecommunications and power
- Lack of population critical mass, particularly in major centres
- Underdeveloped culture of collaborative working and weak linkages between the research base and industry
- Capacity to participate in the global digital economy.

GLOBAL CONNECTIVITY ASSESSMENT

Access to and connection with global markets is critical to the growth of business, employment, incomes and the broader economy. Trade with other locations around the world is the most effective way for a region to exploit its natural, competitive and comparative advantages, generating prosperity for local residents.

Connectivity to global markets can take a number of forms including:

- Ports – export of bulky agriculture and mining products and containerised trade.
- Airports – international connections.
- Tourist visitation – international visitors to the region.
- International students – number of international students being educated in the region.
- E-commerce and service exports – export of knowledge-intensive, professional services.

Connectivity with global markets through each of these forms has been described in the Regional Analysis chapter, showing that:

- The Port of Albany provides a strong connection to global markets for local agricultural production and plays a secondary tourist visitation role.
- Albany Regional Airport also plays a role in connectivity for the region. However, the high cost of airfares probably impedes the development of tourism and other traffic within the region.
- There is significant potential for growth in tourism visitation, including international tourism and visitors related to the education and business sectors.
- The region's tertiary education assets provide a firm base for the attraction of greater numbers of international students, with a long-term target of hosting 3,000 full-time equivalent students by 2040 with over a third coming from overseas.
- Knowledge-intensive service exports represent a significant opportunity for the region and the adoption of e-commerce and new information technologies is a critical enabler for increasing the effective reach of regional professional and knowledge intensive service businesses.

Overall, the Great Southern can be considered to be a moderately well connected economy. The region's food production sector exports to domestic and international markets, there are regular passenger flights through Albany Regional Airport and cruise ship arrivals through the Port provide access for international visitors. The tertiary education presence in the region is significantly greater than that of other regions in the state, providing the future opportunity to attract and retain international students. Leveraging these connections will allow a range of interrelated global opportunities to be captured by local business and industry.

These considerations, together with the competitiveness assessment, feed into the identification of opportunities and implications that define the regional imperatives.

COMPARATIVE ADVANTAGES

Growth and expansion of the Great Southern economy will be driven by advantages including the quality and productivity of the agricultural sector, strong current employment levels and an active small business sector. Tourism activities have the potential to grow in scale and diversity. Major transport infrastructure is in place, and the number and quality of tertiary education institutions in the region is unique in regional Western Australia. Lifestyle, amenity and affordability characteristics of the region present an opportunity to establish a knowledge-intensive service sector trading into the region, the rest of Australia and Asia.

Four broad areas of comparative advantage in the Great Southern economy are revealed through this Blueprint's assessment of the region's competitiveness and global connectivity. They represent the foundations of the Great Southern's current industries, reflected in employment, investment and gross value added. The four comparative advantages are:

- LIFESTYLE AND NATURAL AMENITY – The natural environment and coastal orientation of the major population centres of the region underpins the quality of life of the Great Southern. This amenity, coupled with favourable costs of living, has, and will continue to, underpin lifestyle-based migration to the region. The temperate nature of the climate means the region's natural amenity is expected to be more resilient to the effects of climate change in the future, further reinforcing the attractiveness of the region to families and retirees alike, and accelerating population growth, particularly along the coast. A growing population will support demand for goods and services in the region.
- PRIMARY PRODUCTION – The capacity of the Great Southern to produce a diverse range of food products – including grain, livestock, poultry, horticulture, viticulture, wild capture seafood and aquaculture – makes the region Western Australia's premier food bowl. Additionally, the region has an established timber industry, which remains a distinct comparative advantage of the region within the Australian economy, despite the impact of recent market factors on short-term feasibility. Considerable opportunities exist across a range of food producing and primary industries to tap into the growth in demand in global markets to provide a premium offering to rising middle classes. Major investments in aquaculture and the integration of the food producing sector with tourism also represent major opportunities, as do efforts to value add to local production. The region also has a significant proven gold deposit near Katanning and the Southdown magnetite resource, which could form the basis of an expanded minerals sector.
- TOURISM – The Great Southern possesses a diverse collection of natural environment and heritage-based tourism attractions, including Aboriginal heritage assets, the sites of the earliest European settlements in Western Australia and a nationally-recognised Anzac connection. Leveraging and coordinating these assets into a single integrated tourism offering is critical to developing the Great Southern into a premier domestic and international tourism destination. This will be further enhanced by expansion of services through Albany Regional Airport, attraction of greater numbers of cruise ships to the Port of Albany and the innovative use of technology and telecommunications.
- TERTIARY EDUCATION – The region possesses a comparatively strong tertiary education offering, with a significant UWA presence and integrated offerings with the GSIT. This has the potential to form a base for a critical mass of quality tertiary education facilities in the region that will provide significant benefit to knowledge-intensive service sectors of the economy, by providing locally educated workers. It can also provide a critical mass of research and development to support major industries in the region. Finally, the attraction of international students not only provides an additional source of income and young people for Great Southern communities, but exposes the world's future business leaders to the region, increasing future tourism, migration and inward investment.

Figure 40 Comparative advantages of the Great Southern economy

The region's current comparative advantages are dynamic, not static. They can erode over time if the region fails to invest in sustaining and developing them, and new comparative advantages can develop. For example, the NBN provides the potential for the region to develop new economic sectors, and the successful exploitation of food production could stimulate manufacturing. This could begin with value-added food processing and extend to more elaborately transformed products. Indeed, it is important that the region implements initiatives to maximise other opportunities to diversify the regional economy.

EMERGING OPPORTUNITIES

Looking at the Regional Analysis and Megatrends chapters through the lens of the Comparative Advantages identified above, a number of Emerging Opportunities for the region can be identified, as summarised in Figure 41.

Lifestyle and Natural Amenity provides opportunities to attract workers to expand opportunities in value-adding to agricultural and forestry production and in the development of the minerals sector. It also provides the basis for responding to opportunities in tourism and from the ageing population and in further development of the community and expansion of sports, arts and recreation.

Primary Production is the solid basis for emerging opportunities in value-added food and forestry products, responding to growing export markets in Asia and attracting investments related to climate change, such as renewable energy.

Tourism drives a range of opportunities including leveraging the region's heritage, sports, arts and recreational assets. There is also a link to the demand for export of specialist foods as a result of an increase in tourists, particularly from Asia.

Tertiary Education supports many emerging opportunities through providing regionally-relevant research and development, facilities to support growing and ageing populations and as a cornerstone for opportunities presented by the digital age, thereby helping to drive knowledge, innovation and entrepreneurial activity. Expansion of the higher education sector in the region also represents another area of export opportunity in relation to the education of international students.

These emerging opportunities form one side of an analysis leading to the regional imperatives and the other looks at how to address regional challenges.

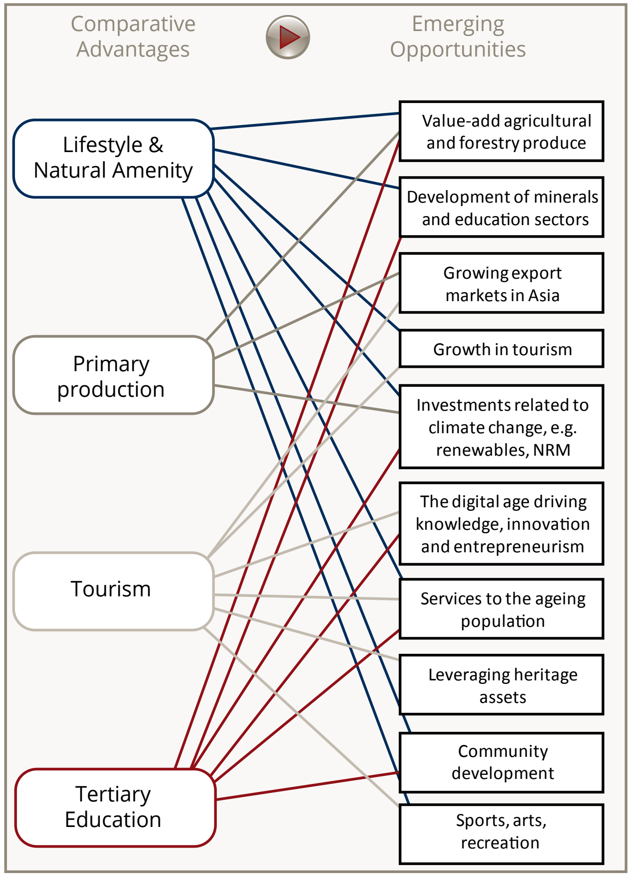


Figure 41 Comparative advantages and emerging opportunities

CHALLENGES

Fully realising the opportunities presented by the region's comparative advantages also requires addressing a number of challenges and constraints that may impede these drivers. The stakeholder consultation, Regional Analysis and Megatrends reveal a number of regional challenges (Figure 42), which can be summarised as follows:

Variable Economic Growth and **Uneven Population Growth** provide challenges for infrastructure development in the region. The development of infrastructure too far ahead of growth results in the returns on the substantial investment involved being suppressed. On the other hand, the development of infrastructure too slowly will become a significant barrier to growth. Population growth will also drive demand for affordable housing and housing diversity and health and education infrastructure, together with power, water and transport. In areas of a declining or static population base, however, the case for investment in infrastructure becomes more difficult, in that the demand drivers are less evident. Economic growth will require infrastructure development including serviced industrial land to provide increased capacity for value-adding manufacture of export product. The lack of economic diversification or an over-reliance on agriculture, tourism and population serving sectors may also impede the region's growth, as may any reduction in the knowledge intensity of the economy.

The region also has challenges in **Social and Community Development** to meet the needs of both its aged and its youth, enabling both groups to be fully active members of the community. There is a further need to address key social indicator deficits where they exist in the region, within specific cultural groups or variations across subregions, including out-migration of youth and tackling social issues.

The skills profile of Great Southern workers and declining employment opportunities in some sectors will inevitably have the effect of impeding growth drivers. In the Regional Blueprint analysis, a significant number of the tools required to effectively address these shortfalls in regional human capacity are drawn from the recommendations included in the *Great Southern Workforce Development Plan 2013-16*. It is recognised that the enhancement of education, training and employment pathways involves a mix of traditional and innovative methods. These include a strategic focus on areas as varied as early childhood learning, health initiatives, fit for purpose housing and targeted training programs that embrace the region's aged residents, young Aboriginal people and the underemployed.

The region also needs to embrace its **Environmental Sustainability**, associated with climate change, clean water and energy. If these issues are left unaddressed, they will be exacerbated by and will constrain economic and population growth. There is an obvious requirement to balance economic and population growth with the region's environmental values.

Addressing these challenges now and into the future, in tandem with leveraging the region's comparative advantages and emerging opportunities, is a key objective of this Blueprint.

Each challenge has implications for the region in terms of physical, virtual and social infrastructure. The linkages between the regional challenges and these regional implications are summarised in Table 15. Addressing gaps in the physical, virtual and social infrastructure in the region related to these challenges will help to meet the regional imperatives identified in this Blueprint.

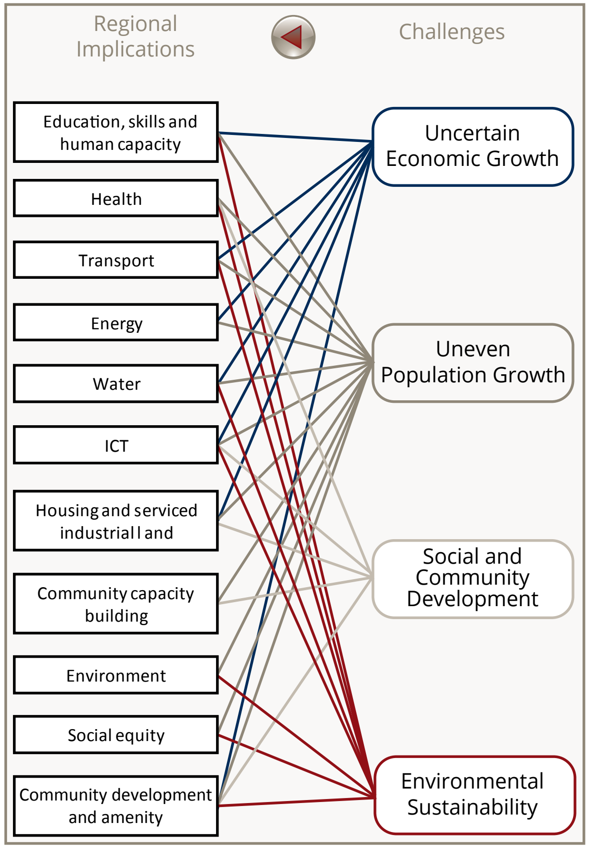


Figure 42 Regional challenges and implications

Table 15 Meeting the challenges in the region

CHALLENGE	KEY ISSUES	REGIONAL IMPLICATIONS
Economic growth	**Business development / innovation capability** • Innovation culture and leadership, risk aversion, networking, experience, support, business acumen, ICT and e-commerce capability • Start-up barriers: access to seed capital, skilled workforce etc. • Attraction of businesses from outside: perception of region, address existing constraints, competing opportunities, cost of relocation and start-up **Development of the regional skills base** • Attract and retain sufficient new skilled residents in areas with the greatest opportunity, through provision of adequate / affordable infrastructure (housing, health education, transport, communications, recreation etc.) • Provision of adequate / affordable services (health, education, policing, waste management etc.) • Address any deterrents: regional towns' visual amenity, crime, environmental issues, climate, remoteness etc. • Address Aboriginal employment and education outcomes **Infrastructure for business growth** • Land and buildings, utilities, transport, communications etc. **Local competitiveness** • Economies of scale and costs of doing business (access to skilled workforce, communications infrastructure, ICT, transport etc.)	**Education, skills and human capacity** • Access to affordable childcare facilities and services to i) attract skilled labour, ii) support women re-entering the workforce after having children and iii) address early year development deficits • Adequate capacity and quality of primary and secondary education to i) attract skilled labour, and ii) prepare regional youth for careers • Adequate capacity and quality of vocational training to i) reduce local skills gaps, and ii) increase youth / Indigenous / aged workforce participation • Increase higher education opportunities to i) reduce the "brain drain" to Perth, ii) provide the tertiary courses most appropriate to the region, and iii) strengthen research and development on key regional issues (salinity, water sustainability etc.) **Health** • i) Address growing and changing regional health needs, ii) attract skilled immigration, iii) maximise economic growth opportunities from the sector **Transport** • Support competitiveness: reduce cost and increase market access (especially for the agricultural commodities that dominate the regional economy) • Improve local transport and connectivity to attract skilled immigration • Develop the regional transport mix to reduce carbon footprint **Energy** • Ensure energy infrastructural bottlenecks do not suppress regional economic and population growth through excessive cost and unreliability of energy **Water** • Replace ageing and obsolete urban and rural water infrastructure **ICT** • Exploit economic, social, environmental opportunities of ICT/NBN to i) support a modern education system, ii) increase regional access to knowledge networks, and iii) enable new business models **Housing and serviced industrial land** • Provision of adequate / affordable housing and housing diversity to attract skilled immigration • Provision of essential infrastructure for the development of special industrial sites • Increased capacity for value-adding manufacture of export product **Community capacity building** • Develop community-related infrastructure to attract skilled immigration **Environment** • Balance economic growth with the region's environmental values **Social equity** • Ensure economic growth in the region benefits all residents

CHALLENGE	KEY ISSUES	REGIONAL IMPLICATIONS
Population growth	**Employment prospects** • Arising from economic growth prospects **Attract and retain new skilled residents** • Attract and retain sufficient new skilled residents in areas with the greatest opportunity, through provision of adequate / affordable infrastructure (housing, health education, transport, communications, recreation etc.) • Provision of adequate / affordable services (health, education, policing, waste management etc.) **Environmental sustainability** • Address environmental constraints on population growth (water, energy, agricultural productivity etc.)	**Education, skills and human capacity** • Access to affordable childcare facilities and services to i) attract skilled labour, ii) support women re-entering the workforce after having children and iii) address early year development deficits • Adequate capacity and quality of primary and secondary education to i) attract skilled labour, and ii) prepare regional youth for careers • Adequate capacity and quality of vocational training to i) reduce local skills gaps, and ii) increase youth / Indigenous / aged workforce participation • Build capacity in education to cater for projected population growth **Health** • i) Address growing and changing regional health needs, ii) attract skilled immigration, iii) maximise economic growth opportunities from the sector • Cater for changing population demographics and growing population **Transport** • Improve local transport and connectivity to attract skilled immigration • Develop the regional transport mix to reduce carbon footprint • Provide access to affordable reliable regional public transport **Energy** • Cater for projected population growth **Water** • Address challenges in sustainable water for urban growth **ICT** • Improve the amenity / attractiveness of the region by leveraging ICT to reduce isolation, increase services **Housing and serviced industrial land** • Respond to demand for affordable housing and housing diversity • Provision of essential infrastructure for the development of special industrial sites **Community capacity building** • Develop community-related infrastructure to respond to population growth **Environment** • Balance population growth with the region's environmental values **Social Equity** • Ensure population growth in the region does not cause deterioration in key social indicators

CHALLENGE	KEY ISSUES	REGIONAL IMPLICATIONS
Community development	**Ageing population** • Increased burden on infrastructure: aged care, healthcare, reduces labour pool, loss of skills **Youth issues** • Develop regional opportunities to retain youth, and mitigate skills shortage and ageing population • Develop social infrastructure to engage youth in the community to reduce isolation, boredom, and attendant social issues (crime, substance abuse, mental health) **Indigenous gap** • Address Indigenous social indicators: employment, education, health, crime etc. • Develop skills to facilitate economic growth	**Education, skills and human capacity** • Provide greater opportunities for senior education (such as ICT skills) to i) extend workforce participation, and ii) engage seniors actively in the community **Health** • Critical for senior demographic: aged wellbeing, care in the community, nursing homes, acute care • Specific health needs of youth and Indigenous groups **Transport** • Provide access to affordable and reliable regional public transport **ICT** • Leverage potential for ICT to support the aged: i) reduce isolation, and ii) cost effectively deliver aged services e.g. home monitoring **Housing** • Increase supply of affordable small dwellings **Social Equity** • Address key social indicator deficits where they exist in the region within specific cultural groups or variations across subregions
Environmental sustainability	**Address existing environmental damage** • Water, salinity • Direct and indirect impacts of climate change • **Biological interactions and ecological richness are stressed** **Develop infrastructure** • Replace ageing and outdated infrastructure • Increase capacity to meet regional expansion **Promote sustainable business and community practices** **Knowledge gaps on environmental challenges** • Water balance and water management • Environmental impact of human activities	**Education, skills and human capacity** • Plays a key role in i) changing community attitudes and unsustainable practices, ii) providing regional skills base needed to address challenges, and iii) stimulating innovation and research and development to address sustainability challenges **Health** • As above **Transport** • A key role in reducing carbon footprint: changing the transport mix to reduce emissions (e.g. more freight by rail, less by road), improving transport energy efficiency through improved infrastructure **Energy** • Upgrade infrastructure to increase energy efficiency and reduce waste, community and commercial initiatives to reduce demand, exploit alternative energy sources, stimulate innovation and investment **Water** • Address challenges in sustainable water for urban growth and agricultural activity • Ensure regional infrastructure in place to exploit climate change upside: localised rainfall increases **ICT** • Exploit ICT enabled sustainability initiatives: improved communication reducing travel, technology for monitoring climate change, technology for optimisation of resource use **Community capacity building** • Develop community awareness of the environment and facilitate community volunteering in tackling specific environmental issues

Meeting the vision for the region articulated in this Blueprint means leveraging the region's comparative advantages as the main drivers of opportunities while addressing the challenges which represent the region's main barriers to growth. The strategic priorities for the region are embodied in four regional imperatives that draw together the analysis described in this Blueprint, as summarised in Figure 43.

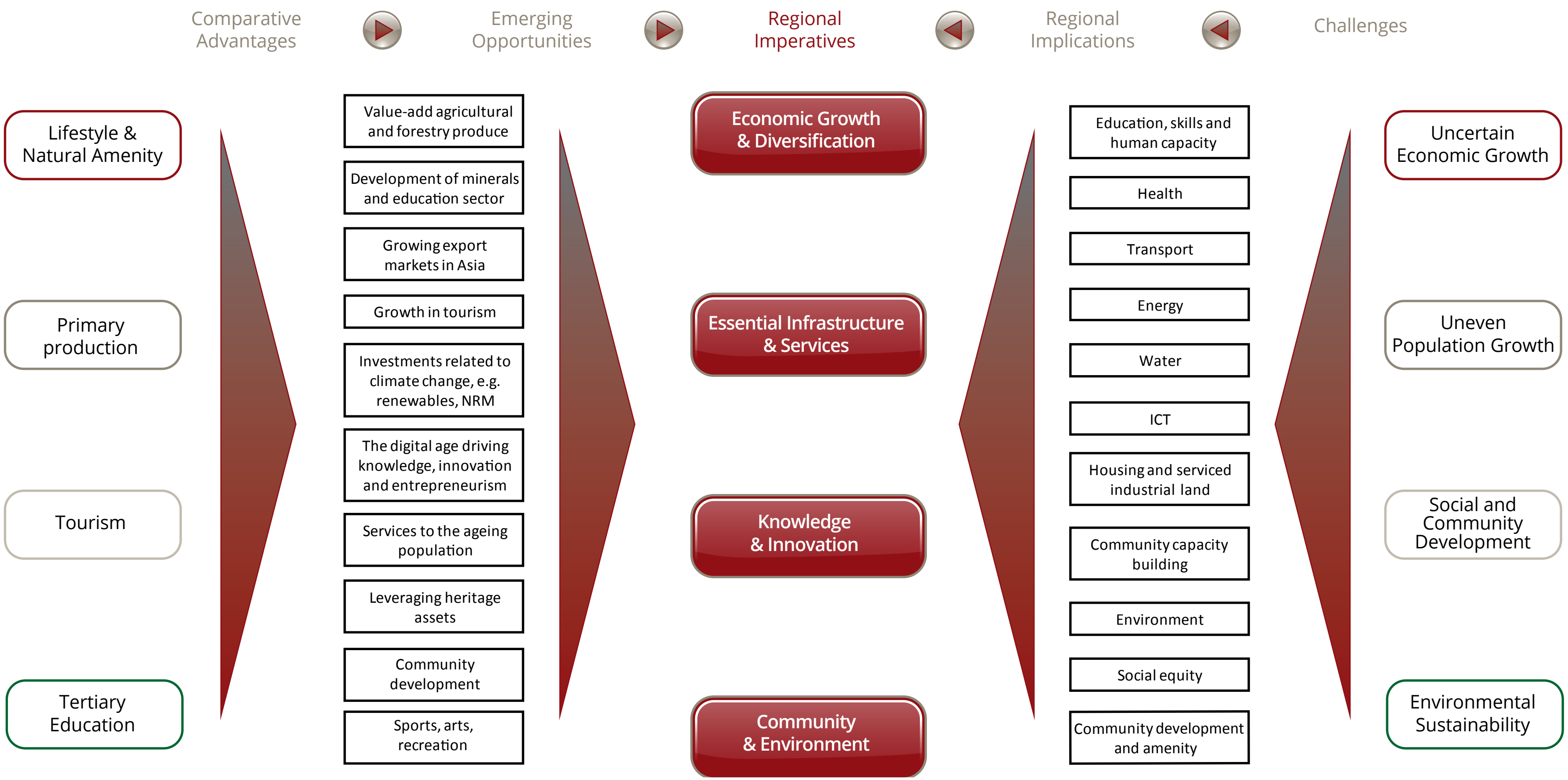


Figure 43 Mapping opportunities and challenges onto the regional imperatives

ECONOMIC GROWTH AND DIVERSIFICATION is both a key objective of the vision and a key enabler for the broader vision. The profits of economic development increase the capacity of the region to invest in achieving its broader vision and generate direct non-economic benefits (for example, by creating a richer, more balanced community through attracting new residents and retaining and better engaging existing residents, such as the region's youth and Indigenous populations). The nature of economic development can have a significant positive, or negative, impact on regional environmental sustainability. Therefore, economic growth and diversification is an imperative for the region for building critical mass and capacity to enable the outcomes described in the Regional Blueprint. This will be achieved through exploiting opportunities that leverage the region's comparative advantages but will require gaps to be addressed in the region's physical, virtual and social infrastructure.

ESSENTIAL INFRASTRUCTURE AND SERVICES such as transport, education, health, communications, energy, water, housing and serviced industrial land underpin the responses to all the regional challenges. Social infrastructure such as sport and recreation facilities, community centres, as well as the visual amenity of the region's urban landscapes, plays a key role in community building. Infrastructure and service gaps need to be addressed if the region is to realise its potential and the vision outlined in this Blueprint.

KNOWLEDGE AND INNOVATION is a critical driver of economic growth and development. It is also essential in resolving the complex and pressing problems standing in the way of environmental sustainability. The education and innovation systems perform an important community development role in addition to providing opportunities for the region's population to fully participate in the region's economy, and by supporting the creation of a more open and flexible social culture that embraces changes as the region develops. Knowledge and innovation builds on the region's existing comparative advantage in tertiary education but will also require investments in community, education and ICT infrastructure for the benefits to be fully realised. These benefits will then flow on, not just for economic development, but for social and community building and environmental sustainability.

The current and future **COMMUNITY** of the Great Southern are the key stakeholders and beneficiaries of the region's vision and mission. Their engagement is clearly essential to delivering community development initiatives (reducing disadvantage, enriching community life). The people of the region also play a critical role in economic development, for example by creating communities that are attractive to skilled migrants. Further, a sustainable **ENVIRONMENT** simply cannot be delivered without the active support and engagement of the region's community.

The regional imperatives are therefore interlinked and build on one another; all need to be pursued in order to achieve the vision that the Great Southern is recognised internationally as a natural choice for opportunity and lifestyle.

REGIONAL ANALYSIS

A rich understanding of the history of the Great Southern's culture, geography and economic development informs this Blueprint

MEGATRENDS

Global shifts in demographics, resources, the environment, movement and communication are transforming the way we live, work and interact with one another

COMPETITIVENESS AND CONNECTIVITY

Prosperity and economic sustainability in a region is increasingly determined by a combination of its competitiveness with and connectivity to national and global markets

REGIONAL INTENT AND IMPERATIVES

Four imperatives are fundamental to the region's economic development, growth and prosperity: Economic Growth and Diversification; Essential Infrastructure and Services; Knowledge and Innovation; and Community and Environment

IMPLEMENTATION AND MONITORING

Progress on public sector and joint investments will be measured as the Great Southern Regional Blueprint is implemented

REGIONAL INTENT & IMPERATIVES

Four regional imperatives have been identified through comprehensive consultation, research and analysis, and appear throughout this Blueprint.

The Regional Analysis and discussion of Megatrends fed into a model of regional Competitiveness and Connectivity and led to the identification of the region's comparative advantages, emerging opportunities that build on these, and a number of regional challenges and their implications in terms of physical, virtual and social infrastructure. Mapping all of these factors led to the four regional imperatives. The imperatives are interlinked, build on one another and need to be pursued together in order to achieve the vision articulated in this Blueprint.

The Regional Blueprint process commenced in 2012 and involved a stocktake and analysis of existing planning documents, strategies, infrastructure and projected investment activities. However, the material considered has also included a significant number of directly relevant strategic documents which have emerged more recently. The document base over the period 2010-2014 considered for this Blueprint is therefore a significant body of work from a range of Commonwealth, state, regional and local sources, which are detailed in the Introduction section of this Blueprint.

The research, findings and projects identified in these plans and strategies have been incorporated into the Regional Blueprint to ensure it reflects the drivers, challenges and opportunities facing all aspects of the Great Southern economy and community.

CONSULTATION

Extensive consultations with a broad cross-section of the region's stakeholders has been undertaken through workshops, face-to-face and telephone interviews, and through written submissions. This process secured feedback which covered the geographic, economic and social spread of the Great Southern. This includes interviews with senior representatives (elected and/or appointed) of all local governments in the Great Southern and senior managers of various public sector agencies. However, while government has a central role in the implementation of this Blueprint, a diverse range of other stakeholders are also anticipated to contribute greatly to the region's transformation over the coming decades. Therefore, the interview list also included representatives from:

- Business and industry organisations
- Not-for-profit and community groups
- Local and external investors
- Small to medium enterprises
- Aboriginal corporations, groups and enterprises.

SITUATIONAL ANALYSIS

Significant effort has been expended in the development of this Blueprint in analysing the data and information available and the feedback received. As illustrated in Figure 1 (page 2), the foregoing Regional Analysis complemented this research and consultation, and guided the development of a vision, mission and regional imperatives.

Supplementing this work in identifying comparative advantages, regional challenges and emerging opportunities, a comprehensive SWOT analysis (strengths, weaknesses, opportunities and threats) was conducted across the region's four regional imperatives. This is presented in Appendix 1. An in-depth analysis in Appendix 2 consolidates this work by highlighting strategic opportunities across all sectors of the economy.

VISION

THE
GREAT SOUTHERN
IS RECOGNISED
INTERNATIONALLY
AS A NATURAL CHOICE
FOR OPPORTUNITY
AND LIFESTYLE

MISSION

RESPECT AND ENHANCE THE REGION'S ENVIRONMENT AND HERITAGE ASSETS

GROW AND DIVERSIFY THE REGION'S ECONOMY THROUGH ENHANCED ENGAGEMENT WITH EXISTING AND EMERGING MARKETS

IMPROVE AND MAINTAIN ESSENTIAL INFRASTRUCTURE AND SERVICES

ENCOURAGE KNOWLEDGE AND INNOVATION THAT BENEFITS THE REGION

BUILD STRONG COMMUNITIES

REGIONAL IMPERATIVES

Four imperatives are identified as fundamental to the region's future development and consistent with the region's mission:

- Economic Growth and Diversification
- Essential Infrastructure and Services
- Knowledge and Innovation
- Community and Environment

The Regional Blueprint hierarchy in Figure 44 shows the relationship between the regional vision, mission and regional imperatives and the transformational project opportunities which flow from these.

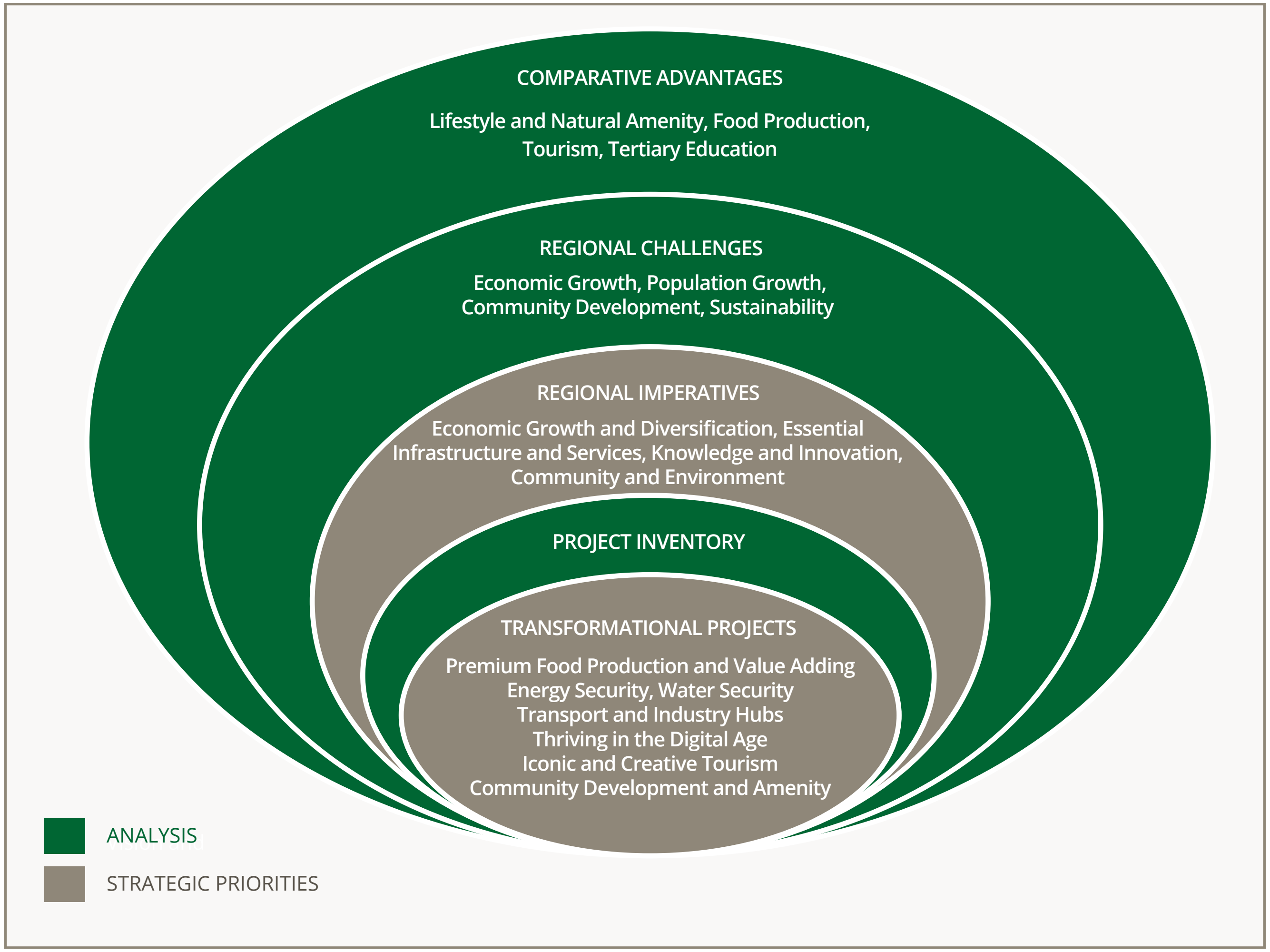


Figure 44 The Regional Blueprint hierarchy

The Great Southern's vision and mission define long-term aspirations and build on the identified regional comparative advantages and challenges. The strategic priorities respond to these; they are dynamic and will evolve as the region develops, potentially leading to new regional imperatives and further transformational project opportunities.

Regional comparative advantages represent the main drivers of opportunities. Leveraging the region's comparative advantages, building on its core strengths and embracing megatrends provide the basis for regional economic growth and prosperity. These are articulated through a range of emerging cross-sector opportunities that will vary over time. This is the heart of the vision of this Blueprint.

Regional challenges, as summarised in Table 15 (page 91), break the vision into its core components, which are the long-term environmentally sustainable growth of the economy and population, and the continued development of the community. Addressing these challenges, which represent the region's main barriers to growth, is a core objective of this Blueprint.

The mission and regional imperatives define the critical areas that must be managed in response to the opportunities to be leveraged and the challenges to be addressed in order to achieve the vision. These critical areas are: the regional economy, its infrastructure, opportunities for innovation and knowledge systems, the regional community itself, and the environment. The regional imperatives define what the region is attempting to achieve. The transformational project opportunities articulate how the region will achieve them. Together, they form the strategic priorities – the particular sectors and projects with the greatest potential to deliver sustainable transformation to key sectors.

PROJECT INVENTORY

As part of the development of this Blueprint, a project inventory was built up through the interrogation of the Regional Blueprint Stage 1 (stocktake) and through comprehensive regional consultations. Projects and initiatives included in the project inventory are those that are either budgeted or at concept development stage, will require a significant level of investment (public or private) and have the capacity to deliver strategic benefits.

The transformational project opportunities have been identified by looking at the project inventory through the lenses of the region's comparative advantages and challenges. Only those projects that leverage comparative advantages and/or address challenges on a region-wide basis have, at this stage, been included as transformational project opportunities.

Both the project inventory and the transformational project opportunities will be updated over time as additional information is provided and as projects develop and progress. In this way, the strategic priorities will evolve as the region develops.

MEASURES OF SUCCESS

A series of aspirational economic, social and environmental indicators, or measures of success, were developed from an analysis of relevant research data, information, consultation and feedback from a wide variety of sources and are summarised below.

ECONOMIC GROWTH AND DIVERSIFICATION

Envisage, by 2040, the Great Southern will have:	This will be achieved by:	Success will be measured by:
A strong, resilient economy,	Growing value in enterprises across the region	The region's gross regional product (GRP) will have grown by at least 5 per cent compounded annually.
Which is diversified,	Retaining the core strength of agriculture while building the contribution of other sectors of the regional economy	The region's industry sectors will be more diversified since: • Tourism as a percentage of regional turnover will have doubled to 20 per cent. • Horticultural production will have doubled in value to more than $50 million annually. • The value of aquaculture production and fishing will have increased three-fold. • Mineral exports by volume will have exceeded 3.5 million tonnes per annum.
Adding value to its primary production,	Innovation in agriculture to meet the needs of new markets	The value of the regional manufacturing sector as a percentage of regional turnover will have increased to 20 per cent. A quarter of the volume of forestry produce will be used for secondary processing in the region.
And supplied by a strong workforce	Education and training that meets the needs of employers	The region's workforce will have increased to 60,000, and will have an unemployment rate below the state average. The region will be a base for 2,000 fly-in fly-out (FIFO) workers.
Which is rewarded for its efforts.	Creating jobs and opportunities for enterprise.	The region will have a mean personal taxable income in line with the state average.

ESSENTIAL INFRASTRUCTURE AND SERVICES

Envisage, by 2040, the Great Southern will have:	This will be achieved by:	Success will be measured by:
Secure energy supplies across the region,	Building the Bunbury to Albany gas pipeline, upgrading power infrastructure and encouraging the use of renewable energy to provide access to energy	The region will have access to natural gas in key locations, including Albany and Mount Barker. The region's electricity network will be as reliable as the network that services the Perth metropolitan area (reliability as measured by the System Average Interruption Duration Index) with sufficient capacity for an expanded industrial sector and a resident population of up to 100,000. The region will supply at least 250MW of renewable energy.
Secure water supplies across the region,	Developing a range of solutions to provide water for growth	The region will have secure, sustainable water supplies sufficient for an expanded industrial sector and a resident population of up to 100,000. The region will recycle 100 per cent of its wastewater.
Safe and efficient transport links,	Continuing investment in road, rail and port infrastructure and encouragement of competition in air transport to provide avenues for opportunity	The Port of Albany will have expanded capacity to accommodate new export trades in minerals and value added products, with the capacity to service a container trade. The region's roads will efficiently and safely accommodate traffic needs including the capacity to cater for increased volumes associated with industry and tourism. The use of rail for transporting bulk commodities to the Port of Albany will have increased from 50 per cent of export product to 70 per cent. Passenger numbers through Albany Regional Airport will grow 3.5 per cent annually to 150,000.
With access to quality industrial sites	Ensuring planning and land availability continues for industrial zones across the region	There will be sufficient serviced industrial land to attract increased industry activity across the region.
And high standard digital links.	Raising engagement with digital technologies and developing the necessary infrastructure for a connected Great Southern economy.	The region will have telecommunications infrastructure comparable to services in the Perth metropolitan area. High speed broadband will be available to 100 per cent of residents and businesses, and access to digital delivery of services will be above regional Australian averages.

KNOWLEDGE AND INNOVATION

Envisage, by 2040, the Great Southern will have:	This will be achieved by:	Success will be measured by:
Excellent educational opportunities,	Ensuring appropriate resources, including digital infrastructure, are in place for education from early childhood through to secondary and adult education levels.	The Australian Early Development Census (AEDC) scores for the region will be above the state average. Educational outcomes (including the proportion of students completing high school and attainment of qualifications) for all Great Southern students will be comparable to those achieved in metropolitan schools.
With a vibrant tertiary education sector	Developing student accommodation, quality training infrastructure and enhancing the delivery of tertiary education in the region	The region will have a tertiary education sector that hosts over 3,000 full-time equivalent tertiary students, 30 per cent of whom will be from overseas. The region's tertiary education sector will be recognised as adding value to regional industry and the wider community through engagement with artistic, scientific and cultural activities.
That services the region's industries	Liaising with employers to ensure education and training meets the needs of industry	Trade skills requirements for key regional industries will be fully provided from vocational training and apprenticeship programs in the region. The region's tertiary and research organisations will be recognised for excellence in marine, agricultural, natural resource management and health economics education and research. The region's research base will be fully engaged with industry and community, as evidenced through the extent of innovation, collaborative research and development programs and outcomes.
And drives innovation	Building a culture of innovation including networks of knowledge and support	Measures of innovative activity (including research and development spend, network membership and activity levels, new product and service development) among regional businesses will be higher than regional Australian averages.
And entrepreneurial activity.	Continuing to support the role of small business.	The region will have the highest levels of small business creation and operation in Western Australia.

COMMUNITY AND ENVIRONMENT

Envisage, by 2040, the Great Southern will have:	This will be achieved by:	Success will be measured by:
A critical mass of residents,	Sustaining natural population growth, building on Katanning's RCDP gains and attracting new residents to the region's lifestyle advantages	The region's population will have grown to approximately 100,000 and will be distributed across the region. Katanning's RCDP vision and targets will have been achieved, sustaining a key service hub for the central Great Southern.
Who are healthy,	Continuing to develop the region's health facilities	Access to health infrastructure and services will be comparable to that in the metropolitan area. The region will have comparable health outcomes to the metropolitan area.
Active and engaged,	Developing quality amenities and supporting participation in sport, cultural activities and volunteering; attracting visitors to a destination of natural choice	The region will have sport and recreation infrastructure that meets Australian standards for core sporting codes. The region will host more than 12 national and/or international sporting events per year. Physical activity rates will be comparable with those for Western Australia as a whole. The Great Southern will be recognised as the premier region for arts and culture in Western Australia. Over 30 per cent of the population will be engaged as volunteers in activities that benefit the community.
And concerned for the region's environment,	Maintaining the region's environmental values and minimising negative impacts of human activity	The region will be recognised as an exemplar for best practice management of its heritage assets, and natural resources across land, water, coastal and marine assets. 100 per cent of recyclable waste will be converted into alternative uses or energy.
Leading to a strong sense of wellbeing.	Building strong and safe communities supported by appropriate services and infrastructure.	The region will offer a range of affordable public and private housing options that have the capacity to cater for a projected population of up to 100,000. Seniors will be able to remain living independently in communities across the region through a choice of quality and affordable accommodation, and home-based support services. The region's residents will feel safe and secure, with measures of both perceptions of safety and incidence of crime comparable with Western Australia as a whole.

Global and national trends will profoundly affect the Great Southern's achievement of these regional aspirations. Strategies over the coming decades need to respond to the opportunities presented by comparative advantages and address the key challenges. The analysis in this Blueprint does this and leads to a series of actions that will help to fulfil the region's vision for its future.

TRANSFORMATIONAL PROJECT OPPORTUNITIES

The identification of projects as transformational in this Blueprint is based on consultations with stakeholders through interviews and workshops, and with reference to a solid evidence base, resulting from extensive analysis of relevant data and information. These project opportunities stand out in that they have the potential to substantially transform the region and engage the attention and energy of the public and private sectors and the community in the years to come.

ENVIRONMENT

Connection with the natural environment is integral to the lives of Great Southern people. Accordingly, consideration of environmental and heritage values must underpin all of the region's transformational project opportunities.

TRANSFORMATIONAL PROJECTS DEFINED

Transformational project opportunities are defined as those with the capacity to either:

a) Initiate strategic regional activity (that is, to leverage emerging opportunities that build on regional comparative advantages), or

b) Remove current or anticipated strategic constraints (that is, to address regional challenges and their associated regional implications).

These transformational project opportunities both enable and draw on other projects listed in the full project inventory developed for this Blueprint.

Transformational project opportunities and the regional imperatives that drive them represent the priorities of the Great Southern region to 2040. This Blueprint seeks to engage these priorities in partnership with government, business, community groups and residents through a diverse range of interrelated actions, projects and initiatives.

These projects are profiled below to provide the foundation for future businesses cases, feasibility assessments, investment prospectuses and other implementation activities.

The anticipated timing of the implementation of these transformational projects is outlined under each and in the project inventory.

TRANSFORMATIONAL PROJECT 1: GROWING VALUE

ELEMENT	DETAILS
Project Area	Premium Food Production and Value Adding
Project Description	The further expansion of production, value adding and international marketing of the region's food products.
Regional Imperatives	Economic Growth and Diversification Essential Infrastructure and Services
Rationale/Need	The Great Southern is the second largest food producing region in the state. There is potential to grow and expand existing agrifood industries as well as to explore opportunities for new ones. The region has a mild climate, regular rainfall, productive soils and currently produces a range of primary products (grains and livestock). Horticulture and viticulture are growth sectors, with development mainly across the southern zone. There is the capacity to expand the export focused aquaculture sector (abalone, oysters). In terms of the value of production, much of the food produced in the Great Southern is exported in an unprocessed form. A focus on the supply chain is warranted to increase value adding and marketing opportunities. The region has production capacity assets that include a full range of infrastructure and services (power, water, telecommunications, transport etc.), skilled management and workforce, zoned land and a relatively high level of local investment. Three export abattoirs and the region's wineries generate most of the value-added income from food production. Final demand for a full range of high quality food products is growing in line with incomes in a range of growing Asian nations with which Australia has long-term trading relationships. Asia will be the main contributor to an estimated 70 per cent increase in global food demand by 2050 (The Brookings Institution 2011). Strong regulatory and quality management systems will continue to allow the output of premium foods that have the confidence of consumers because all products are traceable along the entire production chain. There is also the potential to attract long-term investment into the region as a result of an expansion of trading relationships.

<table>
<tr><th colspan="3">ELEMENT</th><th>DETAILS</th></tr>
<tr><td colspan="3">Benefits</td><td>
Diversified economic base
Employment and income growth
Increased food exports targeting Asia
Expanded investment that complements primary production
Diversified food production sector (expand horticulture, aquaculture, viticulture etc.)
Priority agricultural land protected from competing uses
Accommodate high intensity food production
Productivity improvements through investment
Purpose ready land for agricultural processing plants
Increased investment in skills development and sector innovation
Skilled labour attracted to the region
Technology and investment driven response to changing rainfall patterns
Increase in enterprise level cooperation, partnerships and knowledge sharing
Integrated regional brand, marketing and promotion of food products
Opportunity to link regional agriculture and tourism product
Private sector investment in capacity at the Port of Albany
</td></tr>
<tr><td>Project Components</td><td>Time Frame (years)</td><td>1-5</td><td>FOOD PROCESSING PRECINCT
The Katanning SuperTown Growth and Implementation Plan identified an opportunity to develop a central Great Southern food processing precinct that is integrated with current operations. It is posited that investment in the new development will be driven by local factors of comparative advantage. These elements include access to product inputs, state-of-the-art sheep saleyard, essential services infrastructure, transport logistics and skilled labour. Katanning has a track record of securing long-term agriculture sector investment, the main example being the Western Australian Meat Marketing Cooperative export abattoir.</td></tr>
</table>

ELEMENT			DETAILS
Project Components	Time Frame (years)	**Ongoing**	AGRICULTURAL LAND USE AND PRODUCTION INPUTS PLANNING The identification of high quality agricultural land and statutory planning to conserve priority agricultural land, particularly where the assets are located in reliable rainfall zones, will increasingly be key strategic considerations for local government authorities across the region. The protection of a critical mass of productive land will be necessary where there is a clear threat of fragmentation through development that is inconsistent with broad acre farming. For example, a strong case can be made for planning that will enable export opportunities in sector investment (e.g. the dairy industry) when they arise. Alternative uses could include rural lifestyle and industrial encroachment, the large scale extraction of minerals and the development of plantations. Consideration of alternative land uses needs to be in the context of broader NRM issues and therefore it is essential to ensure there is appropriate continuity in NRM resources (both human and other) across the breadth of the region to sustain and enhance existing effort. Planning to secure competitively priced inputs to agricultural production, such as high grade lime and clays, will be of strategic importance into the future. Acidic soils present a productivity challenge to crops and pasture; therefore affected land will regularly need the application of significant quantities of lime. While a draft state strategy was completed in 2013, an effective program to access lime deposits, including those on the south coast, will require a full review of the 2006 *State Lime Supply Strategy*.
		1-5	IDENTIFICATION AND REALISATION OF SOUTH COAST AQUACULTURE Establish an aquaculture zone to support the development of the industry in coastal waters off the south coast. The project will secure the required approvals for significant offshore and land-based aquaculture activity in selected appropriate areas. The region's overall seafood production sector currently includes the intensive farming of abalone and oysters for export. There is the potential for much further development, as the Great Southern has a range of protected coastal locations where the water quality and consistent temperature would allow commercial-scale operations to be established. Baseline research has been completed which indicates there is capacity to host and efficiently produce a range of seafood, including finfish. Quality seafood, from aquaculture and wild caught sources, is a subset of a wide range of premium foods for which demand is projected to increase in line with incomes in key Asian markets.

<table>
<tr><th colspan="3">ELEMENT</th><th>DETAILS</th></tr>
<tr><td rowspan="3">Project Components</td><td rowspan="3">Time Frame (years)</td><td>Planning 1-5 Implementation 5-15</td><td>HORTICULTURE AND INTENSIVE AGRICULTURE
Determine the feasibility of establishing an extensive horticulture precinct that has the capacity to supply both domestic and export markets with high quality product. Given the transport efficiencies required, a south coast location, which can generate economies of scale across a range of products, will be best positioned to attract the private sector investment required. It is envisaged that initial public sector investment will focus on baseline resource investigations (land, soil types, rainfall, groundwater, services infrastructure etc.). The concurrent identification of significant ground water resources in the lower Great Southern and the exponential growth in demand for dairy product in Asian markets also presents an opportunity that will drive growth in that sector. The second phase of these investigations, which will be aligned with DAFWA's Agrifood 2025+ initiative, will include a more intense examination of all of the factors of production and the feasibility of significantly expanding horticulture and dairying in the region.</td></tr>
<tr><td>Ongoing</td><td>EMERGING MARKET CONNECTIVITY
In order to effectively increase the export volumes and margins generated by the region's premium foods and wines in the longer term, a targeted strategy will be needed that will focus on emerging Asian markets. Driven primarily by industry, trading initiatives that are aligned with DAFWA's Agrifood 2025+ Growing Markets activities in reference to final market research, product development, branding and relationship building will need to be included. For the Great Southern, it is projected that this market connectivity approach could be enhanced by the development or appointment of resources dedicated to a coordinated approach to emerging markets. To be effective and sustainable the initiative would involve an investment by government and industry and comprise planned, targeted actions including working with customers in final markets and facilitating inbound investment / buying tours.</td></tr>
<tr><td>Ongoing</td><td>FREE RANGE LIVESTOCK
The Great Southern currently has a significant number of free range livestock producers (pork, poultry), some with organic accreditation, which have developed recognisable brands and are selling product into domestic and export markets. Sales growth is being driven by targeted marketing and reputation. The region has comparative advantages in land, soil types, climate, producer skills and transport logistics. The intention of current and future industry proponents is to further expand these market niches. To grow as a capital intensive, high yield sector, further investment will be required to extend key infrastructure (water, power, telecommunications, transport logistics etc.), regional branding and additional marketing.</td></tr>
<tr><td colspan="3">Challenges to Meet</td><td>• Secure energy and water resources for agriculture
• Maintain appropriately skilled workforce
• Secure sufficient productive agricultural land
• Maintain and extend transport corridors and connections
• Maintain and extend rural telecommunications and digital services
• Secure serviced industrial land
• Mitigate market fluctuations
• Adapt agricultural practices to changing climate
• Maintain environmental values</td></tr>
</table>

ELEMENT	DETAILS
Measures of Success	✓ Horticultural production will have doubled in value to more than $50 million annually. ✓ The value of aquaculture production and fishing will have increased three-fold. ✓ The value of the regional manufacturing sector as a percentage of regional turnover will have increased to 20 per cent. ✓ The region's workforce will have increased to 60,000 and will have an unemployment rate below the state average. ✓ The region will have telecommunications infrastructure comparable to services in the Perth metropolitan area. High speed broadband is available to 100 per cent of residents and businesses and access to digital delivery of services is above regional Australian averages. ✓ The region will supply at least 250MW of renewable energy. ✓ The Port of Albany will have expanded capacity to accommodate new export trades in minerals and value added products with the capacity to service a container trade. ✓ There will be sufficient serviced industrial land to attract increased industry activity across the region.
Stakeholders	Industry Department of Agriculture and Food Western Australia, Department of Water, Department of Fisheries, Department of Lands LandCorp Local government Austrade RDA-GS
Funding Sources	Industry State Government (including Royalties for Regions) Local and Commonwealth Governments

TRANSFORMATIONAL PROJECT 2: ACCESS TO ENERGY

ELEMENT			DETAILS
Project Area			Energy Security
Project Description			To ensure the Great Southern has access to a range of energy sources that are affordable and secure and able to meet the requirements of industry and the community
Regional Imperatives			Essential Infrastructure and Services
Rationale/Need			There are concerns about the level, age, safety and efficiency of current power infrastructure in the region and the cost of upgrades and maintenance. The capacity of the existing power infrastructure and the cost of upgrading feeder lines have the potential to limit major development at industrial sites in the region. Investment in power supply capacity has the potential to "future proof" the energy needs of the region. Major investment options for boosting the region's power supply include natural gas and/or transmission power lines.
Benefits			Potential benefits of this transformational project include: • Increased industrial and commercial investment • Economic diversification • Alternative energy industries and knowledge • Increased attraction to value-adding industries • Increased exports
Project Components	Time Frame (years)		BUNBURY TO ALBANY GAS PIPELINE Construction of a natural gas pipeline from Bunbury to Albany to provide a long-term and secure energy supply to the South West and Great Southern regions.
		1-5	• Stage 1: Project planning and development of a land assembly strategy for the pipeline corridor between Bunbury and Albany • Stage 2: Pipeline construction from Bunbury to Albany
		Ongoing	Future stages, including the construction of laterals to other regional centres, may be considered based on growth in demand.
			Gas fired power station: Option to construct a 40MW gas-fired power station at Mirambeena Industrial Estate to address the region's future demand for energy.

ELEMENT			DETAILS
Project Components	Time Frame (years)	5-15	CONSTRUCTION OF TRANSMISSION POWER LINES Muja-Kojonup-Albany 132kV transmission line: To ensure sufficient capacity to service the growing population and removing constraints to new power intensive investment opportunities.
		1-5 1-5 1-5 5-15	RENEWABLE ENERGY • Wind farm development: Construction of the proposed wind farm at Flat Rocks near Kojonup producing up to 150MW of electricity. • Solar power: Investigate opportunities for electricity production through large-scale solar power installations. • Wave energy: The construction of a commercial wave energy facility off Sandpatch at Albany producing up to 50MW of renewable energy with potential for desalinated water production. • Energy from waste: Production of methane from municipal waste material for electricity generation. A region wide system coordinated by local government that results in all solid waste being recycled into energy production.
		Ongoing	EDGE OF GRID UPGRADES Electricity supply and distribution infrastructure has in some places in the Great Southern not kept pace with growth in electricity demands, for example Gnowangerup, Jerramungup, Bremer Bay and Frankland River. Irregular and unreliable power is an impediment to business operations. The unexpected failure of key components of the SWIS has the potential to expose Albany and the Great Southern to power supply interruptions. There is a need to ensure core infrastructure is strengthened and enhanced to maintain the high level of security required by the region for its electricity supply.
Challenges to Meet			• Secure energy infrastructure upgrades • Maintain appropriately skilled workforce • Secure piped supply of natural gas • Maintain environmental values

ELEMENT	DETAILS
Measures of Success	✓ The region's electricity network will be as reliable as the network that services the Perth metropolitan area (reliability as measured by the System Average Interruption Duration Index) with sufficient capacity for an expanded industrial sector and a resident population of up to 100,000. ✓ The region will have access to natural gas in key locations, including Albany and Mount Barker. ✓ The region will supply at least 250MW of renewable energy. ✓ 100 per cent of recyclable waste will be converted into alternative uses or energy. ✓ The region's GRP will have grown by at least 5 per cent compounded annually. ✓ The value of the regional manufacturing sector as a percentage of regional turnover will have increased to 20 per cent. ✓ There will be sufficient serviced industrial land to attract increased industry activity across the region. ✓ The region will be recognised as an exemplar for best practice management of its heritage assets and natural resources across land, water, coastal and marine assets.
Stakeholders	Industry Non-government / not-for-profit / community organisations Department of State Development, Department of Regional Development and Department of Lands Western Power RDA-GS
Funding Sources	Industry Non-government / not-for-profit / community organisations Western Power State Government (including Royalties for Regions) Local Government

TRANSFORMATIONAL PROJECT 3: WATER FOR GROWTH

ELEMENT			DETAILS
Project Area			Water Security
Project Description			Ensure the long-term security of the Great Southern's water supply to meet industry and community requirements.
Regional Imperatives			Essential Infrastructure and Services
Rationale/Need			The greatest potential constraint to growth in the Great Southern is securing future water sources for public drinking, industry and agriculture. The region needs more sustainable and reliable water supplies and improved water management, including planned catchment management programs and better use and recycling of water, to be able to meet the demands of increasing population and economic growth. Securing sufficient water resources for the mid to long term presents challenges for certain areas of the Great Southern. Moreover, climate change is expected to have an impact on the water available for dry land agriculture.
Benefits			Potential benefits of this transformational project include: • Increased population growth • Improved access to business investment • Sustainability of rural communities.
Project Components	Time Frame (years)	1-5	GROUNDWATER INVESTIGATION Gain a comprehensive knowledge of groundwater sources across the region. Complete the current phase of investigations of the Albany and hinterland groundwater areas and prioritise for more detailed investigation and development.
		5-15	DEVELOP THE NEXT MAJOR POTABLE WATER SUPPLY SOURCE FOR THE LGSTWSS The Department of Water has identified a significant groundwater resource in an arc which extends from Manypeaks on the south coast across to Narrikup. The department's view is that this has prospects for being the next major water source for the LGSTWSS, although it has not discounted a seawater desalination plant at Albany and aquifer recharge using water from the Marbellup Brook as potential sources for the longer term.

<table>
<tr><th colspan="3">ELEMENT</th><th>DETAILS</th></tr>
<tr><td rowspan="4">Project Components</td><td rowspan="4">Time Frame (years)</td><td>Ongoing</td><td>EXTENSION AND UPGRADE TO WATER SUPPLY INFRASTRUCTURE
There is a need to improve existing water supply infrastructure to accommodate population growth and industrial expansion in the region. Works needed in the GSTWSS include upgrades to the Narrogin-Katanning extension and main line to Harris Dam. Works needed in the LGSTWSS include expansion of the integrated water supply scheme to Tenterden and Cranbrook and, on the south coast, to Denmark and Walpole.</td></tr>
<tr><td>Ongoing</td><td>INDEPENDENT TOWNS WATER SUPPLY
Develop sustainable water supply options for independent towns by:
• Considering connections to regional water supply schemes
• Supplying fit-for-purpose water
• Improving constructed catchments to increase run-off
• Investigating options to reduce evaporation from existing dams
• Improving water efficiency.</td></tr>
<tr><td>Ongoing</td><td>WASTEWATER
Ensure treated wastewater can be recycled. Key strategic infrastructure required in the region includes the installation of deep sewerage or connected septic tank effluent disposal systems across the region, and infrastructure to transport and reuse all wastewater from the Denmark plant and others that discharge to the environment.</td></tr>
<tr><td>Ongoing</td><td>WATER HARVEST AND REUSE
Innovative water capture and efficiency measures are essential for long-term water security. Support individual and regional groupings of local government authorities to plan and implement water harvest and reuse initiatives (e.g. Bremer Bay water efficiency project), storm water capture and reuse (e.g. Cranbrook CBH water harvesting program) and local planning policy to encourage the use of residential and industrial water capture and reuse in new developments (e.g. Shire of Jerramungup).</td></tr>
<tr><td colspan="3">Challenges to Meet</td><td>• Maintain and extend water supply schemes
• Maintain appropriately skilled workforce
• Expand knowledge of regional water resources
• Maintain environmental values
• Adapt water usage to changing climate</td></tr>
</table>

ELEMENT	DETAILS
Measures of Success	✓ The region will have secure, sustainable water supplies sufficient for an expanded industrial sector and a resident population of up to 100,000 ✓ The region will recycle 100 per cent of its wastewater. ✓ The region's GRP will have grown by at least 5 per cent compounded annually. ✓ The value of the regional manufacturing sector as a percentage of regional turnover will have increased to 20 per cent. ✓ There will be sufficient serviced industrial land to attract increased industry activity across the region. ✓ The region will be recognised as an exemplar for best practice management of its heritage assets, and natural resources across land, water, coastal and marine assets.
Stakeholders	Industry Non-government / not-for-profit / community organisations Department of Water, Water Corporation Local government RDA-GS
Funding Sources	Industry Water Corporation State Government (including Royalties for Regions) Local and Commonwealth Governments

TRANSFORMATIONAL PROJECT 4: AVENUES TO OPPORTUNITY

ELEMENT		DETAILS
Project Area		Transport and Industry Hubs
Project Description		To ensure the region's transport network has the capacity to safely and efficiently provide connections to domestic and export markets; to provide industry hubs for regional enterprises.
Regional Imperatives		Essential Infrastructure and Services
Rationale/Need		A diverse network of transport infrastructure serves the Great Southern. With further economic growth in the region, road infrastructure is expected to deteriorate significantly if there is no additional investment in maintenance and capacity development. The potential impacts are expected to be high for agricultural industries, regional tourism and management of conservation areas (including access for visitors). Moreover, improvements of rail and air transport help diversify travel options and are particularly attractive to visitors.
Benefits		Potential benefits of this transformational project include: • Increased tourism and visitor nights • Improved access to export markets • Improved attraction to new export businesses • Increased international student numbers
Project Components	Time Frame (years)	ALBANY RING ROAD
		Menang Drive and the proposed Stages 2 and 3 of the Albany Ring Road will provide more efficient heavy vehicle access route to the Port of Albany and improve transportation safety within the Albany town centre. This will reduce port-related traffic on Albany Highway and South Coast Highway, all of which pass through Albany's urban areas resulting in road use conflicts.
	1-5	Complete planning, design, costing, approvals and progress land acquisition for Stages 2 and 3 of the Albany Ring Road.
	5-15	Undertake construction of Stages 2 and 3 of the Albany Ring Road.
		ALBANY REGIONAL AIRPORT UPGRADE
	1-5	Seek classification as a Code 4C aerodrome through a further runway extension and associated works.
		An increase in economic activity and population growth in the Great Southern as well as potential FIFO growth will lead to a rise in the demand for air services to Albany. The main runway has recently been extended to allow for larger aircraft and the airport is now operating as a Code 3C security controlled aerodrome. Investments will include a new taxiway, an overlay enrichment seal to extend the life of the main runway, overlay of the runway threshold, replacement of the new Royal Flying Doctor Service apron parking area and replacement of the current instrument landing system.
		CRANBROOK INTERMODAL FACILITY
	1-5	Assess the feasibility of establishing an intermodal transport hub in Cranbrook to accommodate overflow from Albany Port. Consider the benefits and costs relative to the proposal to establish a similar facility closer to the Port.

ELEMENT			DETAILS
Project Components	Time Frame (years)		ARTERIAL ROAD UPGRADES
			Upgrades are required to improve the regional and inter-regional road network, to accommodate an expected increase in grain and other freight and reduce road use conflicts.
		Ongoing	Regularly assess demand and, where appropriate, plan for and progressively implement: • Further improvements to Chester Pass Road and to the South Coast and Hassell Highways • More passing lanes and realignment on Albany Highway • Extensions of the dual carriageway north on Albany Highway to the Albany Ring Road and beyond, and south of the metropolitan area from Armadale.
		Ongoing	There is also a need to monitor and regularly assess the case for heavy vehicle bypass roads in relevant Great Southern centres.
		1-5	Detailed analysis should be undertaken on the importance of quality central Great Southern east-west connectors for tourism and agriculture, including the impact of increased heavy traffic loads associated with grain and other vehicle movements to Bunbury Port and the South West. The analysis should include, but not be limited to, Kojonup's position as a junction point with an assessment of the efficiency and safety of the linkage through Moodiarup to Collie and the South West.
			PORT OF ALBANY TRANSPORT CORRIDOR
			The capacity of the Port of Albany is critical to capitalising on potential export opportunities, including the region's minerals resources and a range of products that could be containerised.
		5-15	Reclamation and construction of Berth 4.
		5-15	Widening, deepening and extending shipping channels to facilitate large vessels, and construction of a new Berth 7.
			TRANSPORT LINKS TO STRATEGIC INDUSTRIAL HUBS
		1-5	Assess the cost and feasibility of extending the rail spur at Mirambeena to service relevant industry in the precinct.
		5-15	Further expansion of the use of rail from Mirambeena and Yerriminup to the Port of Albany will assist in shifting freight transport off roads and onto the rail system via the use of intermodal transfer facilities. Through strategic investment in this area, road links to other industrial sites, such as the proposed Denmark Light Industrial Area, should be able to operate within capacity.
			INDUSTRIAL LAND DEVELOPMENT
		Ongoing	Monitor and regularly assess the adequacy of industrial land in regional towns and, where necessary, undertake a land assembly process.
		1-5	Development of the Denmark Light Industrial Area.
		1-5	Monitor and assess industrial land requirements for high tech and innovative industries, e.g. the proposed Anson Road Precinct in Albany.
		5-15	Create and/or upgrade services and infrastructure at key industrial estates including but not limited to Mirambeena, Yerriminup and Katanning.

ELEMENT	DETAILS
Challenges to Meet	• Maintain and extend transport corridors and connections • Secure serviced industrial land • Maintain appropriately skilled workforce • Maintain environmental values
Measures of Success	✓ The region's roads will efficiently and safely accommodate traffic needs including the capacity to cater for increased volumes associated with industry and tourism. ✓ The Port of Albany will have expanded capacity to accommodate new export trades in minerals and value added products, with the capacity to service a container trade. ✓ The use of rail for transporting bulk commodities to the Port of Albany will have increased from 50 per cent of export product to 70 per cent. ✓ Passenger numbers through Albany Regional Airport will grow 3.5 per cent annually to 150,000. ✓ There will be sufficient serviced industrial land to attract increased industry activity across the region. ✓ The region's GRP will have grown by at least 5 per cent compounded annually. ✓ The value of the regional manufacturing sector as a percentage of regional turnover will have increased to 20 per cent. ✓ A quarter of the volume of forestry produce will be used for secondary processing in the region. ✓ Mineral exports by volume will have exceeded 3.5 million tonnes per annum.
Stakeholders	Industry Non-government / not-for-profit / community organisations Main Roads Western Australia Department of Transport, Public Transport Authority Port of Albany LandCorp Local government RDA-GS
Funding Sources	Industry Main Roads Western Australia Department of Transport Local and Commonwealth Governments LandCorp Port of Albany State Government (including Royalties for Regions)

TRANSFORMATIONAL PROJECT 5: CONNECTED GREAT SOUTHERN

ELEMENT	DETAILS
Project Area	Thriving in the Digital Age
Project Description	Integrate and expand the Great Southern's engagement with the global digital environment in order to develop learning and research initiatives with national and international connections and maximise the region's capacity to harness business and investment opportunities.
Regional Imperatives	Knowledge and Innovation Economic Growth and Diversification Community and Environment Essential Infrastructure and Services
Rationale/Need	The region needs to increasingly optimise the benefits of ICT through infrastructure investment in broadband and mobile telephony, and through the establishment of digital systems training and awareness raising programs. For industry, emerging technologies can drive productivity through efficient links to information and factor markets. Small to medium enterprises should grow and become more profitable through embracing e-commerce and innovative business-to-business activities. The not-for-profit sector should also improve operational efficiencies through the on-line environment. The education, training, knowledge-based and research sectors have significant potential for step changes in their respective operations through increasing the adoption of digital technologies.
Benefits	Potential benefits of this transformational project include: • Attraction and retention of an educated and young adult workforce • Diversification of the regional economy • Increased innovation and knowledge intensive industries • Increased trade, tourism and inward investment • Highly skilled workforce • Increased private sector investment • Productivity improvements across all sectors • Increased business-to-business trade and more efficient supply chain • Development of future business leaders • Reduction of ICT infrastructure gaps.

ELEMENT			DETAILS
Project Components	Time Frame (years)	**Ongoing**	BROADBAND AND MOBILE TELECOMMUNICATIONS MAXIMISATION This component includes: • Connection of the NBN to all communities and access to free wi-fi in town centres • Implementation of staged upgrades to mobile telecommunications infrastructure • Availability of world class technical expertise to ensure appropriate selection and implementation of technology to connect the region internationally.
		1-5	LEADERSHIP AND FACILITATION OF INNOVATION In regional Western Australia there is a key role to be played by intermediaries in the innovation process. The feasibility of appointing a Great Southern innovation champion and establishing an innovation fund will be assessed. Through partnerships between business and not-for-profit peak bodies, the tertiary education sector and government, a sustained focus on innovation in the region could be obtained by: • Supporting the creation and delivery of a regional innovation plan • Clarifying the scope and accountability of different agencies regarding innovation, and mapping their interactions with existing regional networks • Implementing a change program to enhance leadership and implementing reward systems • Providing a 'one-stop shop' for information on innovation funding opportunities across State and Commonwealth programs and helping innovators to access and to manage funding once secured • Facilitating mutual understanding between the region's industry and the region's research and development centres and higher education institutions, identifying opportunities to leverage research and development capabilities.

ELEMENT			DETAILS
Project Components	Time Frame (years)	1-5	ENTERPRISE DEVELOPMENT IN AN ON-LINE WORLD To improve national and international competitiveness of the region's enterprises, programs should be developed and delivered through partnerships between business and not-for-profit peak bodies, the tertiary education sector and government. Programs in organisational leadership, investment attraction, digital awareness and entrepreneurial skills could include, but not be limited to: • Development and delivery of training to bring small business operators up-to-date with contemporary business systems and approaches (use of smart phones, tablets, cloud technology etc.) as a means of improving the profitability of small businesses • Promotion of the use and understanding of the potential of technology as a means of enhancing the region's business-to-business supply chain across all sectors • Raising awareness of the critical importance of e-commerce across the Great Southern's small business sector (program to include technical support for the implementation of e-commerce systems and mentorship of small business owners to maximise the benefits of web-enabled commerce) • Development and delivery of awareness campaigns to emphasise the critical importance of actively managing and enhancing the customer experience.
		1-5	MARKETING AND INVESTMENT PORTAL Deployment and maintenance of an on-line marketing and investment portal providing a comprehensive and regularly updated regional opportunities database, which will interface seamlessly with local, national and international investor interest.
		1-5	DISTRIBUTED LEARNING SYSTEM Utilising the latest in interactive video conferencing technology will enable small groups of students in the region to participate in real-time classes with expert lecturers and field specialists in metropolitan-based universities and vocational training institutions. Distributed learning system hubs will be established across the northern arc of the region.
		1-5	RESEARCH CAPACITY Establishment or enhancement of specialised research and/or innovation centres associated with key industry sectors: • Great Southern Centre for Outdoor Recreation Excellence • Katanning Sheep Research Institute • Centre of Excellence in Natural Resource Management (CENRM) • Centre of Excellence in Regional Health Care Systems • Denmark College of Agriculture

ELEMENT			DETAILS
Project Components	Time Frame (years)	**Ongoing**	TERTIARY EDUCATION Build on existing partnerships and infrastructure to expand access to tertiary education in the Great Southern for regional students and as an export opportunity. This will include, but is not limited to, working with UWA Albany to meet its objective of attracting 2050 students to its Albany campus by 2050 and support for the development and/or delivery of academic programs of direct relevance to regional industry, e.g. a Master in Ecotourism degree.
		1-5	TRAINING Trades Training Centre: Construction of a state-of-the-art facility at the GSIT that focuses on skills development for the resource, manufacturing and specialised industry sectors. The centre will include an adaptable industrial skills workshop to rapidly address trade skills shortages. Vocational: Implement the recommendations of the *Great Southern Workforce Development Plan* in relation to training to meet the needs of regional industries including hospitality, retail, health and agriculture.
		Ongoing	SECONDARY EDUCATION Infrastructure upgrades to ensure secondary schools meet current standards for full curriculum delivery, and accommodate opportunities for course specialisation, e.g. planning for a marine studies laboratory at Albany Senior High School. This component will also involve complementary information and communications technology, broadband and on-line software expansions to facilitate staff professional development opportunities, and student extension activities.
		1-5	MAXIMISING REGIONAL BUYING OPPORTUNITIES Support the competitiveness of the region's business operators through a range of Buy Local promotional initiatives and the showcasing of the region's goods and services. Programs to include, but not be limited to: • Maximising regional buying opportunities by providing an easily accessible web-based means for buyers (e.g. investors, state and local government) to easily identify local suppliers • Encouraging 'try local' buying decisions whereby purchasers give local businesses opportunity to supply a quote for services / products.
Challenges to Meet			• Maintain and extend telecommunications and digital infrastructure • Maintain appropriately skilled workforce • Expand digital awareness and capability in business and service sectors • Adapt to global nature of digital commerce and services

ELEMENT	DETAILS
Measures of Success	✓ The region's GRP will have grown by at least 5 per cent compounded annually. ✓ The region's workforce will have increased to 60,000, and will have an unemployment rate below the state average. ✓ The region will have telecommunications infrastructure comparable to services in the Perth metropolitan area. High speed broadband will be available to 100 per cent of residents and businesses, and access to digital delivery of services will be above regional Australian averages. ✓ Measures of innovative activity (including research and development spend, network membership and activity levels, new product and service development) among regional businesses will be higher than regional Australian averages. ✓ The region will have the highest levels of small business creation and operation in Western Australia. ✓ Educational outcomes (including the proportion of students completing high school and attainment of qualifications) for all Great Southern students will be comparable to those achieved in metropolitan schools. ✓ The region will have a tertiary education sector that hosts over 3,000 full-time equivalent tertiary students, 30 per cent of whom will be from overseas. ✓ The region's tertiary education sector will be recognised as adding value to regional industry and the wider community through engagement with artistic, scientific and cultural activities. ✓ Trade skills requirements for key regional industries will be fully provided from vocational training and apprenticeship programs in the region. ✓ The region's tertiary and research organisations will be recognised for excellence in marine, agricultural, natural resource management and health economics education and research. ✓ The region's research base will be fully engaged with industry and community, as evidenced through the extent of innovation, collaborative research and development programs and outcomes.
Stakeholders	Industry CRCs Small Business Centre - Great Southern University of Western Australia Great Southern Institute of Technology Curtin University Department of Education, Department of Training and Workforce Development, Department of Agriculture and Food Western Australia, Department of Health, Department of Commerce, Department of Finance Local and Commonwealth Governments RDA-GS
Funding Sources	Industry Small Business Centre - Great Southern Lotterywest University of Western Australia, Great Southern Institute of Technology, Curtin University State Government (including Royalties for Regions) Local and Commonwealth Governments

TRANSFORMATIONAL PROJECT 6: DESTINATION OF NATURAL CHOICE

ELEMENT	DETAILS
Project Area	Iconic and Creative Tourism
Project Description	Further develop the Great Southern's icon tourism product and its marketing to prospective visitors. Support the growth of a dynamic arts and creative sector with links to the tourism industry.
Regional Imperatives	Economic Growth and Diversification Community and Environment
Rationale/Need	The Great Southern currently has a comprehensive range of high value tourism assets. As well as having internationally recognised eco-tourism assets, the sector is supported by a range of major events, activities and attractions. There are opportunities to grow the overall level of activity in tourism, particularly in the international and business segments in a culturally and environmentally sustainable manner. This should be achieved through coordinated branding and marketing activity, development of quality accommodation options, improved air services, investments in ecotourism, events, arts and cultural heritage assets and leading the way in best practice management of the region's natural assets. Comprehensive collaborative marketing activities are a fundamental requirement if the region's tourism sector is to compete for visitors. In addition to the natural indicators of liveability, participation in culture and the arts is one of the building blocks to achieve sustainable regional communities. Consistent participation has been shown to build social amenity and help communities to attract and retain a broadly skilled workforce.
Benefits	Potential benefits of this transformational project include: • Increased private sector investment • Higher export income through tourism spend, visitor numbers and length of stay • Direct employment growth • Attraction of skilled workforce • Improvement in the sustainability of tourism operators • Increased investment in conservation • Diversification of region's economic base • Increase in employment • Increase in population • Retention of young adults • Improved access to, and professional development of, artists and creative residents

ELEMENT			DETAILS
Project Components	Time Frame (years)		INFRASTRUCTURE FOR ICONIC NATIONAL PARKS
		1-5	National parks in the region present significant opportunity for the establishment of high-end tourism experiences, in particular, those related to wilderness accommodation. Recent investment in capital infrastructure by the Department of Parks and Wildlife has significantly enhanced the amenity and tourism offering in several of the region's national parks. Works being progressed or planned which will add value to existing nature-based tourism product include those at: • Torndirrup National Park (e.g. new viewing platform at The Gap) • William Bay National Park – implementation of the Master Plan (e.g. redesign and renewal of visitor facilities) • Walpole Wilderness Area including the globally-recognised Tingle Forest Ecosystem (e.g. development of new trails that link major trails such as the Bibbulmun Track and the Munda Biddi Trail into local communities; embracing new technology and ecotourism best practice at the Tree Top Walk through investment in integrated product incorporating simulated experiences, themed entertainment for interpretation and education, gourmet dining and the potential for innovative marketing partnerships).
		1-5	The Great South West Edge National Landscape Experience Development Strategy identifies the need to establish a touring route connecting the Great Southern to neighbouring regions and linking iconic attractions. The strategy also identifies a role for national parks as environments in which Aboriginal owned and operated tourism experiences can be developed.
		1-5	Develop island tourism as an iconic south coast experience by refurbishment of heritage buildings and associated infrastructure on Breaksea and Eclipse Islands.
		5-15	A feasibility study has also been undertaken, with the cooperation of the Department of Parks and Wildlife, for the future establishment of a cable car service in the Porongurup National Park. This, or a similar development in another park, will need to be thoroughly evaluated against the prevailing management plan and have the capacity to attract private investment.
		1-5	ALBANY WATERFRONT DEVELOPMENT Enhance the community and visitor facilities at the Albany Waterfront by attracting and developing private investment in a 120-room 4/5-star hotel and 80-unit short-stay apartment complex. The 620-seat Albany Entertainment Centre and Albany Waterfront developments, including world class marina, are the setting that should attract investment in conference facilities.
			ABORIGINAL CULTURAL CENTRES AND ART GALLERY
		Planning 1-5 Implementation 5-15	The development of an Aboriginal Cultural Centre and Art Gallery is a medium-term initiative for the region. It is envisaged that the centre will also have an educational and cultural awareness component. The facility could include the repatriated Carrolup collection which will complement the current Mungart Boodja initiative of developing and marketing the high quality work of local artists. There is potential for the Aboriginal Cultural Centre to have links to the development of a Multicultural Interpretive Centre in Katanning which will celebrate the region's cultural diversity. The creation of a tourism precinct from Kodja Place incorporating Spencer Street in Kojonup will highlight Noongar history, culture and the development of leadership.

ELEMENT			DETAILS
Project Components	Time Frame (years)	1-5	MIDDLETON BEACH ACTIVITY CENTRE IMPROVEMENT PROJECT Acquisition and land release in relation to the Middleton Beach Activity Centre site to include a hotel, short-stay accommodation and commercial infrastructure. The improvement plan area is bounded by Adelaide Crescent, Marine Terrace, Barnett Street, Flinders Parade and Marine Drive. The new development would help to address a shortage of upmarket accommodation for all of the Great Southern and would cater for both leisure visitors and business travellers.
		Planning 1-5 Implementation 5-15	ALBANY'S CULTURAL, HERITAGE AND TOURISM PRECINCTS Develop Albany's cultural, heritage and tourism precincts and integrate these with the Albany Waterfront in partnership with the Western Australian Museum. The precincts will form a vibrant hub, safely and efficiently linking Albany's main heritage assets with other attractions of the central business district. They will be accessible, welcoming and provide a linked-up visitor experience. The initial stages of the project will include the development of business cases, options analysis and conservation, heritage and master plans. The final stages will involve implementation of all identified infrastructure upgrades and development of marketing initiatives.
		1-5	DISCOVERY BAY TOURISM EXPERIENCE Complete the Faunatopia component of the Discovery Bay Tourism Experience to complement the current product which includes the Historical Whaling Station and Australian Wildlife and Botanic Garden exhibitions. The focus will be on the construction of a 770 sq m subterranean native fauna nocturnal house and theatre with 470 sq m of external covered viewing areas and related works.
		 1-5 1-5	TOURISM TRAILS AND TRAIL HUBS The objective is to complete, brand and market a Great Southern Regional Wine Trail incorporating Albany, Porongurup, Mount Barker, Frankland River and Denmark. The project will connect wineries and boutique food producers across the region with onsite and on-line information and interpretation through a drive trail. The priority road upgrade to complete the circuit trail experience is to seal Tindale Road between Muir Highway and South Coast Highway. Where feasible, the regional wine trail experience should integrate with and complement plans to establish land and water trails and trail hubs (walking, cycling, diving and horse-riding) at various centres in the region. Centres on the trail circuits must also be serviced by adequate water, power and telecommunications. Tourism trails will link sites with biodiversity, heritage and recreational value. They will also cater for cyclists and will include subregional and specialty (for example, winery) loops.
		Ongoing	ICONIC REGIONAL FESTIVALS, EVENTS AND CREATIVE PRODUCTIONS Develop a coordinated and sustainable range of initiatives that will complement the region's natural and made attractions, including: • Support for major film and visual art productions which function to diversify the economy and market the region nationally and internationally • Development of a world class events program for the Anzac Centenary commemorative period 2014-2018 • Continued region-wide growth and development of the Great Southern Festival • Expansion of the Hidden Treasures Bloom Festival and Taste Great Southern • Development of a comprehensive business events and conferences marketing strategy.

ELEMENT			DETAILS
Project Components	Time Frame (years)		CULTURAL CONNECTION AND BIODIVERSITY TRAILS
		1-5	The overall project objective is to research and develop a high value tourism product by connecting, providing interpretation for, and marketing sites of outstanding biodiversity through a trail, or series of trails. The project will include sites of natural and cultural significance, and a network of regional botanical gardens. The Department of Parks and Wildlife has plans to establish long and short distance trails linking the agricultural hinterland to the south coast.
		Ongoing	Under the *Conservation and Land Management Act 1984*, the Department of Parks and Wildlife is also committed to protecting Aboriginal heritage, facilitating customary activities and achieving joint management of its natural assets. All of these required actions assist in reducing Indigenous disadvantage. It is anticipated that the imminent finalisation of the SWNTS will provide further resources to include researched and agreed sites of Noongar cultural significance in the trails initiative. Specific product outcomes could include guided cultural tours and educational programs.
		Ongoing	The trails initiative will also complement the Gondwana Link program, which aims to create a 1000-kilometre link between the karri forest of the South West and the mallee woodlands that border the Nullarbor Plain. Gondwana Link will take in connections either side of the Stirling Range National Park, to the Fitzgerald River National Park and south to the Porongurups. The aim is to restore the basic ecological integrity and connectivity of biological assets. It is estimated that, taking into account the intact habitat contained within national parks and nature reserves, approximately 100 kilometres remains to be secured to reconnect critical bushland areas.
		1-5	TOURISM AMENITY AND SAFETY MANAGEMENT The peak tourism season on the south coast of the Great Southern coincides with the period of highest fire risk. This project includes the evaluation of emergency management procedures in relevant tourism centres, including the availability of sufficient water for firefighting and the establishment of emergency/alternative access routes where appropriate, for example in Denmark. Stage one will be an evaluation to identify areas of high risk to existing emergency management plans and procedures. Where deficiencies are identified there will be a second stage through which appropriate measures will be developed at local government, community and agency level. The initiative will also examine the broader impact on the capacity of small town's infrastructure and service delivery systems to manage peak holiday periods. This may include the provision of accommodation for key staff and improvements to the functionality and amenity of tourism centres.
		1-5	ESTABLISHMENT OF A SOUTH COAST SUBREGIONAL TOURISM ORGANISATION Feedback from industry and local government indicates strong support for the establishment of a subregional tourism organisation on the south coast. As per the role of the Hidden Treasures group in the northern part of the region, a single tourism organisation that represents, coordinates and plans for the interests of the industry on the south coast could be beneficial in terms of managing relationships with the various levels of government and entities with relevant marketing responsibilities, such as Tourism WA and ASW. The organisation could investigate a range of destination marketing and product development opportunities for the region in partnership with the Hidden Treasures group including, but not limited to, regional branding and strategy development.

ELEMENT	DETAILS
Challenges to Meet	• Maintain and extend transport corridors and connections, including air services • Maintain appropriately skilled workforce • Maintain and extend tourism infrastructure, including accommodation and attractions • Maintain and extend telecommunications and digital infrastructure • Expand digital awareness and capability in tourism business and service sectors • Maintain and expand tourism-related events • Develop tourism products and services to meet market expectations • Maintain environmental values • Adapt tourism to changing climate
Measures of Success	✓ Tourism as a percentage of regional turnover will have doubled to 20 per cent. ✓ The region's workforce will have increased to 60,000 and the unemployment rate will be below the state average. ✓ The region will host more than 12 national and /or international sporting events per year. ✓ The region will be recognised as an exemplar for best practice management of its heritage assets, and natural resources across land, water, coastal and marine assets. ✓ The Great Southern will be recognised as the premier region for arts and culture in Western Australia. ✓ The region will have telecommunications infrastructure comparable to services in the Perth metropolitan area. High speed broadband will be available to 100 per cent of residents and businesses, and access to digital delivery of services will be above regional Australian averages. ✓ Measures of innovative activity (including research and development spend, network membership and activity levels, new product and service development) among regional businesses will be higher than regional Australian averages. ✓ Over 30 per cent of the population will be engaged as volunteers in activities that benefit the community.
Stakeholders	Industry Non-government / not-for-profit / community organisations Tourism WA Department of Parks and Wildlife, Department of Culture and the Arts/Country Arts WA Australia's South West Local tourism organisations/Visitor Centres Local government Tourism Australia RDA-GS
Funding Sources	Industry State Government (including Royalties for Regions) Lotterywest Local and Commonwealth Governments

TRANSFORMATIONAL PROJECT 7: STRONG COMMUNITIES

ELEMENT			DETAILS
Project Area			Community Development and Amenity
Project Description			Maintain and enhance the region's communities to ensure the Great Southern is recognised as a preferred region in which to live, work and invest.
Regional Imperatives			Community and Environment Essential Infrastructure and Services Economic Growth and Diversification
Rationale/Need			Western Australia's population will continue to grow in decades to come and the Great Southern's population will share in the increase. To retain existing residents and to be recognised as preferred locations for new residents, communities in the region need more than basic infrastructure and services. Communities need to be able to offer a range of employment opportunities, supportive social environments and attractive local amenity.
Benefits			Potential benefits of this transformational project include: • Growing population • Stronger community cohesion • Increased private and public sector investment in regional towns.
Project Components	Time Frame (years)	**Ongoing**	HUMAN SERVICES SCENARIO PLANNING Establish a framework for the periodic analysis of projected demand for human services to meet the needs of a regional population of approximately 100,000. The scenario planning framework would project demand for human as well as capital resources. The Human Services Scenario Planning process would be undertaken every three to five years in close liaison with all key Government and not-for-profit human services delivery agencies within the region.
		Ongoing	REGIONAL AND TOWN CENTRES ENHANCEMENT AND REVITALISATION Continue support for planned and endorsed regional centres and town growth plans and enhancement initiatives across the Great Southern, including, but not limited to, the development of a growth plan for Albany under RCDP2, the completion of Bremer Bay's Town Square project and completion of Katanning's RCDP1 improvements. Regional and town centre revitalisation is a key component of the overall RCDP growth planning process. It will deliver a range of planned and integrated structural modifications to business, administration and heritage districts that will accommodate other elements of future growth. Encourage and support the incorporation of cycle-friendly principles in regional and town centre planning.

<table>
<tr><th colspan="3">ELEMENT</th><th>DETAILS</th></tr>
<tr><td rowspan="3">Project Components</td><td rowspan="3">Time Frame (years)</td><td>Ongoing</td><td>AFFORDABLE HOUSING
Monitor and regularly assess the need for appropriate housing in regional towns, and promote affordable housing options and land assembly in order to meet strategic gaps across the region as identified in the Great Southern Housing Needs Analysis findings.
Aged accommodation: Plan for steady expansion of independent living units for aged residents in line with demand, including but not limited to the Tambellup Independent Living Seniors accommodation project, the Plantagenet Village Homes 'Collet Barker Court' project and the 4WD and Lakes Aged Housing project.
Student accommodation: With the expansion of the UWA Albany Centre, development of specialised centres for NRM and biodiversity, health and health economics and international recognition for associated research, the Great Southern is an increasingly attractive place for tertiary study. In recognition of this, UWA in the Great Southern has a strategic aspiration to be servicing 2050 students by 2050. Construction of dedicated and affordable student accommodation facilities will support international and domestic students who are attending tertiary and vocational institutions in the region. This infrastructure will also support and encourage the development of co-curricular programs during semester breaks. Affordable, good quality housing accommodation for workers is required throughout the region as a means of attracting and retaining government and non-government employees to meet regional demand for community service provision and seasonal employment.</td></tr>
<tr><td>1-5</td><td>STRATEGIC WASTE MANAGEMENT PLANNING AND IMPLEMENTATION
Support strategic planning and implementation of waste management through joint initiatives by regional groups of local governments. Assess existing waste management facilities and encourage best practice approaches to future investment in this region-wide task.</td></tr>
<tr><td>Ongoing</td><td>COMMUNITY LEADERSHIP AND WELLBEING
Cohesive communities are characterised by strong leadership and engagement of all sectors of the local population. Developing programs that build the resilience of Great Southern communities will include:
• Fostering leadership development
• Encouraging volunteerism through the development of volunteer attraction and retention strategies (including, but not limited to, training and development programs and addressing volunteer liability risks)
• Expansion of youth and other community development programs
Great Southern communities rate highly in their perceptions of safety. Maintaining this sense of community wellbeing includes ensuring that 'high risk' regional towns have adequate emergency management systems in place.</td></tr>
</table>

ELEMENT			DETAILS
Project Components	Time Frame (years)	1-5	EARLY CHILDHOOD DEVELOPMENT Investment in a suite of early intervention initiatives to support parenting and childhood development, including, but not limited to: • Expansion of the A Smart Start early years program to all communities in the Great Southern • Establishment of complementary child and parent centre infrastructure to support disadvantaged families including, but not limited to, the establishment of a Katanning Early Childhood Hub servicing Katanning and surrounding communities, and additional child and parent centres in Albany • Indigenous parenting services.
		1-5	SENIORS Support the implementation of the Ageing in the Bush strategy. Research and plan for the provision of residential and respite aged care facilities in regional areas. Plan for aged-friendly accessible transport, public spaces, amenities, health, community support services and accommodation (see above) to meet forecast demand and to provide commercial opportunities in the region.
		 Ongoing 1-5 1-5	HEALTH Maintain and increase access to health services in the region through in-person and tele-health contact, including, but not limited to, providing and upgrading medical facilities at Katanning, Gnowangerup, Kojonup, Tambellup, Bremer Bay and Jerramungup. Plan for the development of a specialist geriatric medicine training facility in the region. Research the need to develop culturally specific Aboriginal permanent health care in the region.
		Ongoing	SOUTH WEST NATIVE TITLE SETTLEMENT The State Government has negotiated with the South West Aboriginal Land and Sea Council, the body representing the South West's six native title claim groups, on an overall settlement. The six claim groups accepted the settlement offer in early 2015. Following legal procedures, the settlement may start to be implemented by mid-2016. The implementation of the SWNTS will provide an opportunity for the joint development of a range of planned economic and community development initiatives across the region. The planning that will generate these developments will be based in commercial and cultural knowledge, be transparent and robust in its application and, in all projects, will contribute to equitable outcomes.

ELEMENT			DETAILS
Project Components	Time Frame (years)		SPORT AND RECREATION
		Ongoing	Undertake a regular needs assessment for regional sport and recreation to support investment in new facilities.
		1-5	Implement the Great Southern Centre for Outdoor Recreation Excellence project including optimising the potential of Camp Quaranup as a base.
		1-5	Continue the development of the Centennial Park sporting precinct in line with the master plan and complete the Sounness Park sporting precinct.
		1-5	ARTS DEVELOPMENT Co-locate a Regional Arts Development Officer in the Great Southern to support the further development and delivery of visual and performing arts programs, organisations and infrastructure. Undertake planning and secure funding for the development of a regional art gallery. Complete the development of the Katanning Regional Entertainment Centre.
Challenges to Meet			• Adapt to uneven population growth, including ageing population • Improve outcomes for Indigenous people in social indicators • Improve outcomes in education, particularly early childhood • Increase participation in post-compulsory education • Maintain and extend physical and social infrastructure for community wellbeing • Adapt to global nature of digital commerce and services in the education market • Maintain environmental values • Adapt communities to changing climate

ELEMENT	DETAILS
Measures of Success	✓ The region's population will have grown to 100,000 and will be distributed across the region. ✓ The AEDC scores for the region will be above the state average. ✓ The region will have a tertiary education sector that hosts over 3,000 full-time equivalent tertiary students, 30 per cent of whom will be from overseas. ✓ The region will be recognised as an exemplar for best practice management of its heritage assets, and natural resources across land, water, coastal and marine assets. ✓ Katanning's RCDP vision and targets will have been achieved, sustaining a key service hub for the central Great Southern. ✓ Access to health infrastructure and services will be comparable to that in the metropolitan area. ✓ The region will have comparable health outcomes to the metropolitan area. ✓ The region will have sport and recreation infrastructure that meets Australian standards for core sporting codes. ✓ The region will host more than 12 national and/or international sporting events per year. ✓ Physical activity rates will be comparable with those for WA as a whole. ✓ The Great Southern will be recognised as the premier region for arts and culture in Western Australia. ✓ Over 30 per cent of the population will be engaged as volunteers in activities that benefit the community. ✓ The region will offer a range of affordable public and private housing options that have the capacity to cater for a projected population of up to 100,000. ✓ Seniors will be able to remain living independently in communities across the region through a choice of quality and affordable accommodation, and home-based support services. ✓ The region's residents will feel safe and secure, with measures of both perceptions of safety and incidence of crime comparable with Western Australia as a whole.
Stakeholders	Industry Non-government / not-for-profit / community organisations CRCs Department for Communities Department for Child Protection Department of Housing WA Country Health Services Department of Sport and Recreation Great Southern Employment Development Committee RDA-GS
Funding Sources	Industry Non-government / not-for-profit / community organisations State Government (including Royalties for Regions) Lotterywest Local and Commonwealth Governments

Transformational project opportunities have been selected based on the extent to which they provide a positive impact on leveraging comparative advantages and/or addressing regional challenges. Those project opportunities that score highly on these criteria will have the greatest capacity to drive achievement of the measures of success described on pages 101-104. Table 16 summarises the impact of the selected transformational project opportunities on leveraging comparative advantages and/or addressing regional challenges on a region-wide basis.

Table 16 Profile of transformational project opportunities

TRANSFORMATIONAL PROJECT OPPORTUNITIES		LEVERAGING COMPARATIVE ADVANTAGES				ADDRESSING CHALLENGES			
		Lifestyle and Natural Amenity	Primary production	Tourism	Tertiary Education	Variable Economic Growth	Uneven Population Growth	Social and Community Development	Environmental Sustainability
Growing Value: Premium Food Production and Value Adding	Opportunity	High	High	Moderate	Moderate	High	Moderate	Moderate	Moderate
Access to Energy: Energy Security	Enabler	Indirect	Moderate	Moderate	Indirect	High	Moderate	Indirect	High
Water for Growth: Water Security	Enabler	Indirect	High	Moderate	Indirect	High	High	Moderate	High
Avenues to Opportunity: Transport and Industry Hubs	Enabler	Moderate	High	High	Indirect	High	Moderate	Indirect	Moderate
Connected Great Southern: Thriving in the Digital Age	Opportunity Enabler	Indirect	Moderate	Moderate	High	High	Moderate	High	High
Destination of Natural Choice: Iconic and Creative Tourism	Opportunity	High	Indirect	High	Indirect	High	Moderate	Moderate	High
Strong Communities: Community Development and Amenity	Enabler	High	Indirect	Moderate	Moderate	Moderate	High	High	Moderate

REGIONAL ANALYSIS
A rich understanding of the history of the Great Southern's culture, geography and economic development informs this Blueprint

MEGATRENDS
Global shifts in demographics, resources, the environment, movement and communication are transforming the way we live, work and interact with one another

COMPETITIVENESS AND CONNECTIVITY
Prosperity and economic sustainability in a region is increasingly determined by a combination of its competitiveness with and connectivity to national and global markets

REGIONAL INTENT AND IMPERATIVES
Four imperatives are fundamental to the region's economic development, growth and prosperity: Economic Growth and Diversification; Essential Infrastructure and Services; Knowledge and Innovation; and Community and Environment

IMPLEMENTATION AND MONITORING
Progress on public sector and joint investments will be measured as the Great Southern Regional Blueprint is implemented

IMPLEMENTATION & MONITORING

PURPOSE

The *Great Southern Regional Investment Blueprint* is a transformative strategy based on an analysis of the region's comparative advantages and challenges that will be used for planning the investment needed to ensure the region's economic and social development.

The Regional Blueprint will enable the region's growth and development aspirations to be progressively achieved and, in addition, generate cross-regional benefits through partnerships across boundaries and with both the public and private sectors.

Embedded in a whole of government planning and decision making process, the Regional Blueprint will, amongst other functions, provide the rationale for future investment across government, the non-government sector and the region's communities.

Oversight of the Regional Blueprint, including monitoring the implementation of its strategies and actions, rests with the GSDC, in close collaboration with the relevant regional stakeholders, many of which will be involved in the delivery of the proposed projects. These stakeholders include Commonwealth, State and local governments, peak industry bodies, private enterprise and not-for-profit organisations, community and non-government organisations.

In summary, effective implementation of the Regional Blueprint will require ownership and commitment from key stakeholders within and external to the region, while ultimately being the responsibility of all.

VALUES

The Regional Blueprint advances governance values that are already being applied in the economic and social development of the Great Southern.

In maintaining the Regional Blueprint and monitoring its implementation, the GSDC and its regional and cross-regional partners will seek to meet a commitment to a defined set of values, including:

- Comprehensive knowledge and appreciation of the economic, social and environmental make-up of the region
- Commitment to a program of on-going measurement of infrastructure and sector capacities
- Recognition that sound leadership is a key factor in all transformative development
- Recognition that community engagement and buy-in is maintained
- Dedication to participation and collective effort
- Decision-making processes that are consistently evidence-based
- Recognition and embracing of innovation in all projects that are focused on economic, social and environmental transformation.

STATE PLANNING CONTEXT

A key outcome of the Regional Blueprint will be the strategic alignment between the Regional Development and Planning portfolios. Throughout its development, this Blueprint has incorporated the relevant provisions of the draft Great Southern Regional Planning and Infrastructure Framework, the overarching State Planning Strategy and key elements of current regional planning initiatives. These include the Great Southern Workforce Development Plan, Regional Freight Transport Plan and the State Water Plan.

REGIONAL CENTRES DEVELOPMENT PLAN

The RCDP is of particular significance in that the State Government has identified its intention to progress the plan ($16.0 million over four years from 2014-15) and regional centres are set to play a more significant role in economic and population growth across Western Australia.

This strategic investment program is designed to drive business and industry expansion which, in turn, will generate economic and social growth in the regions. In the Great Southern, the Katanning SuperTown Growth and Implementation Plan has provided a template for infrastructure investment that is based on a community's vision, unique strengths and areas of comparative advantage. The region presents other opportunities for this template to be utilised.

CROSS-REGIONAL OPPORTUNITIES

Key initiatives of the Regional Blueprint, including reform in services delivery and a number of the transformational project areas, present cross-regional opportunities. Through this approach, wider regional development outcomes will be achieved. It is the intention of the Commission to progress these opportunities in collaboration with its adjoining Commissions (the South West, Wheatbelt, Peel and Goldfields-Esperance Development Commissions) and, wherever possible, its other regional development portfolio partners.

PROCESS OF ASSESSMENT

Through the Regional Blueprint development process of research, consultation and analysis, the GSDC identified seven transformational project areas:

- Growing Value: Premium Food Production and Value Adding
- Access to Energy: Energy Security
- Water for Growth: Water Security
- Avenues to Opportunity: Transport and Industry Hubs
- Connected Great Southern: Thriving in the Digital Age
- Destination of Natural Choice: Iconic and Creative Tourism
- Strong Communities: Community Development and Amenity.

These are set out, with indicative time frames, on pages 106 to 134 of the Regional Intent section of this Blueprint. It is envisaged that initiatives drawn from these transformational projects will be priorities for strategic investment.

Table 17 summarises the criteria (drawn from the measures of success) against which potential initiatives will be assessed and prioritised.

Table 17 Criteria for project priorities

PROJECT IMPERATIVE	SUB CRITERIA - PROJECT HAS THE CAPACITY TO ACHIEVE:
Economic Growth and Diversification	• Increased gross regional product • Industry diversification and expansion • Further value adding in primary production • A skilled workforce across all areas of demand • Increased job opportunities and incomes
Essential Infrastructure and Services	• Enhanced energy infrastructure to service region-wide industrial and residential needs • Secure water supplies and increased water reuse • Safe and efficient transport links • Attraction of industry through serviced industrial sites • High quality digital links and increased engagement with digital technologies
Knowledge and Innovation	• Enhanced education outcomes across all levels of schooling • Strong tertiary education sector and attraction of external and international students • Links between trade skills training education providers and key industry • Strong small business creation and innovation
Community and Environment	• A well distributed and growing population • Comprehensive health infrastructure and services • Healthy and engaged communities through quality sport, recreation, arts and culture infrastructure and programs • Innovative and sustainable management of environmental assets • Strong communities supported by appropriate social services and infrastructure

PROJECTS FOR PUBLIC SECTOR INVESTMENT

Projects will be identified and further prioritised from within these transformational project areas on the basis of their capacity to achieve progress against the targets within the measures of success set out in detail earlier in this document (pages 101-104).

For both existing projects and projects that emerge seeking public sector investment (and Royalties for Regions support in particular) a full business case will be required to progress beyond concept stage, in accordance with the specific requirements of the relevant funding program. Leveraging of any proposed public sector investment is important in this context.

GOVERNANCE

Oversight of the Regional Blueprint rests with the GSDC, which has a Memorandum of Understanding in place with RDA – Great Southern to co-badge the document. The GSDC, continuing to liaise with RDA – Great Southern, will maintain close scrutiny of the processes established and the actions taken to implement the intentions of the Regional Blueprint. Collaboration will continue with other relevant regional stakeholders, many of which will be involved in the delivery of the proposed projects.

Implementation of the *Great Southern Regional Investment Blueprint* will have high level oversight from the Board of the Great Southern Development Commission, which will:

- Monitor the implementation of the Regional Blueprint and agreed priority elements within it
- Review and update the Regional Blueprint to reflect changing needs, resourcing and goals.

Monitoring activities will include ensuring that all project proposals represent value for money and deliver against the desired outcomes. An annual Regional Blueprint progress report will inform the State Government of achievements against region-wide targets and agreed milestones. This annual review will take into account government policy and current economic, social and environmental settings.

REGIONAL ANALYSIS

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CONCLUSION

In a rapidly changing world, a document of this scope, with a time horizon measured in decades, will only hold its relevance by being subject to review and updating over time. This Blueprint will change over the years. It will need to respond to new global trends, to technological advances and to the changing aspirations of the Great Southern population.

This Blueprint has set out a solid framework for building a future, for achieving the vision and mission for the Great Southern and for realising its regional imperatives. It provides a comprehensive evidence base for strategic decision-making, coordinates public and private sector resources and investments, and establishes a strategy to implement transformational projects and actions. Through this Blueprint, the vision for the Great Southern will be realised, to the benefit of industry, businesses, communities and residents.


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APPENDIX 1

SWOT ANALYSIS BY REGIONAL IMPERATIVE

In the development of this Blueprint, significant efforts were made to analyse the data, information and feedback received from stakeholders. This forms the evidence base of the document and the conclusions drawn within it.

This includes a SWOT (strengths, weaknesses, opportunities, threats) analysis (below) for the various strategic focus areas identified to respond to the Regional Imperatives, drawn from both primary and secondary sources.

Extensive consultations with a broad cross section of the region's stakeholders has been undertaken through workshops, face-to-face and telephone interviews, and through written submissions. This process secured feedback which covered the geographic, economic and social spread of the Great Southern. This includes interviews with senior representatives (elected and/or appointed) of all local governments in the Great Southern.

Secondary sources include key contemporary documents which are generally the result of significant consultation, research and analysis in their own right. Major state, regional and local government documents are listed in the Introduction and in Appendix 4.

ECONOMIC GROWTH AND DIVERSIFICATION

AGRICULTURE / PRIMARY PRODUCTION

STRENGTHS	WEAKNESSES
The region's land is the most productive in Western Australia, due to the relatively high and consistent rainfall Agriculture in Western Australia has been a better performer in generating export revenue compared to its counterparts in the rest of Australia Reputation and quality of the region's produce Strong infrastructure in livestock saleyards Well-developed regional supply chains Port access	Ageing population and out-migration of youth leading to skills shortages Upgrades of the road and rail systems are essential for improving the efficiency and safety of the commercial transport networks General increase in the level of farm debt as productivity growth has slowed across the broad acre farm sector Close relationship between productivity growth in agriculture and the level of public and private sector investment in research and development
OPPORTUNITIES	**THREATS**
Growing export markets in Asia - demand for agricultural produce (notably grains and protein) Diversification of agricultural produce - dairy, poultry, pork meat and horticulture Facilitation of new supply chain options Increasing interest in joint investments and partnerships New forms of income generation from: • Reforestation and revegetation • Reduced methane emissions from livestock digestion • Reduced fertiliser emissions • Native forest protection • Use of farmland as a supplier of renewable energy	Drying climate and the anticipated reduction in wheat yields in northern and eastern areas Competition for potable water sources Continued volatility in overseas supply and demand impacting final markets Fluctuating exchange rates impacting returns to exporters of commodities Loss of productive agricultural land to carbon sequestration schemes Increasing dryland salinity Significant issues with power and water in the agricultural areas of the region are seen as substantial barriers to economic growth Increased competition in final markets through globalisation Continued farm aggregation contributing to lower number of farmers Retaining youth and young adults in the agricultural regions

FOOD PRODUCTION AND PROCESSING

STRENGTHS	WEAKNESSES
Large scale processors have access to a wide range of primary agricultural products (sheep, cattle, grains, wine, vegetables) There is existing good quality infrastructure for some sectors (grain storage, wineries, abattoirs, livestock saleyards, stock transport companies etc.) The region has some of Western Australia's most productive land, experienced producers and regular seasonal variation Reputation for quality food commodities (wine, meat processing) Established link between some quality processed food and tourism (wine, cheese, vegetables) Skills and expertise established for the production of a range of processed foods (horticulturalists, wine makers) Minimal barriers to entry by offshore investors	Seasonality is a factor in the production of all commodity inputs Power and water supply varies across the region Attraction and retention of skilled and unskilled labour Input costs (power, fertilisers, wages etc.) Transport and handling logistics require investment Domestic marketing of processed foods can be problematic because of market power of major supermarkets Lack of critical mass in domestic market for all processed foods and very competitive international market Production levels may be too small for prospective medium to large processors to take advantage of economies of scale Vulnerability to periods of strength of the Australian dollar Market entrants required to make significant capital investments Lack of housing and industrial/commercial land in rural Shire towns
OPPORTUNITIES	**THREATS**
Evidence of a sustained shift in trade relations in Asian region with focus on food imports Growing demand (China, India) which this region should have a comparative advantage Recognition and commitment by governments (state/Commonwealth) to support value added food exports (reducing investment barriers, incentives, in the region training programs) Recognition of need for domestic niche investment in the food and wine-based tourism Structure of existing ownership of food producers/processors (Australian companies, cooperatives, family businesses) should allow flexibility in moving to new production model Government investment in key infrastructure (Bunbury to Albany Gas Pipeline, saleyards)	Drying climate and potential for seasonal supply shocks Negative response to globalisation (barriers to trade, tariff walls, investment flows) Fluctuations in labour supply through domestic competition (surge in mining sector investment) Uncertainty in final market demand (consumer preferences) Perception of sovereign risk for offshore investors (tax treatment of key inputs including heavy vehicle fuel, carbon emissions reduction) Uncertainty as to viability of food commodity suppliers due to structural factors in domestic market, overproduction in global market) Uncertainty over sustainable infrastructural connectivity (power and water in the agricultural areas)

TOURISM

STRENGTHS	WEAKNESSES
Natural beauty and diversity Number and diversity of attractions in region Climate is mild Established regional infrastructure reasonably accessible (airport, road, port, hospital, etc.) Accommodation types are diverse – campers, backpackers, hotels, bed and breakfasts etc. Part of Australia's South West - chosen by Lonely Planet as one of the world's Top 10 Regions for 2010 World class walking and off road mountain bike trails Growing diversity of agricultural, horticultural and viticultural produce (food tourism) Consistent level of major public sector investment (Albany Entertainment Centre and Waterfront, National Anzac Centre)	Vulnerability to periods of strength of the Australian dollar Under-investment in tourism product by private sector and perception of less than optimal by the public sector Limited products are available for international agents to market as a commissionable package Perception of sector dynamism as a result of an ageing population Low wages have effect of not being able to retain skilled labour within the region Relatively low population density and lack of critical mass to support major events Distance from Perth and the cost and frequency of intrastate flights Poor numbers in 'low peak' tourist times and seasonal impact on businesses' viability Communication infrastructure gaps e.g. mobile coverage, Internet Extended statutory approval processes for developments reduces investment Seasonality of employment and hence lack of a consistent professional standard Coordinated regional marketing is not maximised Freight costs associated with inputs relatively high Sub-optimal public transport Lack of 4- to 5-star hotel accommodation in Albany Remoteness is a key barrier to visiting regional Western Australia, including the perceived high cost for transport and accommodation and the significant travel time required to reach a destination
OPPORTUNITIES	**THREATS**
Indigenous tourism, based on researched heritage products (e.g. Stirling Range National Park, Oyster Harbour Fish Traps) Strategically planned driving routes (heritage trails, wine trails, National Landscapes) throughout the region have potential to reduce travel times and improve safety whilst protecting scenic value Increasing number of cruise ships to Albany Product and event development associated with the Anzac Centenary Growth of business tourism opportunities where the region already has supporting attractions Tourism product, broadly based on researched heritage and existing infrastructure in inland Shires (e.g. Katanning Regional Entertainment Centre) Demonstrated capacity by community based groups to coordinate and promote linked events Investment in the nature-based, experience and eco-tourism sector to take advantage of the region's natural assets Establish a subregional tourism organisation to identify and address local tourism industry issues and opportunities to work collaboratively with ASW Recognition of need for domestic niche investment in food- and wine-based tourism	Perception that climate change will impact negatively on the region's tourism attractions High cost of business operating environment Traditional intrastate market impacted by economic uncertainty Wage cost pressures to match mining sector competition for skilled employees Relatively high cost of flights into the region being sustained Perception of steady decline in investment by the public sector to regional services (e.g. transport, education, health, particularly to smaller centres)

SPECIALISED MANUFACTURING

STRENGTHS	WEAKNESSES
Driver sectors (agriculture and minerals) have access to raw materials Engineering/fabrication plants are established businesses in the region Sector currently leverages off the agricultural sector which is the base of economy Existing depth of knowledge and skills base	Skills base is ageing and some out-migration of skilled younger employees Sector largely made up of relatively small independent operators with no history of collaboration as a sector Perception of an under-investment in basic infrastructure and high cost of extensions
OPPORTUNITIES	**THREATS**
State and Commonwealth Governments supporting apprenticeships in manufacturing Potential agricultural and minerals developments could provide substantial impetus to the sector through contracts and investment Current ownership models (small companies, family businesses, well established) should allow flexibility in moving to advanced training and re-tooling (productivity/efficiency improvements) Networking, partnerships and cluster development options may become more available activities	Key skills transferable to mining sector Skilled employees can be drawn to mining sector as a result of a surge in development Enterprise level vulnerability to any increases in utilities costs (power, water) Limited capacity (access to capital) to expand quickly in response to contracting opportunities Competition from other regions where the sector operates on a “cluster” model

VITICULTURE

STRENGTHS	WEAKNESSES
Wine grape industry in the region accounts for over a quarter of the area of under vines in Western Australia Growth of the wine industry by 12 per cent AAGR over the past 23 years Reputation of wine areas of Frankland River and Mount Barker	Demand for wine detrimentally affected by an abundant supply on the world market and the global economic downturn, combined with a period of strength for the Australian dollar Ageing population and out-migration of youth leading to skills shortages Lack of housing and industrial/commercial land in rural Shire towns Lack of water, power and ICT infrastructure in rural parts of the region
OPPORTUNITIES	**THREATS**
Growing export markets in Asia Development of and investment in the food- and wine-based tourism Regional cooperation, partnerships and knowledge sharing (cluster building)	Drying climate, decreasing rainfall Continued volatility from overseas and demand seasonality Fluctuating exchange rates Continued abundant supply of wine on the world market Infrastructural connectivity has a critical influence on choice of location for domestic and foreign investors Significant issues with power and water in the agricultural areas of the region are substantial barriers to economic growth Increased competition through globalisation

MINERALS EXTRACTION

STRENGTHS	WEAKNESSES
Proven minerals deposits Appreciation by the community of the economic benefits General level of support from State Government, local governments and the community Adaptable infrastructure (roads, rail, etc.)	Upgrades of the road and rail systems are essential for improving the efficiency and safety of the commercial transport networks Smaller start up miners lack ready access to capital for development investment Lack of water, power and ICT infrastructure in rural parts of the region Ageing population and out-migration of youth leading to skills shortages
OPPORTUNITIES	**THREATS**
Any significant expansion of the minerals sector should generate direct benefits to existing engineering/fabricators that are servicing the agriculture sector Port of Albany has planning in place to increase the capacity and the efficiency of current operations Attractive regional lifestyle options for young families and FIFO workers Planning is being progressed to improve training options in the region as part of a strategy to retain youth The State Government is progressing planning for the Bunbury to Albany Gas Pipeline	Fluctuating exchange rates Uncertainty on long-term minerals prices/returns constrains investment Competition for existing infrastructure in event of an investment decision Infrastructural connectivity has a critical influence on the choice of location for domestic and foreign investors Uncertainty over capacity to expand power and water supply in the timetable of investment decision-makers Competition for finance with traditional sectors (period of agriculture sector investment) Perception that skills shortages are not being addressed in a sustainable manner

ESSENTIAL INFRASTRUCTURE AND SERVICES

STRENGTHS	WEAKNESSES
Investment in new infrastructure in the region is being made, including: • Katanning Regional Sheep Saleyards • RCDP developments in Katanning • Albany Entertainment Centre and Waterfront • National Anzac Centre Investments in health infrastructure across the region Planning for and investigations into future water supply sources are in progress Approximately 94 per cent of urban wastewater is currently reused in the Great Southern for irrigation of public open spaces, tree plantations and agriculture Excess Port capacity is available	Upgrades of the road and rail networks are essential for improving efficiency and safety, including the Albany Port corridor Lack of carrier competition to Albany Regional Airport contributes to higher air fares Lack of water, power and ICT infrastructure, including mobile phone coverage, in rural parts of the region, with the potential to stifle economic and population growth No access to natural gas Insufficient knowledge of potential water sources Lack of housing and serviced industrial/commercial land in rural towns
OPPORTUNITIES	**THREATS**
Construction of a natural gas pipeline from Bunbury to Albany Variety of upgrades have been identified for the Port of Albany to increase its capacity and the efficiency of operations Extension of scheme water supply to Denmark, Walpole and Cranbrook Additional opportunities for renewable energy generation Further development of groundwater sources is expected to meet Albany's water supply requirements beyond 2030 Expansion of mobile phone coverage to address black spots Deployment of public wi-fi coverage in support of tourism, retail and hospitality Digital technologies, e.g. NBN, are expected to extend their capacity and reach Digital communication in health, education and commerce has the potential to transform the options available in regional living	Infrastructure not keeping up with population and stifling investment – infrastructure connectivity has a critical influence on choice of location for domestic and foreign investors. Significant issues with power and water in the agricultural areas of the region remain substantial barriers to economic growth Regional water demand expected to increase by more than 20 GL/yr by 2040 Declining annual rainfall from climate change, particularly in inland areas, affects rural water supplies

KNOWLEDGE AND INNOVATION

STRENGTHS	WEAKNESSES
Well-resourced physical infrastructure in the form of campuses for UWA and GSIT With UWA Albany Centre, a physical regional campus that provides a sense of place together with the high quality and reputation of UWA International reputation of CENRM research Proximity to international biodiversity hotspot with excellent opportunities for research and field studies Liveability of region with quality labour force Infrastructure generally not under strain (health, schools, utilities) Overall a good number of well-resourced and well-managed schools in the region	Cyclical economy has high impact, particularly on the apprenticeship program Population ageing in the region suggests that growth in the local education sector is unlikely to be driven by local demand Propensity for school-leavers and those in their early twenties to leave the region seeking education or employment in larger population centres Lack of accommodation for full-time tertiary students as well as for short courses Small regional population, low population density and attraction of Perth make recruitment of school leavers difficult Evidence of early childhood development deficits as reflected in AEDC results and Aboriginal education gap
OPPORTUNITIES	**THREATS**
Adaptable trades training centre at GSIT Improved communications and collaboration between UWA units in Albany Expand research disciplines and ensure linkages with broader UWA activities (e.g. Marine and Ocean Studies). Potential for additional Chairs to develop new research branches within UWA Expansion of medical teaching where a regional setting would be an advantage, such as post-graduate nursing, dentistry and allied health programs, such as podiatry, health science Development of international links Sciences building provides a catalyst for coordination, raises the profile of UWA Great Southern in the community and increases capacity Growth in education services to ageing population Flexible workshops to respond to changes in demand Availability of training and training choices for school leavers are important factors in the retention of young people in the region UWA has recently agreed a mission-based compact with the Commonwealth Government to deliver regional outcomes. UWA Albany campus can play a key role in helping UWA as a whole to deliver on this compact. Proliferation of on-line courses from other universities, such as Curtin and Open Universities Australia Generate education, training and employment opportunities such as the development of targeted skilled trades training and employment programs for Noongar people under the SWNTS	New technologies and on-line/distance learning create increasing competitive threats to traditional education modes UWA Albany Centre's current reliance on the university's central strategic funding for sustainability of teaching programs The funding outlook for CENRM for the next 3-5 years is highly competitive, which will make continued demand on the delivery of outcomes, and for strategic coordination of funding applications Reliance on triennial Commonwealth funding cycle for continuation of the Rural Clinical School operations Narrow research focus Introduction of self-paid tuition fees, through the Higher Education Contribution Scheme and Fee Help Program, may have a significant impact. The future entitlement model will extend to Certificate 3 level qualifications, although much of industry requires Certificate 4.

COMMUNITY AND ENVIRONMENT

COMMUNITY

STRENGTHS	WEAKNESSES
Extensive range of health, education and other community services located in Albany and, to a lesser extent, Katanning Strong tradition of community volunteerism, self-help, resilience and partnerships Track record of local governments working in partnership with their communities Generally good level of community sporting infrastructure World class outdoor recreation infrastructure for bush walking and off road cycling Popular location for sea changers, tree changers and retirees adding diversity and population growth in some parts of the region Strong presence of and participation in creative communities (arts and culture) Perception of Great Southern as a safe place to live and bring up children	Decline in population in inland communities Gaps in services and accommodation for ageing population, particularly in terms of meeting demand for high care Preponderance for clusters of low socio-economic populations in inland towns Comparatively high rates of economic disadvantage and unemployment in Aboriginal population Comparatively high rates of mortality and systemic illness rates in Aboriginal population Limited capture of Aboriginal knowledge and stories Challenge of meeting demand for health and social services particularly, but not only, in the hinterland is reflected in poorer health outcomes than Metro populations Heavy reliance on volunteers for delivery of emergency services and evidence of volunteer fatigue in some areas Limited provision of state level football and cricket sporting facilities Limited public transport across the region

OPPORTUNITIES	THREATS
Encouragement of greater levels of population growth and migration in the region,	Continued decline in hinterland populations due to further concentration of farm ownership
Record and preserve Aboriginal knowledge and stories	Ageing infrastructure e.g. health care centres
Support youth retention by providing a diverse range of sporting, recreational and cultural activities in the region targeted at young adults	Potential for further contraction of public sector funding for community services and allied infrastructure
Private and not-for-profit investment in aged care, and seniors accommodation and services in response to the ageing of the population	Potential for further burn-out of existing volunteer cohort and reduction in future volunteer numbers
Increase the use of broadband and other digital communication technologies to provide quality tele-services to regional and remote communities and groups	
Improve the scope and quality of health care provision in the region, particularly in rural communities in the Pallinup subregion	
Promote preventative health measures and empower individuals to take a greater role in managing their health and wellbeing	
Increase access to mental health services, particularly to high risk and at-risk groups in society	
Maximise the utilisation and activation of major investments in cultural and arts facilities, through promotion to tourists and integration with festivals and events	
Continue to promote and market major outdoor recreational activities, like the Munda Biddi Trail and Bibbulmun track	
Develop water based recreation assets in the region, such as Lake Ewlyamartup	
Invest in outdoor recreation and sport precincts in major population centres	
Promote the Great Southern as an outdoor recreation region of excellence	
Leverage Katanning's multicultural community to attract migration	
Support small business and entrepreneurial opportunities around tourism and other community enterprise	
Foster the strong tradition of volunteerism and support the development of future community leaders	
Expansion of child and parent support centres program and early child care/development services across the region	
Explore options for expansion of public transport across the region	
Develop regional community services information portal	

ENVIRONMENT

STRENGTHS	WEAKNESSES
Diversity of landscape and environment across three bio-regions Internationally recognised significance through the South West Biodiversity Hotspot and Fitzgerald Biosphere Coastline has significant potential for wave energy Established landscape scale habitat connectivity project: Gondwana Link Strong research and education presence through CENRM with international ties through the Biodiversity Chair and International Water Centre Considerable local expertise and capacity Strong landcare ethic among the community with many established NRM organisations	Capacity of organisations in NRM for long term planning and delivery, associated with variable funding Need to consider cultural heritage and visual landscape in strategic planning Many land, wetland and marine based ecosystems are poorly understood Need for continuing research and development in farming processes to mitigate dryland salinity Need for research and development in adaptation for climate change
OPPORTUNITIES	**THREATS**
New production sectors associated with the changing climate Increasing demand for renewable and clean energy Carbon farming with associated land benefits of increasing woody perennial vegetation Joint management of conservation areas by Noongar people associated with the SWNTS Engagement of local governments in water harvesting and reuse and renewable energy generation Engagement of local governments in the management of local natural areas with associated recreation and tourism uses Investment in the nature-based, experience and eco-tourism sector to take advantage of the region's natural assets Expansion of knowledge-based economic sector associated with NRM	Land degradation associated with clearing including erosion, water logging, salinity Degradation of waterways associated with clearing including salinity, sedimentation Climate change impacts on ecosystem processes and services Climate change impacts on wetland water levels and seasonality, and potential competing water demand *Phytophthora* dieback expansion into 'clean' areas such as the Fitzgerald River National Park

APPENDIX 2

STRATEGIC OPPORTUNITIES ANALYSIS

The following analysis highlights strategic opportunities across all sectors of the regional economy.

ECONOMIC GROWTH AND DIVERSIFICATION

Economic development is about harnessing the region's natural, industry and community resources and opportunities to stimulate sustainable economic activity. In particular, it is about leveraging comparative advantages and/or addressing key challenges in order to focus activity on those areas that will have most impact. The future prosperity, dynamism and sustainability of the Great Southern will be driven by the diversification of the regional economy. At all points in the growth and diversification of the region's economy, it is essential to maximise the opportunities for regionally-based enterprises to participate and benefit.

The Great Southern economy is currently dominated by agriculture, retail and tourism. Population-serving sectors such as retail, public administration and health are expanding in response to the growth and ageing of the region's residents. Some of the other more traditional areas of services employment have undergone a contraction of job opportunities. Food production is increasingly diversified, with the relatively more intensive horticulture and poultry and pork sectors complementing traditional grain and livestock (cattle and sheep) production. Overall, however, employment in the agriculture sector has gradually declined, mainly in response to technology and productivity improvements. It is projected that agriculture will employ fewer, but more technically skilled, workers in the future. Therefore, investment and a steady increase in value adding are critical if employment opportunities are to grow.

The plantation timber industry continues to restructure, albeit with woodchip export tonnages being broadly sustained, but processing-based value adding and manufacturing will be required in order to enhance the sustainability of this sector in the medium term.

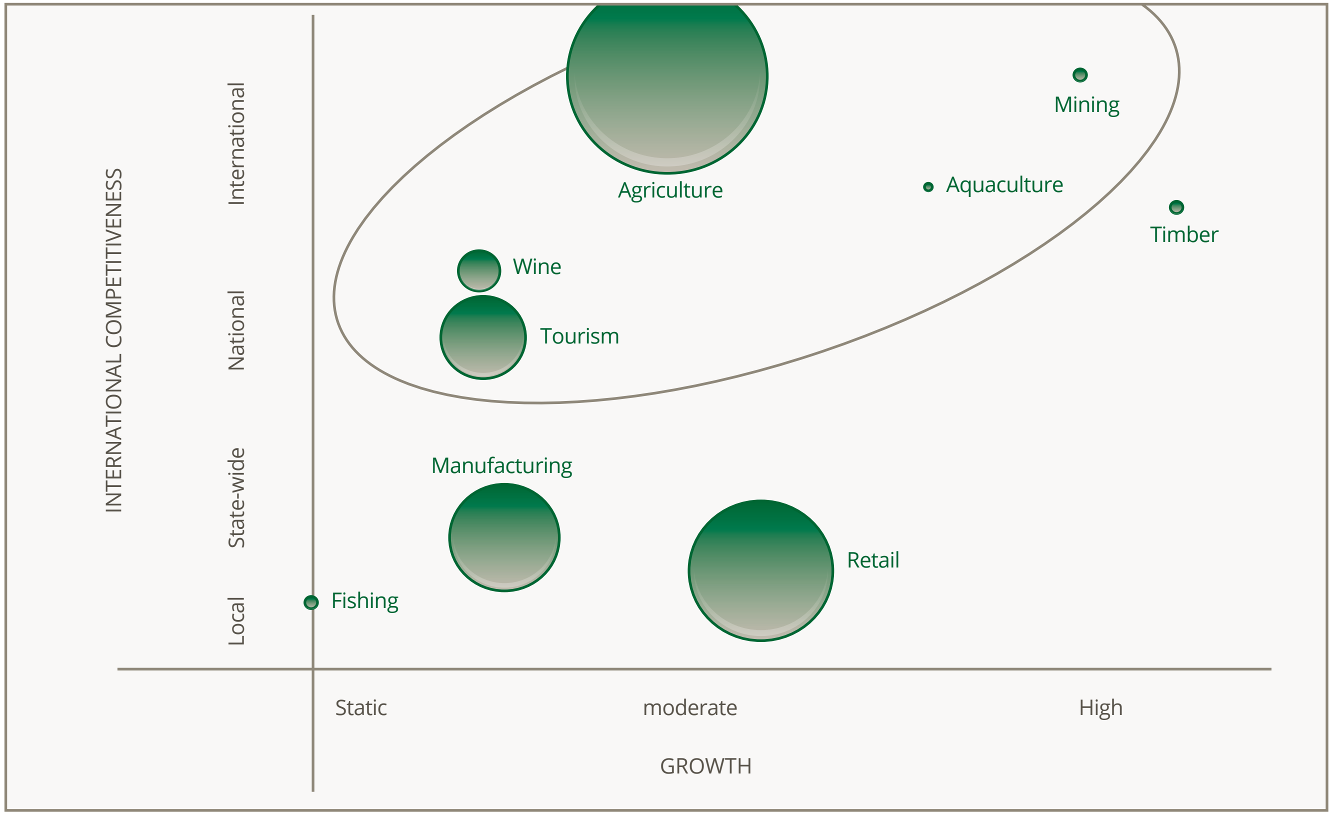
Tourism is also a strong contributor with potential for further growth, as is viticulture.

Opportunities to drive the generation of employment and investment through the further development of key industry sectors include the:

1. Diversification of the region's economic base in order to become more globally competitive and linked to world markets.
2. Need to create an environment that is conducive to business and industry development and attraction.
3. Capacity to provide skills development and continuing learning.
4. Need to ensure that infrastructure investment is industry focused.
5. Strategic development of partnerships, business networks and alliances.
6. Coordination of the promotion/marketing activities in key industry sectors.
7. Attraction of, or retention of, young people in order to balance demographic change (ageing population).
8. Need for human and financial capital to facilitate growth and respond quickly to key opportunities and challenges.

INDUSTRY SECTORS

Given the focus on the region's overall comparative advantages as the base for its continued economic development, it is useful to analyse the region's key industry sectors. The main current industry sectors in the region can be analysed in terms of their international competitiveness (or export attractiveness), growth potential and current size as shown below. Here, international competitiveness has been assessed in terms of the extent to which the sector exports its products and growth in terms of average annual growth rate over a number of years.



Analysis of key current industry sectors over the past decade

Hence:

- Agriculture is the largest industry sector and has experienced average annual growth of 3.72 per cent over the past decade. The sector is clearly internationally competitive given that most of the product is exported. However, the turnover fluctuates as a result of external factors such as rainfall and commodity prices and this seasonality and variability presents a risk to the overall regional economy.
- Retail trade, the second largest sector, has experienced around 4.7 per cent average annual growth over the past decade. The retail sector is, however, predominantly focused on local demand, albeit with a significant proportion catering for tourists and visitors, which are mainly intra-state. There is potential to grow the retail sector beyond population-driven increase by capturing more of the business-to-business supply chain in products for visitors.
- The tourism sector is the third largest sector, growing at an average rate of 1.8 per cent over the past 10 years. Currently it is competitive on a state or national level given the mix of visitors (only 10 per cent international), but there is a high potential to grow this sector and to leverage key growth drivers such as the Anzac Centenary commemorations.
- The plantation timber sector currently exports most of its product in the form of woodchips. It grew steadily in the period before the global financial crisis and has stabilised in recent years but remains relatively small. The plantation timber sector broadly has the potential to grow its value-added content.
- Manufacturing is relatively strong although the sector has shown relatively little growth, with a focus on local or intra-state consumption. There is potential for growth by leveraging opportunities in the food processing and minerals extraction sectors.
- Fishing and aquaculture are relatively small sectors; fishing is focused on the domestic market, while aquaculture (abalone, oysters and mussels) has the capacity to expand exports.
- The Great Southern has a well-earned reputation as a premium wine producing region both domestically and internationally. The industry strongly complements the region's tourism industry.
- The mining sector, while currently relatively small, is clearly internationally competitive and has substantial potential growth prospects that warrant its inclusion.

Key sectors on which to focus economic development initiatives are primary agriculture, tourism, viticulture and minerals extraction. There are also strategic growth sectors that have been identified through the consultations that are important for their potential for diversifying the economic base of the region. These are sectors that continue to drive modern economies and need to be well-represented in order to provide high quality and well paid employment and attract creative people. Two strategic growth sectors have been identified:

- Specialised manufacturing: Engineering services to support the agricultural and minerals sectors. This is a key sector for strategic growth in the region and for maintaining the main regional settlements as service centres for the primary industries.
- Secondary processing: Food production and processing. Downstream processing of agricultural products attracts substantially higher income, employment and value-added multipliers than for primary agriculture.

KEY REGIONAL INDUSTRY SECTORS

These key regional industry sectors are analysed further below. The analyses are based on the Porter's Diamond analysis of factors that underpin competitiveness as described in the earlier competitiveness assessment. While the previous analysis was of the region, the same factors can be employed to assess a particular industry sector. Also refer to Appendix 1 for SWOT analyses for each sector.

Industry Sector	Factor Conditions	Demand	Related & Supporting Industries	Firm Rivalry	
Primary Agriculture	*Basic infrastructure:* Clean, green, safe producing food areas Livestock saleyards well represented in the region Transport and storage infrastructure well developed Lack of reliable water/labour supplies in agricultural areas Need for vibrant regional towns to attract and retain workers *Advanced infrastructure:* Collaborative working is under-developed Technological improvements increase productivity	Growing global demand Need to increase demand through secondary processing Low investment 'demand' due to inadequate commodity prices for goods	The region has a full range of supporting industries, including education, training and research capacity Government agencies, e.g. DAFWA, have key locations in Albany and Katanning	There are a large number of individual farms/ producers There are issues over the need for intensification of farming The region has a full range of supporting businesses across regional centres	Mature but with potential to expand value-adding

Industry Sector	Factor Conditions	Demand	Related & Supporting Industries	Firm Rivalry	
Tourism	*Basic infrastructure:* Leverages off natural advantages of landscape and heritage supported by developed travel-related infrastructure Road and air links exist, but with perceived weaknesses in both (air: lack of competition, high fares; road: lack of dual carriageway down Albany Highway) There is a lack of 4- to 5-star hotel accommodation in Albany, restricting business tourism Lack of space in the region for large events *Advanced infrastructure:* Member-based tourism organisations, e.g. Denmark Tourism Incorporated Websites promoting tourism Lack of a subregional tourism organisation, to identify and address local tourism industry issues, and work collaboratively with ASW	Demand from domestic and international markets Region will attract more tourists by concerted efforts to market the region The principal competition is on a state level Demand will also be driven by improving tourism assets in the region (e.g. business hotels for business tourism), better transport links and through the Anzac Centenary commemoration program	Full complement of tourist facilities including accommodation, cafes/ restaurants, tourism attractions, wineries etc. (though a perceived lack of 4- to 5-star hotel accommodation and a lack of space in the region for large events) Tourism WA and ASW, including support from economic development agencies – City of Albany, shires, and GSDC	There are a large number of businesses working in tourism industry, predominantly small businesses Companies cooperate through the tourism centres but otherwise compete strongly for tourism dollars, leading to continuing investment in facilities and attractions	Mature but with greater opportunities for growth

Industry Sector	Factor Conditions	Demand	Related & Supporting Industries	Firm Rivalry	
Viticulture	*Basic infrastructure:* Climate and soils suitable for viticulture The wine grape industry in the region accounts for over a quarter of the area under vines in Western Australia *Advanced infrastructure:* A number of local wine industry organisations – Great Southern Wine Association, Mount Barker wineries Sharing of wine making facilities and wine makers	Domestic and overseas demand for Great Southern wines, or more generally Western Australian wines Not as famous as Margaret River region, but increasing reputation Efforts continue to market the region's wines to key overseas markets (with the Asian markets being targeted)	Links into tourism, food, art/craft industries, e.g. Great Southern art/craft trail generally promotes wineries as venues for art/craft Many wineries also diversifying into olives/olive oil	Many companies involved in the industry Rivalry between them focused on the quality and attributes of their product Recognition through awards and medals ensures a high level of rivalry in the industry	Room for strengthening sector through strategic initiatives

Industry Sector	Factor Conditions	Demand	Related & Supporting Industries	Firm Rivalry	
Minerals extraction	*Basic infrastructure:* Minerals deposits Transport infrastructure well developed. Port of Albany is a key asset Lack of power in key areas Infrastructure upgrades required, in road and port *Advanced infrastructure:* Weak minerals knowledge and support structures in region	International demand for minerals Need to explore local processing opportunities	Need to develop supporting industries	Few existing firms in region Need to develop education and training to cater for the sector	Immature, weak linkages currently

Industry Sector	Factor Conditions	Demand	Related & Supporting Industries	Firm Rivalry	
Specialised manufacturing	Long-established businesses with existing infrastructure Weaknesses in infrastructure in the rural Shires, particularly access to industrial land, power, water and ICT services Networks and partnerships generally under-developed in the sector	Existing demand from agricultural sector Potential demand from minerals sector	Well-developed skills base and long-established businesses Relevant developments at GSIT No independent research and development base in the region for the sector	There is a lack of a presence of large firms in the sector to anchor the industry	Mature but with greater opportunities for growth

Industry Sector	Factor Conditions	Demand	Related & Supporting Industries	Firm Rivalry	
Secondary processing: Food Production and Processing	Access to primary agricultural production Livestock saleyards Agricultural diversity (sheep, grains, wine, vegetables etc.) Water and energy are vital to all food processors but provision of these utilities across the region is highly variable General lack of culture of collaboration between companies in the sector is a weakness	Growing demand from Asian economies Existing domestic demand and tourism product demand	No independent research and development base in the region for the sector	Lack of presence of large firms in the sector to anchor the industry	Immature, weak linkages currently

Table 16 Key Regional industry sectors

STRATEGIC OPPORTUNITIES

Primary Agriculture	• Technology-driven response to changing rainfall patterns • Productivity improvements through technology and corporate structure • Training for a skilled workforce • Investment in value adding to complement primary resource production • Development of project-ready land for agricultural and forestry value-adding opportunities • Safe, high quality products which are identifiable and trusted by consumers • Expansion of programs to attract skilled labour into the region • Protect priority agricultural land from competing uses • Certainty in the supply of power to the region • Support diversification in the food production sector, including expanded horticulture, poultry and pork production • Add value to regional timber production through niche and high volume processing
Tourism	• Increase economic yield from tourism through visitor spend and duration of stay • Ensure that the basic community infrastructure is capable of servicing the growth • Establishing a tourism vision for the region • Establish a local or subregional tourism organisation for the lower Great Southern • Develop and promote a branded regional tourism product • Expand the food, eco and heritage/culture tourism product • Develop a business tourism product, leveraging Albany Entertainment Centre and Albany foreshore developments • Improve marketing and promotion of the region • Leverage opportunities associated with the Anzac Centenary commemorations • Facilitate transport link improvements, both road and air • Development of quality accommodation options and improved air services • Development of trail hubs

Viticulture	• Integrate promotion of key wine subregions • Invest in skills development and sector innovation • Develop sustainable links to tourism product • Encourage enterprise level cooperation, partnerships and knowledge sharing • Focus on overseas markets in Asia • Attract inbound investment
Minerals Extraction	• Reduce barriers to attraction of investment by addressing infrastructure requirements, including road and rail networks, power and capacity at the Port of Albany • Remove impediments to growing the export trade in mining products • Ensure opportunities for extending supply chains in the region are embraced and facilitated • Strengthen programs to attract skilled labour into the region (such as affordable, good standard housing, high quality health care and schooling, job opportunities for spouses)
Specialised Manufacturing	• Sustain and further develop the region's manufacturing base by encouraging innovation and ensuring the region's infrastructure and transport logistics meet the needs of industry • Encourage knowledge, innovation and research in the manufacturing sector • Strengthen programs to attract skilled labour into the region • Ensure the availability and supply of industrial land meets industry demand • Ensure infrastructure meets the needs of industry
Secondary processing: Food Production and Processing	• Encourage industry growth through the further development of regional infrastructure, including transport logistics and networks that support value-adding opportunities and industry attraction and investment initiatives • Facilitate industry investment and attraction • Facilitate a skilled workforce for the food production and processing industry

ESSENTIAL INFRASTRUCTURE AND SERVICES

The economic potential of the Great Southern can be realised through planning and investment in critical enabling infrastructure capacity and essential services. A summary of key strategic issues follows (See Appendix 1 for SWOT analysis).

WATER

The greatest potential constraint to growth in the Great Southern is securing future water sources for public drinking, industry and agriculture. However, the Department of Water has recently identified ground water sources to meet Albany and the Lower Great Southern demand beyond 2025. While demand for water has stabilised over the last decade, due in part to more efficient water use, the use of rainwater tanks and increased water recycling, it is expected to accelerate as a result of population growth, horticulture and the possible establishment of new water-intensive industries.

While the impact of climate change on rainfall and water security is projected to be less severe than other more northerly regions, many parts of the Pallinup subregion have a lower reliability of water supply and are therefore at a higher risk. Targeted investment to improve water supply and availability in the Pallinup subregion is essential to supporting the continued contribution of grain and livestock production to the state's economy. Population growth in Albany and the lower Great Southern will place further pressure on overall water resources.

ENERGY

Power transmission infrastructure in the region is ageing and undermining the reliability of supply and capacity for the energy network to accommodate expanding economic activity. Investment in new capacity in the SWIS for residential and resource sectors has the potential to ensure the future energy needs of the region. The capacity of the existing power infrastructure and cost of upgrading feeder lines have the potential to limit major industrial development at the industrial sites in the region.

The lower southwest areas of Western Australia are not currently serviced with natural gas, although the State Government is progressing planning for a natural gas pipeline from Bunbury. Delivery of the pipeline project could have significant flow-on effects in the region. The State Government has endorsed a preferred gas pipeline route and is progressing planning for the project.

Currently, harvest residue from plantation timber is left behind when the trees are harvested but there is potential to use this bio-mass for base load power generation. It is estimated that a 25MW power station would require between 180,000 to 190,000 tonnes of residue per year, which could easily be supplied from the current plantation resource. Commercial factors affecting the location of bio-mass power station include the cost of the residue and transport distance. There is also the potential to use timber bio-mass for on-site steam and electricity generation by industry. This is already being done on a relatively small scale but there is potential for significant expansion among the region's more energy intensive industries.

Finally, there is significant capacity in the region to accommodate more renewable energy generation through expansion of wind power, already a major source of energy in the region, and investment in harnessing wave power.

TRANSPORT

Transport accessibility into and throughout the region underpins the core comparative advantages of the Great Southern's economy. Road, air and port transport infrastructure enables the tourism and agriculture sectors to access global markets and is a key factor if the diversification of the economy and essential if the establishment of a minerals extraction sector is to proceed. Addressing the quality of transport infrastructure is also a matter of community safety as the region has a number of identified "black spots", deteriorating road surfaces and freight/ commuter competition.

With further economic growth in the region, road infrastructure is expected to deteriorate significantly if there is no additional investment in maintenance and capacity development. The potential negative impacts are expected to be high for agricultural industries, timber processing, regional tourism and management of conservation areas (including access for visitors). As the haulage of produce in the region underpins economic growth, there are several parts of the road network that will require upgrading in order to provide capacity and to reduce further problems emerging between the freight transportation and public and tourism use.

The importance of protecting access to the Albany Port, its role as a key state and regional asset and the need to increase capacity and secure road and rail access in the long term are recognised.

There is significant potential to expand the rail transport services into general freight. At present the principal commodity transported by rail is grain and the potential for general freight is largely untapped.

The high cost of Western Australia's regional airfares is an issue for regional airports such as Albany.

COMMUNICATIONS

Development of the region's communications infrastructure is essential as the global digital economy continues to expand. Regional engagement with the digital economy will require greater technological awareness along with the necessary communications infrastructure and ICT support.

A measure of development in this area will happen as the Great Southern is carried along with the roll-out of the NBN and other communications improvements but the imperative for the region is to maximise the benefits beyond the common gains. Optimum outcomes from the NBN will be gained by ensuring communities are connected by preferred modes of delivery (fibre over wireless, wireless over satellite) and that they develop and continually upgrade their capacity to exploit communication technology. Katanning is a point of interconnect for the NBN and will have potential opportunities to attract data-intensive businesses.

To take full advantage of communications infrastructure improvements, whether through the NBN or otherwise, the region's business people and community members must gain awareness of the possibilities created by existing and pending improvements. Further opportunities will emerge to take up small- and large-scale digital advantages, touching anything from on-line, home-based businesses to improved farming techniques to global business engagement.

STRATEGIC OPPORTUNITIES

Water	• Address bottlenecks in the water line between Narrogin and Katanning (Harris Dam source of supply) • Facilitate and support the growth of residential population in Albany and the lower Great Southern through investment in residential water infrastructure • Investigate and implement opportunities to improve water (and waste water management) usage and recycling
Energy	• Support the development of the Southdown mining project with the enabling energy infrastructure capacity of the South West Interconnected System • Construction of the Bunbury to Albany Gas Pipeline to diversify regional energy options • Continue to promote and encourage renewable energy generation, including wind power across the region
Transport	• Improve the capacity and safety of the Albany Highway as the major freight, industry and tourist route into the region • Enhance intra-regional connections to maximise accessibility of residents and tourists to all parts of the region • Increase capacity at the Port of Albany through staged investment in the transport corridor infrastructure • Implement the relevant recommendations for the region in the Western Australian Regional Freight Transport Network Plan • Enhance air services and infrastructure throughout the region to support community service delivery, increase worker access to regional employment opportunities and improve the mobility of tourists to and throughout the region
Communications	• Leverage Katanning's role as a regional NBN hub to attract data-intensive industries • Ensure optimum community and business access to telecommunications across the region • Expand mobile phone coverage by addressing identified "black spots", particularly along major highway infrastructure • Deploy economically viable public wi-fi coverage in support of tourism, retail and hospitality operators across the region

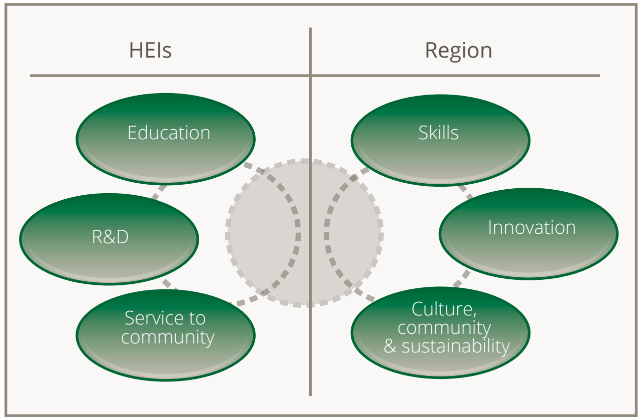
KNOWLEDGE AND INNOVATION

Knowledge, research and innovation drive prosperity and productivity in modern economies. Fostering education, knowledge-intensive industries and innovative business practices are essential to maintaining and improving the international competitiveness of the Great Southern. A summary of key strategic issues follows (See Appendix 1 for SWOT analysis).

EDUCATION AND RESEARCH INSTITUTES

The education sector both drives the growth of other sectors by providing skilled labour matched to industry needs and is a source of employment and economic growth in its own right. However, the ageing population also leads to relatively low levels of local demand for tertiary education. There is the opportunity to counter this through increasing off-site access to education, i.e. e-learning. This could open up education services to wider markets but also represents a threat to local regional educational organisations by enabling competitors to enter the local market. In common with many regional areas, the Great Southern's population shows a notable dip in persons aged 18-25.

On the other hand, HEIs, which include universities and other tertiary bodies such as institutes of technology, can play a key role in a region's well-being and competiveness (Australian Government 2000; OECD 2007). Successful regions demonstrate how place-based knowledge can generate innovative and distinctive solutions which benefit and profile the region (Allison, J and Eversole, R 2008; Garlick, S and Langworthy, A 2004). Regional HEI campuses therefore have a major potential role as innovation catalysts for their regions.



HEI/region interface

The HEI/region interface (Goddard, JB and Chatterton, P 2003) is illustrated above. The challenge for HEIs is to link their conventional roles, through internal management processes, to be better responsive to regional needs. At the same time, regional actors need to integrate their response to the HEI. When industry, HEIs and government work effectively together in such a system, the term triple helix has also become common.

The Great Southern is fortunate is having a strong tertiary education offering with considerable potential for future expansion, including the attraction of intra-state and international students. UWA, ranked among the world's top 100 universities, has the UWA Albany Centre campus that offers courses in arts, sciences and education. It also incorporates CENRM and one site of the RCSWA. Although RCSWA's headquarters is located in Kalgoorlie the head of the school chooses to work from Albany. The region also benefits from the GSIT, which provides certificate and diploma level qualifications in a wide range of disciplines, and vocational education and training transition support

for secondary students. The GSIT has four campuses in the region, in Albany, Denmark, Mount Barker and Katanning, is the largest employer in the sector and has an explicit role to link with industry and provide courses to match industry needs. This critical mass of tertiary education fosters innovation in the region's core industries through research and development activities, and represents a significant cluster of knowledge intensive employment in the Great Southern.

The success of a regional campus, such as UWA Albany Centre, relies on building education, research and community programs that reflect the strengths and needs of the region in agriculture, forestry, minerals and mining, natural resource management and medical education. More recently, a strategic opportunity to expand UWA's research capability into health economics has been identified.

The education and research institutes sector therefore represents a threefold area of attraction for regional development: first the employment it provides for direct education service providers, second the appeal for people wanting to come to live in the region where there will be a broad range of regional educational opportunities, and third the support the sector can provide to regional industry.

INNOVATION AND ENTREPRENEURSHIP

While new 'knowledge-based' sources of competitive advantage are becoming increasingly important, the traditional bases of comparative advantage created by natural resources continue to represent a real base for economic growth. The Great Southern therefore straddles the transition between traditional economics and the 'new economics of competition' that rely on networks and knowledge flows for sustainable competitive advantage.

Innovation is the creative process that transforms new and existing knowledge and technology into value. In a recent study of innovation in regional Western Australia, knowledge networking, industry networking, research and development grants, education and training schemes and HEI collaboration were considered the most helpful mechanisms for developing innovation activities.

Small-to-medium sized businesses make a significant contribution to the health and success of the regional economy. As has been noted previously, the Great Southern boasts the most dynamic small business community in the state, with the concentration of small businesses, per capita, the highest of any region in the state. This reflects the region's strong commercial and entrepreneurial culture.

Studies by the ABS show that most such businesses use ICT and that businesses that use the internet are more productive than those that do not. ICT is therefore an important enabler as it allows businesses to increase the scale of virtual operations without the costs associated with growth in physical operations. The NBN therefore presents opportunities for small, micro and home-based businesses to make improvements and efficiencies.

Lower costs and a higher quality of life can also act as drivers to attract businesses away from metropolitan areas and increase rural and regional populations in communities that would otherwise be dependent on 'monoculture' traditional industries. However, studies show that innovation in regional Western Australia is seen by entrepreneurs to be riskier and more costly than in metropolitan areas and barriers related to the lack of expertise and skills are greater.

Networks and knowledge play a central role in innovation. Networking and collaborative partnerships can provide a source of real competitive advantage by providing local organisations and clusters of organisations with scarce, valuable resources (knowledge and networks) that are difficult for competitors to develop, copy or substitute. The presence of effective networks and partnerships therefore underpins the key element of knowledge flows in innovation, through formal and informal means.

There is a strategic need for the region to grow its knowledge-based industry in order to sustain future economic growth.

STRATEGIC OPPORTUNITIES

Education and Research Institutes	• Expand tertiary education offering in the Great Southern to attract greater numbers of international and domestic students, particularly leveraged off UWA's top 100 ranking • Increase tertiary research and development, including applied research in agriculture, environment, tourism and timber sectors • Establish applied research and teaching capability in health economics • Support partnerships between the education sector and industry and developing initiatives to promote a culture of innovation and ongoing learning • Foster an innovative industry culture that collaborates with regional HEIs • Address the low capacity in student accommodation that represents a key weakness for expanding this sector for residential and short courses • Continue to foster connections between secondary and tertiary education institutions to promote the retention of young people in the region for education and employment opportunities • Continue to promote and encourage lifelong learning to improve worker skill sets • Expand the tertiary education sector with the promotion of Albany as Australia's premier regional 'university town' • Provide new training facilities such as a new adaptable trades training centre at GSIT
Entrepreneurship	• Capture the potential of the e-learning phenomenon • Increase the capacity of broadband and mobile communication technologies to improve business efficiency, enhance tourist experiences and expand small business participation in e-commerce • Raising community and business awareness of and participation in the digital economy • Leverage digital technologies and related infrastructure to improve productivity, improve access to overseas markets and create new knowledge intensive sectors and economies • Promotion of the region as a good base for small, micro and home-based businesses • Ensuring widespread NBN coverage across the region • Assessing the training and mentoring needs of small, micro and home-based businesses • Enhance regional innovation networks through strengthening and optimising existing networks or filling specific gaps identified in current networks

COMMUNITY AND ENVIRONMENT

Growing the prosperity and quality of life of Great Southern residents is the primary objective of the region's aspirations for continued economic development. Building strong regional communities and protecting the region's pristine natural environment are intrinsic to this objective. A summary of key strategic issues follows (See Appendix 1 for SWOT analysis).

GREAT SOUTHERN COMMUNITY

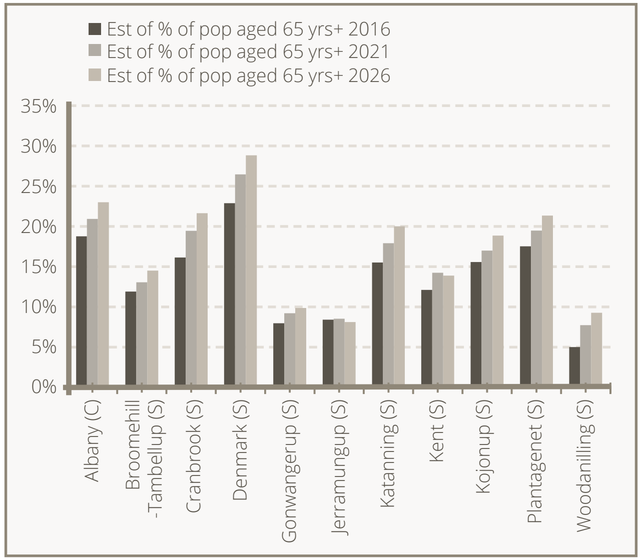
Community cohesion is at the heart of a safe, strong society. Cohesion must be delivered locally through creating strong community networks, based on principles of trust and respect for local diversity, and nurturing a sense of belonging (Local Government Association 2004). Local governments play a critical role in building resilient communities.

Great Southern people are generally considered to have strong community spirit as reflected in highly engaged local governments, historically stable populations and a long tradition of volunteerism (ABS 2012a). However, the recent trends of declining inland populations and the ageing of the population create a number of challenges for the maintenance of community cohesion and service delivery. To address these challenges, community capacity will need to be further enhanced through a strategic approach to and investment in leadership development.

POPULATION PROFILE

Regional Australia as a whole is ageing faster than the national average. The population age profile of the Great Southern is older than the State average, particularly in more rural agricultural and coastal communities. This ageing can and will continue to impact the level of demand for a range of goods and services (most notably health and community services) and decrease the relative size of the labour force available to businesses and industries.

Projections indicate that 22 per cent of the Great Southern population will be aged over 65 years by 2026, compared to an estimated 17 per cent in 2016. As illustrated below, the proportion of over 65-year-old residents in the Shire of Denmark and City of Albany in particular is projected to increase significantly over the period 2016 to 2026 (Western Australian Planning Commission 2012).



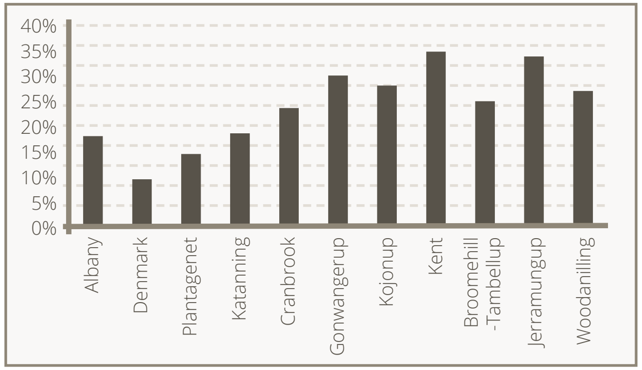
Projected growth of 65 years and over population 2016 to 2026

Stakeholder consultation revealed that although population ageing is a widespread and difficult issue, the Great Southern is well-placed to leverage off its existing reputation as a retirement destination. An older population profile brings an increase in demand on public services, including the provision of services and accommodation for seniors. Planning for population ageing requires the creation of age-friendly, liveable communities and built environment, accessible transport, accessible public spaces and amenities. The ability to age in place is now recognised as a major factor in relation to the overall wellbeing of older people and the communities in which they live. The presence of seniors in regional towns can have an extensive positive effect on the social functioning of their town, in volunteering and demand for local services.

Apart from the ageing of the population, overall population decline in many of the communities in the Pallinup subregion, including Kent, Kojonup, Broomehill-Tambellup, Jerramungup and Gnowangerup local government areas, has had an impact on the social and economic fabric of those communities over the past decade.

COMMUNITY SERVICE AND VOLUNTEERISM

The Great Southern has a well-established tradition of community volunteerism adding considerable value to overall community wellbeing and viability. In rural and regional areas volunteers are the lifeblood of emergency services, aged care support, health, youth, culture and the arts and delivery of events.



Percentage of residents reporting as volunteering for organisations across the region in 2011

Information from the 2011 Census indicates that in some parts of the region, such as the Shires of Jerramungup and Kent, up to 35 per cent of the population volunteered for organisations (over and above the hours of unpaid domestic or caring roles also undertaken by local residents) (ABS 2012a). However, there is some evidence that the current structures for volunteering are coming under stress.

ABORIGINAL COMMUNITY

Aboriginal people represent a significant part of the Great Southern community. An above average share of Aboriginal people in the Great Southern population is a cultural asset to the region and presents considerable opportunities in cultural heritage-related tourism. However, stakeholder consultation has suggested that there are gaps in the recording and preservation of Aboriginal knowledge and stories.

Aboriginal people in the region have higher rates of economic disadvantage, higher mortality and systemic illness rates and higher levels of unemployment. Providing a diverse range of education and employment opportunities, including small business development as well as suitable access to support services, is essential to "closing the gap".

EARLY CHILDHOOD DEVELOPMENT

The AEDC measures young children's development. Since 2009 teachers have completed, on a triennial basis, a checklist for children in their first year of full-time formal schooling. The checklist measures five key areas, or domains, of early childhood development: physical health and wellbeing; social competence; emotional maturity; language and cognitive skills (school-based); and communication skills and general knowledge. These areas are closely linked to the predictors of good adult health, education and social outcomes. Findings from the 2012 census conclude (amongst other things) that children living in the most socio-economically disadvantaged communities are more likely to be developmentally vulnerable on each of the AEDC domains and Indigenous children are more than twice as likely to be developmentally vulnerable than non-Indigenous children (www.aedc.gov.au). The AEDC results for the Great Southern indicate there are some marked deficits in early childhood development in parts of the region, particularly, but not only, in Katanning, Mount Barker, Cranbrook, Tambellup and parts of Albany.

The State Government has recognised that in order for children to have the best start in life, families in low socioeconomic communities need ready access to a range of early learning, parenting, child and maternal health and well-being programs and services in their immediate communities. In 2012 the government developed a Child and Parent Centre model, under which centres located in selected public primary schools will engage with families and children from birth to eight years old, with a focus on children up to four. The centres aim to increase families' capacity to provide home environments whereby children can develop and prepare for successful transitions into school. Mount Lockyer Primary School in Albany has been chosen as one of the first sixteen primary schools in the state to have a Child and Parent Centre and is the only one in the region. The AEDC results suggest that similar services could benefit other areas of the region.

COMMUNITY SERVICES

There is a good network of schools across the region but communities are largely dependent on health and other community services located in Albany and to a lesser extent in Katanning. However there are perceived barriers of access to these services for low socioeconomic and less mobile sections of the community. Consultation has also identified that ease of access to current information about available services is problematic for service delivery agencies as well as for users. Meeting the demand from inland communities for medical, allied health care and family support services in particular is a significant challenge for public and not-for-profit service providers. Local governments play a key role in advocating for enhanced access to services on behalf of their communities and they are also regularly called on to facilitate solutions.

This Blueprint identifies an aspirational population target of 100,000 and there is a need for all relevant human services agencies to work together to undertake a comprehensive body of work to plan for this level of population increase. Human services agencies conduct comprehensive forward planning based on estimates of natural population growth, and the GSDC has in the past worked with key stakeholders to assess the future service demands expected to arise from specific individual major investments (e.g. mining). However, human services planning frameworks are not yet in place within this region for assessing needs at the aspirational level of population growth.

PARTICIPATION IN COMMUNITY LIFE

Population growth is expected to drive demand for culture and the arts in the region. Appropriate infrastructure, networks and communities and quality experiences are critical imperatives for the delivery of culture and the arts in the region. Sport and recreation participation is important for sustaining a healthy population and is particularly important for rural and regional communities.

Continued investment in major sport precincts and centres in Albany and Mount Barker is required to accommodation future population growth, enhance the sport and recreation options for residents, and support the continued growth of sporting associations in the region. Further investments in sports and recreation facilities are also needed in regional towns across the region.

REGIONAL CENTRES DEVELOPMENT PLAN

Katanning is strategically located as a key service hub for the upper Great Southern. The upgrade of the town centre and allied projects are currently being implemented and are already serving to attract new investment and instil increased community confidence in its future.

It is critical that the momentum on the Katanning RCDP is maintained and that the $8.9 million of Royalties for Regions funding leverages further public and private investment for the benefit of Katanning and surrounding communities.

HOUSING

Great Southern residents have access to a sufficient supply of housing for the population but there are deficits in the housing mix and quality. Housing affordability is problematic, particularly in preferred coastal areas. An ageing population is increasing the demand for smaller affordable dwellings, in both the general and public housing market (Department of Housing, Landcorp and GSDC 2013).

Addressing the demand for affordable housing of a suitable size will require the private sector to work collaboratively with the Great Southern Community Housing Association, other not-for-profit organisations and the public sector.

GREAT SOUTHERN ENVIRONMENT

Trends towards declining rainfall, increased temperatures and localised shifts towards higher summer rainfall and lower winter rainfall will all impact on agriculture and production in the region. The impacts are likely to include:

- Southerly shifts in grain production and associated change in crop and horticulture species suited to growing areas
- Southerly shifts by pest and weed species not previously found in the region
- Reduced quality and quantity of crop, horticulture and pasture productivity
- Reduction in stocking capacity associated with the ability to capture and store water
- Increased risk of wildfires
- Increased risk of extreme weather events including droughts.

In 2009, DAFWA outlined its projections for the effects of climate change on Western Australia's grain production to 2050, notably a reduction in wheat yield of around 10 per cent for the most part and increasing to 20 per cent in northern and eastern areas of the Great Southern. Currently, the Great Southern region accounts for 13.7 per cent of the total value of crop production in Western Australia (Australia 2020 Summit 2008). The report noted that while expansion of wheat cropping is possible into southern areas due to favourable environmental conditions, there may be competition with other agricultural industries and forestry plantings (Department of Food and Agriculture 2009).

In order to meet these challenges for the region, it is important to invest in research and innovation to develop new farming processes compatible with the changing climate, identify suitable crops and produce, harvest and recycle water in regional communities, and undertake land use planning to identify and protect high value food production areas.

There are also opportunities associated with climate change through the sequestration of carbon and trading of carbon offset credits. 'Carbon farming' is encouraged to improve condition of the landscape and provide offsets for activities that emit carbon dioxide. A number of businesses are operating in the region managing the acquisition or lease of land and revegetation in order to provide environmental or biodiversity offset services to industrial emitters within the domestic market. However, in the absence of an internationally agreed mechanism beyond the Kyoto Protocol, the demand for offset credits in global markets may be limited.

STRATEGIC OPPORTUNITIES

Great Southern Community	• Encourage greater levels of population growth and migration in the region, to reach an aspirational population target of 100,000 people by 2040 • Generate education, training and employment opportunities such as the development of targeted skilled trades training and employment programs for Noongar people under the SWNTS • Capture and preserve Aboriginal knowledge and stories for the benefit of current and future generations • Support youth retention by providing a diverse range of sporting, recreational and cultural activities in the region targeted at young adults • Encourage private and not-for-profit investment in aged care, and seniors accommodation and services in response to the ageing of the population • Improve the scope and quality of health care provision in the region, particularly in rural communities in the Pallinup subregion • Promote preventative health measures and empower individuals to take a greater role in managing their health and wellbeing • Increase the use of broadband and other digital communication technologies to provide quality tele-services to regional and remote communities and groups • Increase access to mental health services, particularly to high risk and at-risk groups in society • Maximise the utilisation and activation of major investments in cultural and arts facilities, through promotion to tourists and integration with festivals and events • Continue to promote and market major outdoor recreational activities, such as the Munda Biddi Trail and Bibbulmun Track • Develop water based recreation assets in the region, such as Lake Ewlyamartup • Invest in outdoor recreation and sport precincts in major population centres • Promote the Great Southern as an outdoor recreation region of excellence • Leverage Katanning's RCDP initiatives and multicultural community to attract migration • Support small business and entrepreneurial opportunities around experiential tourism and community enterprise • Foster the strong tradition of volunteerism and support the development of future community leaders • Expand child and parent support centres program and other early child care/development services across the region • Increase availability of affordable housing • Explore options for expansion of public transport across the region • Develop regional community services information portal
Great Southern Environment	• Promote the region's high value, internationally recognised environmental assets as a point of difference for the region • Invest in the nature-based, experience and eco-tourism sector to take advantage of the region's natural assets • Increase sustainable access by residents and visitors to major environmental and ecological assets within the Great Southern • Continue to promote a culture of land care management and custodianship among farmers and landholders in the region • Expand of the knowledge-based economic sector associated with natural resource management research and service delivery • Promote joint management of conservation areas by Noongar people associated with the SWNTS • Support research and development around maintaining biodiversity and production values in current and projected climate conditions. • Develop renewable and clean energy generation to meet increasing demand • Support new and emerging production sectors associated with the changing climate • Expand carbon farming with associated land benefits of increasing woody perennial vegetation • Engage local governments in water harvesting and reuse and renewable energy generation • Engage local governments in the management of local natural areas with associated recreation and tourism uses

APPENDIX 3

MAJOR PROJECTS 2012-13

The following table presents active (i.e. funding committed, under construction or at practical completion) major projects in the Great Southern during 2012-13, showing the total value of each project.

PROJECT NAME	VALUE ($M)	LOCATION
Albany Health Campus	$170.4	Albany
Southdown Magnetite Feasibility Assessment	$150.0	Wellstead
Centennial Park Sporting and Recreation Precinct	$42.0	Albany
Katanning Saleyards	$24.5	Katanning
Albany Borefields	$24.0	Albany
Plantagenet Water Main Stage 1	$20.0	Albany
Denmark Waste Water Treatment Plant Upgrade	$11.0	Denmark
Frost/Sounness Recreation Precinct Redevelopment	$10.9	Mount Barker
National Anzac Centre	$8.8	Albany
Katanning RCDP Project	$8.8	Katanning
Munda Biddi Trail Extension	$6.2	Nannup to Walpole (SW region) / Walpole to Albany (GS region)
Mt Clarence Infrastructure Upgrade	$5.8	Albany
Community Services and Health Sciences Building	$5.8	Albany
Denmark Community Windfarm	$5.1	Denmark
Electricity Capacity Expansion	$4.8	Albany
Albany Gas Works Site Remediation	$4.4	Albany
Community Housing	$3.8	Albany
Restoration of Berths 1 and 2	$3.2	Albany Port
Albany Highway Widening	$3.0	Kojonup
Albany Highway Passing Lane	$2.5	Cranbrook
Hawthorn House	$2.0	Albany
Seniors Accommodation	$1.7	Tambellup
Redevelopment of the Denmark Golf Course and Clubhouse	$1.5	Denmark
Chester Pass Road Widening	$1.4	Borden
Morgan Richards Community Centre Refurbishment Project	$1.1	Denmark
Great Southern Highway Widening	$1.0	Cranbrook
Albany Ring Road Planning	$1.0	Albany
Total	**$524.7**	

APPENDIX 4

LOCAL GOVERNMENT PLANS

In 2010 the State Government introduced the Integrated Planning and Reporting Framework for Local Government. Each local government authority was required to prepare a Strategic Community Plan and Corporate Business plan that would outline the aspirational vision for the local government area in the next 10 years and guide the decision making for major projects.

The research, findings and projects identified in the plans and strategies listed below were key sources for this Blueprint to ensure it reflects the drivers, challenges and opportunities facing all aspects of the Great Southern economy and community.

LOCAL GOVERNMENT	DOCUMENT NAME	DOCUMENT DURATION	DATE ADOPTED
City of Albany	Community Strategic Plan	2013-2023	Adopted 25 June 2013
	Corporate Business Plan	2013-2017	Adopted 25 June 2013
	Workforce Development Plan	2013-2023	Adopted 25 June 2013
	Asset Management Plans: Overview Buildings Drainage Pathways Reserves Roads	-	Adopted 25 June 2013
	Disability Access and Inclusion Plan	2012-2017	Not specified
Shire of Broomehill-Tambellup	Strategic Community Plan	2012-2022	Revised June 2013
	Disability Access and Inclusion Plan	2010-2015	September 2010
Shire of Cranbrook	Strategic Community Plan	2013-2023	Adopted 26 June 2013
	Corporate Business Plan 2013	2013-2017	Adopted 26 June 2013
	Community Engagement Strategy 2013	2013-2017	Adopted 26 June 2013
	Workforce Plan	2013-2017	Adopted 26 June 2013
Shire of Denmark	Strategic Community Plan	2012-2031	22 October 2013
	Disability Access and Inclusion Plan	2013-2018	9 July 2013

LOCAL GOVERNMENT	DOCUMENT NAME	DOCUMENT DURATION	DATE ADOPTED
Shire of Gnowangerup	Strategic Community Plan	2012-2022	Not Specified
	Corporate Business Plan	2012-2016	Not Specified
	Disability Access Inclusion Plan	2011-2016	Not Specified
Shire of Jerramungup	Strategic Community Plan	2012-2025	Adopted November 2012
	Corporate Business Plan	2014-2017	Not Specified
	Long Term Financial Plan	2013-2028	7 June 2013
	Workforce Plan	2012-2016	Not Specified
	Asset Management Plan	-	Not Specified
	Disability Access and Inclusion Plan	2013-2018	Not Specified
Shire of Katanning	Katanning Community Plan	2013-2023	27 February 2013
	Katanning SuperTown Growth and Implementation Plan		March 2013
	Disability Access and Inclusion Plan	2011-2016	June 2013
Shire of Kojonup	Community Strategic Plan	2013-2023	May 2013
	Workforce Plan	2013-2017	15 October 2014
Shire of Plantagenet	Strategic Community Plan	2013-2023	Adopted 25 June 2013
	Corporate Business Plan	2013-14 to 2017-18	Adopted 27 June 2013
	Asset Management Plan (Stage 1)	-	Adopted 28 May 2013
	Long Term Financial Plan	2013-14 to 2022-23	Adopted 25 June 2013
	Workforce Plan	2013-14 to 2017-18	Adopted 25 June 2013
Shire of Woodanilling	Strategic Community Plan	2012-2022	Adopted 12 August 2013
	Corporate Business Plan	2012-2022	Adopted 12 August 2013
	Workforce Plan	2012-2016	Adopted 12 August 2013
	Information, Communication and Technology Plan	-	Adopted 21 May 2013
	Asset Management Plan	2013-2023	Adopted 12 August 2013

APPENDIX 5

MAJOR TOURISM ATTRACTIONS AND EVENTS

ATTRACTIONS	EVENTS
Castle Rock Skywalk (Porongurup Range National Park)	Great Southern Festival, the regional component of the Perth International Arts Festival
Valley of the Giants, Tree Top Walk (Walpole Wilderness Area)	Taste Great Southern
Bluff Knoll lookout (Stirling Range National Park)	Southern Art and Craft Trail
The Gap and Natural Bridge (Torndirrup National Park)	Hidden Treasures Bloom Festival
Bibbulmun Track and Munda Biddi Trail (multiple national parks and state and private land)	Numerous sporting and outdoor adventure events including surf boat carnivals, triathlons, cycling events, adventure races and speedway events
Point Ann and Twertup Field Studies Centre (Fitzgerald River National Park)	Katanning Harmony Festival
Greens Pool and Elephant Rocks (William Bay National Park)	Anzac Day Dawn Services
Southernmost point of Western Australia (West Cape Howe National Park)	Anzac Centenary Commemorative Events Program
Kodja Place	Albany Classic Motor Event
Oyster Harbour Fish Traps	Denmark Markets
Mungart Boodja Art Gallery	Mount Barker Grapes and Gallops
National Anzac Centre, Princess Royal Fortress Military Museum, Padre White Lookout	Denmark Festival of Voice
Albany Entertainment Centre and Waterfront	Porongurup Wine Festival
Yongergnow Australian Malleefowl Centre	Mount Barker Graze
Discovery Bay Tourism Experience (formerly Whale World)	
WA Museum Albany	
Brig Amity	

Note: Does not include commercial operators. Tourism in the Great Southern is also served by a number of significant attractions operated by the private sector.

APPENDIX 6

KEY METRIC ASSESSMENT DESCRIPTIONS

METRIC MEASURE	ASSESSMENT DESCRIPTION	INFORMATION SOURCE (AND, WHERE APPLICABLE, RELEVANT STATISTICS)
ECONOMIC GROWTH AND DIVERSIFICATION		
Unemployment rate	Unemployment rates and trends in the region	The Great Southern had an unemployment rate of 5.5 per cent as of June, 2013 compared to 4.3 per cent in June, 2012; slightly higher than the state average but similar to estimates for regional Western Australia (Department of Education, Employment and Workplace Relations)
Post school qualifications	Level and degree of post-school qualification attainment in the region	52 per cent of post school qualifications in the Great Southern were certificate level in 2011 compared to the state-wide proportion of 43 per cent; 25 per cent of non-school qualifications were bachelor or post graduate degrees in the Great Southern compared to 35 per cent in Western Australia (ABS Census)
Change in employment diversity	Trends in the share of employment by industry/ occupation in the region	16.1 per cent of jobs in the Great Southern were in Agriculture, Forestry and Fishing in 2011, down from 19.3 per cent in 2006; the shares of Public Administration and Safety, Education and Training, and Health Care and Social Assistance industries all increased by more than one percentage point between 2006 and 2011 (ABS Census)
Gross value of agricultural production	Estimated value of agricultural industry in terms of production value	The total value of agricultural production in the Great Southern averaged $961.5m per annum between 2007-08 and 2010-11 (ABS 7503.0)
Food production diversity	Estimated food production industries and values	Between 2007 and 2011, wheat was the biggest food product produced, by gross value, at 34 per cent of total food produced; followed by meat products at 28 per cent (ABS 7503.0)
Industry Concentration Index	Index of industry diversity	The number of significant industry segments divided by the percentage of total output of the largest segment; The Industry Concentration Index is currently calculated at 7 for the region. An index of 12 would be a desirable target for the region.
International tourist visitors	International tourist visitor numbers to the region over the last decade	There were an estimated 347,423 international visitor nights in the Great Southern in 2012, an increase of 46 per cent on 2002 levels (Tourism Research Australia)
Non-employing small business numbers (entrepreneurship)	Number of registered small businesses with zero employees	As of June 2012, 63 per cent or 4,383 registered businesses in the Great Southern were non-employing businesses, broadly unchanged from 2011 levels (ABS 8165.0)
Local business registrations	Business registrations by industry and employees	There were 6,962 registered business in the Great Southern as of June 2012, with the highest concentration in Agriculture, Forestry and Fishing (35.7 per cent); followed by Construction (13.5 per cent) (ABS 8165.0)
Personal incomes	Estimated average individual incomes in the region	The Great Southern had an average wage/salary of $37,573 in 2010-11 compared to the state average of $58,291 (ABS 6524.0)

METRIC MEASURE	ASSESSMENT DESCRIPTION	INFORMATION SOURCE (AND, WHERE APPLICABLE, RELEVANT STATISTICS)
ESSENTIAL INFRASTRUCTURE AND SERVICES		
Trade throughput of Albany Port	Value of trade throughput of Albany Port	Approximately 97 per cent of trade throughput at Albany Port between 2005 and 2012 was exports, based on tonnage; tonnage increased 12.6 per cent in 2011-12 but was below the 2008-09 peak (Ports Australia)
Albany airport passenger numbers	RPT passenger numbers through the Albany airport over the last decade	There were 58,371 RPT passengers through the Albany airport in 2012-13, a 70 per cent increase on levels in 2002-03 (Bureau of Infrastructure, Transport and Regional Economics)
Energy production and transmission	Energy source mix, reliability and capacity	Consultations with industry stakeholders
Road connectivity	Major road connections and capacity	Consultations with Main Roads Western Australia and industry stakeholders
Renewable energy	Renewable energy supply and potential capacity	There are three wind farms in the Great Southern with a total generation of 35.8 MW (Department of Finance); potential capacity information sourced from consultations with industry and relevant government departments and local governments
Rainfall patterns and water security	Rainfall patterns and reliability; potable water supply and constraints; and potential climate change effects	Consultations with local governments, Department of Water, Water Corporation, DAFWA, Forest Products Commission and Department of Fisheries; and relevant climate change research prepared by State and Commonwealth Government departments
KNOWLEDGE AND INNOVATION		
Education and health provision	Primary and secondary education, post school education and health service capacity and quality	Consultations with health service and education providers and relevant government departments
Research	Research capacity and quality	Consultations with UWA Albany and industry associations/bodies

METRIC MEASURE	ASSESSMENT DESCRIPTION	INFORMATION SOURCE (AND, WHERE APPLICABLE, RELEVANT STATISTICS)
COMMUNITY AND ENVIRONMENT		
Population growth	Population growth rates throughout the region	The Great Southern had an estimated population of 59,234 as of June 2013 and recorded average annual growth rates over the last decade of 0.9 per cent per annum (DRD & GSDC 2014)
Net migration	Net overseas, interstate and intra-state migration to/from the region	The Great Southern experienced net positive migration in 2006-07, 2007-08 and 2008-09 which was partly offset by net negative migration (i.e. more departures than arrivals) in 2009-10 and 2010-11 (ABS 3412.0)
Fertility rates	Annual births per number 1000 women (between 15-49 years of age) in the region	In 2011, the fertility rate in the Great Southern was 2.79 compared to 1.93 state-wide (ABS 3301.0)
Age profile	Share of population by age in the region compared to national/state proportions	In 2012, 30.4 per cent of the Great Southern population was 55 and over compared to 23.5 per cent state-wide; 15.7 per cent was aged between 20 and 34 in the Great Southern compared to 22.9 per cent state-wide (ABS 3235.0)
Indigenous disadvantage	Proportion of Indigenous residents in region and estimated level of socio-economic advantage and disadvantage (see ABS Socio-Economic Index)	4.5 per cent of Great Southern residents identified themselves as Aboriginal or Torres Strait Islander in 2011 compared to the state proportion of 3.8 per cent (ABS Census)
Culture and arts	Level of cultural and arts infrastructure and attendance in the region; including capacity to service infrastructure	Level of cultural and arts facilities and events sources from stakeholder consultations and GSDC. Total audience numbers for Great Southern Festival events were almost 20,000 in 2012, of which 10 per cent came from outside the region.
Sport and recreation	Level of sports facilities and recreational activity in the region	Consultations with the Department of Sport and Recreation and local government
National parks and environmental protections	Number, size and quality of national parks in the region	Consultations with industry and government stakeholders

APPENDIX 7
CONSULTATIONS

During the development of the *Great Southern Regional Investment Blueprint*, a comprehensive series of consultations took place with local communities, key regional organisations and all tiers of government including, but not limited to, those listed below. Consultations also took place with various private enterprise entities and with individuals through the public comment process. Individuals and private enterprise are not listed.

Albany Chamber of Commerce & Industry
Albany Enterprise Group
Albany Port Authority (now Southern Ports Authority)
Anglicare WA
Australia's South West
Bibbulmun Track Foundation
Centre of Excellence in Natural Resource Management
City of Albany
Country Arts WA
Denmark Chamber of Commerce
Denmark Tourism
Department of Aboriginal Affairs
Department of Agriculture and Food Western Australia
Department of Commerce
Department of Culture and the Arts
Department of Education
Department of Fisheries
Department of Housing
Department of Parks and Wildlife
Department of Planning
Department of Regional Development
Department of Sport & Recreation
Department of State Development
Department of Training and Workforce Development
Department of Transport
Department of Water
Disability Services Commission
Discovery Bay Tourism Experience
Gondwana Link
Grains Research & Development Corp
Great Southern Institute of Technology
Great Southern Wine Producers Association
Greenskills Denmark
Hidden Treasures of the Great Southern
Jaycees Community Foundation
Katanning Landcare District Committee
Katanning Regional Business Association
LandCorp
Main Roads Western Australia
Munda Biddi Trail Foundation
Perth International Arts Festival
Regional Development Australia - Great Southern
Regional Development Trust
Regional Development Council Secretariat
Shire of Broomehill-Tambellup
Shire of Cranbrook
Shire of Denmark
Shire of Gnowangerup
Shire of Jerramungup
Shire of Katanning
Shire of Kent
Shire of Kojonup
Shire of Plantagenet
Shire of Woodanilling
South Coast NRM
Southern Ports Authority (consulted as Albany Port Authority)
St John Ambulance
Tourism Council of WA
Tourism WA (includes Eventscorp)
UWA Albany Centre
Valley of the Giants Tree Top Walk
WA Country Health Service
Wanslea Family Services
Water Corporation
Western Australian Museum - Albany
Western Australia Police
Western Power
YMCA

ACRONYMS

Acronyms and initialisms used in the *Great Southern Regional Investment Blueprint*

ABS	Australian Bureau of Statistics
AEDC	Australian Early Development Census
ASW	Australia's South West
CENRM	Centre of Excellence in Natural Resource Management
CRC	Community Resource Centre
DAFWA	Department of Agriculture and Food Western Australia
DBNGP	Dampier to Bunbury Natural Gas Pipeline
FIFO	Fly-in fly-out
GRP	Gross regional product
GSDC	Great Southern Development Commission
GSIT	Great Southern Institute of Technology
GSTWSS	Great Southern Towns Water Supply Scheme
HEI	Higher education institution
ICT	Information and communications technology
LGSTWSS	Lower Great Southern Towns Water Supply Scheme
NBN	National Broadband Network
NRM	Natural resource management
RCSWA	Rural Clinical School of Western Australia
RCDP	Regional Centres Development Plan
RDA-GS	Regional Development Australia - Great Southern
SWIS	South West Interconnected System
SWNTS	South West Native Title Settlement
UWA	University of Western Australia

ABS – see Australian Bureau of Statistics.

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