



Gascoyne

Regional Investment

Blueprint

Gascoyne
Development
Commission



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The Gascoyne Development Commission acknowledges the contribution of a number of individuals and organisations in the production of this Blueprint. It is a result of extensive consultations with a broad cross-section of the region's stakeholders.





Tony Beard
Chair, Gascoyne Development
Commission

The Gascoyne region in the north-west of Western Australia is rich in resources and investment potential with stunning natural beauty and a strategic central location. The region stretches 600 km along the Indian Ocean coast including two World Heritage Areas, and over 500 km inland through dramatic desert country beyond the iconic Mount Augustus, the world's largest monocline. With an area of 135,277 km square and a population of 10,300, the Gascoyne is known to have the lowest population density of any region in Australia. Despite this, the region is a very important contributor to the Western Australian economy, with its gross regional product (GRP) in 2012/13 being \$869 million or 0.4%¹ of gross state product.

The *Gascoyne Regional Investment Blueprint* establishes the evidence, framework and strategies for the Gascoyne to grow further through informed investment decisions; and contribute more in a national and global environment. It includes consideration of megatrends; the unique characteristics of the Gascoyne; and the regional drivers and inhibitors that will influence development.

We are proud of our vision and associated strategies which have been created after engagement and extensive consultation with our regional, state and national stakeholder partners.

Only through sharing the vision, collaboration and commitment across all levels of government, the private sector and the community will we secure the current and future opportunities of the Gascoyne.

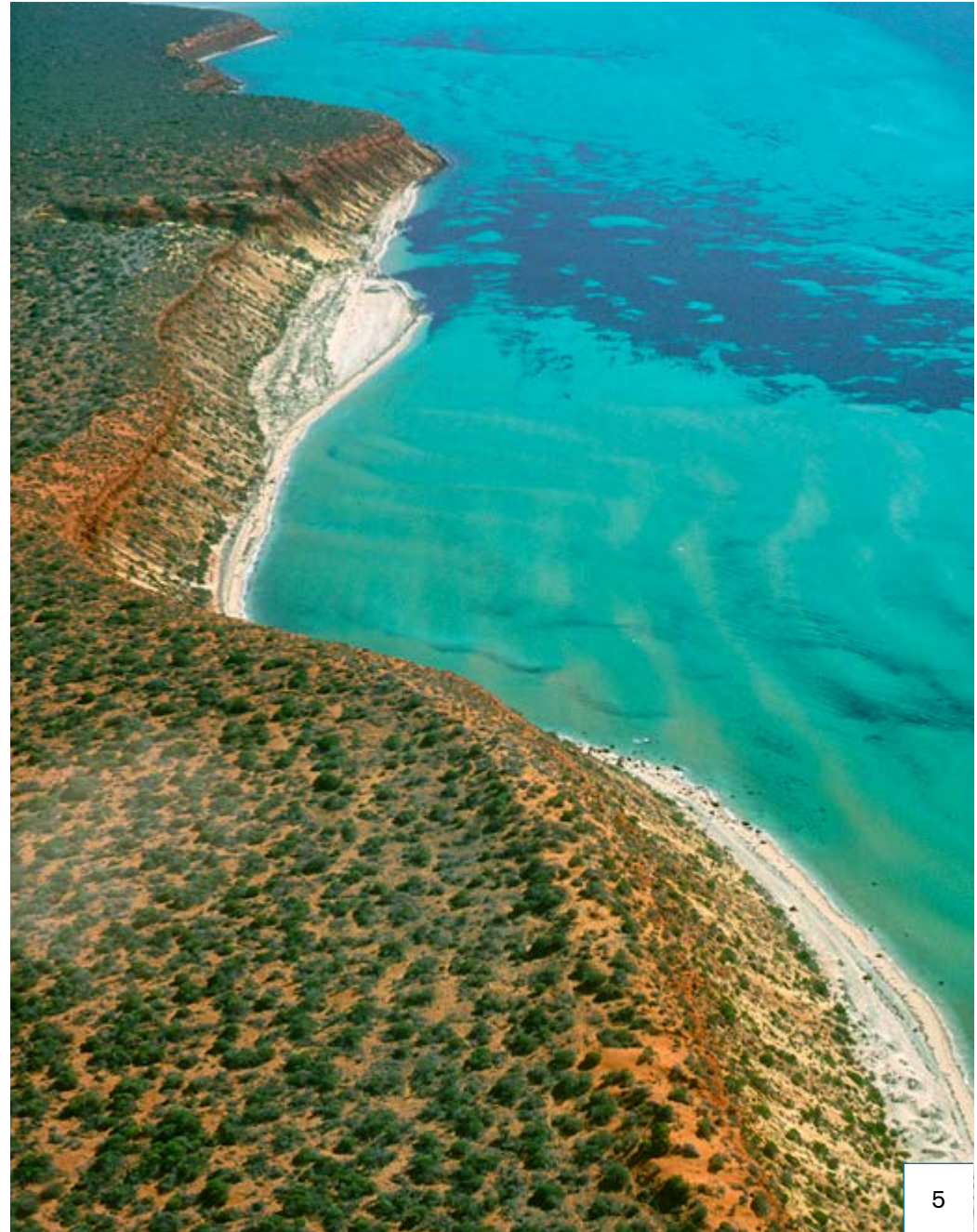
I look forward to the journey with you.

A handwritten signature in dark ink, appearing to read 'Tony Beard', with a stylized flourish at the end.

Tony Beard
Chair, Gascoyne Development Commission

Gascoyne **vision** **2050**

Strategically located on the central coast of Western Australia the Gascoyne is an internationally recognised tourism destination, a reliable global provider of quality food products and a maritime hub for energy project supply chains. With its high value, diverse and future proof industries, 23,000 people will call the Gascoyne home by 2050².



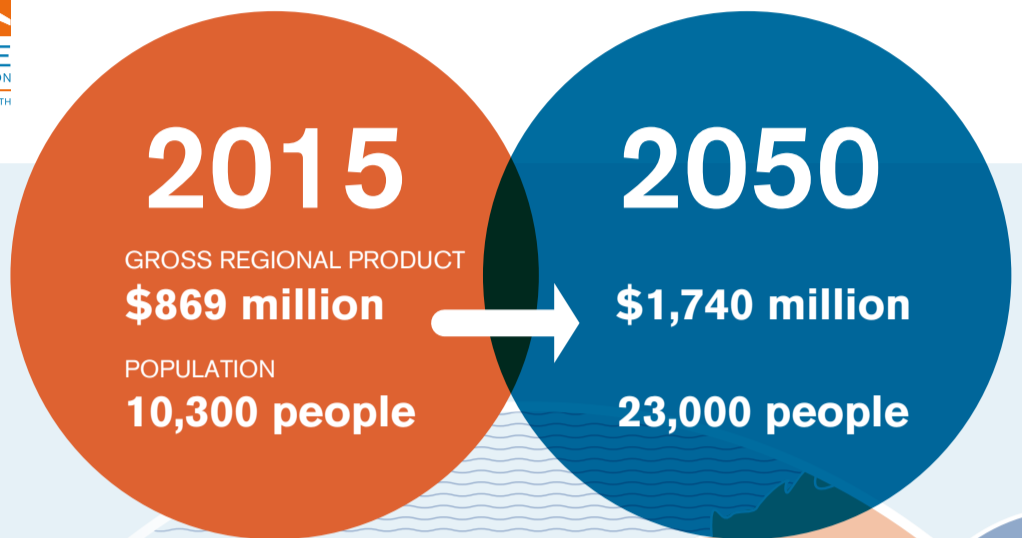
ENRICHING AUSTRALIA THROUGH

THE GASCOYNE REGION



VISION 2050

Strategically located on the central coast of Western Australia the Gascoyne is an internationally recognised tourism destination, a reliable global provider of quality food products and a maritime hub for energy project supply chains. With its high value, diverse and future proof industries, 23,000 people will call the Gascoyne home by 2050 (see page 59, Population Growth Forecast).



Tourism

	2015	2050
Tourist expenditure	\$222 m	\$686 m
Employment -total workforce	500	1,334
5 star resorts	0	3
Improved Aviation Services (flights per week)	40	76



Pastoral

	2015	2050
Pastoral leases	67	67
Value of annual production	\$35 m	\$60 m
Employment -total workforce	134	200
Feed lots	No	Yes
Irrigated pasture	No	Yes
Abattoir	No	Yes



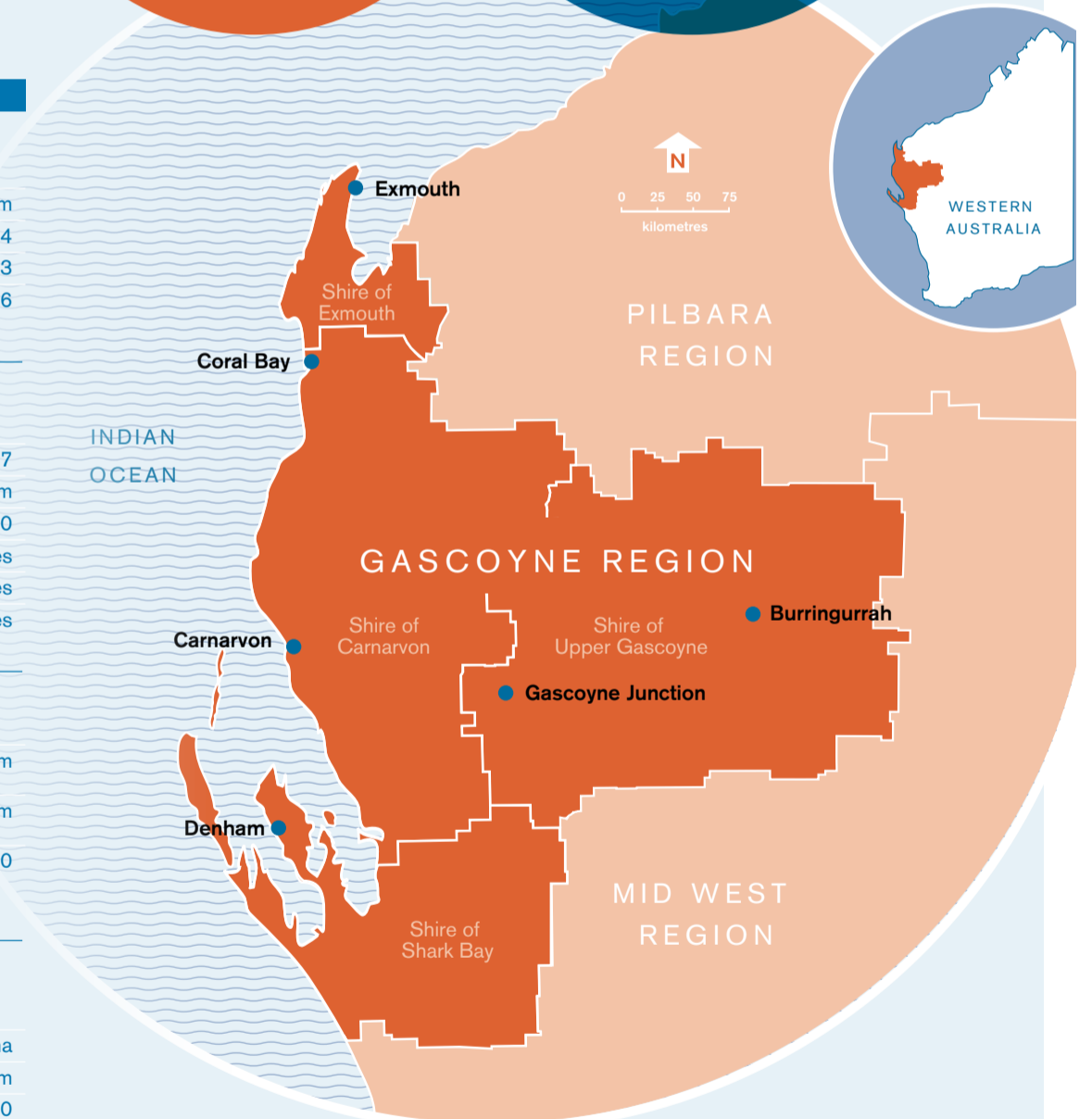
Fishing and Aquaculture

	2015	2050
Value of annual production - fishing	\$40 m	\$50 m
Value of Annual production - aquaculture	\$10 m	\$30 m
Employment - total workforce	80	130



Horticulture

	2015	2050
Area under cultivation	1,200 ha	3,600 ha
Value of Annual production	\$ 80 m	\$232 m
Employment - total workforce	375	1,100
Direct international export	No	Yes



Resources

	2015	2050
Salt		
Annual production (tonnes)	4.2 m	9 m
Value of Annual production	\$100 m	\$233 m
Operating area	1,200 ha	2,200 ha
Employment -total workforce	250	500
- 20% Aboriginal	50	100
Minerals (Gunson Resources)		
Annual production (tonnes)	0 m	23.4 m
Employment - total workforce	0	175
-20% Aboriginal	0	35
Indirect jobs	0	400



Population Services

	2015	2050
Ageing in Place / Health		
High care places	18	150
Independent living places	96	300
Hospitals	2	2
Employment - total workforce	300	750
Education		
Number of Students	884	1,800
Employment - total workforce	312	600

The above GRP figures are not inclusive of all industries in the Gascoyne. All 2015 data is forecasted from previous years' statistics.

THE 6 TRANSFORMATIONAL PILLARS OF THE GASCOYNE REGION 2015 - 2050

VISION 2050

Strategically located on the central coast of Western Australia the Gascoyne is an internationally recognised tourism destination, a reliable global provider of quality food products and a maritime hub for energy project supply chains. With its high value, diverse and future proof industries, 23,000 people will call the Gascoyne home by 2050.

Transformational Pillar	1 Developing Industries & Markets	2 Improving Regional Accessibility & Connectivity	3 Advancing Human Capacity & Knowledge	4 Encouraging Innovation	5 Developing Aboriginal & Small Business Economic Capacity	6 Enhancing Health & Lifestyle
Strategic Themes	Protecting the Environment & Natural Amenity Diversifying the Regional Economy Human Capacity Building Intensifying & Expanding Food Production Growing Incomes Addressing Affordability Maximising Private Sector Investment	Diversifying the Regional Economy Intensifying & Expanding Food Production Human Capacity Building Growing Incomes Maximising Private Sector Investment Social Capital	Population Critical Mass Diversifying the Regional Economy Human Capacity Building Growing Incomes Addressing Affordability Maximising Private Sector Investment Social Capital	Protecting the Environment & Natural Amenity Diversifying the Regional Economy Human Capacity Building Maximising Private Sector Investment Social Capital	Population Critical Mass Diversifying the Regional Economy Human Capacity Building Intensifying & Expanding Food Production Growing Incomes Addressing Affordability Maximising Private Sector Investment Social Capital	Population Critical Mass Human Capacity Building Social Capital
Regional Imperatives	Food Production Tourism - Destination First Choice Resources Services & Supply Chains	Food Production Tourism - Destination First Choice Population Services Resources Services & Supply Chains	Population Services	Tourism - Destination First Choice Population Services Resources Services & Supply Chains	Food Production Tourism - Destination First Choice Population Services Resources Services & Supply Chains	Population Services
Megatrends	National Defence Global Food Consumption Mineral Resource & Energy Investment International Tourism	Global Food Consumption Mineral Resource & Energy Investment International Tourism	Affordability & Cost of Living Global Food Consumption Mineral Resource & Energy Investment	Mineral Resource & Energy Investment. International Tourism Climate Change Broadband and Digital Age	Global Food Consumption International Tourism Resource Demand	Affordability & Cost of Living Population Ageing
Comparative Advantages	Food Production Resource Project Support Domestic & International Tourism Lifestyle & Natural Amenity	Food Production Resource Project Support Domestic & International Tourism	Food Production Resource Project Support Lifestyle & Natural Amenity	Domestic & International Tourism Lifestyle & Natural Amenity	Food Production Resource Project Support Domestic & International Tourism	Lifestyle & Natural Amenity
Key Challenges	Water security Transport linkages Climatic conditions Workforce security Fluctuating demand Consistent quality Exposure to international markets Lack of local services & infrastructure	Increasing fuel costs Sustainability of routes	Lack of critical mass Lack of local services (education, health, retail) Regional migration Lack of regional governance, leadership and capacity	Climate change Lack of investment in renewable energy Broadband infrastructure Financial viability of remote research centres Distance and isolation	Procurement opportunities Lack of regional governance, leadership and capacity Investment attraction On - line procurement (shopping)	Lack of critical mass Lack of local services (education, health, retail) Regional migration Ageing population Socioeconomic disadvantage
Key Measures of Success	Implemented Gascoyne Regional Tourism Strategy Secure water supply Food production >\$370M ↑ Value added food product ↑ Resource Sector Contracting > 400,000 overnight visitors, ↑international	Growing & diverse employment base Supply chain hub of choice Quality, affordable & regular aviation service ↑ Quality of road & key bridge structures Internet connectivity & services = metro	Implemented Gascoyne Workforce Development Plan Balanced age profile Enhanced Secondary & Tertiary education Educational qualifications & outcomes = State Regional average ↑ Governance capability	Implemented Gascoyne Energy Strategy Agreed strategies to address impacts of climate change Development & operation of research facilities ↑ Eco Accommodation ↑ Use of technology for service delivery	Expanded economy Active businesses > State regional average Broadband take-up = regional State average ↑ Aboriginal Enterprise Small business incubator Established new businesses > State regional average	↑ Population Quality local Aged Care accommodation ↑ Locally based government services > Community facilities ↑ Affordable housing High quality culture & arts experiences & employment ↓ Welfare dependence



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Australia is well-positioned in a volatile world economy. Our geographical location, particularly Western Australia, combined with our natural and human capital has enabled us to benefit from the growth of the Asian economies at a time when the economic strength of the world is shifting to the East. Over the last two decades, the share of Australia's merchandise exports to emerging Asia increased from 13 per cent to 42 per cent. Over the same period, the share of Australia's merchandise exports to advanced economies declined from 78 per cent to 50 per cent.

Centrally located on the coast of Western Australian, the Gascoyne is ideally positioned, geographically, economically and culturally, to thrive on this expanding opportunity.

The Gascoyne Regional Investment Blueprint (Blueprint) is an aspirational plan, developed through extensive consultation and strongly supported by evidence; designed to map the way forward for the region, identifying opportunities, barriers and strategies to guide investment and development.



China and India's re-engagement with the global economy brings with them "a middle class that will soon outnumber the rest of the world combined. The middle class in the Asia-Pacific region currently numbers around 500 million and is expected to grow to 3.2 billion by 2030. These people will want better services, goods and experiences."

**Dr Michael Parkinson,
CEDA 18 June 2012**

Purpose and Process

This Blueprint will guide the region's progress towards its vision for the period to 2050. To do this, the Blueprint 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 build human capacity, drive economic growth, stimulate job creation and develop 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.

Developing the Blueprint involved eighteen months 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.

The diagram opposite depicts the logic of the Blueprint development process.

Development Process Logic



Methodology

The Gascoyne Regional Investment Blueprint is an evidence-based strategic economic and social development plan for the region. Its structure is based on the “4Ps” of effective and practical economic development plans, which include:

- Perspective
- Profile
- Potential
- Projects

These plans are the basis for the logical process of developing the Blueprint.



Perspective – analysis 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;

MEGATRENDS

Profile – outline of the characteristics of the region, including population, demographic, socio-economic, industry, business, social and community features and attributes;

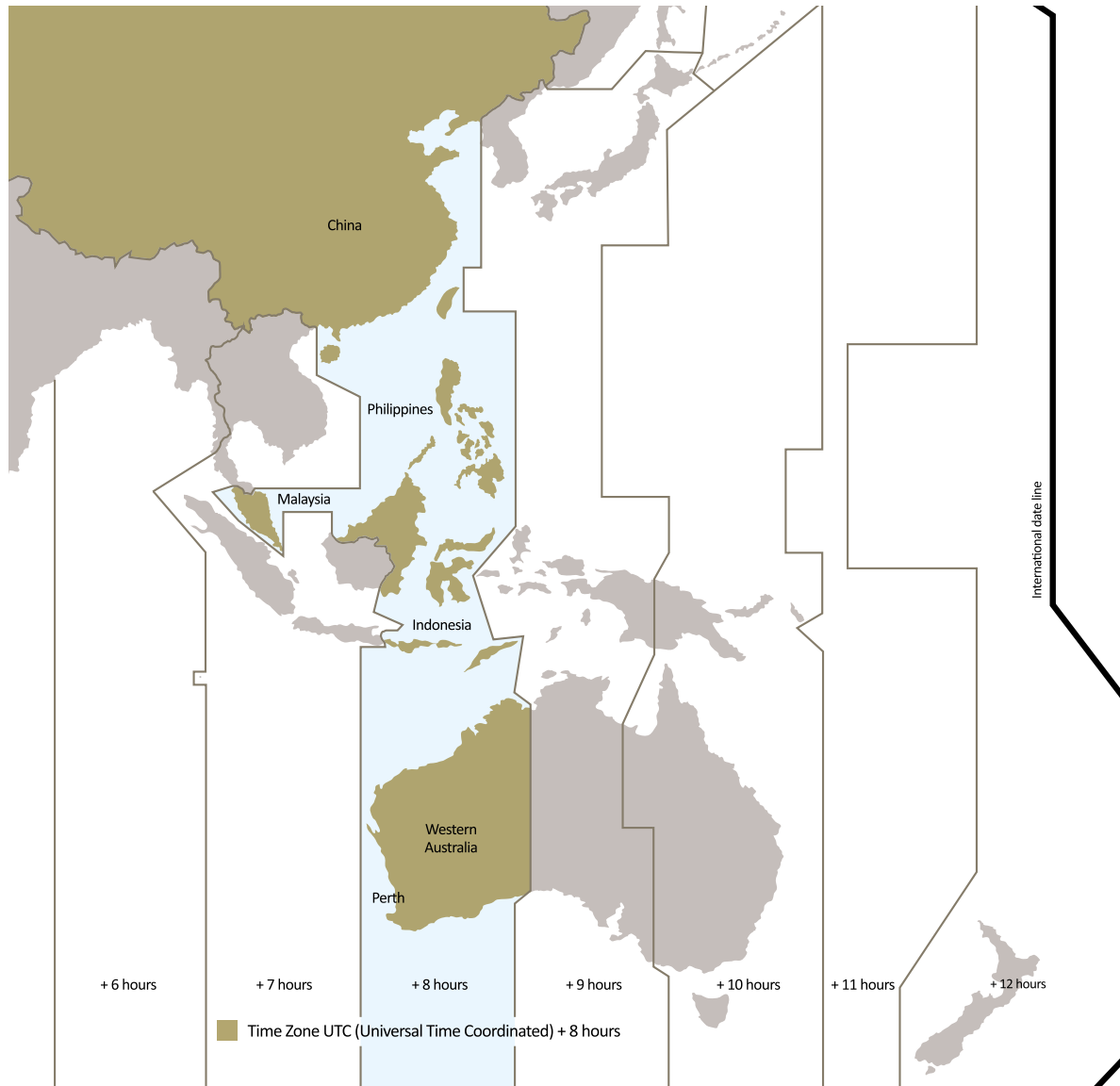
REGIONAL OVERVIEW

Potential – assessment of the drivers and challenges facing the economy and outline of the future economic opportunities of the region;

STRATEGIC THEMES AND REGIONAL IMPERATIVES

Projects – identification of key actions, initiatives, strategies and investments required of stakeholders of the region to support the realisation of the aspirational vision and regional imperatives.

TRANSFORMATIONAL PILLARS /PROJECT IMPLEMENTATION



Department of Planning - State Planning Strategy.

Strategic Themes

In order to achieve the Blueprint's Vision for the Gascoyne region it is necessary to identify the strategic themes that will carry the robust structure of the Blueprint. The nine strategic themes identified provide a focus that is sustainable in the long term. These themes were revealed, through consultation, as being important to our stakeholders. Therefore activities identified within these themes need to be prioritised and measured for success. These are listed below:

- Population Critical Mass
- Protecting the Environment and Natural Amenity
- Diversifying the Regional Economy
- Human Capacity Building
- Intensifying and Expanding Food Production
- Growing Incomes
- Addressing Affordability
- Maximising Private Sector Investment
- Social Capital

Achieving the Blueprint's Vision for the Gascoyne region will be guided by an understanding and appreciation of the nine Strategic Themes.

Population Critical Mass

Achieving a critical mass of population in the Gascoyne (23,000 residents by 2050) is essential to normalising regional property and labour markets, justifying the supply of quality infrastructure and enhancing the sustainability and resilience of the regional economy.

Protecting the Environment and Natural Amenity

The capacity of the Gascoyne to attract new residents, tourists, skilled workers and investment is contingent on developing employment opportunities while maintaining the natural environment. The region's environmental attributes are fundamental economic assets and economic growth must be managed in a way that sustainably protects these assets.

Diversifying the Regional Economy

Increasing the diversity of employment, industry value adding and economic activity is critical to enhancing the Gascoyne's prosperity within a competitive global environment. Diverse economies are more sustainable and are able to respond rapidly to emerging challenges and opportunities.

Human Capacity Building

People are the primary asset of any economy. Productivity, innovation and entrepreneurship coupled with governance and strong leadership are all essential elements of modern economies and building the capacity of the regional workforce and communities is critical to driving future prosperity.

Intensifying and Expanding Food Production

The comparative advantage of the Gascoyne region in food production needs to be further actioned for the region to achieve its economic potential. This includes continued introduction of partial and complementary cropping onto pastoral land and the attraction of domestic and international investment into horticultural, pastoral and aquaculture production.

Growing Incomes

The tourism and agriculture sectors are the largest employers in the region⁴. Value adding to the services and products of these sectors, increasing the skills profile of the labour force and further involvement in the mining and energy resource project supply chains is critical to growing the regions incomes. Value adding to these sectors, increasing the skills profile of the labour force and further involvement in to major mining and energy resource project supply chains is critical to growing incomes and maintaining and enhancing the purchasing power of households.

Addressing Affordability

Attracting new residents and households requires improvements in housing affordability across the region to be achieved and maintained over time, through effective land and housing supply and increases in household purchasing power (i.e. incomes).

Maximising Private Sector Investment

Identifying opportunities for private sector investment to contribute to the achievement of the Vision is critical to the success of the Blueprint. This requires identifying and analysing opportunities and promoting them to national and international markets and investors.

Social Capital

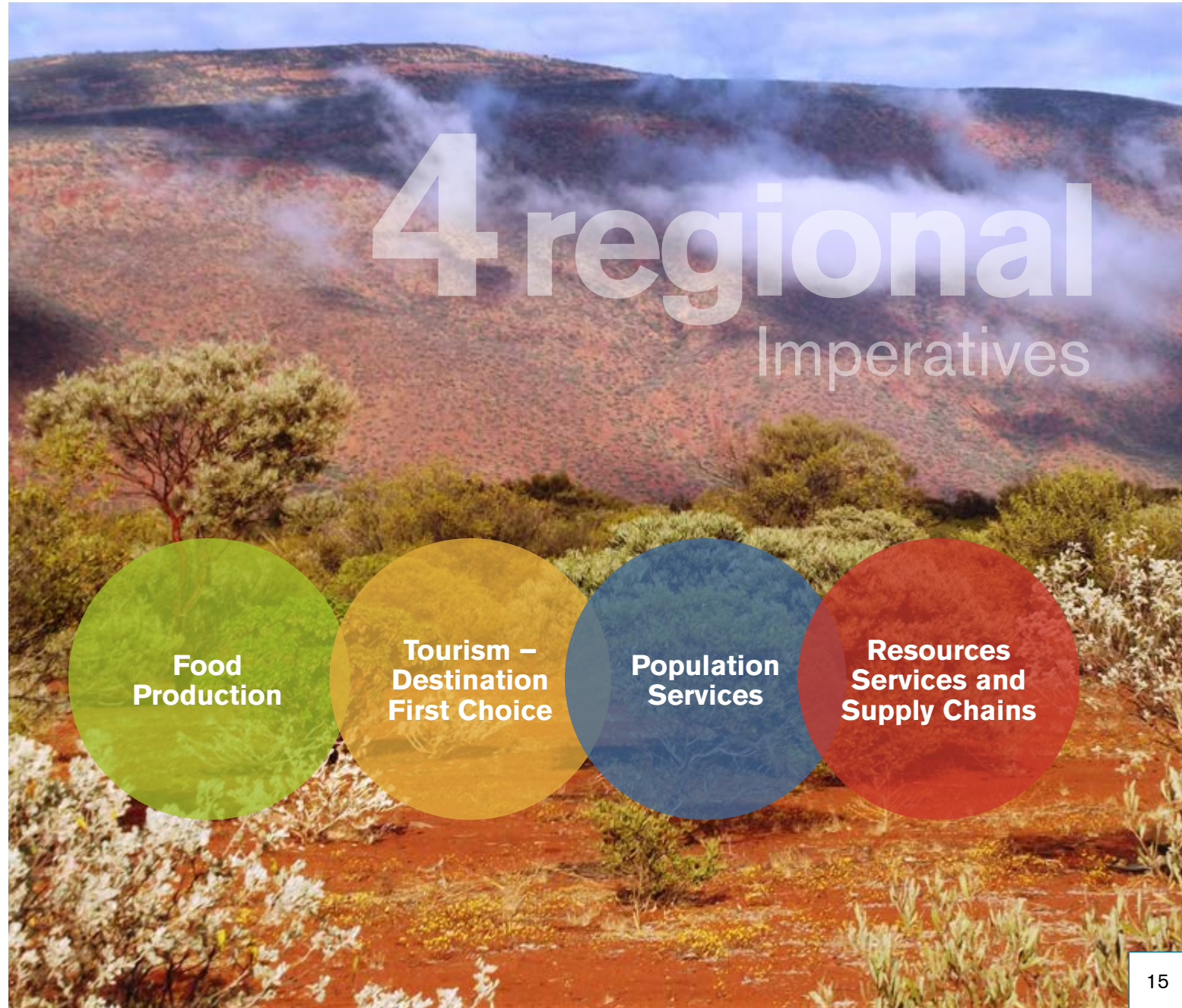
Community infrastructure can act as an 'attractor' which encourages people to live in or visit a particular area. Given that a key component of a sustainable community is diversity, providing a range of quality community infrastructure can help to attract and retain a diverse population. Investment in social capital will be an essential component to achieving the Blueprint Vision.

Regional Imperatives

Through consultation and analysis, four Regional Imperatives have been identified as central to the economic development and prosperity of the Gascoyne. These are Food Production, Tourism – Destination First Choice, Population Services and Resources Services and Supply Chains.






These Imperatives reflect those areas of the economy and society where actions from stakeholders would likely result in the greatest transformational effect. By prioritising investments that relate to these imperatives, the aspirational Vision for the Gascoyne can be achieved.

The Regional Imperatives are supported by the six Transformational Pillars. Transformational Pillars identify the strategic and functional environment within which specific projects will be identified and investments prioritised in order to have the greatest positive economic and social outcomes for the Gascoyne.



Transformational Pillars

The Gascoyne is a well known food producing and tourism region with an attractive lifestyle and climate within a pristine natural environment; attributes which will underpin the future economic and social success of the region. Six transformational pillars have emerged from the consultative process that when enabled will facilitate the Gascoyne achieving its Vision.

1 Developing Industries & Markets	2 Improving Regional Accessibility & Connectivity	3 Advancing Human Capacity & Knowledge	4 Encouraging Innovation	5 Developing Aboriginal & Small Business Economic Capacity	6 Enhancing Health & Lifestyle
					
					
					
					

1

Developing Industries & Markets



Opportunities and Challenges

Tourism is acknowledged as the leading industry by value and a major economic driver supporting the Gascoyne's economy.

With two World Heritage Areas, numerous National parks, and inclusion in Tourism Australia's iconic National Landscapes program, the region has the opportunity to enhance its tourism potential through a collaborative regional approach.

Private sector investment is essential in the development of tourism attractions and accommodation, while an integrated tourism offering with associated branding and marketing has been identified as a key requirement for the sector.

Global demand for quality food is expected to grow rapidly in coming years as countries, particularly Asian, grow in population and affluence. World food supply chains will increasingly seek reliable and stable production regions throughout the world in which to invest and establish commercial relationships. The Gascoyne's mild sub-tropical climate, secure water supply and abundant land provide the opportunity for quality horticulture products to be produced for both domestic and international markets. The recent flood mitigation works will protect the valuable production land and key infrastructure while the State Government's "Seizing the Opportunity" program will provide

internationally recognised biosecurity and water security to the region.

Water security will provide pastoralists with the opportunity to diversify product mix and improve livestock feed through the introduction of partial and complementary irrigated cropping.

Aquaculture represents a significant opportunity for the region. Global seafood demand continues to grow and by 2018, aquaculture is expected to overtake wild capture as the primary source of production. Major private sector investment is required to realise this opportunity.

The Gascoyne, particularly the town of Exmouth, is strategically located adjacent to expanding oil and gas fields. Therefore it is well positioned to provide resource sector support, including marine services support and also to act as a forward base for the Australian Defence Force.

Realising these benefits requires investments in marina, harbour, road, water security and aviation infrastructure in the region.

Significant challenges are the need to increase local labour market efficiency, provide employment opportunities and ensure a competitive level of communications connectivity.

1

Developing Industries & Markets



Measures of Success

- Successful implementation of the Gascoyne Regional Tourism Strategy recommendations.
- Attract over 400,000 overnight visitors per year with an annual percentage increase of international tourists.
- An integrated tourism offering and brand that is internationally recognised in media travel and tourism publications.
- Visitor satisfaction consistently at or above national averages.
- Increasing proportion of tourism business and economic enterprises owned and operated by members of the Gascoyne Aboriginal community.
- Have a quantified, secure and climate independent water supply.
- Residential population growth at 1.5% or greater per annum to achieve a population of 23,000 and seasonal (including temporary and FIFO) population of 35,000 people by 2050.
- A growing, sustainable and diversified economy, with a Gross Regional Product per capita at or above the State average.
- A strong and proactive industry group, promoting regional food development and the Gascoyne brand.
- Produce over \$370 million in food products from a combination of horticulture, aquaculture and livestock production, with an increasing reliance on international export.
- Value added food product as a percentage of total food value increasing year on year.
- Higher shares of business and economic enterprises owned and operated by members of the Gascoyne Aboriginal community.
- The value of resource sector contracting to the Gascoyne based businesses is increasing year on year.
- Reducing welfare dependence, that is reducing the percentage of the populations dependent on government support as the main household income source, at or below the State regional average.
- Shire of Exmouth, GDC and local businesses work together to support and facilitate ADF presence expansion.
- Increased food production will be derived from 3,000 hectares of irrigated land in full production in the Carnarvon area.
- Partnerships developed to support needed infrastructure, such as a multi-purpose deep water wharf at Exmouth.

2

Improving Regional Accessibility & Connectivity



Opportunities and Challenges

The size of the Gascoyne and the distribution of population centres and economic assets through the region necessitates the development of a quality, accessible and affordable network of air, sea and road transport and communications infrastructure.

Ease and safety of movement to and within the region is challenging for both residents and visitors. Aviation services are relatively expensive and infrequent to Shark Bay and Carnarvon while Exmouth has a more regular and affordable service. Apart from within towns and the major highways, most roads are unsealed and subject to adverse weather conditions. The access to the internet is limited and slow.

Specific challenges are associated with this situation:

- Reduced number of tourists affecting their length of stay and regional expenditure.
- Unreliable access to essential services and facilities by remote and rural populations.
- Significant safety issues with unsealed roads.
- Lack of improvement to rural and remote airfields are restricting residents' access to essential and emergency services.

- Basic airline service distribution infrastructure such as a Global Distribution System (GDS) which is generally accessed by domestic and international travel agencies and operators is required to properly service the Carnarvon and Shark Bay market.
- Poor internet

The location of Carnarvon midway between Perth and the mining regions of the Pilbara provides an opportunity for the development of a service and logistics hub for resource sector industries.

Better transport options will further enable the food and tourism industries to achieve their potential, nationally and internationally.

2

Improving Regional Accessibility & Connectivity



Measures of Success

- A growing and diverse employment base, with greater shares of population and professional services.
- Being recognised by mining and energy companies as a logistics and supply chain hub of choice.
- Infrastructure corridors connect economic activity areas.
- An integrated tourism offering that is internationally recognised in media and travel and tourism publications; and
- Gascoyne residents being able to access a choice of quality, affordable and regular movement services, particularly bus and aviation service.
- The efficiency of movement networks is continually improved.
- A coordinated and efficient freight logistics system incorporating and integrating road, sea and air transport.
- Gascoyne residents and businesses have extensive access to high-speed and reliable digital infrastructure, including for education and health services.
- Telecommunications are a matter of consideration in planning frameworks, planning schemes and development decisions.
- New criteria for Air Service Deeds and improved methods of Deed management.
- All commercial air services in the Gascoyne are part of an aviation industry Global Distribution System (GDS) resulting in improved connectivity with domestic and international airlines.
- Availability of Global Distribution System (GDS).

3

Advancing Human Capacity & Knowledge



Opportunities and Challenges

Regional leaders must be nurtured and equipped with skills to advocate for and respond to the specific needs of the Gascoyne and to negotiate more appropriate and effective relationships and partnerships with external influences. Enhancement of governance and leadership skills within the business, government and community sectors has the potential to improve the resilience, dynamism and prosperity of the Gascoyne economy.

Opportunities exist for the use of evolving communications technologies to access new and better education and training pathways.

The perceived quality and scope of education currently offered in the Gascoyne impacts significantly on the attraction and retention of residents and workers in the region. While high school leaving rates and early childhood outcomes are close to the national average, the learning outcomes for primary and secondary school students overall are low.

Opportunities for enhanced regional educational experiences and outcomes will impact positively on the attraction and retention of skilled workers and families to the region.

Measures of Success

- Increased capacity of the Gascoyne workforce due to the implementation of the Gascoyne Workforce Development Plan.
- A more balanced age profile in line with Western Australian averages, with higher population aged 15-34 than current.
- School outcomes and attendance equal to or above the State regional average.
- Enhanced secondary and tertiary education, providing a quality and scope of service more comparable to metropolitan Perth.
- A larger and more diversified economy, with a Gross Regional Product per capita within 5% or above the State average.
- A suitably trained workforce to supply the new and expanding workforce demands in the region.
- Governance capability in regional organisations and communities meeting national standards.
- Completion of the Ningaloo Centre - a modern eco-friendly and iconic multipurpose facility which will include a library, exhibition, cafe, and educational and research spaces.
- Develop and deliver targeted training programs to address skill gaps in partnership with training institutions and industry, including the resource sector.
- Achieve Australian Early Development Index scores above the State regional average.

4

Encouraging Innovation



Opportunities and Challenges

The necessity of addressing the region's remoteness, poor accessibility and distance between communities, combine to make the Gascoyne an ideal incubator for innovative solutions. Education and health optimising the utilisation of e-learning and tele-health; small businesses utilising B2B, expanded food and fodder production through innovative water utilisation, developing niche markets and products are all possible future examples.

However, there are also new opportunities in other areas

- value adding to food products through new facilities such as a multi-food processing plant utilising otherwise wasted horticultural product
- design and develop new training programs and approaches in partnership with training organisations, community and industry
- facilitating the development of new ideas in the arts, enabling greater creativity and partnerships, leading to new economic and social benefits
- Eco-accommodation and adventure tours in remote tourist areas

The Gascoyne has an opportunity to become a leader in the utilisation of renewable energy, with vast areas of land, high annual solar insolation and high alternative fuel costs for the production of electricity. Already, several communities along the region's coastline (Denham and Coral Bay) harness the wind, with wind turbines contributing

to their diesel generated electricity and offsetting the cost.

The development and implementation of renewable energy will be integral to the broader economic development strategy for the region. Energy is fundamental for all of the region's economic activities such as tourism, pastoralism, agriculture, fishing, mining and transport.

A range of potential challenges have been identified; a lack of investment in renewable energy; reduced roll out of optimum broadband infrastructure; financial viability of research centres in Exmouth and Shark Bay; sufficient and reliable water supplies, accessibility and transport.

Measures of Success

- Increased adaptive long term energy planning and coordination through the implementation of the Gascoyne Energy Strategy.
- Development of the Gascoyne Climate Change Strategy facilitating and informing appropriate actions to protect current and future assets.
- Development and operation of research facilities at Exmouth and Shark Bay.
- Increased development of eco accommodation within the Gascoyne.
- Expansion of agriculture research in the Gascoyne, particularly Carnarvon.
- Increased provision of services utilising technology in areas such as business, education and health.

5

Developing Aboriginal & Small Business Economic Capacity



Opportunities and Challenges

The growth of the small business sector is critical to economic development and employment in regional centres. With changes in technology and purchasing practices it is imperative that small business operators; existing and potential, are well educated and supported in all aspects of modern business strategies and technology.

- The Gascoyne is centrally located on the coast of Western Australia and adjacent to mining areas in the Pilbara and Mid West regions. With the attraction of investment into pastoral, tourism and supply chains, small businesses have a number of opportunities to expand and prosper. Carnarvon, the regional centre for the Gascoyne has a business density of 113.4 per 1,000 population which is well above the national average of 93.8 per 1,000 population and a strong base from which to expand.
- There are a small number of Aboriginal businesses operating across the Gascoyne, which are diverse in nature. These businesses have access to only a limited level of Aboriginal economic development support. In the Gascoyne region, specific Aboriginal economic development support is primarily provided from outside the region, namely from Geraldton and Perth.

To address these issues, strong links must be developed with industry and support organisations to build capacity, mentor and foster development of Aboriginal enterprises. This includes drawing upon the lessons learnt by other parts of regional Australia, including the establishment of Aboriginal economic development and industry partnership plans, as well as regional Aboriginal employment strategies with on-ground dedicated support.

Measures of Success

- The number of active businesses per 100 people at or above the state regional average.
- 100% availability of connection to high speed internet through National Broadband.
- Being recognised by major mining and energy companies as a logistics and supply chain hub of choice in central WA; and
- Have share of business and economic enterprises owned and operated by members of Gascoyne's Aboriginal community close to or greater than the population proportion.
- Establish an Aboriginal Economic Development Officer.
- Establish a small business incubator in partnership with Business Local.
- Number of new businesses established at or above the State regional average.
- Host a biannual regional economic forum.

6

Enhancing Health
& Lifestyle

Opportunities and Challenges

The Gascoyne's natural amenity underpins the attraction and retention of residents and visitors alike. The climate and landscape encourage participation in outdoor pursuits, including sport and leisure activities, creating opportunities for enhanced health and wellbeing. The improvement of locally available sport and recreation facilities will foster healthy lifestyle and help to attract and retain residents.

Lack of population critical mass impacts on the provision of resident health services and the frequency of visiting health services, however opportunities exist for the strengthening of partnerships with primary care providers including local general practitioners and Aboriginal medical services.

The current redevelopment of the health campuses in Carnarvon and Exmouth will enhance the delivery of safe, high quality, evidence-based health care in the community that includes health promotion and early intervention. A future increase in primary health services (including General Practice) across the region would improve health outcomes and reduce the number of non-urgent hospital ED presentations. However, the fundamental issue in sustaining health service delivery in the Gascoyne is the ability to attract and retain staff and visiting specialists. This can be addressed holistically through the implementation of the six Transformational Pillars.

The current lack of aged care infrastructure within the region is in stark contrast to the demographics of an ageing population. The demand for aged care services in the Gascoyne is expected to continue expanding due to the growth in older age groups and the increasing prevalence of chronic disease.

6

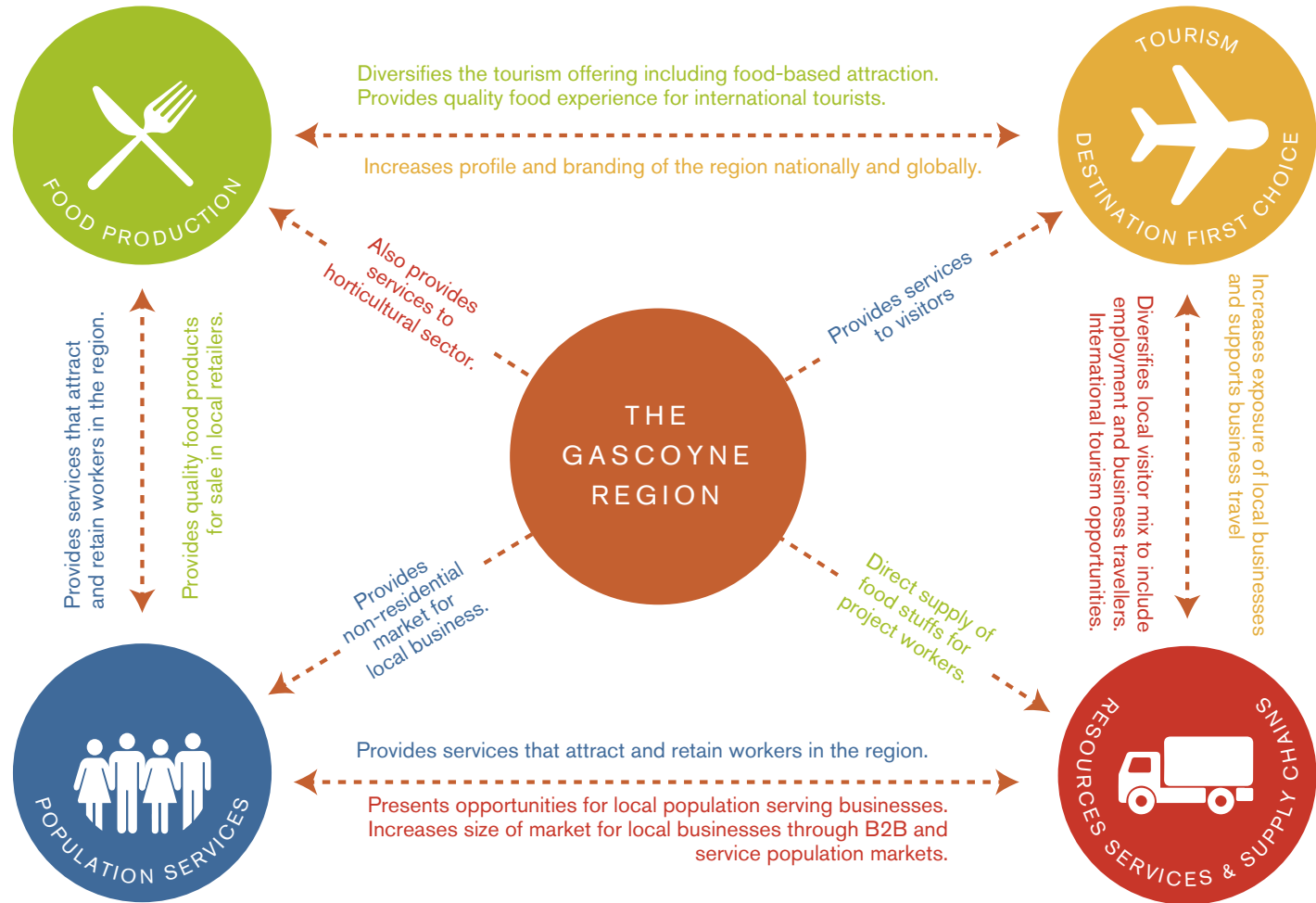
Enhancing Health
& Lifestyle

Measures of Success

- A residential population of 23,000 and seasonal (including temporary and FIFO by 2050) population of 35,000 people by 2050.
- A more balanced age profile in line with Western Australian averages, with higher population aged 15-34 than current.
- A quality range of Residential Aged Care facilities and Ageing in Place facilities to meet the needs of the resident population and to attract residents from outside the region.
- A reduction in the number of non-urgent presentations to hospital Emergency Departments due to increased access to primary health care services across the region.
- Improved access to Commonwealth and State government services with locally available staff based in the Gascoyne.
- Improved and expanded Sport, Aquatic, Youth and Community facilities across the region.
- A range of affordable housing to support its population growth targets and client needs.
- A quality aviation service which can meet the needs of residents and visitors, particularly with regard to flight availability and affordability.
- Collaborate with Local Government Authorities to prioritise and achieve town based planning and strategic growth projects.
- Support community organisations to achieve a volunteering rate at or above the State regional average.
- Increase in access for Gascoyne residents to touring culture and arts programs and high quality arts experiences.
- Gascoyne in May evolving to meet the needs of the community and region.
- 50% increase employment opportunities in culture and the arts across the Gascoyne region.
- Development of the Gascoyne Arts Council as an effective region-wide representative organisation.

Wider Benefits

The Regional Imperatives identified in this Blueprint are highly interrelated, sharing similar drivers and having flow-on effects to one another resulting in wider benefits to the community. Developing the Gascoyne economy's and achieving the Blueprint's Vision will require an integrated development of these Imperatives, recognising their interrelationships as illustrated.





Summation

The Gascoyne is a remote and diverse region facing great opportunities and significant challenges as it moves towards achieving its vision by the middle of the twenty first century.

Key comparative advantages for the Gascoyne are the effective and sustainable exploitation of natural resources, particularly water and iconic attractions for tourism; and the Gascoyne's geographical location.

The State Governments Seizing the Opportunity program, particularly Water For Food, will provide for the regional mapping and optimal use of water and land, facilitating an expansion in the quantum and value of food production in the region. Outcomes could include increased horticulture cropping, irrigated pasture for cattle or value adding to product through assets such as a multi-food processing plant.

Gascoyne's location provides many advantages including its sub-tropical environment, proximity to Asia, access to major international tourism attractions, equidistant between Perth and the Pilbara; and adjacent to the expanding oil and gas industry off Exmouth.

The challenges faced are in the areas of human capital, labour market efficiency, technological readiness, particularly with respect to communication connectivity, and infrastructure.

Strong local leaders with a focus on innovative approaches to overcome barriers and facilitate growth will attract targeted investment from both the Government and the private sector enabling the Gascoyne to achieve its aspirational Vision by 2050.





The Regional Blueprint establishes the priorities for the development and growth of the Gascoyne. 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 a structure to respond to, plan and implement transformative change in a region in a strategic and comprehensive manner. They will be used to coordinate resources to address challenges and opportunities that arise, and 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 Gascoyne. The 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 Gascoyne Blueprint was prepared concurrently with the Western Australian Planning Commission's Gascoyne Regional Planning and Infrastructure Framework and the State Planning Strategy 2050. The Framework complements the Blueprint 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.



The Blueprint has not been developed in isolation. An extensive range of policies, strategies, plans and frameworks covering a diversity of issues and opportunities in the Gascoyne, regional Western Australia and the nation already exist and provide a rigorous evidence base for the Blueprint.

PLANNING AND POLICY FRAMEWORK

COAG Themes of Strategic Importance

The Council of Australian Government (COAG) is the peak intergovernmental forum in Australia. It is the embodiment of the federal system of Government in place within Australia with its members including the Prime Minister, Premiers and Chief Ministers of all States and Territories and the President of the Local Government Association.

Reforms proposed and agreed by COAG are shaped by five themes of strategic importance identified in 2011. These five themes 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; and
- 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 Gascoyne region to 2050. This Blueprint seeks to contribute to the achievement of lasting solutions to these themes in the region and establishes a framework for national priorities to be identified, considered and addressed on an ongoing basis.

Alignment of Commonwealth and State Development Initiatives

The Commonwealth Government is committed to developing Northern Australia (the region north of the Tropic of Capricorn) and will develop ways to capitalise on the region's strengths, provide the best regulatory and economic environment for business and identify critical infrastructure for long-term growth, public and private planning and investment.

There is alignment between the Western Australian State Government's planning and northern Regional Investment Blueprints and the Commonwealth Government's commitment to Northern Australia. The key elements of the Western Australian view of developing Northern Australia³ are:

- WA supports the opportunity to leverage Western Australia's investment in Northern Australia;
- Strategic investment in transformational change across jurisdictions should focus on addressing impediments to growth;

- Diversifying the economic base of Northern Australia beyond the resource sector involves building on competitive advantages including agriculture, defence, aquaculture and renewable energy;
- Increasing the efficiencies of Government actions across jurisdictions;
- Key development priorities include land tenure and environmental approvals reform and more appropriate underpinning financial arrangements; and
- The linkage of Aboriginal people to participation in the benefits and outcomes of development is a priority for concerted effort.

Consistent with the aspirational development objectives of the Blueprint, there is a narrow range of high level development themes that are held in common across Northern Western Australian regions. These common development themes include:

- Agriculture, Food and Fibre;
- Tourism visitation;
- Minerals and Energy;
- Aboriginal Opportunity;
- Services for people – Health, Education and Training, Housing;
- Facilitating Business and Industry growth and diversification; and
- Strategic Infrastructure.



A core objective of the Blueprint process is to identify the transformational development priorities that in each region, will serve to achieve the high level and long term development aspirations of that region. As part of advancing the collective development aspirations of Northern Western Australia, the Regional Development Commissions that cover the Kimberley, Pilbara, Gascoyne, Mid West and Goldfields Esperance have identified those elements of their transformational priorities that are held in common across the regions that collectively comprise Northern Western Australia.

The successful development pathway includes building upon comparative and competitive advantages as well as overcoming the pervasive and inherent barriers to development that exist in the North. Transformational development involves both harnessing advantage and overcoming barriers.

Coastal Settlements Sub-Committee

In June 2014, the Western Australia Government announced the establishment of a new Coastal Towns and Settlements Cabinet Subcommittee (CTSCS). The Subcommittee will investigate the development and revitalisation of priority coastal settlements and examine future coastal sites, particularly on the south coast of Western Australia.

The new committee will begin by examining Coral Bay and the Abrolhos Islands, as well as potential sites along the south coast. Coral Bay is located within the Gascoyne region and is recognised as the gateway to Ningaloo Reef. The new committee will examine issues including access, services, infrastructure, land tenure and any other factors preventing progress in Coral Bay.

The sub-committee of Cabinet will comprise the Deputy Premier, Minister for Regional Development Planning Minister, Tourism Minister, and Fisheries Minister and the Local Government Minister as required.



Royalties for Regions and State Planning Strategy 2050

Development of the Blueprint was supported by Royalties for Regions funding. Royalties for Regions is a State Government initiative to reinvest a share of mining and onshore petroleum royalties into regional WA, with the goal of building strong and vibrant regional communities that are desirable places to live. A major purpose of the Blueprint is to identify Transformational Pillars that can assist Royalties for Regions to prioritise funding and investment opportunities.

The State Planning Strategy 2050 is the primary strategic plan for the State and is an important reference guide for the preparation of the Blueprint. A number of factors identified in the Strategy will drive socio-economic 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; and
- Climate change.

These factors are reflected in this Blueprint and have influenced the strategies identified to guide the Gascoyne's development to 2050.

Gascoyne Revitalisation Plan

The Gascoyne Revitalisation Plan, commencing 2010, is an investment by Royalties for Regions of \$150 million into major infrastructure, headworks and community priority projects in the Gascoyne region over 6 years.

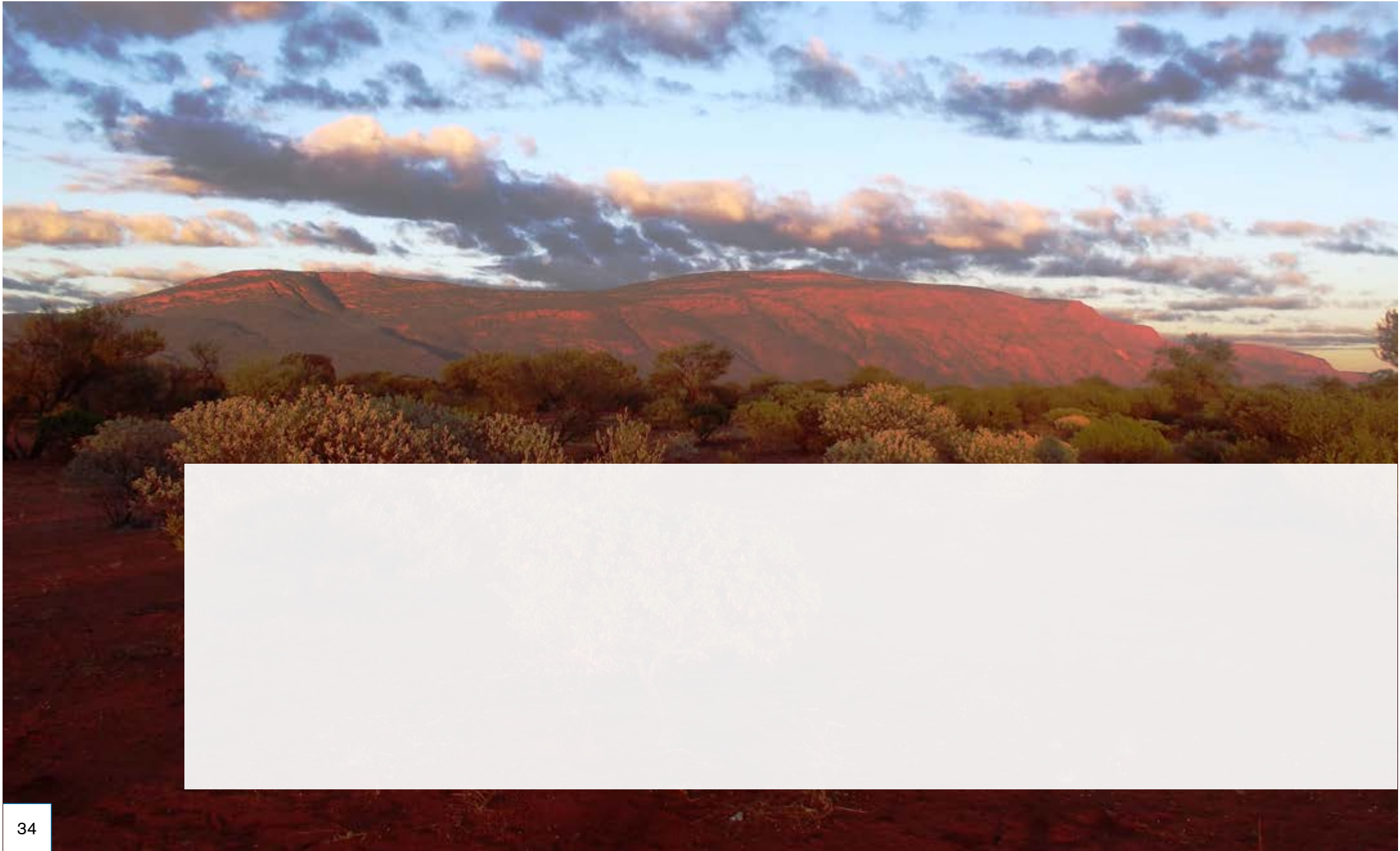
The Plan is providing substantial economic stimulus to the region and will:

- Build increased economic and socio-economic development capability and capacity;
- Provide the community with an enhanced quality of life conducive to expected growth; and
- Generate employment opportunities for local businesses in the planning, works and operational stages of the proposed projects/ initiatives.

Projects being funded are drawn primarily from the Gascoyne Regional Development Plan 2010-2020 and are guided by the Gascoyne Advisory Group.

Other Regional Plans and Strategies

Development and growth in regional Western Australia generally, and in the Gascoyne specifically, are the subject of a range of documents, policies, plans and strategies. The research, findings and projects identified in these plans and strategies have been incorporated into the Blueprint to ensure the drivers, challenges and opportunities facing all aspects of the Gascoyne economy and community are captured. A list of strategies and plans related to the Gascoyne region and referenced in the preparation of this Blueprint are included in the Appendices.



Global megatrends that will influence the trajectory of the Gascoyne economy over the next thirty years have been analysed in this Blueprint, including:

- **Affordability and Cost of Living;**
- **National Defence;**
- **Asian Population Growth;**
- **Global Food Consumption;**
- **Mineral Resource and Energy Investment;**
- **Climate Change;**
- **International Tourism;**
- **Population Ageing; and**
- **Broadband and the Digital Age**

The world is changing – 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.

These global shifts or “megatrends” are relevant to all communities and regions in Australia, including the Gascoyne. The Gascoyne region is exposed to the global economy, through tourism, food and mineral exports, while the impacts of climate change will present challenges but also opportunities for the region.

The global population is projected to continue to grow rapidly for the first half of this century, with Asian countries of China and India contributing the most to this growth. The increase in the size of this population, coupled with the industrialisation of developing economies and associated rising incomes, is expected to accelerate demand for quality food and mineral and energy resources.

This growth in food and resource demand is expected to occur at a time when the effects of climate change may begin to emerge. The productivity of Australian and global food producing areas is projected to deteriorate (due to water security) and the greater focus on carbon emissions and energy security is expected to underpin a shift to renewable energy and low-carbon fuels.

Rising incomes and enhanced global transport connections are already driving increased international tourism visitation to Australia. Over the past decade, while domestic tourist visitation has been depressed by a high Australian dollar, international visitation has continued to grow strongly, supported by increased travel by people from China and direct flights to and from Australia and major Asian cities.

While Australia continuously rates well among the increasing numbers of international visitors in terms of quality, experience and friendliness, value for money is regularly raised as an issue. This relates to the comparatively high cost of living in Australia, which has been increasing in recent years.

Regional Australia is particularly susceptible to increases in cost of living, with isolation and associated transport costs resulting in goods and services being 10-20% higher than capital city averages. Similarly, housing affordability, particularly in high amenity locations, can also be a critical issue, with local workers and households often lacking the income and purchasing power to enter the market.

This is further exacerbated by an ageing population in Australia and much of the Western World. The fixed incomes of older households make it difficult for rising costs of living to be absorbed and managed; creating significant financial stress for older Australians. With populations in regional Australia tending to age faster than metropolitan areas, this issue is particularly stark. However, this ageing demographic also presents significant opportunities with health care and social assistance services now the largest employing sector of the Australian economy and expected to grow rapidly over the coming decades with the retirement of the Baby Boomer generation.



A lack of population critical mass in many parts of regional Australia can impact the delivery of quality health and social assistance services to this older demographic, as well as education, retail, community and public administration services to the broader population. The use of technology, such as tele-delivery and video conferencing facilities, to break down these barriers in the short-term is essential to ensuring regional populations have the same convenient access to critical services as metropolitan residents. This includes remote towns, including Aboriginal communities, where a lack of services can mean the differences between life and death.

A growing globalised and interconnected world raises issues regarding national defence. There are a number of interrelated factors that may influence Australia's security outlook with opportunities for a critical mass of employment, population and expenditure activity from defence posture movements in regional Australia.

Communication technology also presents significant opportunities for individuals and businesses to connect and integrate with emerging Asian economies. E-commerce, telecommuting and freelancing trends are becoming fully imbedded in the way businesses operate and are allowing entrepreneurs to look beyond Australia to opportunities in the global economy. This includes the use of technology to enhance the tourism and visitation experience of individuals, using smart phones, QR codes and other access systems to imbed information on different attractions into the overall tourism experience of the region.

These trends and their relevance to the Gascoyne economy are summarised in the matrix below. A more detailed examination of each of the trends is included in Appendix 1.

The following table summarises these megatrends and their relevance to the Gascoyne economy and community.

Table 1 Megatrends

RELEVANCE TO GASCOYNE

Moderate

High

DRIVER	DRIVER DESCRIPTION	RATIONALE
<p>Asian Population Growth</p> <p>High</p>	<p>Estimates from the United Nations are for a rapid increase in the size of the middle class in Asia over the coming decades, with population in Asia expected to grow from around 4.3 billion people in 2013, to over 5.1 billion by 2050. Most of Asia's population, in fact the world's population, is shared amongst the world's two most populous countries, China and India. In 2013, both China and India accounted for 61.4% of Asia's population and this is projected to remain relatively stable until 2050 (58.2%).</p> <p>Western Australia's population is also expected to experience rapid growth (by Australian standards) over the next 35 years, reaching 5.6 million by 2050/51 or more than double current levels. This growth is expected to be concentrated in Greater Perth, though affordability, cost of living and congestion factors may incentivise greater shares of this growth. Current projections are for another 230,000 people in Regional WA by 2050/51 taking the total population to 880,000.</p>	<p>Growth in Australia and Asian populations will increase demand for food products, both normal and niche, which will provide opportunity for growth of the Gascoyne food industry. This will result in growth of jobs which will attract additional people to the Gascoyne.</p>
<p>Global Food Demand</p> <p>High</p>	<p>Global food production will need to increase by 60% by 2050 to meet projected demand levels. At the same time, global food production is projected to grow at only 1.7% per annum over the next 10 years, as a combination of increased resource competition from biofuel sectors and increased environmental protection constrain production. 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.</p>	<p>The Gascoyne is a significant horticulture district in Western Australia with the industry being the third largest employer in the region. Despite this, there is a very low level of the agricultural product that is exported from the region, with domestic centres (such as Perth) representing the region's primary market.</p> <p>Growing food demand from both increased global population and emerging middle classes in China, India and ASEAN countries will underpin demand for a diverse range of agricultural commodities, from which will result in the international export market opening up for the Gascoyne region.</p>
<p>Mineral Resource and Energy Investment</p> <p>High</p>	<p>Capital expenditure in the WA resources sector continues to be strong, having stabilised at near record levels. This reflects the continued growth and investment in the oil and gas sector, offsetting declines in iron ore and coal nationally, given a combination of the large project size and value and strong growth in energy exploration, particularly in WA.</p>	<p>The Gascoyne region is strategically located to support and facilitate the development of major offshore oil and gas deposits with the centre of Exmouth already fulfilling the role of a strategic hub for existing operations. The consideration of a deep water wharf would also enhance Exmouth's industry position. The growth in investment expected in the medium term has the potential to underpin future economic growth in the region, providing employment, supply chain opportunities, training and economic engagement opportunities during both construction and operational phases.</p>

DRIVER	DRIVER DESCRIPTION	RATIONALE
<p>International Tourism</p> <p>High</p>	<p>Demand for international tourism continues to remain strong with the number of worldwide tourists growing. This confirms the positive trend and recent evaluation shows a significant improvement in confidence, with prospects for future growth remaining upbeat. Further, this growth in global tourism continues to produce above average results in most world regions, offering vital opportunities for employment and local economies. The Australian tourism investment pipeline is now estimated to have been \$44.1 billion in 2012; this is an increase of 22% in pipeline investment over the year. These levels of investment clearly indicate the enormous potential of the tourism sector and highlight both the importance and attractiveness of investing in key tourism-related activities.</p>	<p>Tourist visitation to Western Australia has continued to grow over the past decade despite global economic conditions and the state of the domestic tourist market. The diversity of natural amenity and destinations within the Gascoyne, from the pristine coastal environment to the vast inland landscapes, provides an opportunity for increased international tourist visitation. Maximising the success and growth of this industry will require continued improvements in the quality and mix of accommodation. In addition, the international tourism market needs continued investment in major transport infrastructure such as a deep water wharf at Exmouth. This will allow Exmouth to capitalise on the burgeoning cruise ship industry through improved suitable berthing facilities.</p>
<p>Ageing Population</p> <p>High</p>	<p>The population of Australia is ageing. Approximately 3 million people in Australia were aged 65 years and over in 2011 representing over one in eight Australians. This was an increase of 27.6% over the last decade with an annual average growth rate of 2.5%. Looking forward, the number of people aged 65 years and over is projected to increase by 83.6% over the next two decades with an annual average growth rate of 3.1%.</p>	<p>The population age profile of the Gascoyne is older than the State average. This is expected to underpin growing demand for health, medical and welfare based services (including retirement accommodation and aged care). This is particularly the case in Shark Bay.</p>
<p>National Defence</p> <p>High</p>	<p>Australia's future security will be influenced by a range of interrelated factors. The 2013 Defence White Paper identified a number of these factors as they relate to the broader Australasian region, including</p> <ul style="list-style-type: none"> • the importance of the Indo-Pacific in global security, • the critical nature of enhanced regionalism and cooperation in South East Asia, • the relationship between the United States of America and China, • potential conflict hotspots in North and South East Asia, • regional military modernisation • terrorism • climate change impacts; • resource security; and • cyber warfare. <p>Of particular note in the Defence White Paper is the fact that the economic importance of northern Australia and offshore resources has increased and this must be considered in defence planning. The Defence Posture Review within the White Paper, builds upon the posture review undertaken in 2011 and reinforced the need for Australia's northern and western approaches to be appropriately defended with the capacity for high tempo projections of power into the region.</p>	<p>Exmouth is strategically positioned in closer proximity to major South East Asian centres than Darwin, providing Defence with the ability to project high tempo assets. Additionally, Exmouth's proximity to offshore oil and gas operations and deposits and position between Pilbara and Mid West mining regions provides Defence with oversight capacity of these important contributors to Australia's economy.</p> <p>Exmouth is home to three major Defence establishments:</p> <ul style="list-style-type: none"> • Naval Communication Station Harold E. Holt, was built at the same time as the town and provides very low frequency radio transmission support for ships and submarines of the US and Australian Navies; and • Learmonth Air Weapon Range, 18,954ha located 30km south west of Learmonth Airport (itself a bare forward RAAF base); and • Learmonth Solar Observatory is a quasi-military installation jointly run by the Australian Bureau of Meteorology and the US Air Force. <p>The expansion of Defence operations in Exmouth would provide a critical mass of employment, population and expenditure activity. This is analogous with Darwin and Townsville, albeit at a smaller scale.</p>

DRIVER	DRIVER DESCRIPTION	RATIONALE
Climate Change Moderate	<p>The average global surface temperature has risen around 0.8°C since 1850 and will rise further in the coming decades as a result of emissions that have already occurred. For Australia, this is likely to involve substantial environmental change, where both natural and agricultural production systems face significant change due to the combined effects of higher temperatures and a general reduction in rainfall across much of the nation. These environmental changes also increase the risks from bushfires and other extreme weather, particularly in coastal and rural regions. Since 1990 to 2011, Australia's net emissions (carbon dioxide equivalent) increased by 32.2%, growing annually at a rate of 1.3%.</p>	<p>The Gascoyne has experienced a series of severe weather events in recent years (floods in 2010 and fires in 2012) and the frequency and severity of such events may be exacerbated by variability in the global climate. The Gascoyne region also experiences comparative low average rainfall with cyclones and other tropical rain depressions increasingly accounting for this rainfall. Such rainfall patterns may be further impacted by climate change. Finally, the coastal orientation of the Gascoyne economy, particularly in terms of the tourism sector means the regional economy is at risk of being impacted by sea level rises.</p>
Affordability and Cost of Living Moderate	<p>Asian and Australian cities continue to move up the cost of living scale over the last few years which have been offsetting traditionally more costly European locations. In particular, the cost of living in Australian cities has been rising very quickly up the rankings as economic growth has supported inflation and currency swings to make them more costly. Currently, two of Australia's cities (Sydney and Melbourne) are ranked in the top five most expensive cities to live, where ten years ago there were no Australian cities among the 50 most expensive cities. The affordability and cost of living in the Gascoyne is more expensive than cities. The 2013 Regional Price Index states that it costs 10% more to live in the region compared to Perth. In June 2013, the Consumer Price Index for housing was one of the highest in Australia (106.0), higher than that for all groups (102.8).</p>	<p>The cost of living in Gascoyne towns is comparatively less affordable than southern regions. This reflects a combination of distance-related costs (namely the cost of transport and travel to the region) and the exposure of the region, namely Exmouth, to mining and energy resource projects and employment. Housing in the Gascoyne is also less affordable than the State average. Carnarvon house prices are more affordable, with growth in recent years tracking against incomes. In contrast, Exmouth is severely unaffordable, owing to the purchasing power of investors and workers in resource jobs driving up prices.</p>
Broadband and the Digital Age Moderate	<p>Technology has played a central role in enabling the globalisation of markets mainly by increasing the reach and speed of communication while also assisting to reduce costs, which have eased the flow of goods, capital, people and information across borders. These macro trends have profound life and business changing effects as they are able to transform businesses to better tailor their products and services to meet their customers' needs (i.e. increasing mass customisation). This has made Australian businesses become more responsive to change, have faster speeds of transactions (i.e. maturity of Australian financial markets), cheaper and more convenient as well as making better use of scarce resources in the process.</p>	<p>The relative distance of the Gascoyne from Perth and other capital cities reduces the region's economic interactions with these major sources of economic and employment activity. Increased adoption of broadband internet and e-commerce by Gascoyne households is viewed as critical to further enhancing the integration of the region to the global economy.</p>

Key Metrics Scorecard

The Scorecard for the Gascoyne against Key Metrics analysed in this section and in Appendix 2 is summarised below. This Scorecard uses a “Traffic Light” approach to illustrate the relative position of Gascoyne against individual Metrics within four broad Capital Pools:

- Human – employment, skills and entrepreneurship;
- Productive – comparative advantage, global demand and resilient economy;
- Social – dynamics, structure and infrastructure; and
- Natural – conservation, resources and resilience.

The Score criteria are broken down into three categories:

- **Green** – the indicators are broadly positive and/or above average;
- **Yellow** – the indicators are broadly neutral or in line with averages; and
- **Red** – the indicators are broadly negative or below averages.

Additionally, the direction in which the Metric has been moving in recent years is also identified to provide context. This is important as it reveals the relative momentum of each indicator in the Scorecard. The colour of the arrow (Green, Yellow or Red) confirms whether the relevant movement in the indicator is positive or negative.



The following table summarises the key metrics related to the **HUMAN** capital pool.

CAPITAL POOL	AREA OF FOCUS	MEASURES	SCORE	DIRECTION	COMMENTS
HUMAN	Employment	<ul style="list-style-type: none"> • Unemployment rate • Post school qualifications • Occupation and employment diversity 	●	↑	<ul style="list-style-type: none"> • Unemployment remains in line with State averages and is low by historical levels, but has risen sharply in recent quarters. • Post school qualifications are biased towards Certificate level, reflecting the industry structure of the region. • Employment has diversified in recent years, with a fall in agriculture being offset by growth in mining, energy professional services, transport and retail sectors.
	Skills	<ul style="list-style-type: none"> • Post school qualifications • Access to local education facilities 	●	→	<ul style="list-style-type: none"> • Post school qualifications are biased towards Certificate level, reflecting the industry structure of the region.
	Entrepreneurship	<ul style="list-style-type: none"> • Non-employing, micro and small business Numbers 	●	→	<ul style="list-style-type: none"> • Small business numbers have rebounded strongly from 2011 lows. Agriculture and construction continue to be the most common business sectors, though retail, transport and professional services are also significant. • Business formation and operation rates are above national and State averages.

HUMAN capital pool

The following table summarises the key metrics related to the **PRODUCTIVE** capital pool.

CAPITAL POOL	AREA OF FOCUS	MEASURES	SCORE	DIRECTION	COMMENTS
PRODUCTIVE	Comparative Advantage	<ul style="list-style-type: none"> • Tourism • Gross value of agricultural production 	●	↑	<ul style="list-style-type: none"> • The region is home to a diverse range of internationally recognised tourist attractions and natural amenities. Visitation to the Gascoyne over the past decade has remained comparatively stable with declines in domestic overnight visitation in recent years offset by record international visitation. • Gascoyne has a comparative advantage in horticulture and is a major contributor to State production in a range of vegetable and fruit crops.
	Global Demand	<ul style="list-style-type: none"> • Gross value of agricultural production • International tourist visitors • Learmonth airport passenger numbers 	●	↑	<ul style="list-style-type: none"> • Gascoyne has a comparative advantage in horticulture and is a major contributor to State production in a range of vegetable and fruit crops. • International tourist visitor numbers were at record levels in 2012/13. Major attractions visited by international tourists include Monkey Mia, Mount Augustus and Shark Bay and Ningaloo World Heritage Areas. • Learmonth Airport passenger numbers are at historical highs, experiencing rapid growth since 2009, based primarily on fly-in fly-out workers.
	Resilient Economy	<ul style="list-style-type: none"> • Changes in employment diversity • Local business registrations • Unemployment rates • Employment growth • Personal incomes 	●	→	<ul style="list-style-type: none"> • Personal incomes remained resilient during the GFC and subsequent economic climate. However, household incomes remain below State averages, except in Exmouth. • Unemployment has been rising in recent quarters but remains below historical peaks. • The industry structure of the region has become more diversified, with declines in agricultural employment offset by retail, transport and professional services sectors. This resulted in employment growth being broadly flat since 2006. • Local business registrations have recovered strongly since 2011.

PRODUCTIVE capital pool

The following table summarises the key metrics related to the **NATURAL** capital pool.

CAPITAL POOL	AREA OF FOCUS	MEASURES	SCORE	DIRECTION	COMMENTS
NATURAL	Conservation	<ul style="list-style-type: none"> National Parks Marine reserves Impact of pastoral activities 	●	➔	<ul style="list-style-type: none"> The Gascoyne has strong natural amenity including extensive national parks, marine reserves and two World Heritage listed areas.
	Resources	<ul style="list-style-type: none"> Value of agricultural production 	●	⬆	<ul style="list-style-type: none"> Gascoyne has a comparative advantage in horticulture and is a major contributor to State production in a range of vegetable and fruit crops. Food production has increased in recent years following the recovery of production and livestock numbers after recent floods and fires, in spite of poor rainfall patterns. Seafood production has been declining in value but remains a significant contributor to State production, particularly in terms of pearl production.
	Resilience	<ul style="list-style-type: none"> Rainfall patterns Water security 	●	⬆	<ul style="list-style-type: none"> Rainfall in the Gascoyne is low and primarily from cyclonic cells and tropical depressions. Rainfall in 2012 and 2013 has been below long-term averages (approximately 200mm per year) with corresponding low flows through the Gascoyne River. Water supply to the horticulture sector is supported primarily through irrigation off the Gascoyne River, in Carnarvon, while artesian water is increasingly being drawn upon to support diversification of activities on pastoral leases.

NATURAL capital pool

The following table summarises the key metrics related to the **SOCIAL** capital pool.

CAPITAL POOL	AREA OF FOCUS	MEASURES	SCORE	DIRECTION	COMMENTS
SOCIAL	Dynamics	<ul style="list-style-type: none"> Population growth Net migration Fertility rates 	●	↑	<ul style="list-style-type: none"> The Gascoyne has reversed historical declines and experienced strong population growth in recent years. Net inward migration has been negative in all locations except Exmouth. Fertility rates are strong and above WA averages across all LGAs.
	Structure	<ul style="list-style-type: none"> Age profile Share of population aged 65+ 	●	→	<ul style="list-style-type: none"> The population profile of the Gascoyne is comparable with regional Australian trends, with below average shares of young adults. Loss of youth primarily reflects lack of secondary education services in Gascoyne towns. The population of Gascoyne is ageing at a rate comparable with that of WA.
	Infrastructure	<ul style="list-style-type: none"> Public administration deficit Housing affordability Aboriginal population <ul style="list-style-type: none"> Education and health services provision 	●	↑	<ul style="list-style-type: none"> Public administration levels appear above average but this reflects the predominance of fisheries, horticulture, livestock and natural environment management services. Population serving and administration public sector worker levels are below average, with services increasingly delivered from outside of the region (namely Geraldton). Health services concentrated in Carnarvon with access to specialist services limited. Outside of Carnarvon, basic medical services are limited with part-time offerings common. Housing has remained highly unaffordable in the Gascoyne, particularly in Exmouth and Shark Bay where employment and retirement income market factors influence prices. Carnarvon remains more affordable with price growth in recent years tracking with household income growth. People of Aboriginal descent account for over one in five residents in the Gascoyne, and higher rates in the Upper Gascoyne. This share is well above State and national averages. <ul style="list-style-type: none"> Education (particularly secondary and tertiary education), services are lacking across the region and are a driver of the loss of young adults from the Gascoyne.

SOCIAL capital pool



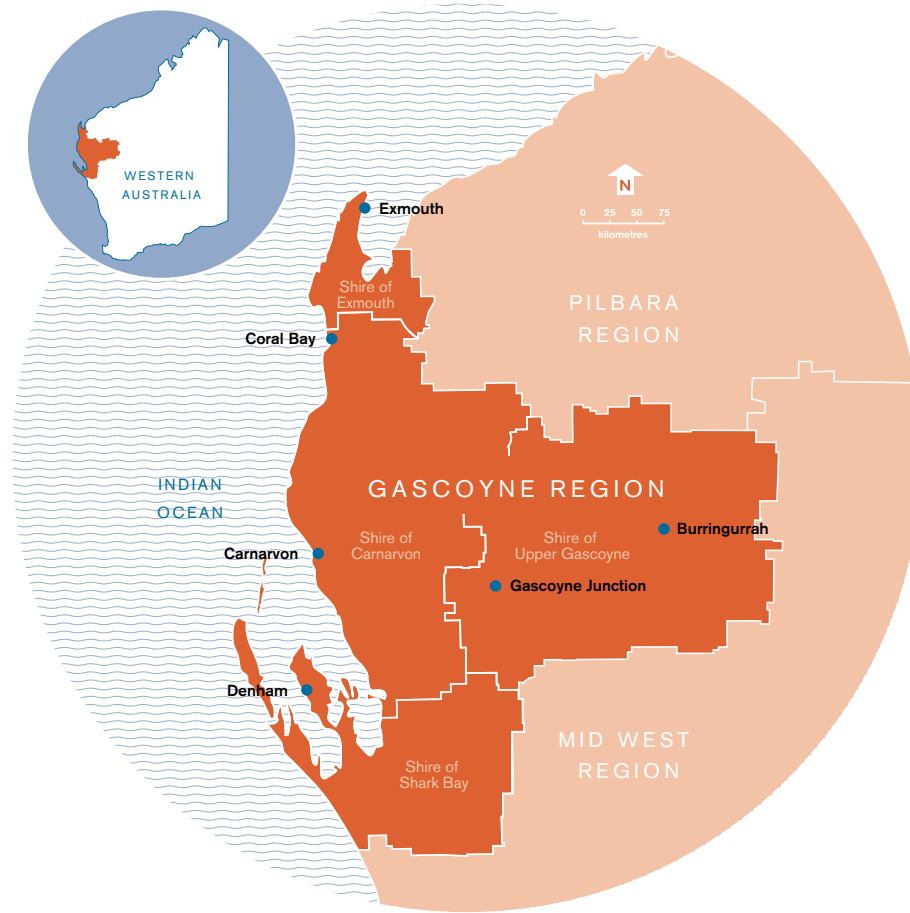


Figure 2 Key Features of the Gascoyne

The Gascoyne accounts for about 5.3% of the State's total land area yet only 0.4% of Western Australia's population. It is an established region with an economy founded on quality horticulture, pastoral and fishery production, resources and tourism. There are four local governments servicing the Gascoyne:

- Shire of Carnarvon
- Shire of Exmouth
- Shire of Shark Bay
- Shire of Upper Gascoyne

This section provides an overview of these and other demographic, economic, environmental and social characteristics of the Gascoyne region. A more detailed analysis of the region's characteristics is included in Appendix 2.

Geographical and Cultural Context

The Gascoyne region extends along 600km of the Indian Ocean coastline and about 500km inland, for a total area of approximately 135,277 km². It comprises the Shires of Carnarvon, Exmouth, Shark Bay and Upper Gascoyne with total population of approximately 10,300 people. It has the lowest population density of any region in Australia.

The five Aboriginal language groups of the Gascoyne, the Yinggarda, Baiyungu, Malgana, Thadgari and Thalanyji have occupied the region for thousands of years and are custodians of its rich heritage, as well as very significant contributors to its current economic and social environment.

The Gascoyne is also the location of the first confirmed European contact on the Australian continent. On 25 October, 1616 the Dutch sailor and explorer Dirk Hartog landed and left a pewter plate on what is now called Dirk Hartog Island in Shark Bay.

The region possesses outstanding natural capital and incorporates internationally recognised features such as the Ningaloo and Shark Bay World Heritage Areas, Monkey Mia and Coral Bay.

The semi-arid to sub-tropical climate of the Gascoyne is apt for the production of various fruits and vegetables. Founded originally on livestock, irrigation from the Gascoyne River has seen the region, particularly Carnarvon, transform into a major horticultural producer, supplying a large proportion of Western Australia's fruit and vegetable crops. The coastal orientation of the region also supports extensive wild capture and an emerging aquaculture-based seafood production. The pleasant climate is also a key attractor for residents and tourists alike.

Environment

The Gascoyne region has a low and gently undulating landscape with open drainage. Vegetation is mainly acacia shrublands and saltbush/bluebush shrublands, with dense shrub-steppe vegetation, dominated by hummock grassland, or spinifex north of Carnarvon. The climate is semi-arid to sub-tropical, with average annual rainfall between 200 and 300 mm. Temperatures are warm to hot, with average daily maximum

temperatures ranging from 30°C to 37°C in summer and from 20°C to 24°C in winter. Most rainfall is in winter, although summer rains from tropical low systems bring heavy rainfall to the inland Gascoyne which can create river flows to recharge aquifers and permanent pools in the Gascoyne River.

At 865 kilometres in length the Gascoyne River is the longest river in Western Australia and flows into the Indian Ocean at Carnarvon. It is joined by 36 tributaries and the 561 kilometre long Lyons River near Gascoyne Junction which together provide a catchment area of 68,326 square kilometres. The Gascoyne River is known locally as an upside-down river, because it flows for about 120 days of the year and then flows below the dry river bed for the remainder of the year. The river's aquifers lying below the sand act as a huge water storage system which has been utilised by the local horticulture industry in Carnarvon to grow crops. The river also flows through many permanent pools that are valuable to both stock and native species in the inland pastoral areas.

Western Australia's marine environment is divided into 'bioregions'. The Gascoyne Coast Bioregion runs from the Zuytdorp Cliffs, north of Kalbarri, to the Ashburton River, south of Onslow. The mix of tropical and temperate conditions in this region is reflected in the fish species found. To the north, near Exmouth, tropical species such as emperors and mackerel dominate. Farther south, there are temperate species such as western rock lobster, tailor, snapper (pink snapper) and mullet. An array of aquatic life and natural wonders has made the Shark Bay and Ningaloo World Heritage Areas world-famous, attracting thousands of tourists and fishers each year. The protected

waters of Shark Bay sustain extensive seagrass beds – key nursery areas for dugongs, fish, prawns and scallops. The warmer waters around the Ningaloo Marine Park support a diversity of marine life associated with its coral reef systems. Ningaloo Reef, 260km in length, is Australia's largest fringing coral reef. Ningaloo Reef provides high-quality fishing for species such as spangled emperor, Spanish mackerel and coral trout. Exmouth Gulf has an extensive mangrove system, with creek species such as mangrove jack and mud crabs. There is also a large annual migration of whales and whale sharks as well as large numbers of dolphins.





GASCOYNE IN 2050

Increased employment opportunities and lifestyle choices attract highly skilled migrants to the region, which will accelerate regional population growth. This will strengthen demand for quality population services in acute and general health, secondary and tertiary education, community facilities and professional services.

Economy

The Gascoyne is home to a dynamic regional economy, reliant on horticulture and tourism. Local employment has remained broadly stable in recent years, with productivity-related declines in agriculture employment being offset by increases in employment in construction, mining and transport, postal and warehousing sectors.

Despite this decline in employment in Agriculture, the value of food production in the Gascoyne

economy continues to grow. In 2012, the gross value of horticultural production in the region increased to \$103.9 million, up significantly from \$72 million in 2011. In 2013 the value was \$78 million. A further \$35 million is contributed each year from the pastoral sector, mainly in the form of cattle disposals. Carnarvon, as the centre of horticulture production in the region accounted for the majority of agricultural production value in 2011/12, with other LGAs playing secondary

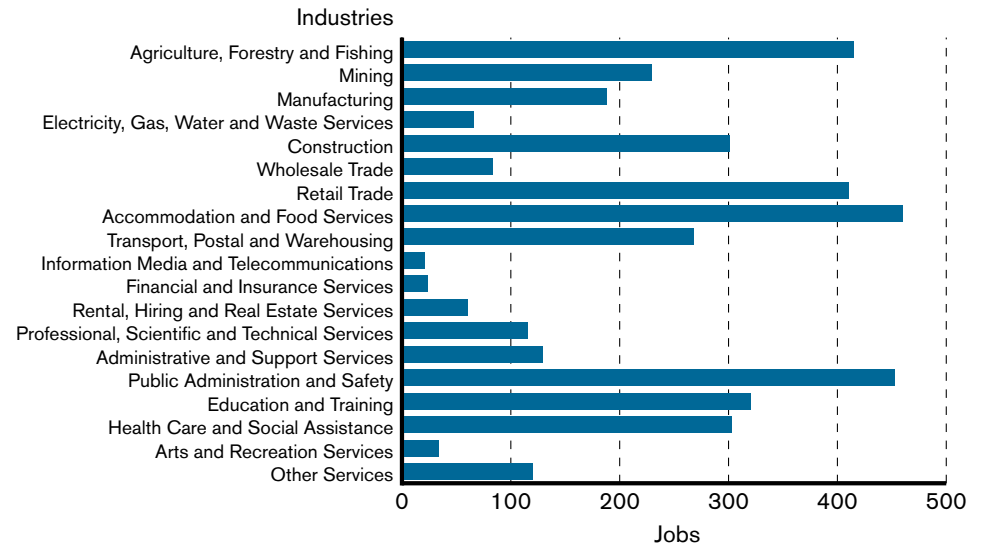


Figure 3 Industries of Employment⁴

roles. Expansion and diversification of the food production sector in the Gascoyne is critical to enhancing exports and supporting growth of the economy. Expansion and diversification of the food production sector in the Gascoyne is critical to enhancing exports and supporting growth of the economy. The need for increased food security and expansion has been recognised through the Gascoyne Food Bowl initiative funded by Royalties for Regions and led by DAFWA.

The Gascoyne has shown a strong growth rate of the labour force up to December 2013, increasing from 6,177 at the same period in 2012 to 6,643 workers, an increase of 7%. This growth rate can be attributed to several major infrastructure projects, as well as growth in the tourism and horticultural sectors.

Unemployment in the Gascoyne decreased rapidly in recent years, falling from 7.0% in mid-2010 to just over 3.0% in September 2012 – less than half. However, since 2012, the unemployment rate in the Gascoyne has climbed higher and as at June 2013, was 5.3%. This climb is sharper than, but broadly in line with, the increase in State unemployment.

In the financial year 2012/13 the value of the Gross Regional Product was estimated to be \$870 million. Typically, about 95% of this is generated in the coastal areas of the region. In 2012/13, the Gascoyne had per worker Gross Regional Product (GRP)⁵ of \$130,965, which is significantly lower than the State GRP per worker of \$180,100. The GRP level fluctuates even further when the individual LGAs are examined.

The highest GRP per worker is in Exmouth with a GRP of \$245,885 which, due to the oil and gas industry, is higher in comparison to the State average. The Upper Gascoyne has the lowest GRP per worker at \$89,460 per worker which is less than half the State average. This is illustrated below.

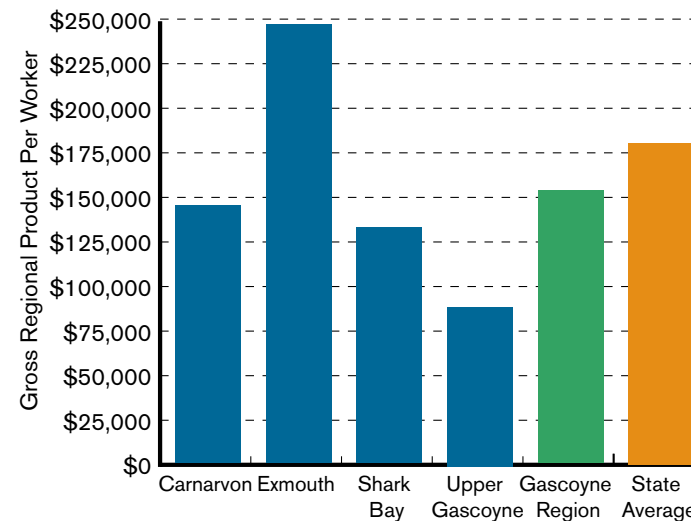


Figure 4 Gross Regional Product Per Worker, Gascoyne v State Average 2012/13⁵

Agriculture

As highlighted in the industry and employment structure, agriculture, and in particular horticulture, is the primary industry of the Gascoyne region. In 2012, the Gascoyne region accounted for 8.7% of the State's agricultural land holdings including 10.4% of the total grazing area⁶.

The value of food production in the Gascoyne has been impacted in recent years by a series of natural disasters and extreme weather events. However, 2012 represented a better year, despite below average rainfall. In 2012, the Gross Value of horticultural production was \$103.9 million,

up from \$72.0 million in 2011. In 2013 the value was \$78 million. The livestock sector contributes approximately \$25 million in production value to the region each year, namely in cattle sales⁷.

The region was the primary producer for a range of horticultural crops, including:

- Vegetables for seed;
- Runner and French Beans;
- Capsicums;
- Vegetable Herbs;
- Melons;
- Pumpkins;
- Tomatoes;
- Carambolas;
- Lychees;
- Mangoes;
- Bananas; and
- Table grapes.

The diversity of food production in the Gascoyne and the primacy of the region in the production of key crops for the State mean the region's role as a major food bowl should not be underestimated.

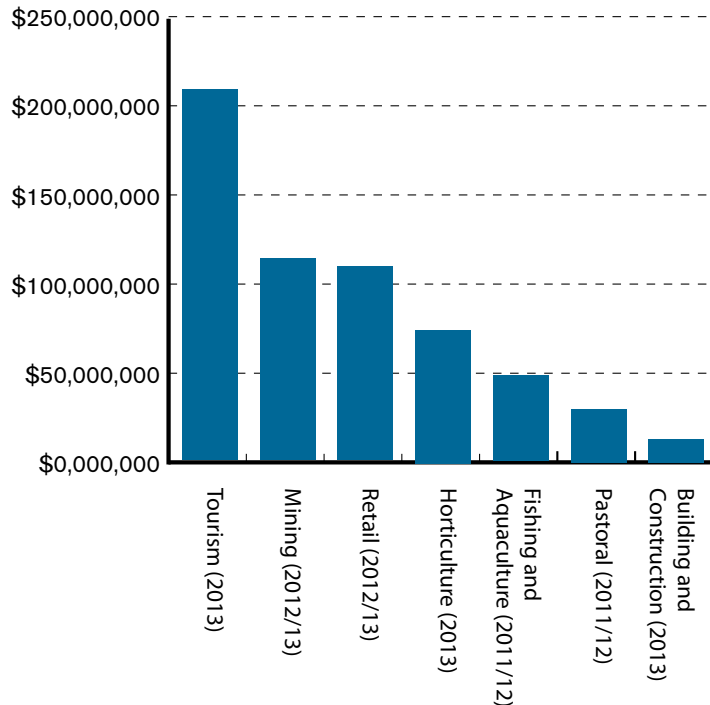


Figure 5 Values of Major Gascoyne Industries 2013⁸

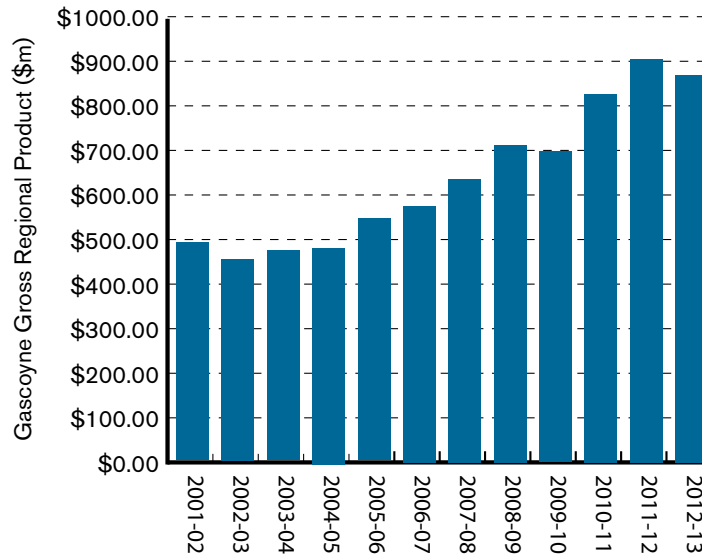


Figure 6 Gascoyne Gross Regional Product Region, 2001/2013⁹

The Carnarvon Horticulture District is situated on the fertile delta of the Gascoyne River and plays an important role in providing fresh fruit and vegetables to the Perth market 900km away. The majority of horticulture activity is carried out along the banks of the Gascoyne River near Carnarvon on 170 plantations covering an area of 1,500 hectares. The most significant crops in volume and value are bananas, tomatoes, table grapes, capsicum and mango. Through the Gascoyne Food Bowl, an additional 400 hectares of horticultural land and associated

water are being developed in order to significantly enhance the economic growth and prosperity of Carnarvon.

In terms of the total agricultural land, 85% is located within the Carnarvon and Upper Gascoyne LGAs. However, this differs from the breakdown of agricultural production. In particular, production is concentrated within the Carnarvon LGA, where 89% of the region's agricultural value is produced despite only having 55% of the total agricultural land. This is illustrated in the following figure.

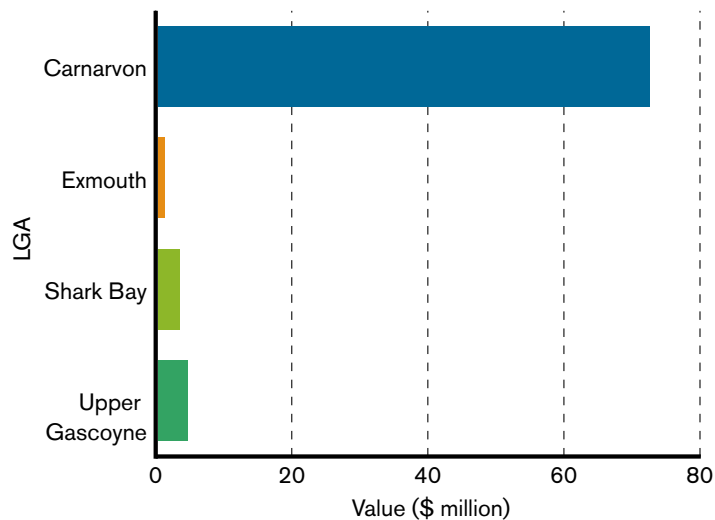


Figure 7 Gross Value of Agricultural Production, Gascoyne Region, 2011/12¹⁰





GASCOYNE IN 2050

With a diverse economy underpinning sustainability, the region's proximity to major resources makes Gascoyne towns the logical hub for energy and mining project supply chains, with local Gascoyne businesses viewed as integral to major projects in regional WA. Additionally, this location reinforces Gascoyne's role as a critical host for Defence Forces charged with defending these important natural resources.

Retail

Retail turnover was estimated at \$104 million for the 2011/12 financial year. This has had a 7.6 per cent annual increase to \$109 million for the 2012/13 financial year. A range of national retailers are found in the towns of Carnarvon and Exmouth, both of which are supported by strong Chambers of Commerce.

Mining

The main commodity mined in the Gascoyne is salt, bound for the chemical industries in Asia. There is significant opportunity for growth at the Rio Tinto Dampier Salt's operations at Lake Macleod. Salt is also mined at Useless Loop by Mitsui's Shark Bay Salt. Department of Mines and Petroleum statistics show that the value of mineral production in the Gascoyne was \$113 million for 2012/13 and is \$134.7 million for 2013/14.

Pastoralism

There are 67 pastoral leases in the Gascoyne running either cattle, sheep and/or goats. The average

size of these pastoral properties is approximately 125,000 hectares. The livestock are raised largely on natural pasture and are watered through a variety of sources including artesian bores, permanent water holes, windmills and dams. The ban on live exports had a severe financial impact in 2012/13, DAFWA statistics state the disposal of sheep and cattle for meat was \$23.5 million and wool production was \$3.4 million for the financial year ending 30 June 2011. This has increased to \$25 million for disposal of sheep and cattle for meat and \$5 million for wool production up to the financial year ending 30 June 2012.

The future of the pastoral industry is looking more positive as demonstrated by significant new investment into the industry in recent years, and the increase in livestock prices.

Tourism

The region is home to an extensive range of high value environmental assets including major marine reserves, national and state parks and two World Heritage Listed areas – Ningaloo and Shark Bay.

The diversity of amenity between coastal and inland environments, coupled with major attractions like Monkey Mia and Mount Augustus, is virtually unique within Western Australia's regional areas and represents a comparative advantage of the Gascoyne.

This natural amenity underpins a dynamic tourism sector that has shown remarkable resilience over the past decade. Recent declines

in total visitor nights have been offset by record international tourist numbers. This has continued to support comparatively strong tourist accommodation performance in the region.

Accessibility to and within the Gascoyne was identified in consultation (refer to Appendix 4 for stakeholder list) as a primary constraint to the growth and expansion of the tourism sector.

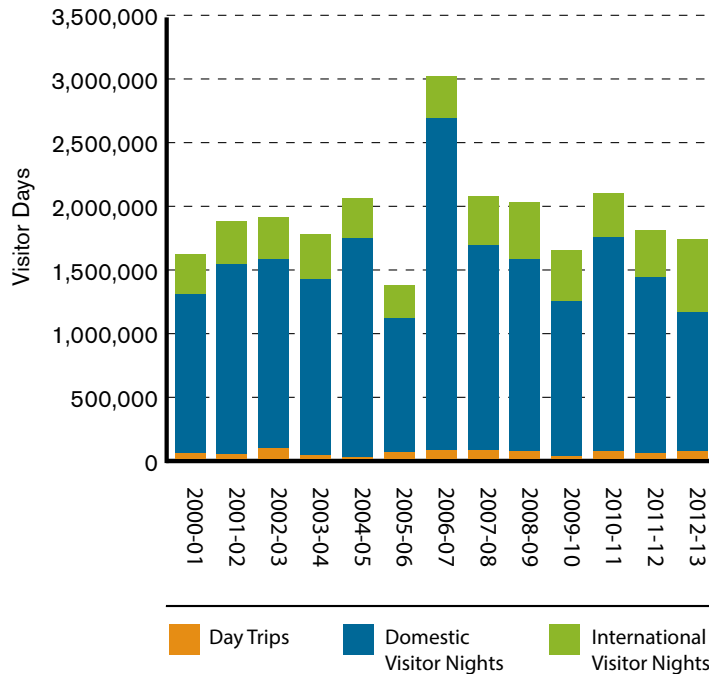


Figure 8 Tourist Visitor Nights and Day Trips, Year Ending June¹¹



NINGALOO REEF

At over 260km long, Ningaloo Reef is one of the largest fringing coral reefs in the world and the largest fringing reef close to shore (at the shoreline at Coral Bay). Renowned globally for the seasonal concentration of whale sharks, Ningaloo Reef is part of the broader Ningaloo Coast World Heritage Area, listed by the United Nations in 2011. Other major marine fauna regularly seen in the area includes dolphins, humpback whales and dugongs on their migratory paths.



GASCOYNE IN 2050

The Gascoyne region's stunning natural beauty and strategic location on the Western Australian coast underpin a diverse range of employment, business and economic opportunities. In 2050, 23,000 residents will call the Gascoyne home with a further 15,000 seasonal, FIFO and temporary workers actively involved in Gascoyne communities. It is an internationally recognised aspirational tourism destination and reliable provider of quality horticulture, livestock and aquaculture products.

Learmonth Airport, located near Exmouth, is the primary airport of the region. The airport has experienced a sharp climb in passenger throughput since the early 2000s and particularly since 2009/10, primarily on the back of employment related travel and has grown to 90,861 in 2012/13 and to 90,452 in 2013/14. It is currently serviced by Qantas Link, with sufficient capacity and frequency to service tourism, employment and community market segments.

Other centres, such as Shark Bay and Carnarvon are currently serviced by Skippers Aviation using turboprop aircraft of up to 50 seats. Passenger volumes to Carnarvon have averaged approximately 25,000 per year in recent years, with Shark Bay averaging only 5,000 passengers¹². Stakeholder consultation as part of the Gascoyne Development Commission's submission to the draft State Aviation Strategy identified that the costs were high and the quality and frequency

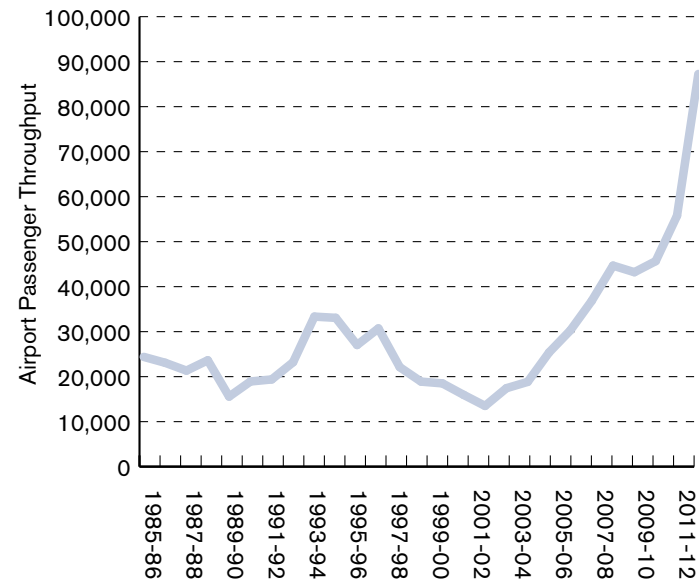


Figure 9 Passenger Throughput, Annual, Learmonth Airport¹³

of services were inadequate. Economic, social and community opportunity costs were being incurred as a result of the lack of affordability and connectivity on these routes¹⁴.

Fishing and Aquaculture

The pristine waters of the Gascoyne coast bioregion provide the perfect marine environment. With water temperatures ranging from 22°C to 28°C and many natural marine incubators such as coral reef, sand flats and seagrass beds, the Gascoyne coast bioregion has superior breeding grounds, fish nurseries and feeding habitats. These conditions contribute to both successful commercial fisheries and a popular recreational fishery.

The commercial fisheries of the Gascoyne coast bioregion are:

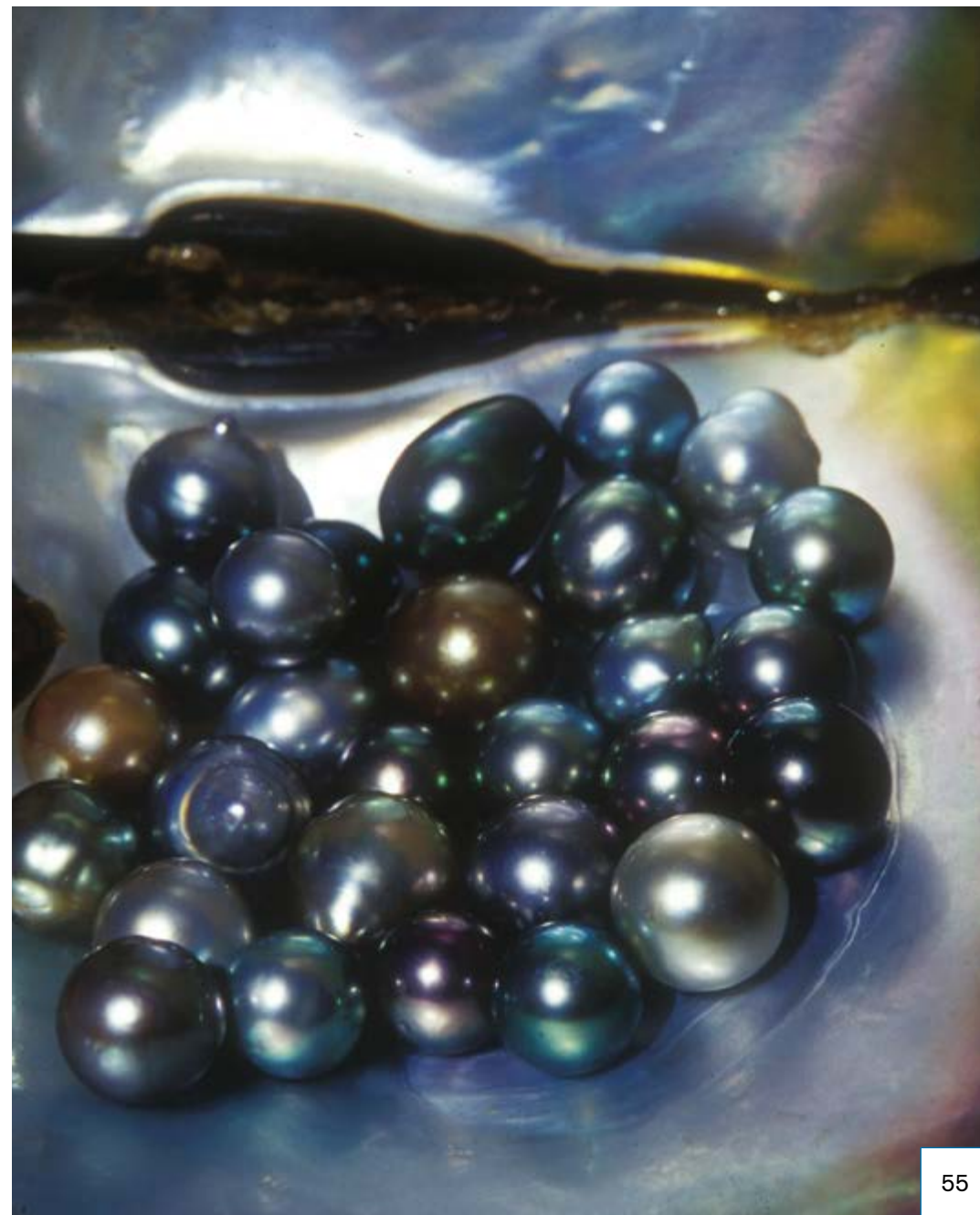
- the Shark Bay Prawn and Scallop Managed Fisheries,
- Exmouth Gulf Prawn Managed Fishery,
- the Shark Bay Crab (interim) Managed Fishery,
- the Gascoyne Demersal Fishery and the Inner Shark Bay Scalefish Fishery.

In 2011/12, Gascoyne fisheries accounted for the following shares of total State production:

- 50.6% of crabs;
- 75% of other crustaceans; and
- 95.8% of prawns¹⁵.

The Shark Bay Prawn and Scallop Managed Fisheries and the Exmouth Gulf Prawn Managed Fisheries are two of the State's most valuable commercial fisheries with combined catches in the range of \$40–50 million annually. Prawn, scallop, crab and fish processing are carried out in the region's towns. Fish processing occurs in Denham, prawn, scallop and fish processing in Carnarvon.

Pearling remains the largest aquaculture sector in the Gascoyne. In 2011/12, pearling produced \$9.4 million in value, representing about 10% of the State's production. Koi Carp and ornamental fish are two other forms of aquaculture but operations are currently very small, with only \$59,000 in combined production value in 2011/12.



Small Business

The Gascoyne has a dynamic entrepreneurial business community with strengths in food production, construction and tourism. In 2012, the Gascoyne was home to over 1,000 locally registered businesses¹⁶. This is the highest number of businesses registered in the region since 2009, reflecting a recovery in the economy after the impact of natural disasters and recent redevelopment and investment in Carnarvon.

Across the Gascoyne, the small business sector is an important component of the local economy with businesses employing fewer than 20 workers accounting for 94% of the region's locally registered business community. Non-employing businesses (or businesses with only one individual) represent the majority of locally registered businesses, accounting for 56% in 2012. This is a common trend across Australia and reflects the self-employment and sub-contractor workforce trends in construction (61% non-employing), agriculture (59% non-employing), and some professional sectors like

finance and real estate (69% non-employing).

The Gascoyne region's share of small businesses (5-19) is above the State average. Gascoyne business community. Still analysis from the Small Business Development Corporation suggests there are 91 small businesses in the Gascoyne region for every 1,000 residents. This is above

the Western Australian average of 85 and the Perth Metropolitan average of 83. However, it is below the average small business level for the Goldfields Esperance (93), Wheatbelt (134) and Great Southern (149).

Agriculture and construction continue to be the most common business sectors, though retail, transport and real estate and

professional services are also significant. The region participates significantly in primary production, especially in horticulture, pastoralism and fishing, and small businesses are increasingly vital to servicing the regional tourism sector, the region's most valuable industry.

Regional economic growth is increasingly dependent on integrating tertiary education and research with innovative, knowledge intensive industries and a dynamic small business community. One of the opportunities is profiling of potential investment opportunities by small businesses in the region, especially in the horticulture, food and tourism sectors, through industry organisations or the CCIs.

Tourism still has the potential to be a significant local employer and economic multiplier in the region, and significant small business opportunities are evident in the Gascoyne Regional Tourism Strategy and the Ningaloo Shark Bay National Landscapes Experience Development Strategy. Small business has the potential

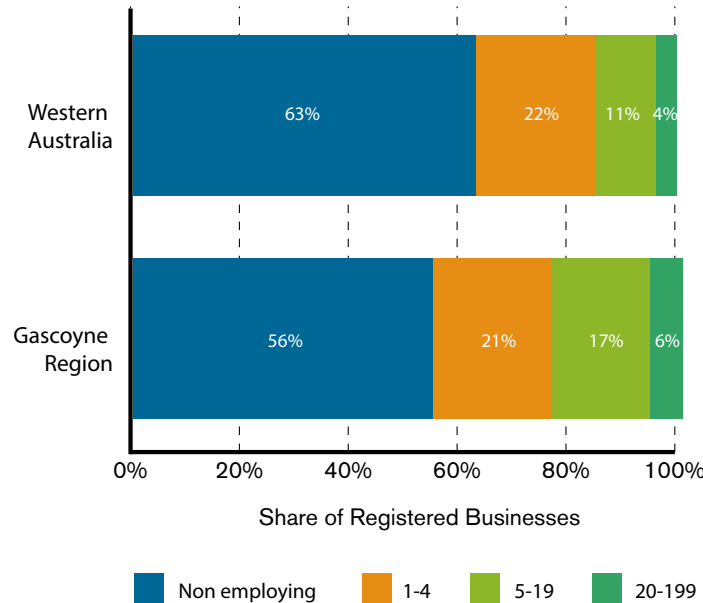


Figure 10 Locally Registered Employing Businesses, by Number of Employees, Gascoyne and Western Australia¹⁷

to benefit from the mining and energy resource sector but they lack the capacity to appropriately meet the production and process requirements. Efforts are required to foster a culture of coordination and collaboration among small businesses in the region, to allow major procurement contracts to be met.

A targeted approach is required to ensure that the small business sector has access to the relevant development programs to increase its productivity and competitiveness. There is opportunity to develop a small business incubator with associated regional outreach program, a working hub to provide a flexible co working space, a small business collaboration website including framework for small businesses to join forces on large public and private sector procurements.

Renewable Energy

While the Gascoyne is located near considerable oil and gas resources within the Carnarvon Basin, businesses are faced with challenges associated with the high costs of developing infrastructure (gas pipelines or electricity networks) to areas that are sparsely populated and separated by vast distances. Each community has its own stand alone power station which inhibits available market opportunities for any excess renewable energy to be on sold.

The abundance of sunshine in the Gascoyne makes it one of the best solar regions in Australia, and already has the largest solar plant in Western Australia owned by a private company. The region has an opportunity to become a national leader in the utilisation for solar technology, with vast areas of land, high annual solar insolation and high alternative fuel costs for the production of electricity.

Several communities along the region's coastline (Denham and Coral Bay) harness the wind, with wind turbines contributing to and offsetting the cost of their diesel generated electricity.

There are many advantages to a region of increasing its reliance on local energy resources:

- Reduces energy costs
- increases the opportunities for local employment and businesses
- Reduces greenhouse gas emissions
- Provides fuel diversification, protecting the region's economic vulnerability.

The development and implementation of renewable energy is essential for any broader economic development strategy for the region because energy is critical or fundamental input into all of the region's economic activities – tourism, pastoralism, agriculture, fishing, mining and transport.



Aboriginal Enterprise

There are a number of Aboriginal businesses operating across the Gascoyne, which are diverse in nature. These businesses have access to only a limited level of Aboriginal economic development support. Like many other support services to the Gascoyne region, Aboriginal economic development support is primarily provided from outside the region, namely from Geraldton and Perth.

To address these issues, strong links must be developed with industry and with support organisations to build capacity, mentor and foster development of Aboriginal enterprises. This includes drawing upon the lessons learnt by other parts of regional Australia, including the establishment of Aboriginal economic development and industry partnership plans, as well as regional Aboriginal employment strategies with on-ground dedicated support.

Mining, energy supply, horticulture and pastoral activities have provided a number of opportunities in the adjacent Pilbara and Kimberley regions, in the

areas of employment, training, entrepreneurship and community development. Indigenous Land Use Agreements (ILUA) negotiated as part of native title agreements, have provided Aboriginal communities with economic benefit through the granting of social license to operate for mineral exploration and extraction. The development of Aboriginal enterprises in supply chains in the resources and food sectors in the Gascoyne should they arise, in the wake of development, could be transformational.

Likewise enormous potential exists in tourism for Aboriginal product development. The Ningaloo Shark Bay National Landscapes Experience Development and the Gascoyne Regional Tourism Strategy both identify the Gascoyne as a region of focus for lucrative international and national market segments. These segments are seeking opportunities based on maritime, outback, adventure and Indigenous experiences.



Courtesy of Australia's Coral Coast

Community Wellbeing

Well designed communities, transport and infrastructure underpin the attractiveness and liveability of a place, which contributes substantially to the general wellbeing of its population. The provision of attractive and liveable communities with good social infrastructure may positively influence the attraction and retention of new residents to the Gascoyne. The lack of a population critical mass in the Gascoyne represents one of the fundamental challenges to the region achieving its economic potential. The small size and dispersed nature of the population impacts the level of demand for a range of population services including health, secondary and tertiary education, retail and public administration. Historical population declines have reversed in recent years and the region has entered a period of sustained strong population growth. This is exacerbating the existing shortfall in population services in the region and placing greater pressure on current service provision.

Population and Demographics

The Gascoyne region accommodates a usual resident population of approximately 10,300. Like much of regional Western Australia, it experiences the dual challenges of an ageing population and youth migration. The region's population has fluctuated during the last decade, contracting by some 1,000 residents to 2006, before expanding to the current level. Aspirational population targets were developed collaboratively by the Department of Planning with the Gascoyne Development Commission and Gascoyne. These projections indicate growth in the population of the region to 15,500 residents by 2026 and to 23,000 by 2050.

In 2012, the share of population aged less than 15 years in the region (21.1%) was marginally higher than the Western Australian average (19.2%). Similarly, the share of population aged 65+ is also marginally higher than that of the State average (12.6% and 12.4% respectively). Regional fertility rates are consistently above

the State and national averages in the Gascoyne.

Only 23.4% of the Gascoyne's population in 2012 was aged between 15 and 34, compared to 29.4% across WA. It is difficult for the region to retain young adults, particularly those undertaking secondary and tertiary education and vocational training. This also includes young workers

seeking a variety of employment opportunities.

The Gascoyne has a relatively large Aboriginal population. In 2011, peoples of Aboriginal descent comprised almost one in every five Gascoyne residents (18.3%) or some 1,770 people. This is above the State (3.7%) and national (3.0%) averages. The Aboriginal population of the Gascoyne has

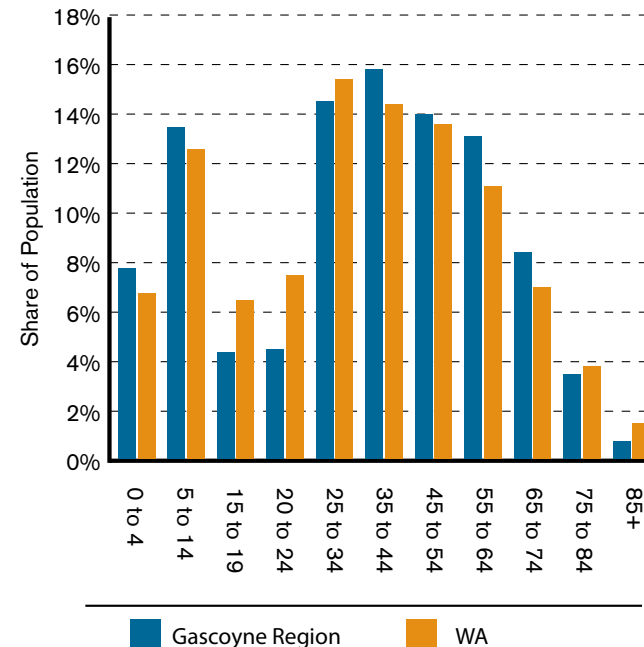


Figure 11 Population Age Profile, Gascoyne Region and WA, 2012¹⁸

a younger age profile than non-Aboriginal residents, with 36.1% of people identifying as Aboriginal under the age of 15. In contrast, the share of Aboriginal residents aged 65 and over is significantly below the non-Aboriginal average. This aligns with State and national trends.

Population Growth Forecast

The Gascoyne Development Commission (GDC) recognises the figures produced by the Western Australian Planning Commission in Western Australia Tomorrow Population Report No. 7, 2006 to 2026 – Forecast Profile for Gascoyne Planning Region developed in February 2012 that contains trend-based population forecasts produced by the State Demographer which are considered to be the State’s official population forecasts.

The GDC believes that circumstances have changed since the WA Tomorrow report was completed that will result in higher population growth within the Gascoyne region. These include:

Forecasts in the WA Tomorrow report have been made until 2026 because it states that it is considered reasonable to assume that underlying trends will continue to that point. However, forecasts are based off a population decline up to 2006 and long-term population decline across the entire region has been reversed since 2007, with positive net migration into Exmouth and strong local fertility rates and household formation supporting strong population growth. This makes trend projections without a recent and accurate evidence base.

Government has adopted plans and strategies that are expected to change future trends such as Directions 2031 and Beyond, Pilbara Cities and Supertowns. These were considered as part of trends that would increase populations for other regions. There was no consideration of the Gascoyne Revitalisation Plan (\$150 million Royalties from Regions) investment in the Gascoyne or future investment through the Gascoyne’s (Carnarvon) inclusion in the new version of Supertowns or Regional Investment Blueprint investment.

Other issues affecting the figures include an ongoing issue of accurately counting the Gascoyne’s Aboriginal population on Census day and impacts of the region’s large service worker population, including overseas workers.

Regional aspirational population targets were developed by Department of Planning (see Table 1) through a consultation process that engaged the four Gascoyne local governments and GDC. Regional targets were proposed following consideration of all feedback received from local governments regarding their future population aspirations at local and regional levels, in addition to further advice from the GDC. These targets are considered by the GDC to be in general alignment with the regional vision.

The Department of Planning has run a project to develop population growth scenarios in the Gascoyne in order to consider the possible impacts of existing and potential investment and economic development on regional population growth. The scenarios were modelled to 2051 to reflect the planning timeframe in the Draft State Planning Strategy (2050). Scenarios are intended to broadly illustrate potential impacts that varying levels of economic expansion and investment in the region may have; and accordingly, they have been developed based on available information. As such, scenario population planning allows for greater timeframes to be considered as it is not expected to be as accurate as a forecast model. The high growth scenario from this project is presented in Table 2.

	2012	2026	2051
1. WA Tomorrow – Band C	9,766	8,550	n/a
2. WA Tomorrow – Band E	9,766	11,510	n/a
3. Aspirational population targets	9,766	20,000	40,000
4. Estimated peak population	20,000	35,000	55,000

Table 1 Gascoyne region population scenarios. Source: WA Dept of Planning

	Current population (refer 4.1)	Population forecasts/ projections (refer 4.2)	Population growth scenarios (refer 4.3)	Estimated residential population capacity based on existing zonings (refer 4.4)				Estimated residential population capacity based on existing zonings (refer 4.4)
	ABS		WA Tomorrow	Gascoyne Population Growth Scenarios Study – High Growth Scenario				
	ABS 2011 Census	ABS 2012 Estimated Residential Population – preliminary	2026 Forecast Population: Band A (median figure) – Band E (median figure)	2026		2051		
				Permanent	Peak	Permanent	Peak	
Carnarvon	5,787	6,057	2,900 - 6,500	7,427	10,991	7,498	11,062	13,131
Exmouth	2,393	2,536	2,100 - 3,100	4,469	11,965	4,604	12,100	9,150
Shark Bay	857	915	1,100 - 1,400	1,366	4,367	1,352	4,353	2,653
Upper Gascoyne	251	258	240 - 510	227	988	146	907	258
Gascoyne region	9,288	9,766	6,340 - 11,510	13,489	28,311	13,600	28,422	25,192

Table 2 Current and future population figures applicable to the Gascoyne Region. Source: WA Dept of Planning

Significantly, the scenario provides two sets of population figures, specifically for permanent population; and for peak population. With respect to the latter, in instances where sufficient validated data is available, annual peak or maximum population figures have been modelled as part of the scenario to consider the possible magnitude of itinerant or

transient populations in addition to an area’s permanently-based resident population. As itinerant or transient populations, such as fly-in fly-out workers, seasonal workers and tourists, invariably create additional pressure on local and regional infrastructure, consideration of their population impacts is important from a planning perspective.

While the figures produced are agreed to by Department of Planning, GDC and the Gascoyne four local governments and state a population in 2051 of 28,422, the GDC has been more conservative with aspirational population figures in the Blueprint stating 23,000 by 2050. GDC have developed the new aspirational figure of 23,000 by 2050 based on the 1.5%

growth experienced from 2010 to 2013 which totalled a population of 17,516 by 2050. The GDC then added a percentage growth of .07% based on future investment in the region which produced a final aspirational figure of 23,000. This is now based on 8 years of continuous positive population growth in the Gascoyne as a whole.

Health and Community Services

The Gascoyne Health District includes the Carnarvon Hospital, Exmouth Hospital, nursing posts at Coral Bay and Burringurrah and the Silver Chain nursing post at Denham. Carnarvon Hospital provides support to Exmouth Hospital and the three nursing posts. Gascoyne residents requiring more specialised care are transferred to Geraldton Health Campus and if required to metropolitan tertiary hospitals. WA Country Health Service (WACHS) facilities within the Gascoyne are summarised as follows:

SERVICE	CARNARVON	EXMOUTH	CORAL BAY	BURRINGURRAH	DENHAM
Inpatients	15 beds	8 beds	×	×	×
Day Surgery	10 beds	×	×	×	×
Residential Aged Care	15 beds	2 beds	×	×	×
Emergency Services	3 treatment bays 1 resuscitation room	2 treatment bay 1 resuscitation room	Acute and Emergency Service with evacuation via Ambulance or RFDS	Acute and Emergency Service with evacuation via Ambulance or RFDS	Acute and Emergency Service with evacuation via RFDS
Maternity Services	1 birthing suite	×	×	×	×
Outpatient Services	✓	✓	Resident Registered Nurse	Remote Area Nurse	Resident Silver Chain Nurse
Population Health	✓	✓	Visiting	Visiting	Visiting
Allied Health	Dietetics, Physiotherapy, Occupational Therapy, Speech Therapy	Social worker on site, remainder visit from Carnarvon	Visiting	Visiting	Visiting
Community Mental Health	On site	Part time	Visiting	Visiting	Visiting
Clinical Support Services	Medical Imaging, Pathology, Pharmacy	Medical Imaging, Pathology collection	×	×	×

In addition to the WACHS services described above, a range of healthcare services are also provided by other State and Commonwealth government funded agencies, non-government organisations and private providers.

Gascoyne residents present at high rates to emergency departments, particularly in the less and non urgent presentations. This indicates a high need for increased primary health services. An increase in the GP sector may help to alleviate some of this need

but co-located and collaborative services models between GP primary care, other non-government health providers and WA Country Health Service emergency department and population health/ primary health services is strongly recommended¹⁹.

<p>State Government</p> <p>Perth Metropolitan Healthcare Facilities Patient Assisted Travel Scheme (PATS) Rural Link Gascoyne Development Commission PathWest WA Police FESA Dept. of Education</p>	<p>Private Providers</p> <p>Carnarvon Medical Centre Silver Chain Ningaloo Physiotherapy Private dentist – Carnarvon Private psychologist – Exmouth Community Pharmacy</p>
<p>Commonwealth Government</p> <p>Mid West GP Network Carnarvon Medical Service Aboriginal Corporation Home and Community Care True Culture True Care Program (OATSIH)</p>	<p>Non-government & local government</p> <p>Agencies St John Ambulance RFDS Carnarvon Family Support Local Shires Burringurrah Community Corporation</p>

In addition, Aboriginal residents have a greater need for health care services compared to their non-Aboriginal counterparts. Future services planning needs to address this with targeted interventions and accessible, culturally appropriate services for the Aboriginal residents²⁰.

The fundamental issue in sustaining health service delivery in the Gascoyne is the ability to attract and retain staff and visiting specialists. Much of this is related to lack of locally available amenities, poor educational options particularly for high school aged children, and unsatisfactory short and long term housing options for staff.

There is currently no residential aged care facility between Geraldton (Mid West) and Karratha (Pilbara) with the exception of a dedicated Permanent Care Unit at the Carnarvon Health Campus (15 beds) which caters for both low and high care residents. This is not a secure facility therefore residents with dementia who wander are not able to be accommodated. The majority of Gascoyne residents requiring high level aged care must therefore relocate from the region to access facilities elsewhere. Their families must then travel significant distances (over 1000 kilometres return) to visit. This impacts broadly on the community and impedes the growth of some service industries, thus reducing the scope and availability of employment.

A collaborative initiative led by the Regional Development Council, with involvement from the Department of Regional Development, WA Country Health Service and all nine development commissions across regional WA, the State Wide Ageing in the Bush project aims to develop a holistic regional solution to assist ageing residents to remain in their communities for as long as possible. Investment is required by State Government to compensate for the current lack of critical mass and provide an appropriate level of service offering. Planning is underway to construct a 24 bed high care facility on the Carnarvon Hospital Campus. However this will not address the need for low care or Independent Living Units.

Education and Knowledge

52% of the region’s residents have obtained a Certificate, Diploma or Advanced Diploma, which is above the current State level of 50%. Despite this, only 18% of residents have a Bachelor Degree or higher as opposed to 31% in the State. This post-school qualification profile is highly biased toward VET related qualifications. Such qualifications are more common among occupations such as tradespersons and machinery and equipment operators, and industries like manufacturing, construction and tourism.

A summary of education services provided across the Gascoyne is as follows:

SERVICE	SHIRE OF CARNARVON	SHIRE OF EXMOUTH	SHIRE OF SHARK BAY	SHIRE OF UPPER GASCOYNE
Kindergarten/Preschool	✓	✓	✓	
Primary School (Public)	✓	✓	✓	
Primary School (Private)	✓			
District High School (Public)	✓	✓		
High School (Private)	✓			
Senior College 10-12 (Public)	✓			
Remote Community School				✓
School of the Air	✓			
Institute of Technology	✓	✓		

There are currently no education providers in the Gascoyne offering a comprehensive range of subjects face-to-face and on-site through to Year 12. Many year 11 and 12 subjects are offered through correspondence and distance education supported through metropolitan based providers.

This has a significant impact on the retention of families with high-school aged children who migrate away from the area seeking more satisfactory educational opportunities.

Under the guidance of the Department of Education, the Carnarvon Public Schools entered into a cluster arrangement with the aim to raise educational outcomes for all students, with the advantage of sharing resources across a single site. The amalgamation of all the Carnarvon State Government primary schools was achieved at the beginning of the 2014 school year, with the completion of Stage 1 of the development of the College. However, Stages 2 and 3 of the project do not have a current funding commitment so the High School continues to be located at its old site. Finalisation of

this arrangement will provide better educational outcomes for students.

The perceived quality and scope of education currently offered in the Gascoyne impacts significantly on the attraction and retention of residents and workers in the region. Whilst high school leaving rates and early childhood outcomes are close to the national average, the learning outcomes for primary and secondary school students overall are low. Opportunities for enhanced regional educational experiences and outcomes will impact positively on the attraction and retention of skilled workers and families to the region.

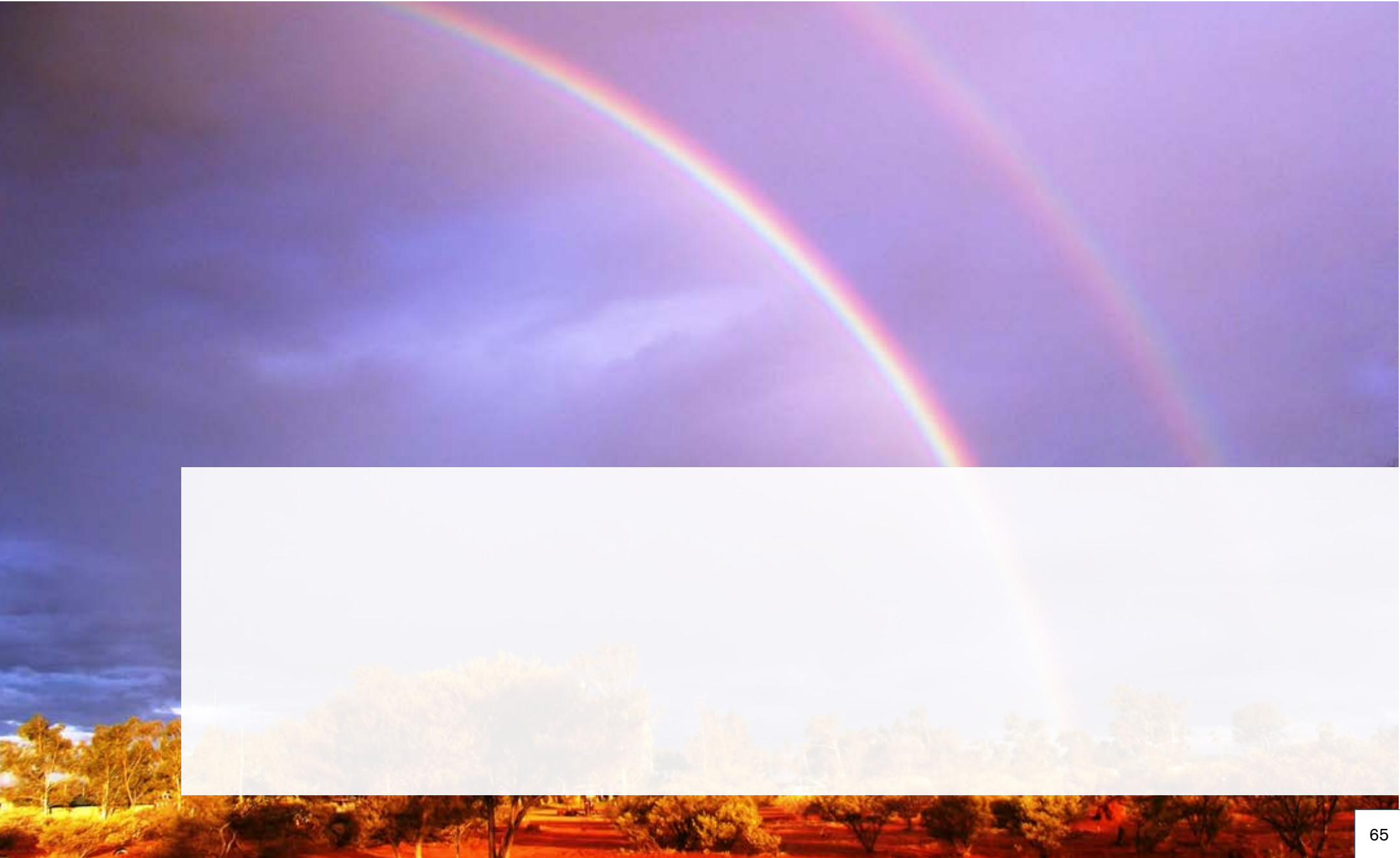




Figure 12 Adjusted Porter's Diamond

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

The competitiveness of a region can be readily assessed through the application of Porter's Diamond Model of Competitive Advantage²¹. Developed by Michael Porter the Diamond Model represents a form of Economic SWOT analysis. Adjustments have been made to this model to reflect the assessment of a region, rather than a nation. This adjusted model is illustrated in the diagram in Figure 12.

The adjusted Diamond Model applied in this Blueprint is comprised of five core, interrelated determinants of regional competitiveness:

Factor Conditions – refers to the factors of production such as land, resources, labour and infrastructure and their relative quality, accessibility and suitability;

Demand Conditions – refers to the state of the domestic market for the goods and services. Strong local domestic markets with sophisticated and quality focused consumers provide businesses with incentive to innovate and grow into exporting firms while access to enabling infrastructure (ports, airports) provides businesses with access to regional and international markets;

Supply and Related Industry – refers to the depth and diversity of businesses that input into the supply chain of the principal activity. Can include direct inputs to production as well as activities that enhance business performance and operation (e.g. a high amenity location that supports the attraction and retention of skilled labour);

Firm Strategy, Structure and Rivalry – represents the impact of local competition on propensity of businesses to innovate and the suitability of their strategies and corporate structures to facilitate this innovation; and

Innovation – includes core facilities, technologies, processes and services that support innovation by industry such as proximity to research and development capacity (like a university), access to quality telecommunications technology and the emergence of new business models (such as ecommerce, crowd sourced financing and cloud computing).

Government also plays an important role in supporting and facilitating the economic competitiveness of a region. Government agencies and representatives relevant to the economic development of the Gascoyne include (but are not limited to):

- The Gascoyne Development Commission;
- Regional Development Australia Mid West Gascoyne;
- Other State and Federal Government Departments; and
- Local Governments within the Gascoyne.

The results of the competitiveness assessment for the Gascoyne are outlined in the diagram on the following page.



MOUNT AUGUSTUS

Located in the Mount Augustus National Park, the prominent landmark is a monocline twice the size of Uluru and the largest monocline in the world. Standing over 1106 m above sea level, the central ridge of the monocline is over 8km long. Created over 1.75 billion years ago as part of an ancient river system that flowed through the area, Mount Augustus is now a popular tourist destination with climbs and trails on the monocline and around the park. Currently serviced by a caravan park, resort style accommodation is proposed for the area to support growing visitation.

	ADVANTAGES	CHALLENGES
Factor Conditions	<ul style="list-style-type: none"> • Significant contributor to State production in horticultural products due to a long term established industry. • An interconnected ocean and arid coast forming striking landscapes and seascapes. • Combination of inland and coastal features provides a diverse range of tourist activities and attractions. • Strategically located between major mining regions and centrally on the WA coastline. 	<ul style="list-style-type: none"> • Fertile soil and availability of suitable water. • The availability of a particular type of accommodation to rent or buy is limited. E.g. Independent Living Units. • Land affordability and high building costs. • Labour force skills lower than state average. • Loss of young adults due to lack of educational and employment opportunities.
Demand Conditions	<ul style="list-style-type: none"> • Growing population supporting demand. • Direct access to markets through Learmonth airport. • International tourist visitation growing. • Strong exposure to domestic and global food markets. • Proximity to major mining and energy regions with associated supply chains. • Aboriginal economic opportunities in tourism and food production. 	<ul style="list-style-type: none"> • Overall population lacks critical mass to support population services. • Lower household and personal incomes. • Regular aircraft passenger movements to Learmonth with only limited access to other parts of Gascoyne. • Business creation levels below average. • Agriculture focused primarily on domestic market. • Investment in a deep water wharf at Exmouth in order to provide export ready facilities and cruise ship berthing.
Related & Supporting Industries	<ul style="list-style-type: none"> • Supply chain value adding occurring in horticulture. • Opportunities to provide significant supply chain support to major mining and energy projects. • Net migration to Exmouth strong in recent years. • Recent growth in local transport, construction and professional services. 	<ul style="list-style-type: none"> • To increase migration to the Gascoyne as a whole.
Firm Strategy, Structure & Rivalry	<ul style="list-style-type: none"> • Export orientated economy incentivises competition and innovation, particularly in tourism. • Resilient regional business communities continue to seek innovative practices. 	<ul style="list-style-type: none"> • Business size limits ability to target export markets. • Adoption of e-commerce hampered by a lack of IT infrastructure.
Innovation	<ul style="list-style-type: none"> • Framework established to encourage research and development in agriculture sector – Gascoyne Food Plan. • Gascoyne Food Bowl initiative designed to enhance regional food security. • Gascoyne Regional Tourism Strategy is a collaborative region wide approach to developing tourism products and services. • Gascoyne Workforce Development Plan to address labour shortages due to lack of skills and migration. • Regional Aviation Strategy to increase regional accessibility and connectivity. 	<ul style="list-style-type: none"> • Lack of major tertiary education or health institutions commonly associated with research and development. • Attraction of new innovative businesses to the Gascoyne region. • Continue to develop established businesses to identify new markets through technology.

REGIONAL IMPERATIVES

- Food Production
- Tourism
 - Destination First Choice
- Population Services
- Resources
 - Services and Supply Chains



Global Connectivity Assessment

Access 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; and
- **Inward investment** – major investments from overseas into the region.
- **Digital Engagement** - access to e-commerce markets, capacity building and information sharing.

For the Gascoyne, salt and aquaculture exports, tourist visitation and energy investment represent the most significant connections to the global economy.



Exports

Gascoyne lacks a multipurpose port facility from which to export the region's agricultural production. Instead, livestock and horticulture products are transported primarily to other regions for access to international markets.

Salt is a major export product for the Gascoyne. This industry is located at Useless Loop in the Shire of Shark Bay and at Lake MacLeod near Cape Cuvier, north of Carnarvon. When operating at their collective full capacity, these two operations account for nearly half of the state's total salt production. Due to an increase in the global price of salt and exchange rate differences in the global financial market, the mining sector in the Gascoyne has recently seen a significant increase in production and value, increasing from \$57.5 million in 2007/08 to \$113 million in 2012/13. Both major salt operations maintain private port facilities for direct transport of product, which is largely exported to Asian countries for food and chemical production. There are future plans to expand operations at Lake MacLeod from the current 764 hectares to 1000 hectares.

Western Australia is a primary place of origin (nearly 50%) for live cattle export to Asia, and in particular, Indonesia²². Livestock production is currently the mainstay of the 67 pastoral leases in the Gascoyne. The average size of these pastoral properties is approximately 125,000 hectares. The livestock are raised largely on natural pasture and are watered through a variety of sources including artesian bores, permanent water holes, windmills and dams²³.

Live export is important for the viability of rangeland businesses. The main ports for livestock disposal from the rangelands are Fremantle, Port Hedland, Broome, Geraldton and Wyndham. Port Hedland berths can be dominated by the mining resource sector resulting in livestock being transported further north. Geraldton Abattoir, 480km south of Carnarvon, is currently the closest facility for slaughter of sheep and goats. Department of Agriculture and Food WA has undertaken a feasibility paper to determine the viability of establishing an abattoir north of Geraldton to service North West Australian slaughter trade.

Tourist Visitation

Since 2004/05, there have been a significant number of international visitors to the Gascoyne staying a total of 5.1 million nights. This equates to an average of almost 1,800 visitors in the area on any one night. International visitation varies year to year but has been steadily increasing over the past decade, with a significant spike in international visitor nights in 2012/13.

UK, Germany, other European countries and New Zealand represent the largest sources of international visitation to the region, collectively accounting for 77.6% of visitors and 64.2% of visitor nights since 2004/05. 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, Korea and China).

Gascoyne is a holiday/leisure tourism destination, with 65% of international visitor nights and 87% of visitors staying in the Gascoyne since 2005/06 for holidays and/or pleasure. These shares have been declining in recent years however, as Visiting Friends and Relatives (VFR) and Employment categories are growing in importance.

This increase in the diversity of international visitors to the Gascoyne reflects a combination of the growth in residential population since 2007 and the region's strategic position accessible to major energy and mineral resource projects. Reduced reliance on holiday and leisure markets can provide significant benefits to the local economy. Non-holiday travellers tend to be less seasonal and their travel is not as influenced by changing market conditions. It also diversifies the guest mix for tourist accommodation establishment, improving operational sustainability and enhancing overall development viability for the sector.

The growth of the international tourism sector in the region will likely come from an increase in holiday visitors from emerging Asian countries in the first instance. Growth will also likely occur in the VFR market as the population in

the Gascoyne increases over time. Significant opportunities exist in the Employment segment within the region on the back of major resource investments, while effort is required to increase business traveller numbers.

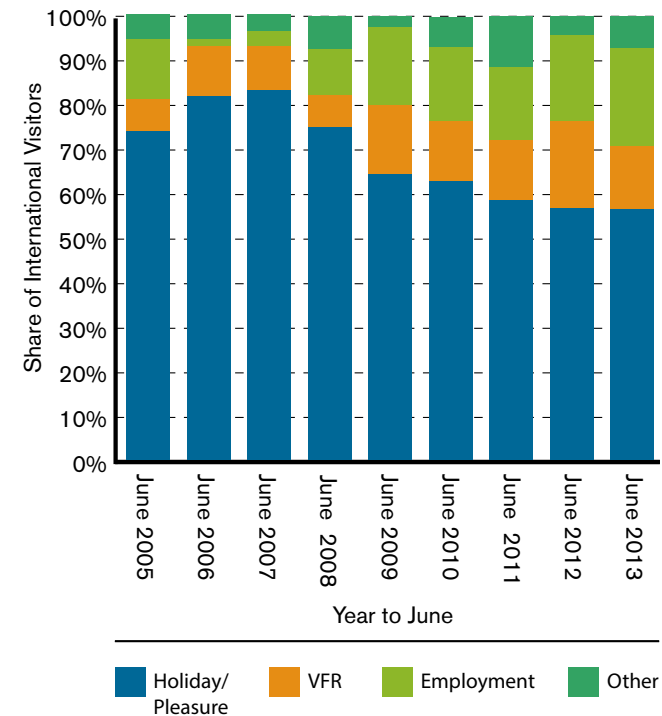


Figure 13 Share of International Visitor Nights, by Reason, Gascoyne, 2004/05 to 2012/13²⁴

Inward Investment

Despite the attention on the emergence of Chinese foreign direct investment (FDI) to Australia, the US and Europe remain the country's largest direct investors. In fact, over the decade to 2011, FDI from mainland China (\$79b) was exceeded by that from Hong Kong (\$86b) and was less than that from New Zealand (\$139b). This distribution is illustrated in Figure 14.

Western Australia has received a disproportionately large share of inward investment in recent years, owing to the mining and energy investment boom and associated requirement for overseas capital. Outside of the mining sector however, inward investment into Western Australia has been more limited. For example, in 2011/12, WA accounted for only \$2.2 billion in inward investment into real estate, significantly less than the \$27 billion into NSW and \$7.5 billion into Qld²⁵. This represents a challenge considering that Real Estate overtook Mineral Exploration and Development as the largest FDI sector in the Australian economy in 2011/12.

Investment in the agriculture sector has become increasingly topical in recent years, in response to community concern regarding food security and land ownership levels. In 2011/12, there were a total of 49 FDI Approvals in the Australian agriculture sector totalling \$3.6b²⁵. This accounted for less than 2% of the total approved FDI that year. This is expected to grow considerably in the future, with the current takeover.

Additionally the topic of foreign acquisition of Australian farm lands and operations has received considerable attention in the media. This topic is highly emotive with strong views from a range of stakeholders. However, the key issues that appear to underpin the discussion include:

- Questionable financial sustainability of some farm operations;
- Need for major investments in some farms to improve sustainability;
- Increased farm consolidation;
- Maintenance of the lifestyle and "way of life" associated with the family owned farm;

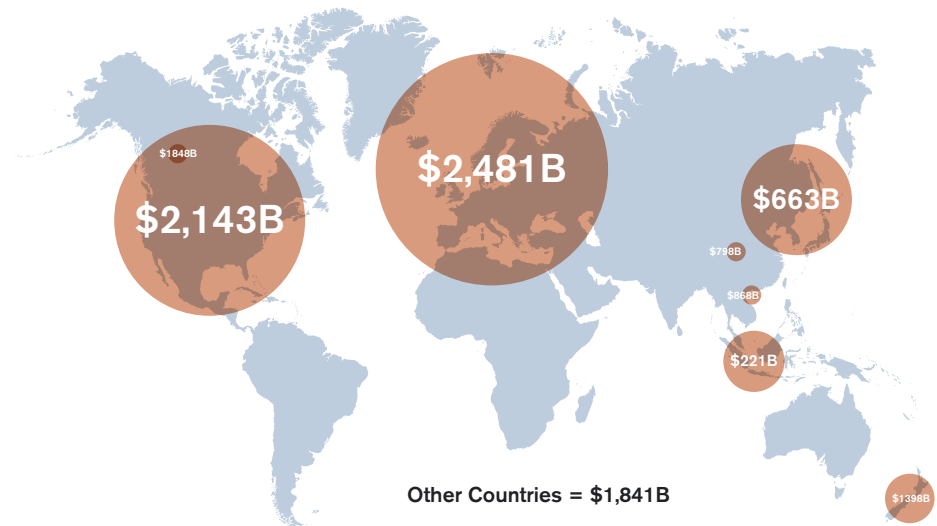


Figure 14 Foreign Investment into Australia, by Country/Region, 2001 to 2011²⁶

- Issues with farm succession with the "next generation" leaving the farm for employment, education or lifestyle reasons;
- Issues of mental health and suicides associated with family owned farm operations; and
- Trends towards farm management versus farm ownership.

Major investments are currently underway in the energy sector within and adjacent the Gascoyne

region. Investment in energy production is at an all-time high and exploration in the State has grown sharply in recent years. The size of the current investment pipeline and the extent of exploration indicate that energy resource development will continue into the medium and long-term in Western Australia. This presents a major opportunity for the Gascoyne region.



Figure 15 Gas Basins, Australia²⁷

LNG offers a lower carbon intensity base load fuel than other fossil fuels using comparable technology. In 2010, gas accounted for nearly 22% of global energy consumption and 24% in OECD countries. Japan and Korea represent major markets for LNG in the Asian market and purchase about half of global LNG production. Currently Qatar is the world's largest producer of LNG though current investments are expected to see Australian production reach

similar levels to Qatar by 2020 and capture 20% of the global market.

The Gascoyne is strategically located adjacent to the Carnarvon Basin. Stretching from south of Shark Bay to Karratha in the Pilbara, the Carnarvon Basin is currently estimated to hold 93 trillion cubic feet (tcf) of natural gas. The position of the major LNG basins in Australia is illustrated in the figure above.

A diverse range of opportunities exist in supporting the supply chains of large LNG and energy projects. These include, but are not limited to:

- Machinery and equipment installation and maintenance;
- Pipe, beam and metal fabrication;
- Facilities management services;
- Printing and design services;
- Communication installation, maintenance and systems management;
- Water storage and treatment services and facilities;
- Safety and environment control systems;
- Engineering and land survey services;
- Diving and underwater equipment installation services;
- Offshore transport services;
- Environment monitoring, management and assessment services;
- Worker camp production, installation and decommissioning;
- Commercial cleaning and laundry services; and
- Food and retail services²⁸





OTC SATELLITE EARTH STATION

The OTC Satellite Earth Station Carnarvon has an impressive history linked with NASA's Apollo moon project and some of the first live satellite TV broadcasts into Australia. Operational in October 1966, the OTC Station provided reliable and higher quality communications for NASA moon landings. The Station was operational for 8 years until the close of NASA Station. It continued to operate in support of European and Japanese Space Agencies until it was decommissioned in 1987. The Station has remained active however, hosting solar scientific research and is home to the Carnarvon Space and Technology Museum. The OTC Station is a registered heritage site with the Heritage Council of Western Australia.

The diversity and scope of these supply chain requirements presents a considerable opportunity for the Gascoyne region. However, capturing these opportunities can be challenging, particularly for smaller businesses. Quality, accreditation, insurance, safety, staff skill levels and technology and systems sophistication procurement requirements can often undermine the potential of small local businesses to participate in major resource project supply chains²⁹. Understanding these requirements and working with State and National major project procurement support agencies (such as the Industry Capability Network) is critical in addressing this constraint.

Additionally the size of contracts for major projects means that many small businesses lack the production capacity to appropriately service the client and can create a perceived risk for the LNG company within their supply chain. This issue can be addressed through either expansion of production capacity and associated investment (which is not possible for all businesses) or collaborative and cooperative tendering frameworks that allow a range of small and medium businesses to jointly tender. In recognition of this issue small and medium businesses are being assisted through a number of State and Federal government initiatives.

E-Commerce and Service Exports

Despite a slowing in growth in service exports since the GFC, export values accelerated again in 2012, driven primarily by a recovery in tourism activity. This resulted in service exports from WA reaching a new record, at \$5.6 billion. Other Personal Travel (i.e. tourism) was the largest service sector exports from WA in 2012, followed by Education-related Travel, Transport and Business Travel. This is illustrated in Figure 16.

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, with the adoption of e-commerce facilitated by new information technologies a critical enabler.

Employment in professional service industries has increased in the Gascoyne in recent years. This growth in knowledge intensive service sector will assist to rebalance the local labour market and business community away from a reliance on horticulture and tourism.

However, the small size of the local Gascoyne market for professional services is a major concern for the sustainability of this sector. One way this could be addressed is by increasing ICT capabilities

which would allow the more effective reach of professional and knowledge intensive service businesses. This includes the use of virtual and outreach delivery models to increase the effective reach of professional service providers across the entire region, and ensure all businesses in the Gascoyne are web-enabled, based on both current and emerging technologies. This should include the adoption of integrated e-commerce platforms and web-presence that is tailored to Asian and other global markets

Another potential approach is to fully incorporate local professional services offering into the supply chains of major resource and energy projects, maximising the size of the Business to Business (B2B) market for professional service businesses.

The future of the Gascoyne economy and region will be influenced by the interrelationship between prevailing global and national megatrends and the comparative advantages and characteristics of the Gascoyne region.

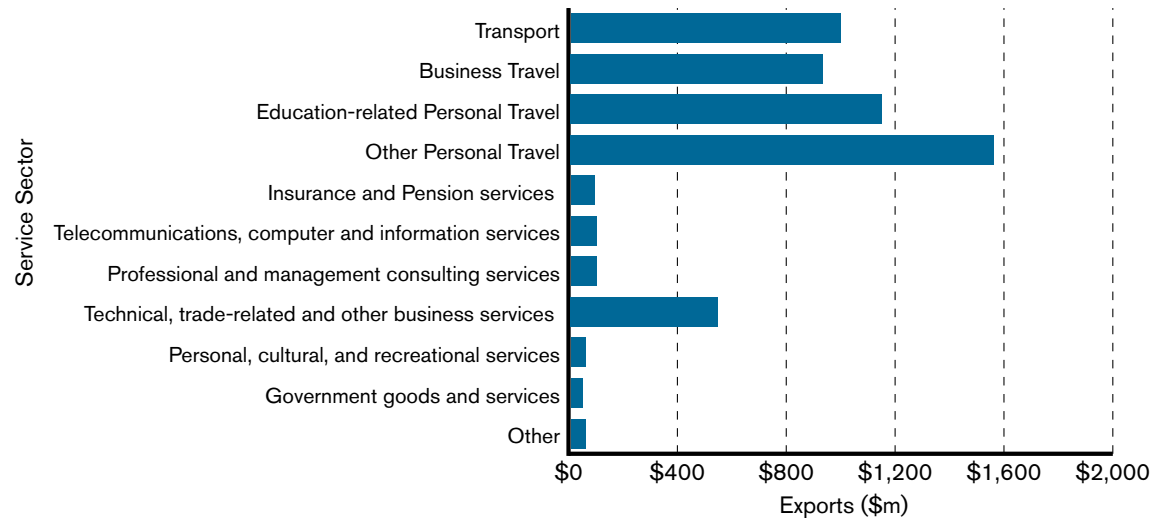


Figure 16 Service Exports, by Sector, Western Australia, 2012³⁰

Connectivity Summary

Although the Gascoyne is regarded as a moderately connected economy, there is significant room for improvement. Lack of port facilities hampers the export of products from the horticultural and pastoral industries. Learmonth Airport has the potential for commercial global connectivity once the demand and appropriate regulations are in place. The region is a recognised international tourism destination and has a historical export profile in livestock, salt and pearls. Additionally, the region's strategic location offers it increased exposure to mega-energy project investment. Opportunities exist to enhance this global connectivity in the horticulture sector and through the adoption of e-commerce and web-enabled practices to allow regional businesses to trade into Asia and the world.



Figure 17 Global Connectivity of the Gascoyne Economy



Regional analysis, through the consultation and research process, including global megatrends, has identified the region's comparative advantages, emerging opportunities and 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 will be key drivers together in order to achieve the vision articulated in this Blueprint.

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

Four Regional Imperatives have been identified as central to the future economic development and prosperity of the Gascoyne. These include:

- Food Production;
- Tourism-Destination First Choice;
- Population Services; and
- Resources Services and Supply Chains.

These Imperatives are not an exclusive list of the broader economic opportunities of the region over the next thirty five years. Instead, they reflect those areas of the economy and industry where efforts and actions from stakeholders would likely result in the greatest transformational effect. By prioritising investments that relate to these Imperatives, the aspirational Vision for the Gascoyne can be achieved.

Regional Imperatives

Four regional Imperatives have been identified as central to the future economic and social development of the Gascoyne.

Food Production

Tourism-Destination First Choice

Population Services

Resources Services and Supply Chains



FOOD PRODUCTION

The strategic role of the Gascoyne in horticulture, livestock and seafood production within Western Australia represents a core comparative advantage of the region and a foundation industry. Efforts to expand, diversify, intensify and value add to this sector will be at the heart of the Gascoyne's future economic and social prosperity. Despite the trend of falling employment in core agricultural sectors, value adding initiatives in processing, marketing and branding can increase the secondary employment opportunities of the sector and provide aspirational careers for young people. Critical to this Imperative is increasing the Gascoyne's ability to address the growing needs of key export markets, particularly feeding Asia's rising middle class. This will require the establishment and promotion of the Gascoyne 'brand' as a premium reliable and diverse food producing region of choice for overseas buyers.

Since 2009 the Gascoyne Food Council has been profiling the Gascoyne regional brand with consumers through events such as the "Long Table" to showcase the amazing and diverse range of high quality foods. It also works with producers for continued development and growth of high value products and new markets.

The following table summarises the mega-trends, strategic themes, regional characteristics and opportunities relevant to this Imperative and identifies opportunities to inform an Implementation Plan.



FOOD PRODUCTION

Megatrends	<ul style="list-style-type: none"> ● Global Food Demand
Relevant Strategic Themes	<ul style="list-style-type: none"> ● Protecting the Environment and Natural Amenity. ● Intensifying and Expanding Horticultural Production. ● Diversifying the Regional Economy. ● Human Capacity Building. ● Growing Incomes. ● Maximising Private Sector Investment.
Regional Characteristics	<ul style="list-style-type: none"> ● The Gascoyne is a significant WA producer in a diverse range of horticulture, livestock and seafood products. ● Carnarvon is the primary centre for horticulture, primarily providing the domestic market with a range of vegetable and fruit crops. ● The Rangelands have extensive pastoral land supporting significant livestock production, namely cattle. ● Wild capture seafood is an established industry in the region with aquaculture focused primarily on pearling. ● Rainfall patterns are below average for a horticulture district and highly variable, though the irrigation-based approach to horticulture in Carnarvon provides resilience.
Opportunities	<ul style="list-style-type: none"> ● Agri-Tourism: <ul style="list-style-type: none"> – Cattle Station Stays; – Farm Stays; – Farm gate produce; – Farmers Markets; and ● Food Festivals and Events. ● Establishment of single food brand across sector for the Gascoyne. ● Multipurpose Food Processing Plant. ● Gascoyne Food Bowl Initiative. ● Carnarvon Horticulture Expansion. ● Increased aquaculture investment in fish, crustaceans, prawns and other seafood including offshore fish farms. ● Use of artesian bore water on pastoral lands to support feed production, onshore aquaculture and/or horticultural activities. ● Development of Asian horticulture and niche value added exports. ● Integrated food processing precinct. ● Aboriginal pastoral enterprises. ● Investigation into Carnarvon Food Bowl by-products.



TOURISM - DESTINATION FIRST CHOICE

Tourism is the central industry of the Gascoyne economy. The diverse and high amenity natural environment of the region has justifiably led to the Gascoyne being recognised nationally and internationally as a premier tourist destination. This has supported strong growth in international visitation in recent years, in spite of the high Australian dollar, with associated longer lengths of stay and higher expenditure than domestic tourists. Recent falls in the Australian dollar, if prolonged, will assist to further enhance the attractiveness of the region to

both domestic and international markets. Packaging the region's diverse tourist attractions and natural amenities into an integrated, seamless and accessible offering is critical to the sustainability and growth of the tourism sector. This requires enhancement in region-wide branding and marketing, and improvements in transport and accessibility infrastructure.

The following table summarises the megatrends, strategic themes and regional characteristics relevant to this Imperative and identifies opportunities to inform an Implementation Plan.



TOURISM - DESTINATION FIRST CHOICE

<p>Megatrends</p>	<ul style="list-style-type: none"> ● International Tourism ● Asian Population Growth 	
<p>Relevant Strategic Themes</p>	<ul style="list-style-type: none"> ● Protecting the Environment and Natural Amenity. ● Diversifying the Regional Economy and Maximising Private Sector Investment. ● Human Capacity Building. ● Growing Incomes. ● Social Capital. 	
<p>Regional Characteristics</p>	<ul style="list-style-type: none"> ● The Gascoyne has a diverse range of natural environmental assets including two World Heritage Areas, internationally recognised Monkey Mia and Mount Augustus. ● The region has experienced relatively resilient tourist accommodation performance in recent quarters with employment-based travel supporting occupancies, particularly in Carnarvon. ● International tourist numbers are at historical highs, offsetting recent falls in the domestic market. 	<ul style="list-style-type: none"> ● Learmonth Airport passenger throughput are at historical highs, reflecting combination of leisure, employment and business-related travel to the region. ● Aviation services to other centres, namely Shark Bay and Carnarvon constrained by a lack of competition, high costs and inadequate airport infrastructure. ● General connectivity and accessibility throughout the region is hampered by issues of distance and remoteness.
<p>Opportunities</p>	<ul style="list-style-type: none"> ● Tourist marketing and governance framework for Gascoyne region. ● Cruise Ship facilities and marina and boat harbour expansions to increase access to the coast. ● Integrated tourist offering and packaging including continued promotion and integration of existing festivals and events. ● Aboriginal and European heritage-based tourist activities: <ul style="list-style-type: none"> – Dirk Hartog Island 400 year anniversary; – HMAS Sydney Memorial Sites; – Overseas Telecommunications Centre Site; – One Mile Jetty; – Gwoonwardu Mia, Gascoyne Aboriginal Heritage And Cultural Centre; and – Lighthouse Keepers Cottage. ● Increased capacity and diversity of accommodation offering. ● Gascoyne Science Trail. 	<ul style="list-style-type: none"> ● Continued growth of international eco-tourism market including development of luxury international resort destinations. ● Enhancement of tourist drives throughout the region. ● Chinese and Asian language versions of all websites and marketing materials. ● Increased adoption of technology in development of tourism products, including Apps, foreshore/town site WIFI for tourists and residents. ● Building upon the success of Gascoyne in May cross regional events. ● High amenity recreational vehicle parks. ● Regional Transport Strategy including focus on expansion of air services (Carnarvon Airport). ● Ningaloo Centre. ● Dedicated events venues.



POPULATION SERVICES

The lack of a population critical mass in the Gascoyne represents one of the fundamental challenges to the region achieving its economic potential. The small size and distributed nature of the population impacts the level of demand for a range of population services including health, secondary and tertiary education, retail and public administration. Historical population declines have reversed in recent years and the region has entered a period of sustained strong population growth. This is exacerbating the existing shortfall in population services in the region and placing greater pressure on current service provision.

This deficit of services, particularly in the provision of a range of quality secondary education is underpinning the loss of younger age people from the region with young families either sending their children away to boarding school or relocating to Perth when the children reach secondary school age. This has the effect of immediately reducing the depth of the labour force and skills, and

undermining future population and labour force critical mass. This is mirrored in the delivery of public administration services in the region.

The lack of a dedicated aged care facility in the Gascoyne forces some older residents to leave the region. This impacts broadly on the community and impedes the growth of some service industries, thus reducing the scope and availability of employment. A collaborative initiative led by the Regional Development Council, with involvement from the Department of Regional Development, WA Country Health Service and all nine development commissions across regional WA, the State Wide Ageing in the Bush project aims to develop a holistic regional solution to assist ageing residents to remain in their communities for as long as possible. Investment is required by State Government to compensate for the current lack of critical mass and provide an appropriate level of service offering.

This should include the use of technology, including high speed broadband, to facilitate virtual, outreach and online service delivery models where appropriate. This will also facilitate innovation and entrepreneurship in the private sector, supporting the establishment of knowledge intensive professional service businesses in the region, diversifying the local industry structure and underpinning rising incomes and employment.

The following table summarises the megatrends, strategic themes, regional characteristics and opportunities relevant to this Imperative and identifies opportunities to inform an Implementation Plan.

POPULATION SERVICES

Megatrends	<ul style="list-style-type: none"> ● Global Food Demand ● Affordability and Cost of Living
Relevant Strategic Themes	<ul style="list-style-type: none"> ● Population Critical Mass. ● Diversifying the Regional Economy. ● Human Capacity Building. ● Growing Incomes. ● Addressing Affordability. ● Maximising Private Sector Investment. ● Social Capital.
Regional Characteristics	<ul style="list-style-type: none"> ● Population decline has reversed in recent years with strong growth since 2007/08. Driven by combination of high fertility rates and stronger net migration – particularly to Exmouth. ● The population age profile of the Gascoyne is slightly older than the WA average, though is significantly older in Shark Bay LGA. ● Secondary and tertiary education service capacity in the region is limited and is incentivising the emigration of young adults and families. ● Health care and social assistance employment in the region declined between 2006 and 2011, despite a growing and ageing population. ● Public administration and safety workers increased in the Gascoyne between 2006 and 2011, though this reflected an increase in workers associated with environmental, fisheries and agriculture management, not population servicing sectors. ● Retail trade employment also declined between 2006 and 2011.
Opportunities	<ul style="list-style-type: none"> ● Small Business Incubator with associated regional outreach program. ● Worker Hub, providing flexible co working space for small businesses, Government workers and project teams. ● Carnarvon Multi Agency Building. ● Strategic planning for sport and recreation facilities and club development including facilities audit. ● Retirement and Aged Care Facility Including Independent Living Accommodation. ● Land Development in Whitlock and Babbage Island and release of Northwater stages. ● Expanded Educational Opportunities. <ul style="list-style-type: none"> – tertiary education institution upgrade; – Investigation of online delivery models; and – Stages 2 and 3 of Carnarvon Community College - High School. ● Waste Water Treatment Plant infrastructure to support growth. ● Youth Centre in Carnarvon to help retain young population cohorts. ● Permanent medical facilities and personnel in Denham and other regional centres. ● Government Regional Officers Housing (GROH). ● Government and Community Group Workers Hub. ● Services for remote and regional Aboriginal communities.



RESOURCES SERVICES AND SUPPLY CHAINS

The Gascoyne's location; adjacent to major mineral and energy regions, with associated investment pipelines, represents a comparative advantage of the region that is currently being realised. The role of Exmouth as a hub for offshore oil and gas production in the Carnarvon Basin has driven migration-based population growth and rising incomes in recent years, at a faster rate than the rest of the region. This illustrates the potential scale of long-term development opportunities of mineral and energy resources in regional WA presents to the Gascoyne. Opportunities from resource investment can be varied and range from physical engineering and construction materials to knowledge intensive branding, marketing and technical support. The development of effective and practical methods for capturing supply chain opportunities that translate across the Gascoyne industry structure is therefore of critical importance.

Exposure to mining and energy investment projects also brings with it challenges of rising costs of living and worsening housing affordability. Structurally higher incomes and strong demand for accommodation, particularly during commercial phases, can distort construction, household, housing and labour costs and undermine the benefits that integration with major mining and energy supply chains can bring. Proactive management of these challenges is required through forward planning, appropriate regulation and stakeholder engagement.

The following table summarises the megatrends, strategic themes, regional characteristics and opportunities relevant to this Imperative and identifies opportunities to inform an Implementation Plan.

RESOURCES SERVICES AND SUPPLY CHAINS

Megatrends	<ul style="list-style-type: none"> • Mineral Resource and Energy Investment
Relevant Strategic Themes	<ul style="list-style-type: none"> • Population Critical Mass. • Protecting the Environment and Natural Amenity. • Diversifying the Regional Economy. • Human Capacity Building. • Growing Incomes. • Addressing Affordability. • Maximising Private Sector Investment.
Regional Characteristics	<ul style="list-style-type: none"> • Gascoyne is strategically located between major resource areas (Mid West, Pilbara and Carnarvon Basin). • Exmouth already providing a supply chain and FIFO accommodation support role for offshore oil and gas sector. • Major salt exports.
Opportunities	<ul style="list-style-type: none"> • GascoyneConnect website including framework for small businesses to join forces on large public and private sector procurements. • Development of a Local Procurement Strategy. • Establish online skills matching/jobs board and promote nationally, potentially in partnerships with labour hire, group training and other employment brokerage programs/services. • Provide and facilitate innovative business management training, with a focus on technology and systems-based productivity improvements, business development and marketing, novel HR and recruitment processes and finance management. • Provide seed funding for business ICT systems and processes reviews to develop individual ICT Procurement and Implementation Strategies. This can include establishment of a nexus point for future NBN investment, adoption of “Cloud”-based systems and collaborative ICT infrastructure procurement to reduce capital expenditure and operational costs. • Aboriginal Economic & Business Development Strategy to identify opportunities from major resource projects for Aboriginal business establishment and supply chain integration. • Resource Project Housing Strategy and Implementation Plan, to identify need for housing and accommodation for residential and service populations and provide accordingly to manage housing cost issues.



NETWORK CLUSTER ANALYSIS

The Gascoyne economy possesses a range of comparative advantages and opportunities. However, the Regional Imperatives manifest themselves differently across the LGAs and towns of the region, with each location possessing a unique set of demographics, business and infrastructure drivers. Therefore each town is expected to play a different role in the regional economy.

Understanding these differences and associated levels of economic specialisation and local competitiveness, is important to assist Local and State Government to prioritise the allocation of scarce fiscal resources across the region and to develop location-specific and tailored actions and initiatives to achieve the Blueprint's Vision.

A series of Network Cluster Maps has been prepared for the Regional Imperatives identified in the Blueprint. These Maps illustrate the spatial distribution of the Regional Imperatives across the major towns of the region. They also reveal clusters of activity within the Gascoyne as well as different degrees and combinations

of roles in achieving the Regional Imperatives of the Blueprint.

Each town can have three degrees of exposure/contribution to the achievement of the Regional Imperatives:

- The town already has an **above average** advantage in the relevant industry/sector and/or has existing activity leveraging this opportunity (represented as a dark colour);
- The town has the **potential** to have an above average advantage in the relevant industry/sector (due to either changing or emerging drivers) over the next two decades (represented as a light colour); or
- The town does not have an above average competitive advantage in the relevant sector (remains grey).

Food Production

Carnarvon and coastal areas will continue to be the hub of food production in the region. Wild capture and aquaculture seafood opportunities and associated processing, are located in Denham, Carnarvon and Exmouth.

Increased access to bore water has the potential to support the sustainability and growth of pastoral operations, either through diversification into horticulture or the production of feed stock.

Improved transport infrastructure such as a deep water wharf at Exmouth, will support the development, growth and access to new markets of existing food industries.

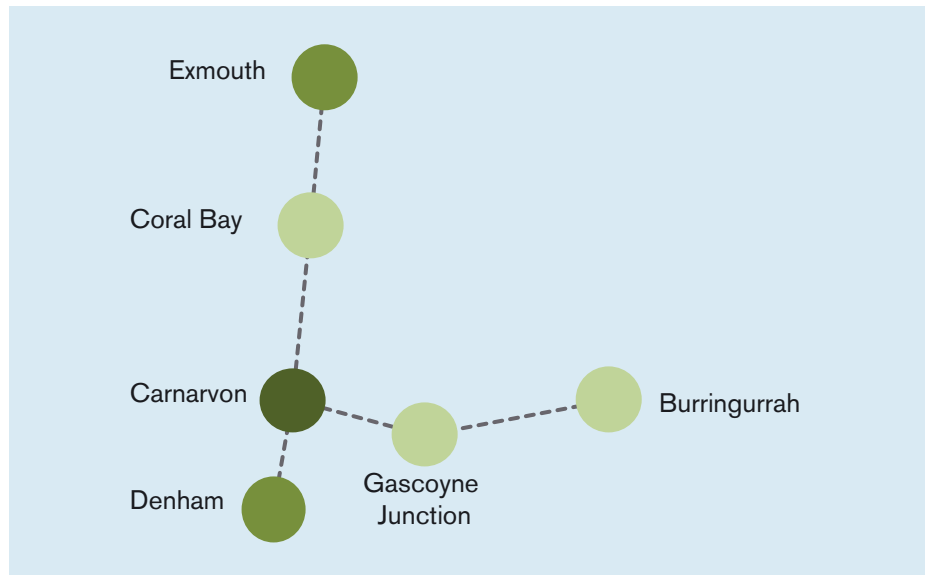


Figure 18 Network Cluster Map – Food Production

Tourism – Destination First Choice

The Gascoyne region is fortunate to contain a diverse range of tourism environmental assets. Denham is strategically located near Monkey Mia, Hamelin Pool Marine Nature Reserve, Dirk Hartog Island National Park, Shark Bay Marine Park and Francois Peron National Park.

Exmouth and Coral Bay have access to the Ningaloo Reef Marine Park and Cape Range National Park. Both are supported by Learmonth Airport and a potential future cruise shipping terminal. Gascoyne Junction is located close to Kennedy National Park while Burringurrah, a remote Aboriginal community, is south of Mount Augustus National Park. Carnarvon is centrally located and has a number of attractions such as the horticultural district and Gwoonwardu Mia. The spatial distribution of tourism assets and service centres supports increased integration of the Gascoyne’s regional tourism offering and enhancements to the transport connectivity throughout the region.

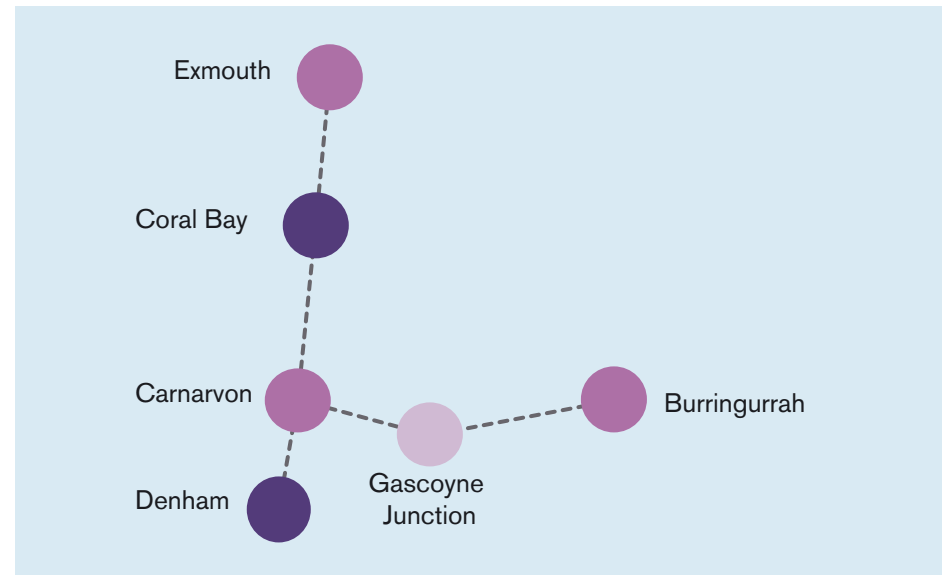


Figure 19 Network Cluster Map – Tourism – Destination First Choice

Population Services

Carnarvon currently represents the largest concentration of population and supporting services and is the regional centre of the Gascoyne. However, Exmouth has been experiencing more rapid population growth in recent years on the back of robust employment growth and associated net migration. Exmouth has a moderate level of population services.

Shark Bay has a small but significantly older population that increasingly requires support services in health care and social assistance. The Upper Gascoyne has a very small population of which a significant proportion are Aboriginal.

Resources Services and Supply Chains

Exmouth currently provides a supply chain and FIFO accommodation support role for energy projects in the Carnarvon Basin and this role is expected to increase in the future. Carnarvon has the highest concentration of businesses in the region and has the potential to benefit significantly from supply chain opportunities in mining and energy area.

Smaller centres have limited capability to capture benefits due to a lack of labour force and business critical mass. Niche opportunities in such centres should continue to be identified and investigated.

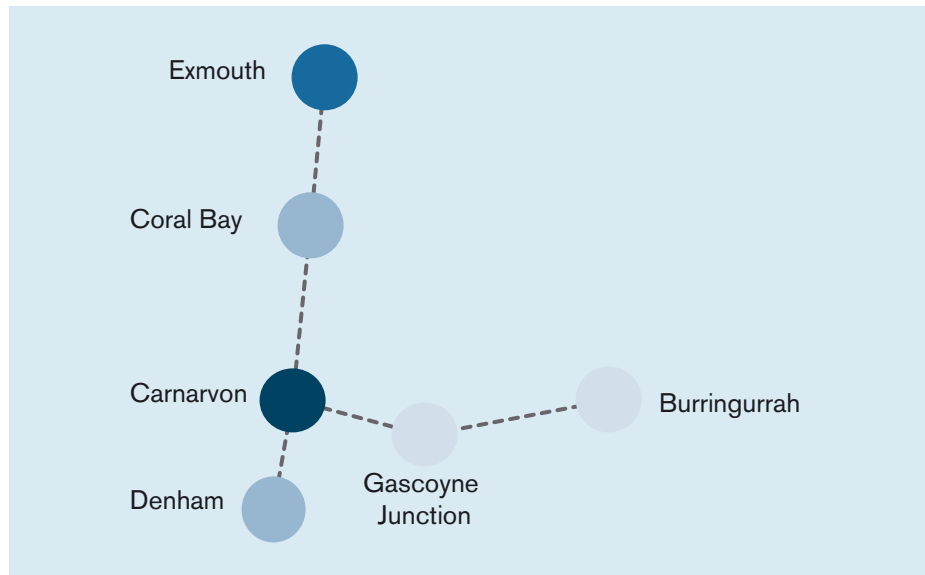


Figure 20 Network Cluster Map – Population Services

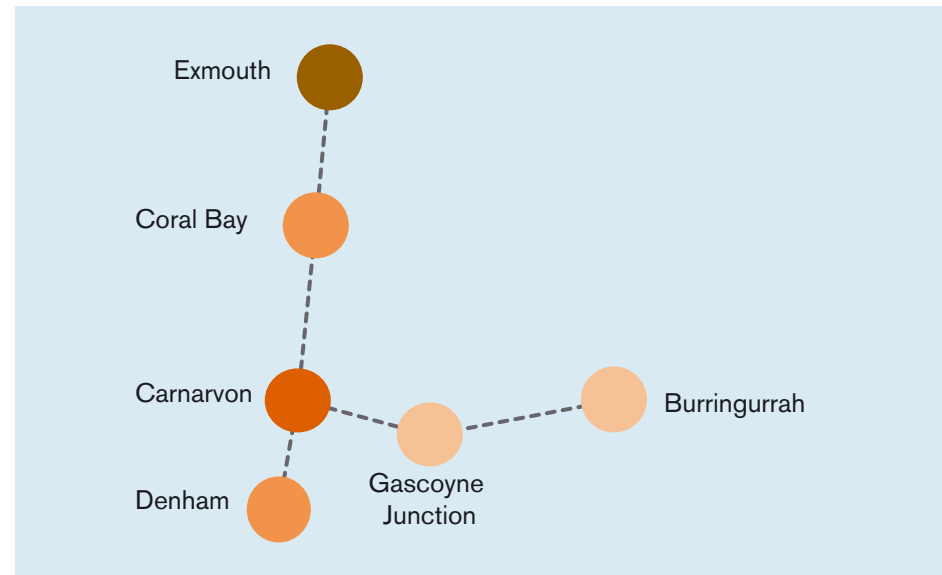


Figure 21 Network Cluster Map – Resources Services and Supply Chains



Six Transformational Pillars have been identified in consultation with government, community and industry stakeholders. These are:

- 1 Developing Industries and Markets;
- 2 Improving Regional Accessibility and Connectivity;
- 3 Advancing Human Capacity and Knowledge;
- 4 Encouraging Innovation;
- 5 Developing Aboriginal and Small Business Economic Capacity; and
- 6 Enhancing Health and Lifestyle.

Possible actions in these pillars have the capacity to transform the Gascoyne region through targeted cost effective investment in enabling infrastructure and services, including the attraction of major private sector investment.

Profiles will be developed for these transformational pillars. These profiles will form the basis of business cases for future use in funding applications, information memorandums and investor profiles and prospectuses.

Information contained within these profiles includes:

- Project name;
- Project description;
- Relevant Strategic Themes;
- The rationale or need for the project;
- The potential benefits of the project to the Gascoyne economy, industry, business and people;
- The potential challenges;
- Possible actions;
- Relevant measures of success;
- Relevant stakeholders; and
- Potential funding sources.



Transformational Pillar 1 Developing Industries and Markets

ELEMENT	DETAILS
Project Name	Developing Industries and Markets
Project Description	The expansion of the Gascoyne's tourism industry and food production capacity, along with the development of services to the oil and gas industries are central to the region's future economic development and export growth. A range of initiatives are proposed to facilitate and support this expansion including the implementation of the Gascoyne Regional Tourism Strategy. The initiatives are necessary to ensure that the region is seen as a whole, which will exponentially magnify the appeal to experience seekers looking for more.
Regional Imperatives	<ul style="list-style-type: none"> ● Food Production ● Resources Services and Supply Chains ● Tourism – Destination First Choice
Megatrends	<ul style="list-style-type: none"> ● Global Food Consumption ● National Defence ● Mineral Resource and Energy Investment ● International Tourism
Comparative Advantages	<ul style="list-style-type: none"> ● Food Production ● Resource Project Support ● Domestic and International Tourism ● Lifestyle and Natural amenity
Relevant Strategic Themes	<ul style="list-style-type: none"> ● Protecting the Environment and Natural Amenity ● Intensifying and Expanding Food Production ● Human Capacity Building ● Diversifying the Regional Economy ● Growing Incomes ● Addressing Affordability ● Maximising Private Sector Investment

Transformational Pillar 1 Developing Industries and Markets

ELEMENT	DETAILS
<p>Rationale/Need</p>	<p>Tourism is acknowledged as the leading industry by value and a major economic driver supporting the Gascoyne's economy. With two World Heritage Areas, numerous National parks, and inclusion in Tourism Australia's iconic National Landscapes program, the region has the opportunity to enhance its tourism potential through a collaborative regional approach. Private sector investment is essential in the development of tourism attractions and accommodation, while an integrated tourism offering with associated branding and marketing has been identified as a key requirement for the sector.</p> <p>Global demand for quality food is expected to grow rapidly in coming years as countries, particularly Asian, grow in population and affluence. World food supply chains will increasingly seek reliable and stable production regions throughout the world in which to invest and establish commercial relationships.</p> <p>The Gascoyne's mild sub-tropical climate, secure water supply and abundant land provide the opportunity for quality horticulture products to be produced for both domestic and international markets at times which allow products to be delivered into markets when other regional supplies are low. The completed flood mitigation works will protect the valuable production land and key infrastructure while the State Government's "Seizing the Opportunity" program will provide internationally recognised biosecurity and water security to the region.</p> <p>Water security will provide pastoralists with the opportunity to diversify product mix and improve livestock feed through the introduction of partial and complementary irrigated cropping.</p> <p>Aquaculture represents a significant opportunity for the region. Global seafood demand continues to grow and by 2018, aquaculture is expected to overtake wild capture as the primary source of production. Major private sector investment is required to realise this opportunity.</p> <p>The Gascoyne, particularly the town of Exmouth, is strategically located adjacent to expanding oil and gas fields. Therefore it is well positioned to provide service and marine support and also to act as a forward base for Australian Defence Forces.</p>
<p>Potential Benefits</p>	<ul style="list-style-type: none"> ● Increased diversification of food production ● Increased employment opportunities in value adding to offset structural declines in primary industries ● Increased exports from the region ● Greater levels of food security in WA ● Improved economic sustainability of pastoral activities ● More efficient use of water assets ● Creation of major international investment opportunities ● Increased tourism visitation, length of stay and expenditure ● Increased private sector investment in the tourism sector ● Investment by State and Federal Governments in tourism-enabling infrastructure that can also be used to support residents and industry

Transformational Pillar **1** Developing Industries and Markets

ELEMENT	DETAILS
<p>Challenges</p>	<ul style="list-style-type: none"> ● Water security ● Transport to export markets ● Climatic conditions ● Market reliance ● Workforce security ● Procurement standards ● Fluctuation global resource demand ● Integrated regional offering ● Offer consistent quality products and services ● Exposure to international markets ● Lack of local services and infrastructure
<p>Possible Actions</p>	<ul style="list-style-type: none"> ● Horticultural expansion in Carnarvon (Food Bowl Initiative) – A key component of the expansion of Carnarvon's bore field to provide an additional 4 gigalitres of water was the development of a further 400 hectares of horticultural land including infill development. Initiative aims to maximise opportunities for industry. Currently funded and being implemented. ● Improve pathways to market for produce. ● Multi Purpose Food Processing Plant – Investigation into the establishment of a Multi Purpose Food Processing Plant in proximity to Carnarvon and to look into the fisheries and horticulture industries as a source of product. ● Water for Food – Assess water sources in the Gascoyne region to create a potential for new horticultural areas and/or pastoral development opportunities. Two resource investigations: <ul style="list-style-type: none"> ● Alluvial aquifers in the vicinity of Rocky Pool (50 kilometres east of Carnarvon); and ● Carnarvon Artesian Basin which is a large brackish resource from Shark Bay to Onslow. Most prospective areas are between Carnarvon and Wooramel for broad acre irrigation especially fodder crops for finishing stock. ● Developing new water resources will increase sustainability, employment, business development and industry diversity. It would lead to new market opportunities. ● Aquaculture – Investigations into the development of aquaculture and create a list of opportunities in the Gascoyne. ● Carnarvon abattoir – Investigation into the development of an abattoir in the Gascoyne as part of a “supply chain” which would include properties, backgrounding, feedlots and abattoir. Investigation to include looking at the feasibility of a mobile abattoir and for processing sheep, goats and cattle.

Transformational Pillar 1 Developing Industries and Markets

ELEMENT	DETAILS
Possible Actions	<ul style="list-style-type: none"> <li data-bbox="600 408 2047 539">● Gascoyne Regional Tourism Board – Establishment of a Regional Tourism Board for the Gascoyne. To include State and Local Government representatives and industry stakeholders from across the Gascoyne. The Board will be responsible for the implementation of the Gascoyne Regional Tourism Strategy and associated initiatives including cohesive brand development, marketing campaigns. Will work with local tourism organisations and Tourism WA. <li data-bbox="600 555 2047 624">● Regional Tourism Officer – Employ a Regional Tourism Officer to work with the Board in implementing the Strategy, engaging with stakeholders and facilitating programs. <li data-bbox="600 639 2047 770">● Major regional event development – Development of a full calendar of events for the Gascoyne region, preserve and enhance existing high value events (e.g. Gascoyne Dash, Gamex and Gascoyne in May), and promote events in partnership with Tourism WA and local tourism organisation and providers, GDC and Local Government. Highlight the attractiveness of the region year round due to coastal orientation, diverse attractions and mildness of the weather. <li data-bbox="600 786 2047 855">● Cruise ship berthing in Exmouth – Development of facilities in Exmouth to accommodate cruise ship docking, passengers disembarking and distribution. <li data-bbox="600 871 2047 928">● Exmouth Harbour Precinct – Expansion of Exmouth’s existing harbour to assist recreational and commercial services due to growth in defence, recreational use, tourism, fisheries and mining activity within the precinct.

Transformational Pillar 1 Developing Industries and Markets

ELEMENT	DETAILS
Measures of Success	<ul style="list-style-type: none"> ● Successful implementation of the Gascoyne Regional Tourism Strategy recommendations ● Attract over 400,000 overnight visitors per year with an annual percentage increase of international tourists ● Increased ease of accessibility, including affordable aviation services ● An integrated tourism offering and brand that is internationally recognised in media travel and tourism publications ● Visitor satisfaction consistently at or above national averages ● Increasing proportion of tourism business and economic enterprises owned and operated by members of the Gascoyne Aboriginal community ● Have a quantified, secure and climate independent water supply ● A residential population of 23,000 by 2050 ● A growing, sustainable and diversified economy, with a Gross Regional Product per capita at or above the State average ● A strong and proactive industry group such as the Gascoyne Food Council, promoting regional food development and the Gascoyne brand ● Produce over \$400 million in food products from a combination of horticulture, aquaculture and livestock production, with an increasing reliance on international export ● Value added food product as a percentage of total food value increasing year on year ● Higher shares of business and economic enterprises owned and operated by members of the Gascoyne Aboriginal community ● The value of resource sector contracting to Gascoyne based businesses increasing year on year ● Reducing welfare dependence, that is reducing the percentage of the population dependent on government support as the main household income source, to below the State regional average ● Shire of Exmouth and local businesses work together to support and facilitate ADF presence expansion ● Establishment of a multi purpose food processing plant through private investment
Stakeholders	<ul style="list-style-type: none"> ● Department of Water ● Department of Agriculture and Food WA ● Gascoyne Development Commission ● Fisheries WA ● Industry ● Private Sector Investors ● Local Government, State Government, Commonwealth ● Community businesses

Transformational Pillar 2 Improving Regional Accessibility and Connectivity

ELEMENT	DETAILS
Project Name	Improving Regional Accessibility and Connectivity
Project Description	The Gascoyne is a remote region due to its population centres, industry and tourist assets being sparsely spread throughout. For the region to maximise its prosperity through economic development, an integrated road transport network, an affordable and accessible network of quality air and sea transport, and improved communications infrastructure are critical.
Regional Imperatives	<ul style="list-style-type: none"> ● Food Production ● Tourism – Destination First Choice ● Population Services ● Resources Services and Supply Chains
Megatrends	<ul style="list-style-type: none"> ● Global Food Consumption ● International Tourism ● Mineral Resource And Energy Investment
Comparative Advantages	<ul style="list-style-type: none"> ● Food Production ● Domestic and International Tourism ● Resource Project Support
Relevant Strategic Themes	<ul style="list-style-type: none"> ● Intensifying and Expanding Food Production ● Human Capacity Building ● Diversifying the Economy ● Growing Incomes ● Maximising Private Sector Investment ● Social Capital ● Protecting the Environment and Natural Amenity

Transformational Pillar 2 Improving Regional Accessibility and Connectivity

ELEMENT	DETAILS
<p>Rationale/Need</p>	<p>The size of the Gascoyne and the distribution of population centres and economic assets through the region necessitate the development of a quality, accessible and affordable network of air, sea and road transport; and communications infrastructure. Ease and safety of movement to and within the region is challenging for both residents and visitors. Aviation services are relatively expensive to Shark Bay and Carnarvon while Exmouth has a more regular and affordable service. Apart from towns and the major highways, most roads are unsealed and subject to weather. Access to the internet is limited and slow. This situation:</p> <ul style="list-style-type: none"> ● reduces the number of tourists, the length of their stay and their regional expenditure ● makes access to essential services and facilities by remote and rural populations unreliable ● unsealed roads represent a significant health and safety issue for all road users. <p>The location of Carnarvon midway between Perth and the mining regions of the Pilbara provides an opportunity for the development of a service and logistics hub for resource sector industries.</p> <p>Better transport options will further enable the food and tourism industries to achieve their potential, nationally and internationally. Improvements to rural and remote airfields are required to enhance access of residents to essential and emergency services.</p>
<p>Potential Benefits</p>	<ul style="list-style-type: none"> ● Improve primary producer access to export infrastructure ● Catalyse private sector investment in tourism, manufacturing and mining ● Increase tourist visitor numbers, length of stay and expenditure in the region ● Diversify air service destinations within the region, aligning with major tourist assets ● Provide air freight-based access to international markets for quality food ● Reduce road fatalities and injuries ● Improve Gascoyne resident access to essential health, education, social service and emergency services
<p>Challenges</p>	<ul style="list-style-type: none"> ● Increasing fuel costs ● Sustainability of routes ● Basic airline service distribution infrastructure such as a Global Distribution System (GDS) which is generally accessed by international travel agencies and operators is required to properly service the Carnarvon and Shark Bay market.

Transformational Pillar 2 Improving Regional Accessibility and Connectivity

ELEMENT	DETAILS
Possible Actions	<ul style="list-style-type: none"> ● Gascoyne Regional Aviation Strategy – To develop an integrated strategy for aviation services and facilities in the Gascoyne. Considers the State Aviation Strategy as well as the demand generated by the Regional Imperatives. ● Carnarvon airport development – The Shire of Carnarvon has undertaken detailed studies and identified the relative merits and cost benefits of various options for continued aviation services to Carnarvon in the short and long term. The redevelopment of the Carnarvon Airport runway is a key aeronautical project for the Shire of Carnarvon that needs to be undertaken in the short-medium term to ensure the sustainability of the Carnarvon Airport in the long term. ● Gascoyne Regional Road Transport Plan – A whole-of-Gascoyne road transport plan that considers road transport requirements for the Gascoyne region within the context of demand from the identified Regional Imperatives. Provides the framework for future investment in critical road infrastructure by Local, State and Federal Government agencies. ● Exmouth Deep Water Wharf – Establishment of improved suitable berthing facilities will allow Exmouth access to the cruise ship industry as well as strengthening Exmouth’s position as an oil and gas hub
Measures of Success	<ul style="list-style-type: none"> ● A growing and diverse employment base, with greater shares of population and professional services ● Carnarvon airport is upgraded ● Identification and development of new Carnarvon airport site ● Recognition by mining and energy companies as a logistics and supply chain hub of choice ● Infrastructure corridors connect economic activity areas together ● Gascoyne residents being able to access to a choice of quality, affordable and regular movement services, particularly bus and aviation services ● The efficiency of movement networks is continually improved ● A coordinated and efficient freight logistics system incorporating and integrating road, sea and air transport ● Gascoyne residents and businesses have extensive access to high-speed and reliable digital infrastructure, including for education and health services ● Telecommunications are a matter of consideration in planning frameworks, planning schemes and development decisions ● New criteria for Air Service Deeds and improved methods of Deed management ● Connectivity with other domestic and international airlines ● The return to air services which participate in an industry standard airline GDS
Stakeholders	<ul style="list-style-type: none"> ● Main Roads ● Department of Transport ● State and Commonwealth Government ● Local Government ● Gascoyne Development Commission ● Resource companies ● Industry

Transformational Pillar **3** Advancing Human Capacity and Knowledge

ELEMENT	DETAILS
Project Name	Advancing Human Capacity and Knowledge
Project Description	Improvement in the educational outcomes of Gascoyne residents and improved leadership and governance across all sectors.
Regional Imperatives	<ul style="list-style-type: none"> • Population Services
Megatrends	<ul style="list-style-type: none"> • Global Food Consumption • Mineral Resource and Energy Investment • Affordability and Cost of Living
Comparative Advantages	<ul style="list-style-type: none"> • Lifestyle and Natural Amenity • Resource Project Support • Food Production
Relevant Strategic Themes	<ul style="list-style-type: none"> • Population Critical Mass • Diversifying the Regional Economy • Human Capacity Building • Growing Incomes • Addressing Affordability • Maximising Private Sector Investment • Social Capital
Rationale/Need	<p>Post school qualifications are biased toward Certificate level, reflecting the industry structure of the region.</p> <p>The population profile of the Gascoyne is comparable with regional Australian trends, with below average shares of young adults. Loss of youth primarily reflects lack of secondary education services in Gascoyne towns.</p> <p>There are currently no education providers in the Gascoyne offering a comprehensive range of subjects face-to-face and on-site through to Year 12. Many year 11 and 12 subjects are offered through correspondence and distance education supported through metropolitan based providers. This has a significant impact on the retention of families with high-school aged children who migrate away from the area seeking more satisfactory educational opportunities.</p> <p>Regionally based leaders need to be nurtured and equipped with the skills to advocate for and respond to the specific needs of the Gascoyne and to negotiate more appropriate and effective relationships and partnerships with external influences.</p> <p>The lack of education and care services (childcare services) in the Gascoyne has a significant impact not only on attracting people to the region, but in allowing women/primary carers who live in the region to enter the workforce.</p> <p>Opportunities exist for the use of evolving technologies to access new and better education and training pathways.</p>
Potential Benefits	<ul style="list-style-type: none"> • Population growth • Equitable service provision • Retention of families with school-aged children

Transformational Pillar 3 Advancing Human Capacity and Knowledge

ELEMENT	DETAILS
Challenges	<ul style="list-style-type: none"> ● Lack of critical mass ● Lack of local services (education, health, retail) ● Regional migration
Possible Actions	<ul style="list-style-type: none"> ● Carnarvon Community College – Completion of Stages 2 and 3. ● Expanded educational opportunities – Encouraging the growth of other non-government education providers particularly in the areas of secondary and tertiary education; Investigation of opportunities for using all forms of on-line educational resources. ● Education facility for Coral Bay – Presently up to 75 students living in Coral Bay attend school via School of the Air, home schooling, Distance Education or travel 300 km round trip each day to Exmouth. An investigation is needed to determine the feasibility of a permanent school based in Coral Bay. ● Increased education facilities in Exmouth – Investigation into increasing education facilities within Exmouth such as private schooling and a university campus. ● Improved leadership and governance – Increased and ongoing leadership and governance education and support for business, government and community organisations. ● Durack Institute of Technology – New and upgraded facilities across the region to offer an expanded range of higher qualifications. ● Ningaloo Centre – a modern eco-friendly and iconic multipurpose facility which will include a library, exhibition, cafe, and educational and research spaces. ● Early Education and Care – Families in the Gascoyne have access to flexible quality education and care services.
Measures of Success	<ul style="list-style-type: none"> ● Gascoyne Workforce Development Plan actively implemented, monitored and regularly reviewed ● A more balanced age profile in line with Western Australian averages, with higher population aged 15-34 than current ● School outcomes and attendance equal to or above the State regional average ● Enhanced secondary and tertiary education, providing a quality and scope of service more comparable to metropolitan Perth ● A larger and more diversified economy, with a Gross Regional Product per capita within 5% or above the State average ● A suitably trained workforce to supply the new and expanding workforce demands in the region ● Governance capability in regional organisations and communities meeting national standards ● Development and delivery of targeted training programs to address skill gaps in partnership with training institutions and industry, including the resource sector ● Achieve Australian Early Development Index scores above the State regional average ● Leadership/Graduate program

Transformational Pillar 3 Advancing Human Capacity and Knowledge

ELEMENT	DETAILS
Stakeholders	<ul style="list-style-type: none">• Local Government• Department of Education• Durack Institute of Technology• Gascoyne Development Commission• State and Commonwealth Government• Non-government Education Providers• Local businesses and community organisations

Transformational Pillar 4 Encouraging Innovation

ELEMENT	DETAILS
Project Name	Encouraging Innovation
Project Description	Using innovation to make the region economically and environmentally sustainable in the long term and to ensure new technology can be developed and utilised to enhance productivity and create new industries.
Regional Imperatives	<ul style="list-style-type: none"> ● Population Services ● Resources Services and Supply Chains ● Tourism – Destination First Choice
Megatrends	<ul style="list-style-type: none"> ● Climate Change ● International Tourism ● Broadband and Digital Age ● Resources Services and Supply Chains
Comparative Advantages	<ul style="list-style-type: none"> ● Domestic and International Tourism ● Lifestyle and Natural Amenity
Relevant Strategic Themes	<ul style="list-style-type: none"> ● Protecting the Environment and Natural Amenity ● Diversifying the Regional Economy ● Human Capacity Building ● Social Capital
Rationale/Need	<p>Remoteness, poor accessibility and isolated communities combine to make the Gascoyne the ideal location for innovative solutions. Education and health optimising the utilisation of e-learning and tele-health; small businesses utilising B2B, expanded food and fodder production through innovative water utilisation, developing niche markets and products are all possible future examples.</p> <p>However, there are also new opportunities in other areas:</p> <ul style="list-style-type: none"> ● value adding to food products through new facilities such as a multi-food processing plant utilising otherwise wasted horticultural product ● designing and developing new training programs and approaches in partnership with training organisations, community and industry ● facilitating the development of new ideas in the arts, enabling greater creativity and partnerships, leading to new economic and social benefits ● Eco – accommodation and adventure tours in remote tourist areas. <p>The Gascoyne has an opportunity to become a leader in the utilisation of renewable energy, with vast areas of land, high annual solar insolation and high alternative fuel costs for the production of electricity. Already, several communities along the region’s coastline (Denham and Coral Bay) harness the wind, with wind turbines contributing to their diesel generated electricity and offsetting the cost. The development and implementation of renewable energy will be integral to the broader economic development strategy for the region. Energy is fundamental for all of the region’s economic activities such as tourism, pastoralism, agriculture, fishing, mining and transport.</p>

Transformational Pillar **4** Encouraging Innovation

ELEMENT	DETAILS
Potential Benefits	<ul style="list-style-type: none"> ● A protected and sustainable environment ● Reduced energy costs ● Reduced greenhouse gas emissions ● Improved planning to prevent water inundation ● Increased opportunities for local employment and businesses diversification ● Fuel diversification, protecting the region's economic vulnerability
Challenges	<ul style="list-style-type: none"> ● Lack of investment in renewable energy ● Renewable energy credit restricted by current structure of energy provider ● Reduced roll out of optimum broadband infrastructure ● Lack of financial viability of research centres in Exmouth and Shark Bay ● Lack of infrastructure in relation to reliable water supplies, accessibility and transport ● Uncertainty regarding Federal Government policies
Possible Actions	<ul style="list-style-type: none"> ● Implementation of the Gascoyne Regional Energy Strategy – develop renewable projects for long term energy options. ● Climate change affects in the Gascoyne region – investigation and initiatives for prevention of climate change impacts. ● Solar powered recycling plant in Carnarvon – investigations into a recycling plant powered by renewable energy. ● Monitor and sustainably manage aquatic resources – utilise Ecosystem Based Fisheries Management to ensure sustainably of aquatic resources. ● Research facility in Shark Bay – establishment of a research facility that would incorporate marine, flora and fauna to ensure sustainability. ● Ningaloo Centre – establishment of a research facility within the Ningaloo Centre for marine, flora and fauna study to ensure sustainability. ● Development of eco based accommodation within the Gascoyne – investigation and development of eco accommodation options. ● Improved telecommunications for Gascoyne region – investigations into improving mobile and NBN services targeted at strategic locations. ● Investigations into NBN opportunities for the Gascoyne – Investigate opportunities for business and industry with the roll out of improved services.

Transformational Pillar 4 Encouraging Innovation

ELEMENT	DETAILS
Measures of Success	<ul style="list-style-type: none"> ● Implementation of Gascoyne Energy Strategy facilitating and informing adaptive long term energy planning and coordination ● Development of the Gascoyne Climate Change Strategy facilitating and informing appropriate actions to protect current and future assets ● Development and operation of research facilities at Exmouth and Shark Bay ● Increased development of eco accommodation within the Gascoyne ● Small business growth above the State regional average ● Expansion of agriculture research in the Gascoyne, particularly Carnarvon ● Increased provision of services utilising technology in areas such as business, education and health
Stakeholders	<ul style="list-style-type: none"> ● Local Government ● Department of Parks and Wildlife ● Gascoyne Development Commission ● Other State and Commonwealth Government Agencies ● Industry, Small business including tourism operators

Transformational Pillar 5 Developing Aboriginal and Small Business Economic Capacity

ELEMENT	DETAILS
Project Name	Developing Aboriginal and Small Business Economic Capacity
Project Description	<p>The small business sector is critical to economic development and employment in regional centres. With changes in technology and purchasing practices it is imperative that small business operators; existing and potential, are well educated and supported in all aspects of modern business strategies and technology.</p> <p>There is potential for new Aboriginal business across the region in the areas of tourism, horticultural, pastoral and resource supply chains. Development and future success of enterprises requires specialised support that is available within the region.</p>
Regional Imperatives	<ul style="list-style-type: none"> ● Food Production ● Tourism – Destination First Choice ● Population Services ● Resources Services and Supply Chains
Megatrends	<ul style="list-style-type: none"> ● Global Food Consumption ● International Tourism ● Resource Demand
Comparative Advantages	<ul style="list-style-type: none"> ● Food Production ● Domestic and International Tourism ● Resource Project Support
Relevant Strategic Themes	<ul style="list-style-type: none"> ● Population Critical Mass ● Diversifying the Economy ● Human Capacity Building ● Intensifying and Expanding Food Production ● Growing Incomes ● Maximising Private Sector Investment ● Social Capital

Transformational Pillar 5 Developing Aboriginal and Small Business Economic Capacity

ELEMENT	DETAILS
<p>Rationale/Need</p>	<p>The growth of the small business sector is critical to economic development and employment in regional centres. With changes in technology and purchasing practices it is imperative that small business operators; existing and potential, are well educated and supported in all aspects of modern business strategies and technology.</p> <p>The Gascoyne is centrally located on the coast of Western Australia and adjacent to mining areas in the Pilbara and Mid West regions. With the attraction of investment in to tourism and supply chains, small businesses have a number of opportunities to expand and prosper. Carnarvon, the regional centre for the Gascoyne, has a business density of 113.4 per 1,000 population which is well above the national average of 93.8 per 1,000 population and a strong base from which to expand.</p> <p>Already mining, energy supply, horticulture and pastoral activities have provided a number of opportunities in the adjacent regions, in the areas of employment, training, entrepreneurship and community development.</p> <p>There are a small number of Aboriginal businesses operating across the Gascoyne, which are diverse in nature. These businesses have access to only a limited level of Aboriginal economic development support. In the Gascoyne region, specific Aboriginal economic development support is primarily provided from outside the region, namely from Geraldton and Perth.</p> <p>To address these issues, strong links must be developed with industry and support organisations to build capacity, mentor and foster development of Aboriginal enterprises. This includes drawing upon the lessons learnt by other parts of regional Australia, including the establishment of Aboriginal economic development and industry partnership plans, as well as regional Aboriginal employment strategies with on-ground dedicated support.</p>
<p>Potential Benefits</p>	<ul style="list-style-type: none"> • Improved Governance • Stronger regional decision making • Equitable service provision • Population growth • Employment opportunities
<p>Challenges</p>	<ul style="list-style-type: none"> • Procurement opportunities • Lack of regional governance, leadership and capacity • Investment attraction • On-line procurement (shopping)

Transformational Pillar 5 Developing Aboriginal and Small Business Economic Capacity

ELEMENT	DETAILS
Possible Actions	<ul style="list-style-type: none"> • Business hub – A targeted approach is required to ensure that the small business sector has access to the relevant development and mentoring programs to increase its productivity and competitiveness. There is opportunity to develop a small business incubator with an associated regional outreach program, a working hub to provide a flexible co-working space, a small business collaboration website including framework for small businesses to join forces on large public and private sector procurements. The project is supported by Small Business Development Corporation, Shires of Carnarvon, Exmouth and Denham and local Chamber of Commerce and Industry groups. • Aboriginal Economic Development Officer – A dedicated position located in the Gascoyne to generate economic activity with local Aboriginals and support the development of such economic activity through the facilitation and negotiation of appropriate support services.
Measures of Success	<ul style="list-style-type: none"> • A larger and more diversified economy, with a Gross Regional Product per capita within 5% or above the State average • The number of active and start up businesses per 1,000 people at or above the state regional average • Being fully connected to high speed broadband with take up by households and businesses at or above regional Australian averages • Being recognised by major mining and energy companies as a logistics and supply chain hub of choice in central WA • Have share of business and economic enterprises owned and operated by members of Gascoyne's Aboriginal community close to or greater than the population proportion • Establish an Aboriginal Economic Development Officer • Establish a small business incubator in partnership with the Small Business Centre • Number of new businesses established at or above the State regional average • Host a biannual regional economic forum
Stakeholders	<p>Local Government, State Government, Commonwealth Government Small Business Development Corporation Chamber of Commerce and Industry Gascoyne Development Commission Resource sector Community</p>
Potential Funding Sources	<p>Small Business Development Corporation Local, State and Commonwealth Government. Community Businesses Resource sector</p>

Transformational Pillar 6 Enhancing Health and Lifestyle

ELEMENT	DETAILS
Project Name	Enhancing Health and Lifestyle
Project Description	Attraction and retention of population through improved regional health services. Improved participation in healthy lifestyle pursuits.
Regional Imperatives	<ul style="list-style-type: none"> ● Population Services
Megatrends	<ul style="list-style-type: none"> ● Affordability & Cost of Living ● Population Ageing
Comparative Advantages	<ul style="list-style-type: none"> ● Lifestyle and Natural Amenity
Relevant Strategic Themes	<ul style="list-style-type: none"> ● Population Critical Mass ● Human Capacity Building ● Social Capital
Rationale/Need	<p>There is currently no residential aged care facility between Geraldton (Mid West) and Karratha (Pilbara) with the exception of a dedicated Permanent Care Unit at the Carnarvon Health Campus (15 beds) which caters for both low and high care residents. This is not a secure facility therefore residents with dementia who wander are not able to be accommodated. The majority of Gascoyne residents requiring high level aged care must therefore relocate from the region to access facilities elsewhere. Their families must then travel significant distances (over 1000 kilometres return) to visit.</p> <p>Planning is underway to construct a 24 bed high care facility on the Carnarvon Hospital Campus. However this will not address the need for low care or Independent Living Units.</p> <p>Gascoyne residents present at high rates to emergency departments, particularly in the less and non urgent presentations. This indicates a high need for increased primary health services. An increase in the GP sector may help to alleviate some of this need but co-located and collaborative services models between GP primary care, other non-government health providers and WA Country Health Service emergency department and population health/primary health services is strongly recommended (Service Plan 2010 – 2020, Gascoyne Health District, WACHS Mid West, 2011, p. 46).</p> <p>The fundamental issue in sustaining health service delivery in the Gascoyne is the ability to attract and retain staff and visiting specialists. Much of this is related to lack of locally available amenities, poor educational options particularly for high school aged children, and unsatisfactory short and long term housing options for staff.</p> <p>Improved sporting, aquatic, youth and community facilities will further encourage participation in healthy lifestyle pursuits, engage youth in diversional activities, and assist in retaining residents.</p> <p>There has been a continued depletion of locally based Commonwealth and State government agencies with regional management of many departments now delivered from Geraldton in the Mid West. This has created a barrier particularly for residents who do not have the access or skills to use online services.</p>

Transformational Pillar **6** Enhancing Health and Lifestyle

ELEMENT	DETAILS
Potential Benefits	<ul style="list-style-type: none"> ● Population growth ● Equitable service provision ● Improved health outcomes ● Ageing in place
Challenges	<ul style="list-style-type: none"> ● Lack of critical mass ● Lack of local services (education, health, retail) ● Regional migration ● Ageing population ● Socio economic disadvantage across the region linked to difficulties accessing mainstream services due to remoteness, lack or transport or financial difficulties.
Possible Actions	<ul style="list-style-type: none"> ● Carnarvon aged care facility – Establishment of a regional residential aged care facility, including independent living units, in Carnarvon to service the Gascoyne region with satellite aged care facilities located at Exmouth and Denham. ● Improved regional health Services – Improved and expanded current health services throughout the Gascoyne region including additional and more frequent visiting specialists and Medicare local services, permanent GP in Denham, investigations into the feasibility of a maternity unit at Exmouth Hospital, provision of more regular GP visits to Gascoyne Junction and improved access for people with a disability throughout the Gascoyne. ● New St John Carnarvon Ambulance and Volunteer Training Facility – The construction of a new St John Ambulance facility in Carnarvon to replace the current facility. ● Increase sporting participation opportunities for small communities – Implementation of innovative programming and partnerships, facilitate sporting events, linkages for athletes to competitions outside of their town/ community, and tool kits to encourage local people to run activities themselves. ● Multi-Purpose sport, aquatic and youth centre in Carnarvon – The recent Aquatic Centre feasibility study identified the existing Aquatic Centre site as a potential location for this facility. The Shire of Carnarvon is in the process of conducting a Sport Recreation and Facility Study, which will assist in the determination of this Project. It is envisaged this facility could also incorporate a Youth Centre. ● Carnarvon Yacht Club – Construction of an additional 22 pens.

Transformational Pillar 6 Enhancing Health and Lifestyle

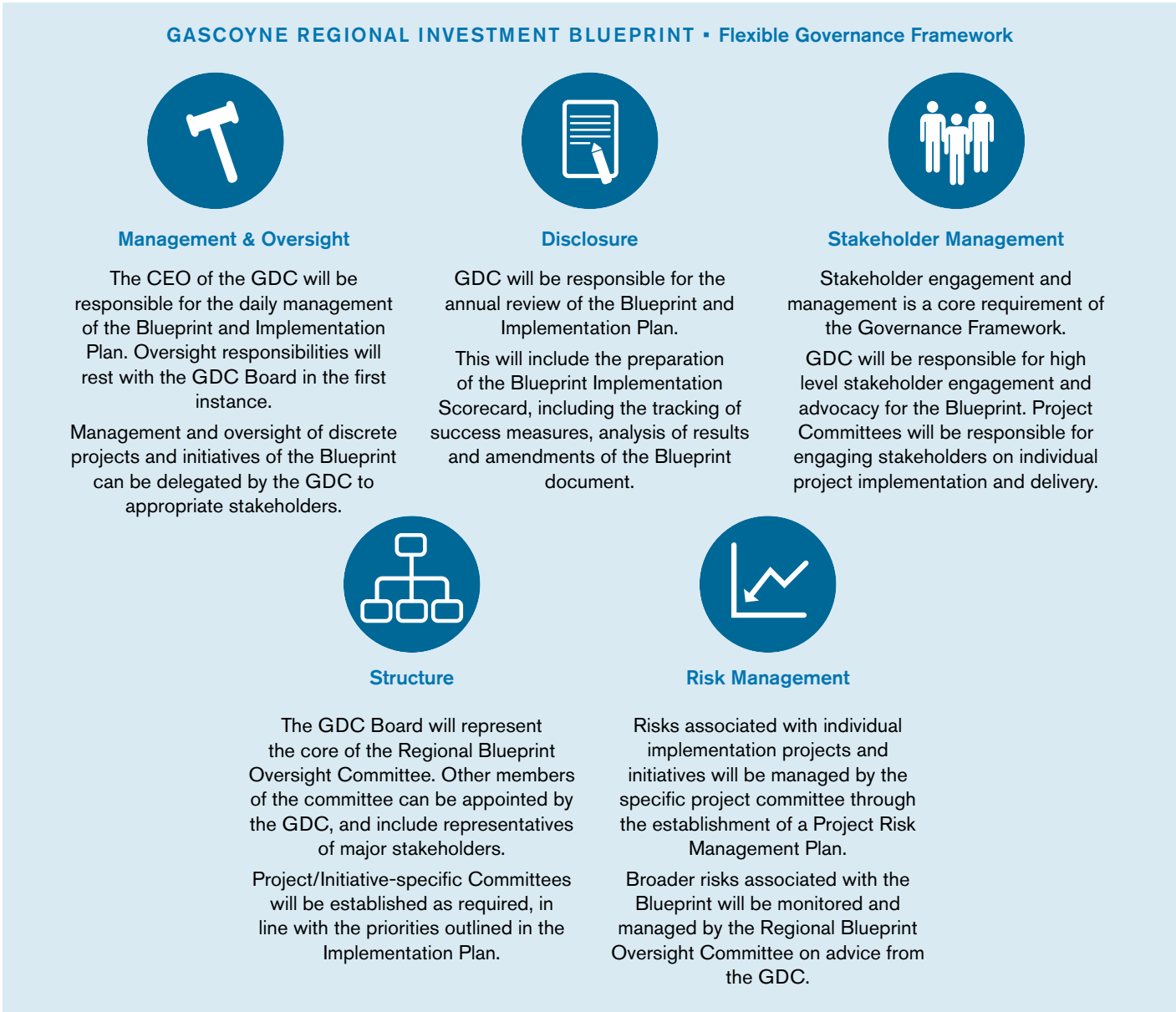
ELEMENT	DETAILS
Measures of Success	<ul style="list-style-type: none"> ● A residential population of 23,000 by 2050 ● A more balanced age profile in line with Western Australian averages, with higher population aged 15-34 than current ● A quality range of Residential Aged Care facilities and Ageing in Place facilities to meet the needs of the resident population and to attract residents from outside the region ● A reduction in the number of non-urgent presentations to hospital Emergency Departments due to increased access to primary health care services across the region ● Improved access to Commonwealth and State government services with locally available staff based in the Gascoyne ● Improved and expanded Sport, Aquatic, Youth and Community facilities across the region ● A range of affordable housing to support its population growth targets and client needs ● A quality aviation service which can meet the needs of residents and visitors, particularly with regard to flight availability and affordability ● Collaboration with Local Government Authorities to prioritise and achieve town based planning and strategic growth projects ● Support for community organisations to achieve a volunteering rate at or above the State regional average ● Increase in access for Gascoyne residents to touring culture and arts programs and high quality arts experiences ● Gascoyne in May evolving to meet the needs of the community and region ● Development of the Gascoyne Arts Council as an effective region-wide representative organisation
Stakeholders	<ul style="list-style-type: none"> ● Local Government ● Department of Health ● Department of Sport and Recreation ● Gascoyne Development Commission ● State and Commonwealth Government ● Non-government Health and Aged Care Providers ● Community, arts and sporting organisations

Flexible Governance Framework

A governance framework is a conceptual framework for how an organisation or process is managed, controlled and guided.

The implementation of the Regional Investment Blueprint for the Gascoyne requires a flexible governance framework. Actively transforming the Gascoyne region is a complex, multi-faceted task, comprising a diversity of projects, stakeholders and objectives.

A flexible governance framework is required to provide structure to the management and implementation of the Regional Investment Blueprint, to maximise the effectiveness of identified interventions and actions.



Implementation Plan Overview

Achieving the Vision for the Gascoyne and meeting the challenges and opportunities presented by the Regional Imperatives requires coordinated and concerted action. It is recognised that while Government has an important role to play in the implementation of the Blueprint a diverse range of other stakeholders have the potential to contribute greatly to the region's continued success. These stakeholders include (but are not limited to):

- Local developers and investors;
- Business and industry;
- Overseas investors;
- Not-for-profit, community groups and small businesses; and
- Aboriginal groups and enterprises.

The Gascoyne Regional Investment Blueprint Implementation Plan establishes the framework for the identification and implementation of a range of priority public, private and community sector projects. The Implementation Plan includes:

- An overview of the purpose of the Plan;
- The responsibilities and contributions to the implementation of the Blueprint by key stakeholder groups;
- A flexible governance framework, based on best practice approaches;
- An implementation monitoring and review process;
- A Blueprint Implementation Scorecard.

Tracking the Performance of the Blueprint

The transformation of the Gascoyne region to 2050 is contingent on the effective, coordinated implementation of transformational and priority projects and initiatives by all stakeholders.

As a living strategy, it is recognised that the Blueprint will need to respond to changes in megatrends and imperatives, including the emergence of new opportunities and challenges for the Gascoyne region. Where such changes are identified, the Blueprint needs to be updated and amended to reflect the new environment.

This Plan recognises that not all actions and projects will be successful, or will contribute as much to the development and transformation of the Gascoyne region as intended. Where the actions, initiatives and projects identified in this Plan fail to achieve the Vision and Regional Imperatives of Blueprint, further amendments are required. This approach will maintain the longevity and relevance of the Blueprint over time and ensure the implementation actions and transformational projects are supported in the medium and long terms.

Blueprint Review and Renewal

A successful Blueprint is one that is subject to ongoing review and renewal. Just as the world changes, so to must the Blueprint to maintain its relevance and currency. A responsive, evidence-based review and renewal process is proposed for tracking the Gascoyne's transformation and informing the amendment of the Blueprint and Implementation Plan.

The steps in this process are summarised below.

- **Track Measures of Success** – tracking the performance of the Blueprint and the Implementation Plan requires monitoring of a series of key indicators or measures.
- **Analyse Performance** – The results of these measures will be tracked annually by the Gascoyne Development Commission, as part of a Blueprint Scorecard. This will compare the development and growth of the Gascoyne region against the Measures of Success.
- **Identify Areas for Improvement** – the results of the Blueprint Scorecard will allow the Gascoyne Development Commission to identify areas where improvement is required. Strategies will be developed, in partnership with relevant stakeholders, to determine the reason for the current performance and actions required to improve performance.
- **Summarise Changes in the Environment** – summarise changes in the local, national and global environment that have the potential to impact the achievement of the Measures of Success and continued relevance of Regional Imperatives and Transformational Pillars identified in the Blueprint.
- **Amend the Blueprint** – based on the identification of areas for improvement and changes in the environment, amendments will be made on a regular basis to the Regional Investment Blueprint. These changes will ensure the document remains current, live and relevant to stakeholders and the Gascoyne community and reflects the goals, aspirations and desires for the region to 2050.

This process is illustrated in the following figure.

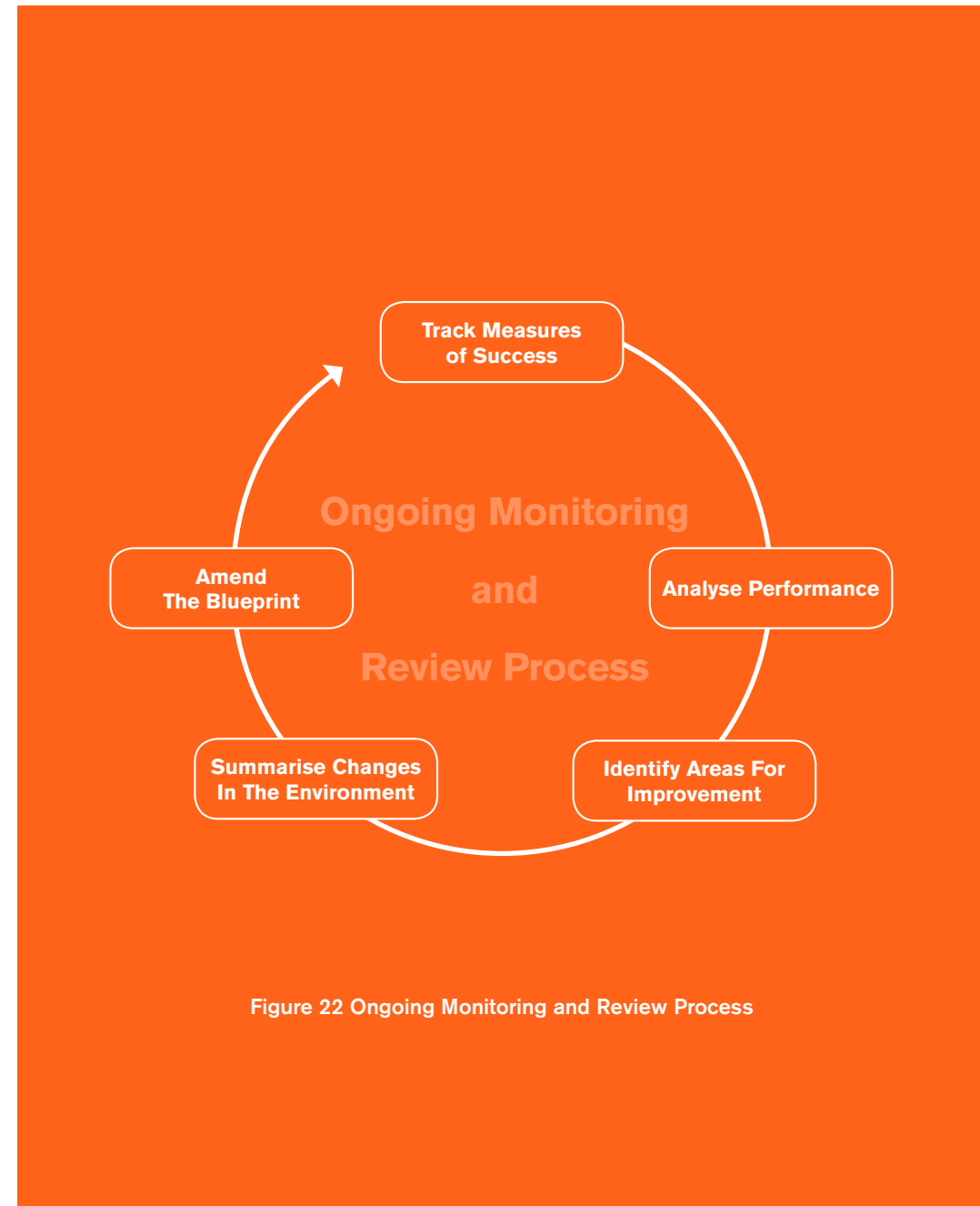


Figure 22 Ongoing Monitoring and Review Process



The Gascoyne region has a diverse and highly valued range of natural resources and cultural assets. This is evidenced by its two World Heritage areas, its ideal climate, range of existing industries and many sites of both Aboriginal and European importance; including the first point of European contact with Australia on Dirk Hartog Island in 1616.

In addition, its location on the central coast of Western Australia, directly adjacent to the off shore oil and gas fields and mid way between Perth and the Pilbara, make the Gascoyne northern town of Exmouth the ideal base for the servicing and security of the energy industry's assets.

This unique combination of natural resources, cultural assets and geographical location highlights the significant regional potential for greater economic and social development through strategically addressing the Blueprint's six Transformational Pillars.

The resultant targeted investment will optimise the return from the region's comparative advantages, improving the resilience and sustainability of the economy and enhancing the prosperity and quality of life of the Gascoyne residents.

The Blueprint sets out the framework for achieving the Vision for the Gascoyne. It provides the comprehensive evidence base for informed decision making; coordinates public and private sector investments and establishes a strategy to identify and implement key projects and actions.

The regular review of the Blueprint and its supporting Implementation Plan will be a critical success factor. The Gascoyne Development Commission will be responsible for executing the review process which will include monitoring and analysing performance against the measures of success, identifying areas for improvement, updating the environment context and factors; and if required, amending the Blueprint. A crucial part of the process will be ongoing and comprehensive engagement with stakeholders.



Through this Blueprint, the Gascoyne will have the opportunity to realise its economic and social potential, for the benefit of industry, businesses, communities and residents.



Appendix 1 – Megatrends

Asian Century

Estimates from the United Nations are for a rapid increase in the size of the middle class in Asia over the coming decades, with population in Asia expected to grow from around 4.3 billion people in 2013, to over 5.1 billion by 2050. Most of Asia's population, in fact the world's populations, is shared amongst

the world's two most populous countries, China and India. In 2013, both China and India accounted for 61.4% of Asia's population and this is projected to remain relatively stable until 2050 (58.2%), although India is expected to surpass China's population by then. This is illustrated in the figure below.

This increase in population will influence growth in globalisation resulting in increasing trade activity between Australia (i.e. exports) and Asia, which will increase the need for industrial space within Australia. The industrialisation of Developing Economies in Asia is also driving up incomes and creating an emerging middle class. Key areas expected to benefit from this newly empowered market segment include automotive components, clean energy, food and beverages, health and medical, education and infrastructure and building materials.

The Gascoyne has the potential to reap considerable benefit from the growth of the global population and the emergence of a true Asian middle class. The Gascoyne already possesses a recognised tourism market, with high quality natural tourism assets and established destinations (e.g. Monkey Mia) providing a base from which international visitation can expand and diversify. A growing global population will also increase demand for quality food (refer to Global Food Consumption) and mineral and energy resources (refer to Mineral Resource and Energy Investment), which represent major direct and indirect opportunities for the Gascoyne region.

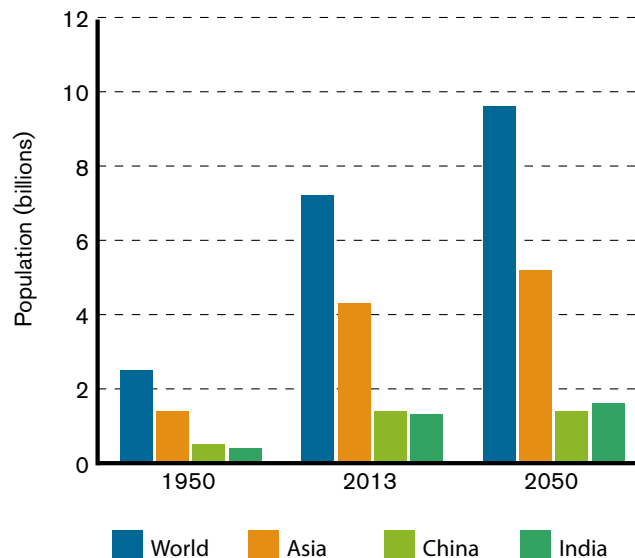


Figure 23 World Population, Asia and Selected Countries, 1950 to 2050³¹

Global Food Consumption

Global food production will need to increase by 60% by 2050 to meet projected demand levels³². Demand is already outpacing supply in international markets, with food price volatility increasing dramatically since 2006 and prices trending upwards from the lows experienced in 2000. This is after decades of real food price declines resulting from increased productivity. This is illustrated in Figure 24.

Australia's coastal regions are well recognised for their diverse range of seafood, which is exported globally to markets such as the USA, Japan, South Korea and China. The coastal environment has also been known as a highly attractive environment for fish farming and other forms of intensive aquaculture. Fish and seafood are a major component of global food consumption and are particularly favoured in many emerging Asian

economies. The increased need for protein in developing countries, driven by increases in both population and income levels, has underpinned this growth and is expected to support a 15% growth in seafood consumption over the next 10 years³².

However, Australia also produces a wide mixture of other products including broad acre grains, animal husbandry and horticulture. Currently, broad acre grains are experiencing considerable price growth on international markets due to seasonal volatility in major producers (such as the USA and Australia) and continued declines in stock-to-use ratios³³. This is expected to continue in the medium term, despite the emergence of new production regions in Russia, Ukraine and other central Asian countries.

The Gascoyne is a major food producing region in Western Australia. Founded on livestock, irrigation has seen the region, particularly Carnarvon, transform in recent decades into a major horticultural producer, supplying a large proportion of Western Australia's fruit and vegetable crops. The coastal orientation of the region also supports extensive wild capture and an emerging aquaculture-based seafood production, with major products exported to interstate and overseas markets. The ability to expand, diversify and value add to this food production capacity is central to the region's prosperity and connectivity to the global economy.

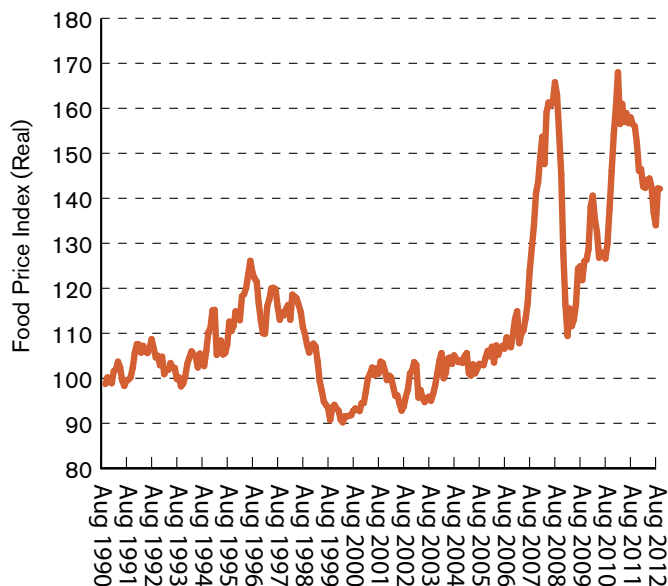


Figure 24 Food Price Index, Real, 1990 to 2012³⁴

Mineral Resource and Energy Investment

Capital expenditure by the resources sector in Australia is generally agreed to have peaked in the December quarter of 2012, reaching \$26 billion or 2.5 times the 2008 peak. Yet, despite this peak, expenditure by resource companies has not fallen precipitously as some commentators predicted. In fact, the June and September 2013 quarters expenditure levels rebounded after the March quarter fall, both exceeding reaching \$24 billion or near historical highs. The standout resource sector has been the continued strength in the Oil and Gas sector, with expenditure reaching its highest historical level in the September quarter at \$16.1 billion – or 60% – of total expenditure and offsetting falls in iron ore and coal expenditure.

Due to the contribution of oil and gas, new expenditure has been concentrated in recent quarters in Western Australia. In September 2013, capital expenditure by the resource sector in WA was at \$12.4 billion, or approximately 50% of national expenditure.

This resilience in the resource sector, and continued growth in the gas sector, nationally is attributed to the still robust pipeline of committed projects. According to the Bureau of Resource and Energy Economics April 2013 major projects list, there were \$270 billion of resource projects in Australia either under construction or committed. This currently represents an effective stabilisation of historical highs of 2012. Of these committed projects, over \$200 billion are in LNG, Gas and Petroleum, demonstrating that the recent dominance of gas in Australia’s resource capital expenditure profile is expected to continue at least for the next 3-5 years.

As major mining companies have shifted focus from investment to production, export output from Australia has increased markedly. Rio Tinto, BHP and Fortescue have recently announced record production and export, as recent investment in capacity increased production and increased certainty in Chinese growth and restocking of core commodities

supported demand. Port Hedland Port Authority, one of the two main iron ore export ports in the Pilbara region of WA, experienced record export volumes in 2012/13, reaching 280 million tonnes per annum (mtpa)³⁵. This is up from just over 150mtpa in 2008/09.

Exploration expenditure is viewed as a leading indicator of future resource project activity. Despite the recent uncertainty in the sector, total exploration expenditure in Australia has continued to grow strongly since 2010. For the first two years of this period, both minerals and gas/petroleum exploration contributed to this growth. However, since late 2012,

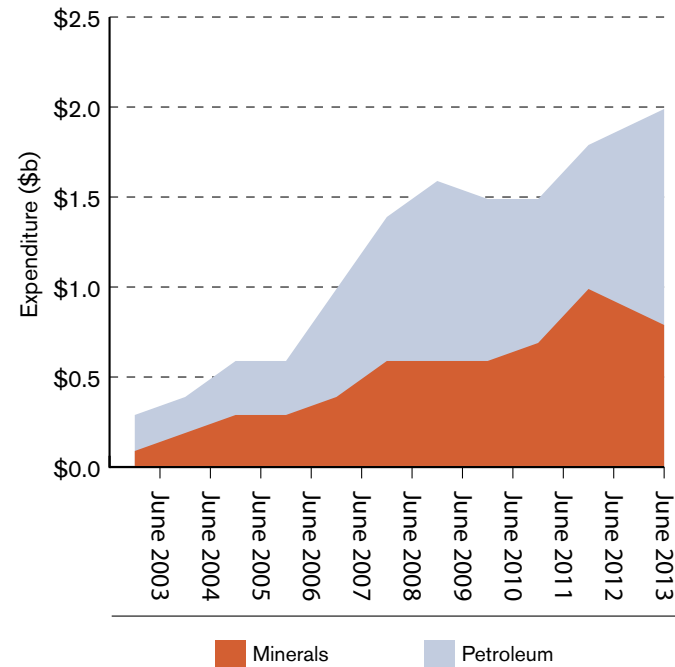


Figure 25 Exploration Expenditure, by Commodity, Australia³⁶

exploration expenditure levels in minerals (namely iron ore and coal) have declined. However, 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 Gascoyne region is positioned between major resource areas of the Pilbara and Mid West and is adjacent the Carnarvon Oil and Gas Basin. This strategic location presents significant opportunities for the region to act as a mining and energy resources support hub, providing a range of goods, services and skills in support of resource project exploration, investment, construction and operational phases. Additionally, the Gascoyne has a range of local resource deposits and developments.

Centres like Exmouth are already benefiting from this mega-trend and increased local and regional resource development has the potential to transform the Gascoyne economy in the future.

Climate Change

The average global surface temperature has risen around 0.8°C since 1850 and may continue to rise further in the coming decades as a result of global carbon emissions³⁷. For Australia, global temperature increases will likely involve significant environmental change and variability, with both natural and agricultural production systems impacted by the combined effects of higher temperatures and inconsistent and irregular rainfall patterns.

These environmental changes also increase the risks from bushfires, floods and other extreme weather, particularly in coastal and rural regions. Since 1990 to 2011, Australia's net emissions (carbon dioxide equivalent) increased by 32.2%, growing annually at a rate of 1.3%. This is illustrated in Figure 26.

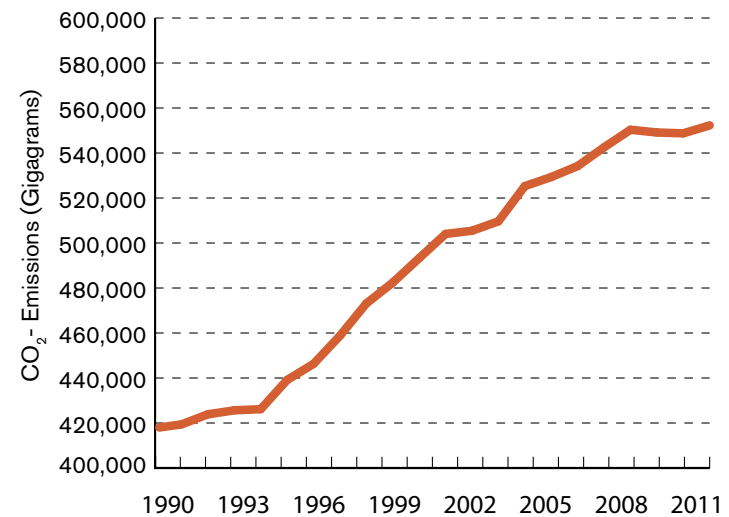


Figure 26 Emissions, Australia, 1990 to 2011³⁸

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.

Like Australia, global energy consumption is dominated by fossil fuels, with a market share in 2011 of 87%. This includes both base load power and transport fuel energy use. In contrast, renewable energy contribution is at 2%, or some 194.8 of 12,274.4 million tonnes of oil equivalent. This is illustrated in Figure 27.

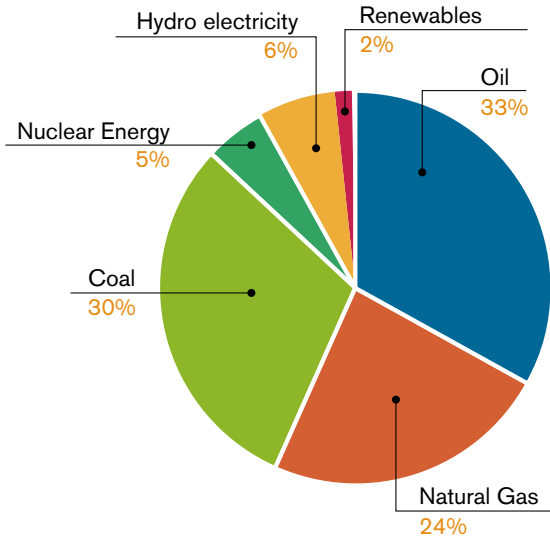


Figure 27 Global Energy Use Mix, 2011³⁹

The Gascoyne is also regarded as a low and variable rainfall area, averaging approximately 200mm per year with large amounts of rainfall from cyclonic and tropical storm cells. Consistency of rainfall is regarded as a critical factor in the success of food producing regions and the Carnarvon horticulture district is investing in improved infrastructure to increase access to aquifers, resulting in improved water security.

International Tourism

Demand for international tourism continues to remain strong with the number of worldwide tourists growing. Recent evaluation shows a significant improvement in confidence, with prospects for future growth remaining upbeat. Further, this growth in global tourism continues to produce above average results in most world regions, offering vital opportunities for employment and local economies.

The Australian tourism investment pipeline is now estimated to have been \$44.1 billion in 2012; this is an increase of 22%⁴⁰ in pipeline investment over the year. These levels of investment clearly indicate the enormous potential of the tourism sector and highlight both 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% and 96.9% respectively. This is an annual average growth rate of 2.3% for international visitors' trips and 5.4% for international

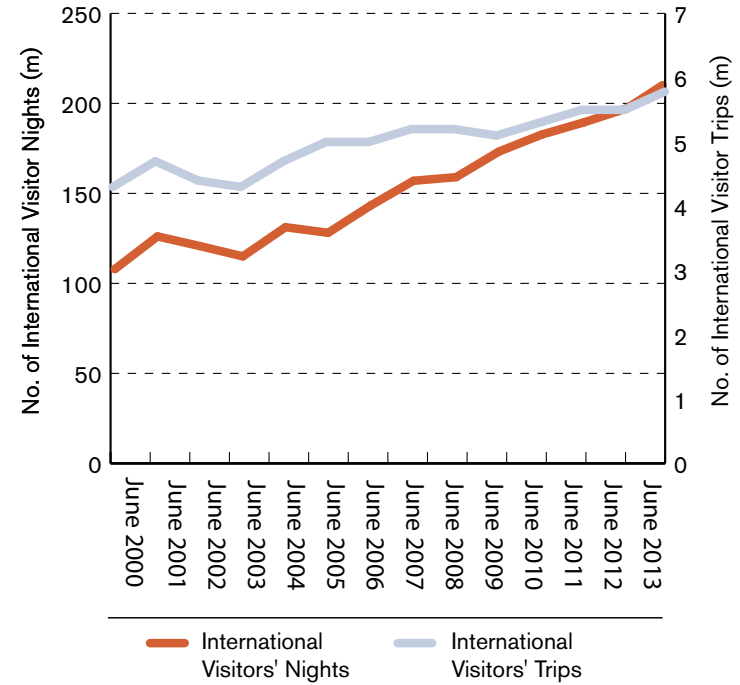


Figure 28 International Visitors' Nights and Trips, Australia, June 2000 to 2013⁴¹

visitors' nights. This is illustrated in Figure 28.

Tourism is the largest industry in the Gascoyne economy with expenditure by domestic and international visitors of almost \$250 million in 2012. This turnover is underpinned by a diverse and quality natural environment, comprising pristine coastal, rugged outback and scenic pastoral locations. The region possesses

an established global reputation, with attractions like Monkey Mia supporting growing international visitation to the region. The region therefore possesses a unique comparative advantage in international tourism market seeking a 'natural' or 'wilderness' experience. This positions the Gascoyne to reap the benefits of this megatrend.

Affordability and Cost of Living

Asian and Australian cities continue to move up the cost of living scale over the last few years which has been offsetting traditionally more costly European locations. In particular, the cost of living in Australian cities has been rising very quickly up the rankings as economic growth has supported inflation and currency swings to make them more costly. This is illustrated in Figure 29.

Currently, two of Australia's cities (Sydney and Melbourne) are ranked in the top five most expensive cities to live, where ten years ago there were no Australian cities among the 50 most expensive cities⁴². In June 2013, the Consumer Price Index for housing was one of the highest in Australia (106.0), higher than that for all groups (102.8). However, health was the highest (109.8) followed by Education

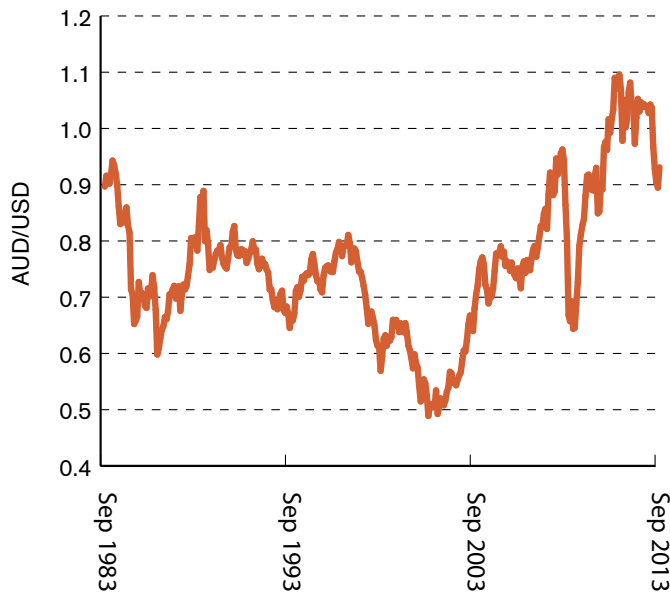


Figure 29 Australian Dollar, 1983 to 2013⁴³

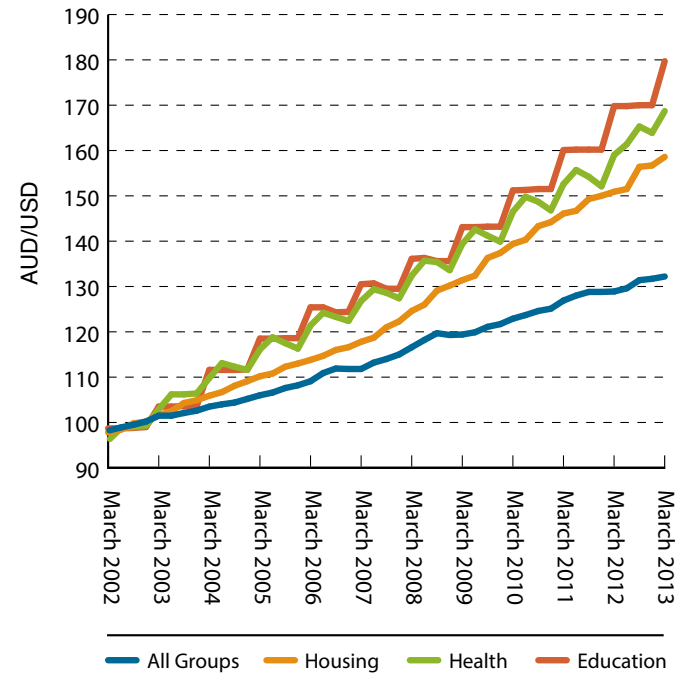


Figure 30 Consumer Price Index, Australia, 2002 to 2013⁴⁴

(108.8). This is illustrated in Figure 30.

The Department of Regional Development's (DRD) Regional Price Index indicates that the cost of living in the Gascoyne region is approximately 10% higher than that of metropolitan Perth in 2013⁴⁵. This is higher than the Peel (99.7), South West (99.9) and Great Southern (97.6) but lower than the Pilbara (118.6) and the Kimberley (114.7). The

two main drivers of regional price differentials appear to be exposure to mining and resource sectors and relative distance from metropolitan Perth (and the impact of transport costs on consumable goods). The combination of these factors is illustrated in the Gascoyne, with Exmouth (and its greater exposure to resource projects and associated employment) having a higher cost of living in 2013 (116.7) than Carnarvon (107.4).



Population Ageing

The population of Australia is ageing – approximately 3 million people in Australia were aged 65 years and over in 2011 representing over one in eight Australians⁴⁶. This was an increase of 27.6% over the last decade with an annual average growth rate of 2.5%. Looking forward, the number of people aged 65 years and over is projected to increase by 83.6% over the next two decades with an annual average growth rate of 3.1%. This is significantly faster than historical growth rates, 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, representing one of the greatest challenges for policy makers, industry and the community. This is illustrated in Figure 31.

The population of Gascoyne is slightly older and ageing faster than the Western Australian average⁴⁷. This trend is not uncommon among regional and rural parts of the State. There is considerable variation across each of the LGAs, with Carnarvon and Exmouth (12.8% and 11.1% respective of population aged 65+) broadly in line with State averages and Upper Gascoyne (6.5%) considerably

below. However, the standout in 2013 was Shark Bay with more than 1 in 10 residents are over 65 years. 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 new businesses and industries.

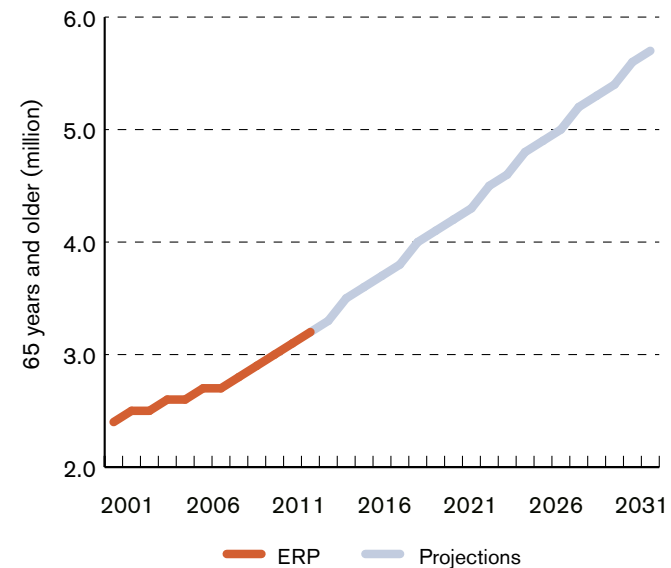


Figure 31 Historical and Projected Population, 65 Years and Over, Australia, 2001 to 2031^{47/48}

Broadband and the Digital Age

Technology has played a central role in enabling the globalisation of markets mainly by increasing the reach and speed of communication while also assisting to reduce costs, which have eased the flow of goods, capital, people and information across borders. These trends have profound life and business changing effects. The future evolution of the internet including increased speeds, cloud based computing and applications will result in these benefits being more widely felt in regional locations, through improved connectivity and the establishment of new, knowledge intensive industries.

The share of Australian businesses using the internet has increased as a result of the digital age as e-commerce/banking gains momentum. Between 2007-08 and 2011-12, the proportion of businesses using the internet increased from 86.8% to 91.9%, while the share of Australian businesses with a web presence has increased from 36.3% in 2007-08 to 44.6% in 2011-12. This is illustrated in Figure 32.

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, for a range of reasons, from reviewing and purchasing goods and services to online learning. In the last five years, the share of households using the internet has increased by almost 20%, from 2005-06 to 2010-11.

The development and implementation of the National Broadband Network (NBN) is expected to have a transformative effect on the connectivity and accessibility of regional residents to the rest of the country and world. This presents significant opportunities for a more remote region like Gascoyne to provide residents and businesses access to services otherwise unavailable, cost prohibitive or inefficient.

However the implementation of the NBN in the Gascoyne is unknown at this stage. These opportunities include:

- More reliable base telecommunications;
- Online retail and shopping;
- Virtual education;
- Online entertainment, music and movies;
- Telehealth;
- Telecommuting and virtual work opportunities;
- E-commerce and web-based business activity.

Asian and global markets represents a significant opportunity for Gascoyne businesses to reach beyond the small and distributed domestic market and seek high returns for quality products and services.

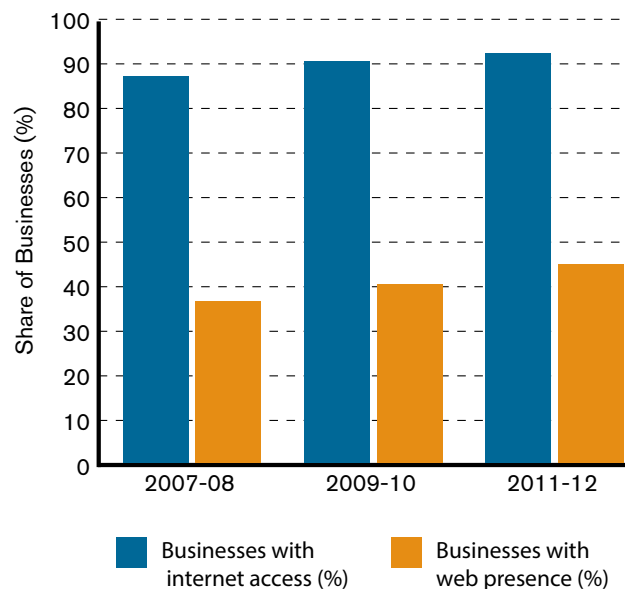


Figure 32 Business Use of Information Technology, 2007-08 to 2011-12⁴⁹

National Defence

An increasingly globalised and interconnected world does raise issues regarding national security. The 2013 Defence White Paper identified a number of interrelated factors that may influence Australia's strategic security outlook in the coming decades. These include:

1. The importance of the Indo-Pacific in global security

Global population and economic activity is increasingly concentrated in countries that either border the Indian and Pacific oceans or are dependent on trade routes through these oceans. This is having the effect of repositioning global security focus. Current security architecture in the Indo-Pacific is focused on a series of sub-regional arrangements with not unifying framework. The development and establishment of this framework in coming decades will significantly influence Australia defence posture.

2. The critical nature of enhanced regionalism and cooperation in South East Asia

With South East Asia the primary pivot of the Indo-Pacific region, interactions and engagements among and between South East Asian nations can have significant global ramifications. Promotion and support of enhanced regional associations (such as ASEAN and the East Asia Summit) are viewed as highly beneficial to regional and global security.

3. The relationship between the United States of America and China

This relationship represents the defining feature of global security over the next several decades. Defined in the White Paper as "collaborative competitiveness", the relationship between China and United States is characterised by strong economic interconnectedness and reliance which is not currently matched by political and security cooperation. The US is currently implementing a 'rebalancing' of their defence posture to afford greater attention

to the Indo-Pacific region and Asia in particular. This has caused some tension in the US-China relationship; though it remains Australia's stated position that we are not required to choose between the US as our military alliance partner and the China as our primary economic partner.

4. Potential conflict hotspots in North and South East Asia

While broader US and China relationships are expected to be restrained by economic interdependence, individual hotspots are regarded as more serious a threat. These hotspots including Taiwan Straits, the Korean Peninsula, the East China Sea and South China Sea.

5. Regional military modernisation

Regional military modernisation is largely a consequence of rising national wealth, enabling many states to modernise their defence forces with more advanced capabilities. This presents significant new opportunities for partnering with other nations' defence and military organisations. However, it also raises the levels of capability required by the Australian Defence Force (ADF) to maintain the edge that has historically underpinned the defence of our continent with a comparatively small population.

6. Terrorism

While enhanced counter-terrorism capabilities, the death of Osama bin Laden and sustained international cooperation and effort have altered the nature of global terrorism, the threat of terrorism and its potential impacts remain real and significant.

7. Climate change impacts and resource security

Global energy, food and water resources are under pressure from population growth, rising affluence and climate change. Robust demand for commodities is underpinned by rapidly emerging economies such as China and India. Demand for key commodities is expected to remain robust over the long-term.

8. Cyber warfare

The 2009 Defence White Paper acknowledged that national security could be compromised by cyber-attacks on defence, government or commercial information networks. Cyber security continues to be a serious and pressing national security challenge⁵⁰.

Of particular note in the Defence White Paper is the fact that the economic importance of northern Australia and offshore resources has increased and this must be considered in defence planning. The Defence Posture Review within the White Paper, builds upon the posture review undertaken in 2011 and reinforced the need for Australia’s northern and western approaches to be appropriately defended with the capacity for high tempo projections of power into the region.

Defence establishments and operations can provide significant economic stimulus to a region. Townsville and Darwin, both of which have extensive Australia Defence personnel and facilities have benefits significantly from this presence, in terms of population growth, expenditure, economic stability and infrastructure delivery and capacity.

The Gascoyne region is strategically located within the context of the Defence form posture shift to northern and western fronts. This strategic position has been recognised historically with the region, and Exmouth in particular, already home to a number of important Defence facilities/assets. These include:

- Naval Communication Station Harold E. Holt, was built at the same time as the town and provides very low frequency radio transmission support for ships and submarines of the US and Australian Navies; and
- Learmonth Air Weapon Range, 18,954ha located 30km south west of Learmonth Airport (itself a bare forward RAAF base); and

- Learmonth Solar Observatory is a quasi-military installation jointly run by the Australian Bureau of Meteorology and the US Air Force⁵⁰.

Exmouth’s position is highly favourable in terms of its proximity to major South East Asian population centres, Indo-Pacific trade routes. The town is actually better located, in terms of proximity than Darwin as outlined in the following table.

The strategic position of Exmouth and the existence of a number of important Defence facilities, position Exmouth as a potential beneficiary of further northern and western force posture movements.

Table 3 Distance in kilometres to Major Asian Centres, Exmouth and Darwin⁵⁰

FROM	TO EXMOUTH	TO DARWIN
Ho Chi Minh City	3,706	3,705
Kuala Lumpur	3,089	3,657
Singapore	2,802	3,347
Cocos Islands	2,143	3,697
New Delhi	6,855	7,343

Appendix 2 – Regional Profile

Population

The residential population of the Gascoyne region has been steadily declining over the decade to 2007, with approximately 1,000 residents leaving since 2001. However, since 2007, population growth has returned to the region with an additional 500 residents calling the Gascoyne home. This represents growth of 5.1% over the period to 2012 as illustrated in the figure below.

As expected, the Carnarvon LGA is home for the majority of the region's population, with 62% in 2012. This is followed by Exmouth (26%), Shark Bay (9%) and Upper Gascoyne (3%). Figure 34 provides the current breakdown of population across the municipalities in the Gascoyne region.

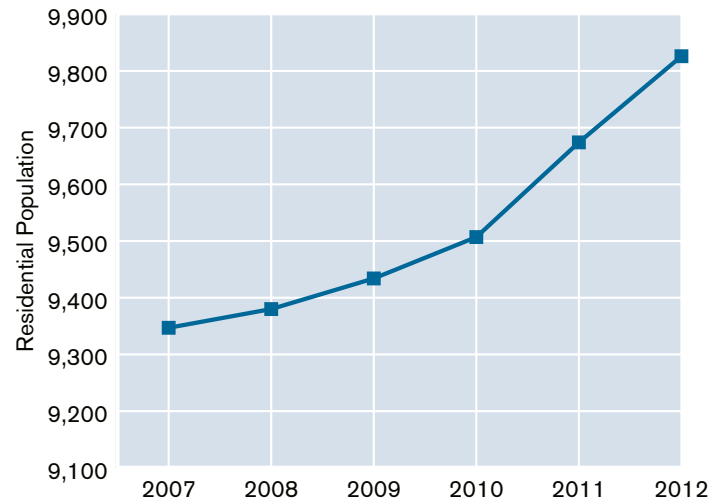


Figure 33 Estimated Residential Population, Gascoyne Region, 2007 to 2012⁵¹

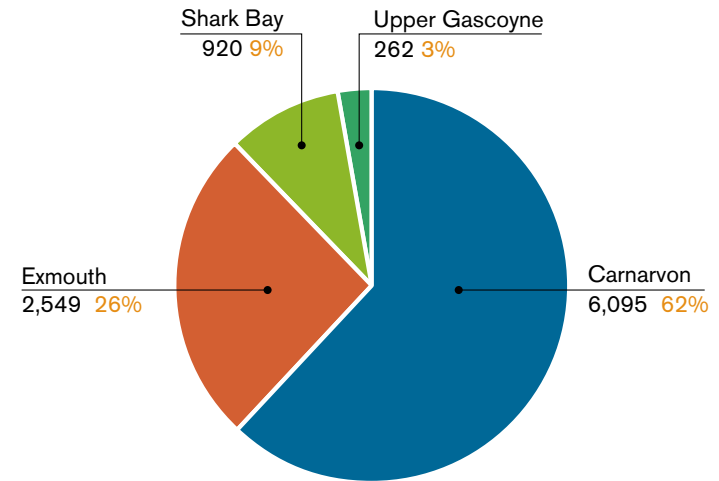


Figure 34 Population Distribution, Gascoyne Region, 2012⁵¹

While Carnarvon was the largest LGA by population in 2012, it did not account for the greatest increase in residents since 2007. The population of Exmouth LGA grew by almost 350 people over the period, or more than half of the growth for the Gascoyne. Upper Gascoyne was the only LGA during this period to experience a decline in population.

Western Australian Planning Commission (WAPC) WA Tomorrow Population Projections suggest the population of the Gascoyne will decline to 8,550 by 2026. However, this is not an accurate representation of recent population growth trends in the region, particularly since 2007. An examination of more bullish scenarios (Band E of the WA Tomorrow Projections) estimate growth in the region to 11,510 by 2026. This is based

on demographic considerations and trends and does not take into consideration the economic and employment potential of the region and the associated need for workers.

Aspirational population targets were developed collaboratively by the Department of Planning with the Gascoyne Development Commission and Gascoyne LGAs. These projections indicate growth in the population of the region to 15,745 residents by 2026 and becoming 23,000 by 2051⁵².

It is important to note that demand for infrastructure, services and facilities will not be generated by residents alone. Exposure to growth through industries such as FIFO resources workers and horticultural and tourism seasonal employees, both now and in the future, will see the region's service population (residents and short-term workers) exceed that of the residential population. Currently, it is estimated that the peak service population of the Gascoyne region is approximately 20,000. This is projected to grow to 35,000 in 2026 and 55,000 in 2051. Both figures are approximately 15,000 people more than the residential population at those times.

Table 4 Population Projections, Gascoyne Region⁵³

SCENARIO	2012	2026	2050
WA Tomorrow – Band E	9,766	11,510	n/a
Aspirational population targets	9,766	15,745	23,000
Estimated peak population	20,000	27,000	35,000

Demographics

The Gascoyne has a traditional population profile for a regional area. In 2012, the share of population aged less than 15 years in the region (21.1%) was marginally higher than the Western Australian average (19.2%). Similarly, the share of population aged 65+ is also marginally higher than that of the State average (12.6% and 12.4% respectively),

though this rate is significantly higher in Shark Bay LGA (17.1%) in 2012.

Larger differences between the region and State average are evident in younger adults. Only 23.4% of the Gascoyne's population in 2012 was aged between 15 and 34, compared to 29.4% across WA. This means that the region currently

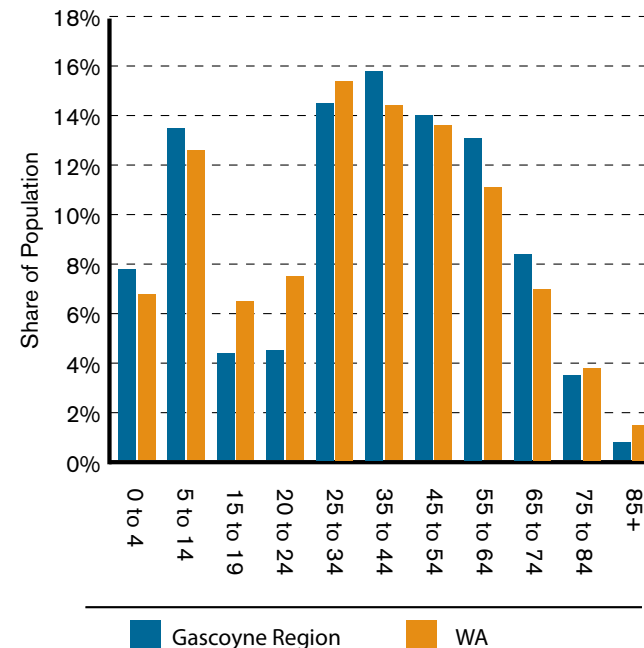


Figure 35 Age Profile¹⁸

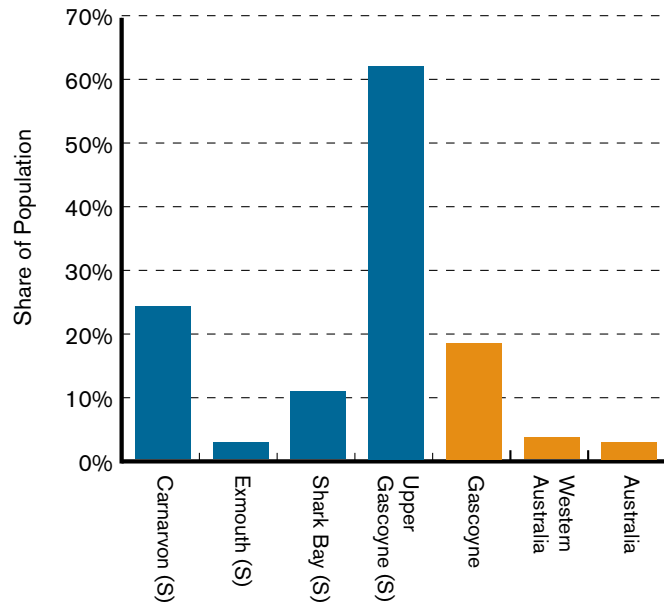


Figure 36 Aboriginal share of Residential Population, Gascoyne LGAs, 2011⁵⁴

experiences difficulties retaining young adults, particularly those undertaking secondary and tertiary education and training and young workers, seeking greater number and diversity of student and employment opportunities. This is not a unique trend in the Gascoyne, with young families regularly leaving the region to allow their older children to attend secondary school in metropolitan Perth or other locations. The emigration of this cohort has the effect of

decreasing not only the proportion of young people but also middle age workers (the parents). Despite this, the issue is not as stark in the Gascoyne as in some other

regions of the State, particularly considering the growing nature of the overall population and the employment prospects emerging in the economy.

Regional fertility rates are consistently above the State and national averages in the Gascoyne. When broken down by LGAs, the highest fertility rates are found in Carnarvon at 3 children per woman, while Exmouth and Shark Bay are more consistent with the WA average rate. This trend contributes to the region having a larger share of 0-14 aged residents as well as supporting the growth of the population in recent years.

In contrast, net migration to the region has not contributed significantly to population growth in recent years. Over the 5 years to 2010/11, the population of the Gascoyne has declined by a

net 45 and 152 people annually with only one year with a positive net migration figure (80 people in 2009-10). This is illustrated in the following table.

The net migration estimates in the table above, correspond with the estimate of population gain and loss by LGA. Exmouth was the only LGA over the period to experience consistent population gains from net migration across all but one of the years. Shark Bay was second with population declines between 2008 and 2010 but an overall net migration of 29 residents.

Interestingly, while Upper Gascoyne had population decline over the 5 year period, it also had a small but positive net migration figure with 14 people moving into the area in net terms. This indicates that the low fertility rate in the area is leading to declining

Table 5 Net Migration, by LGA

LGA	2006-07	2007-08	2008-09	2009-10	2010-11
Carnarvon	-157	-174	-63	-14	-119
Exmouth	-4	29	34	88	0
Shark Bay	3	19	-12	-12	31
Upper Gascoyne	6	-3	-4	18	-3
Gascoyne Region	-152	-129	-45	80	-91

population through natural attrition. Carnarvon, on the other hand, is experiencing natural population growth (birth rate higher than death rate); however the rate at which residents are migrating away from the community has seen slower population growth over the past five years.

The Gascoyne has a relatively large Aboriginal population. In 2011, peoples of Aboriginal descent comprised almost one in every five Gascoyne residents (18.3%) or some 1,770 people. This is above the State (3.7%) and national (3.0%) averages. Aboriginal peoples are not evenly dispersed across the Gascoyne region. The largest number reside in Carnarvon LGA (1,455 in 2011), accounting for 24.0% the local population and 82% of Aboriginal residents of the Gascoyne. However, Upper Gascoyne Shire has the highest share of its population identifying as Aboriginal, accounting for over 60%.

The Aboriginal population of the Gascoyne has a younger age profile than non-Aboriginal residents, with 36.1% of people identifying as Aboriginal under the age of 15. In contrast, the share of Aboriginal residents aged 65 and over is significantly below the non-Aboriginal average. This aligns with State and national trends.

In 2011, 19.2% of people identifying as Aboriginal in the workforce were unemployed, almost 5 times higher than the broader unemployment rate at that time. Those residents with jobs are employed across a range of industries, with Health Care and Social Assistance, Construction, Education and Public Administration the largest sectors. These industries all have a strong public sector focus, illustrating a reliance on the Government for employment opportunities. Improving access to employment and enhancing the quality of life and prosperity of Gascoyne's Aboriginal residents requires greater focus on private sector job creation and business establishment.

Households Structures and Incomes

In 2011, there were a total of 3,312 households in the Gascoyne. This represented an increase of 1.6% from 3,259 households in 2006. The mix of current households aligns with the age profile of the Gascoyne, with Couple families with no children (30.6%), and Lone person households (28.5%) accounting for the largest share. These households are commonly associated with older residents. Similarly, the next largest share of household types is Couple

family with children under 15 (21.9%), associated with younger age cohorts. This is illustrated in Figure 37.

The average household size of the Gascoyne region has increased from 2.50 persons per household in 2006 to 2.55 persons per household in 2011. This minor increase flows against the trend of State averages, reflecting the continuing high fertility rate in the area.

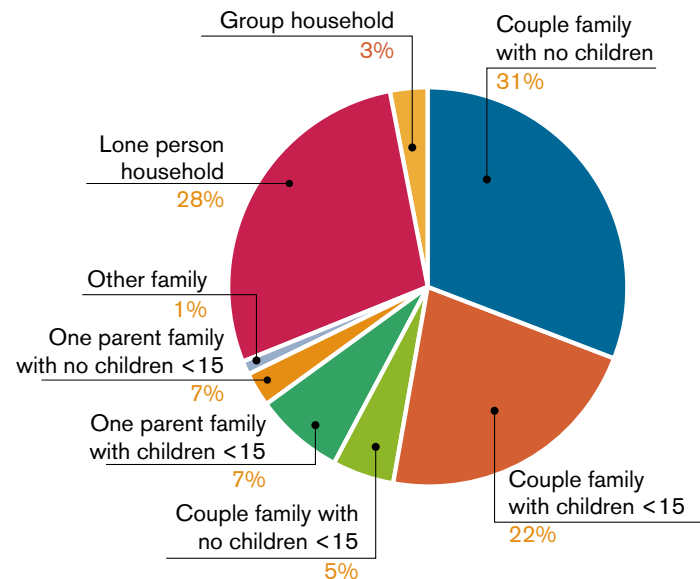


Figure 37 Composition of Households, 2011⁴

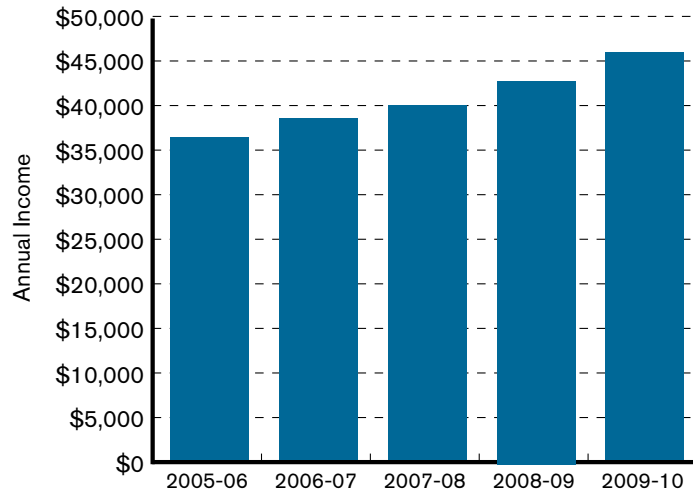


Figure 38 Wage and Salary Income Growth⁵⁵

The Gascoyne is a lower income region of Western Australia. In 2011, the median weekly personal income of taxable individuals in the region was \$552 while the household income \$1,072⁴. Both of these levels were below the State averages (16.5% and 24.2% lower respectively), though levels in Western Australia have been distorted in recent years by the impact of the mining investment boom and associated income growth.

Income levels have been volatile in recent years, with the GFC and subsequent economic slowdown

impacting the earning capacity and income levels of a number of regions across Australia.

However, despite this volatility and uncertainty, incomes in the Gascoyne have exhibited significant resilience, continuing to experience growth between 2005/06 and 2009/10. This is illustrated in Figure 38.

The occupations with the highest incomes in the region are currently Professionals. However, Machinery Operators and Drivers and Technicians and Trade Workers also have high

incomes at over \$1,200 per week while Managers have the fourth highest income levels. In contrast, the occupations with the lowest incomes in the Gascoyne region are Sales Workers and Labourers, which traditionally have lower education levels and higher levels of unemployment.

Unemployment, Labour Force and Skills

As at 2011 the working age population (15 to 65 years) in the Gascoyne region was 6,515 people. This represents

66.3% of the total population. Of this population, 4,536 people were actively in the labour force (employed or seeking employment). The distribution of the labour force mirrors the population distribution with Carnarvon LGA home to 58.8% of the total labour force, followed by Exmouth (28.9%), Shark Bay (10.1%) and finally Upper Gascoyne (2.2%).

Unemployment in the Gascoyne decreased rapidly in recent years, falling from 7.0% in mid-2010 to just over 3.0% in September 2012 – less than half⁵⁶. However, since

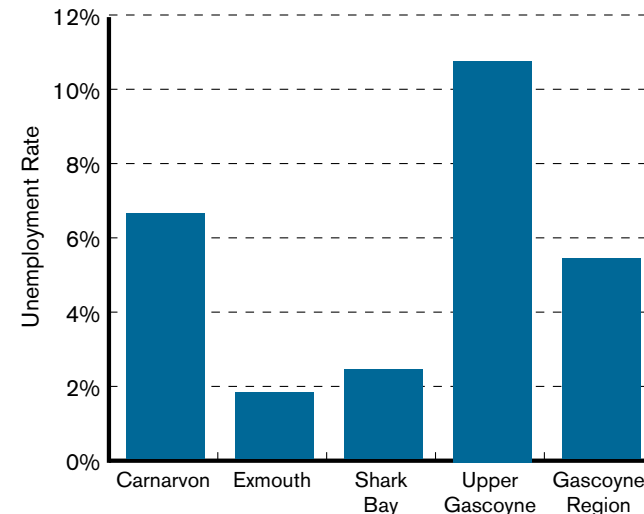


Figure 39 Unemployment Rate, June 2013⁴

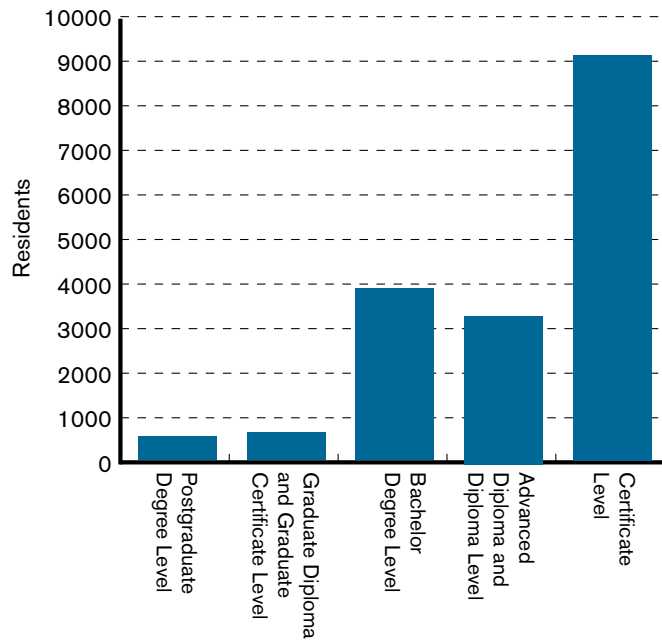


Figure 40 Qualifications Gained, Gascoyne Residents Aged 15+⁴

2012, unemployment rates in the Gascoyne have climbed higher and as at June 2013, was 5.3%. This climb is sharper than, but broadly in line with the increase in State unemployment. Consultation with stakeholders indicates that this increase has been primarily associated by a combination of the peaking mining employment (particularly FIFO construction employment) and the completion of a number of Royalties for Regions

projects associated with the Gascoyne Revitalisation Plan. Unemployment rates vary considerably across the region, reflecting different economic, age and social profiles and drivers. As at June 2013, Upper Gascoyne LGA had the highest unemployment rate (10.8%), however, this is for a very small number of workers so its statistical validity is questionable. In contrast,

Exmouth LGA currently has the lowest unemployment rate (1.8%). Certificate level qualifications are most common among residents in the region, accounting for more than half of the population with post-school qualifications. Bachelor Degree level and Advanced Diploma and Diploma level qualifications account for the next largest shares (19.5% and 15.9%). This is illustrated in

Figure 40. Overall, this post-school qualification profile is highly biased toward TAFE related qualifications. Such qualifications are more common among occupations such as Tradespersons and Machinery and Equipment Operators and industries like manufacturing, construction and tourism. There is also a strong level of Engineering, Architecture and Hospitality certificate holders from the region.

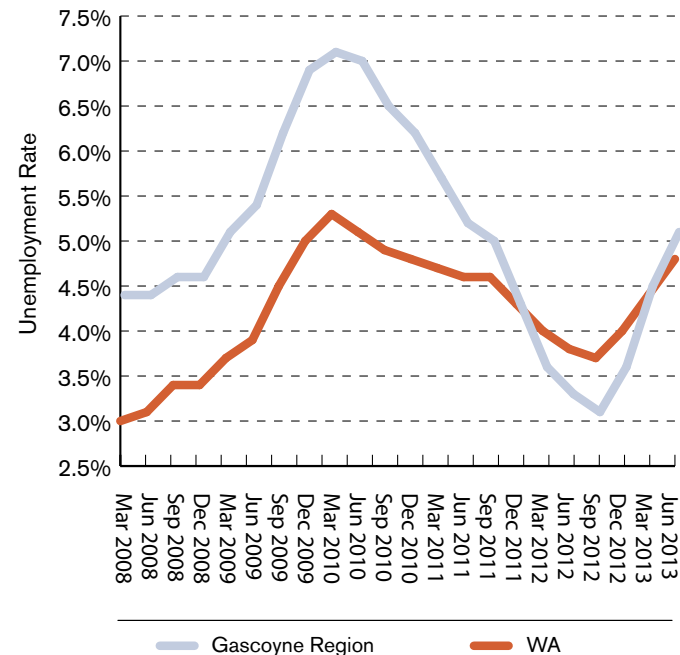


Figure 41 Unemployment Rate Gascoyne Region⁴

Employment, Industry and Economy

Despite the growth in population and labour force in recent years, employment in the Gascoyne increased marginally between 2006 and 2011, from 4,016 people employed in 2006 to 4,149 in 2012. In 2011, Accommodation and Food Services was the largest employer and accounted for 11.4% of total employment or almost 458 jobs. This was followed by Public Administration (11.2%), Agriculture, Forestry and Fishing (10.3%) and Retail Trade (10.2%)

sector. This is illustrated in the figure below.

Agricultural employment has experienced an employment decline in recent years, with the sector experiencing a fall of 139 jobs between 2006 and 2011. Manufacturing experienced a faster fall of 29% but off a much lower bases leading to a decline of 77 jobs in the sector. The largest growth in employment was experienced in Transport, Post and

Warehousing (6.6% up 91 jobs), Construction (7.5% up 77 jobs), and Mining (5.1% up 72 jobs). A small level of growth was also experienced across public sector and population servicing sectors such as Professional Services (2.8%), Public Administration (11.2%), and Accommodation and Food. This is illustrated in Figure 43.

According to data from the Public Sector Commission, 2% of the State's non-metropolitan public sector workers are located in the Gascoyne. This ranks the region as having the lowest number of public sector workers of all regions in the State. Having said this, the Gascoyne has a larger share of public sector workers as a proportion of the total population share. This is illustrated in Figure 44.

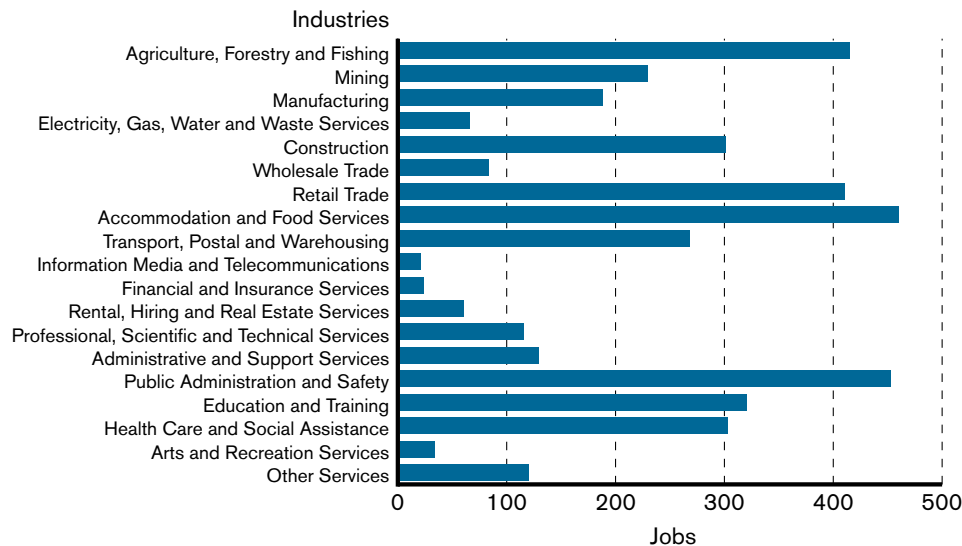


Figure 42 Industries of Employment⁴

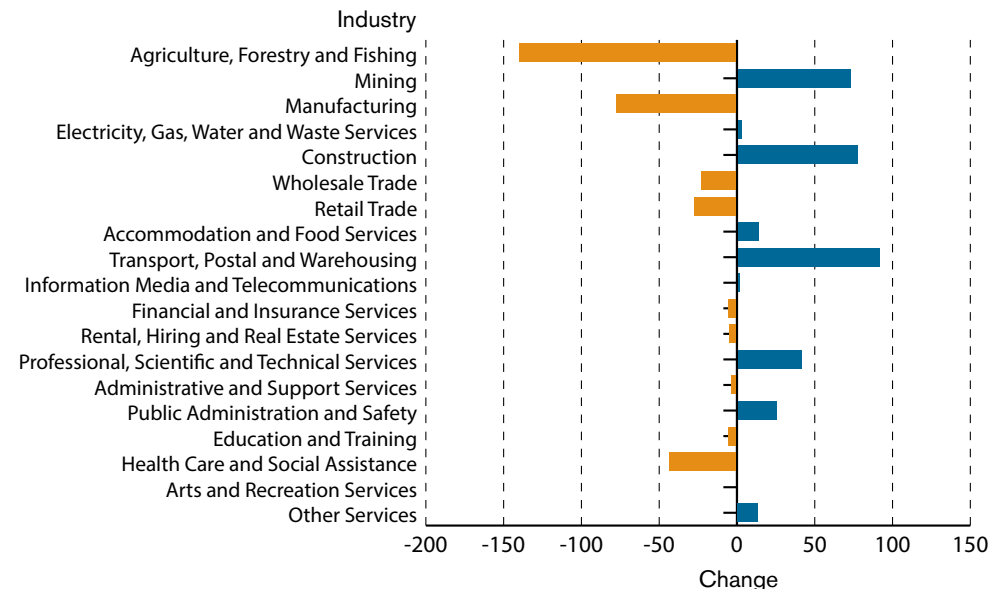


Figure 43 Change in Employment, by Industry, 2006 to 2011⁴

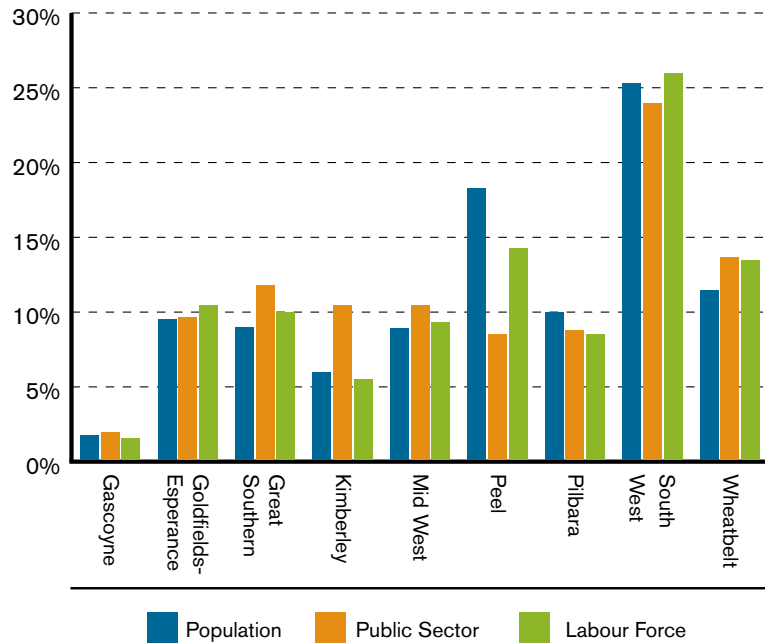


Figure 44 Region Share of Non-Metropolitan Population, Public Sector Workers and Labour Force, 2013⁵⁷

This reflects a combination of factors including:

- The large land area of the Gascoyne region;
- The concentration of horticulture and fisheries activities, with associated State Government oversight and management officers; and
- World Heritage areas, marine reserves and national parks requiring management and administration.

When adjusted for these spatial, industry and environmental characteristics of the region, public sector worker levels in the Gascoyne are actually below average, particularly in population services and central agencies. This reflects an increasing trend among State and Federal Government agencies to base regional services and administration for the Gascoyne out of the Mid West (namely Geraldton).

Overall, the employment diversification in the Gascoyne has increased in recent years even though total employment remained broadly stable. This indicates the region is undergoing an economic restructuring.

In the financial year 2012/13 the value of the Gross Regional Product was estimated to be \$870 million. Typically, about 95% of this is generated in the coastal areas of the region. In 2012/13, the Gascoyne had per worker Gross Regional Product (GRP) of \$152,933, which is significantly

lower than the State GRP per worker of \$180,100. The GRP level fluctuates even further when the individual LGAs are examined. The highest GRP per worker is in Exmouth with a GRP of \$245,885 which remains low in comparison to the State average. The Upper Gascoyne has the lowest GRP per worker at \$89,460 per worker which is less than half the State average. This is illustrated in Figure 45.

As highlighted in the industry and employment structure, agriculture, and in particular horticulture, is the

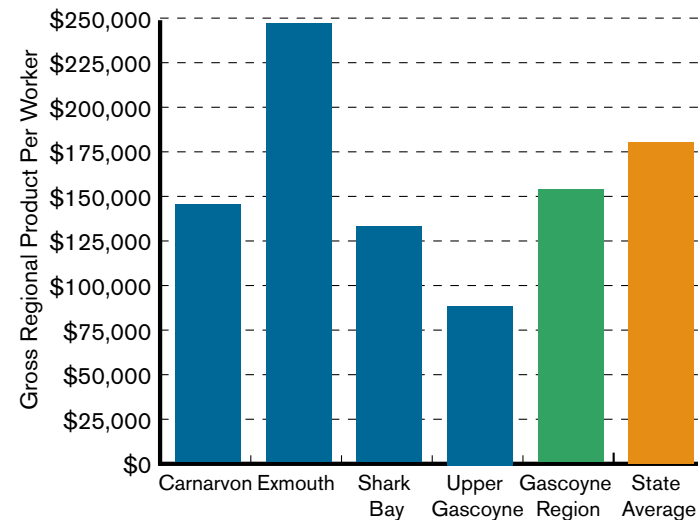


Figure 45 Gross Regional Product Per Worker, Gascoyne v State Average 2012/13⁵

primary industry of the Gascoyne region. In 2012, the Gascoyne region accounts for 8.7% of the State's agricultural land holdings including 10.4% of the total grazing area⁶.

Horticulture, based along the Gascoyne River in Carnarvon, is a strong contributor to the economy of the Region. In 2012 the Department of Agriculture and Food WA (DAFWA) estimated the Carnarvon horticulture industry alone to be valued at \$100 million. This sector was devastated by the floods in 2010/11 and a rare locust plague that followed impacted on 2011 production volumes. Despite flooding and locust plagues, gross value of production did not differ dramatically from 2010 to 2011. DAFWA estimated Carnarvon's horticulture industry to have produced \$75 million in 2013. Gross value has decreased from \$104 million in 2012 due to reduced water allocations, poor market prices and additional competition from domestic and international markets.

The region is the primary producer for a range of horticulture crops, including:

- Vegetables for seed;
- Runner and French Beans;
- Capsicums;
- Vegetable Herbs;
- Melons;
- Pumpkins;
- Tomatoes;
- Carambolas;
- Lychees;
- Mangoes;
- Bananas; and
- Table grapes.

The diversity of food production in the Gascoyne and the primacy of the region in the production of key crops for the State mean the region's role as a major food bowl should not be underestimated.

The pastoral sector was also devastated by the 2010/11 floods and a bush fire in December 2011 to the end of January 2012 which burnt over 900,000 hectares. The ban on live exports had a severe financial impact in 2012/13 as well. DAFWA statistics state the disposal of sheep and cattle for meat was \$23.5 million and wool production was \$3.4 million for the financial year ending 30 June 2011. This has increased to \$25 million for disposal of sheep and cattle for meat and \$5 million for wool

production up to the financial year ending 30 June 2012.

In terms of the total agricultural land, 85% is located within the Carnarvon and Upper Gascoyne LGAs. However, this differs from the breakdown of agricultural production. In particular, production is concentrated within the Carnarvon LGA, where 89% of the region's agricultural value is produced despite only having 55% of the total agricultural land. This is illustrated in Figure 46.

This reflects the different agricultural commodities mix of each LGA. Carnarvon is the primary centre of horticultural activities in the region with their associated land use intensity and production value. The horticultural industry in the Gascoyne region is conducted predominantly at Carnarvon in the Carnarvon Irrigation Area (CIA). The CIA is centred on the banks of the Gascoyne River extending from its mouth 19 kilometres inland. The area zoned for intensive horticulture in Carnarvon is approximately 2,000 hectares, with only 50% of the land actually under crop.

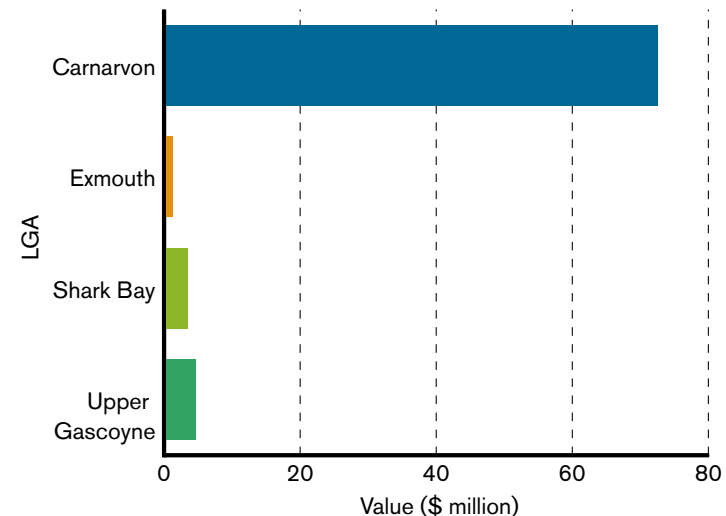


Figure 46 Gross Value of Agricultural Production, Gascoyne Region, 2011/12¹⁰

The pristine waters of the Gascoyne coast bioregion provide the perfect marine environment. With water temperatures ranging from 22°C to 28°C and many natural marine incubators such as coral reef, sand flats and seagrass beds, the Gascoyne coast bioregion has superior breeding grounds, fish nurseries and feeding habitats. These conditions contribute to both successful commercial fisheries and a popular recreational fishery.

The commercial fisheries of the Gascoyne coast bioregion are:

- the Shark Bay Prawn and Scallop Managed Fisheries,
- Exmouth Gulf Prawn Managed Fishery,
- the Shark Bay Crab (interim) Managed Fishery,
- the Gascoyne Demersal Fishery and the Inner Shark Bay Scalefish Fishery.

In 2011/12, Gascoyne fisheries accounted for the following shares of total State production:

- 50.6% of crabs;
- 75% of other crustaceans; and
- 95.8% of prawns¹⁵.

The Shark Bay Prawn and Scallop Managed Fisheries and the Exmouth Gulf Prawn Managed Fisheries are two of the State's most valuable commercial fisheries with combined catches in the range of \$40–50 million annually. Prawn, scallop, crab and fish processing are carried out in the region's towns. Fish processing occurs in Denham, prawn, scallop and fish processing in Carnarvon and prawn processing near Exmouth.

Pearling remains the largest aquaculture sector in the Gascoyne. In 2011/12, pearling produced \$9.4 million in value, representing about 10% of the State's production. Koi Carp and ornamental fish are two other forms of aquaculture but operations are currently very small, with only \$59,000 in combined production value in 2011/12.

Biodiversity and Natural Amenity

The Gascoyne is comprised of parts of two major bioregions – Carnarvon (coastal) and Gascoyne (hinterland). The combination of these bioregions underpins the diversity of the landscape and environment with a combination of coastal, scrubland and arid dry land areas. Despite the region being comprised of extensive pastoral leases, the Gascoyne has a moderate high proportion of land protected under conservation frameworks – 11.4%⁵⁸. This is equal to or higher than other non-forested regions like the Wheatbelt (9.6%) and Goldfields Esperance (11.6%), but is below that of the Great Southern (15.9%).

A major competitive pressure for the use of land with high ecological value is from agricultural uses. There was approximately 7.7 million hectares of agricultural land in the Gascoyne in 2011. Pastoral uses account for the majority of this land (84.7%) which is the largest share of any Development Commission area.

The Gascoyne region encompasses an extensive range of national and state parks and marine reserves. This includes two World Heritage Areas – Shark Bay and Ningaloo World Heritage Areas. Other major reserves and parks include:

Monkey Mia Reserve – offers one of Australia's best known up-close wildlife experiences where you can interact with wild bottlenose dolphins.

Francois Peron National Park – known for its contrasting red cliffs, white beaches and blue waters, has a fascinating pastoral history.

Shark Bay Marine Park – known for its large marine animals, such as the famous Monkey Mia dolphins, turtles, dugongs and sharks. The park and its vast seagrass banks form an important part of the Shark Bay World Heritage Area.



Shell Beach – white stretch of beach composed of billions of shells.

Hamelin Pool – boasts the most diverse and abundant examples of living marine stromatolites, or ‘living fossils’, in the world, monuments to life on Earth over 3500 million years ago.

Dirk Hartog Island National Park – located in the Shark Bay World Heritage Area, has immense historical significance and offers great fishing, steep cliffs and secluded beaches. 2016 will be the 400th anniversary of Dirk Hartog’s landing on the island, which the oldest known European landing in Australia.

Ningaloo Marine Park – Whales, dolphins, dugongs, manta rays, huge cod, turtles and whale sharks are abundant at World Heritage listed Ningaloo Reef, the largest fringing coral reef in Australia and the only large reef in the world found so close to a continental land mass, making it an easy snorkel from shore. More than 500 tropical fish species inhabit the 300 kilometre long reef. They live in and around more than 200 species of coral. Lakeside, Turquoise Bay,

Pilgramunna, Oyster Stacks and Coral Bay provide great snorkelling from the shore. From April to July each year huge but gentle whale sharks, between four and 12 metres long, begin to appear in large numbers.

Cape Range National Park – Includes rocky gorges of an arid, rugged landscape in the Ningaloo Coast World Heritage Area⁵⁹.

Kennedy Range National Park – The Kennedy Range is an eroded plateau on the rim of the Gascoyne River catchment, about 150 kilometres east of Carnarvon. It extends for roughly 195 kilometres in a northerly direction from near Gascoyne Junction. The park offers spectacular scenery of gorges and precipitous faces, with a vast plateau of ancient dunefields on top of the range.

Mount Augustus National Park – Mount Augustus, or Burringurrah as it is known by the local Wadjari Aboriginal people, is about 850 kilometres from Perth and midway between the Great Northern and North West Coastal highways. At over 1,100 metres above sea level, it is one of the most spectacular

solitary peaks in the world, it rises 717 metres above a stony, red sandplain of arid shrubland – dominated by wattles, cassias and eremophilas – and is clearly visible from the air for more than 160 kilometres. The granite rock of Mount Augustus is 1,650 million years old. Making it not only, more than twice the size of Uluru, but considerably older⁶⁰.

The region is also home to a diverse range of terrestrial and marine fauna. Red and Euro Kangaroos are common in the region. Smaller marsupials and bats, including rare and endangered species, are found often in the less accessible parts of the mainland and on offshore islands. A wide diversity of birds, both resident and migratory, inhabits the Gascoyne region. Large flocks of corellas and galahs are the most easily visible as well as emus, parrots and numerous smaller birds. Lake MacLeod is home to diverse bird species and an important resting spot for trans equatorial migratory waders. It has been nominated in part, for Ramsar listing. Dingoes and feral animals such as goats, foxes, cats and rabbits have had a significant effect

on the vegetation and fauna of the region.

The marine fauna of the Gascoyne region is diverse and plentiful. The single, most profound effect on this fauna is the Leeuwin Current. Green and hawksbill turtles, dugong, humpback whale and the whale shark are common to the region. At the southern end of the region is the World Heritage listed area of Shark Bay. Shark Bay has one tenth of the world’s dugong population (approximately 10,000 animals) and significant loggerhead turtle rookeries. Shark Bay contains breeding grounds for prawns, scallops and commercial finfish as well as habitats for endangered green turtles.

A unique subterranean fauna has been recently discovered in Cape Range and has created worldwide scientific interest because it provides evidence of continental drift and the evolution of specific species. The fauna, known as troglobites are small, live in limestone rock caves and are blind due to adaptation to a life in darkness.

Tourism

The tourism sector in the Gascoyne has been relatively stable over the past decade. Between 2000/01 and 2012/13, overnight visitor nights and day trips typically remained between 1.5 million and 2 million over the period, spiking above 3 million in 2006/07 as a result of a jump in domestic overnight trips to Exmouth. Overall visitor numbers have declined over

the past three years; however, there has been a strengthening of the number of international visitor nights, which hit a record in 2012/13 and the economic value has continued to increase. This is illustrated in the figure below.

The number of day trips to the Gascoyne is very low compared to other regions. Despite this,

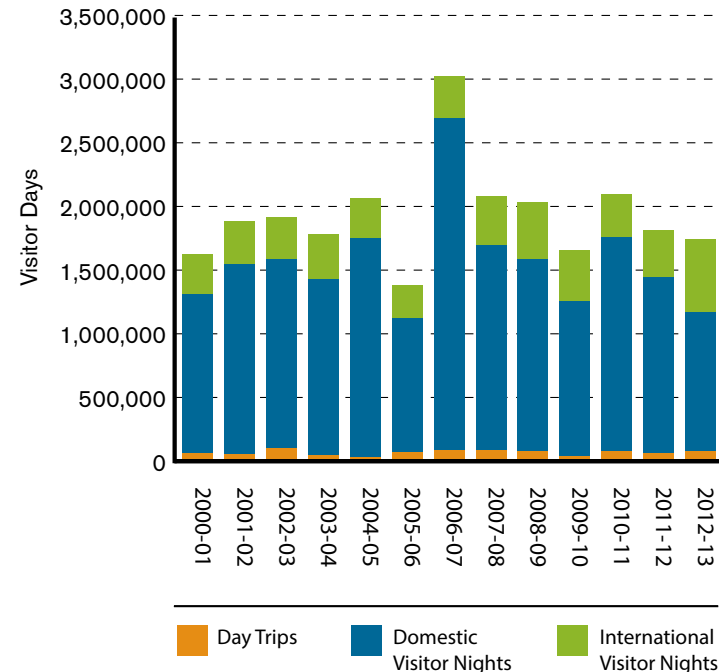


Figure 47 Tourist Visitor Nights and Day Trips, Gascoyne¹¹

the number of day trips has increased from 46,000 trips in 2001 to 79,000 trips in 2013, representing an increase of 71.7% over the period. This is a strong performance considering the distance of the region from major day trip origins (namely Greater Perth).

The number of international visitor nights to the region has also experienced growth from

2001 to 2013, increasing from 315,758 visitor nights in 2001 to 570,487 visitor nights in 2013. This represents a total growth rate of 80.7%. Conversely, the number of domestic visitor nights has decreased from 1,246,000 visitor nights in 2001 to 1,090,000 visitor nights in 2013, highlighting a decline of 12.5% over the period. This is relatively consistent with Western Australian regions.

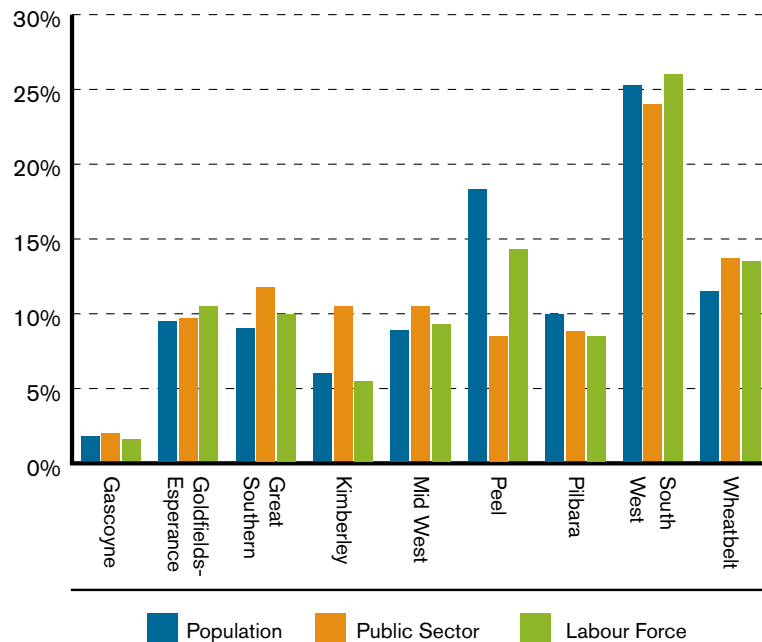


Figure 48 Tourist Visitor Expenditure, by Origin, Gascoyne Region⁴¹

This combination of decreasing domestic visitor nights and increasing international visitor nights is in line with State and national averages and reflects the impact of the high Australian Dollar on the affordability of overseas holidays for Australians. Expenditure by tourists in the Gascoyne region has grown strongly since 2001, increasing from \$136 million to \$246 million in 2012. This represents an almost doubling in expenditure levels, with international share of expenditure increasing over this time.

The Gascoyne region offers a diverse range of tourist activities and attractions. The natural amenities and ecological assets of the region are complemented by a range of man-made attractions, festivals and events. These include, but are not limited to:

Shark Bay World Heritage Area

- Monkey Mia
- Francois Peron National Park
- Dirk Hartog Island
- Hamelin Pool
- Shell Beach
- World Heritage Discovery Centre
- Fishing Fiesta
- Bare Foot Black Tie

Carnarvon

- One Mile Jetty Heritage Precinct
- Carnarvon Space and Technology Museum
- Growers Markets and plantations
- Gwoonwardu Mia – Gascoyne Aboriginal Heritage and Cultural Centre
- Tropicool Festival
- Gascoyne Arts Council Biennial Arts Awards

Ningaloo Reef World Heritage Area

- Ningaloo Reef
- Cape Range National Park
- Whale Sharks
- Whale migration
- Vlamingh Head Lighthouse
- Coral Bay
- Exmouth Cultural Arts Centre Biennial Arts Awards
- Whale Shark Festival
- Gamex (tag and release)

Inland Gascoyne

- Mt Augustus
- Kennedy Ranges National Park
- Gascoyne Murchison Outback Pathways
- Gascoyne River Festival
- Burringurrah Fire Festival
- Kickstarters Gascoyne Dash™

Tourist accommodation establishments in the Gascoyne have exhibited greater levels of resilience in their performance than other tourism destinations in regional Western Australia. Since March 2012, room occupancy rates for establishments within 15 or more rooms in the Gascoyne have remained broadly stable between 50% and 80% across the quarters. This is illustrated in the figure below.

Carnarvon has experienced greater consistency of room occupancy rates than Exmouth in recent quarters, with occupancy rates not falling below 60% over the period and reaching or exceeding 80% in two quarters. This reflects the concentration of short-term construction employment within Carnarvon, owing to flood reconstruction and mitigation infrastructure investment and Royalties for Regions projects

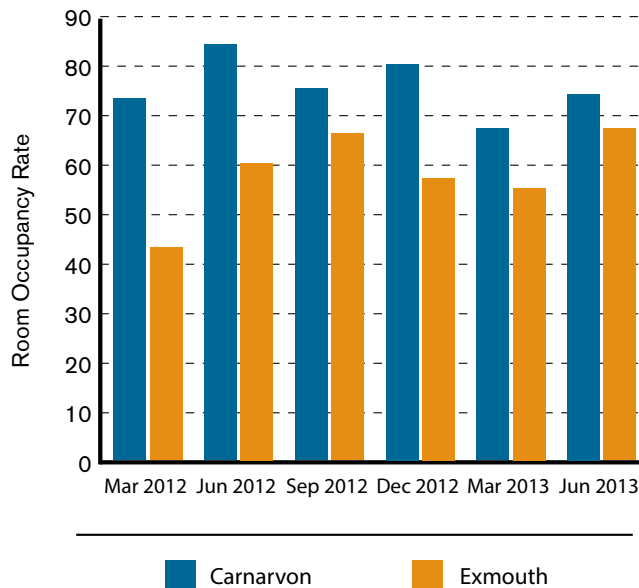


Figure 49 Room Occupancy Rates, Tourist Accommodation Establishments with 15+ Rooms, 2012-2013⁶¹

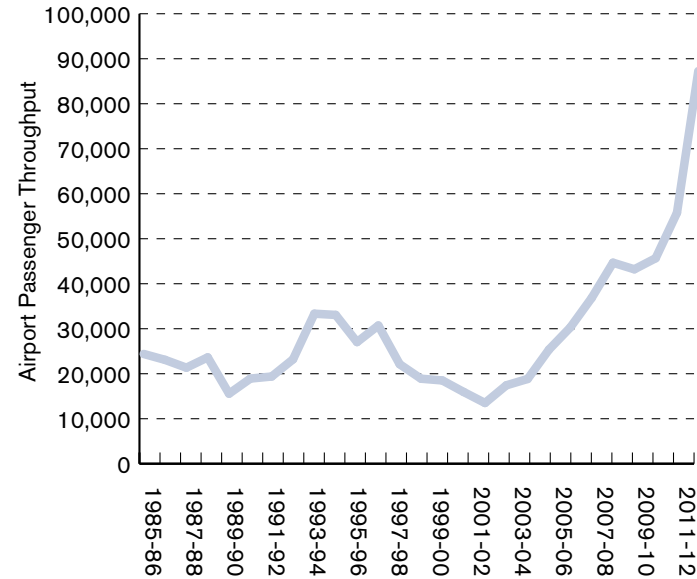


Figure 50 Passenger Throughput, Annual, Learmonth Airport¹³

under the Gascoyne Revitalisation Plan. It is expected that Carnarvon accommodation occupancy will return to more normal levels in the medium term.

The Gascoyne is directly serviced by air through a number of small airports. These include Carnarvon Airport, Shark Bay Airport, Gascoyne Junction Airport and RAAF Learmonth (Exmouth). Learmonth Airport is the largest of these airports which is serviced by 12 weekly return flights by Qantas Airlines. Annual total passenger

movements over recent years has increased significantly at the airport – from 16,000 in 2001/02 to 90,500 in 2013/14. The largest growth has occurred between 2011 and 2012, with annual passenger growth of 22.1% and 56.5% in 2010/11 and 2011/12 respectively. The impact of the departure of Virgin Australia from the Exmouth aviation market in late 2014 leaving Exmouth with a sole provider is still to be assessed.

This upswing is primarily associated with FIFO workers

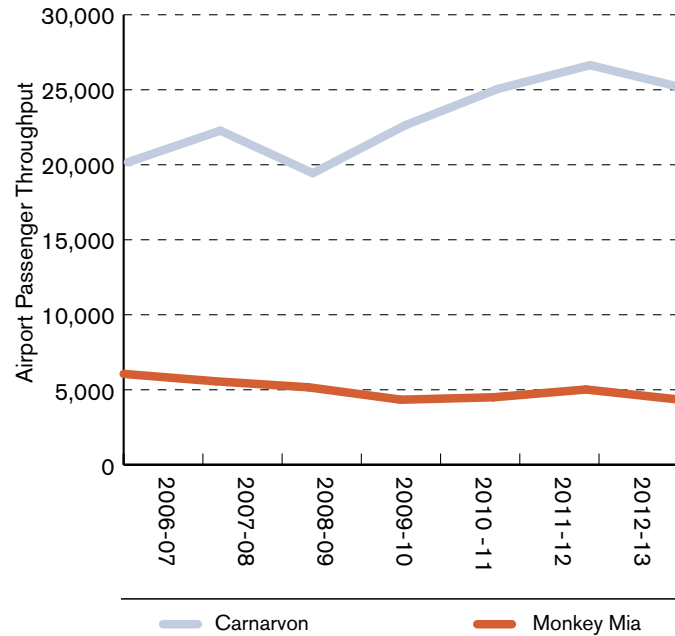


Figure 51 Passenger Throughput, Annual, Carnarvon, Monkey Mia Airports¹²

supporting Oil and Gas industries. The presence of the airport and associated regular passenger services helped to diversify the transport and travel options of visitors to the Gascoyne region and provided for improved accessibility to the region, particularly for employment and business-related travellers. Other centres, such as Shark Bay and Carnarvon are serviced by Skippers Aviation using turboprop aircraft of 30, 36

or 50 seats. Passenger volumes to Carnarvon have averaged approximately 25,000 per year in recent years, with Shark Bay averaging only 5,000 passengers. It is questionable whether this low volumes reflects a constraint of capacity and price or a low level of demand.

Small Business and Investment

The Gascoyne has a dynamic entrepreneurial business community with strengths in food production, construction and tourism. In 2012, the Gascoyne was home to over 1,000 locally registered businesses¹⁶. This is the highest number of businesses registered in the region since 2009, reflecting a recovery in the economy after the impact of natural disasters and recent

redevelopment and investment in Carnarvon.

Non-employing businesses (or businesses with only one individual) represent the majority of locally registered businesses, accounting for 55% in 2012. This is a common trend across Australia and reflects the self-employment and sub-contractor workforce trends in construction (61% non-employing),

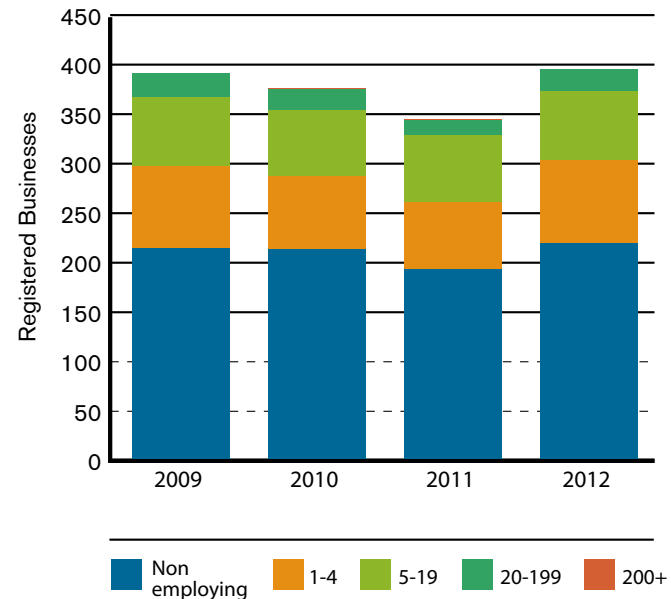


Figure 52 Locally Registered Businesses, Employing and Non-Employing, Gascoyne¹⁶

agriculture (59% non-employing), and some professional sectors like finance and real estate (69% non-employing). These shares have remained broadly consistent in recent years.

Non-employing businesses account for a smaller share of the Gascoyne business community than the Australian average. This suggests the region has a higher propensity to grow and employ

staff, which is a positive for the regional economy.

The Gascoyne region has above average shares of micro (0-4 workers) and small (5-19) businesses than the State average. This reflects the dynamism and entrepreneurialism that characterises the Gascoyne business community. Analysis from the Small Business Development Corporation suggests there are 91 small businesses in

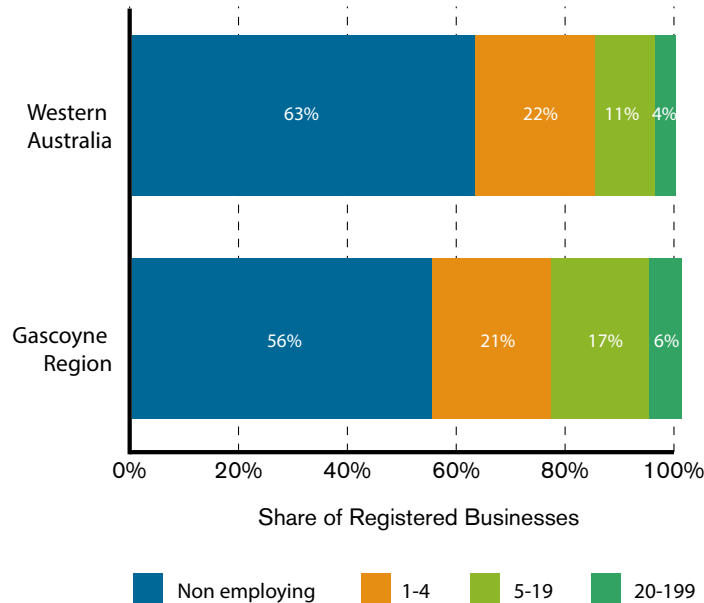


Figure 53 Locally Registered Employing Businesses, by number of Employees, Gascoyne and Western Australia¹⁶

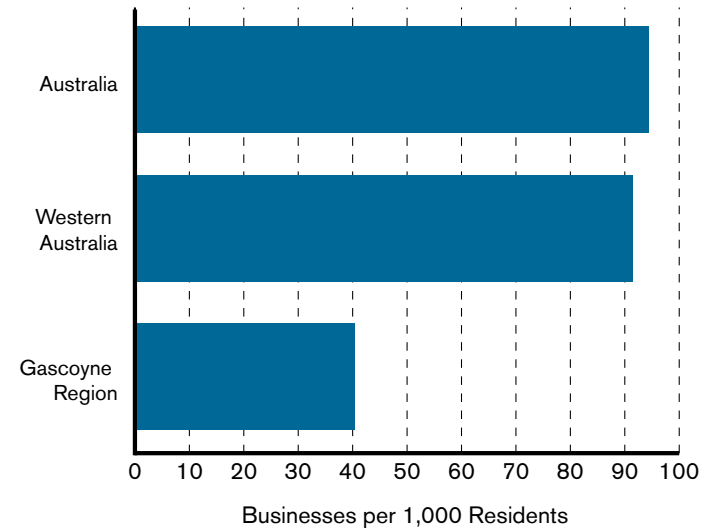


Figure 54 Number of Businesses per 1,000 Residents, Gascoyne, WA and Australia¹⁶

the Gascoyne region for every 1,000 residents. This is above the Western Australian average of 85 and the Perth Metropolitan average of 83. However, it is below the average small business level for the Goldfields Esperance (93), Wheatbelt (134) and Great Southern (149).

Gascoyne's rate of business formation and operation is strong compared to State and national averages. In 2012, there were 105 registered businesses per 1,000 residents in the region. This compares to 91 in Western

Australia and 94 nationally. This suggests the presence of an entrepreneurial culture in the region.

As expected, the largest share of locally registered businesses is in the Agriculture, Forestry and Fishing sector (295 in 2012). This was followed by Construction (169 in 2012). Both of these sectors have high shares of non-employing businesses, which has the effect of increase the total business numbers. Transport, Postal and Warehousing (88 businesses), Retail Trade (76) and Rental, Hiring

and Real Estate Services are other noticeable industries. This is illustrated in the figure below.

Regional economic growth is increasingly dependent on integrating tertiary education and research with innovative, knowledge intensive industries and a dynamic small business community. One of the opportunities is profiling of potential investment opportunities by small businesses in the region, especially in the horticulture, food and tourism sectors, through industry organisations or the CCIs.

Tourism has the potential to be a significant local employer and economic multiplier in the region, and significant small business opportunities are evident in the Gascoyne Regional Tourism Strategy and the Ningaloo Shark Bay National Landscapes Experience Development Strategy. Many small businesses lack the production capacity to appropriately service the LNG companies supply chains. Small businesses have the potential to benefit from exposure to the mining and energy resource sector.

However, efforts are required to foster a culture of coordination and collaboration among small businesses in the region, to allow major procurement contracts to be met.

A targeted approach is required to ensure that the small business sector has access to the relevant development programs to increase its productivity and competitiveness. There is opportunity to develop a small business incubator with associated regional outreach program, a working hub to provide a flexible co working space, a small business collaboration website including framework for small businesses to join forces on large public and private sector procurements.

Community Facilities

A summary of existing social infrastructure in each of the LGAs in the Gascoyne region is provided in the following table. Note a large majority of facilities and services identified in the inventory were located within a major centre of each LGA, including Carnarvon, Exmouth, Denham and Gascoyne Junction. Due to the sources of information used to compile the inventory, location of some services could not be identified.

Regional level facilities such as hospitals, university, library, art gallery, museum and performing arts/theatre cater are high order facilities that cater for the entire regional population. In the Gascoyne region, existing regional level facilities include the Regional Art Gallery and Library in Carnarvon, and Shire of Carnarvon's Civic Centre (with performing arts facility).

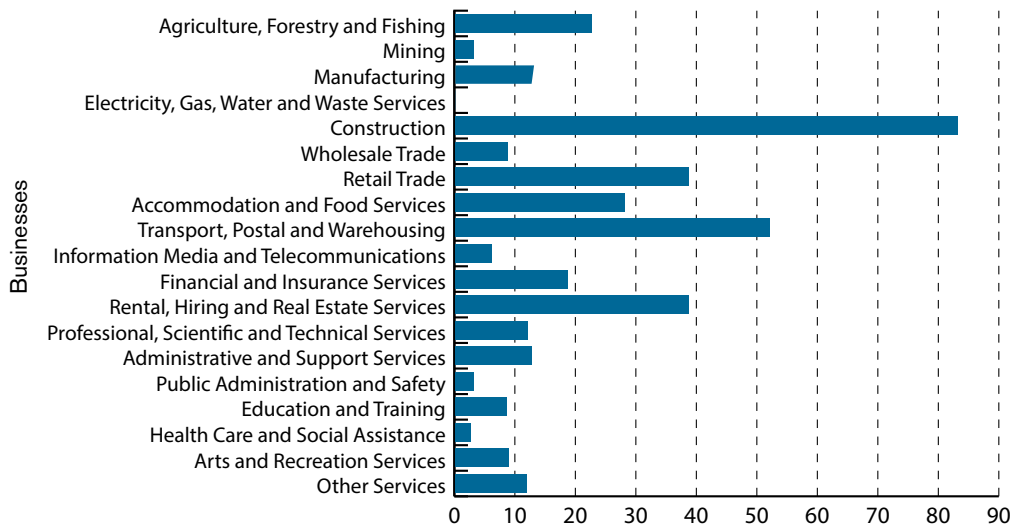


Figure 55 Locally Registered Businesses, by Industry, Gascoyne¹⁶

Table 6 Summary of Existing Social Infrastructure

Facility/Services	EXISTING SOCIAL INFRASTRUCTURE			
	SHIRE OF CARNARVON	SHIRE OF EXMOUTH	SHIRE OF SHARK BAY	SHIRE OF UPPER GASCOYNE
SENIORS				
Aged care /respite centre (hospital)	✓	✓		
Seniors Centre/Club	✓	✓	✓	
CHILDRENS				
Child Care Centre	✓	✓	✓	
Toy Library	✓	✓		
Playgroup	✓	✓	✓	
YOUTH				
Youth Centre/Services	✓	✓	✓	
COMMUNITY SPACE				
Multipurpose hall/local community centre/meeting space	✓	✓	✓	✓
Multi-purpose community centre/Civic Centre	✓			
HEALTH				
Local Community Health Centre		✓		✓
Medical Services	✓	✓		
District Community Health Centre	✓		✓	
Hospital	✓	✓		
Royal Flying Doctor	✓	✓	✓	✓
Nursing Post	✓			✓

Facility/Services	EXISTING SOCIAL INFRASTRUCTURE			
	SHIRE OF CARNARVON	SHIRE OF EXMOUTH	SHIRE OF SHARK BAY	SHIRE OF UPPER GASCOYNE
EDUCATION & TRAINING				
Kindergarten/Preschool	✓	✓	✓	
Primary School (Public)	✓	✓	✓	
Primary School (Private)	✓			
District High School (Public)	✓	✓		
High School (Private)	✓			
Private College K-12				
Senior College 10-12 (Public)	✓			
Middle College 8-9 (Public)				
Remote Community School				✓
School of the Air	✓		✓	
TAFE Campus (District)	✓	✓		
University				
Residential College				
University of The 3rd Age (U3A)				
CULTURAL				
Local Art Gallery			✓	
Regional Art Gallery	✓			
Arts and Cultural Centre	✓	✓		
Visitor Centre	✓	✓	✓	
Local Library		✓	✓	✓
Regional Library	✓			

Facility/Services	EXISTING SOCIAL INFRASTRUCTURE			
	SHIRE OF CARNARVON	SHIRE OF EXMOUTH	SHIRE OF SHARK BAY	SHIRE OF UPPER GASCOYNE
Local Museum	✓		✓	✓
Regional Museum	✓			
Performing arts space/Theatre	✓			
EMERGENCY				
Police	✓	✓	✓	✓
Ambulance	✓	✓	✓	
Marine Rescue	✓	✓	✓	
SES/Fire	✓	✓	✓	✓
SPORT AND RECREATION				
Indoor Sports Centre/Recreation Centre	✓	✓	✓	✓
Swimming/Aquatic Facility	✓	✓		
BMX/Skate Facility	✓	✓	✓	
Various Sports Clubs	✓	✓	✓	
COMMUNITY SUPPORT				
Community Resource Centre			✓	✓
Community Education Centre				
Men's Shed	✓	✓	✓	
Women's Services Centre	✓			
Drug/Alcohol Rehabilitation Centre	✓			
Multicultural Services Centre				
Family Services Centre	✓			

Facility/Services	EXISTING SOCIAL INFRASTRUCTURE			
	SHIRE OF CARNARVON	SHIRE OF EXMOUTH	SHIRE OF SHARK BAY	SHIRE OF UPPER GASCOYNE
SERVICES				
Government Services	✓	✓	✓	✓
Income Support	✓	✓	✓	
General Community Support	✓	✓	✓	✓
Family Support	✓	✓	✓	
Parenting Programs	✓			
Domestic Violence	✓			
Sexual Assault	✓			
Community Development	✓	✓	✓	✓
Home-based Care	✓			
Counselling	✓	✓	✓	✓
Specialists Support Counselling	✓			
Legal Services and Mediation (Legal Aid, offender support)	✓			
Employment Support Services	✓	✓	✓	
Disability Support Services	✓	✓	✓	✓
Older People Services	✓	✓	✓	
Children's Services	✓	✓	✓	
Young People	✓	✓		
Multicultural Services i.e. translation, interpreting				
Aboriginal Community/Health Services	✓			✓
Complex needs arising from mental health, drug and alcohol and homelessness	✓	✓	✓	✓

Analysis has been undertaken for existing social infrastructure in each LGA. The findings are outlined below.

Shire of Carnarvon

All of the educational institutions are located in the regional centre of Carnarvon. These include a Community College run over two sites, two private primary schools (one of them currently caters up to Year 10) and one School of the Air.

There is also a Durack Institute of Technology campus. Carnarvon has a range of higher order health facilities such as the Multipurpose Health Service (District Hospital), Carnarvon Medical Service Aboriginal Corporation (which provides outreach services to Gascoyne Junction), Carnarvon Community Health Service, Carnarvon Medical Service, the Department of Health Gascoyne Population Health Unit, Carnarvon Mental Health Service, Alcohol and Drug Centre and a nursing post in Coral Bay. Discussions with service providers indicated that health services in Carnarvon was under increasing pressure to meet the

additional demand during the peak tourist season.

According to Gascoyne WA Country Health Services, the demand for aged care beds outstrips current supply (the Carnarvon Multipurpose Health Service/Hospital has 16 aged care beds but the demand is double the number of beds available). In terms of aged care support services, Silver Chain provides palliative care, continence management, respite, wound care, domestic assistance, transport, personal care and social support to older residents.

There are is one centre based child care service, and three playgroups in Carnarvon.

There is a PCYC facility with both indoor and outdoor recreational areas available for young people and the wider community. There is also a recreation centre attached to Carnarvon Community College (the former district high school site) which is utilised for school use during school hours and is available for community hire after hours.

Carnarvon has regional level cultural facilities such as a library and art gallery, a civic centre (with performing arts theatre), Gwoonwardu Mia Gascoyne Aboriginal Heritage and Culture Centre, and a visitor's centre.

Carnarvon does not have a multipurpose community centre, however the Gwoonwardu Mia, the Civic Centre (Wool Shed Function Room) and the Regional Public Library and Art Gallery offers meeting spaces for residents.

There are various sporting clubs, a skate park and a 50 metre swimming pool in Carnarvon. However, the audit found there is no dedicated sports and recreation centre other than PCYC.

Carnarvon has a police station, St John's sub-centre, volunteer marine rescue, volunteer fire fighters and SES. Construction is currently underway for the new Police and Justice Complex, which will house courts, police, and community and youth justice services into one facility. The project has been designed with input from the public and the local Aboriginal community. Construction is due for completion in early 2015.

Sports and recreation programs are currently being delivered through various models in the Gascoyne region. These include regional and local sports association (delivery of sporting activities and competition), local government (delivery of club development officers to support participation in sport and recreation, increase volunteer and club capacity, and development of sporting facilities), DSR (delivery funding, sport and recreational facilities planning, and talent development), community organisations and NGO (provision of sporting and recreational opportunities and programs), Aquatic Gascoyne Reference Group (delivery aquatic training and development), Active After Schools Community Programs (catering for primary school students).

In the Gascoyne region, DSR is currently contributing to the funding of State sporting associations such as Netball, Yachting, BMX and Golf, delivery of Sports For All Program (Kids Sports, Community Volunteer Project, Club Talk and support to nature play WA), development of the Community Sport and Recreation Leadership

Program and implementation of DSR Gascoyne Inclusion Strategy.

Shire of Exmouth

Based on the audit, the Shire of Exmouth has more than 20 different community facilities and services, all of which are located in the main township of Exmouth. There is a Multipurpose Health Service (formerly called the Exmouth Hospital), a Community Health Centre, Kindergarten and Primary School, a District High School, Durack Institute of Technology (district campus), playgroup and long day care, a Seniors Centre, PCYC, a library as well as a toy library, a visitors centre, a recreation centre and a 50 metre swimming pool, meeting rooms/halls, and a number of sporting clubs with onsite club houses. Exmouth also has a police station, a volunteer Bush Fire Brigade and St John's Ambulance.

A summary analysis of the services and facilities indicates that:

Discussions with the Department of Education indicate that existing schools (Exmouth Kindergarten, Primary and District High

Schools) have capacity to cater for up to 690 students. Currently the schools have a combined enrolment of 447 students and this figure is projected to increase to 491 by the year 2017.

The Shire does not have a community centre however it was noted by the Shire of Exmouth that the Sports Club currently functions as a community hub. It is used for community events and activities, as well as for private functions.

The Shire Hall is a Council-owned facility that has a seating capacity of 287 people. On average, the hall is used 4 days a week and is booked out for weeks in a row for larger performances. Although the hall is well utilised during the week and weekends, its usage rate could be improved if its acoustics and performance space were improved. The hall also functions as an evacuation centre during times of disasters.

Another community space available for hire is the Truscott Club, which has a fully equipped commercial kitchen. The Club is used regularly by the darts club.

The library is a dedicated room within the Shire office and has a small collection of books and internet access.

There is no private practice GP within the Shire, however doctor services are available at the hospital. The Royal Flying Doctors Service comes to the town as needed. The availability of GPs during tourist seasons (May to September) is a major issue given there is approximately a 4-5 week wait during this period.

There are no resident specialist medical services available for older people. Based on discussions with the Shire of Exmouth, it was found that people seeking many specialist medical services must travel to Geraldton or Perth.

There is a Home and Community Care (HACC) service but no aged care facility within the Shire.

The Exmouth Multipurpose Health Service (District Hospital) is currently being upgraded using Royalties for Region Gascoyne Revitalisation Plan funding. Disability services are provided via outreach programs from Carnarvon.

There are various sporting and recreation clubs in Exmouth, some having their own club houses. The Shire has recently completed the Exmouth Recreation Precinct Plan which provides a master plan for the existing recreation centre but with the inclusion of ovals, tennis courts and skate park on one site.

Shire of Shark Bay

Shark Bay has more than 15 different services and facilities that support community wellbeing. The main township of Denham has a Community Resource Centre, a town hall, a public school (Kindergarten to Year 10 and senior years by distant education), a community health centre, child care and after school care, a respite centre, a sports and recreation centre, and emergency services (police, ambulance, SES and marine rescue). The Shark Bay World Heritage Discovery and Visitor Centre is also located in Denham and is a major tourism facility providing informative displays and resources on Shark Bay Marine Park and World Heritage Site.

Monkey Mia, situated 25 km northeast of Denham, has a range of tourist accommodation and camping facilities for visitors. A small number of dining and retail facilities is also available. There is also a boat ramp, jetty, toilets and barbecues for community use. In Useless Loop, there is a kindergarten and primary school program.

A summary analysis of the services and facilities indicates that:

According to the Department of Education, the Shark Bay School currently has 100 students enrolled and the student population is projected to increase to 110 students by the year 2017. The school has physical capacity to cater for up to 270 students.

Similarly, the Useless Loop Kindergarten and Primary School Program has current capacity to accommodate 50 students. At present, it has 34 students and only an increase of 4 students is projected by 2017.

The Community Resource Centre in Denham functions as a community hub and a one-stop-shop for government and

community services within Shark Bay LGA. The Centre has an office space, conference room and video-conferencing facilities available for public and private hire. It operates as an agent for Centrelink and provides training and technology support to residents and local businesses. There is also after school and holiday activities provided by the Shire from the Shark Bay Community, Sport and Recreation Centre.

Silver Chain Services operates the Shark Bay Health Centre which delivers a range of services including primary health and emergency, child health, centre-based day care, palliative care, continence management, respite, wound care, domestic assistance, transport, personal care and social support. There is no permanent doctor in Shark Bay and while the Royal Flying Doctors Service provides a regular fly-in doctor to Denham, it may not be viable given the high flight costs. Demand for health services peak during the winter tourist season. Residents and visitors requiring specialist services or other services not available locally must travel to Carnarvon or out of the region.

Silver Chain provides aged care and respite services, however there is no aged care accommodation within Shark Bay.

There is a full time child care and after school care delivered by a private provider in a Council-owned community building.

There is no dedicated youth centre or services within Shark Bay. There is however, a skate park and a BMX track.

There are various volunteer-driven community organisations and sporting clubs, including SES, St John Ambulance and marine rescue.

Shire of Upper Gascoyne

Community facilities and services provided in Upper Gascoyne are limited. The main township of Gascoyne Junction has a Shire Office, a museum, a racecourse, tennis courts, the Pavilion (includes a gym and badminton court), and a Community Resource Centre which has a small library nook, doctor's room, computers, internet, a meeting space and it hosts visiting services such as a doctor and Aboriginal Medical Service.

There is also a Remote Community School in Gascoyne Junction which caters for low numbers of students.

In December 2010, severe flooding swept through many parts of the Gascoyne region, including Gascoyne Junction which lost a historic pub and adjacent fuel station, shop and caravan park as a result. The Shire of Upper Gascoyne has recently opened a \$9.1 million RfR funded tourism precinct which includes a tavern, roadhouse, and caravan park with cabins.

Based on discussions with the Department of Education, the Gascoyne Junction Remote School has sufficient capacity to cater for up to 20 students, and given the declining trends in student enrolment, no additional schools are required.

The Community Resource Centre functions as a service hub, hosting various visiting health, social and government services including Australia Post, Medicare, Centrelink and Carnarvon Aboriginal Medical Service. The CRC was constructed with funding from the Royalties for Regions funding schemes and contribution from the Shire. The building was officially opened in October 2012.

The Pavilion caters for both community and private functions, and has an indoor gym for residents.

The Upper Gascoyne does not have any playgroup, child care or youth services due to very low proportions of children and young people.

There are no local or visiting age care or disability services. According to the Shire of Upper

Gascoyne, residents usually make their own arrangements by travelling to Carnarvon or elsewhere.

There are no sporting clubs in Upper Gascoyne due to its population size (not having enough people to form organised sporting teams).

The Royal Flying Doctors Service operates on an as needs basis.

Durack Institute of Technology delivers training programs to Burringurrah, a nearby Aboriginal community subject to enrolment numbers, availability of lecturers and facilities.

The only police station in Upper Gascoyne is located at Burringurrah, which is approximately 200 km east of Gascoyne Junction. The Shire of Upper Gascoyne's Strategic Community Plan 2012/2013 – 2022/2023 identifies a need for a permanent police presence in Gascoyne Junction.

Housing Mix and Type

There are a total of approximately 3,242 occupied private dwellings in the Gascoyne region in 2011. Separate houses represent 75.7% of the total while semi-detached and townhouses and apartments represent a further 11.6%. Gascoyne's housing stock is roughly comparable with the national average but with a lower level of flat/units and apartments. Compared to regional WA, the dwelling stock is significantly more

diverse, reflecting a higher density of product and higher level of other forms of dwelling such as caravan parks etc. given the coastal location.

The occupancy rate of these dwellings (84%) is below the national average (92%). This is a common attribute in high amenity housing markets, particularly those with strong tourism bases due to a large number of holiday homes and rentals.

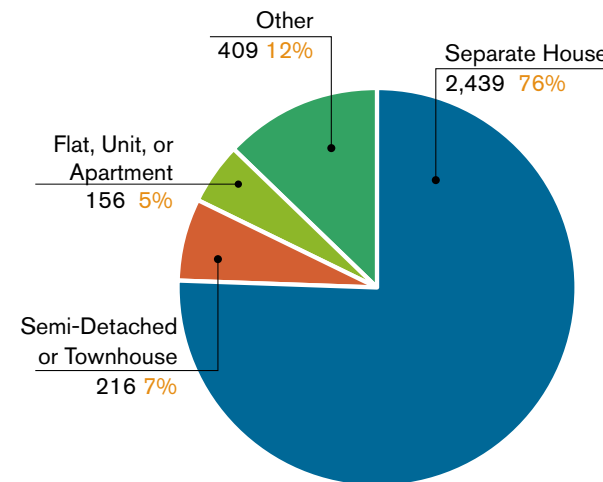


Figure 56 Dwellings by Type, Gascoyne Region, 2011⁴

Shark Bay LGA had the highest share of its dwellings unoccupied in 2011, within 30% unoccupied at the time of the Census. Upper Gascoyne was next with 27% unoccupied, followed by Exmouth (15% unoccupied) and finally the highest occupancy rate in Carnarvon with just 13% of dwellings unoccupied.

Sales Trends

The number of house and unit sales in the Gascoyne has declined steadily since 2007, reflecting affordability issues and negative net migration. House sales fell from 178 in 2007 to 125 in 2013 in the year to date, while unit sales declined from 8 in 2007 to just 5 in 2013. This is illustrated in the figure below.

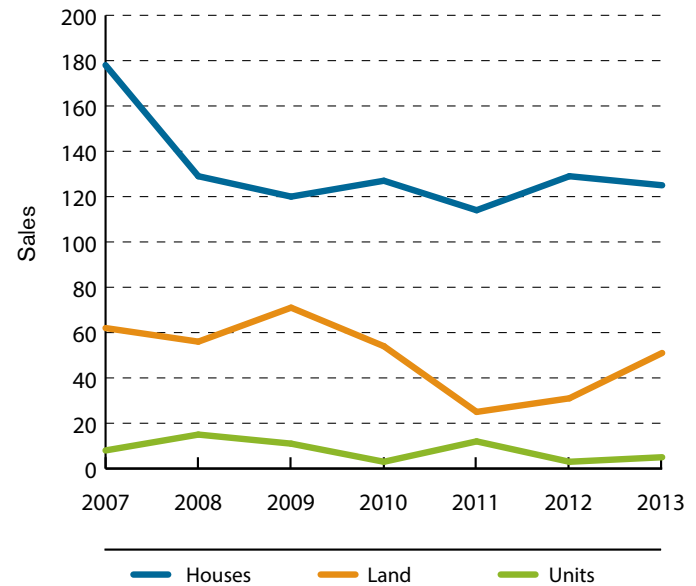


Figure 58 Residential Sales, Gascoyne Region⁶²

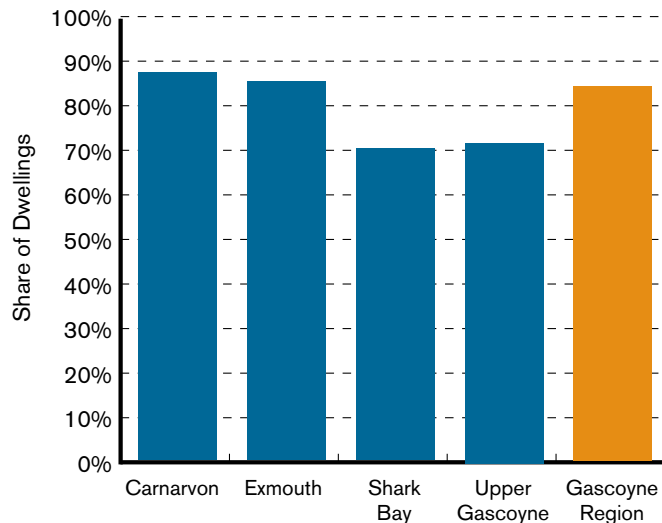


Figure 57 Occupancy of Private Dwellings, Gascoyne LGAs, 2011⁴

Prices and Affordability

While sales volumes have remained steady, the median sales price of dwellings sold in the Gascoyne have increased since 2007. This growth has been relatively consistent for house and land prices, while unit median prices have fluctuated widely as a result of the low volume levels. The steady price growth even through the difficult years following the Global Financial Crisis indicates that there is not an oversupply of housing in the market and that demand is

growing at a faster rate than supply, particularly for new land.

Median sales prices for houses increased from \$390,000 in 2007 to \$430,000 in 2013. This is mirrored by an increase in the median price of land sold in the region over this period – from \$200,000 in 2007 to \$270,000 in 2013⁶². Prices for units have been volatile – picking up after the GFC only to fall significantly in 2011 to hit a low of \$120,500. Prices rebounded the following year to hit \$380,000, however, have softened

in the year to date 2013 to sit at \$245,000. As noted, this reflects lower sales volume, increasing overall price volatility. This is illustrated in the figure below.

Gascoyne dwelling prices are broadly lower than that of the Perth Metropolitan Area. According to the figure below, house and unit prices in the region were lower than that of the Perth Metropolitan averages. This highlights the fact that the Gascoyne has lower costs

– particularly labour cost – than the Perth metropolitan region.

While, dwelling prices are lower than the Perth metropolitan area, land prices are on par with the Perth metropolitan median which reflects the larger land parcels being sold in the region compared to Perth. As such the square metre rates are actually lower in the Gascoyne than in the Perth metropolitan area.

It should be noted that the lower dwelling prices does not necessarily lead to better housing affordability given the lower income levels in the region.

Price growth is generally regarded as positive as it contributes to the wealth and affluence of a region. However, maintaining affordable housing options is critical to underpinning employment and lifestyle based migration required to increase local population critical

mass. A simple and effective measure of whole-of-market affordability is the Median Multiple – the ratio of median house prices to median household income. In other words, the Median Multiple illustrates the number of years of household income required to equal current prices. This approach is effective in that it allows for differences in local income levels within a region – like the Gascoyne – to be considered, ensuring that variations in purchasing power and

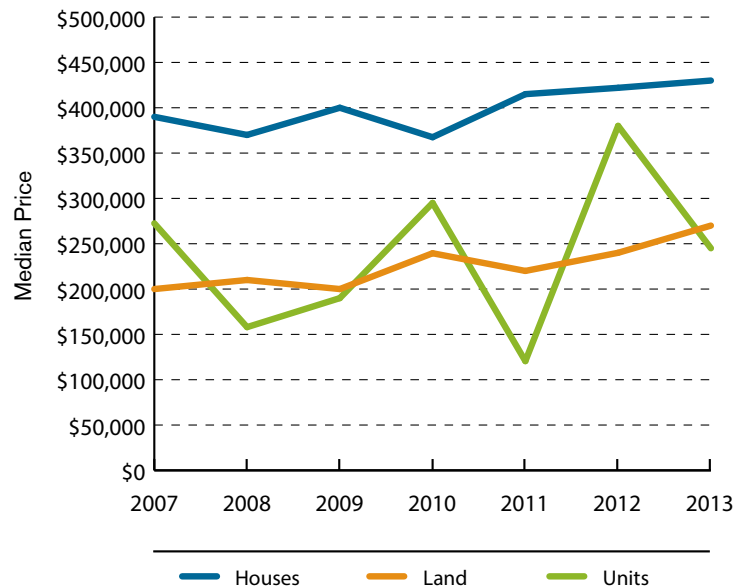


Figure 59 Median Price of Residential Sales, Gascoyne Region⁶²

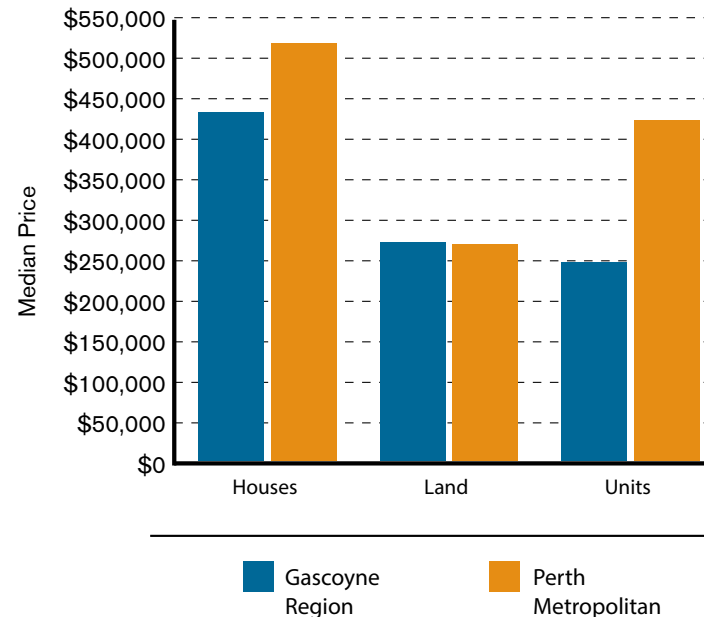


Figure 60 Median Price, Residential Sales, Gascoyne and Perth Metro, 2013⁶²

Table 7 House Prices and Median Multiples, by LGA, 2006 and 2011

LGA	2006			2011		
	House Price	Household Income	Multiple	House Price	Household Income	Multiple
Carnarvon	\$220,000	\$44,616	4.9	\$282,500	\$57,564	4.9
Exmouth	\$375,000	\$55,068	6.8	\$490,000	\$71,396	6.9
Shark Bay	\$340,000	\$40,560	8.4	\$290,000	\$49,192	5.9
Upper Gascoyne	NA	\$43,784	NA	NA	\$44,824	NA
Gascoyne Region	\$322,500	\$47,372	6.8	\$415,000	\$60,684	6.8

Note, there was insufficient house sales data for median prices to be calculated with any degree of statistical accuracy.

relative affordability are determined. This is illustrated in Figure 60.

Overall, the Gascoyne had a Medium Multiple in 2011 of 6.8. This is above the WA average of 6.0, indicating affordability issues in the regional housing market. House prices are high compared to regional WA while incomes are broadly in line with State averages. This means buyers have comparatively less purchasing power in the Gascoyne market. Note that the current state average is regarded as seriously unaffordable by international standards, with the Reserve Bank of Australia considering a ratio of 4.0 to 4.5 affordable in Australia.

Prices and affordability levels vary considerably across the region, reflecting the different dynamics within individual local housing markets. Housing affordability is a major issue in coastal locations and areas of major employment, while inland areas often have more affordable housing stock. As expected, Exmouth has a very high median multiple as does Shark Bay. Affordability in Shark Bay has improved considerably in recent years as a fall in house prices and rising household incomes increased local household purchasing power. Carnarvon has a comparatively affordable housing market (remaining above national averages but below WA average).

This reflects the fact local house prices have broadly tracked growth in local incomes, maintaining the multiple at existing levels over the period. This is outlined in Table 7.

Building Approvals and Development

Residential building approvals peaked in 2011/12 with a total of 88 private new dwelling approvals. In the year to September 2012/13 there were a total of 57 approvals in the Gascoyne region which was

not expected to reach the peak of the previous year although is still expected to be a strong year.

The largest share majority of residential building approvals occurred in the Carnarvon LGA; however, in recent years there have been a growing number of dwelling approvals in the Exmouth LGA which mirrors recent population growth changes in the two municipalities – particularly with the strength of Exmouth population growth.

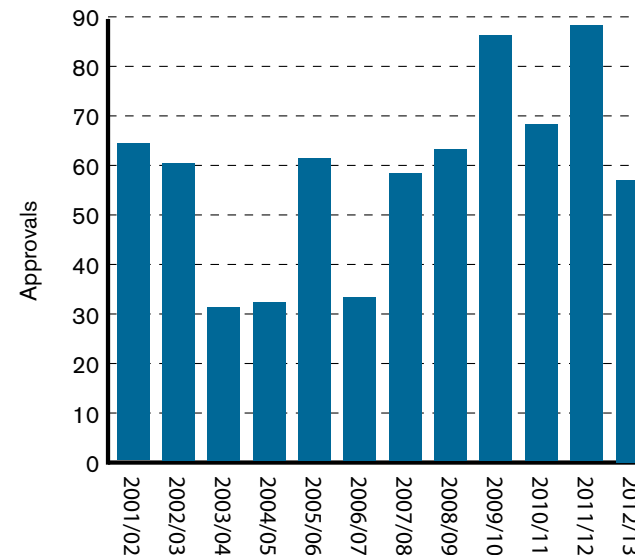


Figure 61 Residential Building Approvals, Gascoyne Region⁶³

Appendix 3 – Regional Plans and Strategies

The following plans, strategies and policy documents related to the Gascoyne were reviewed and referenced in preparation of the Blueprint:

Carnarvon Artesian Basin: Water Management Plan, Department of Water (2007)	Gascoyne Fishing & Aquaculture Investment Profile, GDC (2009)	Gascoyne Regional Infrastructure Review, GDC (2010)	Strategic Plan 2009/10-2019/20, Gascoyne Junction, Shire of Upper Gascoyne (2009)
Draft Gascoyne Regional Planning and Infrastructure Framework, WAPC and Department of Planning (2012)	Gascoyne Mining Investment Profile, GDC (2009)	Gascoyne Development Commission Strategic Plan 2010-2020, GDC (2010)	Water resource allocation planning series Report no 46: Lower Gascoyne water allocation plan, Department of Water (2011)
Department of Fisheries Strategic Plan 2009 – 2018, Department of Fisheries (2013)	Gascoyne Pastoralism Investment Profile, GDC (2009)	Geological Survey of Western Australia Bulletin 133: Geology of the Carnarvon Basin, Department of Mines (1987)	
Economic Development Opportunities for the Gascoyne Region Associated with Resource Sector Investment and Expansion, GDC (2012)	Gascoyne Tourism Investment Profile, GDC (2009)	National Heritage List, Department of Sustainability, Environment, Water, Population and Communities (2011)	
Fisheries Environmental Management Review – Gascoyne Region, Department of Fisheries (2000).	Gascoyne Regional Development Plan 2010–2020, GDC (2010)	Profile – Mid West Area Consultation Document – Area Profile for Comment, Disability Services Commission (2013)	
Gascoyne: a Region in Profile, Department of Regional Development and Lands (2011)	Gascoyne Regional Infrastructure Review, GDC (2010)	Shire of Carnarvon 10+ Strategic Community Plan, Shire of Carnarvon (2011)	
	Gascoyne Revitalisation Plan, Department of Regional Development (2010)	Shire of Exmouth 10+ Strategic Community Plan, Shire of Exmouth (2011)	
	Gascoyne Regional Infrastructure Priorities 2011 Workshop Paper, WAPC (2012)	Shire of Shark Bay 10+ Strategic Community Plan, Shire of Shark Bay (2012)	
	Management Plan for the Ningaloo Marine Park and Murion Islands Marine Management Area 2005 – 2015'. Management Plan No. 52, Department of Fisheries (2013)		
	Mount Augustus and Gascoyne Outback Development Taskforce Final Report, GDC (2010)		

Appendix 4 – Stakeholder Consultation

The Gascoyne Development Commission spent over three months widely consulting with over 200 stakeholders through a series of workshops, one on one meetings, teleconferences and questionnaires.

Local Government Areas

(Shire Presidents, Chief Executive Officers and Shire Councillors)

Shire of Carnarvon

Shire of Exmouth

Shire of Shark Bay

Shire of Upper Gascoyne

Community consultations conducted

(Including community groups, not for profit organisations and individuals)

Carnarvon

Exmouth

Denham

Gascoyne Junction

State Government Agencies

(Primarily Director Generals and Regional Managers)

Department of Agriculture and Food Western Australia

Department of Commerce

Department of Culture and Arts

Department of Education

Department of Fisheries

Department of Health

Department of Housing

Department of Justice

Department of Lands

Department of Local Government and Communities

Department of Mines and Petroleum

Department of Parks and Wildlife

Department of Planning and Western Australia Planning Commission

Department of Regional Development

Department of Sport and Recreation

Department of State Development

Department of Training & Workforce Development

Department of Transport

Department of Water

Disability Services Commission

Horizon Power

LandCorp

Lotterywest

Main Roads Western Australia

Tourism Western Australia

West Australian Police

Federal Government

Department of Aboriginal Affairs

Regional Development Australia

Small Business Sector

Small Business Development Corporation

Chamber of Commerce and Industry groups

Major Industry

Oil and gas and resource mining.

Other relevant organisations contacted

Country Arts WA

Gascoyne Arts Council

Gascoyne in May

Gascoyne Offroad Racing Club Inc

Appendix 5 – References and Notes

1. Department of Education, Employment and Workplace Relations with additional estimates by DRD.
2. The Gascoyne's aspirational goal of 23,000 people living in the region by 2050 is based on the recent 1.5% growth rate experienced between 2010 and 2012 and with almost 8 years of continuous positive population growth in the Gascoyne, which resulted in a population of 17,516 by 2050. An additional percentage growth based on the successful implementation of the Blueprint was added to this figure which produced a final aspirational figure of 23,000
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