

Goldfields-Esperance Regional Investment BLUEPRINT

A Plan for 2050



Acknowledgments

The Goldfields-Esperance Development Commission respectfully acknowledges the Traditional Owners of the land in this region, in which we reside, and Elders both past and present.

The important role Aboriginal people continue to play within the Goldfields-Esperance community is acknowledged, together with the ongoing effort that is made to protect and promote Aboriginal cultures which will leave a lasting legacy for future Elders and leaders.

In addition, the Goldfields-Esperance Development Commission would like to acknowledge RPS Australia and the Department of Regional Development for their assistance in developing this Regional Investment Blueprint and to thank our State and regional stakeholders who provided input into the document.

A Roadmap For Regional Development

In 2010 the State Government of Western Australia recognised that to ensure future economic and community aspirations in regional Western Australia were met, the development of strategic plans was required to guide collective and coordinated action across the State¹.

The 'Structuring Regional Development for the Future' Review (known as the Duncan Review) presented an opportunity for Western Australia's nine regions to plan strategically for long-term change through the development and implementation of Regional Investment Blueprints. The Blueprints are developed in the region, by the region, for the region's future.

The Regional Investment Blueprints form part of the Regional Development Strategy for regional Western Australia – an overarching State strategy directing effort and investment from the Regional Development Portfolio towards the objective of building vibrant regions with strong economies that build prosperity.

The Goldfields-Esperance Regional Investment Blueprint (the Blueprint) is a roadmap for the future social and economic growth and prosperity of the region to 2050 and beyond. By identifying opportunities, challenges, priorities and strategies, it provides a credible and guiding framework that will foster economic opportunity and build vibrant communities, enabling the alignment of government, industry and community sector planning and investment towards a shared regional vision.

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Foreword

Planning for the future of an area as vast and diverse as the Goldfields-Esperance region is a huge task. This Blueprint lays out a vision for Goldfields-Esperance 2050, a vision that represents the collective aspirations and beliefs of regional and State stakeholders and of what can be achieved through collaborative planning, strong partnerships and rigorous effort. Together we can plan for the possible technological and other changes that will drive innovation and advance opportunities, enhancing our connections with each other and the rest of the globe.



We know that our region will continue to play a significant role in the development of Western Australia and the nation. This builds on our great heritage and current achievements, be this constructing the longest water pipeline in the world, developing Australia's first commercial wind farm or the \$19 billion gross annual revenue generated by our regional economy. These incredible achievements are just a taste of what the Goldfields-Esperance region can accomplish when we work together.

As Western Australia's largest region, Goldfields-Esperance has long-established access to significant markets, a number of globally focussed industries exporting across the world, coupled with abundant natural resources and alternative energy possibilities. These all position us for a prosperous and sustainable future. Goldfields-Esperance is a multicultural, inclusive region of welcoming people, with significant opportunities yet to be tapped.

We reside in an ancient land, home to globally recognised biodiversity treasures such as the magnificent Great Western Woodlands, as well as rich, red deserts and the bright, white sandy beaches and aqua Southern Ocean. In a world of increasing urbanisation, our natural assets, wilderness areas and vast expanse of land are a rare commodity. The landscapes and features of our region present a unique marketing position that can be used to attract people and investment from across the continents.

Our mining and agricultural sectors will continue to be a driving force of our economy up to and beyond 2050, delivering substantial financial, social and economic outcomes. However, the future diversity of our economy will be key to riding out the 'boom and bust' nature of the industries that we rely on most.

This Blueprint establishes a pathway for State and regional stakeholders to enable, value-add and diversify to meet new and emerging opportunities, addressing local challenges and delivering prosperity to all our people.

The Blueprint has been developed by the Goldfields-Esperance Development Commission with State and regional stakeholders. We thank them all for their input and continued ownership. The priorities and strategies within this document reflect the confidence and commitment of the people throughout the region to embrace a shared vision and create a future where:

"In 2050, the Goldfields-Esperance region enjoys exceptional lifestyle opportunities and a prosperous, diverse economy built upon our skills, natural resources and rich cultural heritage."

Tony Crook

Chair

Goldfields-Esperance Development Commission

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Executive Summary

The world in 2050 will be transformed by technology, shifting geopolitical power, ageing populations and environmental change. This transformation will present both challenges and opportunities for the future growth and prosperity of Australia's regions. This includes the Goldfields-Esperance region of Western Australia.

The Goldfields-Esperance region is vast, the largest in Western Australia. It covers an expansive 771,276km², just under a third of Western Australia's total land mass. The region is a recognised biodiversity hotspot with world-renowned flora and fauna and diverse, ancient landscapes.

Aboriginal people have inhabited the Goldfields-Esperance region for tens of thousands of years. Prior to European settlement in the 1870s, the Aboriginal population is estimated to have numbered about 20,000 people. Today, Aboriginal people live across the region and represent nearly 10% of the region's population. The region is also home to those people descended from early mining and agricultural pioneers and more recent migrants from cultures from around the world.

The discovery of gold in the late 1800s put the region on the map with towns like Coolgardie and Kalgoorlie becoming known around the globe. Gold, nickel and other mining activities continue to drive the regional economy today, along with significant agricultural exports and services.

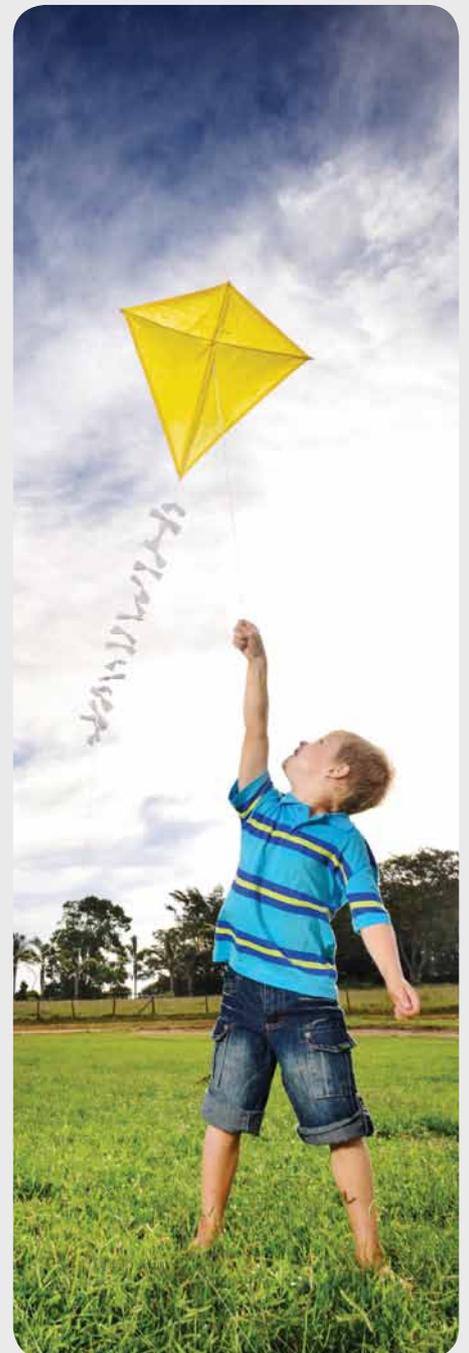
The natural environment encompasses some of the most biodiverse areas on the planet with features such as the Great Western Woodlands and the Fitzgerald River National Park.

The region's inland city – Kalgoorlie-Boulder – boasts magnificent heritage architecture and wide boulevards from the 19th century, including a clock tower gilded with gold leaf – a celebration of the city's rich gold mining heritage.

The region's friendly outback towns welcome tourists from the east, from the Nullarbor Plain or from the north, from the red centre. The region truly brings outback adventure alive with its wide open spaces, long roads, four wheel drive tracks and stunning landscapes.

Esperance and the towns of the southern coast are renowned for their stunning natural beauty – white beaches, aqua ocean and island views.

Home to 61,400 people as of 2014³, the Goldfields-Esperance region historically experiences the rise and fall of a cyclical population profile. A relatively strong growth in the residential population has been recorded since 2005.





The region is supported by an economy that earns \$19 billion per annum in gross revenue. With 29,100 jobs and over 4,000 businesses, the region is a major contributor to the State's mineral and agricultural exports.

The Goldfields, particularly Kalgoorlie-Boulder, attracts young families and experiences a younger and culturally diverse demographic, whilst the coastal centres of the Esperance sub-region attract families and an older population. This diversity supports a greatly engaged community with high levels of participation in social, sporting and cultural activities across the region.

Many centres within the Northern Goldfields include a high level of fly-in fly-out (FIFO) workers associated with mining operations as well as smaller residential communities.

Local employment for residential communities comprises a mix of retail, accommodation and food services, health, education, community services, other government services, tourism, agriculture and mining.

The geographic size of the region, together with the small populations in many communities, impacts on how key services like health and education are delivered. Utilising new and emerging technology will be critical to the future prosperity of the people who call the region home. This will require strong and sustained investment by government, industry and the community sectors in infrastructure, services and skills. Improvements in mobile phone coverage, broadband accessibility and performance and technological take-up by business and households are required to help the Goldfields-Esperance region realise its economic potential.



Figure 1 Economic Highlights, Goldfields-Esperance²



Figure 2 Goldfields-Esperance Region Map

A Vision for 2050 and Beyond

The Goldfields-Esperance Regional Investment Blueprint (the Blueprint) seeks to optimise our comparative advantage in primary industries, our natural resources and highly skilled people to ensure that the region continues to grow stronger into the future with increased prosperity and vibrant, inclusive communities.

The Blueprint establishes the following Regional Vision:

“In 2050, the Goldfields-Esperance region enjoys exceptional lifestyle opportunities and a prosperous, diverse economy built upon our skills, natural resources and rich cultural heritage”

Imagine

Goldfields-Esperance @2050

The Goldfields-Esperance region has invested in people, skills and innovative business capacity, fostering the knowledge and expertise of the agriculture and mining industries, and developing new industries that service customers across the nation and globe. The region nurtures highly skilled and capable people and attracts people and global investment to drive its strong and diverse economy.

The region celebrates all people and their contribution to the cultural, social and economic development of our communities regardless of cultural, language or ability backgrounds. The community sector is strong and capable, employing many local people and delivering high quality services to the people of the region.

The region works collaboratively to optimise social, economic and environmental benefits from its abundant natural assets, cultural heritage, strategic location and access to international markets. A globally recognised tourism brand and suite of destination experiences has been developed, based on our rich cultural heritage and arts and cultural events in communities across the region.

Kalgoorlie-Boulder's world class mining services and research and education facilities drive technological innovation that support local and international mining operations with flow-on benefits to other industries. The city is a sophisticated business hub for entrepreneurs and innovators, investing in local creativity and attracting talent from across the globe. There is a diversified employment base with a growing professional services capacity. Lifestyle opportunities and services in Kalgoorlie-Boulder are comparable with major cities across Australia.

The region's rich mineral deposits provide new economic and social opportunities and positive outcomes shared by all people within the region, primarily Aboriginal people and remote communities. Mining operations have locally-based mining service capacity in Kalgoorlie-Boulder and other regional centres across the region. Goldfields communities are popular tourism destinations and also home to new industries such as waste management and diversified activities across the Rangelands.

Esperance and Ravensthorpe are recognised as centres of excellence for agricultural produce and services. They are recognised for high quality, high value food and fishing products which are exported to growing markets around the world. Other areas of the region also contribute with

emerging produce offerings. Land use management and agri-service expertise, based across the region, add to improved food production around the world.

Our natural environment is acclaimed for its spectacular biodiversity and unique treasures such as the Great Western Woodlands, which are conserved and highly valued. The region is one of the top ecotourism destinations in Australia. Natural resources are utilised to trial and develop renewable technologies creating new opportunities once considered too remote or costly to develop. These have secured affordable and reliable energy supplies to our regional centres, remote communities and mining operations.

The Goldfields-Esperance region has overcome the challenge of distance through the development of high-speed transportation and by embracing digital technology. Significant improvements in digital infrastructure and digital literacy support a thriving professional services capacity across the region, with many people choosing to live in the Goldfields-Esperance region and work 'virtually' around the globe.

Our vibrant, healthy and educated communities showcase the best of the region's creative economy through arts, culture, recreation and lifestyle. People actively participate in education, employment and recreation across the region, driven by a strong commitment to inclusiveness, equity and the delivery of high quality services for all.



To achieve the Regional Vision,
it is important the region aspires
to be recognised as:

Regional Aspirations



Knowledge Based

With greater business sophistication, innovation, education, networking and partnerships supported by the creation and growth of local businesses that export their services and products across the nation and internationally.



Globally Connected

Where world class, affordable logistics for existing and emerging industry and digital technologies have expanded global trade of services, creative industries and professional expertise.



Economically Diverse & Resilient

Where economic growth is achieved by supporting emerging and existing industries and building on a capable and innovative small business sector. Professionals and new residents are attracted and retained to live, work and study in the region.



Inclusive

Where the region's residents and businesses are at the forefront of initiatives that ensure equal opportunity, with enhanced opportunities enabling residents to reach their potential as an integral part of the region's development; valuing and strengthening the region's culture and society.



Sustainable & Renewable

Where the region's unique natural assets are valued, alternative and renewable energy sources are exploited and waste and soil management are optimised.



World Renowned

Where the region is globally recognised for its major industries, products, services, experiences and business expertise; where local industries are early adopters of new and emerging technology; where the region is considered an attractive destination in which to live, work and do business.



Capacity for Growth

The growth of the Goldfields-Esperance region will be driven by leveraging the region's advantages and strengths while addressing the core challenges and constraints to growth. Key comparative advantages and challenges to growth identified in the Blueprint include the following:

Challenges to Growth



Equity of Opportunity
The diverse communities in the region have varying levels of service quality and access, with differences between education, employment, health and wellbeing outcomes for Aboriginal and non-Aboriginal residents depending on location.



Geography
Isolation, hand in hand with low population critical mass, adds some costs to households and businesses and impacts on the viability of improving service and infrastructure provision.



Boom & Bust Cycle
The region is heavily linked to global commodity prices, meaning that the local economy can be subject to 'boom and bust' cycles with implications for the sustainability of regional centres, population fluctuation and rapid employment changes.



Land Use Conflicts
Access to land in many areas is constrained by competing interests and lease arrangements, with constraints on urban, pastoral and agricultural expansion.



Primary Production Costs
The region's core industries are challenged by a number of barriers which impact on further expansion, including increasing general operating costs, access to sustainable and affordable energy sources and access to water.



Population Retention & Attraction
A relatively high proportion of young adults and teenagers leave the Goldfields-Esperance region seeking employment, education, training, or adventure elsewhere, while aged residents leave the region to access required health services.



Skills Requirement
The relatively lower education participation, student retention and achievement outcomes, as well as the need for more employment, higher education and training pathways in the region, are constraints on industry development.



Digital Readiness
The region has low levels of technological readiness, possibly due to low levels of local employment in some technology-related industries, comparatively poor mobile and internet coverage and low utilisation of digital technologies.

Comparative Advantages



Primary Industry Innovation
The established presence of major activity focussed on mining and agriculture supports high levels of innovation and expenditure on downstream and upstream supply chains.



Natural Resources & Assets
A range of regional advantages come from the region's unique and vast array of natural assets spanning mineral wealth, natural energy sources, world-renowned natural landscapes, biodiversity and coastal assets.



Strategic Location
The region is the connecting gateway between the eastern states, Perth and the rest of Western Australia, with key road, rail and coastline links which provide local business with access to customers and markets outside of Goldfields-Esperance.



Skilled, Experienced & Diverse Workforce
The region has a skilled and experienced workforce that is mobile and flexible with an entrepreneurial attitude. There is opportunity to attract people to 'stay a while' longer, capture more resident workers to live in larger regional centres and encourage increased virtual working.



Geography
The vast land area is an enduring attribute of the region that has been fundamental to population migration decisions and business ventures, with numerous industries benefitting from isolation, such as tourism.



Culture & Heritage
The region's rich history, culture and heritage is founded on a legacy of thousands of years of Aboriginal culture and early European settlement initially based on mining and pastoral industries.



Logistics Infrastructure & Access
The region enjoys strong access to markets and is a globally recognised export hub, with physical access through ports and airports, as well as global business relationships and networks including trading partners, clients and labour.

Realising the Vision

Central to the development of the Blueprint is the recognition that a 'business as usual' approach to growth and development will not drive the Goldfields-Esperance region to diversify its economy and increase levels of wellbeing and prosperity for people in the region. While the region's natural resources will continue to make a significant contribution to the wealth of communities within the Goldfields-Esperance region and to the State, opportunities to diversify the regional economy and transition to knowledge-focussed industries must be identified, explored and captured. These opportunities must be supported by highly skilled people and enabling infrastructure and services.

The Blueprint identifies three core investment themes that underpin eight Regional Priorities for the region.

The priorities encompass a range of strategies to enhance economic and social development. The strategies represent one approach of many to future development within each of the Regional Priority areas. Positive outcomes for each strategy are identified for 2035 and 2050 to provide meaningful targets to monitor during the Blueprint plan period.

Growth Scenarios for 2050

The Blueprint strategies aim to increase investment in the region to grow the population by 26,000 persons to around 87,000. The Blueprint population projection is aligned with the high population growth scenario projected by the Western Australian Planning Commission (WAPC)⁴ and requires an increase in the population growth rate to an average of 1.34% per annum over the next 34 years.

Achieving a high growth population scenario will be dependent on the region's ability to create approximately 13,000 new jobs and promote lifestyle opportunities across the region.

Regional Population



87,000+
By 2050

Regional Job Creation



13,000+
By 2050



Regional Priorities

Enhancing Regional Living

Improving regional lifestyle and liveability is key to retaining and attracting population and workforce. With a growing population, employment in sectors that service the community will add to the economic value of the region. The Regional Priorities that focus on enhancing lifestyle include a range of strategies that build healthy, educated and inclusive communities, support skills development and employability, conserve our natural environment and improve services in regional centres to encourage people to 'stay a while longer'.

Enabling Infrastructure

Infrastructure is critical to encourage business investment and community development. Expanding and improving infrastructure to move, transport and connect digitally, as well as providing new energy sources and accessible reliable utilities, are essential to underpin the growth of the economy in the region and to mitigate the impacts of distance and geography. It also allows for economic diversity in related industry sectors.

Fostering An Innovative Economy

To foster an innovative economy, the region must build on its comparative advantages to develop, value-add and diversify a range of economic opportunities for growth. Focussing on investment, market development, creativity and innovation, the Regional Priorities aim to diversify the regional economy and support the creation and development of new industries and sectors with a number of strategies. To foster diversification requires significant upfront investment and intervention in people, regional centres and enabling infrastructure.



*People,
Community
and Place*



Environment



*Tourism and
Visitation*



*Infrastructure
and
Connectivity*



*Energy and
Utilities*



*Enterprise
and
Knowledge*



*Mining and
Industrial
Technology*



*Agriculture,
Fisheries
and Food*

Figure 3 Regional Priorities

Implementing the Blueprint

The Blueprint will be implemented through a collaborative approach involving regional, State and Australian stakeholders. This approach will focus on building community-led coalitions using local expertise, knowledge and investment funding from within and outside the region to achieve the vision and regional priorities.

The implementation of the priorities and strategies of the Blueprint will be guided by a series of values, which will provide important context for the different approaches to economic and community development. These include innovation, leadership, stakeholder ownership, ongoing improvement, informed decision-making and a proactive attitude to collaboration and transformative change.

The Blueprint seeks to monitor key indicators for each priority to ensure that the region continues to develop and realise its aspirations. This approach will ensure the Blueprint remains a 'living document' over the long term. The strategies will remain flexible and responsive to change, both globally and locally, ensuring that the vision for the future of the Goldfields-Esperance region remains active.

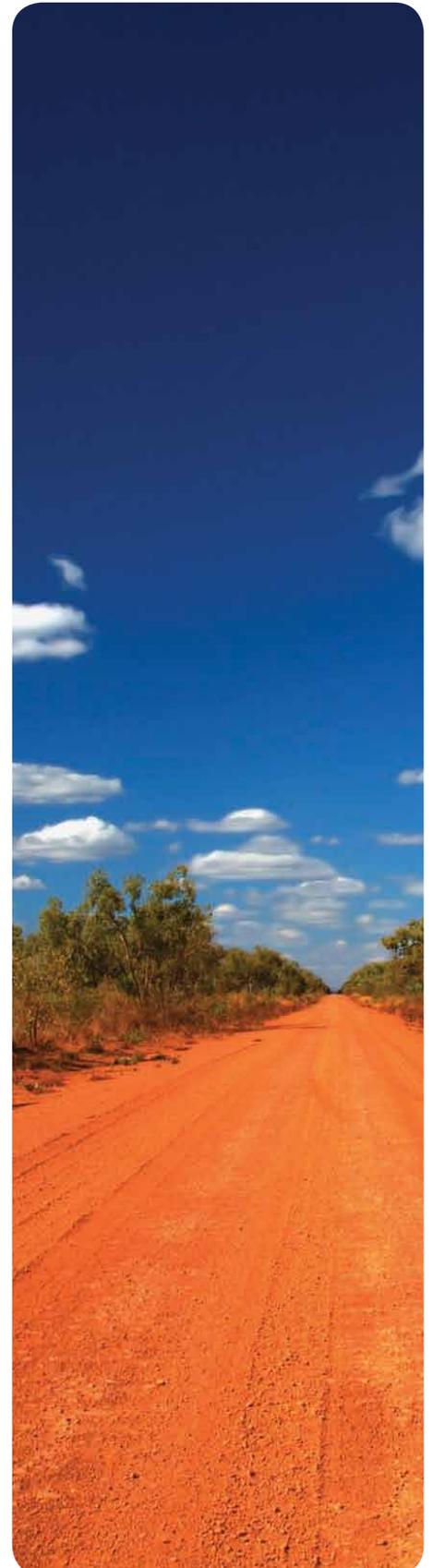
The Structure of the Blueprint

The Blueprint has been structured through a logical process of understanding the following elements:

- Regional and local economic drivers and social demographic characteristics (understanding where we are now and the likely regional and global influences on the region);
- Capacity for growth (the region's comparative advantages and assets, our opportunities and barriers);
- Establishing a Regional Vision and aspirations (where we want to be and why); and
- Regional Priorities and Strategies (how we realise our vision).

It is important to note that this Blueprint does not provide a single or definitive pathway for economic development and growth in the region. Whilst it presents the region's significant economic opportunities and proposes priorities and strategic outcomes for the region, it cannot precisely predict its economic future. It recognises that other, often unknown initiatives, will be important for future investment planning.

Stakeholder collaboration is recognised as an essential and ongoing process in the development and implementation phases of the Blueprint. The Blueprint can only be implemented through a partnership approach that builds coalitions and leverages expertise to ensure optimal outcomes are achieved.



Aligning with State Policy Objectives

The Blueprint is a high level, aspirational strategy for the Goldfields-Esperance region informed by a range of policies, strategies, plans and frameworks relevant to the region and the State.

The Blueprint aligns with the State Regional Development Strategy, the State Planning Strategy and the Goldfields-Esperance Regional Planning and Infrastructure Framework (PIF)⁵.

The State Planning Strategy is the lead strategic planning document for the Western Australian Government. It highlights principles, strategic goals and strategic directions that are important to land-use planning and the development of Western Australia. A vision of sustained growth and prosperity underpins the Strategy which is framed around diversity, liveability, connectedness and collaboration.

The Goldfields-Esperance Regional PIF sets out a range of strategic planning goals and infrastructure requirements to sustain our steadily growing region. The PIF identifies an economic development vision whereby the Goldfields-Esperance region will have a robust, diverse and sustainable regional economy to service the needs of its industry and commerce effectively.

The Blueprint relies on, links to and builds upon other strategic priorities put in place by the Australian Federal Government, State and local government partners.

A list of the key plans and strategies of relevance to the development of the Blueprint is available at Appendix 1.

Key themes supported by the PIF include:

- A diverse region offering diverse ecosystems, landscapes, enterprises, people and cultures;
- A liveable region that is the place of choice for the brightest and best;
- A collaborative region enabling alignments that progress the region's sustained prosperity; and
- A globally connected region that interacts effectively with business and communities across the rest of the world.

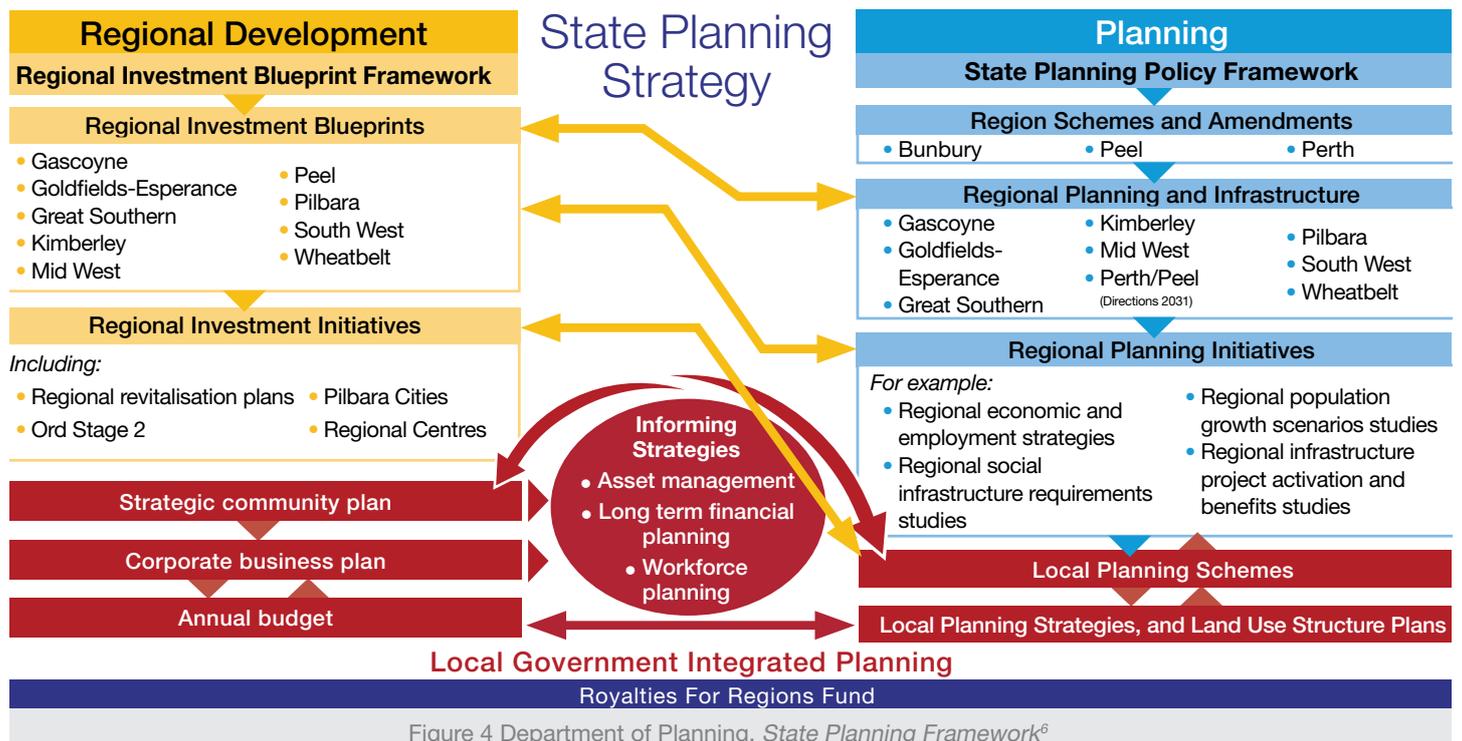


Figure 4 Department of Planning, State Planning Framework⁶

2.0

Regional and Local Characteristics

The Goldfields-Esperance region is exceptionally diverse and is the largest of the nine regional areas in Western Australia. The region is home to ancient culture, descendants of early explorers and pioneers and migrants from around the globe. The vast landscapes are full of incredible biodiversity and abundant natural resource wealth. Regional communities are found across the Goldfields-Esperance region, from coastal areas in the south to inland areas bordering the Western Desert. This section of the Blueprint introduces the region's diverse geography and settlements, unique character and people and its world-renowned environment.

The Goldfields-Esperance region is over three times the size of the State of Victoria and is the largest region in Western Australia

2.1 A Vast and Diverse Region

The Goldfields-Esperance region is vast — encompassing just under one third of the total land mass of the State of Western Australia, it is also over three times the size of the State of Victoria. The region is bounded geographically by the Little Sandy Desert, Gibson Desert and the Pilbara region to the north and by the Southern Ocean to the south. The western boundary connects to other regions of Western Australia including the Great Southern, the Wheatbelt and the Mid West. The eastern border adjoins the State of South Australia and the Northern Territory (Figure 6).

The region is strategically placed as the entrance into Western Australia from the eastern states with a border crossing located at the town of Eucla. It is also home to some of the most extraordinary biodiversity and great expanses of nature and wilderness found in Australia including the Great Western Woodlands – a 16 million hectare, largely-intact temperate woodland – at the heart of the region.

The historic inland city of Kalgoorlie-Boulder sits at the centre of the Goldfields-Esperance region, home to half of its population and a mining services hub for the Goldfields. Kalgoorlie-Boulder is located approximately 600km from Perth on the Great Eastern Highway and can be reached by plane within one hour. The town of Esperance is a regional centre situated on the southern coastline. Esperance is located around 400km from Kalgoorlie-Boulder and 720km from Perth (1½ hour plane flight). The Northern Goldfields has many smaller, historical settlements and is serviced by the sub-regional centre of Leonora. The north-eastern area of the region is known as the Ngaanyatjarra Lands and is home to many remote Aboriginal communities.

Due to the size of the region's land mass and the distances between major settlements, the region is often referred to as four sub-regional areas known as the Goldfields, the Northern Goldfields, Esperance and Ravensthorpe, and the Ngaanyatjarra Lands. These sub-regional areas reflect the diverse landscapes across the region, ranging from the red deserts of the Ngaanyatjarra Lands and the rich mineral wealth of the Northern Goldfields to the natural beauty of white sandy beaches, blue sea and picturesque islands of the south. More broadly, the sub-regions also reflect the differing economic areas of the region – minerals and mining and pastoralism in the Goldfields, agriculture, tourism and services in Esperance and Ravensthorpe, and minerals, services, arts and culture in the Ngaanyatjarra Lands.

The Goldfields-Esperance region has nine Local Government Areas including the City of Kalgoorlie-Boulder, Shire of Coolgardie, Shire of Dundas, Shire of Esperance, Shire of Laverton, Shire of Leonora, Shire of Menzies, Shire of Ngaanyatjaraku and the Shire of Ravensthorpe.

2.2 Our People

The First Inhabitants

Aboriginal people are known to have inhabited the region for tens of thousands of years. Prior to experiencing contact with European settlers in the early 1870s, the Aboriginal population in the region is estimated to have numbered about 20,000⁸.

Today, Aboriginal people live in regional centres and remote communities across the Goldfields-Esperance region (Figure 5). In 2011, the Goldfields-Esperance region was estimated to be home to approximately 6,850 persons who identified as Aboriginal, representing 10.0% of the total residential population, compared to 2.5% nationally. The regional City of Kalgoorlie-Boulder is home to approximately 2,900 Aboriginal residents. In the Ngaanyatjarra Lands, more than 80% of residents are identified as Aboriginal and the Shires of Menzies and Laverton also have high populations of Aboriginal residents.

There are currently 25 Aboriginal communities in the region; many in the Shire of Ngaanyatjarraku, including Warburton, Tjirrkali, Mantamaru, Papulankutja, Irrunyju, Tjukurla, Wanam, Kanpa, Patjarr, and Warakurna⁹. The Wongutha people of the north-eastern Goldfields played an important role supporting early explorers in the region by providing them with information about locally available gnamma (water) holes¹⁰.



Figure 5 Indigenous Status by LGA, Goldfields-Esperance, 2011⁷

The Spinifex people returning to their land

The Spinifex People were dispossessed from their homelands in the Great Victoria Desert in the 1950s when their country was selected for the Maralinga atomic testing, carried out between 1952 and 1957 by the British and Australian governments.

During that time many people were moved hundreds of kilometres from their land to missions including Cundelee and Warburton in Western Australia. About 200 people were recorded as still being on the Spinifex homelands in the period 1955 to 1963, though most of these were later moved to mission settlements.

In the early 1980s, Cundelee mission closed. The Spinifex People were moved again to other lands before eventually settling at Tjuntjuntjara, a newly selected outstation in the south-western corner of the Spinifex homelands.

Since establishing a secure living area at Tjuntjuntjara within traditional lands, the community has developed into a stable and important focus for the regional cultural cycles of Western Desert life. As the community has grown, people from throughout the region with traditional attachment to the area have returned to live at Tjuntjuntjara.



Figure 6 Goldfields-Esperance Region, Western Australia

To the east, Tjuntjuntjara is home to the Spinifex people whose art works are globally acclaimed and have been exhibited internationally in London, Amsterdam and Zurich. It is one of the most remote communities in the region, located in the Shire of Menzies, east south-east of Laverton.

Aboriginal people across the region encounter a diversity of experience and participation depending on location, social and cultural circumstances and access to education, economic and employment opportunities. Aboriginal people are employed in a variety of industries including the pastoral, tourism, land management, mining and service industries and the public sector.

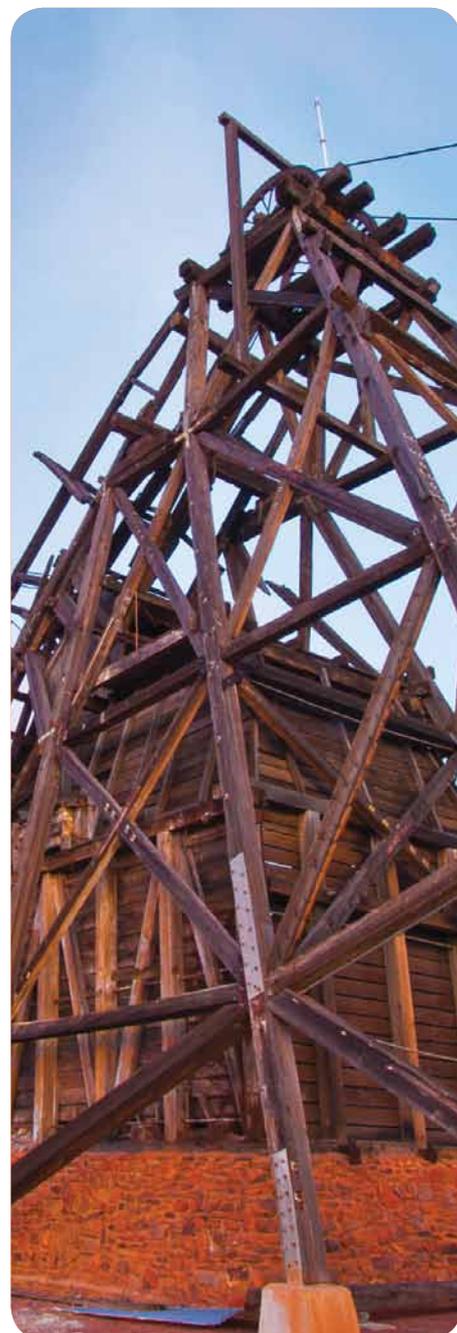
Aboriginal people in the region have played, and continue to play, an important role in a variety of social and economic spheres at a local, State and national level and many Aboriginal arts, cultural and tourism enterprises are gaining national and international acclaim.

History

The Goldfields-Esperance region has a rich and varied cultural history reaching back tens of thousands of years with the region's first inhabitants. Aboriginal cultural heritage in the region includes an array of archaeological, historical, ceremonial and mythological sites as well as living cultural practices. Some remote communities only experienced first contact with European settlement during the 20th century. Although the region was visited many times by Dutch, French and English explorers, the Aboriginal population lived predominantly undisturbed until around 1870 when European settlers first developed pastoral activities in Ravensthorpe and Esperance¹¹.

Early European exploration led to the discovery of mineral wealth within the inland areas and the subsequent establishment of mining, agricultural and pastoral activities across the region as well as the formation of the region's key settlements. It was the discovery of gold in the 1890s that triggered a dramatic increase in the population of the Goldfields-Esperance region. The mining towns of Coolgardie, Leonora, Kalgoorlie and Boulder developed rapidly on the back of the gold rush. The discovery of gold drew prospectors and their families from across Australia and from all over the world. This led to the tripling of the population in Western Australia between 1891 and 1901¹² fuelled by migration to the Goldfields region.

Aboriginal people have inhabited our region for tens of thousands of years



Early farming enterprises in the region were not widely successful. Growing wheat was a particular challenge due to the difficult climate and poor soils. However, experiments to add trace elements to the local soils in the southern areas of Esperance and Ravensthorpe during the post-war period of the 1950s led to the implementation of modern agricultural practices and the development of a significant agricultural industry that has continued to grow and expand until present times.

During the 1960s and 1970s the discovery of nickel at Leinster and Mount Windarra, near Laverton in the Northern Goldfields, as well as Kambalda in the Goldfields, resulted in the further expansion of mining and the mining services industries and cemented Kalgoorlie's reputation as a centre of mining activity, minerals wealth and mining expertise.

Many other factors have helped shape the history of our region, including the development of a fishing industry along the South Coast, a timber harvesting industry across the region and a steady growth in tourism attracting regional, intrastate, interstate and international tourism.

The population of the Goldfields-Esperance region has grown from around 27,100 in 1966 to around 61,400 in 2014¹³. Population growth has increased with the migration of people from interstate and overseas to work in key primary industries. The region has become the State's largest producer of gold and nickel and a significant exporter of grain.

Heritage

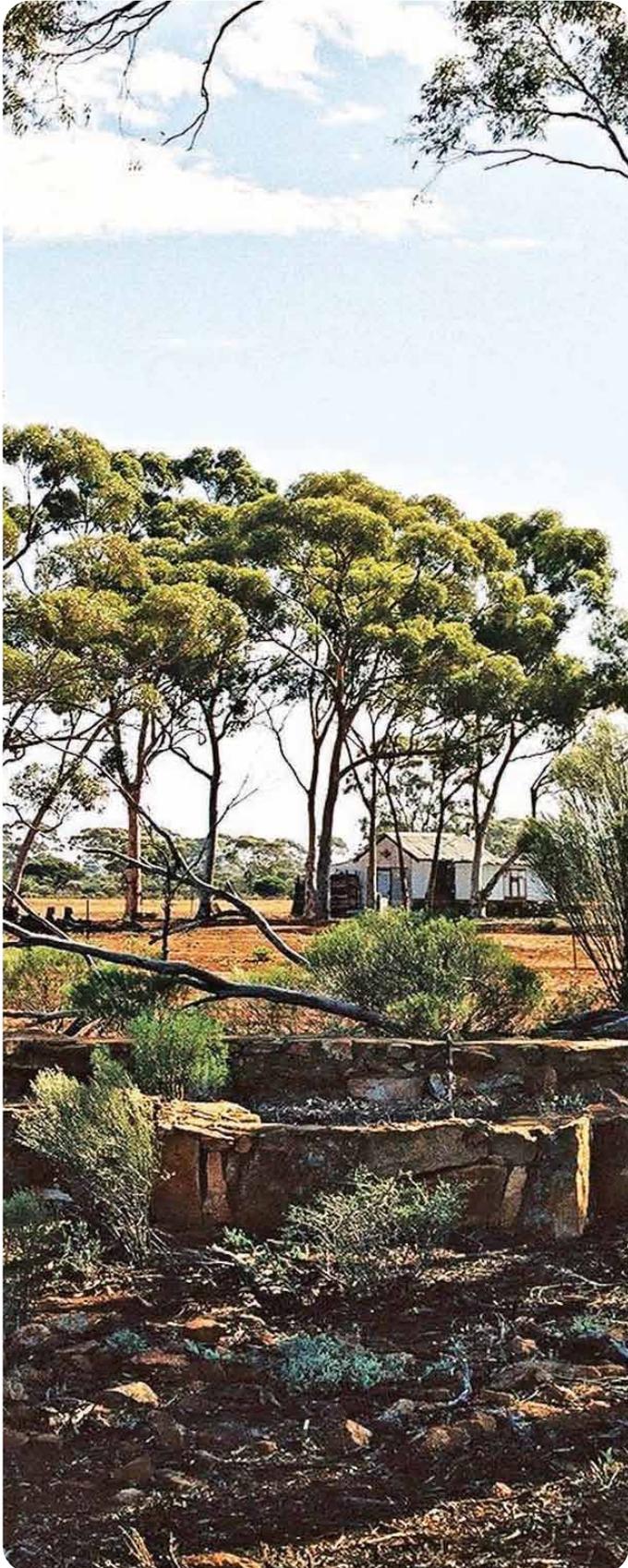
The region's rich cultural, mining and agricultural heritage is highly visible as you travel through the region. The heritage precincts and buildings of Burt and Hannan streets in Kalgoorlie-Boulder and Bayley Street in Coolgardie proudly display the grandeur of the gold rush era. The mining history of the region surrounds the settlements of the Goldfields in the shape of flat-topped mullock dumps or aged headframes over the entrances to underground shafts. The giant 'Super Pit' mine in the heart of Kalgoorlie-Boulder remains a living tribute to the gold mining heritage of the Goldfields, as does the cluster of preserved tin huts in the heritage town of Gwalia in the Northern Goldfields.

Many heritage trails showcase the region's history including the John Holland Way and the Holland Track, both carved into the rugged bushland connecting Broomhill and the Goldfields; the Golden Quest Discovery Trail, winding its way through the gold rush towns of Coolgardie, Laverton and Gwalia; and the Golden Pipeline trail, tracking the route of C.Y. O'Connor's Golden Pipeline.

The southern coastal areas of Esperance and Ravensthorpe are characterised by farming and fishing activities with landscapes of paddocks of crops and livestock, and extensive bushland and areas of national park showcasing long white sand beaches, granite outcrops and island views. There are historical pioneer homesteads to visit as well as old ship wrecks and timber jetties amongst the many natural features.

Many prominent characters were lured to the Goldfields in search of their fortunes, perhaps none more famous than the 31st President of the United States, Herbert Hoover. In 1897 he was invited to undertake mine management and exploration work in the Goldfields. By the time Hoover left Western Australia in late 1898, he was one of the best-known mining engineers in the colony. He had helped to establish single-hand drilling, disciplined management and high standards of efficiency in the aftermath of the early mining boom.

Another famous engineer who helped transform the region was C.Y. O'Connor. As the region's population grew, so too did the need for new infrastructure. The Goldfields and Agricultural Water Supply Scheme was O'Connor's vision to provide a much-needed water supply to the Goldfields. Without this water supply, further development would have been severely hampered. O'Connor achieved what many believed was impossible – to pump water from the Mundaring Weir, east of Perth, to the towns of the Goldfields over 600km away. When the Goldfields Water Pipeline was completed in 1903 it was the longest such pipeline in the world¹⁴ and a significant step in advancing the growth of Western Australia. It supplied water to Coolgardie, Kalgoorlie, Boulder and many towns and thousands of farms, also creating new communities throughout the Wheatbelt. Today the pipeline continues to support people, mining and agriculture across a wide area of Western Australia.



Greats of the Gold Rush Era

The region's gold rush began with the first discovery of gold in the 1890s. News of the gold find spread fast and soon prospectors were arriving to seek their fortunes and build towns in the dusty landscapes of the Goldfields and Murchison regions.

As the population grew, clusters of tents and rough bough sheds were transformed into booming Western Australian gold-rush towns. Grand hotels lined the main streets and bustling town centres boasted their own stock exchanges, banks, butchers, bakers, schools and places of worship.

Many of the original townships remain and, although the populations are smaller, the character buildings and museums provide a fascinating glimpse into the colourful spirit of the gold rush era.

C.Y. O'Connor

Engineer C.Y. O'Connor was responsible for building the now famous Goldfields and Agricultural Water Supply Scheme, a 600km pipeline supplying water from Perth to the Goldfields and an engineering feat that was believed, by many, to be impossible to construct.

Herbert Hoover

American mining engineer Herbert Hoover worked in the Goldfields in the 1890s. When he left Western Australia in late 1898, Hoover was one of the best-known mining engineers in the colony. Today the former Sons of Gwalia mine manager's house that he designed is open to visitors at the Gwalia Ghost Town and Museum. Hoover was elected the 31st President of the United States in 1929.

Culture and Recreation

The people, culture and communities of the Goldfields-Esperance region are as diverse as the region's geography and landscapes. However, many common attributes are shared, not least the welcoming hospitality and people who are highly engaged with a strong sense of civic and social participation in their communities (Figure 7).

The region and its various settlements have an early history of interstate and international migration that has contributed to the character and culture of each regional community. The region identifies as multicultural and while at times this has presented some challenges in the form of community service need, it has brought great spirit, diversity and opportunity. Many local events have been created around this diversity such as Desert Dust Up in the Ngaanyatjarra Lands, the Multicultural Festival in Kalgoorlie-Boulder, the Festival of the Wind in Esperance and other events that provide unique experiences for locals and visitors alike.

People living in regional centres across the Goldfields-Esperance are highly engaged in social and cultural activities and volunteerism. Giving time and effort towards a good cause, event or initiative is commonplace for many residents in the region and local businesses are likewise highly engaged in their community. The Goldfields-Esperance region has been built upon a 'can-do' attitude of getting things done. There is strong level of social capital in the community and a variety of skills and capacity involved in local organisations that play a critical role in delivering services where government does not. They include service groups, progress associations, care organisations, sports and recreation clubs, places of worship, arts, culture and wellbeing groups. Due to the isolated nature of the many communities in the region, non-profit organisations, businesses, groups and individuals play an important role in the function of the community.

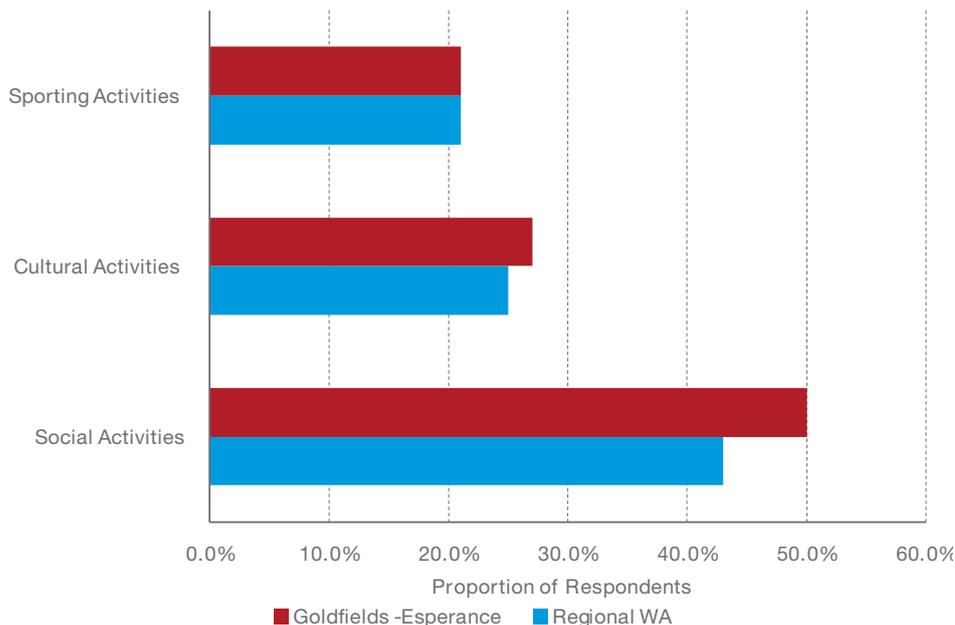


Figure 7 Living in the Regions, *Participation in Activities*¹⁵



As in most regional cities and towns, sport and recreational activities play a vital role in the region, particularly in the major centres of Kalgoorlie-Boulder and Esperance where there are a number of quality sporting and recreational facilities. The region has excellent sports and recreation venues including the Goldfields Oasis Recreation Centre in Kalgoorlie-Boulder, the Bay of Isles Leisure Centre and sports grounds in Esperance and there are regular major sporting events. Race courses across the region host horse-racing events and cup days, such as the Goldfields Race Round — a key feature of the regional events calendar. Currently, a state-of-the-art sports ground, the Ray Finlayson Sporting Centre in Kalgoorlie-Boulder, is nearing completion and is due to open in late 2016.



An Inspiring Story

Sadie Canning

Born in 1930 under a tree on the outskirts of Laverton to an Aboriginal mother, for whom a hospital birth was not an option, Sadie became one of the 'Stolen Generation'. She was sent to live at Mt Margaret Mission, 40km from Laverton, at the age of 4 years.

Sadie was a strong supporter of the United Aborigines Mission of Melbourne, which ran the camp at Mt Margaret, and credited the care and encouragement she received from the missionaries for her trailblazing achievements. It was at the Mission that she developed her strong work ethic, and where she became interested in nursing care and was encouraged to study the profession. After applying to Perth and being rejected on the basis that Aboriginal girls were not accepted into nursing study at that time, Sadie persevered and applied to Bethesda Hospital in Richmond, Victoria, where she was successful in her studies and returned to WA in 1954 as the first Aboriginal triple certificate nurse.

In 1956 she applied for a nursing sister's position at the Leonora District Hospital where she was to work for the next 34 years. She was responsible for bringing Aboriginal mothers into the maternity ward of the hospital — they were previously located in a tin shed on the outskirts of the hospital. She oversaw the building of a new facility in the 1980s. She credited her greatest achievement as introducing fully integrated wards by the end of 1958, within a year of becoming Matron. She was a relentless campaigner for Aboriginal equality and rights, and a crusader for the cause of education. In 1964 she was awarded an MBE for her services to nursing in Leonora, the Queen's Silver Jubilee medal in 1977 and the Centenary Medal in 2003.

Nullarbor Muster

a weekend like no other

The isolated township of Rawlinna, along the Trans Australian Railway line, comes alive each year when hundreds of enthusiastic 'townies' drive the 380km of gravel road to attend the Nullarbor Muster. Rain, hail or shine, horse floats mix with four wheel drives and camper vans to join bull riders and cowboys for a three day extravaganza worthy of the best western movie. Planes dot the airstrip and utes fill the camping ground, a large paddock cleared of the many rocks so typical of the Nullarbor.

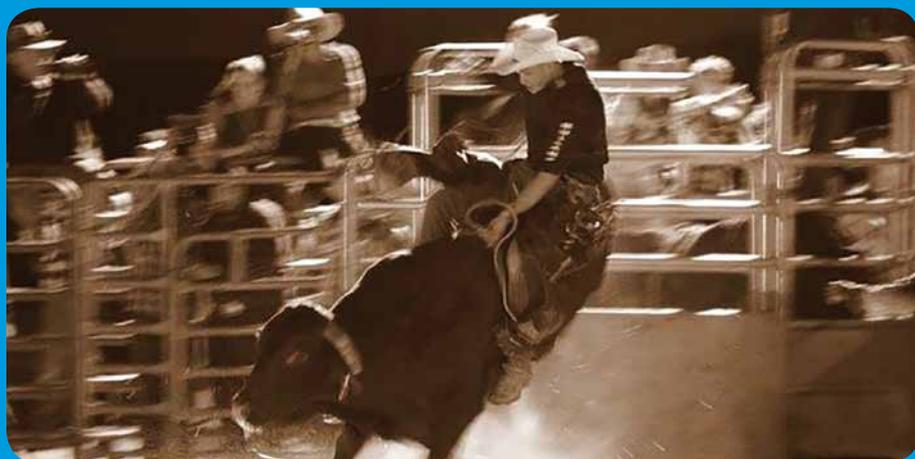
Facilities have improved significantly since the early days of the Kanandah Gymkhana, first run in 1964, which was the original version of the Nullarbor Muster. A large hangar now houses food, beverages, souvenir stalls, and accommodates hundreds for the evening festivities. While some reminisce with nostalgia about the early years and the rustic setting, a new ablution block is a welcome addition to the amenities.

The rodeo, listed on the country rodeo circuit, attracts professional and amateur bull riders, while gymkhana horse events are favourites for station jackeroos and town competitors. The Muster offers all kind of events from barrel racing, to arm wrestling, skeet shooting to iron men and women challenges. There's even a best turned out ute competition. The day's events culminate in the running of the Nullarbor Muster Cup where station horses compete with the visitors.

As the sun sets over the wide plain, an amazing transformation takes place. The dusty jeans and fleecy shirts have given way to smart casual and even some cocktail gear, as the party starts and dancing continues long into the night.

Arts and culture are very much thriving across the Goldfields-Esperance region, as recently heralded by the iconic Regional Arts Australia summit being held in Kalgoorlie-Boulder during 2014, showcasing the region's spectacular array of artistic talents. These range from artists in the Western Desert, dancers in Dundas and bush poets of the agricultural areas. The region is home to the oldest purpose-built theatre in Western Australia and the third oldest in Australia – the Bijou Theatre in Esperance. There are many arts and cultural venues within the region catering for music, comedy, theatre, cinema, dance, arts exhibition and much more. These include the Goldfields Art Centre, arts centres in the Ngaanyatjarra Lands and the Cannery Arts Centre in Esperance. Many local events and festivals are held throughout the year. One of the most recently established outback events is the Norseman Gold Fever Festival that features an iconic 'rock drill' competition – a mining town tradition where drillers compete as individuals and as teams.

The strong social engagement and range of facilities and activities means the people of the region lead active lifestyles where volunteerism and participation play a vital role in binding communities together and encouraging people to 'stay for a while' – or for a lifetime.



2.3 Regional Communities

The Region's Diverse Communities

The major centres within the region have primarily developed around the location of key industries, such as mining and agriculture, as well as major infrastructure like roads and railways.

The City of Kalgoorlie-Boulder is a regional mining and service hub for the Goldfields and beyond with highly dispersed populations outside Kalgoorlie-Boulder, influenced by the location of mining operations and pastoral stations across the central and northern areas of the region.

The southern areas of Esperance and Ravensthorpe comprise a mix of coastal centres and inland farming-based communities. The region's most northern areas contain many remote Aboriginal communities and centres developed around mining activity.



The Goldfields

City of Kalgoorlie-Boulder — WA's Inland Regional City

Kalgoorlie derives its name from the Karlkurla (pronounced gull-gurl-la), the name for a native silky pear, a vine that grows in the area.

With more than 33,000 people, the City of Kalgoorlie-Boulder is Western Australia's largest outback local authority by population¹⁶. First established as a gold mining town, Kalgoorlie-Boulder has transitioned into a more diverse economy¹⁷ with mature mining operations such as the Super Pit, a growing mining services sector and industrial manufacturing. Retail, tourism and government services support this vibrant service hub.

The city has a significant and highly regarded education and training sector with the Goldfields Institute of Technology, the Western Australian School of Mines (WASM) and other training providers. The University of Western Australia and Notre Dame University jointly operate the Rural Clinical School with sites in Kalgoorlie-Boulder and Esperance offering medical students an introduction to medical practice in the regions. A total of 12 private and public schools provide for youth education requirements.

Kalgoorlie-Boulder's legacy as an economic and political centre of Western Australia during the late 19th century is evident today through its heritage buildings, cultural sites and museums. Its outback heritage and accessibility from Perth, South Australia and Queensland (via the Outback Way), has supported a growing tourism sector over the past decades. There is also passenger rail by the TransWA Prospector and a major regional airport for leisure and business visitors. Additionally, Kalgoorlie-Boulder is a popular stopover destination for vehicles traversing the great expanse of the Nullarbor to and from the eastern states.

As the largest urban centre in the region, strategically located within an expansive freight network, the City is positioned to develop industries that service not just the region but the State and nation, whilst building on its vibrant culture and attractive lifestyle.

Population



33,310

Population Growth



% Employed/
Largest Industry

Mining



Shire of Coolgardie

The Shire of Coolgardie marks the entrance to the Goldfields when travelling from Perth. It includes the towns of Kambalda, Coolgardie, Widgiemooltha and the Aboriginal community of Kurrawang.

Both Coolgardie and Kambalda played a significant part in Australia's history. Coolgardie was the birthplace of the great gold rush of 1892 and Kambalda is the home of Australia's nickel industry – its large nickel deposits have been mined since the 1960s.

Today the Shire continues to thrive as a mining community. It is the largest producer of minerals in the region, with significant gold and nickel mining operations supporting globally significant regional exports.

The Shire is home to a wealth of outback attractions, including nature reserves, ghost towns, beautiful rock formations and the Golden Quest Discovery Trail, Holland Track and the Golden Pipeline drive trail. Regular land-sailing events conducted on the Shire's expansive salt lakes are also a unique highlight of the recreational activities available.

The Shire contains the Mungari Industrial Area zoned for the use for heavy and strategic downstream processing opportunities in the Goldfields-Esperance region. The future development of this industrial area is a key priority for the Shire and the region.

Population



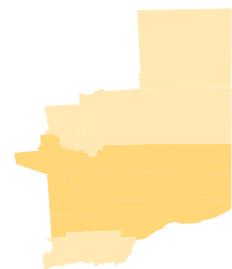
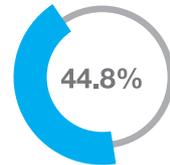
4,239

Population Growth



% Employed/
Largest Industry

Mining



Shire of Menzies

In the early 1900s Menzies was founded on the discovery of gold and, with many of Western Australia's wealthiest gold deposits found in the area, its population grew to over 5,000 people. Today the Shire of Menzies, located just north of Kalgoorlie- Boulder, supports a resident population of approximately 400 people in both the town of Menzies and the Aboriginal community of Tjuntjuntjara.

The Shire is rich in mineral deposits such as iron ore, gold, uranium, mineral sands and nickel. Various operations both large and small are under consideration within the Shire's 125,00km² land area.

Tourism is a major industry. Menzies is 50km from the iconic Antony Gormley sculptures on Lake Ballard. This permanent installation has captured the imagination of people from around the world, leading to increased visitor numbers since the installation was launched in 2003. The extensive promotion of the Golden Quest Discovery Trail, a 965km self-drive adventure through the Goldfields, has also boosted the profile of Menzies as a place to visit.

Population



401

Population Growth



% Employed/
Largest Industry

Education



Shire of Dundas

Norseman, the major centre within the Shire of Dundas, marks the gateway to the Eyre Highway and the iconic Nullarbor Plain, linking Western Australia with the eastern states of Australia. Norseman is a major transit point for national freight and a stopover point for travellers. The Shire also includes the town of Eucla, as well as smaller communities, including Balladonia, Caiguna, Cocklebiddy, Madura and Mundrabilla, dotted along the Nullarbor Plain.

Popular legend has it that prospector Laurie Sinclair tethered his horse 'Hardy Norseman' in this area, to find that it had uncovered a gold nugget overnight. Sinclair subsequently named the gold-reef he discovered 'Norseman'. The Shire's mining history continues today, with mines still operating around Norseman and known reserves of gypsum, tantalum and nickel. Norseman claims Australia's longest continuously running gold mine operation. Other industries in the Shire include fishing around Eucla on the South Australian border and pastoral operations along the Eyre Highway.

As a major gateway to Western Australia and the Goldfields-Esperance region, the Shire is notably home to the Great Western Woodlands and plays an active role in the region's tourism industry being popular for its natural lakes, caves and cliff faces along the Australian Bight and its isolated wilderness areas, ideal for bird watching.

Population



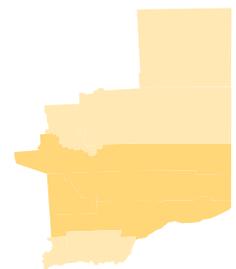
1,158

Population Growth



% Employed/
Largest Industry

Mining



Esperance and Ravensthorpe

Shire of Esperance – Coastal Regional Centre

The vast majority of the 14,500 residents of the Shire of Esperance live in the town of Esperance, which provides services to communities across the southern areas of the region²¹. Esperance is a regional centre, identified as a growth centre by the State Government. Numerous investments have been made to develop community infrastructure to sustain and attract further population growth. Other smaller communities in the Shire include Cascade, Condingup, Gibson, Salmon Gums, Scaddan and Grass Patch. These settlements play a key role in supporting the local farming community.

The Shire of Esperance is the second largest local government area by population within the region. The Shire is well known for its coastal and island scenery that contributes to seasonal tourism and visitation. The Shire's European history dates back to 1627, when a Dutch vessel passed its coast. The town itself was named by French explorers who were the first Europeans to make landfall in 1792, naming the area after their ship the *Esperance*.

Esperance has developed around farming and agriculture, experiencing substantial growth in agricultural productivity during the 1950s and 1960s as a result of overseas investment and the introduction of new technology and inputs. The agricultural industry supports a range of agricultural businesses and services based in Esperance and the neighbouring Shire of Ravensthorpe. Today the local economy is supported by a variety of other industries including fishing, professional services and tourism and the Shire is one of the most economically diverse local government authorities in the region. Seasonal tourism is based around the spectacular natural attractions such as Cape Le Grand National Park, the Esperance waterfront and coastal amenity.

The Esperance Port is a key piece of infrastructure for the region, servicing the agricultural areas of the south and exporting a wide range of mineral commodities transported from the Goldfields and beyond. The Esperance Port is the deepest port in Southern Australia, predominantly exporting iron ore, nickel concentrate and grain commodities.

Population



14,487

Population Growth



% Employed/
Largest Industry
Agriculture



Shire of Ravensthorpe

The Shire of Ravensthorpe, in the south-west of the Goldfields-Esperance region, lies between the City of Albany and the Shire of Esperance. The town of Ravensthorpe is located 530km south-east of Perth and the coastal town of Hopetoun is located around 50km from Ravensthorpe. Around two thirds of the Shire is comprised of natural bushland including the spectacularly biodiverse Fitzgerald River and Frank Hann National Parks. The landscape features ancient mountain ranges, rocky hills, river valleys, sand plains, estuaries and inlets, a wealth of native flora, fauna and great natural beauty. Similar to the neighbouring coastal Shire of Esperance, Ravensthorpe enjoys a temperate 'Mediterranean' climate with sunny winter days and cool summer nights.

Agriculture developed in the Shire from the 1950s and 1960s when land blocks were released and has continued to provide stability for the local economy. Grains and livestock are key export commodities for the Shire. The agricultural industry supports a range of agricultural businesses and services based in Ravensthorpe and Esperance. There are also a number of mining operations within the Shire including a notable nickel mining presence that supported over \$700 million in mineral exports during 2013-2014.

Tourism is a smaller but important contributor to local employment and activity in the Shire. Although tourism and visitation is seasonal, the coastal areas between Hopetoun, Starvation Bay and the National Parks attract international and national visitors year-round and there is significant potential to build the ecotourism sector. The Ravensthorpe Wildflower Show is an annual event in the Shire attracting nature lovers from across the globe.

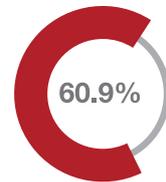
The cyclical nature of the mining industry and the amalgamation of smaller farms into large holdings, have seen the Shire's population fluctuate over the years. The current population, including the settlements of Ravensthorpe, Fitzgerald, Hopetoun, Jerdacuttup and Munglinup, is 2,300 residents.

Population



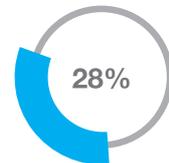
2,310

Population Growth



% Employed/
Largest Industry

Mining



Northern Goldfields

Shire of Leonora

Leonora, 235km north of Kalgoorlie-Boulder, is a service centre for the Shire's residents including residents from outlying communities and mining, exploration, tourism and pastoral industries. Leonora has a relatively young resident population of approximately 800 people and numerous mining villages supporting up to 1,000 workers¹⁸. Leonora has a mining history dating back to 1898 due to its central position between Gwalia and the Four Mile Leases.

Today Leonora is home to numerous services and recreational facilities and hosts a range of popular events such as the annual Leonora Cup Race Meeting and the Golden Gift — Australia's richest mile running race. In addition to popular regional events attracting visitors and locals alike, its location on the Golden Quest Discovery Trail and proximity to the Outback Way supports a seasonal flow of tourists.

The Shire is home to the historical town of Gwalia — a ghost town of mining homes and businesses preserved as they were left abandoned during the 1960s. The much younger mining town of Leinster, 135km north of Leonora, was established in 1976 to support the local nickel industry. Leinster grew with a residential population of approximately 700 people as well as up to 700 fly-in fly-out (FIFO) personnel until late 2013 when mining operations were suspended with the loss of many jobs, leaving its future uncertain. Overall, the Shire is a major minerals producer, with production valued at \$1.54 billion during 2013-14.

The town of Leonora has been identified as an education, vocational training, health and transport hub for the local government authorities of the Northern Goldfields and the Ngaanyatjarra Lands.

Population



2,630

Population Growth

-5.4%

% Employed/
Largest Industry

Mining

49.5%



Shire of Laverton

Situated on the edge of the Great Victoria Desert around 360km north-east of Kalgoorlie-Boulder by road, the Shire of Laverton is the western gateway to the Ngaanyatjarra Lands and home to approximately 1,300 residents. The major centre is Laverton and there are a number of Aboriginal communities located within the Shire including Cosmo Newberry, at the edge of the Great Victoria Desert, Mount Margaret, Wongutha Wonganarra and Mulga Queen.

The Shire began as a sandalwood harvesting area in the 1870s. However, in 1886, when gold was discovered in Laverton, the area became a significant mining region. In 1969 reports of a rich nickel find by the Poseidon NL mining company at Mt Windarra, north of Laverton, caused a huge stock market bubble. With nickel in high demand, the ensuing 'Poseidon Boom' was one of the most spectacular in Australia's share market history. The Poseidon bubble burst in 1970 and Poseidon NL was de-listed in 1976. The Mt Windarra nickel mine is today operated by Poseidon Nickel Limited.

Today, the Shire contains Australia's largest nickel mine at Murrin Murrin as well as high producing gold mines at Sunrise Dam and Granny Smith and numerous small mining operations and exploration activity, including extraction of rare earths. During 2013-14 it was the region's third most valuable exporter of minerals, with combined gold and nickel production of over \$1.7 billion¹⁹.

The Shire's population has fluctuated over the past 100 years with the opening and closing of mining operations, yet this part of the region contributes substantially to the wealth of the Goldfields-Esperance and Western Australia. The Shire hosts a large number of FIFO workers, with an estimated workforce in excess of 1,000 people accommodated at mining villages outside the town of Laverton²⁰.

There is a long-established pastoral industry in the western part of the Shire but with high costs of operation, lack of economic diversity and problems with wild dogs and dingos, the industry has seen recent declines in people and investment. The management of feral animals and diversification of economic activities on pastoral leases will help address this in the longer term.

Tourism is a growing industry and employer, with the Shire attracting tourists from the Outback Way and Golden Quest Discovery Trail. Other outback roads to other States from Laverton include the Anne Beadell Highway to Coober Pedy in South Australia and the David Carnegie Road to Western Australia's north.

Population



1,291

Population Growth

-9.8%

% Employed/
Largest Industry

Mining

55.3%



Ngaanyatjarra Lands

Shire of Ngaanyatjarraku

In the north-east of the region, the Shire of Ngaanyatjarraku is characterised by widely dispersed Aboriginal communities. This is a sparsely populated part of the region but home to many remote communities with traditional cultural connections to country. Many communities lie close to the Northern Territory and South Australian borders.

Mining exploration is a major activity in the region as well as art, cultural and adventure tourism supported by the Great Central Road (known as the Outback Way) which connects Queensland to Western Australia through central Australia.

The Shire of Ngaanyatjarraku is located in the Ngaanyatjarra Lands (often referred to as the Lands) and provides local government services and infrastructure development for the remote communities within its boundaries.

The Ngaanyatjarra Lands, an Indigenous protected area, is home to the Ngaanyatjarra, Pintupi and Pitjanjatjara people ('Yamangu')²². Situated in the vast Central Desert, the Ngaanyatjarra Lands constitute one of the most remote areas of Australia, encompassed by the Gibson Desert to the north and the Great Victoria Desert to the south.

The town of Warburton is the largest of the 12 communities of the Ngaanyatjarra Lands and is home to numerous cultural art centres and exhibits, education, health care, heritage and youth support services. Warburton is located approximately 1,000km from both Kalgoorlie-Boulder and Alice Springs. The Ngaanyatjarra Lands attract visitors from across the globe seeking a unique cultural and extended outback driving experience.

Large mining operations are under consideration in the Ngaanyatjarra Lands, including sites in the Musgrave area to the east of Warburton. The Musgrave area is one of the last areas of Australia to be explored for mining resources and may be a significant area of opportunity to support local social and employment opportunities in the future²³.

Ngaanyatjarra Council

The Ngaanyatjarra Council is an incorporated Aboriginal-controlled organisation of elected members representing the interests of all people living in the Ngaanyatjarra Lands. The Ngaanyatjarra Council works with the Shire of Ngaanyatjarraku to deliver services and support the communities. In 2005 the Ngaanyatjarra area achieved Native Title – the largest ever Native Title claim in Australia. It took nearly 20 years to settle the claim and a considerable amount of work by the Ngaanyatjarra people to secure this for the communities and the region.

Population

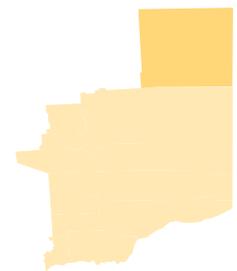


1,507

Population Growth



% Employed/
Largest Industry
Public Admin



Warakurna Artists

Warakurna is a remote community situated in the Ngaanyatjarra Lands, approximately 330km from Uluru, near the Northern Territory border. The township of approximately 180 people is nestled amongst the spectacular Rawlinson Ranges in the Gibson Desert, close to the Giles Meteorological Weather Station.

Warakurna opened an Art Centre Studio in March 2005 – a place for the expression of the people's rich cultural and artistic heritage and spirit²⁴. The Art Centre is owned and administered by Aboriginal people and provides support and services to artists living in and visiting Warakurna and the community of Wanarn. Warakurna Artists is an organisation enabling the community to gather to paint and share Tjukurrpa

(traditional law and culture) and contemporary stories. The centre plays an important role in passing Aboriginal stories to young people and keeping traditional culture and bonds strong.

Warakurna Artists facilitates the production, distribution and sale of the artists' works. The paintings reflect each artist's unique style, stories and connection to country. Paintings are catalogued, with a photograph of the artwork, the story it conveys and information about the artist. The paintings are then sold through galleries and from the Warakurna Artists website with funds returned to the artists, the organisation and for social and cultural benefits.

Artwork from the Warakurna artists can be found world-wide in the collections of Artbank, the National Gallery of Australia, the National Gallery of Victoria, the Art Gallery of NSW and galleries across Australia. Warakurna Artists have exhibited at the yearly Alice Springs Desert Mob Art Fair and have won many awards and arts prizes. From 2012, the 'Warakurna: All the Stories Got into our Minds and Eyes' exhibition of contemporary paintings and sculptures has been exhibited as part of the National Museum of Australia in Canberra and Australia, showcasing the emerging art movement from the Warakurna Western Desert community.



2.4 World-Renowned Biodiversity and Environment

The environment of the Goldfields-Esperance region is one of its greatest assets. Unique and beautiful, with multitudes of diverse species of flora and fauna, it is also a source of great mineral wealth and offers the potential for agricultural, pastoral, forestry, horticulture and aquatic production opportunities. The climate and location also make it ideal for energy production and attractive to both tourist visitation and permanent regional living.

The environment can also be incredibly challenging with a level of risk associated with the dry and hot climate which, when coupled with the vast geography of the region, can make natural disasters extremely difficult to manage. Meeting requirements for water supply and environmental protection for elements such as biosecurity can be difficult. Climate change and unpredictability, as well as management of diminishing resources and land use, will be major considerations for the growth and sustainability of the region and the conservation of the abundant biodiversity and environmental values.

Many of the region's landscapes and environmental assets such as woodlands and coastline span multiple local government areas and land management authorities. Inter-regional collaboration will be key to balancing sustainable development opportunities with the protection of the natural environment and biodiversity.

A Biodiversity Hotspot

The Goldfields-Esperance region is part of the South West Biographic Region, one of over 30 international biodiversity regions identified across the globe and the only internationally recognised biodiverse region in Australia. The South West Botanical Province stretches across 300,000km² of land in the southern part of Western Australia from Shark Bay in the north to Israelite Bay on the South Coast, east of Esperance, and encompasses a large area of the Goldfields-Esperance region. This area has been internationally recognised for its world-renowned flora and fauna and beautiful, geologically diverse landscapes.

The South West Biographic Region, separated from the east of Australia by desert, has evolved over millions of years to become home to thousands of unique plants and animals, with many plant species endemic only to the south-west. These include magnificent towering karri trees (eucalypts) that can grow to 70 metres in height and tiny rare orchids and many endangered animals such as the Western Swamp Turtle. At times during the year the Goldfields-Esperance region blooms with spectacular flowering species and endemic wildflowers, springing up across the woodlands, scrub heath and around areas cleared for agriculture and settlement.

The environment of the Goldfields-Esperance region is one of its greatest assets, offering great opportunities and requiring collaboration and thoughtful care to ensure generations of enjoyment and prosperity



Within the Goldfields-Esperance region are two nationally recognised biodiversity hotspots – the Central and Eastern Avon Wheatbelt hotspot and the Fitzgerald River Ravensthorpe hotspot. These connect with other biodiversity hotspots across southern Western Australia to form the larger South West biographic region. The Central and Eastern Avon area within the Goldfields-Esperance region contains the magnificent woodland areas known as the 'Great Western Woodlands' stretching from Ravensthorpe and Esperance, through the Shire of Dundas and throughout the Kalgoorlie-Boulder, Coolgardie and Menzies local government areas. Rare and unique vegetation within this area includes Wandoo, York Gum, Salmon Gum, Casuarina and areas of proteaceous scrub heaths. The woodlands also contain many of Western Australia's threatened plant's species and birds. The area is biologically rich in endemic plants including Grevilleas, Hakeas, Eucalypts, Acacias, Eriostemons and the Asteracea family and is home to many rare invertebrates such as ground-dwelling spiders.

The Fitzgerald Ravensthorpe biodiversity hotspot covers an area along the South Coast and encompasses the peaks of the Ravensthorpe Ranges as well as areas of coastal sand plain and offshore islands, important for unique Western Australian bird species like the Cape Barren Goose and rare mammals such as the Dibbler (*Parantechinus apicalis*) only found in the Fitzgerald Ravensthorpe hotspot and once thought to be extinct. The area includes land cleared for agriculture as well as expanses of coastal scrub and heathland vegetation.

Although a large area of biodiverse coastal, scrub heath and woodlands remains intact, much native vegetation has been cleared for agriculture and grazing and there are issues relating to the clearing of land including habitat fragmentation, salinity and soil erosion. Many wetlands, rivers and catchments are in poor condition. There are also threats to vegetation, animals and natural ecosystems from invasive weeds, fire and feral animals. Both the nation and international biodiversity listings can help draw attention to these issues.

The unique biodiversity and environmental assets of the Goldfields-Esperance offer the region a distinct selling point to a national and international visitor audience and an opportunity to diversify the economy with a range of new cultural, health, tourism science and environment based industries. The environmental values provide an opportunity to position the region on equal standing with areas such as Kakadu National Park and the Great Barrier Reef. The wilderness and natural areas that surround the regional centres of the Goldfields-Esperance region also provide a lifestyle 'point of difference' to increasingly populous metropolitan areas across Australia and the globe. They provide regional communities with the resources to secure a more sustainable future when natural resources in other areas are under threat.

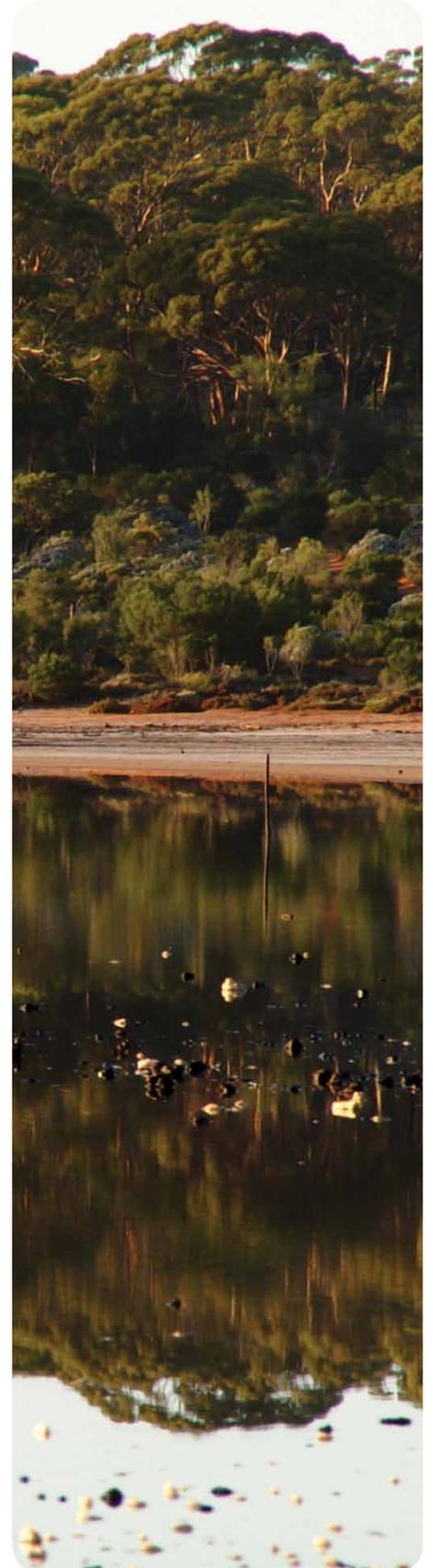


Key Regional Environmental Assets

The region contains a number of national parks and reserves and areas of conservation value. Here are a few of the many hundreds of uniquely Goldfields-Esperance environments, landscapes and ecosystems of unique conservation and recreational value within the region.

The Great Western Woodlands – the region is notably home to the magnificent Great Western Woodlands, an area of great biological richness that extends over 16 million hectares – about the same size as England²⁵. It is considered to be the largest remaining area of intact Mediterranean climate woodland in the world, supporting more than 3,000 flowering plant species, which represent over 20% of Australia's flora. The woodlands also contain around a third of Australia's iconic eucalypt species. The Great Western Woodlands is important for its environmental values as well as for the existing and potential economic opportunities it provides to the regional community and to the State of Western Australia. There is significant mining and exploration activity, active pastoral leases and harvesting of timber resources, the area is also a popular destination for recreation and tourism. There is great potential for increased Indigenous cultural tourism and land management embracing bush foods, ranger programs, medicine, arts and storytelling as well as increased adventure, nature and science based tourism. There is significant opportunity for regional communities to leverage marketing and branding campaigns around the unique and biodiverse flora and fauna to promote visitation and local events. Many scientific, nature and heritage organisations already work to advance the cultural and scientific research and knowledge about the Great Western Woodlands and there is significant capacity to increase the level of creative and knowledge-based industries within this area.

Land tenure within the Great Western Woodlands is predominantly Unallocated Crown Land, but also includes large areas of pastoral lease and conservation reserve. Such are the environmental, cultural and historical values of the Woodlands that its suitability to meet World Heritage Nomination criteria under the World Heritage Convention has been raised. A conservation listing that recognised the woodland's global biodiversity values whilst allowing current and future economic activity such as mining, pastoral and timber harvesting activity to grow, may help to foster greater global awareness of the region.



The Great Victoria Desert – this bioregion encompasses nearly half a million square kilometres of desert area characterised by dunes, Playa lakes (round hollows) and spinifex grasslands. The water holes are ephemeral, filling with water on a seasonal basis and providing habitat for migratory bird species. The desert bioregion includes a mix of Unallocated Crown Land, conservation reserve, a small number of pastoral leases and Aboriginal land with a number of small Aboriginal communities. The climate is arid with variable rainfall. Within the bioregion there is much biodiversity with many bird, reptile and mammal species, including some threatened species. There are many invasive species present including wild dogs, feral cats, camels, rabbits, foxes and goats. There has been some mining exploration activity in the area²⁶.



The Southern Ocean – the southern part of the Goldfields-Esperance region has a spectacular 1,000km coastline where the land meets the cold waters of the Southern Ocean. The coastline has many diverse landscapes and features, alternating between white sand beaches, granite headlands, coastal dunes, wetlands and inlets and the magnificent unbroken limestone cliffs of The Great Australian Bight – the Southern Hemisphere’s longest ice-free east-west stretch of continuous coastline. The Bight begins at Cape Paisley, east of the town of Esperance, and ends at Cape Carnot on the Eyre Peninsular in South Australia.

The ocean is abundant with marine life including invertebrates, seabird species and fish. Southern Right whales and colonies of Australia’s only endemic Australian sea lion population can be found in the waters along the coastline. The coastal corridor has many continuous and remnant areas of native vegetation and dune habitat providing protection for wildlife. The Recherche Archipelago is a group of 105 islands stretching 230km from east at Israelite Bay to west near Esperance and 50km (31 miles) offshore. The islands contain valuable habitat and form an extremely important marine and terrestrial environment. The coastline and its many landscapes provide recreational, cultural and economic value to the region along with significant conservation and biodiversity value.

Cape Le Grand National Park – located within 45 minutes of the town of Esperance, this National Park is home to Pygmy Possums, Western Grey Kangaroos and an abundance of rare wildflowers, flora and fauna. The coastline features many large rocky headlands and peaks, including Le Grand and Frenchman’s Peak, that contrast with long, white sand beaches and turquoise waters. There are many serene and pristine bays including Lucky Bay – rated one of the best beaches in Australia – and Rossiter Bay, a natural bird sanctuary²⁷.



Cape Arid National Park – located 125km east of Esperance, Cape Arid is known for its wilderness, rich biodiversity and isolated white sand beaches and rocky headlands, It is an important conservation area for over 1,100 species of plants and more than 160 bird species, several of which are threatened or endangered. One such species is the Western Ground Parrot of which there are only about 100 birds remaining. The landscape is characterised by dense coastal sandheaths, mallee and low rocky outcrops inland towards Mount Ragged, after which the vegetation changes to woodlands featuring saltbush and bluebush. The Russell Range, at its highest point of 600 metres, is comprised of ancient quartzite rock. The Thomas River area of Cape Arid is a popular spot for whale watching as Southern Right and Hump Back whales migrate through the Southern Ocean during winter and spring. There are also ruined homesteads from pioneer graziers who lived in this area during the late 1800s²⁸.

Nuytsland Nature Reserve and the Eucla National Park – together with Cape Arid National Park, the Nuytsland Nature Reserve and the Eucla National Park form an almost continuous nature conservation area from the east of Esperance across to the South Australian border. The Nuytsland Reserve is a long coastal strip including the spectacular towering 80km high cliffs of the Great Australian Bight that extend for 190km, as well as the long beaches, dunes and sandplains at Eyre and Israelite Bay. The reserve extends inland to include Cocklebidy Cave, the longest underwater cave on the Nullarbor. The reserve can only be accessed by experienced four wheel drive vehicles and makes for an excellent adventure tour through some of the most isolated areas of the southern coastline. The Eyre Bird observatory is also located here and is open to visitors or short term caretakers seeking an outback eco-adventure²⁹.



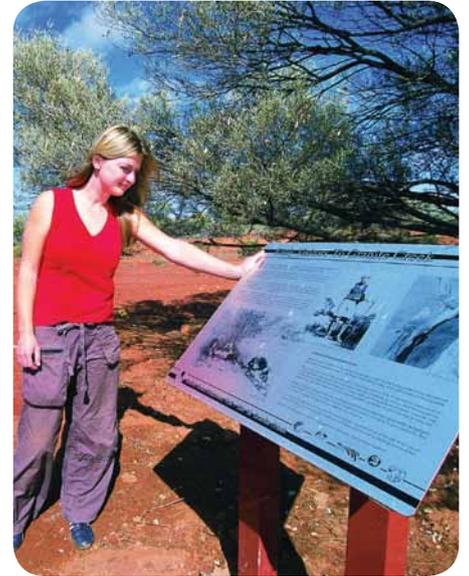
The Fitzgerald River Reserve – recognised and protected as an International Biosphere by the United Nations Educational, Scientific and Cultural Organisation (UNESCO), this park contains a spectacular array of flora and fauna and is one of the most botanically diverse and significant parks in Australia. Over 20% of Western Australia's flora species can be found within the Reserve boundaries. The landscapes are stunning with plains, peaks and inlets and the coastline shelters migratory Southern Right whales during the winter periods³⁰.

Lake Warden and Lake Gore – Lake Warden, near Esperance, and Lake Gore, west of Esperance, are internationally recognised and protected wetland systems listed under the Ramsar Convention. Both wetland areas are of international significance to birdlife. The Lake Warden system regularly supports up to 30,000 water birds in hydrologically complex wetlands of seven main lakes and over 90 smaller lakes situated behind beachfront dunes. Many of the resident bird species are migratory and are at increasing risk due to habitat loss and climatic change in other parts of Australia and around the globe. Lake Gore supports significant proportions of the global population of Hooded Plovers, Australian Shelducks and Banded Stilts. These lesser known wetland systems are as important in status as other more visited areas of Australia, like Kakadu³¹.



Lake Ballard – located near Menzies, Lake Ballard is recognised as a Wetland of National Significance and nominated for listing as a Ramsar Wetland of International Significance. Usually a waterless salt lake in one of the oldest parts of the surface of the Earth, it becomes home to tens of thousands of Banded Stilt wading birds that gather to breed following huge and infrequent rainfall events such as cyclones. Lake Ballard is famous for the iconic 'Inside Australia' artistic installation by Turner Prize-winning artist, Antony Gormley. The 51 metal figures sculpted from 3D laser scans of the inhabitants of Menzies form a magnificent cultural exhibition in Australia's largest outdoor gallery³².

The Adelong Dunes – these stable and well vegetated dunes are a unique feature of the desert bioregion found within the Shire of Menzies. The Adelong Dunes lie to the south of Adelong Station – a pastoral lease and sheep station west of the town of Menzies.



3.0

Regional Economic Profile

The Goldfields-Esperance region's economic strength and characteristics will underpin the future growth and development of the region. However, achieving substantial increases in regional prosperity and wellbeing will require building on what the region does well and diversifying the nature of the region's economy through the development of emerging and new industries. This task requires an understanding of the current regional economic advantages and strengths to leverage, and the challenges to overcome.

3.1 Economic Overview

A \$19 Billion Revenue Earning Economy

The Goldfields-Esperance region has played a significant role in the development of Western Australia and the nation for more than a century. To this day, the region continues to contribute significantly to the export income and taxation receipts of the State, and generates over 29,000 jobs in mining, manufacturing, agriculture, construction, transport, retail, education, health, community and administrative services, the emerging arts and creative industries, and other sectors.

With around \$9 billion in output per annum, the region's mineral deposits underpin much of the economy, with substantial amounts of gold and nickel extracted each year. The mining industry expands well beyond extraction, including exploration, processing, services, equipment development, education and research. The manufacturing and processing sector is the third largest outside the metropolitan area with an annual turnover of almost \$3.0 billion, largely due to the considerable mining activity within the region.

Agriculture makes up a smaller but nonetheless significant contribution to the economy of the region with agricultural production of \$646.2 million in 2012-13. There is also a significant service sector, including education and health, generating a notable percentage of employment. The region is home to the Western Australian School of Mines and Goldfields Institute of Technology, providing quality, targeted tertiary education and training. Other key industries include retail, tourism and visitation, construction and local businesses spanning technical and professional services, through to creative industries.

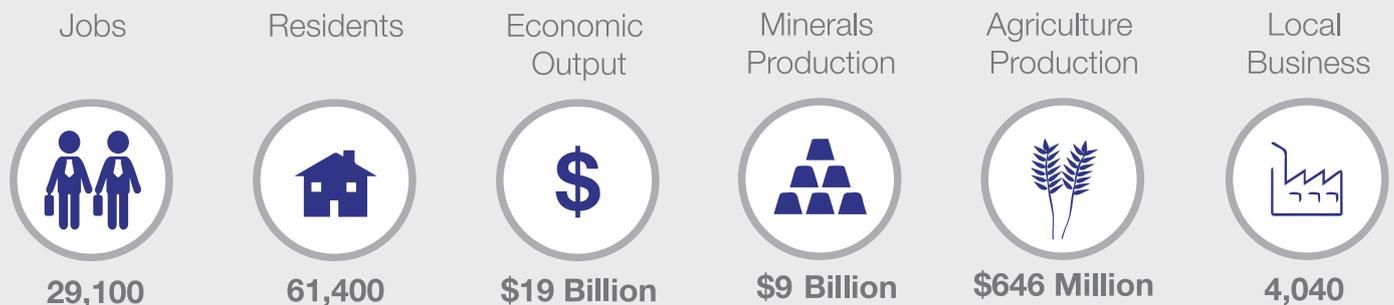


Figure 1 Economic Highlights, Goldfields-Esperance²

Economic capacity to grow the Goldfields-Esperance region exists through business opportunities allied to the comparative advantages of the exporting mining and agriculture sectors, and future-industries that service industrial and population potential. Economic diversification is a key strategy for the future of the Goldfields-Esperance region and this will require the development of new and latent industries, resulting in the creation of more employment and new occupation types.

Relying heavily on one industry to support an economy can heighten risk in terms of impact on communities and quality of life for residents if a downturn in that sector occurs and it is not managed well. For example, the impact of fluctuating prices can cause considerable impact on new investments and existing operations; this has been experienced in recent times as gold and nickel prices have declined.

According to the Hachman economic diversification index, which shows the levels of employment similarity between regions, the Shires of Coolgardie, Laverton and Leonora are considered to be most heavily reliant on one industry (Appendix 3).

The inland urban hub of Kalgoorlie-Boulder is notable for the level of diversification in recent times, characterised by increases in professional and personal service sectors, though it remains a mining



service hub and is therefore linked to the fortunes of employment in adjacent towns. Esperance is the only region with comparable levels of diversification across the nation. In addition to mining, the Shires of Esperance and Ravensthorpe benefit from the local agriculture sector which is relatively stable year-to-year despite varying rainfall patterns and commodity prices.

The employment and other economic impacts of mining in the region are not solely those that come directly from mine development and operation. Businesses that supply services to mining companies, including drilling, surveying, environmental management, construction, transport, human resources and training, are also vulnerable.

The lack of diversity is particularly challenging for more regional and remote communities, not only for employment but also local service provision.

The export potential of industries is also important since it increases the extent to which Goldfields-Esperance businesses (and thus residents) can benefit from economic growth outside the region. The top five industries in terms of export potential across Australia are: information media and telecommunications, mining, wholesale trade, manufacturing and professional services.

Within the region, there are limited media and telecommunications, wholesale trade and professional services businesses. However, there is considerable mining and mining-related manufacturing organisations servicing customers in the wider region and globe.

Initiatives aimed at expanding access to markets are required to assist local business to achieve diversification, and ultimately, resilience. This includes the physical infrastructure to connect business and residents to other regions, the services to encourage new businesses to develop and existing businesses to support local downstream opportunities.

Economic diversification is a key strategy for the future of the Goldfields-Esperance Region



Area of Focus	Indicator	GE	Nation	Scorecard
Regional Average Economic Fundamentals and Sustainability	Local Businesses	67.0	89.9	Poor
	Business Turnover	\$41,053	\$36,678	Good
	Long Term Unemployment	3.8%	4.0%	Good
	Youth Unemployment	9.3%	12.3%	Good
	Economic Diversification Rating	0.30	0.56	Poor
	Welfare Dependence	16.4%	23.1%	Good
	Senior Dependency Ratio	11.1%	21.2%	Good

Table 1 Regional Average Economic Fundamentals and Sustainability Scorecard

Scorecard Benchmarking:

The Scorecard approach uses a set of indicators that help determine the key strengths and challenges of the region for each of the core areas analysed. Regional average scores are presented in Chapters 3, 4 and 5. Scores for individual Shires are shown in Appendix 3. The methodology and sources of information for these indicators are also appended in the Blueprint. Using the traffic light system a 'Good' and 'Poor' for each indicator illustrates whether the regional indicator is greater than or less than the value for the national average. Some metrics may require further analysis or a substitute metric depending on application.

To assist the profiling of the Goldfields-Esperance economy, community and infrastructure capability, scorecard benchmarking is applied in Chapters 3, 4 and 5 of this document. Regional strengths and weaknesses are identified against national averages for economic, social and other factors relating to regional possibilities. Regional average scores are presented although scores for individual shires can be viewed in appendix three. These indicators are suggested as a benchmark for the future achievements allied to the regional Investment Blueprint outcomes.

3.2 Characteristics of Regional Trade

Trade is critical to job creation and economic growth. It helps define the skill requirements of the region, infrastructure needs such as transport, energy, water, waste management and market structures. Innovation and entrepreneurship, along with natural resources and historical behaviours, also have a role in strong trade, as do partnerships and availability of financial resources. Trade can be viewed by gross regional product, exports, imports, local purchasing and business structures.

The trading industries of the Goldfields-Esperance region reflect the regional strengths in mining and flow-on sectors, and the activity of other important business and community-building industries.

Gross Regional Product (GRP)

Gross Regional Product (GRP) shows the regional economy in terms of the net worth of its annual activities, and identify which industries contribute the most value. Since 2000-01 GRP has generally followed a growth pattern from around \$4.0 billion to a high of over \$10.0 billion in 2010-11.

The mining sector dominates GRP for the region as is reflected in Table 2 'Industry Share of Goldfields-Esperance GRP (estimated) 2012-2013'. However, of note is that the next five sectors — personal and other services, construction, transport and storage, agriculture, forestry and fishing, and manufacturing — share 23% of GRP value, reflecting some diversity across the region.



Industry Share of Goldfields-Esperance GRP (estimated) 2012-13

Mining	62.0%
Personal and Other Services	6.9%
Construction	6.0%
Transport and Storage	4.1%
Agriculture, Forestry and Fishing	3.6%
Manufacturing	2.5%
Health and Community Services	1.8%
Education	1.6%
Retail Trade	1.6%
Government Administration and Defence	1.5%
Wholesale Trade	1.4%
Administrative and Support Services	1.4%
Professional, Scientific and Technical Services	1.3%
Rental, Hiring and Real Estate Services	1.0%
Finance and Insurance	1.0%
Electricity, Gas and Water Supply	0.9%
Accommodation, Cafes and Restaurants	0.9%
Communication Services	0.4%
Cultural and Recreational Services	0.1%
	100.0%

Table 2 Industry Share of Goldfields-Esperance GRP (estimated) 2012-2013³⁴

Export, Import and Internal Trade

Regional trade includes goods and services that are exported from, and imported to, the Goldfields-Esperance region from anywhere in Western Australia, Australia or overseas.

Exports are indicators of what the region does well, what is sought by others and could be developed further with improved processes, management and workforce skills, infrastructure and market linkages.

Imports present opportunities to explore and assess potential for sourcing or developing import replacements from within the region.

In the Goldfields-Esperance region mining is the major exporter, followed by livestock, grains and other agriculture, construction and transport exports (Figure 8).

Livestock, grains and other agriculture product exports have the potential to be increased in line with increases in global food consumption.

Construction and transport industries play a critical role as enablers for community and industrial growth as well as contributing to regional exports.

Exported accommodation and food services are aligned to business and community demand around resources, but also contribute to economic diversification and community liveability.

Mining also dominates import activity in the region (55.2%) with metal and metal product manufacturing, basic chemical, cleaning and polymer manufacturing, technical equipment and appliance manufacturing, and exploration and mining support services forming part of the top eight imported sectors along with construction and transport.

The profile of the Goldfields-Esperance regional exports, import, and local purchasing within the region provides a base for the growth and diversification of economic activity.

Led by the mining sector, which has a comparative advantage in the region, leading export sectors have a strong association with the resources industry. They possess well-developed management, knowledge and skills, business and market structures. While vulnerable to the global demand and prices for resource products, there is potential to expand the efficiencies and export activity of these sectors.

Regional mining imports can include raw product for processing which is an employment and value-adding opportunity in the region. Other imports such as public administration and safety services are important to both the community and the economy. The demand for these imported services suggests that the relevant industries could be strengthened in the region

Further examination of the leading sectors in all categories of trade will identify opportunities to build on strengths and take advantage of opportunities



and provide greater employment and community benefit. This may require a changed approach by government for regional provision of services and improved liveability in the region, particularly in remote areas. Expansion of other sectors requires an improved understanding of their potential and capability for increased local delivery.

Local purchasing, or intra-regional trade, includes the goods and services that local organisations provide to one another as production inputs or consumables. Table 3 shows that mining is the lead local sales sector and also the lead purchaser of local content. Overall, eleven sectors are responsible for 88% of the local purchasing and this concentration of local purchasing can place the region at risk. When the lead purchasing sectors are threatened, industry activity including employment can diminish, particularly with the cyclical nature of the resources sector. Similarly, when the mining sector is performing well, pressure to grow capacity to meet demand is placed on local provider sectors. A better understanding and management of the features impacting on local sales and local purchasing will provide long-term benefit to the Goldfields-Esperance region. Further examination of the leading sectors in all categories of trade will identify opportunities to build on strengths and take advantage of the opportunities beyond the regional purchasing and sales behaviours.

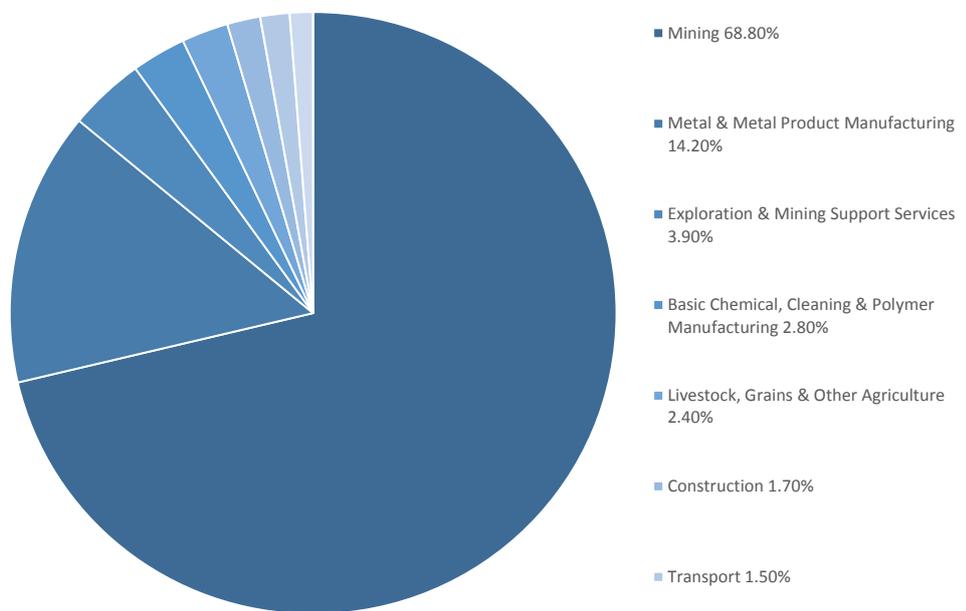


Figure 8 Regional Export Sectors by Percentage³⁵

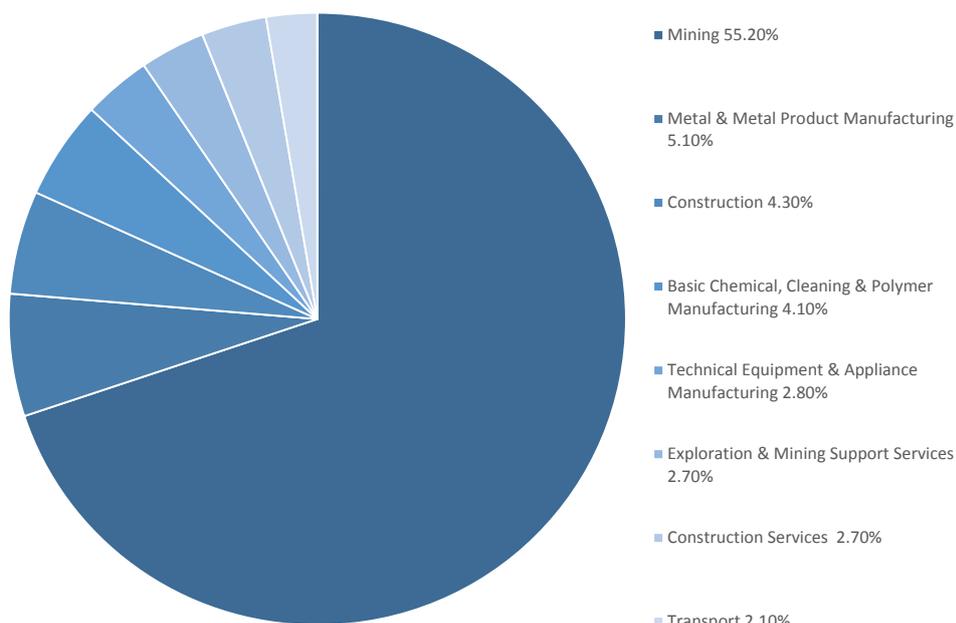


Figure 9 Regional Import Sectors by Percentage³⁶

A Dynamic Regional Business Community

The Goldfields-Esperance business sector is characterised as having a mixture of global and national organisations operating in the region complemented by a stable local business sector. There is a notable level of large businesses in the mining and mining support service sectors such as transport, manufacturing and construction, many of which service local and external clients.

Population-servicing industries such as health, education and training are also well represented as business partners. Most of the local businesses are sole traders or small businesses in the agriculture and construction sectors. There is also a healthy level of retail businesses in the main urban centres, as well as providers of personal and other services.

Opportunities to expand Indigenous business activity will continue as a growth area

Industry Sector	Local Expenditure		Local Sales	
	\$M	%	\$M	%
Mining	\$1,869.28	40.10%	\$1,126.05	24.20%
Metal & Metal Product Manufacturing	\$1,280.78	27.50%	\$343.49	7.40%
Construction	\$226.39	4.90%	\$114.25	2.50%
Construction Services	\$166.72	3.60%	\$374.93	8.00%
Exploration & Mining Support Services	\$107.80	2.30%	\$288.15	6.20%
Transport	\$94.10	2.00%	\$202.49	4.30%
Property Services	\$82.06	1.80%	\$100.65	2.20%
Basic Chemical, Cleaning & Polymer Manufacturing	\$77.40	1.70%	\$153.29	3.30%
Wholesale Trade	\$76.72	1.60%	\$179.83	3.90%
Public Administration, Regulatory Services, Order & Safety	\$65.90	1.40%	\$70.40	1.50%
Livestock, Grains & Other Agriculture	\$64.90	1.40%	\$36.14	0.80%
Professional, Scientific & Technical Services	\$50.47	1.10%	\$256.24	5.50%
Administrative & Support Services	\$38.67	0.80%	\$191.00	4.10%
Rental & Hiring Services (except real estate)	\$42.48	0.90%	\$160.17	3.40%
Financial & Insurance Services	\$26.89	0.60%	\$152.48	3.30%
Repair, Maintenance & Other Services	\$33.65	0.70%	\$145.62	3.10%
Technical Equipment & Appliance Manufacturing	\$22.30	0.50%	\$103.98	2.20%
Transport Support Services & Storage	\$37.10	0.80%	\$104.70	2.20%
Electricity	\$22.49	0.50%	\$103.79	2.20%

Table 3 Goldfields-Esperance Intra-Regional Trade³⁷

Overall, the Goldfields-Esperance region has the third highest number of businesses per capita across the nine regional WA areas. The region is also home to more than twice as many small businesses per capita than the Australian average.

Referring to Table 4, 'Business Counts by Industry and Employment', over half of businesses in the region are sole traders, followed by over a quarter of small businesses with one to four staff. This demonstrates a willingness for the business community to be entrepreneurial. It is also important to note that sole trader businesses account for around 13% of regional employment.

Local factors such as remoteness, access to infrastructure and to a reliable, skilled workforce and management expertise in cyclical economic times have a high impact on the costs and efficiencies of regional businesses. Despite these key challenges, the Goldfields-Esperance business community



Industry Sector	Sole Traders	1-4	5-19	20-199	Total
Agriculture, Forestry and Fishing	471	282	62	9	824
Construction	346	179	67	12	604
Rental, Hiring and Real Estate Services	320	44	24	9	397
Retail Trade	80	100	74	17	271
Transport, Postal and Warehousing	150	82	27	9	268
Other Services	89	105	51	11	256
Professional, Scientific and Technical Services	111	66	42	4	223
Financial and Insurance Services	185	31	3	0	219
Accommodation and Food Services	41	58	62	19	180
Mining	98	45	21	16	180
Manufacturing	44	51	25	6	126
Health Care and Social Assistance	49	30	31	6	116
Unknown	79	18	7	0	104
Administrative and Support Services	48	29	17	7	101
Wholesale Trade	32	24	19	6	81
Education and Training	22	15	6	3	46
Arts and Recreation Services	14	7	3	0	24
Electricity, Gas, Water and Waste Services	3	6	3	0	12
Public Administration and Safety	0	0	0	6	6
Information Media and Telecommunications	0	3	0	0	3
Total	2182	1175	544	140	4041

Table 4 Business Counts by Industry and Employment³⁸

appears to be relatively satisfied, according to results of a recent business survey conducted across regional Western Australia³⁹. The indicators covered in the survey revealed that the majority of business owners and managers recorded a much higher level of satisfaction than general regional residents. More specifically, they felt happier, more connected to their local communities, safer and more satisfied with their lifestyle.

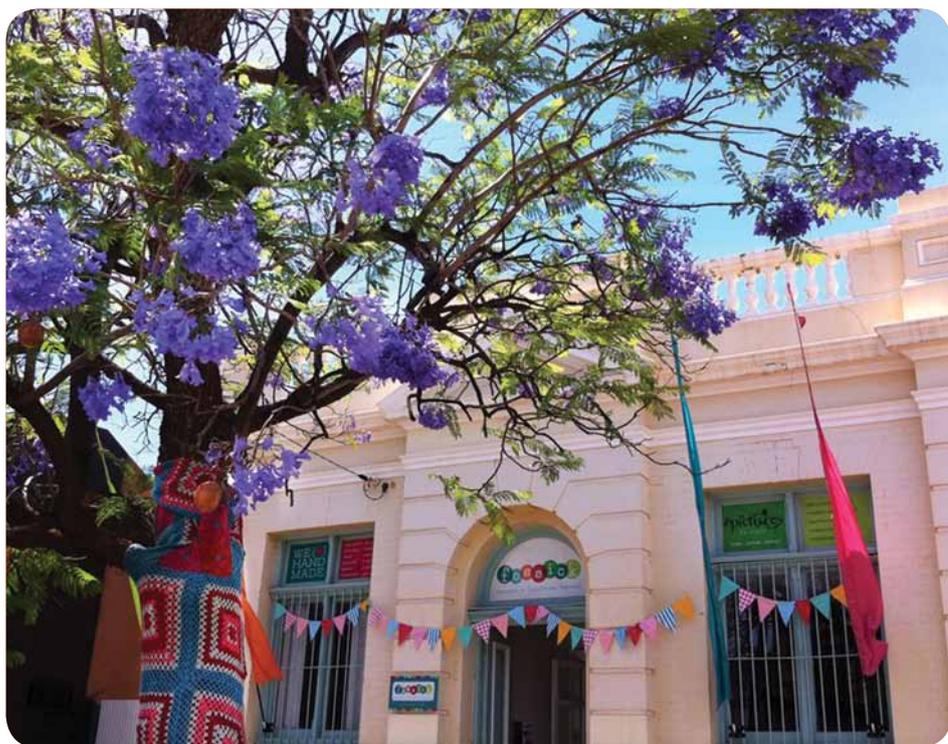
There is also evidence that Goldfields-Esperance businesses actively seek high-quality advice from a range of organisations to support their business. Thirty three per cent of businesses in the region sought advice from multiple sources (the highest of the Western Australian regions).

Nonetheless, business costs and access to skilled employees, as well as developed management expertise, remain key challenges across the entire business sector, in addition to industry-specific challenges.

Digital technology is expected to both challenge and provide opportunities to the sector through improved access to markets, allowing local businesses to be based in regional areas and still service markets and customers across the nation and the globe.

Opportunities to expand Indigenous business activity will continue as a growth area. Programs and initiatives to assist Indigenous business growth in the Goldfields-Esperance region are already established and include targeted improved early childhood education and Year 12 graduation rates, employment participation, business mentoring and financial assistance.

Challenges exist with low internet connectivity and low employment in technology-related industries and science and technology



Entrepreneurship and Innovation

The Goldfields-Esperance region is considered a significant generator of innovation. The region's mining sector in particular supports research and development in the region in both the private sector and through the Western Australian School of Mines. This is most notably reflected by the number of patents held within the City of Kalgoorlie-Boulder per capita compared to the nation, many of which are for drilling and exploration technologies. As shown in Table 5, these are far higher than the Australian average. Many of these mining support sector business innovators are also significant local employers who present resilience through their targeted customer solution focus, which helps to secure national and international clients.

The agricultural sector is also an important industry at the forefront of innovation in its field. Locally applied and developed research in land use management, first instigated in the 1960s, is well regarded across the globe. The sector also leads in the adoption of digital technologies to support operational productivity and quarantine, though there are significant impediments around access to reliable mobile communications. The Goldfields-Esperance region is challenged with low internet connectivity, and low employment in technology-related industries and science and technology.

Area of Focus	Indicator	GE	Nation	Scorecard
Regional Average Entrepreneurship and Innovation	New Business Start-Ups	10.1%	13.5%	Poor
	Non-Employing Microbusinesses	36.2	38.9	Average
	Income Source Own Business	\$30,953	\$23,453	Good
	Local Economic Development Support	7.1	1.65	Good
	Local Patenting Rating	0.07	0.01	Good
	Small Businesses	55.6	24.4	Good
	Human Resources in Science and Technology	11.1%	13.5%	Poor

Table 5 Regional Average Entrepreneurship and Innovation Scorecard^{41a}

Technology enhancing agricultural innovation

Region-based farmers are at the forefront of embracing new and emerging technologies and developing practical innovations to accelerate agricultural production and land management practices.

One local company, Precision Agronomics Australia (PAA), based in Esperance, offers a number of innovative services to the agricultural industry across Western Australia, including drone services to map vegetation, weed coverage and trial sites as well as data collection and processing services that can be used to identify and manage soil variability and improve productivity.



It is critical to continue to support innovation in the Goldfields-Esperance region. Innovation is a key ingredient in an economy's ability to increase the standard of living for a region's residents. Innovation can result in the introduction of new or better goods and services and is manifest in adopting new technologies and processes that increase productivity or lower costs. On a more macro-level, innovation is evident in an economy that is adaptable and that can readily move resources from lower value-added activities to higher value-added activities. Innovative economies improve economic wellbeing because residents earn more and have a higher standard of living.

In a recent study of innovation in regional areas, the most commonly identified critical factors for innovation include access to new technology, information and finance, the importance of strong business and political leadership, regional infrastructure (physical and virtual infrastructure) and access to skills and expertise. Meanwhile, common barriers to innovation include a lack of access to funding, cost, a shortage of skills, a lack of access to knowledge or technology, and government regulations and compliance. The most helpful mechanisms identified for supporting innovation included:

- Networking;
- State/Federal innovation initiatives;
- Innovation grants;
- Education and training schemes and support services; and
- Higher education/research and development (R&D) centre collaboration.



Figure 10 Living the Regions 2013 Business Survey⁴¹

The Goldfields-Esperance Region is considered a significant generator of innovation





Investment

Investment or expenditure in the Goldfields-Esperance region is generally private, community or government. REMPLAN⁴² shows estimated recent annual household expenditure at \$3.538 billion. This is expenditure on all items by households and leakages from the local economy may occur. Estimated government consumption was \$1.2 billion, not including purchases that are inputs for producing new assets. Combined private, public and gross fixed capital expenditure of \$1.920 billion was shown as the investment in non-producing tangible assets and improvements.

In the past the region had a level of autonomy and ability around project funding. More recently funding for resource-based projects is venture or equity capital raised outside the region. Funding and investment is changing: understanding and managing funding regionally and cross-regionally or even internationally will be important in the future.

Overall the region is a net exporter with exports significantly higher than regional imports.



3.3 Labour Market Features

Strong Labour Market

The labour market in the Goldfields-Esperance region has been one of the strongest in the country over the past decade (Figure 11), with the unemployment rate averaging 3.7% compared to 5.1% across the nation. Increasing commodity prices, which supported the expansion of production capacity, were the driver of strong labour market conditions.

Volatility in employment is however important to emphasise. For instance, the suspension of nickel operations at Ravensthorpe resulted in increased unemployment in 2009-10 although recommissioning commenced in 2011 and contributed to positive employment levels. Subsequently, declines in the price of nickel have resulted in increasing unemployment over the past 18 months. Given that volatile employment levels is an enduring feature of many of the region's communities, exploring possibilities for industry diversification has become important.

Employment is a key driver of migration decisions for many residents in Goldfields-Esperance region.

This point is illustrated by the recent Living in the Regions survey⁴³ which indicated that 63.8% of residents live in the region for employment opportunities and 40.6% rate employment opportunities as the most important reason for living in the region. Additionally, in 2011 the national census showed that 31.83% of arrivals in the Goldfields-Esperance region took place between 2005 and 2009 while for Western Australia this figure was only 22.39%, demonstrating the attractiveness of the region at the time.

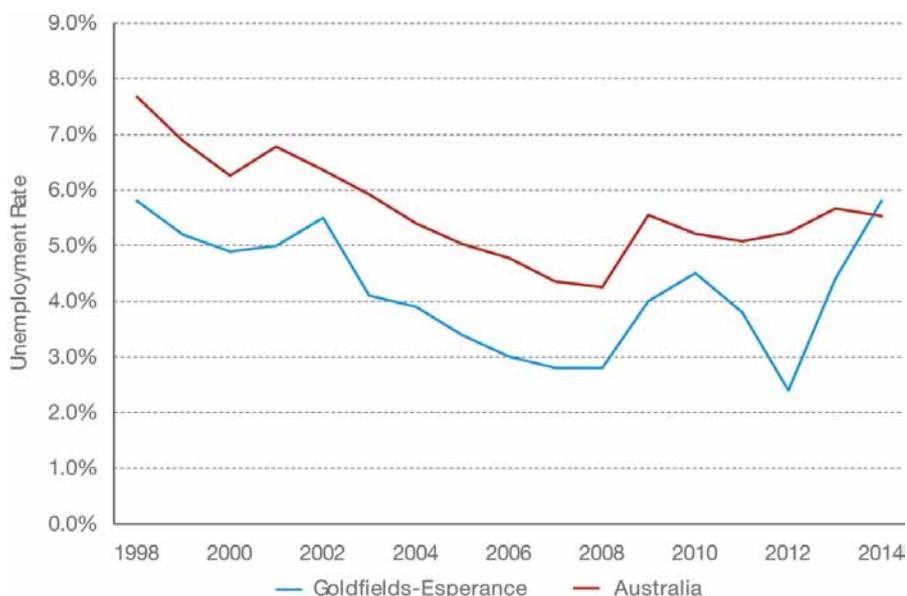


Figure 11 Unemployment Rate, Goldfields-Esperance and Australia⁴⁴

Jobs count!
63.83% of residents live in the region for employment opportunities

The Goldfields-Esperance region is generally characterised by high levels of workforce participation. High participation rates highlight the relative tightness of the labour market in recent years and hence the critical issue of attracting and retaining the required workforce for the region. Participation rates are particularly high in Ravensthorpe, Kalgoorlie-Boulder and Esperance, and lower in Menzies, Leonora, Laverton and Ngaanyatjarraku. Aboriginal participation in the regional workforce does vary across the region depending on access to education and economic or employment opportunities, and is also associated with a range of differing social and cultural situations.

Average wages in Goldfields-Esperance are 36% above the national average

Dual Wage Economy

Low unemployment has supported wage growth across the region in excess of national averages. The region's average wage of \$59,800 per annum in 2011 is the second highest in Western Australia – higher than Perth and well above the national average. High wages are associated with the health of the mining sectors, whilst lower wages are earned in sectors that support the liveability of the region such as health, education and retail.

Whilst high wages remain a considerable attractor for workforce migration inflows, they flow through to higher business costs and wage expectations in lower wage sectors. This results in higher costs of living and decreased employment and retention in lower wage sectors that are integral to servicing the communities' needs.

Of the population responding to the 2011 census around 20% earned less than \$400 a week, 6.5 % earned between \$400 and \$600 per week, and a further 6.0% received between \$600 and \$800 per week, showing that around 30% of the community were in this lower earning category. Conversely around 22% earned between \$1,250 and \$2,000 or more per week.

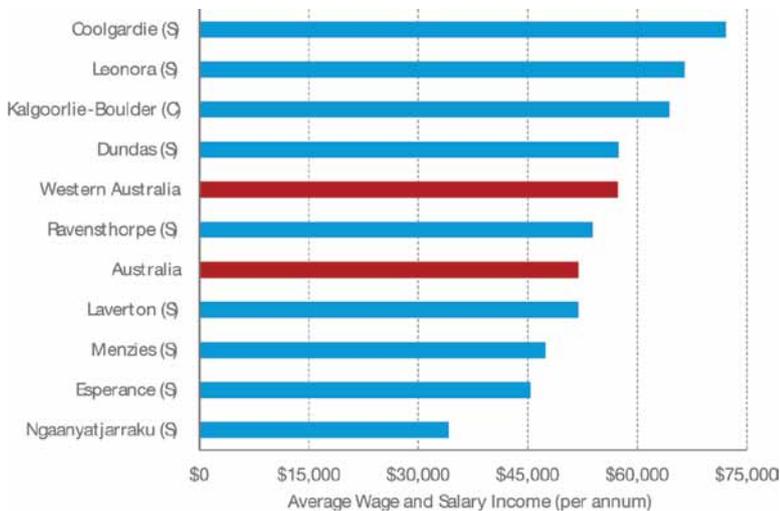


Figure 12 Wage and Salary Earner for Small Areas⁴⁵

Workforce Distribution

Of the 29,100 people employed to work in the region, as shown in the 2011 Census of Population and Housing, 23,800 were local residents, while approximately 5,300 respondents claimed to work within the Goldfields-Esperance region but resided elsewhere, predominantly Perth. There was also a notable proportion of residents, around 3,800 persons, who worked outside the region.

The substantial non-residential population hosted in the Goldfields-Esperance region is mainly comprised of industry fly-in fly-out (FIFO) workers. FIFO worker populations are prevalent across regional and mining communities around the world, however improved infrastructure has seen the number of FIFO workers increase significantly in recent decades. FIFO workforce needs vary across the region and include mining exploration, extraction, processing and services as well as logistics, construction, professional services and specialist health services.

The significant proportion of the FIFO worker population has been used to support project construction or contract-based workforce needs and therefore determining the level of FIFO population is difficult. Figure 13, however, provides a snapshot of the FIFO workforce in the region.

The majority of the FIFO workforce in the region was associated with jobs connected with mining operations within the Shire of Leonora, especially at Leinster. In addition to mining and construction, FIFO and drive-in drive-out (DIDO) are also associated with manufacturing, mainly metal and metal product manufacturing, and a range of service providers.

One in four FIFO workers would consider working in the region if required to live locally

Mining villages

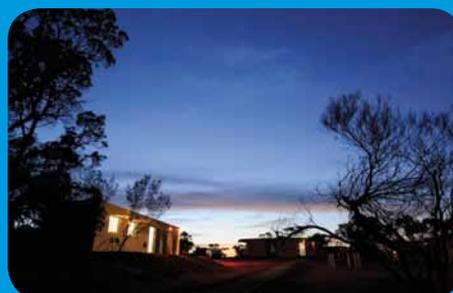
In the early mining days, workers living in camps often had a tent no more than 3 metres long on their claim. There were few places to buy food, fires could spread quickly and living conditions were unhygienic.

Now, life in mining villages such as the Granny Smith mining village in the Shire of Laverton and AngloGold Ashanti's Tropicana site (pictured below) include fully contained ensuite rooms. There are well-equipped facilities available to residents on site, such as a swimming pool, gym, multi-use sports courts and indoor recreational facilities.

Mining villages in the region remain remote, however the focus on health and recreation is a dramatic shift that has occurred in mining villages over the past decade, with programs and initiatives increasingly being put in place to manage injury, physical and mental wellbeing.

The Tropicana Gold Mine, which is owned by AngloGold Ashanti Ltd (70% and manager) and Independence Group (30%) through the Tropicana Joint Venture, is located 330km east-north-east of Kalgoorlie-Boulder. The miner poured its first gold in September 2013 after two and a half years of construction and eight years after the initial discovery.

The remote location of Tropicana necessitates a fly-in, fly-out operation with flights arranged to cater for employees and contractors based in both Kalgoorlie-Boulder and Perth. The site operates on a combination of 8:6 and 2:1 rosters and the site accommodation village accommodates up to 600 employees.



A study by the Chamber of Minerals and Energy⁴⁷ reveals that one in four FIFO workers would consider working in the region if required to live locally. This suggests that suitable arrangements could possibly attract one quarter of FIFO workers to regional lifestyles. The 75% of FIFO workers who would not continue in their role if they had to live regionally was attributed to family reasons and lack of infrastructure in the region⁴⁸.

However, a notable number of workers choose to reside in the Goldfields-Esperance region and travel to jobs across the State. As of 2011, approximately 3,900 workers residing in the region, predominantly in the Shire of Esperance and City of Kalgoorlie-Boulder, worked outside the Goldfields-Esperance region.

Many of these workers travelled to Perth and the Pilbara, but also across Australia and globally. Mining, construction and mining service sector jobs lead the areas of participation, but a significant number of professional and community service workers living in the region also find employment in Perth and elsewhere. For a region that is geographically removed from Perth, this is a substantial attribute and suggests that many residents are attracted to the region's amenity and lifestyle and will manage work commitments around this.

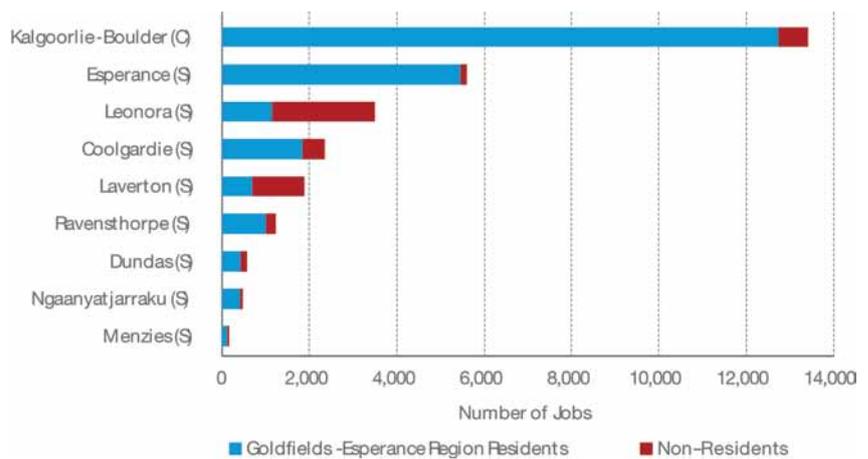


Figure 13 Indicative Resident and FIFO/DIDO Workforce, Goldfields-Esperance⁴⁶



3,900 residents travel to work outside the Goldfields-Esperance region

Demographic Dynamics

The nature of a workforce within strong mining and agricultural sectors has also resulted in unique gender and age dynamics in the region. Analysis of demographics shows a higher proportion of working age males than females in the region, which reflects the higher incidence of male workers in mining. While the sector's gender structure is changing, male resident workers are far more likely to be employed in the mining sector. This masks the differences between resident and non-resident FIFO populations in towns and communities, especially in the Northern Goldfields. Most residential populations have more balanced gender profiles. Females in the region, however, lead employment across a range of important community building sectors such as healthcare, education and retail.

The region's population is also generally much younger than the Western Australian average and the average age in regional areas around Australia. These dynamics are primarily due to the resources sector attracting a large number of working age persons and are also a reflection of the challenges associated with retaining elderly residents in inland communities.

In contrast, the southern communities of Ravensthorpe and Esperance have resident populations that are generally older, which is a reflection of the natural amenity and services these communities offer.

With high wages and employment opportunities attracting international and interstate migrants, especially to Kalgoorlie-Boulder, over 15% of the region's population comprised international migrants in the 2011 national census. The multicultural community comprises people who noted their ancestry predominantly as English, Irish, Scottish, German, Italian, Maori, South African and New Zealand. A growing number of migrants were also found to originate from Indonesia, India, Central Africa, China and South East Asia.

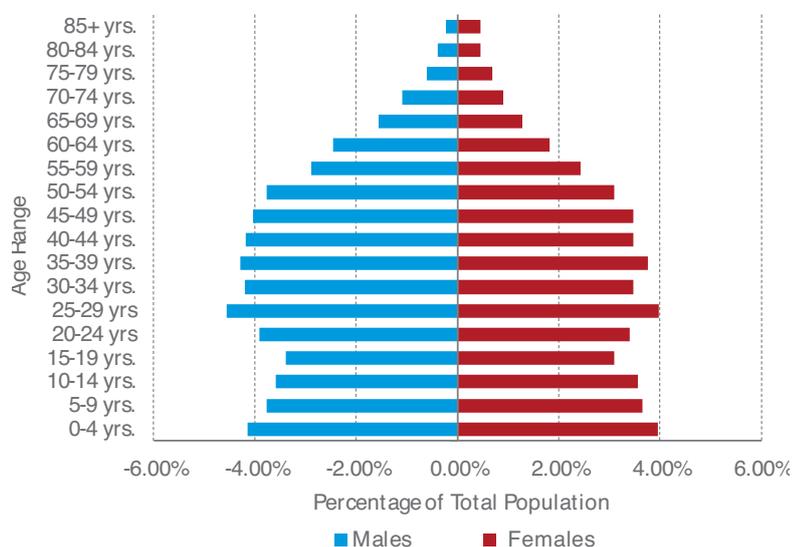


Figure 14 Age and Gender Profile, Goldfields-Esperance, 2011⁴⁹

Primary Industry Concentration

Employment is very concentrated on mining in the Goldfields communities, while it is more diversified in the Shires of Ravensthorpe, Esperance and the City of Kalgoorlie-Boulder. Employment shares (Figure 15) illustrates the industries that are prominent in the Goldfields-Esperance region. A value greater than 1 implies the Goldfields-Esperance region's workforce has a high representation and comparative advantage in that particular industry compared to WA as a whole, and vice versa. Mining, as the most significant employing industry, includes the sub-sectors of exploration, other support services and processing. Mining both within the region, and within the State as shown in Figure 15, offers the most significant regional comparative advantage. Agriculture, forestry and fishing offer further significant comparative advantages to the region, while transport, postal and warehousing, and accommodation and food services are also strong.

Table 6 provides a closer look at the top 10 industries of employment. Combined the mining sector and related construction and manufacturing sectors account for nearly one in five jobs in the region. The region also has significant employment across population servicing industries. In order for the region to continue to grow its population, it will need to further support the growth of these servicing industries across health, education, emergency and community services and public administration, as well as sectors that contribute to lifestyle such as arts, culture, sport and recreation.



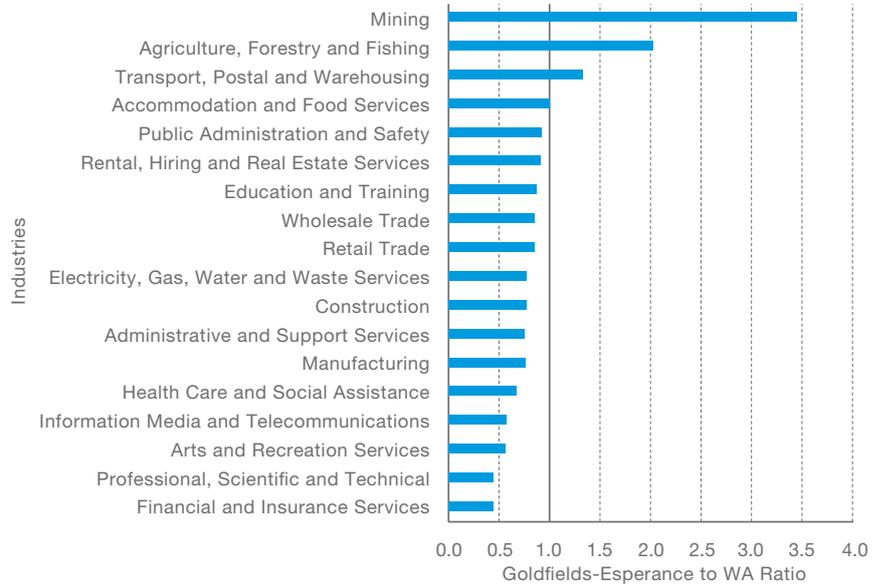


Figure 15 Employment Shares, Goldfields-Esperance, 2011⁵⁰

Industry	Jobs	Proportion of Regional Jobs	Industry as Proportion of Australian Jobs
Metal Ore Mining	4,166	14.8%	0.6%
Preschool and School Education	1,628	5.8%	5.0%
Construction Services	1,426	5.1%	4.7%
Agriculture	1,217	4.3%	2.2%
Exploration and Other Mining Support Services	1,198	4.3%	0.3%
Public Administration	1,118	4.0%	4.5%
Other Store-Based Retailing	1,099	3.9%	5.6%
Food and Beverage Services	1,043	3.7%	5.3%
Road Transport	992	3.5%	2.3%
Repair and Maintenance	982	3.5%	1.8%

Table 6 Jobs by Top Industries, Goldfields-Esperance⁵²

3.4 Industry Profile

A Globally Significant Mining Region

The mining sector is critical for the Goldfields. Gold and nickel mining operations define the Goldfields region and provide the foundation for many of its settlements. The exploration, extraction and processing of these resources through well-established supply links continue to underpin the prosperity of the region.

The contribution of the mining industry to the Goldfields-Esperance region eclipses that of all other industries. Mining accounted for over half of the combined economic output of all industries in the region during 2012-13 at just under \$10 billion⁵³. It is also a significant contributor to exports, representing three quarters of exports by value. Goldfields-Esperance is also the second most valuable mining region in Western Australia, with mineral production representing a notable 3.4% of the nation's merchandise exports⁵⁵.



Kalgoorlie Consolidated Gold Mines local benefits

KCGM produces around 700,000 ounces of gold each year and has a gold reserve of 6.965 million ounces. KCGM is a residential mine site with 1,100 employees and additional onsite contractors. In the past five years, KCGM has contributed more than \$2.3 billion in supply, payroll and sponsorship opportunities; 30% of KCGM suppliers are located in Kalgoorlie-Boulder.

KCGM is currently looking at processing gold until around 2029 while continuing to look for opportunities to extend mine life. Several projects identified include increasing the capacity of tailings storage facilities as well as upgrades at the Fimiston and Gidji Processing Plants to reduce air emissions.

KCGM supports local tourism with a free public lookout at the Super Pit and the reinvigoration of the Hannans North Tourist Mine. KCGM also supports the community by contributing \$3 million at \$1 million each to the Goldfields Arts Centre, Goldfields Oasis Sports Centre and Ray Finlayson Sporting Complex.

Mineral production is, however, inherently underpinned by global demand and commodity prices, which can be volatile. As such, the amount and value of mining activity in the Goldfields-Esperance region is prone to fluctuation. The flow-on benefits of mining are also significant. In 2012-13, mining and exploration and mining support services comprised local expenditure on intermediate goods and services of nearly \$2 billion⁵⁶. This supports a range of support sector companies and businesses which provide mine site operations and maintenance workers. Exploration, engineering, manufacturing and product suppliers are also key beneficiaries of healthy mining sector activity. There is also a considerable level of mineral processing within the region.



Mining represents more than half of the Goldfields-Esperance region's economic output, however it is inherently underpinned by global demand and commodity prices, which can be volatile

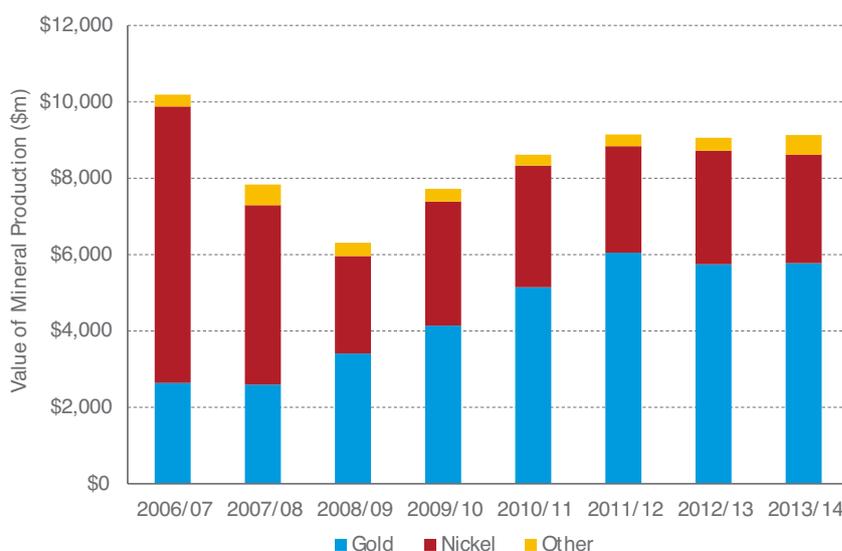


Figure 16 Value of Mineral Production, Goldfields-Esperance⁵⁴

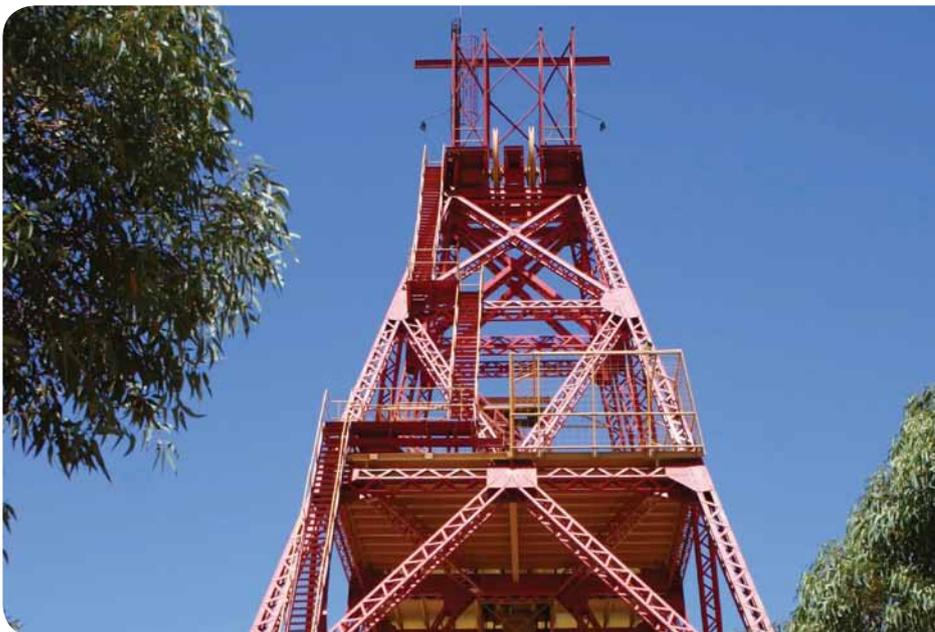
Gold

Ever since the discovery of gold in the late 19th century, the region has been synonymous with gold mining. Numerous discoveries have been made and operations established over the past 120 years. The production and export of gold has had significant flow on effects for the region, State and nation.

Over the past decade, a substantial increase in the price of gold contributed to increased exploration and production capacity, as well as increased exports. Although the gold price has declined from more than US\$1,800/oz in 2011, gold production was worth \$5.9 billion in 2014-15 due to increasing production volumes⁵⁸. This represented two thirds of Western Australia's gold production and 64.7% of the value of all mineral production in the region. The gold industry has also been assisted by the exchange rate in recent times.

There are a variety of large and small gold miners across the region, with two large local employers located close to Kalgoorlie-Boulder: Kalgoorlie Consolidated Gold Mines and Northern Star Resources. The Department of Mines and Petroleum collects mining employment data that informs Table 7. While this shows examples of larger gold operations located in the region and the approximate employment numbers, small-scale miners are a critical part of the region's heritage and economy.

Despite the volatility of the gold price⁵⁹, it is expected that gold mining will continue to be the foundation industry in the region in the medium and long term. The size of the resource endowment, coupled with the substantial supply chains developed in the region, means that the industry has developed some considerable price advantages.



Diggers and Dealers a Kalgoorlie institution

This leading annual conference combines presentations by listed mining and exploration companies with a large exhibition area housing exhibitors from the sector. The delegation is made up of mining and exploration companies, brokers, bankers, investors, financiers and mining service industries. A strong media contingent ensures that the proceedings of the forum are widely reported.

The conference originated over 20 years ago. Mining entrepreneur and former accountant, Geoff Stokes, had a concept where he envisaged the cream of the resources industry meeting in Kalgoorlie-Boulder annually to promote and discuss activities in which companies were involved. To quote his widow, Kate, "The idea was to create an environment where all players, from brokers to investors, miners, suppliers and professionals, could develop relationships, do deals and generally advance the opportunities and dreams that many in the resources sector have".

The first conference held in 1992 attracted 150 people, growing to 185 in 1993 and has now expanded to over 2,000 delegates annually.

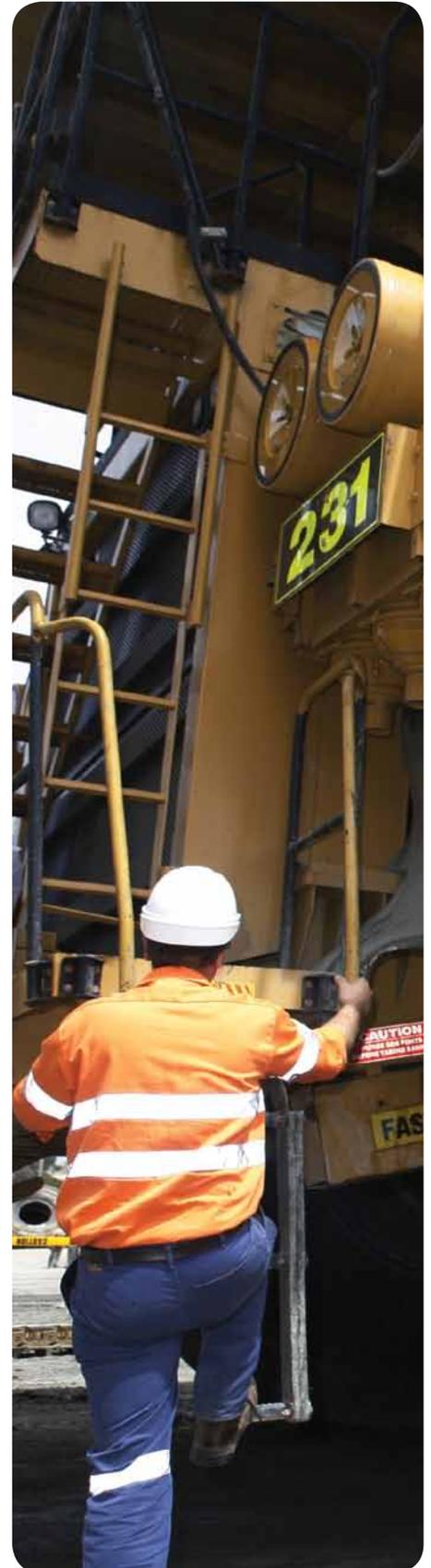
Mineral Company	Operating Site	Local Government Authority	Employment (2013/14)	Employment (2014/15)
Agnew Gold Mining Company Pty Ltd	Agnew	Shire of Leonora	542	676
St Barbara Ltd	Gwalia	Shire of Leonora	554	553
AngloGold Ashanti	Sunrise Dam	Shire of Laverton	880	783
GSM Mining Company	Granny Smith	Shire of Laverton	514	865
Kalgoorlie Consolidated Gold Mines Pty Ltd	Super Pit	City of Kalgoorlie-Boulder	1,774	1,100
Norton Gold Fields Ltd	Paddington Gold	City of Kalgoorlie-Boulder	700	766
AngloGold Ashanti Australia Limited	Tropicana Gold Mine	Shire of Menzies	445	456
Avoca	Higginsville	Shire of Coolgardie	507	444
St Ives Gold Mining Company Pty Limited	St Ives	Shire of Coolgardie	1,239	1,285
Regis Resources	Duketon, Garden Well, Vivien Gold Projects	Shire of Laverton	817	856
Northern Star Resources	Kalgoorlie Operations	City of Kalgoorlie-Boulder	175	526

Table 7 Large Gold Mining Operations, Goldfields-Esperance, 2013/14⁶⁰

The Department of Mines and Petroleum collects mining employment data from monthly accident reports, which are required to be submitted by all operating mines and companies carrying out exploration on mineral and mining leases under the Mines Safety and Inspection Act 1994.

The Resources Safety Division's AXTAT reporting system identifies the number of direct employees and contractors (including exploration personnel) working on operating mining leases.

In March 2008, legislation was introduced to capture data on exploration personnel working on greenfield sites. The employment data reported includes sites under State Agreement Acts. The data does not include personnel in administrative locations outside operating sites⁶¹.



Nickel

Nickel production began in the region in the late 1960s in Kambalda and Leinster. In 1969, the discovery of a rich nickel deposit at Windarra sent shares in the Poseidon mine soaring from \$1 to \$280 within a few months. This intense period of speculation, now known as the Poseidon Boom, helped establish Australia as a world leader in mining on the international stage⁶². Although prices have fluctuated notably in recent years, its value has been relatively stable over the past two decades. In 2014-15 production was valued at \$2.6 billion, representing 81.0% of the State's nickel sales⁶³.

Nickel production is more concentrated than gold mining operations and during 2014-15 production came from the following operations:

- BHP Billiton Nickel West;
- Mincor Operations Pty Limited;
- Western Areas NL operates the Forrestania complex;
- Murrin Murrin Operations, Murrin Murrin;
- Panoramic Resources owns and operates the Lanfranchi underground nickel sulphide mine;
- Independence Long Mine Pty Ltd nickel sulphide mine located at Kambalda; and
- First Quantum Minerals (Australia) Pty Limited with the Ravensthorpe Nickel Operations.

The economic nickel resources in the region consist of both sulphide and lateritic deposits. However, most production comes from nickel sulphide mines. The balance was sourced from the two laterite mines of Murrin Murrin and First Quantum Minerals' Ravensthorpe mine. The significant operation of Murrin Murrin employs in excess of 1,200 positions, mainly as a fly-in-flyout (FIFO) work force. Ravensthorpe is a dual residential and FIFO workforce of around 400 employees.

Large fluctuations in the price of nickel⁶⁴ have seen mines close and reopen on several occasions, impacting substantially on residential populations in mining communities. These closures also resulted in reduced private and public investment in the region and regional mining communities.

Demand and price activity for gold and nickel, and the impacts of resource development across social and economic aspects of the region are a key consideration when planning for Goldfields-Esperance 2050.

Continued investment in the resource sector, for exploration, management of approvals, interaction with the environment, investment in innovation, highly skilled and increasingly diversified resource opportunities, is essential for the region. Managing the cyclical impacts for the sector is important for employment and business security for the industry itself, as well as for support and flow-on sectors and the communities.

Additionally, the identification, development and maximising of opportunities for other industries, including those that have strengths through association with the resources sector, will diversify and give longevity to the regional economic base and an expanded quality of life for its communities. Sectors that have a potential for growth include the exploration and mining support services and equipment, closely allied with the resources sector.



Other Minerals

Aside from gold and nickel, the region has other notable minerals. Lynas Corporation's Mt Weld rare earths project, located 18km south-east of Laverton and commenced mining operations in 2007. The Mt Weld deposit comprises world-class rare earth oxide and niobium-tantalum deposits. Rare earth ore is mined, crushed and blended at Mt Weld and transported by truck to Fremantle in containers for export to Malaysia. Mt Weld, with its very high grade, contains light rare earth elements. It is also high in europium, a heavy rare earth element, and currently the only commercially viable resource of significant size outside China.

Further exploration around the region has also revealed new resource possibilities including iron ore and uranium. For example, the Wiluna uranium deposits – Lake Way and Centipede – are located 45km from Wiluna, on Martu country, and estimated to contain 11,000 tonnes of uranium. The economic extraction of these resources, is however, constrained by access to affordable freight infrastructure, high capital costs and fluctuating world prices, especially with current low demand.

It is uncertain when demand for uranium will increase but a number of uranium companies are currently pursuing community engagement and development activities to be ready for a change in the market. Australia has significant expertise in the uranium sphere, being the world's third largest producer of uranium after Kazakhstan and Canada. As of June 2012, Western Australia had known deposits of about 211,000 tonnes of uranium⁶⁵.

Exploration and mining support service companies in the Goldfields-Esperance region employ over 1,800 persons and produce an output of around \$744m p.a. regional exports over \$417m p.a.



Local providers for mining services

With a mining sector that represents over half the Goldfields-Esperance region's economy and around a quarter of its employment, the support industries that service this giant could easily be overlooked. However, there are numerous mining-related manufacturing, exploration and service businesses which are among the quiet achievers of the Goldfields-Esperance region.

Many local contractors are well established Aboriginal businesses including Bundarra Contracting which won the Kalgoorlie-Boulder Chamber of Commerce and Industry Aboriginal Business of the Year in 2014. Bundarra Contracting in the Northern Goldfields offers a variety of machinery-based services across five locations. Carey Mining, BYAC Contracting and Triodia Mining are other successful Aboriginal businesses working in the Northern Goldfields. The companies offer a variety of services between them including cross-cultural training, a light vehicle workshop, a wet mess (tavern) and retail services. Working closely with global operator AngloGold Ashanti has been a 'win-win' for all.

Other innovators like Kalgoorlie-Boulder based Newland Associates, Harlsan Industries and Wilmott Engineering have achieved highly competitive, national and global export markets for their manufactured and service-based offerings. From small beginnings these local organisations developed through energy, risk-taking and smart business practises. By committing to employing, training and growing a local workforce, companies like these also contribute to the community while ensuring a skilled and reliable employee base ready to meet the needs of the resources sector regionally and beyond.



Exploration and Mining Support Services

Normally shown as part of the mining sector, exploration and mining support services are valuable industries in the Goldfields-Esperance region. Exploration plays a key role in the economic productivity of the region. As with mining, small operators, explorers, prospectors and miners unlock smaller, riskier opportunities. They also help to develop the region's human capital and can be leaders in utilising and developing new technologies and practices. Exploration firms working for larger operations contribute to employment, innovation and regional output. Mining services companies provide haulage, processing, construction, maintenance, mining camp accommodation and a variety of services essential to mining operations.

Many exploration and mining support service companies located in the region service Western Australian and offshore projects. The sector employs over 1,800 persons and has an annual output of around \$744 million with regional exports of over \$417 million.

Expanded manufacturing capacity in the region is presenting opportunities to service the mining industry in other regions and overseas

Manufacturing

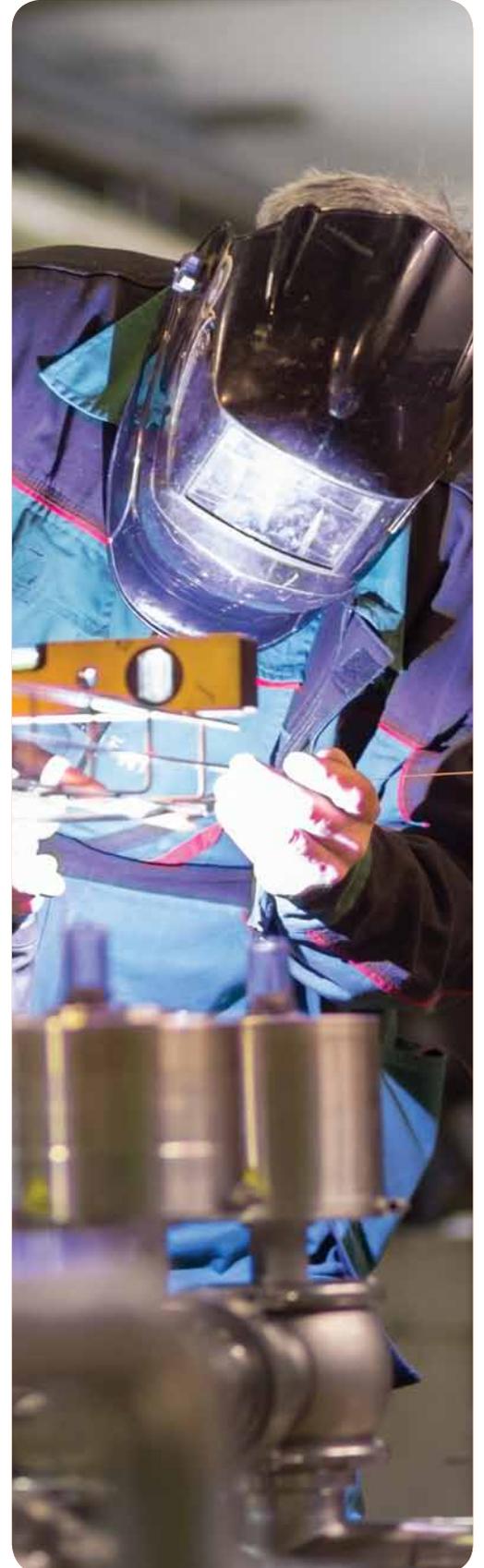
Manufacturing is an important and enduring economic sector in the Goldfields-Esperance region. This sector is the second largest economic contributor to the region after mining and the third biggest contributor to employment. In 2014-15, manufacturing related activity represented \$2.82 billion, or 15.1% of the region's economy⁶⁷.

Whilst the majority of manufacturing activity is related to metal manufacturing, other sectors such as basic chemical manufacturing and technical equipment and appliance manufacturing contribute to valuable regional outcomes and offer potential for growth.

Although a large proportion of this manufacturing is for the local market, expanded manufacturing capacity in the region is presenting opportunities to service the mining industry in other regions, such as the Mid West and Pilbara, as well as overseas markets. The sector is currently importing⁶⁸ around \$1 billion in inputs and exporting⁶⁹ \$1.9 billion. The opportunity exists to explore and create economies of scale to expand the domestic market, meet the challenges of high labour costs, inputs, and the distance to external markets, and continue innovation in production, management and global market building.

Overcoming these barriers will require a greater emphasis on technology adoption and market identification. The continued development of appropriately located and serviced industrial land will also be fundamental to the continued health of this sector as well as new manufacturing concepts focused on non-mining requirements.

Indications from successful exporting participants in this sector are that opportunities exist globally and that a willingness to innovate, adopt smart management and smart technology and processes, along with a local skilled workforce commitment, are key strategies. Working with support partners like AusIndustry Business Services and local business improvement providers has already proved very useful in the region.



SEPWA

connection to our agricultural future

SEPWA was commissioned by the Grains Research and Development Corporation (GRDC) to roll out technology and precision agriculture training to WA grain growers. Since early 2014, SEPWA has trained more than 330 farmers and industry professionals across the State. However, a continual theme raised by participants in technology training was that adoption of farm business technology is disadvantaged by slow, limited and expensive internet data connections.

SEPWA is working collaboratively with stakeholders to conduct on ground testing of a wireless data network concept that will be connected to the fibre-optic communication network. The data network will use wireless transmission technology to revolutionise data connection speed and coverage. Initial testing began in early 2015 in the Esperance region to investigate options available for data transmission at a farm level prior to installing a data transmission test service which will be tested for reach and reliability. The project is investigating the potential for an entirely new business model which will see farmers co-invest in their own local data network. Achieving reliable, fast and cost effective data access will significantly improve the take-up and use of emerging technology within the agricultural sector and drive entrepreneurship and opportunity for the future of farming in the region.



Agriculture, Rangelands and Fishing

The Goldfields-Esperance region has a rich history in agriculture and pastoral activities and a notable recreational and commercial fishing industry. Southern parts of the region, including the Shires of Esperance and Ravensthorpe, contain its most valuable agricultural and fishing areas and are where the region's cropping and intensive livestock production occur. Extensive livestock and pastoral activities are conducted throughout the remainder of the region. While not currently active, north-western neighbours such as Wiluna have also demonstrated success in horticulture and have large parcels of land available.

Agriculture and Rangeland Activities

In 2012-13 agriculture production for the Goldfields-Esperance region was estimated at \$646 million, accounting for 8% of the State's total agricultural value⁷⁰. The value of agriculture to the region on an annual basis therefore tends to vary as agricultural production is reliant on favourable weather conditions and its value is dependent on global commodity prices. Nonetheless, the sector is notably more stable than the mining sector.

Crops, particularly wheat, barley and canola, are the region's most valuable agricultural commodity, accounting for approximately 89% of the value of the region's total agricultural production in 2012-13. Livestock disposals and livestock products constitute other significant agricultural products from the region. Livestock disposals largely consist of cattle, sheep, pig and goat production, with wool being the most significant livestock product. Livestock is generally exported to South East Asian markets, namely Indonesia and Malaysia. Grains are exported to both the Middle East and South East Asia, with key wheat markets including Japan, Saudi Arabia and Indonesia.

Further, there is a notable food processing presence in the region which supports the agriculture industry. The vast majority of this relates to meat processing facilities in Esperance. Value-adding to crops and livestock exports is an important area of focus for the region, given food processing is an employment-intensive industry that supports a range of agricultural and professional services such as maintenance, technology development and marketing.

In the 1960s the previously underdeveloped agricultural sector in this area was transformed by the injection of millions of dollars by American investors who used the latest techniques involving the addition of trace elements to make the perceived poor soils of the Esperance plain suitable for clover-based grazing. Subsequently, increased grazing land became available and is used for planting cereal crops. This in itself has boosted grain exports from Esperance in recent decades.

The agriculture industry continues to be at the forefront of innovation in Australia and across the globe. Innovative techniques have focussed on reducing the encroachment of salinity and rehabilitation of salt-affected areas, as well as developing innovative technologies to manage agriculture output and productivity. As farms have grown in size and become more technologically dependent, the service sector to support these farms is expanding.

Value-adding to crops and livestock exports is an important area of focus for the region



Rangeland Reform Program

digital connection to our agricultural future

Recent reviews have revealed the challenges and opportunities for Western Australia's pastoral industry as well as a historical lack of government vision for the economic and social future of the rangelands.

In response, the State Government Rangelands Reform Program is a program of specific action developed to address these issues and to tackle ongoing challenges faced by the pastoral industries in the rangelands. Growth will primarily be driven through:

- Encouragement of new investment opportunities and land uses;
- Identification of measures to restore the rangelands' productive capacity and conservation values; and
- New forms of land tenure.

Rangelands Reform is being conducted in addition to the work being undertaken on pastoral lease renewals in 2015.

Opportunities to expand agriculture production in the region and improve productivity are constantly being explored. To further increase productivity, effort is being made to investigate more robust production systems and better decision-making tools for farmers. Traditional agricultural productivity within the region is potentially threatened by factors including weather variability, land degradation (especially salinisation) and the fragmentation of the rural land base.

The number of properties used for pastoral activities has decreased significantly over the years. A large number of properties are now leased by mining companies or Aboriginal interests. This has resulted in a land use change away from grazing on some pastoral leases. One area of difficulty that has arisen is the conflicting land use needs of the pastoral community and mining companies. Many areas allocated for mining exploration are quarantined from pastoral use despite exploration activities only impeding a portion of the land – and in some cases, not at all.

Additionally, pastoral operations within the Southern Rangelands are experiencing numerous challenges related to feral animals (the pastoral industry has been seriously affected by the increase in wild dogs population which has decimated sheep flocks and contributed to a move to cattle production), land degradation and other issues. As a result of these circumstances and depressed prices for pastoral products, the expansion of the industry may not be economically or structurally viable in its present form. Other income-producing activities are needed to sustain pastoral activity. Required diversification of the pastoral industry and development of other forms of agricultural activity are slowly emerging. Examples of diversification in the region include production of niche livestock (kangaroo, goats and camels), horticulture, forestry and timber, and tourism (Frazer Range, Gindalbie, Credo and Morapoi).



Fishing Activities

Commercial and recreational fishing in the region occurs along the coastlines of the Shires of Esperance and Ravensthorpe. Despite commercial fishing being a relatively minor industry in terms of employment at a regional level, it is important in the local coastal communities where it exists. Further, a number of associated locally based specialised and service industries generate employment in the region.

The major commercial fisheries of the South Coast Bioregion (as defined by the Department of Fisheries) include the abalone fishery, the purse seine fishery targeting pilchards, and a demersal gillnet fishery for sharks. Other smaller commercial fisheries are the long-standing beach seine fishery for Western Australian salmon and herring, a trap fishery targeting southern rock lobsters and deep-water crabs, and the intermittent scallop fishery.

With natural fish stocks depleting, aquaculture is an alternative for the future fishing industry along the coast and inland. Aquaculture development in the region is occurring at Wylie Bay east of Esperance, with 16,000 juvenile greenlip abalone housed in an artificial reef⁷³.

Further development of the aquaculture industry is planned by creating investor-ready aquaculture zones across the South Coast Bioregion including the South West, Great Southern and Goldfields-Esperance region. The South Coast Aquaculture Development Zone Proposal will seek to undertake all the relevant planning approvals to a stage where selected zones would be investment-ready.

Further development of the aquaculture industry is planned by creating investor-ready aquaculture zones

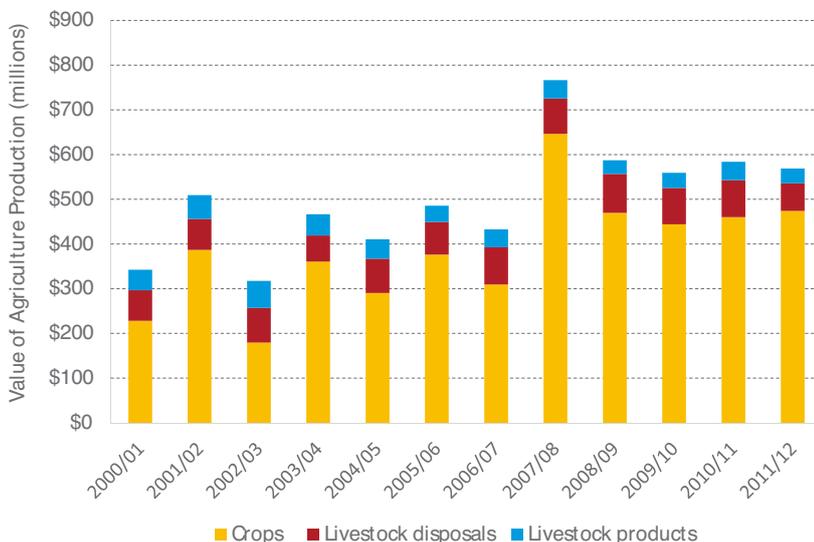
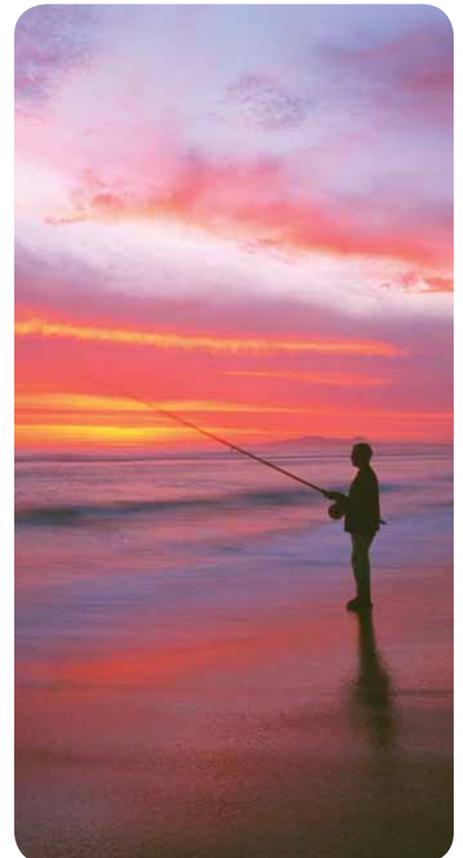


Figure 19 Value of Agriculture Production, Goldfields-Esperance⁷²

Construction

The construction sector is a significant source of job creation in the region. As a function of economic output, construction-related activities contribute slightly over \$1.3 billion or 7.2% to the economy's output⁷⁴ and employ over 2,000 people.

Nearly 65% of the region's activity in the construction industry is in construction services which largely operate out of Kalgoorlie-Boulder where around 54% of employment is concentrated. A core focus of construction services over the past decade has been in relation to non-residential construction to support mining expansions and associated industrial building construction.

However, the growing population in recent years has resulted in increased investment in housing, commercial and retail buildings and recreational and community facilities.

Recent notable projects have included:

- Kalgoorlie Courthouse;
- Eastern Goldfields Regional Prison redevelopment;
- Ray Finlayson Sports Complex development;
- Esperance Health Campus redevelopment;
- Kalgoorlie-Boulder Community High School redevelopment;
- Curtin University's Western Australian School of Mines Agricola College
- Esperance Primary School redevelopment;
- Esperance transport works and foreshore redevelopment; and
- Leonora Office and Administration Centre Project.

The contribution of the construction sector is heavily linked to the fortunes of the broader mining sector in the region. Therefore there are considerable swings in labour requirements which results in periods of high unemployment and increased use of FIFO employment to cover resource requirements. Construction providers based in the Goldfields-Esperance region also provide services outside the region. The latest information from the Australian Bureau of Statistics⁷⁵ shows the considerable non-residential building approvals over the 2013-14 and 2014-15 period, some of which are associated with the above projects. Residential approvals though much lower, have been more consistent.

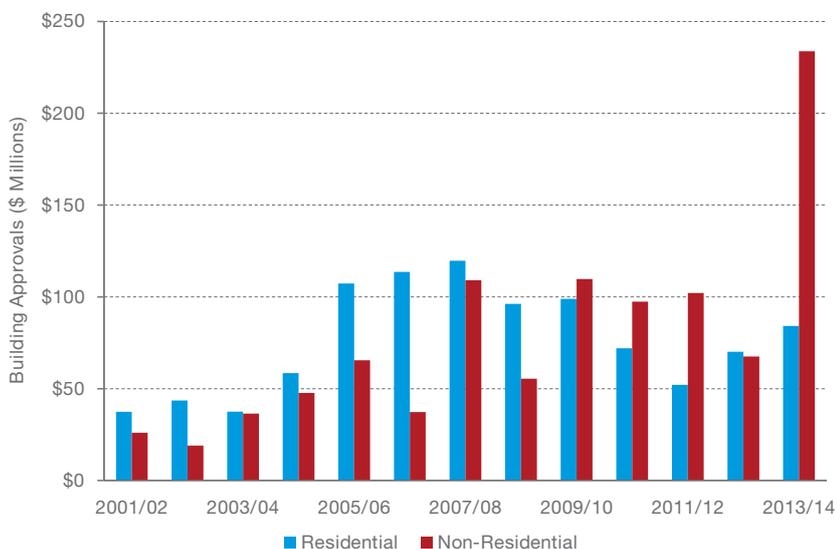


Figure 20 Value of Building Approvals, Goldfields-Esperance⁵⁴



Transport

Transport, like construction, is a regional building block. The geographic size of the Goldfields-Esperance region requires the movement of products, connection of communities and facilitation of visitation over large distances utilising road, rail, air and shipping infrastructure. As a direct contributor to the regional economy, it ranks fifth for output at \$644.31 million per annum and seventh for employment with over 1,500 employees.

Professional, Scientific and Technical Services

Across the Goldfields-Esperance region, professional, scientific and technical services represented 3.0% of employment compared to the national average of 7.5% in 2011⁷⁶. Approximately a quarter of professional services are engineers (24.4%), followed by legal and accounting services (24.0%) and scientific testing and analysis (21.3%). Approximately three-quarters of professional services jobs in the region are located in the City of Kalgoorlie-Boulder.

The performance of the Goldfields-Esperance region's major industries are allied to this sector, which provides the bulk of its services to the exploration and mining support services sector, followed by mining, construction, private investors, rental, hiring and real estate services. Over \$100 million of professional, scientific and technical services are currently imported to the region annually⁷⁷. With further business within itself, the professional, scientific and technical service sector could develop to meet import demand in the region and provide significant flow-on benefits to the communities.



Tourism and Visitation

The tourism sector is significant in the Goldfields-Esperance region yet accounts for a relatively modest proportion of the region's total economic output. The sector currently represents around \$300.8 million of the region's economy⁷⁹. Of the 29,100 people working in the Goldfields-Esperance region it is estimated that over 1,200 positions, or 4.2% of jobs, are supported by tourism.

Encompassing a large geographic area, rich in cultural heritage and also containing unique natural landscapes, including several national parks, the Goldfields-Esperance region contains a unique and diverse range of tourism attractions and destinations.

Leading tourism industry operators and experienced Western Australian intrastate, interstate and international travelers identify the most iconic holiday experiences available in Australia's Golden Outback region as being:

Historical discoveries – historical buildings, historic towns and sites, mining museums, mines and prospecting (key areas Kalgoorlie-Boulder, Coolgardie, Norseman, Menzies, Leonora and Laverton) offer opportunities to glimpse the past and experience self drive or accompanied tours through ghost towns and remote destinations, try a hand at prospecting or gold panning, or explore pastoral and anthropological histories, or the famous woodlines.

Trails – a variety of established and developing trails help visitors connect to heritage, culture, arts, mining, gem collecting, genealogy, nature and environment through places such as the ghost town of Kanowna, the Great Western Woodlands, Coolgardie 'Mother of the Goldfields', and more. The 965km Golden Quest Discovery Trail or the Golden Pipeline Heritage Trail are good places to start.

Goldfields-Esperance is rich in cultural heritage, natural landscapes and a diverse range of tourism attractions and destinations



Outback experiences – with vast clear skies and theatrical landscapes, camping under the stars, prospecting, fossicking and four wheel driving throughout the region and along such roads as the Gunbarrel Highway, the Outback Way and the sealed Eyre Highway across the Nullarbor is an adventure for everybody.

Beach/coastline and natural environmental wonders – relaxing or having a more active coastal holiday experience in a beautiful scenic environment (key areas Esperance, Hopetoun or anywhere along the southern coastal region) includes secluded beaches, bird watching and scenic drive routes, islands to explore, fishing, swimming, granite rocks and rugged coastlines.

Enjoy drives and exploration in national parks such as the renowned Great Western Woodlands, Cape Le Grand, Stokes and Fitzgerald National Parks as well as the desert experience and the great salt lakes. Closer to major centres, learn about the Great Western Woodlands in the 200 hectare Karkula Park adjacent to Kalgoorlie-Boulder.

Aboriginal experiences and cultural immersion – immersion in local Aboriginal lore, food and medicines dreamtime stories; arts and crafts galleries for viewing and purchasing Aboriginal art (key areas Kalgoorlie-Boulder, Northern Goldfields shires and Ngaanyatjarra Lands, but also the Shires of Dundas and Esperance) and cave paintings (key area the Ngaanyatjarra Lands) are ever popular and a truly unique experience.

Wildflower discoveries – wildflower holidays can be enjoyed at various times throughout the year and can include guided tours or self-drive trails and even wildflower farms. Ravensthorpe holds an annual wild flower festival.

Tourism is a key focus to diversify the region's economy



Outback Way

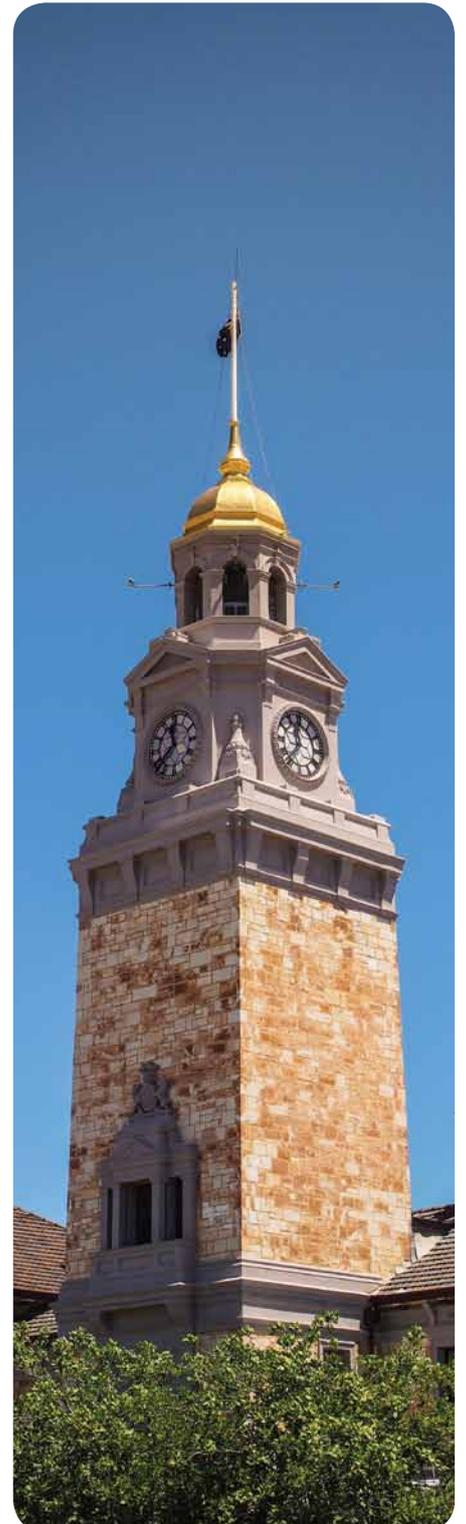
a national link through Australia's centre

The Outback Highway, also known as Outback Way, or Great Central Road, is the name for a series of roads and dirt tracks linking Winton, Queensland and Laverton, Western Australia. At over 2,800km, it crosses central Australia, passing through Queensland, the Northern Territory and Western Australia.

This route is used by tourists, mining and freight industries travelling through central Australia, saving two days travel from east to west. It figures as a key project in the Development of Northern Australia White Paper.

Apart from tourism, the development of the Outback Way will provide considerable benefits for the region. In particular, in conjunction with the significant mineral deposits of the Musgrave Ranges area of WA it has the potential to contribute to economic and social development in this remote area. In a significant move, the WA State Government is currently developing the Mid West Musgrave Corridor concept, linking the west Musgrave Ranges to Geraldton which would enable a number of social and economic opportunities.

The Outback Way has an existing significant role in enabling the provision of essential services, food, fuel, health and education to the Central Desert communities from Kalgoorlie-Boulder and Perth in the west and Alice Springs in the east.



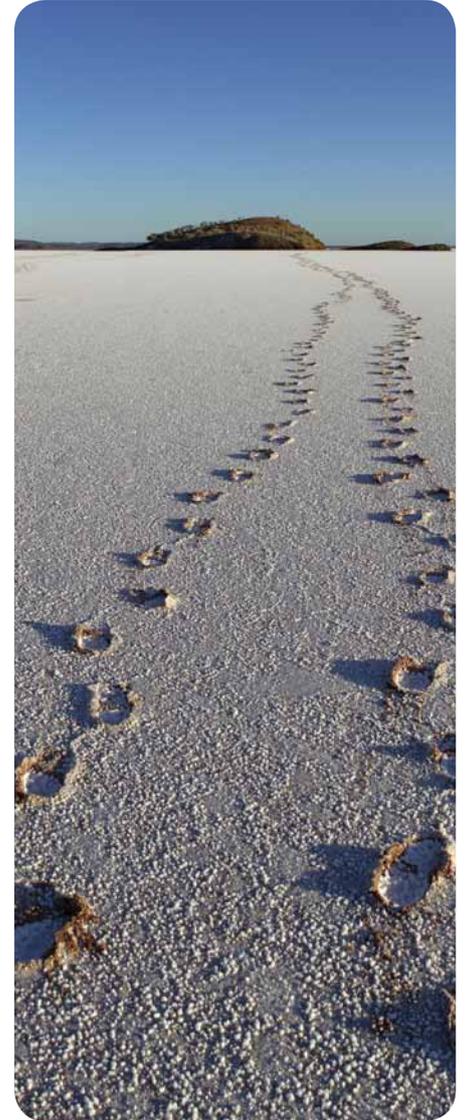
Sports and adventure tourism – the Goldfields-Esperance region offers many opportunities for athletic recreation, high adventure-low key facility experiences, along with quality sporting events to attend depending on the competition season.

Nature and science tourism – potential exists for structured field trips and events to learn about biodiversity, geology, geomorphology, Aboriginal knowledge, Western scientific research, astronomy and many other disciplines.

Local attractions – the Golden Mile Loophole Railway, Esperance 'Stonehenge', Laverton Great Beyond, Gwalia and Hoover House, the Eastern Goldfields Historical Society and a variety of museums including the WA Museum Goldfields, as well as some excellent sporting facilities, cultural and shopping opportunities are waiting to be enjoyed.

Australia's largest open cut mine, the Super Pit, is a major attraction in Kalgoorlie-Boulder, while Antony Gormley's renowned steel figures at Lake Ballard, near Menzies, continue to be a drawcard for the Northern Goldfields. Meanwhile, Esperance and the south-east coastal areas, are significant tourist destinations for intrastate, interstate and – to a less extent – international visitors. The region is also home to numerous long-standing events that attract visitors and locals alike, such as the Leonora Golden Gift, the Festival of the Wind and Blessing of the Fleet in Esperance, St Barbara's Parade in Kalgoorlie-Boulder and the Kalgoorlie-Boulder week-long Race Round racing carnival.

Tourism has been a key focus as part of a drive to diversify the region's economy. Recent developments include the waterfront development in Esperance, cultural and immersion experiences such as coastal eco-tours and the world's largest collection of community-controlled Aboriginal art emerging from the thriving arts industry in the Western Desert region. Upgrades to the Outback Way are enabling greater ease of access to tourism attractions and services in the region's north and through into the rest of the region.



The region experiences the majority of visitation for leisure (see Figure 21) while the business market is also strong. In 2014 Tourism WA estimated overnight stays in the region in excess of 2.6 million⁸⁰. International and domestic visitors had similar patterns of accommodation choice in hotels, caravan parks or camping grounds and friends and family. More males than females visited the region and the lead age group of visitors was 25-44 years, followed by the 45-64 year group. Around 25% of visitors were over 65 years of age.

There is an important opportunity for the region to capture a greater share of increasing tourism from international, interstate and intrastate markets in order to increase visitor volumes that have remained steady in recent years. Global population trends, increased international standards of living and wealth and pursuit of experiences will contribute to growth in the tourism market over the next 35 years.

Moreover, the predicted increase in cruise shipping activity in Western Australia over the coming decade presents opportunities to further diversify the tourism sector in the Goldfields-Esperance region in particular.

In order to facilitate these identified tourism opportunities, effort needs to be directed towards capturing a greater share of passing traffic with the provision of quality accommodation and services and the development of targeted tourism products aimed at key markets. A coordinated approach from key government and industry bodies is required to further explore and realise these opportunities. Furthermore, 'soft tourism infrastructure' elements need to be developed including marketing, branding, promotions and tourism networks. Cross- regional partnerships, advanced investment in product and physical infrastructure improvement, along with soft tourism infrastructure need to be developed.

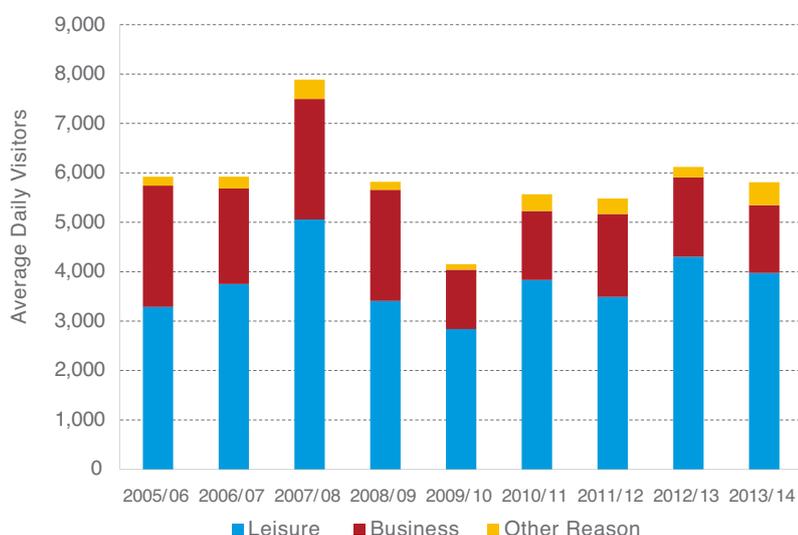


Figure 21 Average Daily Visitation, Goldfields-Esperance⁸¹



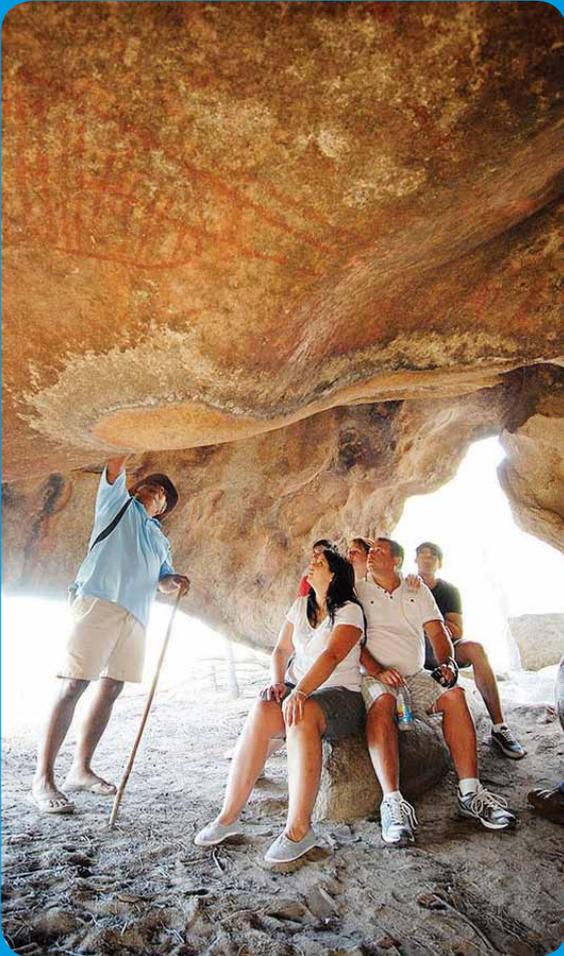
Aboriginal Art

world-renowned talents

The value and contribution of Aboriginal art to the region cannot be underestimated. The Goldfields-Esperance region, from the Southern Coast to the Ngaanyatjarra Lands, has a diverse and wide-ranging pool of talented Aboriginal artists.

Skills range from sculptures, carvings and glass work, to traditional and contemporary visual arts and weaving, natural dyed silk scarves and vast storytelling and musical talent. Many of these talented artists live in very remote Aboriginal communities in the Ngaanyatjarra Lands and the remote community of Tjuntjuntjara, as well as within urban centres across the region.

Many of Australia's leading Aboriginal artists are from the Western Desert region. Aboriginal art from the region is a contributor to the national and international success and profile of Aboriginal and Torres Strait Islander art in Australia featuring prominently in the commercial art market with works in exhibitions, museums and private collections around the globe.



Retail

Retail is an important sector in the Goldfields-Esperance region⁸² ranking second only to mining, employing 7.5% of the region's workforce and accounting for 1.8% of the economic output of \$336 million per annum.

Both Esperance and Kalgoorlie-Boulder have Chambers of Commerce and Industry, as well as regional business service providers to assist small and larger business.

A challenge to local retailers exists with the recent increase in online shopping⁸⁴. The Australian Government Communications and Media Authority suggests that 70% of internet users in remote Australia engage in this purchase behaviour.

Retail is considered important for the quality of life experience in regional communities where convenience, choice, quality and price is sought after. Remote areas of the Goldfields-Esperance region share a very small percentage of the retail sector and therefore have reduced purchasing opportunities.

Improved understanding of retail trends, competitors within and outside the retail sector, provision of high-level infrastructure to support digital retail and customer-provider freight systems, access to quality supply chains, and continually improving business practices and cost efficiencies are important for the future of retail in the region.



Creative Industries

Creative industries, like retail, are considered significant for quality of life experiences and important for the economy and culture. Typically, a collection of industries including music, performing arts, film, television and radio, advertising and marketing, software development and marketing, writing, publishing and print media, and architectural or visual design comprise this sector. In the Goldfields-Esperance region creative industries are considered as emerging, in line with a national interest in exploiting new digital infrastructure and developing human capabilities to think and innovate through education, training and creativity. Currently, industries comprising this sector in the Goldfields-Esperance region earn altogether almost \$90 million per year and employ almost 200 people in paid employment⁸⁵. Ng Media⁸⁶ in the Ngaanyatjarra Lands and the Tjuma Pulka⁸⁷ Media Aboriginal Corporation in Kalgoorlie-Boulder are examples of contemporary organisations in this sector.



Education, Training, Health and Other Services

Education, training, health and other services are vital for the functioning of a sustainable regional economy and community and are considered as industry skills and employment, and population-enablers. Yet they are also direct performers in their contribution to employment and output (demand for local goods and services). Education ranks 12th for output and health 13th at \$290⁸⁸ and \$278 million per annum respectively. In reverse order they are significant employers with health ranking fifth with just over 1900 positions and education with around 1890. These sectors both export⁸⁹ and import⁹⁰ goods and services, with education and training exporting around \$38 million per year and importing \$43 million. Health exports \$1.2 million but imports \$41 million. Both sectors could seek to increase exports and reduce imports and will have a strong role in the development of Goldfields-Esperance 2050.

Other services, which includes many of the not-for-profit sectors, made the second highest gross regional product contribution in 2012-2013⁹¹.

Education, training, health and other services are further explored in Chapter 4. Opportunities exist to improve services within the region for the benefit of skilling and caring for community, while building industry and expanding regional exports.

Retail Sub Sector	%
Clothing Retail	0.73%
Non-Store Retailing	0.69%
Other Store-Based Retailing	0.63%
Other Specialised Food Retailing	0.29%
Retail Commission-Based Buying and/or Selling	0.24%
Supermarket and Grocery Stores	0.23%
Fuel Retailing	0.22%
Retail Sub Total (all sectors)	5.46%
Regional Other Businesses	94.54%
	100.0%

Figure 22 Top Regional Retail Business by Type⁹²

Retail entrepreneurship creative showcase Fossick Handmade

In the few short years since its creation, Fossick Handmade has left an indelible mark on Kalgoorlie-Boulder. A boutique styled, art gallery and gift shop, Fossick Handmade has been supporting local Goldfields artists and emerging Australian designers as well as offering the locals and visitors a sophisticated shopping experience.

It has gallery space and supports local artists and exhibitions. It provides regular craft workshops, bringing the community together on projects such as the recent yarn bombing of an entire street where all the trees were decorated with multi-coloured knitting and crocheted patterns. Fossick Handmade played a significant role in the success of 2014 Regional Australia Arts Summit, coordinating the twilight markets, a first for the region.

It is owned and managed by two talented local women who collectively contribute their innovative ideas and skills to a unique retail experience for visitors and locals.

4.0

People, Community and Place Profile



People and communities are key enablers for regional growth and sustainability. A future Goldfields-Esperance region offering prosperous and exceptional lifestyle opportunities will be made possible by understanding the region's people and places, leveraging the strengths, addressing the challenges and exploring the many possibilities.

The Goldfields-Esperance region aspires to a future where people and communities are engaged, well cared for, educated, skilled, diverse, resilient and happy. Sustainable communities are inclusive, accessible, healthy and safe with access to a range of employment, housing, cultural, educational and recreational opportunities.

Sustainable communities are places where people want to live and work, now and into the future – a core aspiration for the Goldfields-Esperance region.

4.1 Workforce Development, Education and Training

Workforce Participation

Developing the skills, education and capabilities of the people of the region is a key input to economic activity and crucial to regional competitiveness, resilience and social and cultural sophistication. These skills include (and stimulate) creativity, innovation and entrepreneurship — key attributes for the future of the Goldfields-Esperance region and the development of new and diversified industries.

The development of the region's knowledge, capacity and skill set can provide a stimulus for substantial economic and socio-economic shifts. Conversely, a lack of access to appropriate skilled people can constrain the growth of local enterprises and discourage new business creation. The ability to provide a skilled and educated resident workforce, to drive an increasingly sophisticated and diverse economy, will depend on addressing challenges and enabling opportunities through workforce participation and skills, and through entrepreneurship and innovation.

Using scorecard benchmarking (Table 8) an average rating for the Goldfields-Esperance region is presented for key indicators related to Workforce Participation and Skills. Individual Local Government area information is shown in Appendix 3 and illustrates the variation of challenge and capacity across the region to achieve a skilled and educated workforce.

As the benchmarking in Table 8 indicates, the region is characterised by a high level of workforce participation, with relatively fewer disengaged or underemployed residents than the national average. A key contributing factor is the historically strong economic activity in the region which has encouraged employment migration as well as the tendency for recent migrants to leave the region once employment ceases. The demographics of the region also support a high participation rate, with fewer aged residents. The distance to education, and therefore access, demonstrates an underlying barrier to the share of cross-regional skilled workforce participation.

Rates of participation in the labour force amongst Aboriginal people in the Goldfields-Esperance region are less than for the non-Aboriginal population; however, participation rates vary across the region depending on a range of health, social, cultural and economic situations and access to education, training and employment opportunities. Just under half of Aboriginal people between 15 and 65 years old were engaged in the labour force, compared with approximately 80% of the non-Aboriginal population.

The ability to provide a skilled and educated resident workforce will enable an increasingly sophisticated and diverse economy

Aboriginal people within the labour force are employed in a range of industries including the construction, mining industry, creative industries, tourism, public administration and services. By addressing barriers there are many areas of opportunity to further expand employment options for Aboriginal people across the region, including in business enterprise, tourism and cultural sectors and creative industries. Increased and more equitable access to health and education services, together with greater opportunities for career development, would enhance the number of Aboriginal people in employment or business.

Area of Focus	Indicator	GE	Nation	Scorecard
Regional average workforce participation and skills, and education	Adult Participation Rate	76.2%	65.6%	Good
	Aboriginal Adult Participation Rate	42.6%	53.3%	Poor
	Early School Leavers	54.3%	46.1%	Poor
	University Qualified	10.4%	22.8%	Poor
	Technical Qualified	30.3%	31.6%	Average
	English Proficiency	88.8%	92.0%	Poor
	Youth Learning or Earning	97.6%	80.1%	Good
	Primary School Performance	44.9%	62.8%	Poor
	Secondary School Performance	24.5%	37.4%	Poor
	Distance to Primary Education Services	203km	24km	Poor
	Distance to Secondary Education Services	76km	23km	Poor
	Adults in Higher Education Learning	4.5%	21.5%	Poor

Table 8 Regional Average Workforce Participation and Skills Scorecard

Scorecard Benchmarking:

The Scorecard approach uses a set of indicators that help determine the key strengths and challenges of the region for each of the core areas analysed. Regional average scores are presented in Chapters 3, 4 and 5. Scores for individual Local Government Authorities are shown in Appendix 3. The methodology and sources of information for these indicators are also appended in the Blueprint. Using the traffic light system a 'Good' and 'Poor' for each indicator illustrates whether the regional indicator is greater than or less than the value for the national average. Some metrics may require further analysis or a substitute metric depending on application.

Female workforce participation is an important consideration in the region. The gap between the male and female participation rate is more than 20% in some local government authority areas. The availability of child care is a serious constraint in many communities, not simply in terms of attraction and retention, but also in preventing individuals from taking up work, thereby reducing the potential availability of labour. In more remote areas, the number of return-to-work roles in the retail, health, education and other sectors affects the participation rate. It is also important to recognise that women's lower participation in workforce may disguise the fact that many women carry out a significant amount of unpaid work, including volunteering and care work, that is vital to small communities.

Skills development and efficient use of those skills is an important area of focus within the Goldfields-Esperance region. The region's workforce requirements change rapidly during commodity cycles, which has implications for current and future businesses seeking staff. Increased diversification in the region and changes in business practices and associated technology will require a workforce which is innovative and responsive to these changing needs.

A large proportion of the workforce has technical qualifications, primarily concentrated at the Certificate III and IV level. In much of the region, the percentage of people with qualifications at this level is higher than for Western Australia as a whole. This is to be expected since this level of qualification is linked to the large number of people working in trades, technical and para-professional occupations.

The proportion of people with qualifications at the diploma, advanced diploma, bachelor and higher degree levels is lower than the State average. Outside Ravensthorpe, Esperance and Kalgoorlie-Boulder, the proportion of working age residents with these qualifications drops significantly.

To overcome skills challenges will require factors impacting on the level of training participation to be addressed, across all level of qualification, by those in the workforce and those yet to enter the workforce. Within small communities, this requires greater access to innovative teaching mediums and collaboration between education providers and private sector organisations.

There is a strong interest in improved delivery in the regions, resulting in greater educational participation by workers in the region, but more is needed. Pathway programs are also being supported to facilitate employment outcomes. For trade qualifications the capacity of employers to place trainees and apprentices is critical.

Embracing and supporting education, training and skills development as part of the region's cultural identity through homes, schools, training providers, employers and other stakeholders will result in a more engaged, educated and employable population.

Addressing barriers to Aboriginal workforce participation will improve the employment and business options for Aboriginal people across the region



Goldfields-Esperance Workforce Development Plan a collaborative effort

Workforce development has been identified as critical to the region's future and consequently a region-wide strategy to address the challenges and opportunities has been prepared.

The Goldfields-Esperance Workforce Development Plan 2013-2016 is an initiative to build, attract, and retain a skilled workforce to meet the economic needs of the Goldfields-Esperance region. The Department of Training and Workforce Development (DTWD) and the Goldfields-Esperance Workforce Development Alliance (GEWDA), which includes representation from industry groups, local governments and relevant government agencies, work together on a range of priority actions to address regional education, training and workforce development issues.

Regional issues identified in the plan include education participation, retention and achievement outcomes, the need for more education, training and employment pathways for students and mature age residents returning to work, and the need for a broader range of housing and childcare services to improve workforce attraction and participation.

Aboriginal participation and education is also emphasised in the Workforce Development Plan and is supported by Aboriginal workforce development strategies that increase the potential for Aboriginal people to participate in the economy, through the provision of equitable opportunities in education and training.

GEWDA and DTWD are working towards alignment with the Regional Investment Blueprint priorities to ensure that there is a continued collaborative, region-wide effort and commitment to understand and address workforce needs and development.



Western Australian School of Mines

here to stay

In a jacaranda-lined street, one block away from the famous Hannan Street in Kalgoorlie-Boulder, the Western Australian School of Mines (WASM) is testament to the region's rich mining history. With the difficulty of treating refractory ores and the prospect of underground mining becoming a reality, there was an urgent need for a facility to train and educate people in mining-related fields of study.

Initially set up at Coolgardie in a building erected for the International Mining and Industrial Exhibition of 1899, the school moved to Kalgoorlie in 1902. It was founded as a tertiary school specialising in subjects directly related to the Western Australian mining industry and was primarily funded from independent sources. In 1969 the Department of Mines transferred management of WASM to the Western Australian Institute of Technology (WAIT), which later became Curtin University.

The Western Australian School of Mines has earned a reputation for excellence in mining education, research and industry service, both locally and internationally. Graduates work all over the world and are highly regarded for their expertise and knowledge. WASM is one of only three national university schools that are endorsed by the Minerals Council of Australia as preferred national providers of mining engineering education through Mining Education Australia and of Minerals Tertiary Education through the Metallurgical Education Partnership (MEP).

WASM engineers have a place in global war history as tunnel experts in World War 1. Today, now part of Curtin University, WASM graduates are still highly sought after by industry and achieve higher starting salaries. WASM also has an exemplary research profile, attracting post-graduates from all over the world to provide local solutions to industry while completing qualifications and living in the region. WASM is currently expanding its facilities and student accommodation provision.



Education and Training

Access to education has improved over the past few decades with government school facilities generally located within the larger towns and communities in the Goldfields-Esperance region. Additionally, private schooling is available in some of the region's larger towns. Schools in all Goldfields-Esperance communities generally have some capacity to provide schooling up to Year 12, although within some schools Year 8 to Year 12 are delivered by the School of Isolated and Distance Education. The Kalgoorlie-Boulder based School of the Air also broadcasts to students in more remote areas such as pastoral stations and Eyre Highway roadhouse communities.

Whilst stakeholder feedback indicates that the standard of education is perceived to be at a reasonable level, standardised test results reveal that education outcomes are well below national averages (Table 8). This is reinforced by a view that education in the metropolitan area is of a higher quality than in Kalgoorlie, Boulder or Esperance. In more regional and remote areas, educational resources are limited; it is considered that the larger regional towns offer greater choice than smaller communities.

In order to improve education quality and access in regional areas, focus has historically been given to the quality of facilities and staff as well as broader strategies to improve student engagement and learning outcomes. Whilst this will remain a core focus going forward, improved digital technology is enabling new approaches such as greater collaboration between schools, staff and students and access to different learning methods. To take advantage of these advancements, schools require reliable and ongoing access to resources, including committed and skilled educators.

Overall, the rate of early school leavers is higher than the national average. Lower Year 12 completion rates are more prevalent outside the major centres where, generally, schooling is only available to Year 10 and the availability and access to quality education post-Year 10 is a challenge due to isolation and low population numbers in remote towns. Aboriginal residents are also less likely to have completed Year 12 than other residents, in part due to access – especially in the Ngaanyatjarra Lands – and in part due to barriers of disadvantage or complex social dynamics.

In the main population centres of Kalgoorlie-Boulder and Esperance higher levels of student aspiration and achievement are apparent. A recent study⁹³ showed that from 2011 through to 2014, 93% of students in the region who sought university entry received an offer compared to the State average of 87%. However, over half these students, 51%, deferred their studies. This figure, compared to the State historical average for deferment of around 20%, captures the difficulty for regional students to participate in tertiary education. With preferred courses predominately located outside the region, financial and lifestyle factors were the main influences on deferment and limited participation in further study.

Despite difficulties in converting student university entrance achievement into tertiary qualifications, Kalgoorlie-Boulder has a notable provision of targeted post-school education facilities. The Western Australian School of Mines (WASM), established at the turn of the century, is the primary provider of tertiary education in the region. The Goldfields Institute of Technology, with campuses in Kalgoorlie-Boulder and Esperance, also offers tertiary education through a range of vocational and training courses. Other training providers provide workforce development in the region.

While these providers are a very important resource for the region, there is a need to identify what strategies and initiatives can be implemented to further encourage and attain post-high school education and training.

A clear demand gap exists for the provision of tertiary courses across health, education, science, arts, and commerce in the Goldfields-Esperance



Increasing post-secondary study and training options as well as student support facilities and services would assist in retaining young people and increasing education attainment levels across the region.

The study also showed that a clear demand gap exists across the region for courses in health, education, science and technology, arts and commerce. The study found that potentially 150-200 full-time equivalent students could choose to study at local centres across the region. The demand for tertiary education is also evidenced by a strong mature market undertaking 'Open University' qualifications and increasing demand for Goldfields Institute of Technology Certificate IV and other courses. The same recent survey indicated that 61% of mature-age respondents would like to study at a tertiary level in the Goldfields-Esperance region. This presents opportunities for the expansion of local courses through existing or new campuses.

Education and training for professional and business development in new technologies, digital infrastructure and application, management and governance, and community 'whole of life' learning are also sought after in the Goldfields-Esperance region.



4.2 Health, Wellbeing and Security

Health and Community Services

Similar to the perception of education services in the Goldfields-Esperance region, perceptions around the quality and range of available health services have also been identified as a challenge to attracting and retaining people in the region. It is also an inhibitor to attracting and retaining resident senior populations.

The region has complex health needs with generally poorer mental and physical health compared to Australian averages (see Table 9), and this is more prevalent in more remote areas with fewer services (Appendix 3).

Kalgoorlie Hospital is the major regional hospital facility in the Goldfields-Esperance region. The hospital is a 131-bed inpatient facility, making it the largest regional public hospital in Western Australia. The hospital maintains a range of higher order capabilities and services including a mental health inpatient unit, special care unit, dialysis unit, restorative care, maternity, disability services, Aboriginal health and radiography.

Esperance Hospital is a district hospital offering a relatively diverse range of services and facilities.

Western Desert Kidney Project health services in remote communities

The Western Desert Kidney Health Project, conducted in the Western Desert region over a three year period, consisted of a multidisciplinary team of Aboriginal health, medical and community development workers and artists. Its aim was to reduce the prevalence of kidney disease and diabetes by 20% in 10 Aboriginal communities representing six language groups. The project covered an area about the size of Victoria, populated by almost 4,000 people whose expected life-span was 17 years less than that of non-Aboriginal people. Contributing factors in this reduced life expectancy are kidney disease and diabetes.

The project's Chief Investigator was respected senior Wongutha woman Annette Stokes of the Kalgoorlie-based Rural Clinical School of Western Australia. "One of the communities the project visited was 700km out in the desert, one of Australia's most isolated communities," Ms Stokes said.

Two six-tonne 'healthy lifestyle' four wheel drive trucks were used to transport the project team. One was a mobile clinic for early detection of disease and chronic disease management, health promotion and evaluation. The other truck transported artists and healthy lifestyle workers who educated the community members about kidney health.

Over the life of the project, which finished early in 2014, the team conducted close to 1,500 health assessments, detecting over 40% of people with signs of early kidney disease. At least 50% of people screened were overweight or showed signs of nutrition-related diseases.

Close to 1,400 people actively participated in arts activities and 2,500 people attended events associated with the project. The Western Desert Kidney Health Project has become an arts in health ambassador for the region, winning national awards.



Shared Health and Social Services Hub Leonora, Northern Goldfields

The Northern Goldfields Regional Office and Administration Centre Project is a hallmark of collaboration between State and Local Government. Its purpose is to ensure access to critical health and social services in the Northern Goldfields sub-region and to create the opportunity to develop and grow services in a multi-purpose, co-located hub in an isolated part of the region.

In the past, delivery of services to the Northern Goldfields has been hampered by the lack of suitable office accommodation. Visiting service providers have few, if any, options for the delivery of services in a professional, ethical and confidential environment.

The development of the Northern Goldfields Regional Office and Administration Centre will provide quality office accommodation for delivery of visiting services and will house permanent, locally based services. It will also encourage agencies to expand their services into the Northern Goldfields communities and to permanently locate staff in the region, ensuring this regional hub continues to grow and thrive into the future.

This building, scheduled for completion in late 2016, will further provide a 'fit for purpose' facility for the expansion of essential government services such as child protection and family services. It will also house the relocated Leonora Community Resource Centre, managed by the Shire of Leonora, and enable it to expand its services. The hub will contribute to the sustainability of the Northern Goldfields communities by ensuring delivery of, and access to, ongoing health and social services in a suitable environment.



Several smaller district hospitals are located throughout the Goldfields-Esperance region, providing a range of health services to more localised populations. Recently-announced funding has been granted for a new health campus in Laverton after years of community advocating. In addition, nursing posts operate at a number of other locations.

Importantly, many services provided in regional areas are supported by local government authorities. Local Government Discretionary Expenditure per head of population (Table 9), while shown as 'good' against national averages, reflects the portion of funds required to support the communities that may be quite remote and otherwise under-resourced. This includes funding for roads and other infrastructure or services which are essential to providing health and wellbeing to a community.

Hospital services are complemented by community and allied health services which are under-provided compared to Australian averages.

Disability care availability is limited in small communities, however the National Disability Insurance Scheme is expected to treble the government funding available to provide services to help people who have a significant and permanent disability and who need assistance with everyday activities. A key barrier to service provision is isolation, impacting on the viability and availability of specialists within remote communities.

The Royal Flying Doctor Service (RFDS) is of significant importance to the Goldfields-Esperance region due to the vast distances between facilities. Within the region, the RFDS has aircraft, medical infrastructure and staff permanently based at Kalgoorlie-Boulder Airport.

In addition to the mainstream health services available, the Bega Gambirringu Health Service Aboriginal Corporation in Kalgoorlie-Boulder offers a range of health and medical services to the region's Aboriginal people.

Area of Focus	Indicator	GE	Nation	Scorecard
Regional average health and community services access	Major Services Presence Rating	25.0	9.3	Good
	Allied Health Services Employment	6.6%	11.0%	Poor
	GP Services Per Capita	3.3	5.4	Poor
	Adult Health Risks	59.4%	55.5%	Poor
	Developmentally Vulnerable Children	21.1%	24.3%	Good
	Local Government Discretionary Expenditure	\$1,133	\$616	Good

Table 9 Regional Average Health and Community Services Access Scorecard



The Department of Health has commenced the Southern Inland Health Initiative to dramatically improve medical resources and 24-hour emergency coverage within the Southern Inland catchment area, which includes areas within the Goldfields-Esperance region. This regional initiative is funded by Royalties for Regions and includes six streams:

- District Medical Workforce Investment Program;
- District Hospital and Health Services Investment Program;
- Primary Health Care Demonstration Program;
- Tele-health Investment;
- Residential Aged Care and Dementia Investment Program; and
- Small Hospital and Nursing Post Refurbishment Program.

A variety of private health providers work across the region as general practitioners (GPs) and in services such as pathology, podiatry, chiropractic, physiotherapy, optometry, dentistry, pharmacy and others. Many GPs specialise in health areas to assist their clients who would otherwise be required to travel to a major metropolitan area for treatment.

A wide range of other regional community services is delivered by government and the not-for-profit sector in the Goldfields-Esperance region. A deeper understanding of the needs and gaps in services provided by the sector is required, but generally this group fills a fundamental role in providing quality of life services and activities to communities that would otherwise not be accessible.

This sector includes services for children and youth, older community members, mental health, disability, drug and alcohol programs, domestic violence, general and life-threatening or challenging health issues, as well as other services, including those designed specifically for the socioeconomically disadvantaged.

There is a level of vulnerability in the region in the area of community services as funding is primarily accessed by government grants or programs, as is the physical resourcing for positions. Remote communities are particularly exposed with fewer services and facilities, short-term programs and underfunding. High turnover of staff is often associated with the heavy workload and other difficulties to service a large region, or through regulations, policy and funding uncertainty or irregularity. Other organisations such as local government authorities, together with fund-raising efforts, sponsorship and charities, are frequently relied upon to maintain some services. It is evident in the Goldfields-Esperance region that these services must be directly managed within the region and available to appropriate standards across all sub-regions.

The provision of police, justice and emergency infrastructure and services makes a vital contribution to the security, functionality and liveability of a regional community

Ensuring appropriate community sporting, artistic, cultural and recreational facilities and programs are available enhances regional attractiveness and liveability

Police, Justice and Emergency Services

The provision of police, justice and emergency services and infrastructure makes a significant contribution to the security, functionality and liveability of a local community. Services are not only essential to every community but, in such a large region as Goldfields-Esperance, they are challenged to maintain an ongoing delivery of service across the huge land mass. Staffing levels, retention of high-standard personnel, improved facilities, mobility of on-ground services and premium communications are important to the provision of service.

In 2013, 47 people were killed or seriously injured due to single and multiple vehicle incidents in the Goldfields-Esperance region. A total of 855 people were killed or seriously injured over the past 10 years (2004-2013)⁹⁴.

In 2014-15, there were 1,743 offences against the person and 4,831 against property, with a further number of drug and other related offences⁹⁵.

While these figures are only a small proportion of the Western Australian police statistics, they require a significant resource commitment to manage and reduce crime and improve safety across the Goldfields-Esperance region. Not only is a police presence required but adequate emergency, judicial, correctional and support services are also essential. Safety, and a low risk of exposure to criminal activity, contribute greatly to the attraction, business service and community liveability of the region.

Emergency services in particular can be extremely challenged when natural disasters like storm or bushfire threaten homes, businesses and the environment. The Department of Fire and Emergency Services⁹⁶ in Western Australia has over 29,000 volunteers and just 1,100 career firefighters, very few of whom are based in the Goldfields-Esperance region. Working with the community and government in prevention, preparation and management of emergencies is critical.

In addition to the Royal Flying Doctor Service and St John Ambulance WA, some mining operations also share ambulances and other services, where possible, placing their own operations at risk to help the community.

The expanded Eastern Goldfields Regional Prison, located in Kalgoorlie-Boulder, is a positive example of an expanding service provision in the region. The new state-of-the-art, locally-based facility and the contemporary programs it offers aim to build stronger communities, while also contributing to the local economy by providing local employment.

Due to the size and isolation of many communities, local government authorities are key providers and funding partners for many community services generally not provided for by metropolitan local governments. This presents challenges for local government revenue which is already constrained by the low rate base across many communities.



Lifestyle Amenity

The established regional centres and towns in the region offer the community many opportunities to engage in arts, cultural, sporting, heritage and recreation activities with numerous facilities available. However with varying population dispersion and ability to provide or maintain facilities, the standard and range does vary throughout the region.

Major sporting events are held across the region for water sports, bowls, football, rugby, soccer, tennis, squash, cricket, athletics, horse riding, racing and pacing, motocross, speedway and more.

Visual and performing arts as well as craft, history and heritage activities are popular in the region, which enjoys frequent visits by professional performers. There are numerous exhibitions and shows, and in 2014 the 'Arts and Edges' Regional Arts Australia Summit was successfully hosted in the region, indicating the importance of this sector to the community. A regional Arts and Culture Trail is under consideration. Across the region individuals are able to join various interest groups for creativity, sport or pure recreation, or to collaborate and organise events and activities that enrich and provide for community cohesion. Many centres have well-maintained parks, reserves and aquatic facilities.

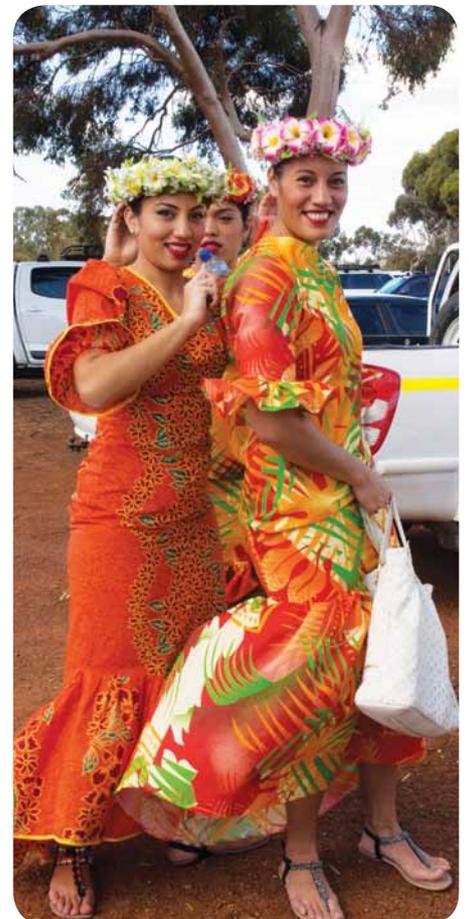
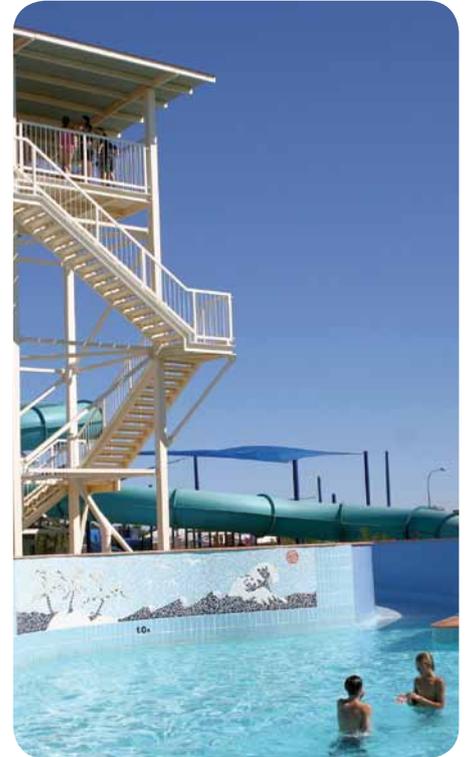
The City of Kalgoorlie-Boulder offers modern aquatic facilities and playing fields at the Oasis Recreation Centre and boasts an 18-hole grass PGA-rated golf course. The \$18 million Ray Finlayson Sporting Complex, a multi-sport facility, is due to open in late 2016. The Goldfields Arts Centre is a multi-functional arts venue and there are other dramatic, artistic and cultural venues.

Facilities in Esperance include the Bay of Isles Leisure Centre, the Bijou Theatre, the Civic Centre, Esperance Bay Yacht Club, Bandy Creek Harbour, the Esperance Museum and many other cultural, art and sporting venues in addition to the array of coastal activities available. The recently enhanced Esperance Waterfront is a popular town attraction.

Ravensthorpe, to the south-west of the region, offers a variety of quality recreational and sporting facilities. Nearby Hopetoun also has attractive community amenities.

Laverton houses the intriguing Great Beyond Explorers Hall of Fame and is planning a major swimming pool and facilities expansion.

The Shire of Coolgardie features a new recreation centre in Kambalda, designed as a multi-function facility catering for health, fitness and leisure needs. Regular land-sailing events conducted on the expansive salt lakes at Lake Lefroy are a unique highlight of the recreational activities available, while the annual Coolgardie Day celebrates the people and features of this historic town.



The Ngaanyatjarra Lands is home to the Tjulyuru Cultural and Civic Centre and the world-renowned Art Gallery exhibiting stunning glasswork and other pieces.

Leonora has a variety of community amenities and hosts the famous 'Golden Gift', Australia's richest mile running race and athletics carnival, held on the long weekend in June each year.

In Dundas horse racing is an important annual event, and there a variety of other sport, cultural and recreation facilities available. Norseman has recently hosted a new annual event—the 'Gold Fever Festival' — that celebrates the town's gold mining heritage.

Community Resource Centres operate in most regional centres, offering various services such as information, library, internet and some training. A number of regional towns have a public library.

Returned Services organisations, Freemasons, museums, faith-based and other bodies have an established history in the Goldfields-Esperance region, contributing to a variety of community services such as aged care, education, social services, environmental stewardship, historical, cultural and tourism activities, as well as offering facilities for like-minded people to enjoy.

Ongoing maintenance and upgrade of facilities is essential for regional communities to ensure that adequate opportunities are provided for both individuals and organisations. Various funding and training programs are available, but a good deal of what is achieved is due to the considered effort of volunteer committees, local government authority contributions and community sponsorship.





Volunteering to Grow Our Future Workforce

In 2008, a time of State-wide skill shortages, a small but innovative group of people in the Goldfields region was drawn together to address the challenge of enriching learning and promoting employment in the mining industry. Within one year the group, formalised as the Goldfields Education Mining Industry Alliance (GEMIA) Inc, had reached almost 1,000 youth and educators through person-to-person engagement, informative hands-on activities, a careers forum, a science and education-based festival and school presentations. Positive knowledge-based experiences were enabled by linking mining professionals and the education sector.

GEMIA's success continues today based on the commitment of volunteers from various sectors bringing alive the knowledge and possibilities in all areas of mining, the sciences and mathematics. Many highly-regarded programs and events have been delivered to thousands of students and community members in the Goldfields-Esperance region. Interest from neighbouring regions, the Perth metropolitan area and the South West has seen GEMIA assist like-minded innovators with information or events.



GEMIA activities include:

'Dust Off' — an industry immersion professional development opportunity for teachers;

'Girls and Guys Exploring Mining Forum (GGEM)' — a full day resources career expo featuring inspiring speakers, hands-on activities, tours, workshops and career pathway information; and

'Science Rocks on the Road' — where industry volunteers take curriculum based activities and speakers to schools.

In 2015, John Paul College in Kalgoorlie-Boulder introduced a university entry level (ATAR) Earth and Environmental Science program, thanks to the student, educator and industry interest raised and coordinated by GEMIA members.

Over 86% of retirees do not plan to leave the region. They feel connected, safe and enjoy cultural, sporting and social activities. Over 50% are volunteers.



Social Cohesion and Volunteerism

Social cohesion is the willingness of members of a society to cooperate with each other in order to survive and prosper; it represents a genuine experience of community belonging and is an important aspect of quality of life and the attractiveness of a region. The positive human experiences of those living in the Goldfields-Esperance region come from a combination of the many lifestyle opportunities, amenities, services, activities, employment satisfaction, community engagement and volunteering, enabling people to connect emotionally.

The 2013 'Living in the Regions' survey⁹⁷ presents a very positive picture of the interests and activities that appeal to people living in the Goldfields-Esperance region, when compared to the rest of Western Australia. Goldfields-Esperance retirees, not limited by workplace location, have identified a number of reasons for living in the region. These factors reveal that quality of life in the Goldfields-Esperance is highly regarded compared to other regions.

The wider community enjoys a high level of social connectedness with 58.7% enjoying social activities, 48.4% sporting activities and around one fifth enjoying cultural activities. On a ranked scale, most people consider that they feel safer in the region, they are happier, enjoy a good lifestyle and earn more⁹⁸.

The main reason people live here is for work, though this is closely followed by lifestyle factors. The survey revealed that of the people considering leaving the region, 48% would leave to be closer to family. This finding has implications for the provision of more affordable and timely transport links for family visitation to help retain population.

One in three retirees scores 'cultural factors' as an attractive feature of the region compared to only 14% of retirees in the rest of Western Australia; 37% of Goldfields-Esperance retirees enjoy sporting activities versus 23% of Western Australian retirees. For social activities, both groups rate attractions in the region as a key feature of the region (around 60.8% in the Goldfields-Esperance region and 61.2% in Western Australia). These are positive findings about the social activities and opportunities in the region.

A total of 86% of retirees do not plan to leave the region, as they feel a strong connection to their community; 62% feel that the region 'is my country' and 66% feel they are safer than in the city. Around two thirds of retirees state that the region is a friendly place to live, that they are here for the climate and that the region is good for their health.

Volunteering is a lifestyle choice that contributes to cohesion through its enrichment of life in culture, recreation and knowledge. However, Volunteering WA⁹⁹ identified that volunteering is also a valuable enabler for economic growth. The report suggested that in Western Australia over 600,000 people volunteered in 2015, with every volunteer hour said to contribute \$4.50 to the economy. The Goldfields-Esperance region's 'Living in the Regions' survey¹⁰⁰ suggests that 45% of respondents volunteered, with retirees volunteering at a slightly higher rate, at similar rates to the nation at 56%.

More affordable, functional housing, of a variety of dwelling types, is needed to meet market requirements in the region

4.3 Housing and Land

Accommodation

In addition to employment, education, community services, facilities and social cohesion, appropriate accommodation choices are critical for sustainable and aspiring communities. Goldfields-Esperance region housing is characterised by diverse housing options, from low cost (less than \$100,000) housing in small regional communities to more expensive housing in high amenity locations and near large mining operations. Notably, underlying prices vary considerably across the region, reflecting different price drivers within each community.

House prices are generally highest in Esperance and Kalgoorlie-Boulder (with median prices of \$365,000 and \$335,000¹⁰¹). When local incomes and purchasing power are taken into consideration, the affordability of Esperance was regarded as very poor, though it has improved marginally in recent years, whereas Kalgoorlie-Boulder was more affordable due to higher median household incomes. Private rental affordability and availability has also become a significant issue for the community in the major centres.

Generally, housing market conditions in the region are inherently linked to the fortunes of the mining sector and, to a lesser extent, agriculture. Affordability, the availability of housing and the development of new housing therefore mirror global commodity prices more so than in many other regional areas in Australia.

Workers' accommodation also plays a role in meeting the housing needs of the Goldfields-Esperance community. For employer flexibility around accommodating rapid workforce changes, and often due to the remote location of mining operations, a number of communities in the region's north, in particular, have a high proportion of their 'residents' in mining villages located adjacent to large gold and nickel mining projects.



Anecdotal evidence suggests that each FIFO worker represents an annual expense of around \$25,000 per annum to the employer, though this can vary between operations. Allowing for the costs of set up, servicing and maintenance of the mining worker camp, each employee could potentially cost up to \$75,000 per annum. Some local government authorities consider that this amount could be better invested as a salary incentive or assistance to live in the nearest regional community, in line with the findings of a recent Chamber of Minerals and Energy study¹⁰².

There are many benefits to housing workers and their families within existing regional communities, for both the employers and employees, including:

- Reduced operation costs and staff turnover;
- Service provision quality supported by larger population;
- Local business viability improved through access to more customers; and
- Social cohesion and interaction.

Other than Kalgoorlie-Boulder and Esperance, housing markets in the region have very low median house prices. Lower prices may appear an enticement to improve regional ownership but in reality reflect a lack of depth of demand from owner-occupiers and investors necessary to drive price growth. This is due to limited resident-based employment opportunities in many of the region's remote and small communities.

A high proportion of social housing also exists within communities in the Northern Goldfields sub-region and the Ngaanyatjarra Lands, as shown in Figure 23. These communities face many difficulties around the provision of housing, services and employment, and lack the market scale to develop viable private sector housing.

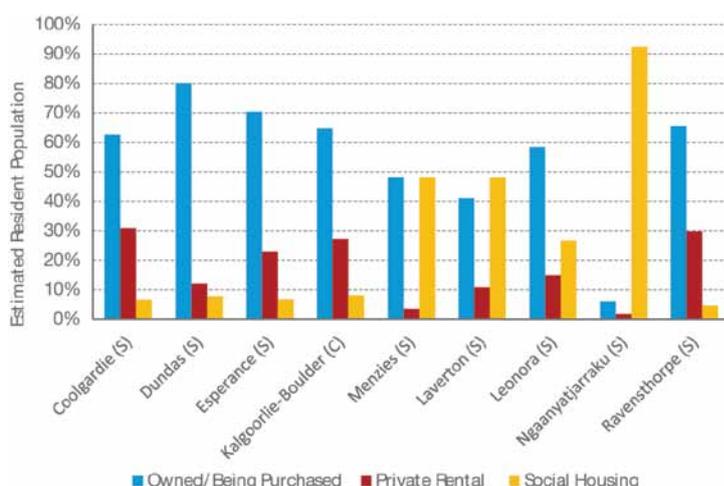


Figure 23 Housing Tenure, Goldfields-Esperance, 2011¹⁰³



During periods of high population growth over the past decade, major service centres like Kalgoorlie-Boulder and Esperance, as well as regional service centres like Leonora, experienced high demand for accommodation. The acute demand for housing led to challenges in attracting and retaining a workforce, especially for lower wage positions outside the mining sector. It also has important implications for the retention of families and elderly residents in these communities.

Retirement living is another challenge as current aged housing is limited. This is common across the whole region including the Ngaanyatjarra Lands. Older households are forced into sub-optimal and inappropriate housing options. Community and outreach care options are also limited. Currently, those residents who are able to move to other regions for aged care needs take the opportunity to do so. However, many residents have family and social connections in their communities and are unable or unwilling to leave.

Redevelopment and revitalisation of the Northern Goldfields communities and the provision of new housing stock to support changing needs presents an opportunity to attract new residents and workers, as well providing better facilities for the ageing in place of older residents.

Within the region there is a clear and demonstrated need for more affordable housing that is functional and varied to meet market requirements. Housing development requires a response that recognises the challenges across the region's communities and the increased cost in providing housing in regional areas. A 2014 study of housing needs established a series of recommendations that have the capacity to transform the region's housing market in order to facilitate economic and population growth, social equity and sustainable prosperity¹⁰⁴. To do this, the high cost of infrastructure headwork charges to service new land and the cost of housing construction must be overcome as barriers to accommodation provision.



Land

While access to suitable, serviceable and affordable land for housing is important in meeting the need for sustaining or growing the regional population, so too is accessing land for business development, particularly mining and agriculture, and for recreation and natural enjoyment. The Goldfields-Esperance region is vast, yet land cannot be accessed and employed effortlessly. All activities must be undertaken within existing land management structures, ownership, planning regulations and allocations. This is often complex, conflicting and time-consuming.

The planning and management of land in Western Australia is administered in accordance with multiple pieces of legislation and by a number of organisations, programs and frameworks, some of which are outlined here.

The State Government Rangelands Reform Program is important for a number of land management matters including encouraging new investment opportunities and land uses on pastoral leases.

The Goldfields Land and Sea Council assists with Native Title administration to ensure Aboriginal people have the ability to build strong communities and economic enterprises, employing the best use of their land and natural and cultural assets, while balancing other business or recreation activity.

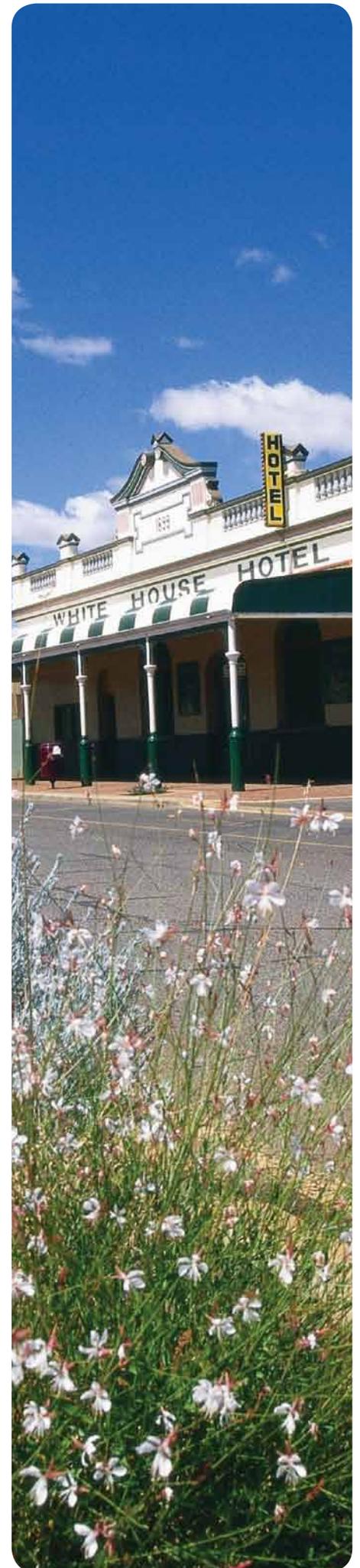
The Department of Environmental Regulation, Department of Parks and Wildlife and the Environmental Protection Authority also play a key role in land management in the region.

Landcorp is the Western Australian land and development agency with responsibility to develop, or assist in the development of, residential, commercial and 'place making' assets across the State. It has several developments in the Goldfields-Esperance region.

Local government authorities are obliged to produce local planning schemes and strategies as contemporary planning documents that meet the Local Planning Scheme Regulations and provide for sound and orderly local land use and development.

The Department of Planning assists with the administration of planning contemporary local planning frameworks to improve decision-making in areas including land supply, infrastructure coordination, industrial and commercial development and also the protection of agricultural land, basic raw materials and environmental assets¹⁰⁶.

Appropriate land management will be a significant enabler for positive outcomes for the future of the region.



4.4 Regional Centres

The Regional Centres Development Program is a Western Australian State Government initiative that involves detailed research and planning to guide economic and social development across a Statewide network of towns, identified as 'Regional Centres'. Within the Goldfields-Esperance region, Esperance has been identified as a Regional Centre and the City of Kalgoorlie-Boulder has recently been announced as a Regional City. The program builds local decision-making between industry, community and government, strengthening local capability, growing business and jobs through innovation and investment and driving sustainable economic growth.

Collaborative partnerships support the effective delivery of government effort and investment and contribute to serving population growth and social needs generated by economic growth.

Regional Centre Development Plans align closely with the priorities of the Regional Investment Blueprint and aspire to create and showcase the attractive, highly-liveable communities in the Goldfields-Esperance region.

Enhancing the economic and cultural hubs of Kalgoorlie-Boulder and Esperance will provide improved access to quality services and experiences for the broader region, and meet the increasingly diverse local, national and international industry and population needs and expectations.

Regional Centres are identified in the Western Australian State Planning Strategy 2050 (Figure 24).

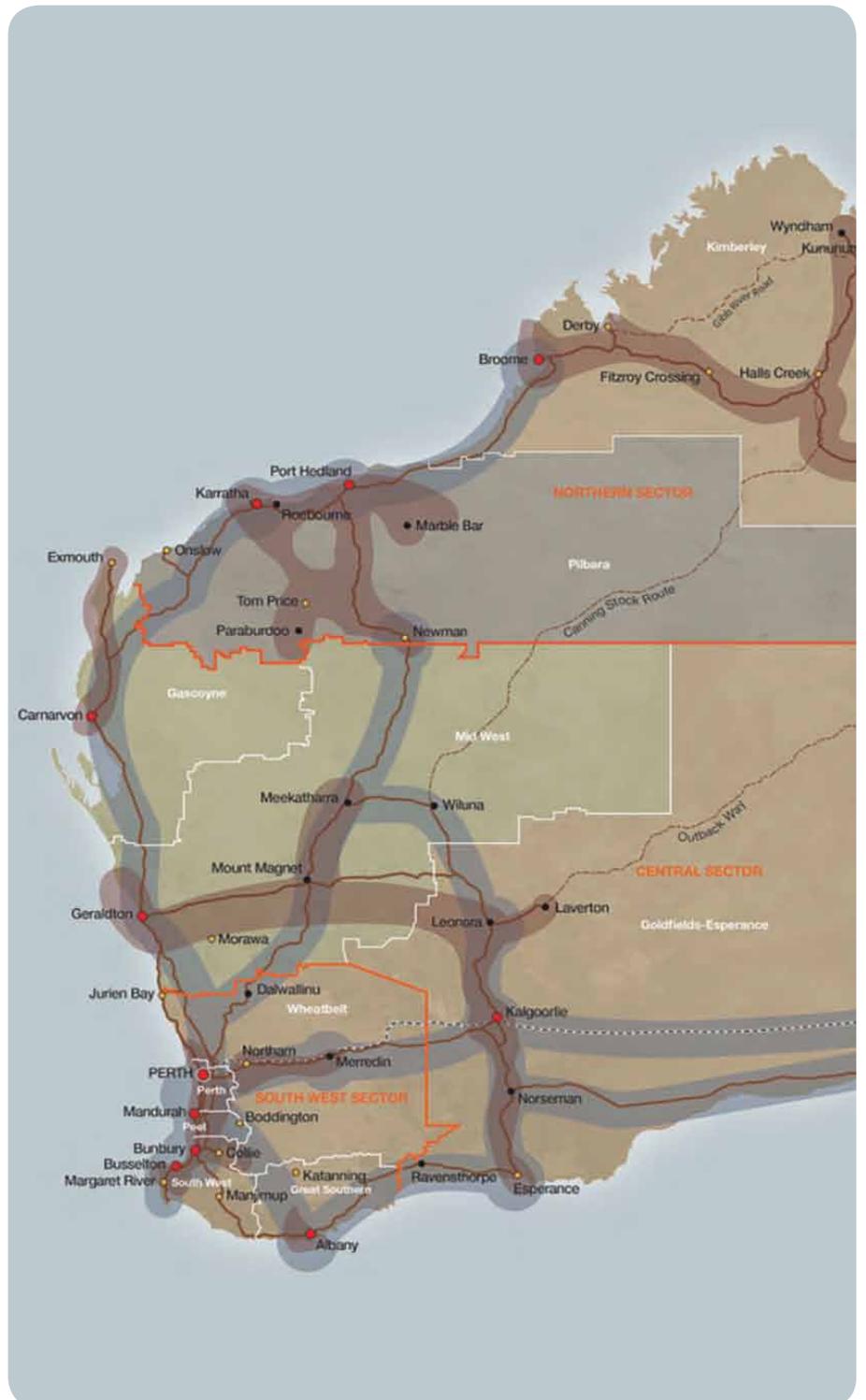


Figure 24 Regional Centres¹⁰⁵

5.0

Regional Infrastructure, Energy and Utilities Profile

Infrastructure, energy and utilities are critical enablers to regional growth. The Goldfields-Esperance region requires significant, relevant and affordable infrastructure to reduce the barrier of distance across its vast land mass and essential utilities to sustain population and grow communities and industry into the future.

Access and connection to global markets is critical to the growth of business, employment, incomes and the broader economy. Trade within the State, nation and around the world is the most effective way for a region to exploit its comparative advantages and competitiveness to generate prosperity for local residents. Access to markets comprises both physical access, including through efficient transport and digital infrastructure, as well as business relationships and networks with trading partners, clients and labour.

Improving access to markets broadens trade, allows competitive industries to grow and can increase the availability of goods and services. The level of connectivity of the region can be viewed in terms of infrastructure access and capacity across transport, movement of people and digital factors.

Energy, water and waste management provide the basis for communities and industries to function. In the vast Goldfields-Esperance region energy and utilities can be complex, costly and difficult to provide, but they are also essential for the aspirations of the region and contribution to the global environment. They also provide business opportunities in themselves. With the natural resources of the region including geographical space, energy, waste management and water technology applications could also become major industries.

5.1 Movement and Connectivity

Transport

From an economic perspective, inter-regional links are vital to ensure strong connectivity between the region and other markets, and to allow efficient movement of goods and people into and out of the region. Notably, the Goldfields-Esperance region is the first port of call for road and rail freight coming into WA from the eastern states, which positions the region as a 'hub' of intra and interstate network links.

Esperance Port is the only regional port facility in the region. It is a deep water facility capable of handling Capesize vessels up to 200,000 tonnes. Its catchment extends beyond the boundaries of Goldfields-Esperance as the facility also services economic activity in the Wheatbelt region.



Inter-regional links are vital to ensure strong connectivity between the region and other markets, and to allow safe, efficient movement of goods and people into and out of the region

The Port of Esperance broke the 15 million tonnes per annum milestone for the first time in 2015 with a new record trade volume of 15.06 million tonnes. Iron ore and grain exports contributed 78% and 14% respectively of this total¹⁰⁷. Over the past decade, growth of iron ore production in the region has driven growth in export trade through the Esperance Port. This has been the catalyst for recent expansion at the Port, which has included the creation of a third berth and additional on-site storage.

Imports generally comprise only a small proportion of the Port's total trade, with petroleum and fertilisers being the main products. The Port's role in receiving imports is expected to increase in the future.

The Goldfields-Esperance region's primary road network services an extensive area and provides a number of important inter-regional and interstate connections. The Great Eastern Highway is the principal interstate road link. The east-west road infrastructure is under regular assessment for capacity, safety and amenity. Attention is also being applied to enhancing the northern routes linking the Goldfields-Esperance to the Pilbara in order to achieve improved freight outcomes.

The Outback Way through Laverton to the Central Desert and Winton in Queensland via Alice Springs is often considered the region's second (and the State's third) interstate link.

Road safety is of increasing importance and can be improved by road widening, overtaking lanes and central medians as well as safety barriers and upgrades to stopping places. Future investment planning for road funding is seen as critical for future roads users for freight, tourism or community use. Looking at Table 10 with Esperance Port having five times the national average in throughput, improvements to roads around Esperance, though upgraded in 2014, may need to be considered in the future.



On average rail, road and port access across the region are rated as 'good' against national averages (Table 10). From a whole of region perspective, Appendix 3 provides an understanding of access to this valuable mobility infrastructure on a Local Government Authority basis.

The road network is supplemented by the region's rail network. Kalgoorlie-Boulder is the junction of the Trans-Australian east-west railway and the rail line from Leonora in the Northern Goldfields to the port town of Esperance. The Eastern Goldfields Railway is the main freight link into the State. This railway carries approximately 80% of all freight carried from the eastern states to Western Australia. Haulage on the region's north-south rail line, which connects the Northern Goldfields to Esperance Port, is predominantly bulk freight. This line is frequently challenged with hold-ups due to weather or sheer volume, which impact on passenger and freight movements.

One major proposal for the region is the Portlink project which seeks to create a more efficient State transport network, and to open up regional development and employment opportunities in the region. The project focussed on four key areas including the development of an Intermodal hub in Kalgoorlie-Boulder, road and rail realignment around Kalgoorlie-Boulder, development of the Meekatharra to Wiluna Road and other inland freight corridors to the Mid West and Pilbara. Studies being undertaken will be important to inform the future planning and development of the transport network in the State, subject to commercial market viability and business case development. Other future requirements for regional rail under consideration include the Esperance-Leonora line and Shark Lake Industrial Park options in Esperance, main and arterial road improvements and the Esperance Port Precinct expansion.

Development of air transport infrastructure is a further consideration for the region and valuable for accessing national and global markets.

Supply chain logistics — getting 'product to market' through timely, relevant and competitive transport options that connect the region to State, national and global markets — are essential to building a strong, secure Goldfields-Esperance economy.



PortLink

PortLink Inland Freight Corridor Concept

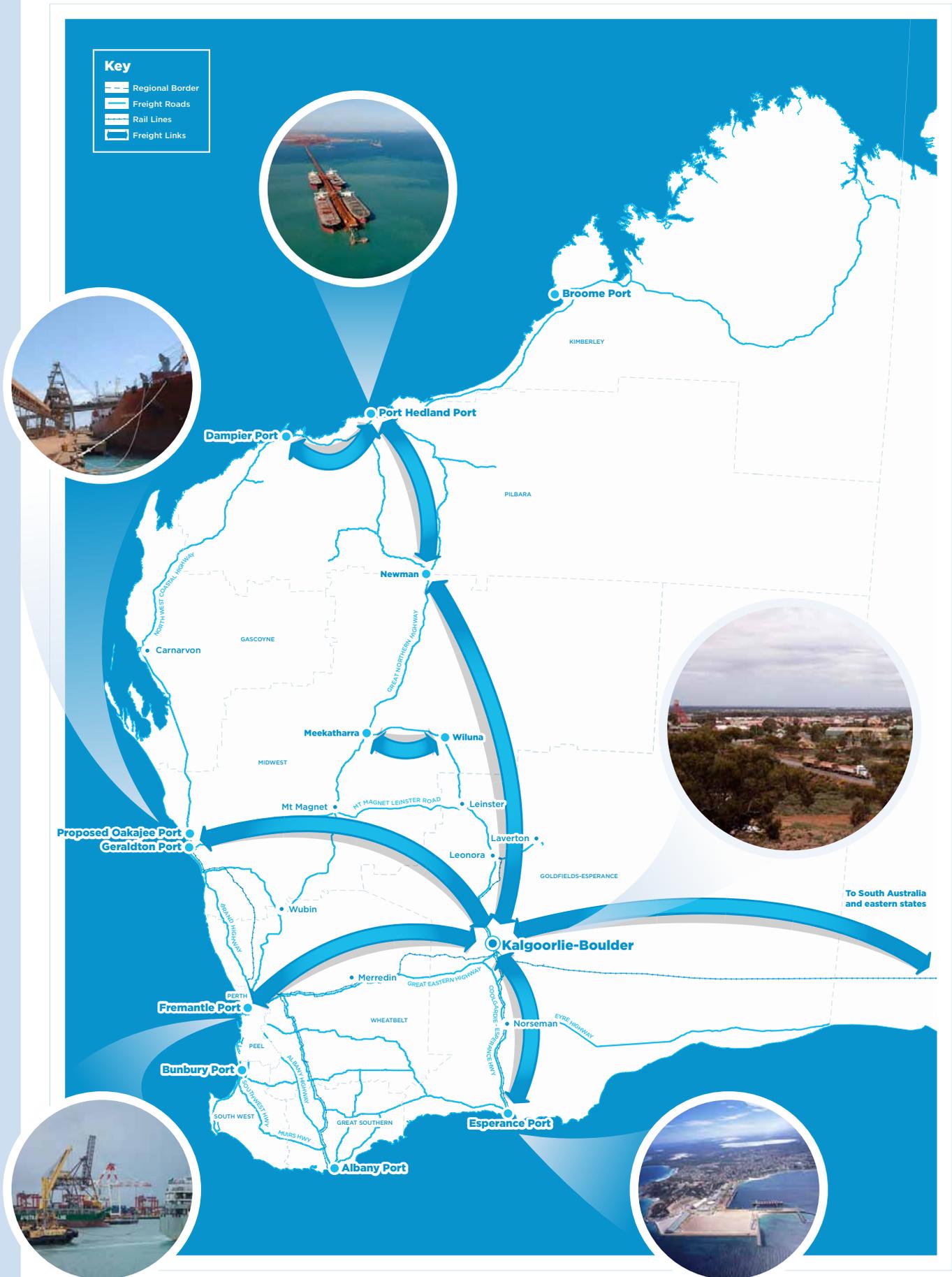


Figure 25 PortLink Inland Freight Corridor Development Plan (2015)¹⁰⁸

Movement of People

As Tables 10 and 11 illustrate, the Goldfields-Esperance region, on average, appears well provided for by transport connections. However the 'whole of region' connectivity presented in Appendix 3 highlights the disparity across the Local Government Areas. Attention to efficient and adequate transport services are imperative, especially for remote and isolated regions, as they enable access to services and customers based outside and within a region, as well as connectivity to other places for social reasons. In Table 8 in Chapter 4, the distance to education services with a 'poor' rating against national averages is noted as a possible contributor to

issues around education participation and performance.

While only a regional average, the Goldfields-Esperance region scores as 'good' for 'major roads access' and 'average distance to nearest rail station'. As mentioned above, this is not the case across all shires. The region is serviced by a number of regional and inter-regional public bus routes operated by Trans WA. These services provide important public transport connections between towns in the region and beyond. The Eastern Goldfields railway is used for passenger transport, carrying around 132,000 passengers each year.

While the TransWA Prospector train provides a daily connecting service between Perth and Kalgoorlie-

Boulder, the journey time at around seven hours is limited by rail infrastructure capacity and freight train gridlocks. The Trans-Australian Indian Pacific connects Perth to Sydney, with a once-a-week, three night trip in either direction, stopping in Kalgoorlie-Boulder. Future development of high speed rail (HSR) connecting people and freight across the region's vast land area could have benefits such as improved journey times, reliability and safety. It could also be a viable alternative to aviation and road transport modes.

At present, Kalgoorlie-Boulder is the only centre in the region with regular timetabled intracity public transport services and is currently serviced by three Trans Goldfields bus routes.

Area of Focus	Indicator	GE	Nation	Scorecard
Regional average infrastructure access and capacity	Average Distance to Port	288km	141.6km	Poor
	Port Throughput Per Capita	259.5mts	52.5mts	Good
	Major Roads Access	15.6km	19.4km	Good
	Average Distance to Nearest Rail Station	29.8km	35.6km	Good

Table 10 Regional Average Infrastructure Access and Capacity Scorecard

Area of Focus	Indicator	GE	Nation	Scorecard
Regional average movement of people	Overseas-Born Residents	29.7%	30.2%	Average
	Population Turnover	70.1%	46.2%	Good
	Average Distance to Commercial Airport	34.5km	79.7km	Good
	Airport RPT Usage (per capita)	5.0	6.3	Poor

Table 11 Regional Average Movement of People Scorecard

Scorecard Benchmarking:

The Scorecard approach uses a set of indicators that help determine the key strengths and challenges of the region for each of the core areas analysed. Regional average scores are presented in Chapters 3, 4 and 5. Scores for individual Shires are shown in Appendix 3. The methodology and sources of information for these indicators are also appended in the Blueprint. Using the traffic light system a 'Good' and 'Poor' for each indicator illustrates whether the regional indicator is greater than or less than the value for the national average. Some metrics may require further analysis or a substitute metric depending on application.

Numerous school bus services operate within the region, providing transport for children travelling to and from school, particularly those living in rural areas. In remote locations, particularly the region's north as well as small and remote communities, there is inadequate public transport. The lack of regular transport services also impacts on the ability of tourists to access areas of interest and tourism services.

The Goldfields-Esperance region is well serviced by airports, though inter-regional and interstate services are irregular. The region's main regional airports are located at Kalgoorlie-Boulder and Esperance, with interstate flights generally routed through Perth. Within the region, regular passenger flights to and from Perth also service Leonora, Laverton and Leinster.

Only chartered flights are available from Kalgoorlie-Boulder to the rest of the region. Numerous larger mining companies operate private sealed airstrips and a number of charter operators based at Kalgoorlie-Boulder service the smaller, more remote mining operations.

A range of community, business and industry needs are serviced through aviation infrastructure, from the provision of fly-in fly-out workforces to the Royal Flying Doctor Service. Accordingly, such infrastructure is vital to support economic activity in the region; the future development of the region's economy may require further development and diversification of aviation infrastructure and services.

Key challenges for aviation services in the region are cost and access to more destinations, particularly more regular services to eastern Australia. Opportunities to lessen flight route regulations are considered an important area of focus to encourage competition on aviation routes. Overcoming these challenges will also enable further air freight opportunities for perishable and other products, particularly to take advantage of export markets and expansion of the tourist sector opportunities.

Table 11 shows that the region has both a high percentage of overseas-born residents and a high population turnover. While the ranking for a strong migrant population is a healthy indicator, the high turnover of population is not. However, the high population turnover, while largely associated with employment opportunities, could also be attributed to the isolation and limited access to regular, affordable and fast transport, particularly in places like Leonora and Laverton (Appendix 3). Access to transport plays a key role in allowing people to travel to visit family, other centres and experiences, and have family visit them. The population of the Shire of Ngaanyatjarraku has a lower population turnover than the national average, demonstrating a stable population.



Digital Infrastructure

Community and business opportunities are reliant on fast, efficient and affordable digital communication and other applications of the technology. Across vast and isolated areas, the vital role of keeping the region connected through telecommunications infrastructure is a challenge. As Table 12 illustrates, the region has low utilisation of digital communication technology.

Telecommunications services for households and businesses in the region are generally of a lower standard than elsewhere in the State. This is in part due to poor access. Universal access to high speed broadband is lacking and broadband access is problematic away from the major towns, with slower and less reliable satellite broadband often the only alternative. Combined with low levels of mobile coverage, at approximately 33% of the region, the lack of digital infrastructure has translated into low business and community take-up. As an example, rural farmers have access to digital applications and software to improve processes, but don't have reliable access to the mobile or internet coverage required to use them.

An area in the north of the region is partly covered by fibre-optic services which were developed to support nickel operations in Leinster. Tele-health services are already benefitting from this investment and helping to deliver specialist services in a more timely fashion.

The lack of appropriate mobile telecommunications infrastructure is a core challenge and barrier to the economic and social development of the Goldfields-Esperance region. Mobile digital infrastructure is therefore a major avenue to overcoming these challenges. It would also enable local businesses and households to access broader markets and services, including different education and health services not available in the region.

Area of Focus	Indicator	GE	Nation	Scorecard
Regional average digital connectivity	Broadband Access Rating	4.9	5.4	Poor
	Mobile Coverage	33.0%	80.0%	Poor
	Quality of Mobile Internet Access	2.4	3.1	Poor
	Household Internet Connectivity	76.7%	79.0%	Poor
	Employment in Technology-Related Industries	3.5%	8.5%	Poor

Table 12 Regional Average Digital Connectivity Scorecard

Key challenges for aviation services in the region are cost and access to more destinations, particularly more regular services to Eastern Australia



Programs currently proposed to deliver significant improvements to the standard of telecommunications infrastructure in the region include the Regional Mobile Telecommunications Project and the Federal Mobile Black Spot Program aimed at improving mobile coverage across small communities and strategic areas in regional Western Australia. Some areas of the Goldfields-Esperance region are identified as a high priority. Nonetheless, a significant number of areas within the region still do not have access to reliable wireless telecommunications and are not within the current planning horizon of telecommunication providers. Further alternative network deployment models need to be considered for communications access for industry and smaller isolated community needs.

5.2 Energy and Utilities

Energy Supply

A variety of electricity provision and generation arrangements exist within the Goldfields-Esperance region. The South West Interconnected System (SWIS) network provides electricity to Coolgardie, Kalgoorlie-Boulder, Kambalda and Ravensthorpe. The towns of Laverton, Leonora, Menzies, Norseman, Esperance, Salmon Gums, Grass Patch, Condingup, Scaddan, Gibson and Hopetoun are provided with electricity by Horizon Power, generated from stand-alone power stations fuelled by either diesel or natural gas.

Natural gas is supplied from Varanus Island in the north-west of Western Australia, via the Goldfields to Esperance. Access to gas has been beneficial for many projects and communities in the region as it is an affordable energy option. AngloGold Ashanti has completed extending the 1,380km Goldfields Gas Transmission Pipeline (GGTP) a further 292km to two mining operations in the north-eastern Goldfields. This decision, based on energy and cost efficiencies, could be extended to other mines and industries.

Uranium has been a globally significant energy source for decades and there is a solid resource base of this product in the region. Pending an increase in global demand and price for uranium, the region could become more involved in its production, science and use.



Digital infrastructure is in its infancy in the region, yet is a critical enabler for community and industry growth



There is a particular willingness to trial alternative energy generation in the Goldfields-Esperance region, including wind power on the South Coast, biomass in Ravensthorpe and solar power in Kalgoorlie-Boulder. The Goldfields-Esperance region has a long history of renewable energy generation. Esperance was home to Australia's first wind farm at Salmon Beach, which commenced operations as a demonstration project in 1987. It comprised six 60kW wind-driven generators and supplied up to 360kW into the Esperance electricity grid. In 1993 Western Power developed the Ten Mile Lagoon Wind Farm – Australia's first commercial wind farm. Renewable energy in Esperance works in parallel with a gas turbine power station, which is privately owned and operated.

Hopetoun is serviced by a wind-diesel system comprising two wind turbines and a low-load diesel power station. The turbines are capable of supplying up to 40% of Hopetoun's annual electricity requirement – this equates to approximately 700,000 litres of diesel fuel saved per annum.

Looking forward, advancements in storage technology are likely to be disruptive to traditional energy delivery models. Improved reliability of renewable energy and storage technology enables energy production to occur in the most remote areas of the region and overcomes challenges associated with infrastructure requirements. However, there are several challenges for renewable energy production, including¹⁰⁹:

- Relatively high capital costs;
- New technology;
- Access to supporting expertise;
- Lack of storage capacity;
- Policy uncertainty; and
- Transitioning from fossil fuels and traditional energy production.

A variety of commercial energy developers has shown an interest in producing solar energy at Mungari Industrial Estate near Coolgardie. Timing with regard to demand has been one factor in the delay in establishing large scale renewables at that site, yet grid constraints are the main driving factor for the project.

Ensuring an adequate supply of power for population and industrial growth will be a key challenge for the region in the future. Mining is expected to continue to grow as exploration continues to bring about new prospects and potential for further development. Future projects in both mining and other expanding or new industries will require a sustainable, substantial, cost-efficient and reliable energy supply. Planning and advancement of the regional energy sector is essential to ensure that an appropriate power supply is available.

Goldfields-Esperance has a history of early adoption of renewable technology and is well placed to develop a variety of energy resources



Water Supply

The main water supply to the City of Kalgoorlie-Boulder and the towns of Coolgardie, Kambalda and Norseman is the iconic and historic Goldfields and Agricultural Water Supply Scheme (GAWS), known as the C.Y. O'Connor Pipeline. The primary water source for this supply is surface desalinated groundwater, piped to the region from Mundaring Weir just east of Perth. Although this scheme is more than 100 years old, ongoing maintenance and improvements allow it to continue to meet current domestic and commercial customer demand. In the past decade, major improvements to the scheme have included the upgrading or replacement of eight major pumping stations, the construction of 400 million litres of additional water storage at Kalgoorlie-Boulder, and the refurbishment of approximately 15km of the pipeline every year.

Those areas that are not serviced by the C.Y. O'Connor Pipeline, which includes most of the region, are generally reliant on locally-sourced groundwater for their water supply. Many towns have declared public drinking water source areas and water source protection plans to assist in separating water sources from incompatible land uses.

Towns north of Esperance, including Salmon Gums and Grass Patch, are supplied from independent surface water sources which are at the mercy of unpredictable rainfall. When adverse rainfall conditions occur water is carted from nearby water schemes.

Renewable Energy: Reducing Emissions and Costs

For the Goldfields-Esperance region, renewable energy is not just about protecting the environment. With abundant natural resources in sun, wind, and waves, and most of the region remote from the South West Interconnected System (SWIS), expanded renewable energy is viewed as a cost-efficient, reliable energy source, critical for economic development and quality lifestyle.

The City of Kalgoorlie-Boulder is enthusiastic about embracing solar energy and features solar systems on a number of buildings, including the Oasis Recreation Centre and the waste water treatment plant. Utilising solar power on just four Council buildings saves 584,000 units of electricity per year and reduces CO² emissions by over 440 tonnes per year. The Australian Government's Community Energy Efficiency Program assisted with funding for these alternative energy projects. The latest installation of a PV system will be accessed by Kalgoorlie-Boulder airport, reducing energy consumption by some 20%.

A Goldfields-Esperance region-wide initiative is the installation of Light Emitting Diode, or LED streetlights, across the region. An estimated saving of 55% of existing energy consumption is anticipated, along with better vision, pedestrian and driver safety.

A number of resources industry organisations, community and government departments throughout the region access solar and wind energy to assist in their operations. The Department of Agriculture applies a hybrid system to its border checkpoint in Eucla on the Eyre Highway.

Meeting the energy needs of remote areas with alternative and natural sources of energy from Esperance to the Eucla and to the Ngaanyatjarra Lands will be the way forward for energising the Goldfields-Esperance region of the future.



Water use by the mining sector is mostly sourced from local saline or hypersaline aquifers located in proximity to mining operations.

As the volume of water supplied per capita is high, a program of water efficiency projects to better manage water demand has been implemented. This includes the installation of 'smart meters' in Kalgoorlie-Boulder to help customers track their water use and extensive leak detection and repair, which aims to save 1.09 billion litres of water. Recycling and storm water collection presents further water efficiency options.

In its '50 Year Plan' to 2060 the Water Corporation, after consideration of the impacts of climate change on rainfall and temperatures and increase in population, opted to manage demand by working to reduce water use by 25%, increase water recycling to 60% and identify, investigate and secure support to develop new water sources¹¹⁰.

While the Water Corporation considers the GAWS climate change proof due to the variety of water sources supplying it, the rest of the region has to contend with water access and management issues.

The availability of water to support population growth, industry, business and environmental needs is an issue for future development and land use within the region. Agricultural and horticultural initiatives are hindered by limited access to water. Mining and manufacturing also need ready access to water. Long-term regional water planning needs to be undertaken along with implementation surety, to safeguard sustainable groundwater allocations and establish practices for water source protection and ongoing access for both communities and industries. The Water Corporation has a variety of planning tools to assist developers and local government.

The availability of water to support population growth, industry, business and environmental needs is an issue for future development and land use within the region



Figure 26 Towns serviced by Water Corporation, Goldfields-Esperance¹¹¹

Waste water

The Water Corporation operates five waste water treatment plants in the Goldfields-Esperance region. In Esperance, Kambalda and Leonora, recycled water replaces about 370 million litres of water a year that would otherwise come from natural and climate-dependent sources. A key constraint identified in the region is treated waste water management in Esperance, with existing capacity requiring expansion.

In Kalgoorlie-Boulder, the City owns and operates a waste water recycling facility. The City manages its sewer system, which is the largest outside Water Corporation management in WA. At the forefront of water recycling, the City has been using treated effluent from the system since 1969 to water parks and gardens around Kalgoorlie-Boulder. Approximately 2.5 gigalitres of waste water is received at the South Boulder treatment plant each year and is recycled for use on parks and reserves. The Shire of Esperance is also a major user of recycled waste water for parks and reserves. The continuation of the State's Infill Sewerage Program is also important for a number of centres in the region, delivering a positive impact on public health and the environment.

Waste

Effective waste management is growing in importance as a regional issue given the commitment to sustainably manage both domestic and industrial waste across Western Australia, as well as plan future investment requirements considering the high capital costs of large-scale waste facilities. Local councils and the Water Corporation are the core stakeholders in this sector, managing and disposing of liquid, solid, organic and hazardous waste.

A regional strategic waste management plan encompassing the City of Kalgoorlie-Boulder and the Shires of Coolgardie, Dundas and Esperance has been prepared to align with the State-wide waste management planning process. The management plan primarily facilitates waste infrastructure planning to ensure adequate provision for solid waste management and the required infrastructure. This includes transfer stations, resource recovery facilities, recycling processes, landfill and also planning for potential industrial expansion. A key constraint identified in the region is treated waste water management in Esperance with existing capacity requiring expansion.

While these services are critical to the functioning of communities, they can also provide significant economic diversification in regional areas.

There is an opportunity to increase the uptake of comprehensive waste management in the mining and processing sectors. There are also opportunities for regional areas, such as Leonora and Coolgardie, to develop waste processing expertise that can service customers within

and outside the region, including the re-use of waste as a resource for products such as fertilisers or energy. This also includes the potential processing of other recyclables for new or existing industries.

The region's vast landscape has potential to host further nuclear waste facilities. The region already hosts Western Australia's only nuclear waste facility, a national repository for low-level waste located at the Mt Walton facility in the Shire of Coolgardie. Nuclear waste management can involve treatment, conditioning, transportation, storage and disposal of all categories of radioactive wastes, including administrative, operational and safety-related activities. There are many issues relating to the potential expansion of nuclear waste management facilities that need to be explored further outside the scope of the Blueprint. Any such industry expansion would require the support of the local and regional communities. If communities are willing to explore this potential opportunity, the region could position itself to leverage the expected global growth in nuclear power demand and generation.

Energy, water, waste water and waste are vital sectors for the economy and community. They also offer industry opportunities. However, most importantly, sound management of each will assist in protecting the environment and scarce resources.

6.0

Regional and Global Influences

Regions are increasingly confronted with changing global and regional influences that shape the economic and environmental landscape over the longer term. Also known as megatrends, they are of particular importance to the Goldfields-Esperance region which is intrinsically connected to global markets as an exporter of minerals and agricultural produce and a tourism destination with internationally-significant tourism assets. Understanding the impacts these megatrends have on our community is important to plan effectively for the future.

The region will need to embrace a broader vision and skills for interacting in the global environment to build markets, attract investment and discover new opportunities

Various organisations such as the Commonwealth Scientific and Industrial Research Organisation (CSIRO)¹¹² and others¹¹³ have identified trends that will be important to understand the future. Core themes relate to technology and connectivity, resource stress, climate change and environmental protection, demographic change and ageing, urbanisation, expectations and the individual, economic inter-connectiveness, economic power shift and public debt. A number of other global and regional trends are likely to impact on the Goldfields-Esperance region in the years to 2050. Of most likely influence and need for consideration are the trends around business interactivity. The Goldfields-Esperance region is a global business participant through the mining sector and in the provision of well-regarded international mining education and services. Many manufacturers and mining service providers are already working in the international arena. The region also has a high migrant population and a strong multicultural character. However in considering the future aspirations of the region, the global trends of increased economic inter-connectiveness, the southern economic power shift and significant public debt need to be taken into account. The region will need to embrace a broader vision and skills for interacting in the global environment to build markets, attract investment and discover new opportunities. This will include cross-regional partnerships as well as international interests.

These overlapping factors will influence and shape the future of the Goldfields-Esperance region. This section describes these external influences and opportunities broadly, under three groupings, with specific opportunities and challenges considered in subsequent sections.

6.1

The Technological Age

Technology plays a central role in virtually every aspect of life. It presents empowerment for individuals, communities and organisations alike with connectivity and automation having profound impacts on business applications and processes, communication, work and lifestyle improvements. Globalisation of markets has been progressed by increasing the reach and speed of communication and reducing costs. It has in turn facilitated the flow of goods, capital, people and information across borders, with profound implications for life and business. Expanded telecommunications capacity and new communications mediums are providing new economic, social and community benefits and opportunities to regional areas, including:

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

A key area of change already underway in the Goldfields-Esperance region is the take-up of automation technologies in recent years. While industrial automation is historically focussed on process manufacturing – refining raw materials, discrete manufacturing and assembling/building parts – it is permeating into other areas of the economy on the back of recent technological advances and rapidly reducing costs. Automation allows productivity to occur, freeing resources to expand businesses and leading to further employment.

Advances in computing, signalling and sensing technology have brought driverless trucks, trains, tractors, automated drills and other pieces of equipment to the Australian mining scene, agricultural sector and other transport and logistics industries.

While there are still many challenges to overcome, miners are pushing towards fully automated ‘pit to port’ operations in their quest to boost productivity, reduce costs, improve safety and remain globally competitive. This creates opportunities for access to new mines, testing and developing technology and creating operations centres, but also challenges to retain local workforces. Further, the region has adopted digital technology in mining exploration through activities such as 3D imaging and data analysis.

Automation is challenging traditional business models, particularly across the mining, manufacturing, transport and agricultural sectors.

Megatrend	Theme	Change as a result of trend	Key sectors potentially impacted	Goldfields-Esperance response
The Technological Age	Connectivity Automation New technologies and industries	Business applications and processes, communication, work and lifestyle improvements	Mining Agriculture Manufacturing Transport Health Education Environment Social Recreation, entertainment and tourism Shopping Info-technologies Live local remote work	The Goldfields-Esperance region builds on the successes of those regional participants already working well in the technological space, in innovation, connectivity and automation, by adopting strategies to maximise technology-related opportunities; providing significant benefits to the economy and communities, and especially the remote areas of the region. This includes applying a focus on digital and technology-based education, soft and physical infrastructure development and business arrangements.

In the agricultural sector, digital technology and automated machinery is also being used to enhance productivity. For the region to fully capture these opportunities, it needs to have access to reliable communications infrastructure, training, a skilled workforce, and for costs to remain competitive.

The Goldfields-Esperance region has some way to go in relation to technological readiness. Only two local government authorities in the region – the City of Kalgoorlie-Boulder and Shire of Ravensthorpe – report more than 65% of households accessing broadband connections¹¹⁵. Three local government authorities (the Shires of Menzies, Laverton and Ngaanyatjarraku) record less than half of households having broadband connections¹¹⁵.

In its recently released Competitiveness Index, 2014, the Regional Australia Institute ranked the region 56th out of 60 regions nationally for its level of technological readiness, mainly due to low levels of employment in technology-related industries and comparatively poor broadband coverage.

With the advent of high-speed broadband and wireless technology and an increasingly connected world, the Goldfields-Esperance region needs to ensure that it is positioned to take advantage of the new opportunities the digital revolution offers. This means identifying where and what investment and training in enabling communications technologies and infrastructure is required. Strong community and business take-up of the technology

and the implementation of effective strategies is required to maximise the use of communications technology to promote economic integration between industries, research and development, innovation and service-based exports.

The Goldfields-Esperance region with its vast distances, remote communities and relatively small population has much to gain from accessing, learning and applying the digital advances and technological possibilities of the innovation imperative. Education, research, and investment by government and industry in technology-based initiatives, including in early development of technologies, could open opportunities for evolved and new industries, diverse employment and a higher standard of living across the region, particularly in remote areas.

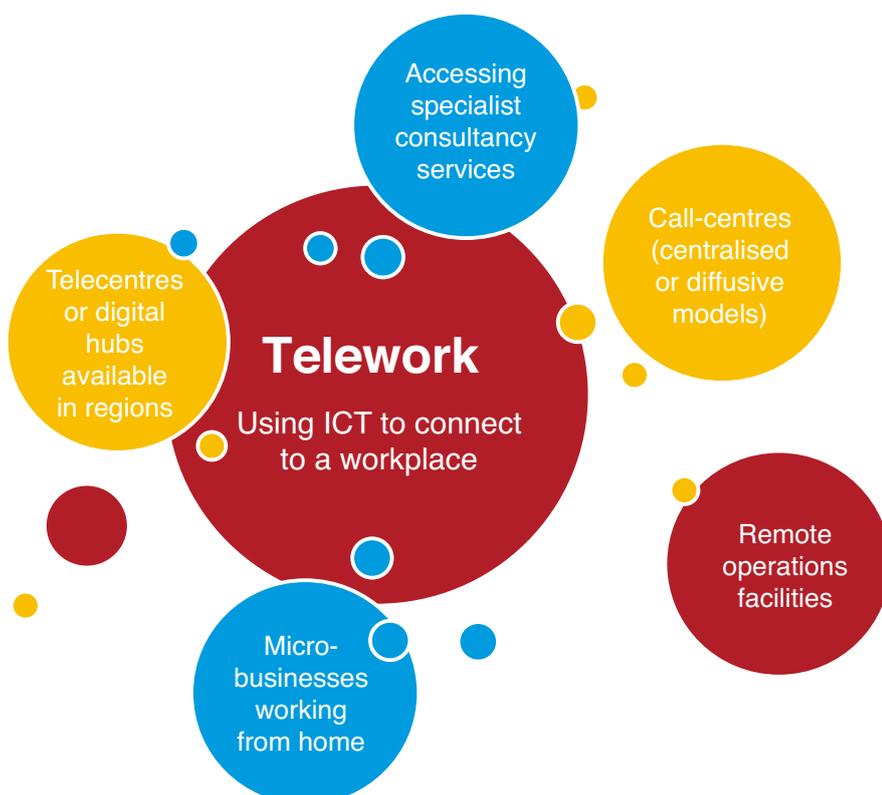


Figure 27 Main Types of Online Work¹¹⁴



6.2 Environmental Change and Resource Stress

Diminishing resources and climate change are placing global pressures on the dual requirements of environmental management and protection, while growing the global economy and standard of living. Significant environmental and economic impacts need to be faced, arising from changing temperatures, weather patterns and extreme events impacting on biodiversity, agriculture, infrastructure, coastal communities and water supply.

Under a moderate-emissions scenario, climate change projections for the Goldfields region suggest that from a 1990 base level, temperatures will continue rising to be between 0.6 to 1°C warmer by 2030 and annual rainfall will decline by between 5-7%, particularly over the April-October period¹¹⁶. Specific impacts identified included:

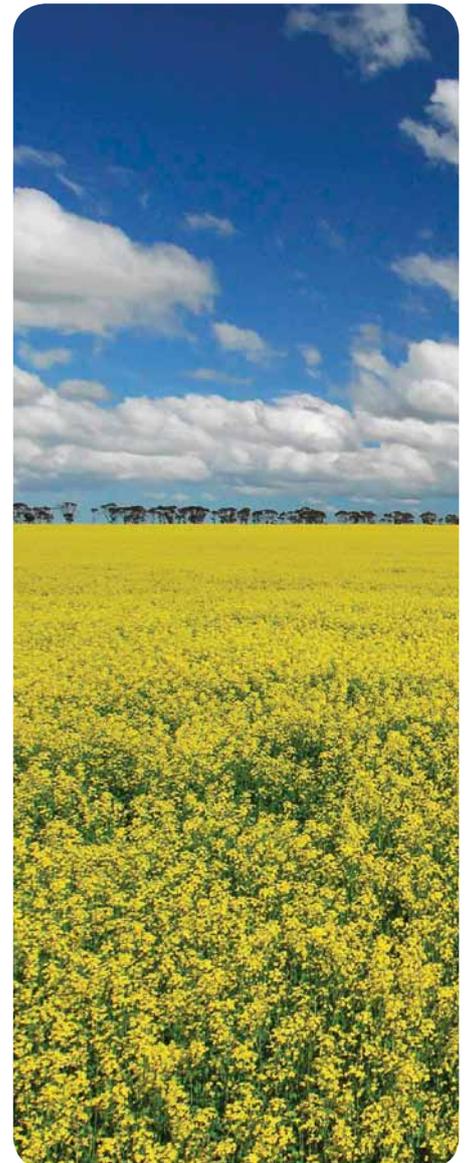
- Restraints on potable water supply from south-west Western Australia due to the winter drying effect but greater local opportunities for fresh water capture in summer;
- Improved stability of electricity supply in winter but greater instability in summer associated with the shifting seasonal incidence of storms;
- Changes to the liveability of the region with milder winters, but hotter and wetter summers;
- Generally detrimental changes to the natural ecology of the region (from drier winters, hotter and wetter summers and consequent bush fires); and
- Shifting seasonality of disruptions to road transport and mine production from rainfall events and to port operations from storms.

Climate change is particularly relevant to the Goldfields-Esperance region's significant ecological regions, including the spectacular South Coast, the Great Western Woodlands, and within the central deserts and the Ngaanyatjarra Lands. All of these ecological assets are important to the region, State and, in the case of the Great Western Woodlands, the world. Preserving these assets, while also ensuring a compatible development approach that allows industry to flourish, will be a major factor in the success of the region now and into the future.

Further, climate change has implications for land-use activities in the Goldfields-Esperance region such as:

- Fishery production;
- Water availability;
- Suitability of areas for land uses such as agriculture;
- Settlement patterns affected by changes in land use and environmental constraints;
- Disruption to 'upstream' components of the supply chain, such as water, energy and transport, impacting on mining productivity and viability¹¹⁷; and
- Coastal development setbacks and acceptable shoreline stabilisation techniques in response to sea level rise, storm events and changes in wave and wind patterns.

Key issues include the depletion and sustainability of water and food production systems, energy resources, and natural mineral wealth which are fundamental to the Goldfields-Esperance region's future prosperity



Due to levels of population and economic growth across the world, this trend is only set to increase into the foreseeable future, for example:

- Australian water consumption is forecast to rise by 42% by 2026, and 76% by 2056, compared to 2009 levels;
- The Australian Bureau of Agricultural Resource Economics and Sciences forecasts total energy consumption increase in Australia of 35% over the period from 2008 to 2030; and
- Mining sector data reveals a gradual and permanent decline in ore grades for major mineral commodities produced by Australia.

It is therefore incumbent on stakeholders and residents to discover new ways of ensuring quality of life for current and future generations within the confines of the natural world's limited resources. The region has shown that it is resilient and able to adapt to changing circumstances and adopt new practices and technologies.

Increased engagement in use of renewable energy, water recycling, land use management and sustainable accommodation and urban design will position the region to better respond to current and emerging challenges.

Nonetheless, planning of the investments is required, as well as the implementation of programs to support the required behavioural changes across community and business alike.

It is important to recognise that climate change, together with the policy and social action directed at responding to climate change, is creating both economic opportunities and challenges.

It requires shifting incentives towards lower carbon energy sources and industrial processes. It also requires expanding market demand for carbon-reducing technologies and environmentally friendly products. Although coal is expected to account for 59% of the increase in demand, the fastest growing gas, nuclear, hydro and renewable energy sources are expected to increase at a faster rate.

Biofuels and other renewable energy sources are expected to increase by 86.5%¹¹⁸. The global shift towards the green economy can mean that new industries, small and large, seeking to assist the economy in reducing its carbon and environmental footprint could find a niche in the Goldfields-Esperance region.



Megatrend	Theme	Change as a result of trend	Key sectors potentially impacted	Goldfields-Esperance response
Environmental change and resource stress	Climate change Diminishing resources	Drier winters, hotter and wetter summers Diminishing resources/ higher prices/ diminishing regional benefits	Damage to ecological regions and assets Regional liveability reduced Settlement patterns locate to cooler climates Pressure on water supply Natural disasters (bush fires) impacts on transports, built environment (ie storms) Impacts on fisheries, agriculture and pastoral production; leads to reduced employment and rising food prices Finite nature of minerals and other mined resources, including resources for producing energy could lead to reduced mining activity, increasing costs and job losses	Stakeholders and residents discover new ways of ensuring quality of life for current and future generations within the confines of the natural world's limited resources and climatic challenges by adopting new practices and technologies.



6.3 Population Factors

A number of significant global trends relate to populations. There is a greater portion of ageing people across the world who, with lifestyle and health benefits, are living longer. Meanwhile birth rates over time have been decreasing, creating an imbalance in population structure. Additionally, continued development in Asia, South America and India is leading to rapid urbanisation. With the world economy growing and populations changing, issues of global food consumption, liveability, and experiences have become increasingly important. Working within the umbrella of global trends, the historic cyclical characteristics of the Goldfields-Esperance region also need to be considered.

Global Food Consumption

The UN Food and Agriculture Organisation predicts that feeding a world population of 9.1 billion in 2050 will require raising overall food production by 60% between 2007 and 2050¹⁹. This creates enormous opportunities for regions with recognised agriculture and food production expertise that are geopolitically stable and have reliable supply chains and infrastructure.

The Goldfields-Esperance region's wheat and livestock markets are the obvious beneficiaries, but so too are other markets such as aquaculture, agri-tourism and niche high-value food production. The region's geographical proximity, direct access to Asian and global markets through the Esperance and Fremantle Ports, advantage in the production of several commodities and its reputation as a stable provider of quality produce are important, established attributes that support export opportunities.

While the predicted growth in demand for food products presents opportunities for the Goldfields-Esperance region, the capacity to expand, diversify and add value to this food production is central to the region's prosperity. Policies and incentives need to be in place to encourage businesses to invest in the required technology and workforce skills to take advantage of new food production opportunities. This also includes national and international biosecurity and trade restrictions which limit market access.

1.2 billion people, or 17% of the global population, did not have access to electricity in 2013



Urbanisation

Across the globe, the continued shift from rural to urban living will be profound, with the world's urban population increasing from close to 3.9 billion today to 6.3 billion in 2050¹²⁰. Continued strong growth in the size and diversity of the global urban population is expected to be disruptive socially in adaption, and also on demand for infrastructure and resources, particularly energy¹²¹. It will also present opportunities for social and economic development and more sustainable living. Expertise in providing environmentally-friendly housing and urban design that is appropriate, affordable and sustainable will be of value to metropolitan and regional centres alike. Early movers to accommodate urbanisation will gain lasting advantages and regions can prepare to cater for and attract the emerging needs of this cohort, including social services.

Three core areas of opportunity and disruption have been identified for the Goldfields- Esperance region:

High quality food production — demand for agricultural produce is a key outcome of increased urbanisation as more food is demanded by a growing population of net food buyers. Additionally, agriculture production is challenged by large scale conversion of farm land to urban centres and increased water usage, placing an increased strain on food production capabilities. The region's existing comparative advantages in agriculture and supply chain infrastructure position it well to meet the needs of this growing cohort although use of land, access to water, climate change management and other factors remain a priority.

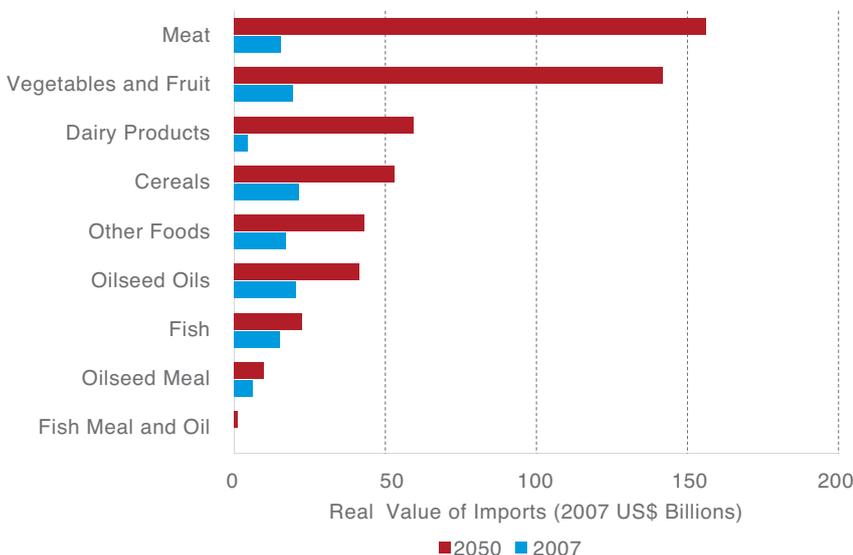
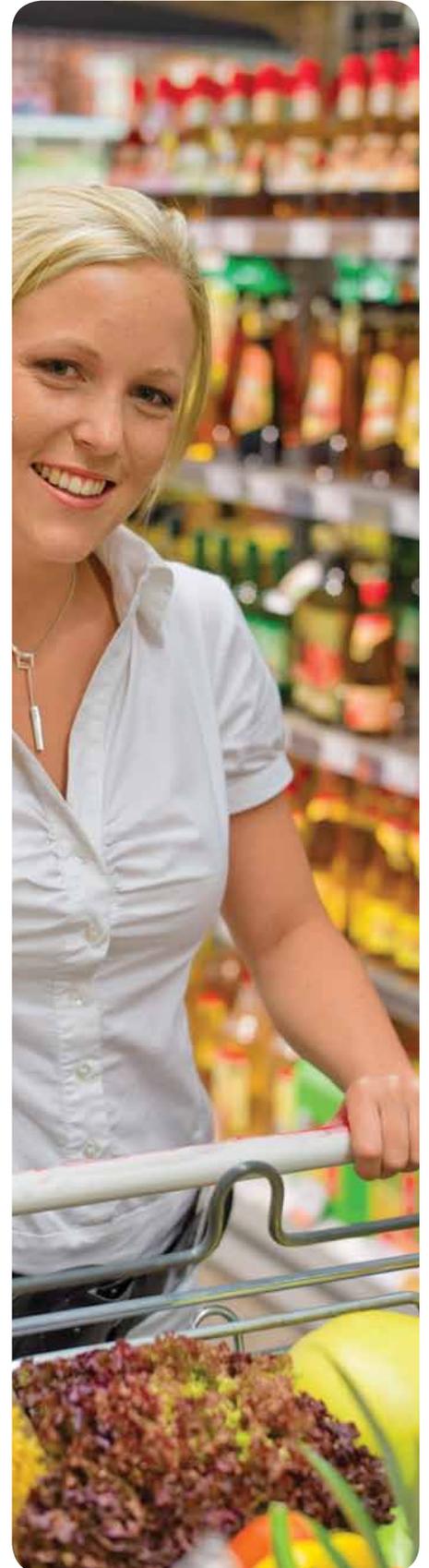


Figure 28 Projected Agriculture Imports by Commodity, World¹¹⁹



Population retention and attraction — urbanisation will impact on the Goldfields-Esperance region in a number of ways. As the region develops, it is highly likely that it will experience the rural-urban drift that is the hallmark of urbanisation. The populations of established towns such as Kalgoorlie-Boulder and Esperance will continue to grow as people move in from rural and remote areas, overseas and interstate to take advantage of increasing economic and social development opportunities offered in these places. Similar to major metropolitan centres, this will also put pressure on the region's infrastructure and population servicing resources.

The Goldfields-Esperance region itself is typically characterised by cyclical population growth. Fluctuating population levels are allied to changing mining sector employment needs. Over the past two decades the population of the Goldfields-Esperance region has grown from around 54,500 in 1994 to 61,300 in 2014¹²². However population growth across the region has been varied, with many of the region's communities heavily linked to the fortunes of the cyclical mining sector.

The only communities which experienced a steady increase in population over this period were the southern communities of Esperance and Ravensthorpe and the inland general services, mining and retail hub of Kalgoorlie- Boulder. The nickel and gold mining towns of Coolgardie, Kambalda, Norseman, Laverton and Leinster have all experienced fluctuating population levels over the past two decades as employment opportunities came and went.

The region also has a high population turnover, especially the communities in the Northern Goldfields. Regional areas such as the Shire of Leonora have experienced an average annual turnover of approximately one-in-six residents over the past five years compared to the average across all of Western Australia's local government areas of one-in-ten¹²⁴.

Improving infrastructure, land access, community services, and social environment along with capturing business and employment opportunities are critical for the Goldfields-Esperance region. Through targeted approaches to liveability and catering for retirees and migration populations, including mobile Aboriginal communities, the Goldfields-Esperance region can aspire to build a strong, more permanent population.

A considered challenge of urbanisation is that with larger cities beyond the region, such as Perth, people may continue to be attracted away from the region. The challenge is for the region's towns and centres to continue to create spaces and communities through the provision of affordable and diverse housing, high quality public amenity and community infrastructure, easy access to quality population services including health and education, and appropriate retail, entertainment and recreation choices.

Improvements in community services and amenity need to be matched by the creation of employment opportunities across a diverse range of industries. The choice to live in the region and work 'anywhere' will be assisted by this approach as well as the technological and digital advances that enable the virtual workplace.





Industrial and urban development materials and expertise— the expanding cities in emerging economies will spend the majority of global investment in coming decades as they strive to meet the surging demand for infrastructure, energy, water, and waste management. This will strengthen demand for raw and processed materials for which the region has considerable reserves, as well as technical and professional services. However with the global mineral production underpinned by global demand and commodity prices the Goldfields-Esperance region will continue to be vulnerable and will need to continue to develop industry diversity, and ongoing investment in resources exploration. The region could also have a contributory role in waste management, energy, water and transport expertise or provision.

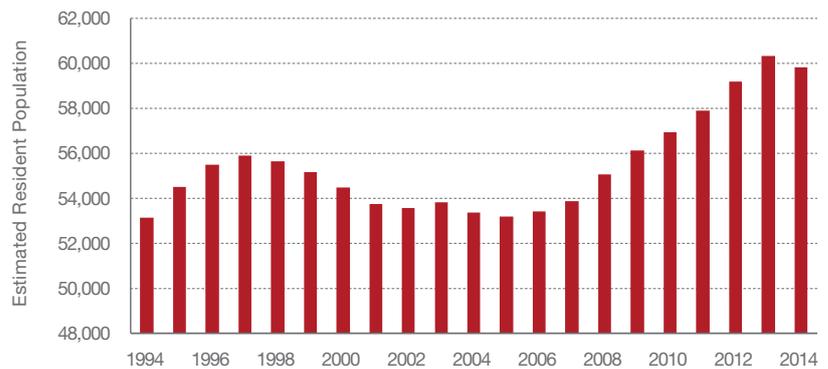


Figure 29 Historical Population, Goldfields-Esperance, 1994-2014¹²³

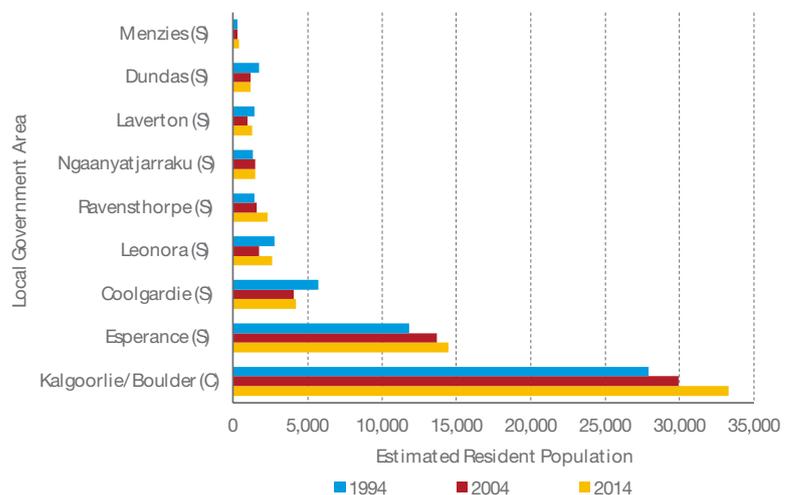


Figure 30 Historical Population by LGA, Goldfields-Esperance¹²⁵

Life Expectancy

The population of Australia is ageing rapidly, representing one of the greatest challenges for policy makers, industry and communities. Approximately three million people in Australia were aged 65 years and over in 2011, representing over one in eight Australians. By 2050, the number of people aged 65 and over is expected to reach one in five people.

Key challenges include:

Housing provision — aged people often require more affordable housing as well as housing more appropriate to their needs, such as smaller, easy-to-maintain housing close to services;

Infrastructure — a decreasing level of mobility requires appropriate transport infrastructure and services;

Aged care services — a growing proportion of aged residents requires a growing number of accessible care services;

Population retention — elderly residents in regional areas typically move to centres with better care and support services; and

Community drainage — the aged are more likely to be engaged in the community and perform vital volunteering work: as they leave a region the community loses a vital resource.

Traditionally seen as a burden on services such as health, an ageing population can provide business opportunities and economic growth to regional areas.



Ageing in place is important in regional areas and an increasing demand is already being seen for the Northern Goldfields, Kalgoorlie-Boulder and the southern regions.

The natural amenity and current aged migration in the Esperance region, in particular, can create a number of opportunities for the Goldfields-Esperance region, such as:

- Positioning the region as a destination of choice for retirees seeking affordable housing and an aged-friendly lifestyle;
- Developing an aged care industry through the creation and development of high quality aged housing, transport infrastructure and aged care services, including relevant training;
- Supporting the local tourism industry by developing niche market aged-friendly tourism initiatives; and
- Engaging the elderly in the community to take on leadership positions and support community projects and initiatives.

The region needs to look at how it provides services, what those services are and ensure that businesses, governments and communities understand and address the wants and needs of an ageing population. Centralisation of services away from regional centres is contrary to positive outcomes for the population changes envisaged in the next 34 years in the Goldfields-Esperance region.



Individuals and Experiences

When considering the global population growth, mobility and experience of rapid change, as well as technological advances and rising standards of living, it is now a recognised global trend that 'people expect more'. Individuals are gaining empowerment through education, health and technology; they travel and are informed. They want transparency and participation in government and public decision making. They are increasingly becoming more interested in doing and experiencing. They are also becoming more environmentally and ethically focussed. The Goldfields-Esperance region needs to respond to this trend to attract both residents and visitors, and provide opportunities to share ethical and philanthropic values.

International tourism — in 2013¹²⁶ the travel and tourism industry was valued on direct, indirect and induced benefits at US \$7trillion. China was the leading contributor to that expenditure. A wealthier and growing Asian middle class will have the ability to travel further and stay for longer in destinations. The Goldfields-Esperance region already possesses substantial natural, environmental and developed tourism assets across an environmentally diverse region. Realising and optimising the latent potential of these assets, developing new attractions and ensuring access for both time-poor and more leisurely visitors represents both a challenge and an opportunity.

Experiential consumption — the digital world is changing the structure of businesses and consumer interactions. They can share their ideas and needs quickly and collaborate in their decision-making with ease. Purchasing, social and other interactions have become fast and effortless. They want their wants and needs met intuitively; they want choice, convenience, price benefits and enjoyment; but they are also seeking more from their experiences.

The Goldfields-Esperance region is changing to meet evolving requirements for new consumption patterns, liveability and tourism. Local initiatives like eco-friendly shopping, community gathering spaces for exhibits and purchase experiences, development of creative industries, lifelong learning opportunities, and businesses willing to participate and compete in the online shopping and virtual arena, demonstrates the regional interest in this space. The need of businesses and other organisations to embrace the future requires support, education and innovation.



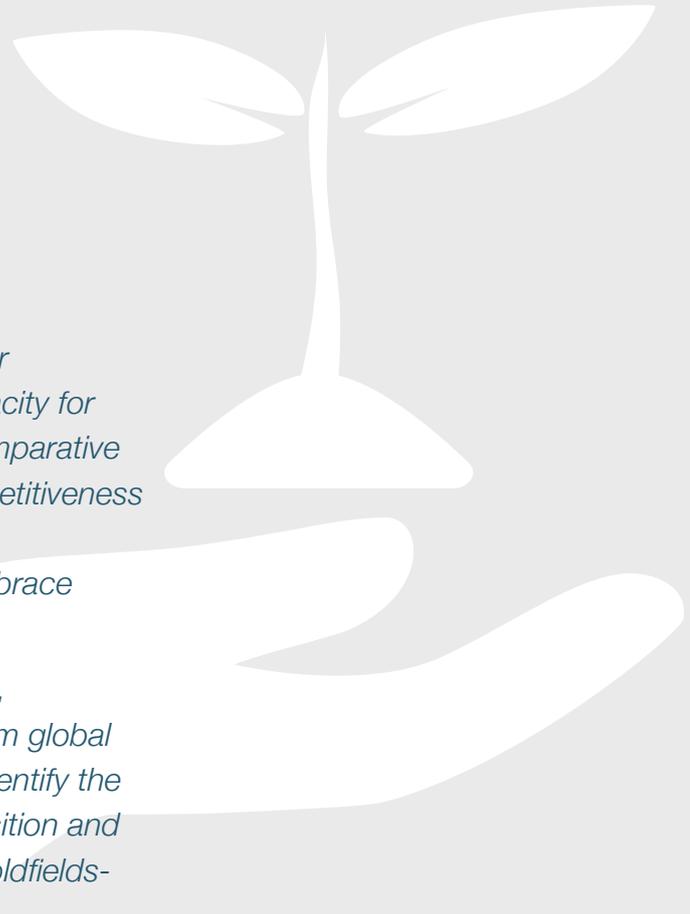
Megatrend	Theme	Change as a result of trend	Key sectors potentially impacted	Goldfields-Esperance response
<p>Population factors:</p> <p>Urbanisation</p>	<p>Global food consumption</p> <p>Urbanisation</p>	<p>The world's urban population is increasing, anticipated to almost double by 2050. This is anticipated to be disruptive socially and place heavy demands on infrastructure, food, energy and social resources.</p>	<p>High quality food production</p> <p>Industrial and urban development materials and expertise</p> <p>Population retention and attraction</p>	<p>The region's agriculture and supply chain infrastructure will help meet the needs of this growing cohort although use of land, access to water, climate change management and other factors remain a priority.</p> <p>The demand for infrastructure and resources, particularly energy are a challenge but there are opportunities for social and economic development and more sustainable living.</p> <p>The region will be challenged by urbanisation but can proactively seek to provide improved community services and amenity, land access, infrastructure, and social environment, along with business and employment opportunities across a diverse range of industries.</p>
<p>Population factors:</p> <p>Life Expectancy</p>	<p>Life expectancy</p>	<p>By 2050 one in five people will be over the age of 65, requiring selective accommodation, mobility infrastructures, aged care services and a loss to the community in expertise and contributions.</p>	<p>Housing</p> <p>Aged care</p> <p>Infrastructure</p> <p>Volunteers</p> <p>Lifestyle</p>	<p>Enable ageing in place for regional retirees and create an environment to attract older people.</p> <p>Embrace business opportunities by developing an aged care industry with high quality aged housing, transport infrastructure, aged care services, including training, and an attractive aged-friendly lifestyle including engaging the elderly in leadership positions that support community projects and initiatives.</p>
<p>Population factors:</p> <p>Individuals and Experiences</p>	<p>Individuals and experiences</p>	<p>With an increasing global standard of living, individuals will become more informed and selective, interested in experiencing, and changing the way they spend their time and financial resources.</p>	<p>International tourism</p> <p>Experiential consumption</p> <p>Consumer ideology</p>	<p>Optimising and improving the natural, environmental and developed tourism assets to meet the global and national tourist interests.</p> <p>Ensuring quality of regional digital connectivity, providing enhanced experiential shopping, improved services, creative and recreational experiences, in order to build regional business and communities.</p> <p>Recognise and create opportunities to engage individuals in philanthropy to improve communities, reduce poverty and enhance the environment.</p>

7.0

Capacity for Growth

To realise our Regional Vision and long term aspirations for Goldfields-Esperance 2050, an understanding of the capacity for growth in the region is required. Exploring the region's comparative advantages, core challenges, barriers and business competitiveness identifies priorities to be addressed to drive sustainable development, activate new economic enablers and to embrace innovative opportunities.

This section builds upon the analysis of the region's social, economic and infrastructure profile together with input from global and regional influences and community consultation, to identify the key issues for growth and a growth scenario that will transition and sustain the people, communities and economy of 'the Goldfields-Esperance 2050'.



7.1 Comparative Advantages and Assets

The Goldfields-Esperance region has many advantages and strengths that can be leveraged to drive growth and development and improve regional living for all people within the region.

Skilled, Experienced and Diverse Workforce

The leading industry sectors in the region, namely mining, agriculture and primary sector services, have attracted and developed a high level of skills and experience within the region. Vocational and tertiary education and training providers are well established, supporting the resources and agricultural sectors within and outside the region. Employment opportunities attract new people to the region. The workforce within the Goldfields-Esperance region is generally flexible and responsive, willing to travel for work and also willing to enter into small business, entrepreneurial activity and diversify into other areas, as economic circumstances change. It is recognised that a highly skilled workforce is likely to move with national and global economic trends, but there is significant potential to capture this mobile portion of the workforce to 'stay a while longer' whilst living and working in the region. Providing further opportunities for the transient workforce to stay longer, for example residing for five years instead of three years, is a key area to leverage in future.

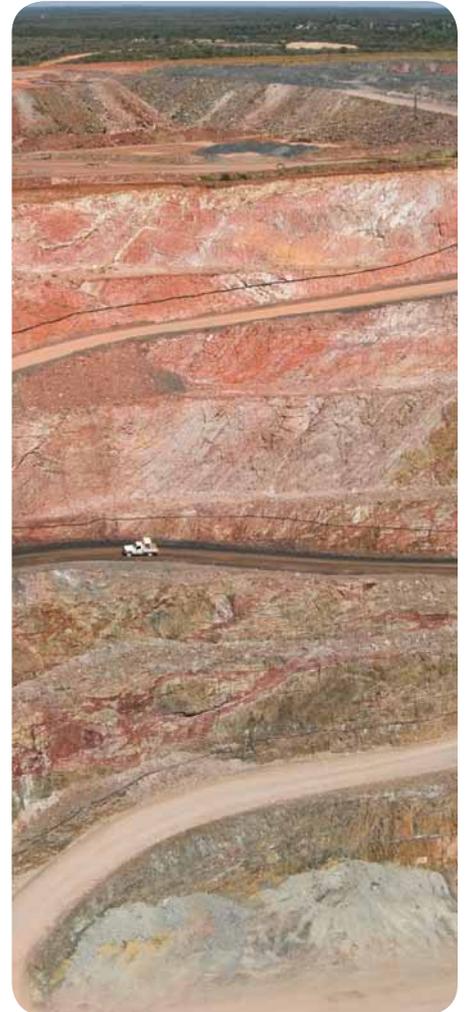
Currently the distribution of workforce across the region differs depending on the key industries and employment available within each sub-region or community. In the southern sub-region, the population is concentrated in the major settlements with farming families, farm managers and seasonal workers living on outlying farms. Some central and northern Goldfields settlements have majority fly-in fly-out population for nearby mining operations and there

are many dispersed mining camps with fly in-fly out arrangements. The City of Kalgoorlie-Boulder has a mix of resident and FIFO workers as well as many residents who live in the Goldfields and travel out to work. Dispersed mining camps outside regional centres and FIFO arrangements can reduce the potential benefits to all communities, particularly affecting smaller and remote communities. There is significant potential to capture more resident workers in the City of Kalgoorlie-Boulder or other larger regional centres, where the equivalent metropolitan-style opportunities and amenities can be offered as incentive. There is much capacity to grow the proportion of the population travelling out of the region to work or working virtually through the use of digital technology, while continuing to live in the region to help retain regional knowledge and expertise.

Primary Industry Innovation

The established presence of major activity focussed around mining, agriculture and primary industry services supports high levels of innovation and expenditure on downstream and upstream supply chains. The multi-billion dollar resource activity generates the development of flow-on opportunities through demand for goods and services including maintenance and operation capacity and down-stream processing utilising extraction by-products. Resources activity is supported by the presence of the Western Australian School of Mines (WASM) and other well-established training providers and mining education initiatives. Significant mining activity in the region has developed a high standard of manufacturing, industrial technology and mining services industries that not only serve the region, but also other parts of the State and global markets.

The region's agricultural sector has led the way in pioneering the implementation of new technology and innovation and has been a consistent early adopter of technology and processes to improve productivity and land use management. New and emerging farm equipment, products, services and technology are piloted in the region, including the use of new crop types, drone mapping and new digital products to manage productivity and land use management. The agricultural sector supports numerous agribusiness and professional services, with opportunities for expanded local equipment manufacturing and digital services. Recently, niche food businesses in regional and local food products, are being developed as a value-add to traditional agriculture – these include brewing and bread making with local by-products from the agricultural sector as well as olives and olive oil production.



Natural Resources and Assets

A range of regional advantages result from the region's unique natural assets spanning:

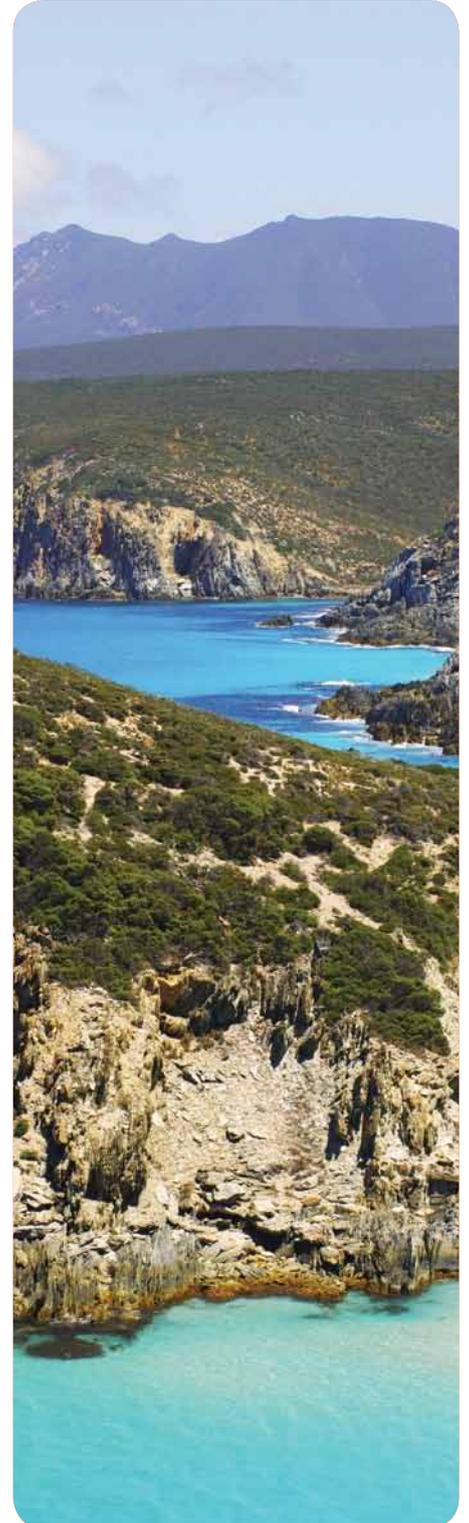
- Mineral wealth in gold, nickel, iron ore, uranium and rare earth metals;
- Natural energy sources, including developed and potential wind and solar energy;
- World-renowned natural landscapes and biodiversity; and
- Coastal assets.

The region's vast and unique environment and geography positions it to benefit from a range of resource activity, agriculture, food, fisheries and tourism activities whilst offering a lifestyle 'point of difference' from increasingly urbanising and expensive metropolitan areas. The size of the region and its communities provides an ideal testing ground for pilot activities and trialling new economic, social and environmental activities, from new energy supplies to improved land use management. The climate, geology and landscapes within the region provide perfect conditions for renewable and alternative energy from solar, ocean, wind and geo-thermal energy.

The biodiverse environment provides significant opportunity to maintain the health and productivity of land and water catchments within the region as well as providing scientific, health and medical opportunities for the future.

Geography

The size and location of the Goldfields-Esperance region means sustainable growth can occur whilst protecting and enhancing the region's natural assets. Numerous industries leverage the region's expansive geography and relative isolation from major metropolitan regions to their advantage, including tourism, waste management, heavy processing and renewable and alternative energy production. Whilst the relatively low population density and large distances between settlements in the region do create challenges around service delivery and access to markets for business and industry, the geography of the region is an enduring attribute that can be optimised in future. The lower population density and smaller communities lead to people within the region expressing a sense of safety and experiencing strong community bonds.



Culture and Heritage

The region's cultural heritage is founded upon thousands of years of Aboriginal culture and more recent European exploration and settlement. Recent history contains the early influences of mining, agricultural and pastoral explorers, pioneers and subsequent industries that led to the establishment of the regional centres and communities that exist today. Wide-ranging opportunities exist to develop healthy, happy and educated communities based around our Aboriginal people and living cultural practice as well as new economic opportunities based on tourism, art and cultural heritage expertise. The current success of cultural enterprises from across the region – from the art centres of the Ngaanyatjarra Lands to participation in the Regional Arts Summit in Kalgoorlie and bush tucker tours on the South Coast – marks just the beginning of growing our cultural heritage and creative industries and enabling greater social justice and capacity-building for the people of the region.

Strategic Location

The Goldfields-Esperance region is the gateway between the eastern states and Perth and Western Australia, with key road, rail and coastline links running through the heart of the region. With strategic routes through the major industry centres of Kalgoorlie-Boulder and Coolgardie, there is significant opportunity for these local government areas to leverage existing and future infrastructure development and logistics, optimising potential high speed rail links, fibre-optic connections and road and air upgrades.

Smaller regional centres such as Norseman and the local government authorities of Laverton and Ngaanyatjarraku have significant opportunity to take advantage of their location on strategic routes to leverage increased road-based tourism from the Eyre Highway (east-west) and the Outback Highway (north-south).



Logistics Infrastructure and Market Access

The Goldfields-Esperance region enjoys well established, strong access to global markets and is an internationally recognised export hub for grain and minerals. The region benefits significantly from the rail and road logistics infrastructure associated with the Esperance Port — the deepest port in the southern hemisphere — providing crucial import and export capability for regional products. There is significant growth potential for the Esperance Port, however, future expansion is largely linked to global commodity demand and prices. Other physical infrastructure includes a number of regional airports also servicing logistics, importing and exporting product and business and recreational visitation. Some of the region's most successful, locally-grown businesses are in the freight and logistics sector, leveraging their years of road transportation experience to service Western Australia and the nation. This is a future industry growth area for the region.

Access to Australian and global markets is facilitated by strong business and trade relationships and networks with trading partners, clients, education and training providers and the industry workforce. The region's position within the same time zone as the growing Asian markets enables business communication and trade.

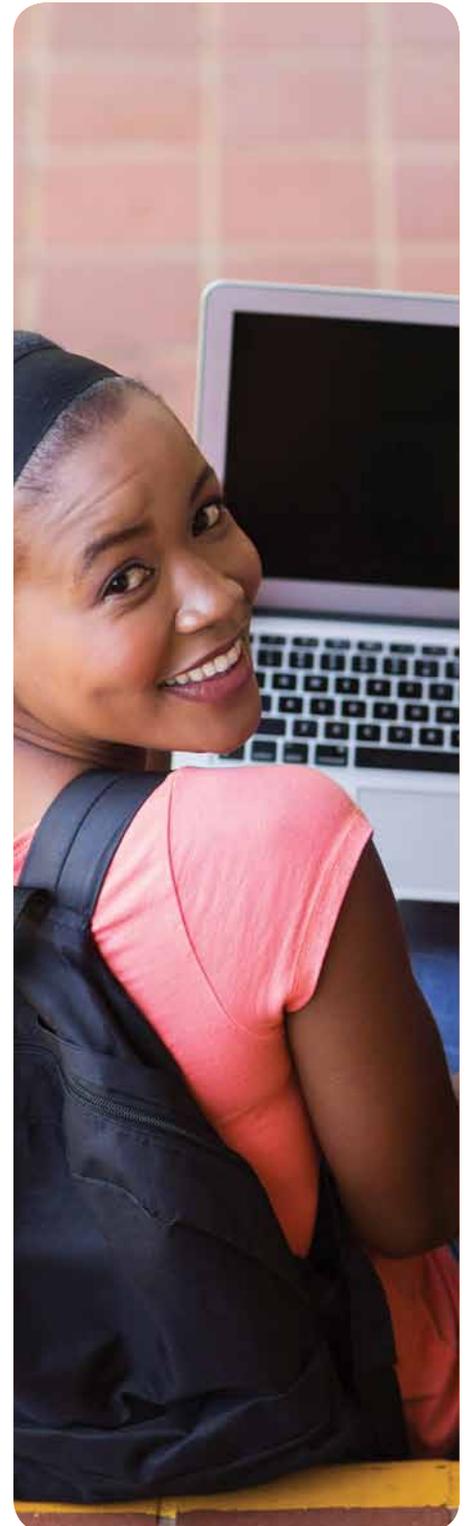


7.2 Core Challenges to Growth

The region has many strengths and comparative advantages but does face a range of challenges associated with retaining and enhancing regional living and diversifying the economy, especially in the context of the global trends and influences identified in Chapter 6. A number of the challenges identified relate to the significant differences between sub-regional economies, communities and populations across the vast region. The region requires a multi-pronged approach to tackling the challenges it faces; a 'one size fits all' approach will not be effective given the range of industries, location of jobs and complex social scenarios. The following challenges have been identified through analysis of the social, economic and infrastructure circumstances that currently prevail in the region.

Equity of Opportunity

The communities across the region have varying levels of service quality and access to education, employment and business opportunity. Larger urban centres offer greater opportunities for health, education, recreation and community services compared to remote towns and communities. The region has experienced a 'dual wage economy' that leads to significant differences between incomes and standards of living between people of the region, social-demographic groups and areas within the region. The Goldfields-Esperance region has a significant Aboriginal population living in diverse locations with variable levels of access to opportunity due to a range of complex factors. There are differences between education, employment and health outcomes for Aboriginal people across the region and also between Aboriginal and non-Aboriginal residents, which varies depending on location and the availability, or lack of, services. There are also residents within the region for whom English is a second or third language. The region must work collaboratively to address equity of opportunity for all and ensure that all people share in the future prosperity of the region in order to reach its aspiration of becoming a fully-inclusive region. More innovation is required to facilitate quality education, health and wellbeing for all people, regardless of their location, cultural background, ability, language or other social or economic circumstances.



Geography

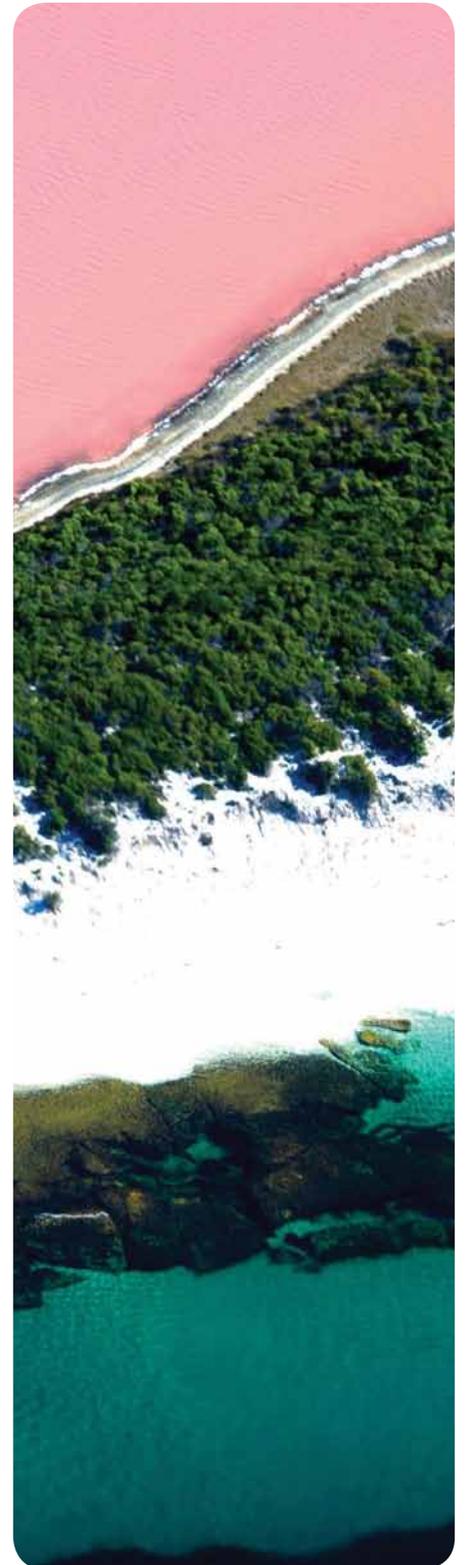
The geography of this vast region, including the distances and relative isolation from regional centres and communities both within the region and from metropolitan areas, is a challenge common to many other Western Australian regions. It can add significant costs to household expenditure and the cost of doing business – this is particularly prevalent for smaller regional and remote communities that import the majority of basic essentials, including food and energy supplies. The remote nature of many of the region's communities, coupled with a lack of population 'critical mass' or decreasing populations, impact on the viability of improving services and infrastructure.

However, despite these challenges, the region has always been and remains a significant economic driver of the WA economy, providing considerable economic benefit. It continues to play a key role in driving the development of the metropolitan regions of the State. Future investment in the region, especially around innovation to reduce or eliminate the perceived barriers of geography and distance (such as digital capacity), delivering social services in more efficient ways as well as optimising the expansive geography of the region as an opportunity for economic benefit will continue to see returns for the region and the State.

Population Retention and Attraction

The population turnover in the region is high, particularly for younger age groups. Retaining people in the region continues to be a challenge in some locations, namely inland communities and mining towns where the workforce has become increasingly FIFO rather than residential. This is a trend occurring across Australia and the globe as nations continue to urbanise. Many young adults and teenagers tend to leave the Goldfields-Esperance region seeking education and training, employment or adventure elsewhere. Many aged residents, often reluctantly, leave the region to access required health services despite being keen to remain in the region. The loss of workers and aged residents has important implications on skills availability and community service provision.

In the more globally-focused and agile economy of the future, it is unrealistic to expect workers to remain within the same regional community for their entire lives. However it is a realistic aspiration to aim to 'extend their stay' – that is, look to keep people in the region for longer whilst they're here, attract them to other communities within the region (sea-change scenario) or to encourage them back at different periods during their lives (having a family or retirement).



Boom and Bust Cycle

The region is heavily linked to changes in global commodity prices and the local economy can be subject to 'boom and bust' cycles. This has particular implications for the sustainability of towns linked to one key employer, where populations fluctuate and unemployment rises and falls. This key attribute of the region can undermine public and private sector investment, especially investments which require a large degree of planning and future certainty such as utilities. Greater economic diversification is one area that can help address this trend.

Skills Requirements

The diversity of skills and experience in the region is a fundamental input to economic activity and crucial to regional competitiveness and resilience. Levels of skills and educational attainment in the region vary across regional centres, communities and socio-demographic groups. There are a number of constraints, including relatively low education participation, retention and achievement outcomes for some areas of the community. There is also a movement of high-performing students and skilled people away from the region with an identified need for more locally accessible education, higher education, training and employment pathways.

Land Use Conflict

The development of investment opportunities within the region will, directly or indirectly, require access to land. Land availability is a fundamental input to deliver affordable housing, commercial opportunities, recreational space and community services. Despite the expansive land mass of the region, there are challenges relating to land availability around key regional centres. The expansion of urban and commercial land is constrained by land tenure arrangements and environmental designations including government-held unallocated Crown land, natural reserves and mining leases surrounding regional centres. The potential for pastoral and agricultural land expansion is constrained by similar land and environmental arrangements, often put in place to protect and enhance land, and environments and landscapes of regional, national or international significance. There are also conflicts between different and sometimes incompatible industries and land uses, such as mining and agriculture.



Digital Readiness

Some areas of the region have high potential for digital-based industries, online work and digital-based services. The City of Kalgoorlie-Boulder has been identified as one of the top local government areas with potential for online work due to its good connectivity and workforce capacity¹²⁷. Other areas of the region do not have high speed broadband networks and have no access, or only limited and expensive access to internet coverage and mobile services. Overall, the region ranks low for levels of technological readiness, partly due to the limited access to digital connection and comparatively poor mobile coverage. The areas of the region with limited access to digital infrastructure and connectivity are often the areas that could benefit substantially from the application of digital technology and services (agricultural and pastoral areas and smaller centres and remote communities). Digital readiness also includes the utilisation of digital technologies, an area where the region ranks below national averages, again due to the varied nature of access to infrastructure and services. This impacts on the ability of the region to capture the benefits of changing digital technologies that have the profound potential to positively impact on life in isolated regions.

Primary Production Costs

The region's core industries are challenged by a number of barriers which may impact on further expansion, including:

- Increasing depth and geological complexity of new deposits;
- Declining ore grades;
- Higher processing costs for several commodities;
- Capital and operating cost pressures resulting from cost inflation;
- Access to sustainable and affordable energy sources; and
- Access and cost of inputs such as fuel, fertilisers and water.





7.3 Economic Competitiveness

A key challenge for the Goldfields-Esperance region is to identify new sources of growth based not just on our comparative advantage in raw materials and primary industries but on the 'competitive advantage' brought about by increased knowledge, ingenuity and innovation. This means rethinking and refocusing the local economy to increase returns from high-value segments of global markets in sectors such as industrial technology and advanced manufacturing and other more flexible and specialised activities. This is a challenge for Australia as a whole and all countries and regions must become more competitive if they are to maintain their economic position and respond to challenges such as productivity gaps, competition for mobile investment, rapid adoption of new technology and electronic commerce.

A 'competitive region' is one that can attract and maintain successful business and maintain or increase standards of living for the region's inhabitants. This means that skilled labour and investment will gravitate away from uncompetitive regions towards more competitive ones. The following table provides a summary overview of the Goldfields-Esperance region's competitive strengths and limiting factors, based on the five forces Porter's Diamond Model of Competitive Advantage. The Diamond Model represents a form of economic SWOT (strengths, weaknesses, opportunities and threats) analysis.

To optimise the region's capacity for growth, regional stakeholders must strive to maximise the region's competitive advantages outlined below and invest in people, skills, collaboration and productivity-enhancing innovation to develop competitive strengths in new areas. This will require highly skilled and educated workers and business managers that are closely connected and responsive to the global market. This future workforce will be required to be knowledgeable and adaptive to emerging technologies, global trends and influences. To optimise competitiveness and productivity, regional business and industry will need to improve levels of collaboration with other businesses as well as with government, universities, training providers and research organisations to realise commercial gains from innovation.

Table 13 Economic Competitiveness Summary

	Advantages	Challenges
Factor Conditions	<p>Port infrastructure – presence of deep water port in Esperance and associated rail and road links</p> <p>Airports – regular services to major towns compared to comparable regional areas</p> <p>Road and rail freight infrastructure – major freight routes to east coast, Port of Esperance and Perth</p> <p>Southern Ocean – key asset for commercial seafood production, tourism and lifestyle amenity</p> <p>Mineral deposits – abundance of economic mineral deposits</p> <p>Natural assets – unique landscapes, parks and biodiversity with extensive flora and fauna</p> <p>Land availability – availability of land for residential, commercial and industrial development</p> <p>Favourable climate – favourable climate and amenity supports retiree and lifestyle migration as well as agriculture and pastoral activities</p> <p>Clean and green environment – abundance of pristine environment and wilderness</p>	<p>Skills deficit – below-average education levels for some sectors of the workforce and population</p> <p>Digital connectivity – limited access to quality digital telecommunications services, particularly in remote areas and agricultural areas of the region</p> <p>Digital literacy – low digital literacy and levels of technological readiness</p> <p>Inbound freight – lack of inbound container freight</p> <p>Water and wastewater capacity – future capacity constraints in some areas of the region</p> <p>Contemporary local planning framework – limited capacity to ensure local planning frameworks are adequate for supporting efficient and effective land use planning</p> <p>Energy infrastructure – limited access to affordable energy infrastructure in remote locations</p> <p>Land constraints – some land in and around regional centres is constrained due to mining tenements</p> <p>Invasive species and biosecurity – invasive species and feral animals threaten the Rangelands, agricultural areas and natural assets and maintaining biosecurity can be difficult</p>
Demand Conditions	<p>Population growth – moderate population growth in major urban centres</p> <p>Access to growing markets – infrastructure access and physical proximity to Asia</p> <p>National and international organisation presence – strong presence of large corporations and associated expenditure</p> <p>Interstate visitation – access to interstate visitors</p> <p>Resident purchasing power – high incomes and wages (noting elements of a dual wage economy exist within region)</p>	<p>Critical mass – limited size of local markets</p> <p>Population retention – lower levels of population retention during youth, mature family and retiree stages of household lifecycle</p> <p>Volatility – cyclical and project-based economies</p> <p>Lack of economic diversity – limited employment and economic opportunities outside primary industries of mining and agriculture and population services</p>

Table 13 Economic Competitiveness Summary

	Advantages	Challenges
Related and supporting industries	<p>Established value chains – primary sectors serviced by established support services and businesses</p> <p>Mining education and research – quality local university and research capacity</p> <p>Agricultural development support - government support for agricultural development practices</p> <p>Unique amenity and lifestyle – amenity and lifestyle supports population growth in larger regional centres</p> <p>Civic and volunteer activity – high levels of civic participation and volunteering with welcoming social networks</p>	<p>Local community and professional services – limited local services provision in small towns and communities and decreasing frequency of specialist services</p> <p>Labour availability – reliance on imported skills and labour from other regions especially during times of high demand</p> <p>Critical mass – lack of critical mass affects ability of business and industry to form larger value chains</p> <p>Government centralisation – increasing centralisation of State government services</p>
Firm strategy, structure and rivalry	<p>Collaborative agricultural practices – collaboration in terms of labour sharing, marketing, price negotiations, logistics and research and development</p> <p>Established regional centres – Kalgoorlie-Boulder and Esperance act as major suppliers of professional, retail and social services, generally offering higher levels of services than comparable-sized centres due to isolation from major centres</p>	<p>Critical mass – lack of population size in smaller centres can lead to less price competition</p> <p>Isolation – isolation from densely populated centres adds to cost of business and creates business retention pressures</p>
Innovation	<p>Mining education – local research and development support through WASM and other education initiatives such as GEMIA</p> <p>Agricultural innovation – recognised region of technological innovation due to progressive and entrepreneurial attitudes of local growers</p> <p>Major sector technology use – Strong reliance on machinery, equipment and technology in primary industries and rapid uptake of new technology to improve productivity</p> <p>Natural energy sources – established wind and solar power generation in some regional centres with progressive attitude to alternative energy generation – Australia's first wind farm located in Esperance</p>	<p>Telecommunications technology – limited high speed and mobile connectivity, particularly in remote and agricultural areas of the region</p> <p>Isolation – distances involved for innovators, businesses and research organisations to come together and collaborate</p> <p>Local research and development presence – underrepresented research and development professionals</p> <p>Local technology firms – low levels of technology-related local businesses</p>

7.4 Economic Diversification

Economic capacity to grow the number and diversity of regional jobs and the prosperity of the Goldfields-Esperance region exists through opportunities allied to the comparative advantages of the primary industry sectors of mining and agriculture, along with new enterprises, that capture the innovative and creative potential of the region's population. Economic diversification is a key aspiration for the future of the Goldfields-Esperance region to build resilience and sustainability. This will require the investment and development of existing and new industry sectors and the creation of new jobs, in a range of different employment types, most likely very different than the region currently offers.

Other areas of investment will target building the capacity of regional businesses to grow and diversify. Initiatives will be aimed at expanding access to markets such as cultural and language skills, trade and buyer initiatives, digital literacy and engagement and, most crucially, access to modern and reliable digital infrastructure, as well as physical infrastructure, to connect business and residents to other regions. Digital infrastructure is a short term essential and key enabler to build the capacity of the region and drive business development and job creation.

Relying heavily on one or two industries to support the local economy can heighten the risk of adverse impacts to communities and quality of life for residents, if and when economic downturns occur in that sector. For example, the impact of fluctuating commodity prices can cause considerable impact on new investments and existing operations. This has been experienced in recent times as gold and nickel prices have declined and mining operations have closed or moved to 'care and maintenance' only.

The region must ensure that wealth and skills from its primary industries are invested in economic diversification and that it does not depend on resource wealth and exports as primary sources of revenue for the long term.

The WA Tomorrow forecasts are based on past trends in total population and net overseas migration for WA. Three forecasts, low, medium and high, reflect the uncertainty in predictions over long time periods

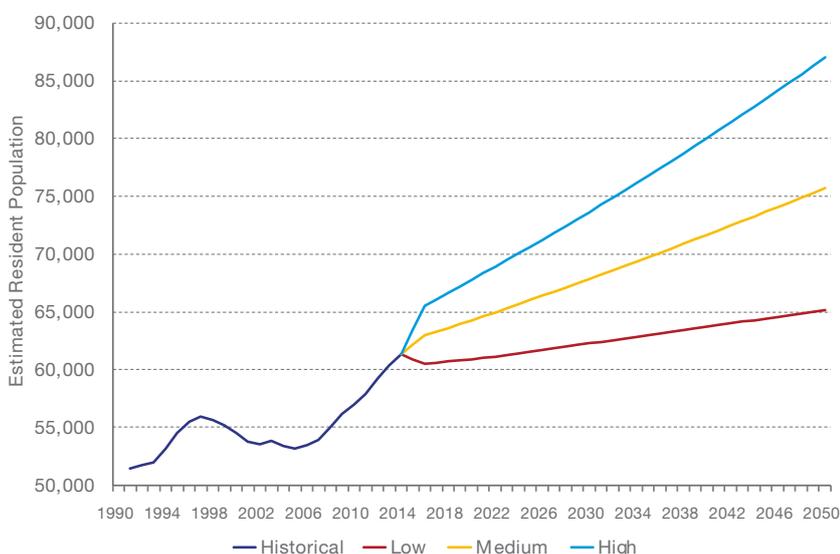


Figure 31 WA Tomorrow (2015), *Population Forecasts Local Government Areas*¹²⁸



Downturn in export demand and commodity prices, increases in fixed costs and fuel prices, as well as natural disasters such as drought, hail and bush fire, also affect local businesses that supply services to mining companies and agribusiness. These flow-on trade and service suppliers can include construction, drilling, surveying, environmental management, transport, retail, human resources, professional services and training providers. Furthermore, changes to residential populations such as the sudden loss or arrival of a locally based or fly-in fly-out workforce can have drastic impacts on local service provision, accommodation and land prices in regional centres, which is often played out more prevalently in smaller communities. Having access to a more diverse range of employment opportunities can help mitigate the impacts of the 'boom and bust' of the resources sector and temper the seasonal and often unpredictable nature of the agricultural sector.

The agricultural sector is a mature sector within the region, however there is significant opportunity to grow the agricultural services industry and develop a highly skilled workforce around this sector. With reforms to tenure arrangements within the Rangelands, pastoral activities will have the opportunity to expand and diversify into other economic areas.

The export potential of industries is also important to the region's capacity to grow, since it increases the extent to which Goldfields-Esperance businesses (and residents) can benefit from economic growth outside the region. Currently, the top five industry sectors in terms of export potential across Australia are information, media and telecommunications, mining, wholesale trade, manufacturing and professional services. Whilst there is currently limited media and telecommunications and wholesale trade opportunities within the region this could be improved, particularly with media as part of the growing creative industry sector and telecommunications a vital enabler of liveability and industry. There is significant capacity for growth in mining and mining-related manufacturing to service an international customer base. There is also considerable scope to build a more knowledge-based economy with greater capacity within the professional and scientific services sector. The regional mining and agricultural sectors have already commenced transition to becoming data and information-driven industries with the rollout of state-of-the-art technology allowing mine sites to be operated remotely and allowing agriculture to use data collection and analysis to drive productivity and environmental management gains. Tourism, accommodation and food services, health, education and other services all have potential to contribute to regional employment growth.



7.5 Growth Scenarios

Overall, the demographics of the Goldfields-Esperance region have been characterised by periods of rapid population growth, interspersed by periods of stability and occasional decline. This historical population pattern mirrors the dynamics of the mining sector and mining-based communities, predominately located in the central and northern Goldfields and, to a lesser extent, in other areas of the region. The pattern reflects the fact that employment-based migration has been a primary driver of regional population growth historically.

On a settlement by settlement basis, each regional centre has experienced a differing population story and the regional pattern of population demographics is less applicable to some regional centres, particularly the agricultural-based settlements of the southern sub-region such as Esperance, or the communities of the Ngaanyatjarra Lands that have formed around a complex history of Aboriginal dispossession and movement to communities. The agricultural areas of the region also have annual population variations that flux with seasonal workers during busy times of the year, usually peaking during periods of harvest and seeding.

Looking to future population growth to 2050, the Blueprint uses forecasts based on historical population patterns from WA Tomorrow¹²⁹ prepared by the Western Australian Planning Commission (WAPC). These State Government projections are based on three forecasts – low, medium and high scenarios to reflect the uncertainty in predictions over long time periods (see Figure 31)

Under a growth model of 'business as usual' (the medium scenario) the Goldfields-Esperance region's population is likely to increase moderately due to population ageing, with interspersed periods of low and high mining sector migration. The medium scenario would result in a population of around 75,000 people by 2050. However, with effective growth planning and investment, the region is capable of experiencing greater levels of population growth (the high scenario) that would provide a range of benefits for the Goldfields-Esperance region, such as:

- Improved viability of community facilities and services;
- Increased size and diversity of the local labour force and skills base;
- Increased markets for local retailers and businesses;
- Improved vibrancy of regional centres; and
- Increased resilience to cyclical economic fluctuations.



The Blueprint strategies aim to increase investment in the region to grow the population by around 26,000 persons by 2050 to bring the population to around 87,000. The Blueprint population projection is aligned with the high scenario population growth projected by the Western Australian Planning Commission (WAPC) and requires an increase in the population growth rate to an average of 1.34% per annum over the next 34 years. This is in excess of the 0.7% per annum growth rate achieved over the past two decades.

Although the region is aiming to grow its population long-term, it needs to be acknowledged that the numbers of fly-in fly-out workers are likely to remain higher than desired for some time during future peaks of high employment demand and that a feasible approach to population growth will include aiming to attracting people to the region to 'stay a while longer' rather than their entire lives. Other population retention strategies may include incentivising the workforce to reside in the major centres of Kalgoorlie-Boulder or Esperance, where a critical population mass can be obtained and lifestyle services and opportunities greatly enhanced.

Achieving a high growth population scenario will be dependent on the region's ability to create approximately 13,000 new jobs and promote regional living opportunities across the region. The Blueprint details a range of priorities and strategies aimed at expanding employment opportunities, and supporting industry collaboration and innovation and population services over and above 'business as usual' to reach and exceed this target.



Figure 32 Strategic Growth Themes for the Goldfields-Esperance Region

Regional Population



87,000+
By 2050

Regional Job Creation

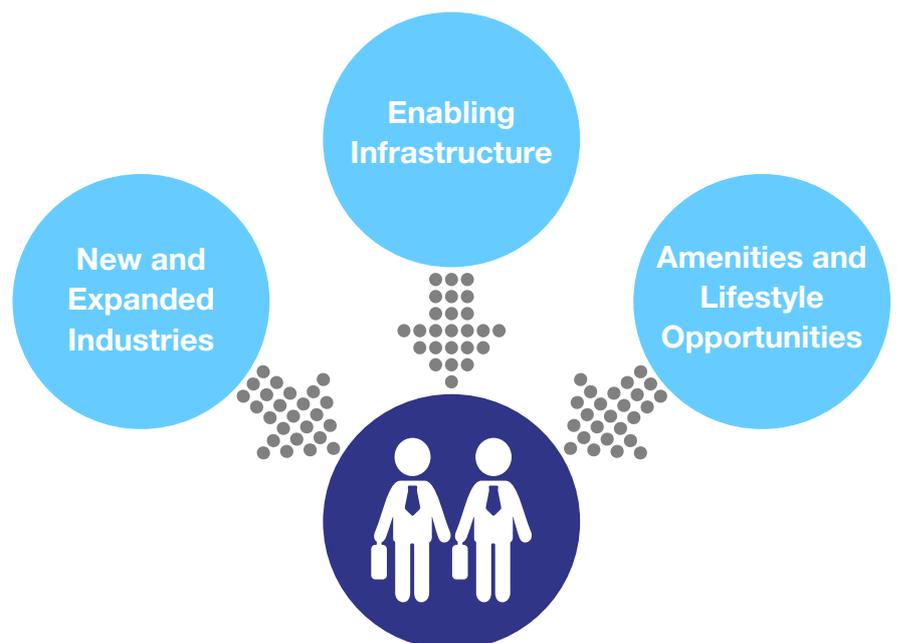


13,000+
By 2050

New employment opportunities will facilitate population expansion, however, to achieve a 41.8% growth in the region's population over the next 34 years a range of complementary tax incentives, migration policies, digital engagement and other region building strategies must also be pursued. The provision of high standard community and government services such as aged care services and facilities and the decentralisation of key government services are also required.

Population growth and the expansion of business and industry drives the need for additional services based employment to meet the demands of the population and economic growth. Population demands will increase for health and education, emergency services, construction, housing and property, financial and professional services, telecommunications and the provision of government administration and non-profit support services, leading to additional employment in these sectors. Improving amenities, lifestyle and recreational opportunities will build stronger creative industry sectors based around the arts, culture and heritage and resulting in further regional business and employment growth.

The provision of essential infrastructure and services will underpin the growth of the economy and communities. Physical infrastructure such as rail, roads and port infrastructure are important to maintain the region's current competitive advantages, however digital infrastructure, access to high-speed internet, a skilled and internet ready workforce and increased business capacity are essential to drive future knowledge-based, creative industry jobs and to diversify the economy.



Job Creation and Population Growth

Figure 33 Incentives to Attract and Retain Population

8.0

Regional Priorities



Goldfields-Esperance Regional Vision

“In 2050, the Goldfields-Esperance region enjoys exceptional lifestyle opportunities and a prosperous, diverse economy built upon our skills, natural resources and rich cultural heritage”

8.1 Goldfields-Esperance @2050 and beyond

The vision for Goldfields-Esperance 2050 provides a strategic focus for the region. Developed in consultation with community stakeholders, the Vision reflects the key focus areas for the region – enhancing regional living and fostering a prosperous and innovative economy that is underpinned by enabling infrastructure, investment in skills and education, and leveraging our comparative advantages.

Regional collaboration towards this Vision is necessary to guide investment and coordinate stakeholder effort to achieve social and economic outcomes.

The Vision is supported by six regional aspirations – high level goals that underpin the Vision and common themes connecting the Vision with priorities and strategies of the Blueprint. The priorities and strategies of the Blueprint provide the pathway, or framework, for realising the Vision for the region.





By 2050 the region aspires to be recognised as:



Knowledge Based

With greater business sophistication, innovation, education, networking and partnerships supported by the creation and growth of local businesses that export their services and products across the nation and internationally.



Globally Connected

Where world class, affordable logistics for existing and emerging industry and digital technologies have expanded global trade of services, creative industries and professional expertise.



Economically Diverse & Resilient

Where economic growth is achieved by supporting emerging and existing industries and building on a capable and innovative small business sector. Professionals and new residents are attracted and retained to live, work and study in the region.



Inclusive

Where the region's residents and businesses are at the forefront of initiatives that ensure equal opportunity, with enhanced opportunities enabling residents to reach their potential as an integral part of the region's development, valuing and strengthening the region's culture and society.



Sustainable & Renewable

Where the region's unique natural assets are valued, alternative and renewable energy sources are exploited and waste and soil management are optimised.



World-Renowned

Where the region is globally recognised for its major industries, products, services, experiences and business expertise; where local industries are early adopters of new and emerging technology; where the region is considered an attractive destination in which to live, work and do business.

8.2 Regional Priorities

The Blueprint challenges State and regional stakeholders from government, industry and the community to create a path to a prosperous future for the Goldfields-Esperance region. The Blueprint identifies Priorities and Strategies that will guide us to 'where we want to be' in 2050, shifting away from a 'business as usual' growth scenario. A framework has been developed, to direct investment effort and guide regional stakeholders during the Blueprint plan period:

Regional Priorities — the Regional Priorities of the Blueprint are built around three core investment themes derived from the Vision:

- Enhancing Regional Living;
- Enabling Infrastructure; and
- Fostering an Innovative Economy.

The analysis of the region, together with discussion of the global and regional influences, has led to identification of the region's comparative advantages and assets and the emerging opportunities that build on these, as well as a number of regional challenges and their implications for growth. Through this process, the three core investment themes were identified along with eight Regional Priorities central to the future economic and social development of the Goldfields-Esperance region.

These Regional Priorities are not an exhaustive list of the broader economic opportunities of the region over the next 34 years. Instead, they reflect core areas of focus where effort and action from stakeholders would likely result in the greatest transformational benefits and realisation of the Vision for the Goldfields-Esperance region.

Strategies — the Strategies represent one way in which the Vision, Regional Priorities and Outcomes of the Blueprint can be achieved. The strategies will be implemented by a range of government, industry and community stakeholders over the period to 2050.

Outcomes — a set of Outcomes for 2035 and 2050 are provided for each strategy. The Outcomes provide an important context for each strategy as well as providing targets to be monitored over the Blueprint plan period.

Stakeholder Implementation — collaboration is the key to achieving the regional vision and implementing the strategies of the Blueprint. Many regional, local and state stakeholders have been identified for each Regional Priority, but in reality there will be many more stakeholders that will participate in the implementation of the Blueprint to 2050.



Eight regional priorities have been identified to drive the future economic and social development of the Goldfields-Esperance region

Figure 34 Priority Identification Process

Key indicators — key indicators are provided for each Regional Priority to enable the planned Outcomes to be measured over time. These indicators include measures utilised within the scorecard analysis within the baseline chapters of the Blueprint.

Individual investments or 'projects' are not identified in this Blueprint; instead the Blueprint provides a framework for identifying higher level, strategic growth themes and opportunities. This framework does allow for future projects and initiatives in the region to be evaluated in terms of their relevance to future growth and their contribution to addressing critical issues within the region.

To accelerate population and economic growth in the Goldfields-Esperance region from the current 'business as usual' scenario towards a higher growth scenario with 87,000 people and 13,000 jobs, a range of strategies is required to create new jobs within existing, emerging and new industries. It will also require the continued development of enabling infrastructure to remove the barrier of distance and connectivity and, importantly, the development of people, skills and services to support sustainable economic and social development and population growth.

Regional Priorities

Enhancing Regional Living

Improving regional lifestyle and liveability is key to retaining and attracting population and workforce. With a growing population, employment in sectors that service the community will add to the economic value of the region. The Regional Priorities that focus on enhancing lifestyle include a range of strategies that build healthy, educated and inclusive communities, support skills development and employability, conserve our natural environment and improve services in regional centres to encourage people to 'stay a while longer'.

Enabling Infrastructure

Infrastructure is critical to encourage business investment and community development. Expanding and improving infrastructure to move, transport and connect digitally, as well as providing new energy sources and accessible reliable utilities, are essential to underpin the growth of the economy in the region and to mitigate the impacts of distance and geography. It also allows for economic diversity in related industry sectors.

Fostering An Innovative Economy

To foster an innovative economy, the region must build on its comparative advantages to develop, value-add and diversify a range of economic opportunities for growth. Focussing on investment, market development, creativity and innovation, the Regional Priorities aim to diversify the regional economy and support the creation and development of new industries and sectors with a number of strategies. To foster diversification requires significant upfront investment and intervention in people, regional centres and enabling infrastructure.



**People,
Community
and Place**



Environment



**Tourism and
Visitation**



**Infrastructure
and
Connectivity**



**Energy and
Utilities**



**Enterprise
and
Knowledge**



**Mining and
Industrial
Technology**



**Agriculture,
Fisheries
and Food**

Figure 35 Regional Priorities

8.3 Enhancing Regional Living

Priority — People, Community and Place



A regional priority is ensuring our people, communities and places are the best they can be. This means investing in Aboriginal people, valuing excellence in education and training from early childhood to whole of life, creating vibrant regional centres and inclusive communities. A focus on people, community and place will ensure healthy, happy and highly educated communities that showcase the best of regional living underpinned by high quality and accessible social services and facilities.

A critical mass of residents increases the viability and sustainability of a range of services and facilities and optimises the size and skills mix of the regional workforce. To maintain a critical mass, current residents must be retained and new residents must be attracted to the region. Attracting and retaining new residents can also enhance the cohesiveness of the Goldfields-Esperance communities. The region is characterised by a strong population flow of people in and out of the region, with many migrants, seasonal workers and FIFO workers travelling into the region for regular employment or for a period of time before moving elsewhere. It is unrealistic to expect people to stay in the region for their lifetime but slowing down the flow or turnover of population in the region with incentives, programs and services to attract and retain residents can help to improve community cohesion and community 'buy-in'.

The Goldfields-Esperance region currently has a range of amenities in residential centres which vary from high quality to poor across the region and is supported by a network of communities, cultural and lifestyle facilities and services.

This lifestyle and amenity must be advanced and maintained to facilitate the socioeconomic contribution of current and future residents to the region. The cost of living must also be affordable and accessible, including both essential (housing, power, water, and physical and digital connectivity) and lifestyle (retail, education, health, aged care, entertainment) services. Communities must enjoy a high standard of safety and experience a strong sense of social cohesion through the ability to engage in a range of interests and activities.

Greater effort must be afforded to defining the unique residential offering that the region has and promoting the region to national and global markets. This must include effective branding and marketing of the region and its communities.

Whilst the local provision of services will be the main priority, the region must take advantage of innovative service delivery models using advanced digital technology such as tele-health. This will require the development of training and services to assist the community to take up new technologies and implement alternative service delivery models.

Priority — People, Community and Place

Ref	Strategy	Outcomes 2035	Outcomes 2050	Alignment To Regional Aspirations
P1	Strong Aboriginal Communities			
P1.1	Governance — Develop and implement services targeted at building and strengthening governance systems both within individual Aboriginal corporations and across the network and other organisations and agencies in the region.	Aboriginal people play a leading role in governance across community, government and business and industry within the region.	Aboriginal people from the Goldfields-Esperance region play a leading role in the governance of the State of Western Australia.	Inclusive World-Renowned
P1.2	Education and Training — Establish a meaningful learning environment for all Aboriginal students and provide mechanisms, including early learning, family support, mentoring and clear student pathways to assist Aboriginal students achieve national standards in education and equal access to employment opportunities.	All students have fair and equitable access to education and training through multiple pathways no matter their location or socio-economic situation. A strong network of education and training providers, together with the local communities, local businesses, and effective government assistance collaborate to achieve equity in regional employment opportunities and choice for Aboriginal people.	Comprehensive, education, training and employment opportunities exist and are inclusively accessed across the Goldfields-Esperance region.	Inclusive Economically Resilient Knowledge Based Globally Connected

Priority — People, Community and Place

Ref	Strategy	Outcomes 2035	Outcomes 2050	Alignment To Regional Aspirations
P1.3	<p>Business Participation and Enterprise — Cultivate an environment together with training, mentoring and exposure to leadership opportunities that encourages and enables Aboriginal people to pursue leadership opportunities within the business sector.</p>	<p>Working partnerships between new and established businesses are strong, fostering the development of new enterprises by Aboriginal people throughout the region and growing existing businesses.</p>	<p>Aboriginal business people within the region are leading Indigenous Australians with the strength of their enterprises, entrepreneurship and involvement in new and growing industries.</p> <p>Aboriginal business people are recognised as valued leaders and contributors in many sectors and across all employed positions.</p>	<p>Inclusive</p> <p>Economically Diverse and Resilient</p> <p>World-Renowned</p> <p>Globally Connected</p>
P1.4	<p>Caring For Country — Successfully expand Caring for Country sustainable land management practices and tourism opportunities across the region to increase levels of Aboriginal employment within more remote parts of the region and care for culture and the environment.</p>	<p>Aboriginal people are utilising their unique knowledge of the land to care for the country and at the same time government agencies, local businesses and communities are looking to them to provide leadership and education in this area.</p> <p>Future carers are ensured through traditional knowledge, incorporated where relevant into contemporary certified programs.</p>	<p>People visit from across Australia and beyond to experience the unique and pristine natural landscape that the region offers and to learn about 'country' and 'caring for country' from the region's Indigenous people.</p>	<p>Sustainable and Renewable</p> <p>Inclusive</p> <p>Economically Diverse and Resilient</p> <p>Knowledge Based</p> <p>World-Renowned</p>
P1.5	<p>Aboriginal Health and Wellbeing — Ensure access to quality health and wellbeing services in Aboriginal Communities and develop regional and remote area health knowledge.</p>	<p>Aboriginal communities have a culture of preventative health and wellbeing, with access to quality health and wellbeing services which are delivered in culturally appropriate ways.</p> <p>The traditional medicines and health approaches of Aboriginal people are understood and cultivated as an option for choice in health and wellbeing.</p>	<p>Aboriginal people play a lead role in the delivery of health and wellbeing services within Aboriginal communities and export this knowledge and expertise throughout regional Australia.</p> <p>Aboriginal communities have health and wellbeing indicators in the top quartile.</p>	<p>Inclusive</p> <p>Economically Diverse and Resilient</p>

Priority — People, Community and Place

Ref	Strategy	Outcomes 2035	Outcomes 2050	Alignment To Regional Aspirations
P2	Valuing Excellence In Education and Training			
P2.1	Secondary and Tertiary Education Hubs — Develop benchmark quality secondary and tertiary education, including vocational education and training, allied to core economic drivers and emerging industries.	Education and training institutions have embraced innovative and tailored methodologies, teaching tools and other educational technology advancements, and developed strong alliances with key industries which has resulted in education and training being culturally valued by parents, students and communities throughout the region.	A culture of excellence within the education sector has been fostered throughout the region, which has resulted in centres of excellence being developed and recognised nationally, producing highly sought after graduates and exports of education.	Inclusive Economically Diverse & Resilient Globally Connected Knowledge Based
P2.2	Secondary Education Pathways in Remote Communities — Develop and implement strategies that support enhanced learning and educational experiences for regional and remote schools in order to provide and sustain quality secondary and vocational education pathways for students.	Improvements in education delivery, community appreciation of education, and access to technologies, as well as alliances with providers in Kalgoorlie-Boulder, Esperance and partners external to the region have enabled advances in educational outcomes for regional and remote schools.	The region is recognised as a leader in the delivery of education services into regional and remote schools throughout Australia.	Inclusive Economically Diverse & Resilient Globally Connected Knowledge Based
P2.3	Access to Life Learning — Support the development of human capital by increasing access to education and training for people and workforce across the region, providing clear pathways and access to tertiary and further education, training, apprenticeships and employment, enabled by multiple pathways and providers.	A culture of life-long learning has been developed which has seen the level of tertiary attainment increase so that it is comparable to metropolitan attainment levels within Australia.	Providers of education and training export the region's expertise in training and workforce development within key industry sectors across the globe.	Globally Connected Inclusive Knowledge Based World-Renowned

Priority — People, Community and Place

Ref	Strategy	Outcomes 2035	Outcomes 2050	Alignment to Regional Aspirations
P2.4	Creating Regional Jobs — Attract, develop and retain human capital within core sectors and emerging industries.	The region has grown its proportion of employees employed in the knowledge-based economy and has developed a high level of entrepreneurship and business creation and growth in all sectors.	The region is recognised for its innovative industries and attractive lifestyle options which generate new jobs and attract professionals, entrepreneurs and creatives to live in regional centres and either work locally, remotely or virtually.	Inclusive Knowledge Based World-Renowned Globally Connected
P3	Vibrant Regional Centres			
P3.1	Cultural Hubs: Experiences, Places and People — Develop and foster regional city and town centres into 'Cultural Hubs' that provide access quality services and experiences to meet the increasingly diverse and globalised expectations.	Physical town centre revitalisation has been effectively coupled with activation, events and business development to diversify services and experiences for all people regardless of ability, culture or socioeconomic status.	The regional centres of the Goldfields-Esperance region, led by Kalgoorlie-Boulder and Esperance, are thriving hubs with a diverse offering of streetscapes, art, culture, retail, services and events offering unique experiences and providing lifestyle 'point of difference' to metropolitan centres, complemented by rich town centre experiences throughout the region.	Knowledge Based Economically Diverse and Resilient World-Renowned Inclusive Sustainable and Renewable Globally Connected
P3.2	Stay a While Longer — Develop strategies and programs to encourage former residents to return to the region and existing residents and temporary workers to extend the length of stay living and working in the region.	With enhanced lifestyle opportunities, greater employment prospects, unique experiences and targeted population retention and attraction strategies, including targeted incentives, the region has seen increased numbers of former residents returning to the region and a greater proportion of existing residents and temporary workers choosing to remain in the region long term.	The region is regarded as a 'lifestyle of choice' amongst past and current residents, sustaining enduring populations and attracting recognition throughout Australia for the success of the population retention and attraction strategies.	Knowledge Based Economically Diverse and Resilient Inclusive Globally Connected
P3.3	Welcoming migrants — Encourage migration of skilled migrants from other regions, states and the globe to live and work in the Goldfields-Esperance region; starting businesses, meeting the workforce and skills demands, and continuing to build a welcoming, culturally diverse community that celebrates shared values.	People from around Australia and overseas migrate to the region to enjoy the wealth of business and employment opportunities and attractive lifestyle experiences, natural environment and high quality education, health and other services.	Reputation of the opportunities and experiences within the region for a great work-life balance and inclusiveness is highly regarded throughout Australia and further afield resulting in people choosing the lifestyle that the region has to offer even if their employment is not physically within the region.	Knowledge Based Economically Diverse and Resilient Inclusive Globally Connected

Priority – People, Community and Place

Ref	Strategy	Outcomes 2035	Outcomes 2050	Alignment to Regional Aspirations
P3.4	<p>Affordable and Quality Housing options — Deliver a range of accommodation options to cater for demographic change within the region and to stimulate migration and attract investment to the region.</p>	<p>With continual forward planning and flexibility of land supply, a culture of new models of housing types being encouraged, developed and trialled, together with innovative ways to reduce the encumbrance of upfront head works and services costs, the region offers a range of quality and affordable lifestyle and housing choices within safe and inclusive communities.</p>	<p>All people in the region have access to quality accommodation to suit their needs with housing stock that is flexible and can be used for multiple purposes, including combined live/work/aged/student accommodation or alternative uses in times of high or low demand.</p>	<p>Knowledge Based Economically Diverse and Resilient Inclusive Sustainable and Renewable</p>
P3.5	<p>Supply of Land for Development — Ensure a planned supply of suitable land is available for population and business use whilst maintaining a balanced approach to the conservation of the unique natural environment.</p>	<p>Government, businesses and industries have collaborated to ensure that future needs across a range of sectors are understood and planned for, providing a balanced and sustainable approach that is attractive and readily available to investors and communities.</p>	<p>Proactive and incentivised planning has ensured that the region is considered as an attractive, viable and cost appropriate alternative to metropolitan options across all land uses.</p>	<p>Inclusive Sustainable and Renewable Economically Diverse and Resilient</p>
P3.6	<p>Maintain Quality Facilities — Ensure the adequacy of key community facilities in regional centres and remote communities including sport, recreation and cultural facilities.</p>	<p>Facilities that meet the needs of a diverse range of sporting, recreation and cultural providers have ensured that new and existing providers of these services are thriving throughout the region.</p>	<p>A network of quality co-located facilities which are well maintained with clear asset management plans are in place throughout the region to foster the provision of services for the betterment of all residents.</p>	<p>Inclusive Sustainable and Renewable Economically Diverse and Resilient</p>

Priority — People, Community and Place				
Ref	Strategy	Outcomes 2035	Outcomes 2050	Alignment to Regional Aspirations
P4	Inclusive Communities			
P4.1	Health — Ensure the delivery of and access to quality health services across the region.	<p>The region's 'hub and spoke' health delivery model has evolved, new models of healthcare delivery have been developed to provide for the demands of an ageing population and changing demographics.</p> <p>Digital and tele-health services are integrated into locally based health delivery, including remote services, e-health data is used to plan for better service delivery and health outcomes.</p>	<p>The region exports health and aged care services and knowledge to other regions and countries as it has become a leader in the delivery of e-health services in regional and remote areas, using digital technology.</p> <p>Aboriginal health indicators are similar to other population groups within the region.</p>	<p>Inclusive</p> <p>Knowledge Based</p> <p>Globally Connected</p> <p>Economically Diverse and Resilient</p>
P4.2	Wellbeing — Ensure the delivery of and access to quality mental health, wellbeing and social services in the region including aged, maternal health and early childhood services. Utilise regional recreational, cultural, creative and social capacity in wellness.	<p>A preventative and balanced approach to wellbeing has been developed across the region as community service providers and government agencies collaborate and innovate new delivery models in regional and remote areas including ongoing community engagement and education.</p>	<p>The region has become a leader in the delivery of regional wellbeing services using e-health, innovative digital technologies and community engagement and education.</p>	<p>Inclusive</p> <p>Knowledge Based</p> <p>Globally Connected</p> <p>Economically Diverse And Resilient</p>
P4.3	Age Friendly Communities — Develop a culture that values and celebrates seniors and embraces the economic and social opportunities arising from our ageing demographic. Attract, engage and care for seniors, with quality health and ageing focussed services investing in regional centres, and broader community and organisations actively seeking to embrace the gifts of seniors.	<p>The region has regional centres renowned for their aged and culturally friendly lifestyle opportunities, safety, and services including transport, housing, care, respite and numerous engaging experiences that retain residents through quality 'whole of life' choices and attract new retirees.</p>	<p>Investment in innovative new models of aged living and aged care services inclusive of housing and lifestyle opportunities has resulted in the region exporting health and aged care services and knowledge to other regions and countries.</p>	<p>Inclusive</p> <p>Knowledge Based</p> <p>Globally Connected</p> <p>Economically Diverse and Resilient</p>
P4.4	Arts and Culture — Invest in the development of creative industries, arts and cultural enterprises and local and regional events.	<p>The region has a strong arts and culture foundation that is seeing new artists and enterprises emerge and thrive; there is a buzz around the State about the artists emerging from the region.</p>	<p>Creative industries are exporting their goods and services around Australia and further abroad; people from around Australia are visiting the region to experience the strong culture that has emerged.</p>	<p>Inclusive</p> <p>Sustainable and Renewable</p> <p>Knowledge Based</p> <p>Globally Connected</p> <p>Economically Diverse and Resilient</p>

Priority — People, Community and Place

Ref	Strategy	Outcomes 2035	Outcomes 2050	Alignment to Regional Aspirations
P4.5	Community capacity and social cohesion — Develop structures and services that create and enhance social cohesion, participation and community volunteering.	The region has a strong sense of community and community pride, with local service providers and volunteers valued and supported by government agencies and government funding.	New community governance models centred on a collaborative approach have ensured sustainability of the sector by reducing costs and bureaucratic burden so providers can concentrate on their core responsibilities and continue to develop their skills and offerings.	Inclusive Sustainable and Renewable Knowledge Based Globally Connected Economically Diverse and Resilient
P4.6	Collaborative Service Delivery — Establish coordinated, collaborative approaches to service delivery across government, non-government organisations, local business and community.	There is an established regional hub that coordinates service delivery of key State services, with particular emphasis on satellite townships and remote communities (i.e. 'hub and spoke' model).	There is effective information sharing and collaboration in the delivery of services between government, commercial and community sector organisations across the region.	Sustainable and Renewable Knowledge Based Inclusive Economically Diverse and Resilient
P4.7	Community Participation in Service Delivery — Increase the capacity and involvement of community members in the management and strategic direction of key services.	Services are integrated, guided and governed by local leaders; strong community participation focussed on enabling and ensuring that services are tailored to and target local needs is being actively promoted and enabled by governments.	Local, State and Federal government investment in regional and local services has risen year-on-year based on strong local delivery and effective advocacy to key decision-makers.	Sustainable and Renewable Knowledge Based Inclusive
P4.8	Devolved Delivery via Community Organisations — Foster active partnerships between governments, community based organisations and enterprise to improve the quality and consistency of community service delivery.	Community services are locally driven through devolved delivery by local government and community organisations in partnership with State and Federal government.	Local community organisations are strong and representative, providing excellent services throughout the entire region and are looked favourably upon by government and supported through government funding.	Sustainable and Renewable Knowledge Based Inclusive
P4.9	Regional Funding — Invest in the development of community based organisations within the region and support these organisations with sustained funding regimes and capacity building.	A sustained funding model, such as a Community Trust or similar, has been established with a strong governance model led by regional leaders. It is valued by government, community service, education and healthcare providers and is a driver in fostering and developing community networks within the region. Funding is from a variety of sources.	A Community Trust, or similar funding model, is a key lever in securing government grants and private sector investment into the region.	Sustainable and Renewable Knowledge Based Inclusive Globally Connected

Measuring Outcomes – People, Community and Place Indicators

The following indicators are headline metrics that will be used to measure and monitor the progress of the People, Community and Place strategies.

Blueprint Priority	Key Indicators
People, Community and Place	<ul style="list-style-type: none">• Population growth• Economic diversity rating• Aboriginal workforce participation rate• Working population with university qualifications• Local government discretionary spending• Local business per capita• Developmentally vulnerable children• Adults with health risk factors• Major service presence rating



Stakeholder Implementation – People, Community and Place

Australian, State, regional and local stakeholders across government, industry and community will be instrumental in implementing the People, Community and Place Strategies of the Blueprint. The following stakeholder list is not exhaustive and will change over time. It reflects known participants in the region and others identified through community consultation in the preparation of the Blueprint.

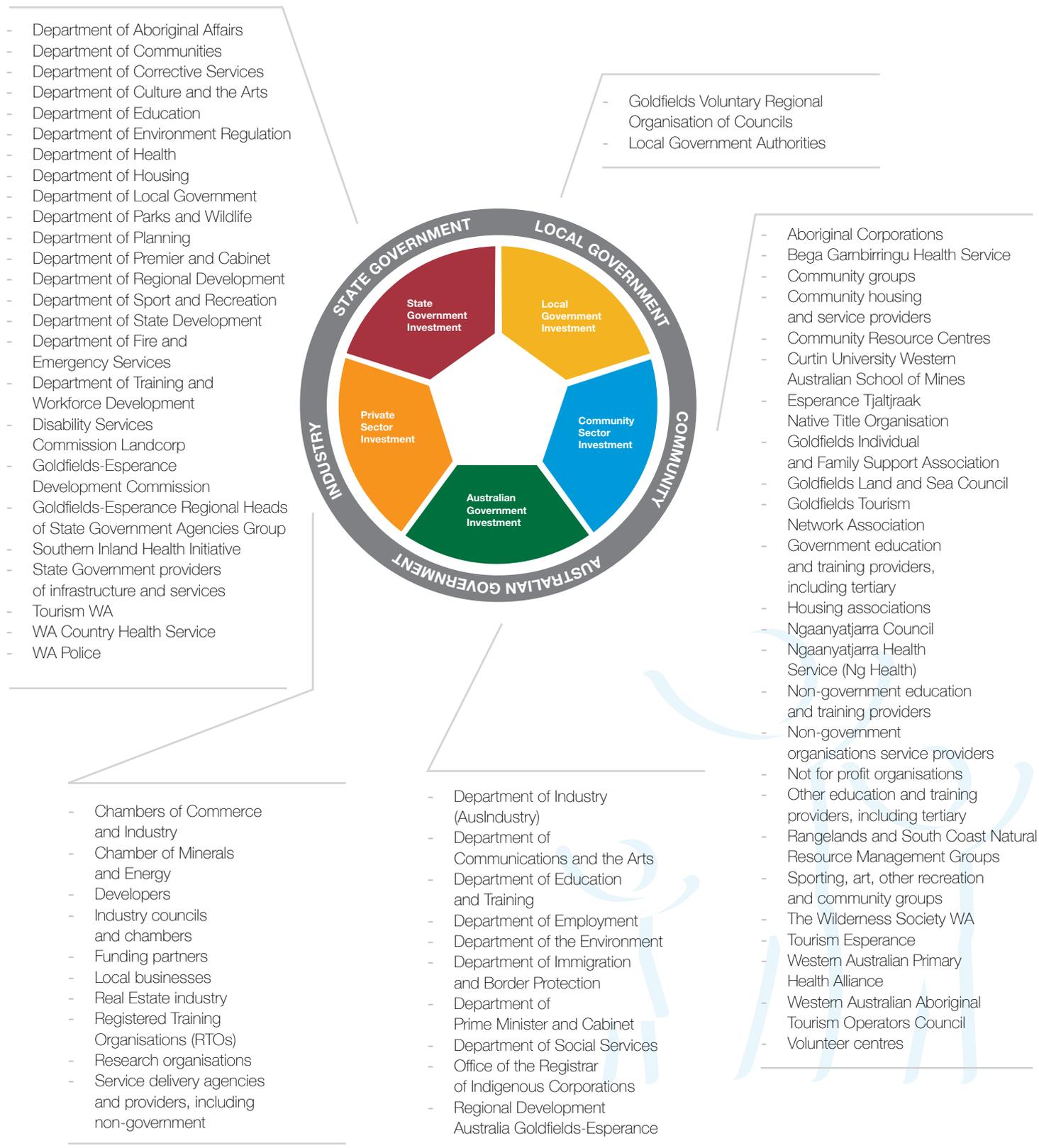


Figure 36 People, Community and Place Stakeholders

Priority — Environment



The region has a wealth of environmental assets including some of the most extraordinary biodiversity in the world, expansive landscapes and coastline, nature and wilderness areas. Many natural areas of the region are unspoilt by human activity – the land, air and water is clean. The region's cultural, historical and environmentally unique areas can be considered equal to renowned World Heritage sites such as Kakadu National Park, Fraser Island, Lord Howe Island, Shark Bay and the Ningaloo Reef. There are many opportunities for the region to optimise its environmental assets for social and economic growth including the development of iconic experiences around indigenous culture, adventure tourism, nature tourism and events. Building a focus on the expansion of creative and knowledge based industries based on the region's Aboriginal culture and knowledge, as well as scientific research and development, has potential to expand local job opportunities.

There is availability of water, energy and food, however much can be done to transition water supplies to more efficient and sustainable, long-term sources including rain water harvesting, recycling or desalination as technologies improve and costs reduce. Renewable energy sources are abundant and represent an opportunity for investment for the region to harness these efficient, sustainable and low cost energy sources. The emerging low carbon economy offers significant

opportunities for the region, transferring existing skills and knowledge from primary industries to emerging industries.

High levels of agricultural commodities are exported from the region, with the majority of food for residents imported by road. There is significant opportunity to grow and develop a wider range of food products apart from existing commodities. The organics and niche food markets are likely to grow in line with global and national trends. The growing and manufacture of renewable building and product materials also represent opportunities for the region. Land management industries can help tackle issues currently affecting land, such as salinity, soil erosion and invasive species, but can also create knowledge-based employment, maintain strong cultural ties, and create value-adding industries, such as local food production.

Key environmental assets need to be conserved for their ecological value to support the large populations of plants and animals, ecosystems and the human communities within the region. In particular, the Great Western Woodlands and connected bioregions, national parks and reserves, desert, coastlines and internationally recognised wetland systems and their catchments are of vital importance to the health and wellbeing of the region.

Priority – Environment

Ref	Strategy	Outcomes 2035	Outcomes 2050	Alignment to Regional Aspirations
EE1.0	<p>Regional Conservation</p> <p>Develop a regional conservation strategy which coordinates existing and future conservation activities and enjoys widespread support amongst regional stakeholders.</p>	<p>The region has developed regional partnerships and approaches, including agreed measures of regional conservation that are providing unique solutions to balancing the needs of the environment, industry, and community.</p>	<p>Unique biodiversity and cultural values of the Western Woodlands, Aboriginal managed lands and Southern Coasts are well managed, protected and globally recognised for their conservation value.</p>	<p>Sustainable and Renewable</p> <p>Inclusive</p> <p>Knowledge Based</p> <p>Globally Connected</p> <p>Economically Diverse and Resilient</p>
EE2.0	<p>'Pride In Our Country'</p> <p>Embed stronger understanding and appreciation of the region's unique values, culture and history through a dedicated program which highlights these attributes and promotes visitation through well managed infrastructure.</p>	<p>The Goldfields-Esperance region is recognised around the State as a region of outstanding natural and cultural values, integrated with thriving industry and communities.</p>	<p>The regional leaders and community continue to understand, manage and enjoy the unique and diverse natural characteristics of the Goldfields-Esperance region while celebrating its international reputation for facilitation and integration of conservation and compatible development.</p>	<p>Sustainable and Renewable</p> <p>Inclusive</p> <p>Knowledge Based</p> <p>Globally Connected</p> <p>Economically Diverse and Resilient</p>
EE3.0	<p>Manage Access To Land</p> <p>As the region's unique landscapes and associated biodiversity become recognised, ensure that timely and efficient access to natural resources is maintained in a sustainable and equitable way, and land made accessible for population, business, industry and recreation.</p>	<p>Core conservation reserves and national parks, Native Title and other land management structures are managed and complemented by compatible zones of private and public land that allow for access to land for minerals, agricultural and natural resources development, business, communities and conservation priorities.</p>	<p>Conservation planning continues to recognise the importance of maintaining access to land for mining, pastoral, population and other compatible land uses.</p> <p>Best practice management of environmentally sensitive areas is defined and common practice across all key industries.</p>	<p>Sustainable and Renewable</p> <p>Inclusive</p> <p>Knowledge Based</p> <p>Globally Connected</p> <p>Economically Diverse and Resilient</p>



Priority – Environment

EE4.0	Sustainable Behaviour Encourage sustainable behaviour change in our communities and focus investment on delivering long term benefits for our communities, economy and environment.	Our people and communities are skilled, knowledgeable, highly engaged with each other and their environment and are leaders in the areas of recycling, water and waste management, diversifying food supply and security, energy production and appropriate land, air and natural environment management and use.	The region has developed a culture that rewards sustainable behaviour and as a result is producing innovative solutions that are attracting investment in research and commercial activity.	Sustainable and Renewable Inclusive Knowledge Based Economically Diverse and Resilient
EE5.0	Environmental and Climatic Change Prepare for environmental change and address the impacts of climatic change and natural disaster.	The region is renowned as a safe and secure place to live, work and invest due to its responsive and proactive approach to managing the impacts of environmental and climatic change.	The region is renowned as a safe and secure place to live, work and invest due to its responsive and proactive approach to managing the impacts of environmental and climatic change.	Sustainable and Renewable Inclusive Knowledge Based Globally Connected Economically Diverse and Resilient
EE6.0	Coastal and Marine Management Maintain and enhance our coastal and marine environments.	Marine resource use is balanced with sustainable ecosystem management and coastal and marine conservation and enjoyed by residents and visitors alike.	Coastal communities are highly engaged with their coastal and marine environments, with high levels of social, cultural, economic and environmental values.	Sustainable and Renewable Inclusive Knowledge Based Globally Connected Economically Diverse and Resilient

Measuring Outcomes – Environment Indicators

The following indicators are headline metrics that will be used to measure and monitor the progress of the Environment strategies.

Blueprint Priority	Key Indicators
Environment	<ul style="list-style-type: none"> • Economic diversity rating • Population growth • Conservation, land and water use metrics

Stakeholder Implementation – Environment

The following Federal, State, regional and local stakeholders across government, industry and community will be instrumental in implementing the Environment strategies of the Blueprint. The list is not exhaustive and will change over time. It reflects known participants in the region and others identified through community consultation in the preparation of the Blueprint.

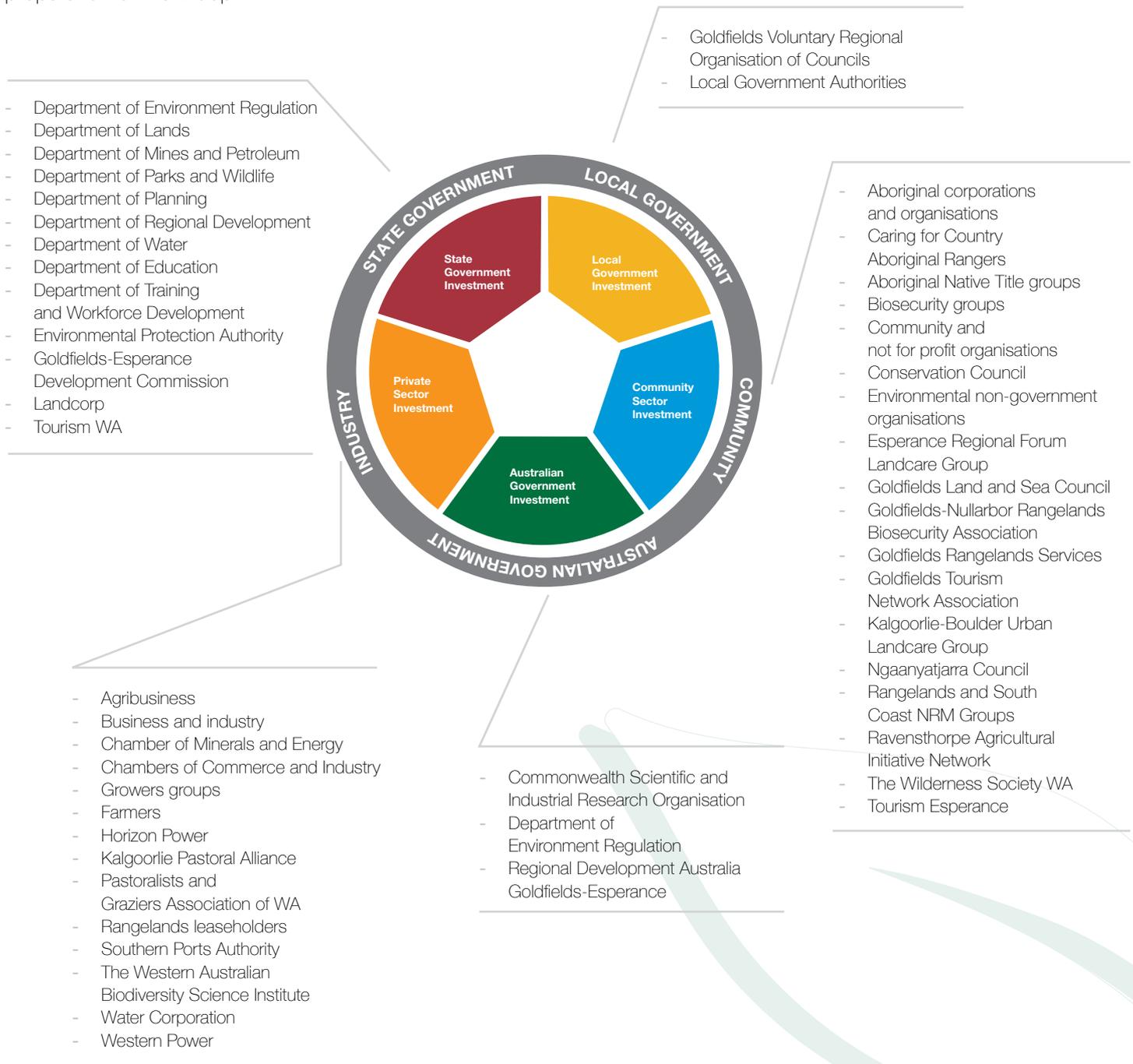


Figure 37 Environment Stakeholders



Priority — Tourism and Visitation

Tourism and visitation leverages road and rail traffic, cruise ship-capable port infrastructure and airports that support visitation to the region's natural, cultural and heritage tourism assets and unique local events.

The Goldfields-Esperance region is strategically located between Perth and eastern Australia through the Eyre Highway and Outback Way. With the increased mobility of people, goods and services, the region's location has the potential to be leveraged as a comparative advantage, particularly in terms of tourism.

In the first instance, this passing traffic should be captured in the region, at minimum, as short-stay overnight visitors. This will help to support the development of a truly integrated tourism sector in the Goldfields-Esperance region, leveraging the environmental, cultural and historical assets of the region. The region possesses incomparable natural assets, such as the Great Western Woodlands, across an environmentally diverse landscape. Realising the latent potential of these assets and developing new products presents a major opportunity. This needs to be supplemented by quality tourist accommodation to provide visitors with choice.

Targeted marketing is important. In addition to short-stay visitors, the Goldfields-Esperance region has the potential to capture growth by offering a unique lifestyle and cultural experience to longer-term domestic and international visitors. Those visitors with higher expenditure or those with the ability for longer lengths of stay will require convenient links to unique intraregional attractions by air and road, as well as appropriate accommodation and product offerings. The cruise ship market, through the Esperance deep water port, offers potential for rapid growth, particularly with the further improvement of convenient land access and product development.

Once the region is established as a desirable traveller and tourism market, this profile can then be leveraged to directly attract more visitors. This will require a strong and robust State, national and global profile for the region, as well as unique tourism attractions and experiences and the targeting of key market segments.



Priority – Tourism and Visitation

Ref	Strategy	Outcomes 2035	Outcomes 2050	Alignment to Regional Aspirations
T1	<p>Iconic Outback Routes and Road-Based Tourism</p> <p>— Create a quality, well-serviced road network across the whole region to ensure all areas in the Goldfields-Esperance region attract visitors.</p>	<p>Tourism and community service routes (Golden Quest Discovery Trail, Arts and Cultural Trail) have been further developed or established and enhanced around a variety of offerings (cultural, heritage, pastoral, mining, woodlines, adventure, environmental) by the construction of ancillary infrastructure (multilingual signage, maps, information boards, digital resources) and appropriate accommodation, while the Outback Way has been sealed.</p>	<p>The Goldfields-Esperance region is within the top 10 regions in Australia for total number of visitors.</p>	<p>Economically Diverse and Resilient</p> <p>Globally Connected</p> <p>Inclusive</p> <p>World-Renowned</p> <p>Knowledge Based</p>
T1.1	<p>Gateway to the Goldfields</p> <p>— Optimise the entry into Western Australia by developing and marketing the township of Norseman and the spectacular Great Western Woodlands area as the Gateway to the State.</p>	<p>Norseman is known throughout Australia as the key gateway to Western Australia and 'well worth spending a couple of nights' in.</p>	<p>Norseman is recognised as a preferred outback tourism centre with a range of unique Aboriginal cultural experiences, ecotourism and recreational activities.</p>	<p>Economically Diverse and Resilient</p> <p>Globally Connected</p> <p>Inclusive</p> <p>World-Renowned</p>
T2.0	<p>Unique Aboriginal Tourism Experiences</p> <p>— Improve the number of Aboriginal tourist enterprises in order to attract visitors seeking traditional cultural and environmental experiences.</p>	<p>There are many Aboriginal tourism experiences throughout the region that are well supported and that are increasing the number of visitors to the region.</p>	<p>The Aboriginal tourism experiences in the region are highly rated and are promoted beyond Australian shores.</p>	<p>Sustainable & Renewable</p> <p>Economically Diverse and Resilient</p> <p>Globally Connected</p> <p>Inclusive</p> <p>World-Renowned</p> <p>Knowledge Based</p>
T3.0	<p>Regional Branding</p> <p>— Create a unifying 'brand' for the whole Goldfields-Esperance region based on key attributes and assets in order to encourage recognition and market the region as a destination to live, work and/or visit.</p>	<p>The Goldfields-Esperance region is positioned as a region of choice attracting high levels of government and business investment, with continually increasing number of visitors and increased number of nights stayed within the region.</p>	<p>The Goldfields-Esperance region is within the top 10 regions in Australia for total number of visitors.</p>	<p>Economically Diverse and Resilient</p> <p>Globally Connected</p> <p>Inclusive</p> <p>World-Renowned</p>

Priority — Tourism and Visitation				
Ref	Strategy	Outcomes 2035	Outcomes 2050	Alignment to Regional Aspirations
T4.0	<p>Cruise Ship Friendly</p> <p>— Facilitate investment in Esperance to become a premier cruise ship destination.</p>	Esperance has developed multi-purpose tourism infrastructure, facilities and tourism product to meet a range of tourism and visitation requirements and to service the cruise ship industry.	Esperance is an iconic Tier 1 cruise ship destination with cruise ship berthing facilities and disembarking services, welcoming national and international cruise ships for extended stays as well as providing the Goldfields-Esperance region residents with direct cruise access.	<p>Economically Diverse and Resilient</p> <p>Globally Connected</p> <p>Inclusive</p> <p>World-Renowned</p>
T5.0	<p>Iconic Events, Arts and Culture Installations</p> <p>— Enhance the profile of the region as an exciting tourist destination through the creation of new iconic events, art and installations.</p>	The region hosts many annual events that are highly regarded across the State, bringing visitors that are surprised by the rich diversity of culture and art displays in the regional and town centres.	The Goldfields-Esperance region is promoted nationally and internationally as one of the premier remote tourist destinations in Australia.	<p>Economically Diverse and Resilient</p> <p>Globally Connected</p> <p>Inclusive</p> <p>Knowledge Based</p> <p>World-Renowned</p>
T6.0	<p>Iconic Accommodation</p> <p>— Enhance the profile of the region as an exciting tourist destination through investment in the creation of iconic accommodation for a diverse range of visitors, including high-end visitors.</p>	Investment from local, national and global partners has led to various accommodation types being developed that are supporting growth in all tourist markets and providing accommodation types for all budgets and tastes.	A multitude of iconic tourist accommodation options catering for a broad range of tourist budgets and needs exist and are well patronised by key tourist markets.	<p>Economically Diverse and Resilient</p> <p>Globally Connected</p> <p>Inclusive</p> <p>World-Renowned</p>
T7.0	<p>Ecotourism</p> <p>— Enhance the profile of the region as an ecotourism destination through the creation of iconic nature-based accommodation, activities and destinations.</p>	Ecotourism is a thriving market that provides experiences and accommodation that is highly comparative to anywhere in the world.	The Goldfields-Esperance region is recognised nationally and internationally as one of the premier remote tourist destinations in Australia.	<p>Sustainable and Renewable</p> <p>Economically Diverse and Resilient</p> <p>Globally Connected</p> <p>Inclusive</p> <p>World-Renowned</p>

Measuring Outcomes — Tourism and Visitation Indicators

The following indicators are headline metrics that will be used to measure and monitor the progress of the Tourism and Visitation strategies.

Blueprint Priority	Key Indicators
Tourism and Visitation	<ul style="list-style-type: none"> • Population growth • Aboriginal workforce participation rate • Airport RPT usage (per capita) • Economic diversity rating • Number of new business start-ups

Stakeholder Implementation – Tourism and Visitation

The following Federal, State, regional and local stakeholders across government, industry and community will be instrumental in implementing the Tourism and Visitation strategies of the Blueprint. The list is not exhaustive and will change over time. It reflects known participants in the region and others identified through community consultation in the preparation of the Blueprint.

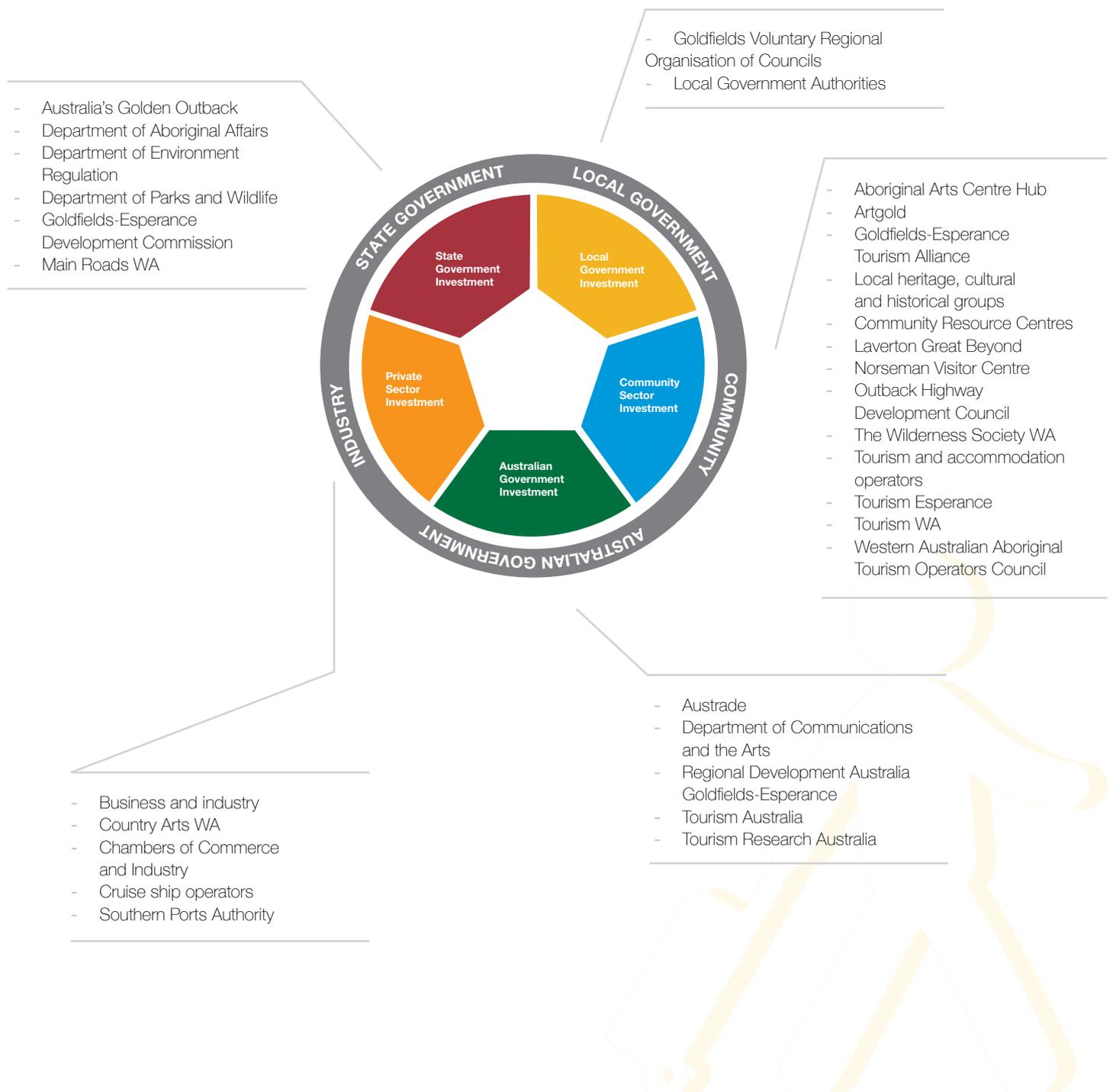


Figure 38 Tourism and Visitation Stakeholders



8.4 Enabling Infrastructure



Priority — Infrastructure and Connectivity

The ability of businesses and industry to access national and global markets is recognised as critical to driving regional prosperity. Having access to markets allows a region to focus economic investment and activity on those sectors where it has a comparative advantage, allowing local businesses and industry to compete in an increasingly competitive global market. Market access also brings with it connections to the latest technologies, processes and thinking from around the world, with businesses able to draw upon new technologies and innovations, driving productivity and profitability.

For the Goldfields-Esperance region, key transport infrastructure hubs such as airports, rail, major road corridors and Esperance Port are essential to the region's export capacity. At a minimum, growing and expanding this capacity for primary industry exports is needed to support the growth of the economy. However, this export capacity must be supported by an extensive and comprehensive intra and inter-regional freight transport network to allow industry to transport goods to global markets in an affordable and timely manner. Increased access to airfreight and passenger transport services, upgrades and expansion of the roads and road networks, and ongoing expansion of the rail network is extremely important.

Additionally, export infrastructure capacity needs to be diversified, allowing for container movements. This will not only provide mining, construction and agricultural industries with direct access to global machinery and equipment producers, but also allow value added manufacturing in the region to be expanded and greater opportunity to import a range of inputs and supplies.

Market access also includes connections between local businesses and customers. This is particularly relevant to local tourism operators which are reliant on supporting infrastructure. The region's strategic location as a gateway to the eastern states presents unique and significant opportunities for local operators, supported by infrastructure, to encourage more visitors and increase their stay in the region.

In addition to transport infrastructure, the distance of many Goldfields-Esperance communities from major capital cities means that digital information and communications technology have the potential to provide significant benefits to the economy. The digital economy has the potential to drive innovation and productivity in existing industries, promote and encourage greater levels of collaboration and cross-sectoral integration, and foster new industries and businesses to help diversify the economy and provide essential services and information in innovative ways, particularly to remote communities.

Fostering the digital economy in the region will require investment and training in enabling communications technologies and infrastructure, strong business and community take up of the technology and effective strategies to optimise use of communications technology to promote economic integration between industries, research and development, innovation and service based exports. The uptake of digital technologies is crucial to the competitiveness of the region's businesses.

Priority — Infrastructure and Connectivity

Ref	Strategy	Outcomes 2035	Outcomes 2050	Alignment to Regional Aspirations
IN1	Modern Transport Networks			
IN1.1	<p>Access to Markets</p> <p>— Upgrade, renew or establish rail, road, port and air facilities to enable effective transport and access to markets. Establish integrated transport and logistics capability through private/public funding to allow timely and cost-effective movement of resources, commodities and manufactured products to markets.</p>	Goldfields-Esperance region is a preferred supplier to global markets of quality agricultural commodities, resources and minerals and in manufactured products due to its reliable and cost-efficient access to market infrastructure.	Goldfields-Esperance region is a preferred supplier to global markets of quality agricultural commodities, resources and minerals and manufactured products due to its reliable and cost-efficient access to market infrastructure.	<p>Globally Connected</p> <p>Economically Diverse and Resilient</p> <p>Sustainable and Renewable</p> <p>Inclusive</p>
IN1.2	<p>Local Roads</p> <p>— Ensure high level of adequacy of and access to the road network throughout the region and cross-regional.</p>	The local road network is integrated, well established and well maintained and continues to contribute to the safety of residents and visitors, and facilitate competitive trade throughout the region and cross regional.	The local road network is integrated, well established and well maintained and continues to contribute to the safety of residents and visitors, and facilitate competitive trade throughout the region and cross regional.	<p>Globally Connected</p> <p>Economically Diverse and Resilient</p> <p>Inclusive</p> <p>Sustainable and Renewable</p>
IN1.3	<p>Air Travel To Regional Centres</p> <p>— Develop Kalgoorlie-Boulder, Esperance and other regional airports to be ‘investor ready’ and visitation friendly for future increases in business, resident and tourism travel.</p>	Kalgoorlie-Boulder and Esperance regional airports have been expanded and cater cost-effectively for expanded services that are seeing an increase in use of air services by residents, visitors, businesses and for freight to and from Perth, other WA regional cities and other states.	Air travel has become a cost-effective way to travel throughout the region and provides access to other regions, states and countries.	<p>Globally Connected</p> <p>Economically Diverse and Resilient</p> <p>Sustainable and Renewable</p> <p>Inclusive</p>
IN1.4	<p>Remote Airport Infrastructure</p> <p>— Ensure that all regional and remote airports have high quality landing facilities and terminal facilities to facilitate safe emergency access and attract investment to smaller towns and communities.</p>	All-weather landing strips have been installed at regional and remote airports which are facilitating trade and supporting an increase in visitation to the region.	Regional and remote airports have upgraded terminal facilities.	<p>Globally Connected</p> <p>Economically Diverse and Resilient</p> <p>Sustainable and Renewable</p> <p>Inclusive</p>

Priority – Infrastructure and Connectivity				
Ref	Strategy	Outcomes 2035	Outcomes 2050	Alignment to Regional Aspirations
IN1.5	Future Movement — Invest in research on and provision of alternative and improved transport infrastructure including access to passenger rail, public transport and emerging vehicle technologies to broaden trade, tourism and visitation in the region and adapt to changing travel demographics and economic patterns.	Regional centres have a growing range of public and shared transport opportunities; they are highly liveable cities and towns with low vehicle traffic, clean air and are walk and cycle friendly places, which can connect with one another and beyond the region in a fast, safe and cost-effective manner.	New technologies have led to safer, more efficient and convenient travel throughout the region. Industrial and commercial areas are focussed on logistics and transportation infrastructure, leading to efficiencies and collaboration.	Globally Connected Sustainable and Renewable Economically Diverse and Resilient Inclusive
IN2	Digital Infrastructure			
IN2.1	Effective, Accessible and Reliable Mobile Coverage — Secure essential mobile phone coverage across the whole region.	The entire region enjoys mobile phone coverage equivalent to the servicing, accessibility and pricing offered in metropolitan areas.	The entire region enjoys mobile phone coverage equivalent to the servicing, accessibility and pricing to that of Perth, and is able to enjoy increases in productivity, services provision and involvement in technology-based and other industries as a result of connectivity.	Globally Connected Sustainable and Renewable Economically Diverse and Resilient Inclusive
IN2.2	Effective, Accessible and Reliable High Speed Internet	The entire region enjoys high speed (upload and download) internet coverage equivalent to the servicing, accessibility and pricing offered in metropolitan areas.	The entire region enjoys high speed (upload and download) internet coverage equivalent to the servicing, accessibility and pricing offered in metropolitan areas, and is able to enjoy increases in productivity, services provision and involvement in technology based and other industries as a result of connectivity.	Globally Connected Sustainable and Renewable Economically Diverse and Resilient

Measuring Outcomes – Infrastructure and Connectivity Indicators

The following indicators are headline metrics that will be used to measure and monitor the progress of the Infrastructure and Connectivity strategies.

Blueprint Priority	Key Indicators
Infrastructure and Connectivity	<ul style="list-style-type: none"> • Economic diversity rating • Population growth • Employment in technology related industries • Airport RPT (per capita) • Broadband access rating • Port throughput per capita • Local patent rating • Major road access

Stakeholder Implementation – Infrastructure and Connectivity

The following Federal, State, regional and local stakeholders across government, industry and community will be instrumental in implementing the Infrastructure and Connectivity strategies of the Blueprint. The list is not exhaustive and will change over time. It reflects known participants in the region and others identified through community consultation in the preparation of the Blueprint.

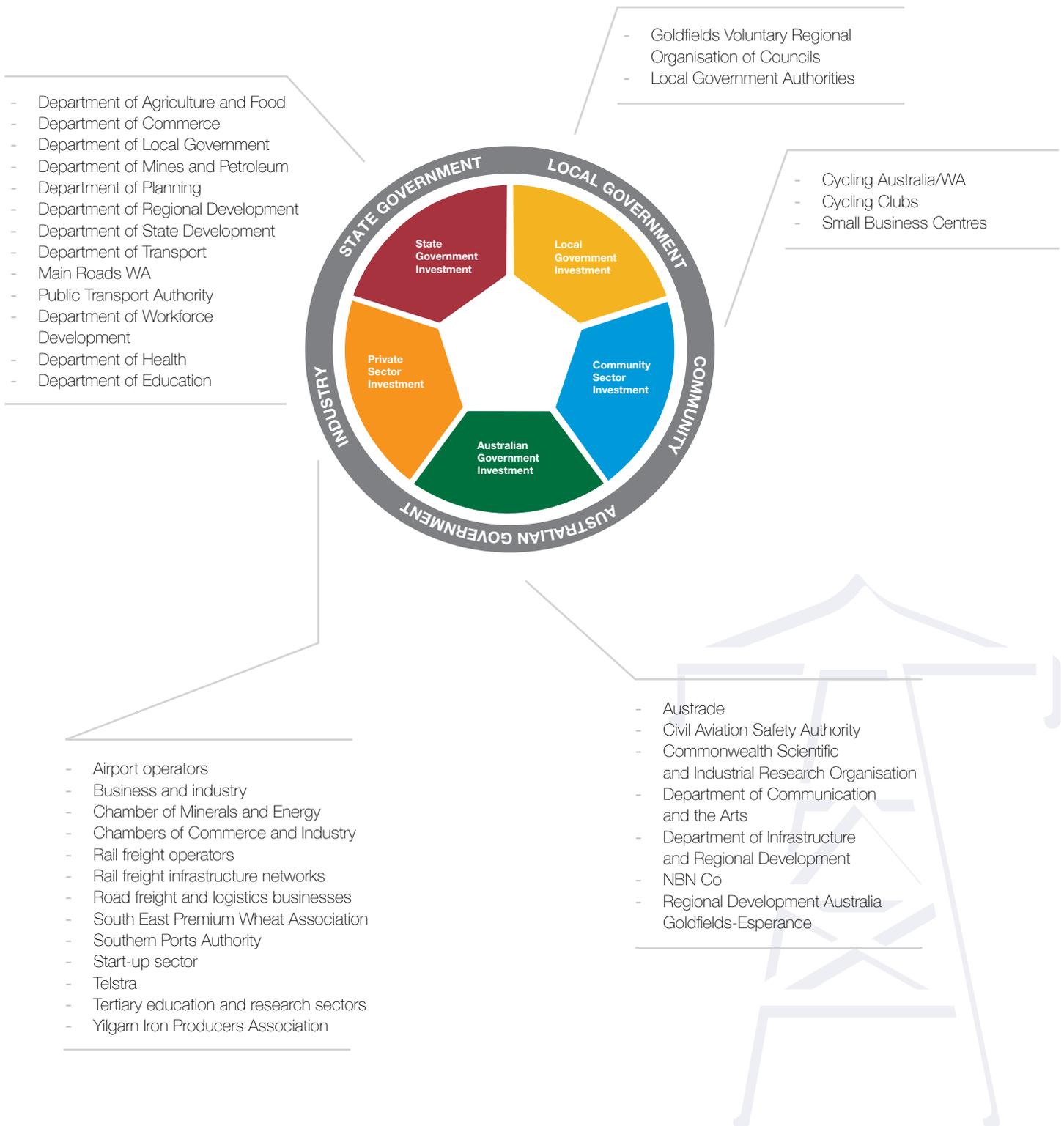


Figure 39 Infrastructure and Connectivity Stakeholders

Priority — Energy and Utilities



The Goldfields-Esperance region has access to diverse renewable and sustainable energy assets. With a history of early adoption of alternative and renewable technologies, the region is characterised by two major industries as consumers of energy, machinery and equipment. The region has the opportunity to develop expertise across the growing alternative energy and bespoke industrial technology and equipment sectors.

The size and locality of the region offers almost limitless solar, wind, biomass and ocean and tidal energy assets which have the potential to generate significant energy. The development of these local renewable energy resources can assist in improving the diversity and security of energy supplies in the region; the more self-sufficient the Goldfields-Esperance region can be in terms of power production, the less susceptible and vulnerable it is to global and national prices. This will require a critical mass of regional renewable energy production, along with supporting infrastructure.

The region also has the opportunity to improve the accessibility and security of energy access to major regional and remote communities, leveraging improvements in power storage. Decentralised and local energy production can assist to improve the quality of life through employment and for residents living in remote parts of the region, including Aboriginal communities and remote mining and agricultural operations.

Furthermore, utilities such as high quality, plentiful and accessible water and well managed waste water and waste sectors are important for the region that may also offer economic diversity opportunities in the development of new business, particularly in waste treatment and recycling.

Priority – Energy and Utilities

Ref	Strategy	Outcomes 2035	Outcomes 2050	Alignment to Regional Aspirations
U1.0	<p>Energy Supply</p> <p>— Ensure a sustainable, secure, cost effective energy supply for the region while attracting investment for research and development into the region.</p>	<p>The Goldfields-Esperance region has a highly diverse energy mix providing energy security and reliability to residents and industry throughout the region.</p> <p>The region is attracting significant investment for the development and production of clean energy.</p>	<p>The Goldfields-Esperance region is seen as a leader in the production of clean energy, providing a low cost supply that is enhancing industry competitiveness, which in turn is assisting with the attraction and retention of businesses and populations within the region.</p>	<p>Inclusive</p> <p>Sustainable and Renewable</p> <p>Knowledge Based</p> <p>Economically Diverse and Resilient</p>
U2.0	<p>Water Supply</p> <p>— Ensure a secure and cost effective supply of potable water for residents and 'fit for purpose' supply for industry and broader users such as emergency services.</p>	<p>Through research, planning, recycling, reuse, alternative supply methodologies and private/public investment the region has a secure and affordable long-term water supply that is facilitating the growth of the region.</p>	<p>Through a culture of valuing water, commitment and innovation, industry and residents set the benchmark for water saving, recycling and reuse across Australia.</p>	<p>Inclusive</p> <p>Sustainable and Renewable</p> <p>Knowledge Based</p> <p>Economically Diverse and Resilient</p>
U3.0	<p>Waste Water as a Resource</p> <p>— Develop and value waste water as a resource for reuse and recycling and for creating new economic and civic opportunities for industry and government.</p>	<p>Waste water technologies have been implemented and the percentage of waste water reused or recycled has increased year on year.</p>	<p>The region is at the forefront of waste water recycling technology and processing for reuse.</p> <p>The region has developed new industries that profitably process waste water from outside the region.</p>	<p>Inclusive</p> <p>Sustainable and Renewable</p> <p>Knowledge Based</p> <p>Economically Diverse and Resilient</p>
U4.0	<p>Waste Water as a Resource</p> <p>— Innovators in waste reduction programs and improved waste management services and opportunities, including harnessing waste streams as a resource, are attracted to the region with well researched, funded and appropriate business proposals which can be regionally accommodated.</p>	<p>Adequate access to modern waste management services are providing options for reuse and recycling of waste streams throughout the region.</p>	<p>The region has large-scale waste processing industries and services that profitably process or recycle waste from outside the region.</p> <p>Waste management and recycling is a valuable industry for the Goldfields-Esperance region.</p>	<p>Inclusive</p> <p>Sustainable and Renewable</p> <p>Knowledge Based</p> <p>Economically Diverse and Resilient</p>

Measuring Outcomes – Energy and Utilities Indicators

The following indicators are headline metrics that will be used to measure and monitor the progress of the Energy and Utilities strategies.

Blueprint Priority	Key Indicators
Energy and Utilities	<ul style="list-style-type: none">• Population growth• Local businesses per capita• Workforce employed in science and technology



Stakeholder Implementation – Energy and Utilities

The following Federal, State, regional and local stakeholders across government, industry and community will be instrumental in implementing the Energy and Utilities strategies of the Blueprint. The list is not exhaustive and will change over time. It reflects known participants in the region and others identified through community consultation in the preparation of the Blueprint.



Figure 40 Energy and Utilities Stakeholders

8.5 Fostering an Innovative Economy

Priority — Enterprise and Knowledge

The Goldfields-Esperance economy is already characterised by a range of knowledge-intensive industries. Education figures prominently in regional employment profiles, with the region home to school and post-school education options including the Western Australian School of Mines and the Goldfields Institute of Technology.

In addition, the mining and agricultural sectors in the region are recognised for their technological intensity, research, development and innovation.

Opportunity exists to build upon this base to drive the development of a true knowledge economy in the region. The knowledge economy does not rely on natural resources and raw materials. Instead, it leverages the skills and capabilities of the region's population and combines this with new and emerging technologies to support research and development, drive new innovations and develop new products and services. This transition to a knowledge economy represents the natural evolution of maturing economies.

Knowledge-intensive industries can include a wide range of professional and creative services, ranging from medical, health and physical research and services, tertiary education and training, research and development, engineering, marketing, finance and communications services to advanced manufacturing, information technology and cultural activities.

People working in knowledge-based activities are often able to transition between industries and careers as circumstances change. They can also have long careers, presenting opportunities for older workers to continue to actively participate in the economy, including after traditional retirement age.

This focus on knowledge and information will not only help to diversify the Goldfields-Esperance economy and reduce its cyclical and seasonal volatility, but will also help to improve the productivity and competitiveness of core mining and agricultural sectors. For example, the regional agriculture sector is currently at the forefront of adopting new land use management practices and digital technologies to improve yields and productivity. Similarly, the region is already recognised for developing and commercialising new drilling and exploration technologies for the mining sector.

Transitioning to a knowledge economy requires building on the region's existing post-school education capacity and building stronger and more streamlined and 'hands on' relationships with industry as well as new investment connections between industry and the education sector. This may include developing further post-secondary education facilities.

The region needs to leverage post-school education capacity and industry activity to create a mining centre of excellence that positions the region at the forefront of new technologies, attracting skilled personnel and businesses from around the globe. This would focus not just on mining itself as an activity, but all manner of support sectors including manufacturing, exploration and other mining services, management and environment.

Similarly, the benefits of the knowledge economy can be reflected in how traditional sectors of the economy do business. E-commerce, cloud computing, crowd sourcing of funds or information and other new and emerging business tools are fundamentally changing how businesses find customers, engage with clients and deliver goods and services. Successful adoption of new technologies by business and the development of the skills and capabilities to use them can also help to improve linkages between the Goldfields-Esperance region and regions and countries around the world. With these linkages come new ideas, new approaches and new ways of thinking which can underpin a wave of innovation and growth.

A robust, dynamic and innovative knowledge-based Goldfields-Esperance economy requires a highly skilled workforce, enabling telecommunications infrastructure, broader industry-oriented education and training programs, applied research and development, the adoption of new and emerging technologies and strong business, community and political leadership. But more than anything a knowledge economy needs a culture of innovation and entrepreneurship, with a dynamic and collaborative small business community and international goods and services exports.



Priority — Enterprise and Knowledge

Ref	Strategy	Outcomes 2035	Outcomes 2050	Alignment to Regional Aspirations
E1.0	<p>Business and Entrepreneurship</p> <p>— Invest in the entry and growth of new and existing businesses and entrepreneurs in the region.</p>	<p>Small businesses and start-ups are thriving through a culture of support and encouragement, leading to the region outperforming many others in the number of successful start-ups.</p>	<p>The region is recognised as an affordable, business-friendly location with many opportunities attracting young professionals, entrepreneurs and creatives to live in regional centres and work remotely or virtually.</p>	<p>Knowledge Based</p> <p>Economically Diverse and Resilient</p> <p>Globally Connected</p>
E2.0	<p>Creative Industries</p> <p>— Invest in the development of creative industries, arts and cultural enterprises.</p>	<p>The region has attracted entrepreneurs and investment into new creative industries, arts and cultural enterprises who have embraced digital technology to deliver innovative enterprises and events.</p>	<p>The region exports its knowledge and skills in the arts, creative industries and cultural enterprises across the globe.</p> <p>International visitors travel to the region's iconic arts and cultural events.</p>	<p>Knowledge Based</p> <p>Inclusive</p> <p>Economically Diverse and Resilient</p> <p>Globally Connected</p> <p>World-Renowned</p>



Priority — Enterprise and Knowledge				
Ref	Strategy	Outcomes 2035	Outcomes 2050	Alignment to Regional Aspirations
E3.0	<p>Digital Engagement</p> <p>— Increase digital engagement across the region.</p>	Goldfields-Esperance businesses have embraced the digital economy and implemented new technology across business and industry sectors.	The region has a knowledge-based economy with a diverse range of business and industry sectors.	<p>Knowledge Based</p> <p>Globally Connected</p> <p>World-Renowned</p>
E4.0	<p>Leadership Development</p> <p>— Invest in ongoing opportunities for aspiring leaders to develop their skills and play an increasing role in business and community decision-making and strategic planning for the region.</p>	Through investing in emerging leaders the region has strong leadership and local decision makers in business, community and government who are making a real difference throughout the region.	A culture of continually developing and supporting emerging and current leaders has emerged which is seeing leaders from the region making a real difference throughout Australia in business, community and government.	<p>Sustainable and Renewable</p> <p>Knowledge Based</p> <p>Globally Connected</p> <p>Inclusive</p>
E5.0	<p>Cross Disciplinary Collaboration</p> <p>— Develop business advisory, training and support services for increasing research and innovation capacity and collaboration, as well as innovation awareness.</p>	Strong partnerships and collaboration across all sectors are providing real synergies that are producing results and driving the region forward.	People from across Australia are looking towards our region as it is recognised as the leader in robust and strong partnerships, collaboration that is contributing to the greater good.	<p>Knowledge Based</p> <p>Economically Diverse and Resilient</p>
E6.0	<p>Cultural Skills Development</p> <p>— Develop cultural literacy, awareness and language skills to enable effective communication between communities within and outside the region and with key trading partners.</p>	With strong migration partners and an inclusive environment, connections are being made with different cultures from across the globe.	Cultural diversity is a recognised strength of the region and is leading to access in new markets around the world.	<p>Knowledge Based</p> <p>Economically Diverse and Resilient</p> <p>Globally Connected</p> <p>Inclusive</p> <p>World-Renowned</p>
E7.0	<p>Supportive Business Regulation For Innovation</p> <p>— Streamline regulatory approvals to ensure that a competitive regulatory environment for business is in place to attract ongoing investment across business and industry.</p>	Local governments are proactive, supportive and encouraging business innovation, new business and business migration through a proactive and streamlined decision making and regulatory process.	The Goldfields-Esperance region is acknowledged as a leader in maximising business opportunities through business friendly regulatory processes, attracting national and global interest and investment.	<p>Economically Diverse and Resilient</p> <p>Globally Connected</p> <p>Inclusive</p> <p>World-Renowned</p>

Measuring Outcomes — Enterprise and Knowledge Indicators

The following indicators are headline metrics that will be used to measure and monitor the progress of the Enterprise and Knowledge strategies.

Blueprint Priority	Key Indicators
Enterprise and Knowledge	<ul style="list-style-type: none">• Economic diversity rating• Income from own business• Income source• Level of overseas residents• Working population with university qualifications• Local patenting rating



Stakeholder Implementation – Enterprise and Knowledge

The following Federal, State, regional and local stakeholders across government, industry and community will be instrumental in implementing the Enterprise and Knowledge strategies of the Blueprint. The list is not exhaustive and will change over time. It reflects known participants in the region and others identified through community consultation in the preparation of the Blueprint.

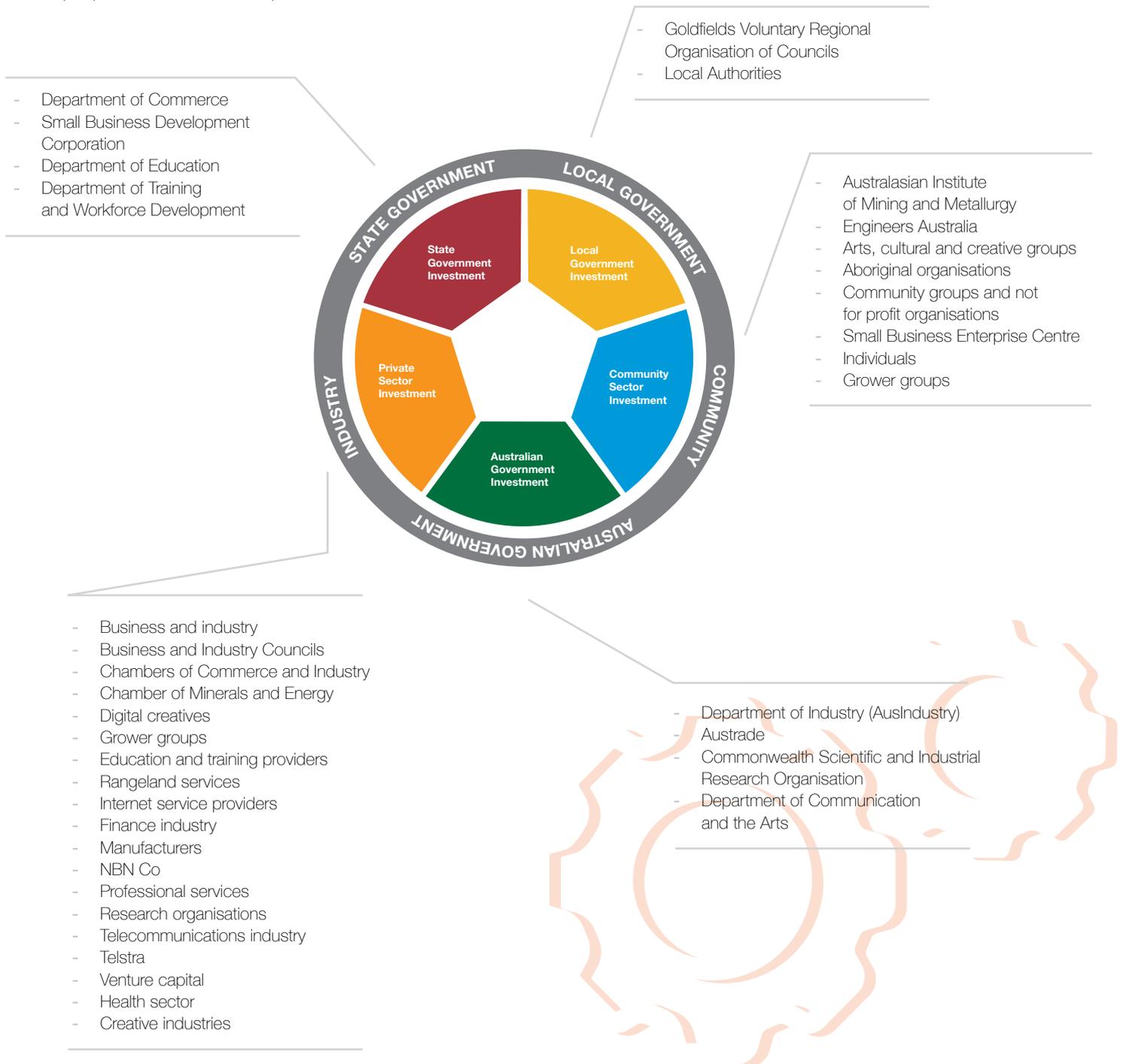


Figure 41 Enterprise and Knowledge Stakeholders



Priority — Mining and Industrial Technology



Manufacturing is currently undergoing a transformation. The shift away from traditional capital-intensive manufacturing methods to technological and digital processes is changing how consumer goods are produced. Emerging technologies such as additive printing are making local parts and equipment manufacturing and customised, tailored fabrication viable again. Similarly, digital design processes are allowing manufacturers to access the latest designs at affordable prices, drawing upon expertise from around the world.

Within the Goldfields-Esperance region, the established presence of major activity focussed on mining and agriculture supports high levels of innovation and expenditure on downstream and upstream supply chains. However, much of the required equipment for mining and agriculture is currently imported into the region, either from other parts of Australia or, more likely, other parts of the world. Leveraging the supply chain opportunities presented by these two industries, the region has the opportunity to develop a niche, innovative, technologically capable machinery and equipment manufacturing and maintenance sector.

Mining service providers are also major players in the future of the Goldfields-Esperance region. Expertise developed over decades in exploration, haulage, processing, construction, maintenance, accommodation, occupational safety and health is provided to clients outside the Goldfields-Esperance region and exported all over the world.

Collaboration, investment and innovation as well as continually developing and retaining skilled professionals in the region will provide significantly expanded global export opportunities. Areas of expertise (such as equipment for mining and processing) should be identified and leveraged to establish a point of difference for the region's manufacturers and mining services sectors. This competitiveness should be promoted across global markets, leveraging the expertise and capabilities gained in meeting the needs of local industries.

Priority — Mining and Industrial Technology				
Ref	Strategy	Outcomes 2035	Outcomes 2050	Alignment to Regional Aspirations
M1	Mining Innovation			
M1.1	<p>Mining Innovation Hub and Mine Services</p> <p>— Establish a Mining Innovation Hub to harness the comparative advantage of the region in minerals education, research and development, servicing, commercialisation and marketing of minerals knowledge, technology and manufacturing.</p>	<p>The Resources Innovation Hub has played an active role in maintaining the cost competitiveness of the resources sector by facilitating continuous improvement in exploration, extraction and processing of minerals within the region.</p>	<p>The Resources Services sector is world-renowned and has built alliances that ensure it is a net exporter of resources technologies from the region.</p>	<p>Sustainable and Renewable</p> <p>Knowledge Based</p> <p>Economically Diverse and Resilient</p> <p>Globally Connected</p> <p>World-Renowned</p>
M1.2	<p>Exploration and Rehabilitation</p> <p>— Support exploration for mining resources in the region within a framework of sustainable environmental, social and economic outcomes and concern for building value in local communities.</p>	<p>The Goldfields-Esperance region has continued to attract funding which has led to further resources and deposits being discovered, securing the future of the mining industry in the region.</p> <p>The continued advancements in mine rehabilitation is contributing positively in returning the mined land to its natural state.</p>	<p>Advances in technology continue to make exploration and rehabilitation cheaper and easier and are allowing for previously uneconomic deposits to begin to be mined.</p>	<p>Sustainable and Renewable</p> <p>Knowledge Based</p> <p>Economically Diverse and Resilient</p> <p>Globally Connected</p> <p>World-Renowned</p>
M1.3	<p>Mining</p> <p>— Mining is a valued industry sector of the Goldfields-Esperance region, continually developed within a framework of sustainable environmental, social and economic outcomes and concern for building value in local communities, with a focus on renewal of the Goldfields-Esperance region.</p>	<p>Mining continues to be a leading industry within the region, providing economic, social and environmental benefits for the region.</p> <p>Other industries continue to leverage the mining sector and are exporting their services and knowledge throughout the world.</p>	<p>Advances in technology have changed the face of mining, but it is still a major economic contributor to the region, providing jobs and supporting growth in other sectors that continue to reinvent themselves to be leaders in their various industries.</p>	<p>Sustainable and Renewable</p> <p>Knowledge Based</p> <p>Economically Diverse and Resilient</p> <p>Globally Connected</p> <p>World-Renowned</p> <p>Inclusive</p>

Priority — Mining and Industrial Technology				
Ref	Strategy	Outcomes 2035	Outcomes 2050	Alignment to Regional Aspirations
M2	Industrial Technology			
M2.1	<p>Manufacturing Renaissance</p> <p>— Leverage mining and other industries to allow the development of a strong and diverse higher-end manufacturing sector.</p>	Training, education and collaboration ensure innovation, effective service delivery and product development that have seen the region become a leader in machinery, equipment and other manufacturing for the mining and resources industry, accessing the world market through highly efficient transport and digital infrastructure.	Manufacturers capitalise on their mining related expertise and new digital technologies, resulting in recognition of the region as a world leader in custom and tailored equipment, products and services. Other sectors such as agriculture also develop manufacturing opportunities.	<p>Sustainable and Renewable</p> <p>Knowledge Based</p> <p>Economically Diverse and Resilient</p> <p>Globally Connected</p> <p>World-Renowned</p>
M2.2	<p>Digital Systems and Data</p> <p>— Support the development of digital systems across sectors to optimise the benefits of 'big data' in manufacturing and in information management, including new regional business opportunities.</p>	Training in development and use of new digital technologies and the ability to access and use 'big data' as a regional priority have led to continued innovation and application of diverse commercial applications.	<p>Machinery and equipment manufacturers are fully integrated into the digital economy with new and advanced design technologies used extensively throughout the manufacturing process.</p> <p>Information as a business opportunity has been embraced by regional innovators.</p>	<p>Sustainable and Renewable</p> <p>Knowledge Based</p> <p>Economically Diverse and Resilient</p> <p>Globally Connected</p> <p>World-Renowned</p>
M2.3	<p>Robotics and Automation</p> <p>— Support opportunities for the utilisation of advanced robotics and automation to support existing and emerging industries.</p>	The mining sector in the region is a leader in piloting advances in automation and new technologies that are further enhancing their competitive advantage, leading to further employment and innovation within the region.	Machinery and equipment manufacturers are fully integrated into the digital economy, with new and advanced design technologies used extensively through the manufacturing process. This knowledge is being exported around the world.	<p>Sustainable and Renewable</p> <p>Knowledge Based</p> <p>Economically Diverse and Resilient</p> <p>Globally Connected</p> <p>World-Renowned</p>

Priority — Mining and Industrial Technology				
Ref	Strategy	Outcomes 2035	Outcomes 2050	Alignment to Regional Aspirations
M3	Industry Research and Development			
M3.1	Establish strategic alliances to improve cross-industry and government collaboration to leverage research and development funding into resources, mining services and industrial technology.	The region attracts increasing amounts of public and private sector funding year-on-year, leading to innovation and efficiencies that are applied and the knowledge exported.	The resources industry research and innovation sector has achieved a world-leading international profile.	Sustainable and Renewable Knowledge Based Economically Diverse and Resilient Globally Connected World-Renowned
M4	Mining Regulation			
M4.1	Mining Regulation — Streamline regulatory approvals processes to ensure that a competitive regulatory environment for business is in place to attract ongoing investment in the mining and minerals sector.	Continual improvements in the regulatory arrangements for mining and supporting businesses have streamlined the process, leading to efficiencies and cost reductions, and enhancing the reputation of the region.	Western Australia is ranked in the top five locations in the world to initiate a mining project based on criteria associated with: <ul style="list-style-type: none"> • Sovereign risk • Taxation and royalty rates • Access to skilled labour • Access to capital • Productivity • Safety • Cost 	Sustainable and Renewable Knowledge Based

Measuring Outcomes – Mining and Industrial Technology Indicators

The following indicators are headline metrics that will be used to measure and monitor the progress of the Mining and Industrial Technology strategies.

Blueprint Priority	Key Indicators
Mining and Industrial Technology	<ul style="list-style-type: none">• Population growth• Economic diversification rating• Business turnover per capita• Port throughput per capita• Workforce employed in technology related industries



Stakeholder Implementation – Mining and Industrial Technology

The following Federal, State, regional and local stakeholders across government, industry and community will be instrumental in implementing the Mining and Industrial Technology strategies of the Blueprint. The list is not exhaustive and will change over time. It reflects known participants in the region and others identified through community consultation in the preparation of the Blueprint.



Figure 42 Mining and Industrial Technology Stakeholders



Priority — Agriculture, Fisheries and Food

Agricultural production and services, particularly crops and livestock, are primary industries in the Goldfields-Esperance region. The expansive land area of the region coupled with the combination of inland and coastal environments has long made the region attractive for agricultural, pastoral and fishing industries. The region is additionally recognised globally for its land management expertise.

Growing global demand for food, in response to rapid population growth and the emergence of a significant middle class in Asia, is expected to drive demand for quality Australian produce. This includes protein-based foods (such as beef) and coarse grains (such as wheat), plus a wide range of niche horticultural and seafood products.

This demand is expected to grow at a time when global food production will potentially become more volatile and uncertain. The increased urbanisation of the developing world, greater competition for scarce water supplies and the overarching implications of climate change are expected to see food production come under pressure. However, for regions able to adapt and respond to climate change, such a circumstance presents a significant long-term opportunity.

The region must diversify production to address challenges associated with global commodity price downturns and weather events. This includes the production of new crops and horticultural products as well as land-based and ocean-based fishing.

Key to the successful production of fishing and aquaculture products is a pristine natural environment. The South Coast of Western Australia is recognised internationally as a high quality marine environment, with minimal pollutants and strong biosecurity integrity. This has long supported an established wild capture seafood industry. However, quotas and other resource management processes have led to structural declines in many fishing and seafood sectors. Capturing investment in aquaculture is therefore critical to leverage the Goldfields-Esperance region's natural comparative advantage in seafood production. In both cases, successful aquaculture production requires significant investment. Foreign investment is particularly important as overseas producers not only bring with them the necessary financial capacity, but also the technical expertise and access to global markets.

Additionally, opportunities exist for Goldfields-Esperance producers to value-add to base agricultural produce. This value-adding can include physical manufacturing and food processing as well as softer value adding such as regional branding, marketing and promotions.

Priority – Agriculture, Fisheries and Food				
Ref	Strategy	Outcomes 2035	Outcomes 2050	Alignment to Regional Aspirations
A1	Agriculture and Food Hub			
A1.1	<p>Diversify and Value Add</p> <p>— Facilitate the development of dispersed value adding associated with horticulture, dairying, brewing and processing of mainstream agricultural products across the region.</p>	<p>Agricultural, food and value added production is diverse comprising a wide range of bulk commodity and niche agricultural, horticultural, dairy, brewing and other products.</p> <p>Farm diversification supports a range of tourism, recreational and environmental activities, complementing the region’s unique tourism experiences.</p> <p>Coordination and collaboration between agricultural organisations, producer groups and government optimise investment opportunities.</p>	<p>The region is internationally renowned for its agricultural, food and other value-added products, commodities and services.</p> <p>Multi-purpose food processing facilities employ many people in the region and export value-added products from the region.</p>	<p>Globally Connected</p> <p>Sustainable and Renewable</p> <p>Knowledge Based</p> <p>Economically Diverse and Resilient</p> <p>Inclusive</p> <p>World-Renowned</p>
A1.2	<p>Agricultural Services</p> <p>— Expand locally provided agricultural services and the uptake of these services across Australia and the globe.</p>	<p>Agricultural producers are supported by an extensive supply chain of regionally based farming products and services and are constantly trialling new services and technologies to maximise production and efficiencies.</p>	<p>The Goldfields-Esperance region is globally recognised for its agricultural services, knowledge and expertise and advanced knowledge and implementation of the latest technologies.</p>	<p>Globally Connected</p> <p>Sustainable and Renewable</p> <p>Knowledge Based</p> <p>Economically Diverse and Resilient</p> <p>Inclusive</p> <p>World-Renowned</p>
A1.3	<p>Investment Attraction</p> <p>— Promote opportunities for investment in agricultural and food products, value-adding and agricultural services in the region.</p>	<p>The region has a highly visible regional food and agriculture brand complemented by collaborative marketing of agricultural services, commodities and food products.</p>	<p>The region has seen an influx of investment due to a collaborative and proactive approach to investment opportunities in agricultural services, commodities and food products.</p>	<p>Sustainable & Renewable</p> <p>Economically Diverse and Resilient</p> <p>Globally Connected</p>

Priority — Agriculture, Fisheries and Food

Ref	Strategy	Outcomes 2035	Outcomes 2050	Alignment to Regional Aspirations
A1.4	<p>Tools for Managing Agricultural Risk</p> <p>— Develop cost-effective tools that can assist in better integrated decision-making and management of agricultural risks to improve farm productivity and profitability.</p>	<p>Agricultural risk management tools are fully supported by high quality, high speed digital connectivity and capability across the region.</p>	<p>The region is a pioneer in developing and implementing new risk management tools and in creating employment and training in the agricultural services industry.</p> <p>Digital agricultural services and knowledge are exported around Australia and the globe.</p>	<p>Sustainable and Renewable</p> <p>Knowledge Based</p> <p>Economically Diverse and Resilient</p> <p>Globally Connected</p>
A1.5	<p>Agricultural Research and Development</p> <p>— Innovate to improve productivity, create new commodities and value added products, create new employment and enhance the environment.</p>	<p>The development of leading agricultural development, technology and research practices is driven by industry and supported by government.</p>	<p>The region is positioned as the leading region of Western Australia for undertaking agricultural research and development practices.</p>	<p>Sustainable and Renewable</p> <p>Knowledge Based</p> <p>Economically Diverse and Resilient</p> <p>Globally Connected</p> <p>Inclusive</p>
A1.6	<p>Healthy Soils, Land and Water Catchment</p> <p>— Establish a proactive and collaborative approach to securing soil, land and water catchment quality, supported by cost-effective technologies and supplies of key inputs to measure, sustain and improve soil health in the region.</p>	<p>Through ongoing research and development continuous improvements in soil quality, agricultural inputs, water efficiencies and production are being made and are delivering economical returns.</p>	<p>Practices for improved soil health have been implemented and there is measurable improvement in soil quality, productivity and the catchment area, leading to the knowledge being imparted around the world.</p>	<p>Sustainable and Renewable</p> <p>Knowledge Based</p> <p>Globally Connected</p>
A2	Rangeland Productivity			
A2.1	<p>Rangeland Enterprise</p> <p>— Engage in sustainable pastoral activities and the harvesting of plant and timber products and initiate research and development of viable, alternative Rangeland enterprises.</p>	<p>Productive use and management of the Rangelands continues and has diversified to include the creation of new products, experiences and entrance into new markets.</p> <p>Measures to mitigate the impacts of threats to Rangeland productivity, such as weed, feral animal and dog control, have been implemented and are delivering positive returns.</p>	<p>Investment has been achieved in outback tourism experiences optimising opportunities between pastoral businesses, visitation and natural resource management.</p>	<p>Sustainable and Renewable</p> <p>Knowledge Based</p> <p>Economically Diverse and Resilient</p>

Priority — Agriculture, Fisheries and Food

Ref	Strategy	Outcomes 2035	Outcomes 2050	Alignment to Regional Aspirations
A2.2	<p>Land Tenure</p> <p>— Ensure that land tenure within the Rangelands supports sustainable pastoral use as well as the development of viable, alternative Rangeland enterprises.</p>	Rangelands land tenure reform has been implemented and has delivered new opportunities and investment to a range of industries within the region.	Investment has been achieved in outback tourism experiences, optimising opportunities between pastoral businesses, visitation and natural resource management.	<p>Sustainable and Renewable</p> <p>Knowledge Based</p> <p>Inclusive</p>
A3	<p>Fishing and Seafood Hub</p>			
A3.1	<p>Fishing and Seafood Hub</p> <p>— Promote Esperance and the South Coast as a Fishing and Seafood Hub to catalyse investment in fisheries and position Esperance as a premier fishing and seafood centre within the State.</p>	Esperance and the South Coast is an established Fishing and Seafood Hub with a focus on developments in fishing technology, industry and investor alliances, the promotion of tourism and visitation and distribution of premium seafood products.	<p>Investment in fishing and seafood industries has been realised in the form of increased productivity, efficiencies and volumes of the fisheries industry in the region.</p> <p>The region is renowned as an ocean and land based fishing and seafood tourism destination with a range of ocean and food based visitation and recreation activities.</p>	<p>Sustainable and Renewable</p> <p>Knowledge Based</p> <p>Economically Diverse and Resilient</p> <p>Globally Connected</p>
A4	<p>Biosecurity</p>			
A4.1	<p>Biosecurity</p> <p>— Ensure the long term sustainability of the region's primary industries, healthy soils, land and water catchments, coast and marine areas with measures to protect and maintain biosecurity and reduce the impact of invasive species.</p>	The region is at the forefront of biosecurity in Western Australia and continues to protect and enhance the region's agricultural and aquaculture production.	The region is at the forefront of biosecurity in Western Australia and continues, to protect and enhance the region's agricultural and aquaculture production.	<p>Sustainable and Renewable</p> <p>Knowledge Based</p> <p>Economically Diverse and Resilient</p>

Measuring Outcomes — Agriculture, Fisheries and Food Indicators

The following indicators are headline metrics that will be used to measure and monitor the progress of the Agriculture, Fisheries and Food strategies.

Blueprint Priority	Key Indicators
Agriculture, Fisheries and Food	<ul style="list-style-type: none">• Adult participation rates• Broadband access rating• Income from own business• Population growth• Port throughput per capita



Stakeholder Implementation – Agriculture, Fisheries and Food

The following Federal, State, regional and local stakeholders across government, industry and community will be instrumental in implementing the Agriculture, Fisheries and Food strategies of the Blueprint. The list is not exhaustive and will change over time. It reflects known participants in the region and others identified through public consultation in the preparation of the Blueprint.

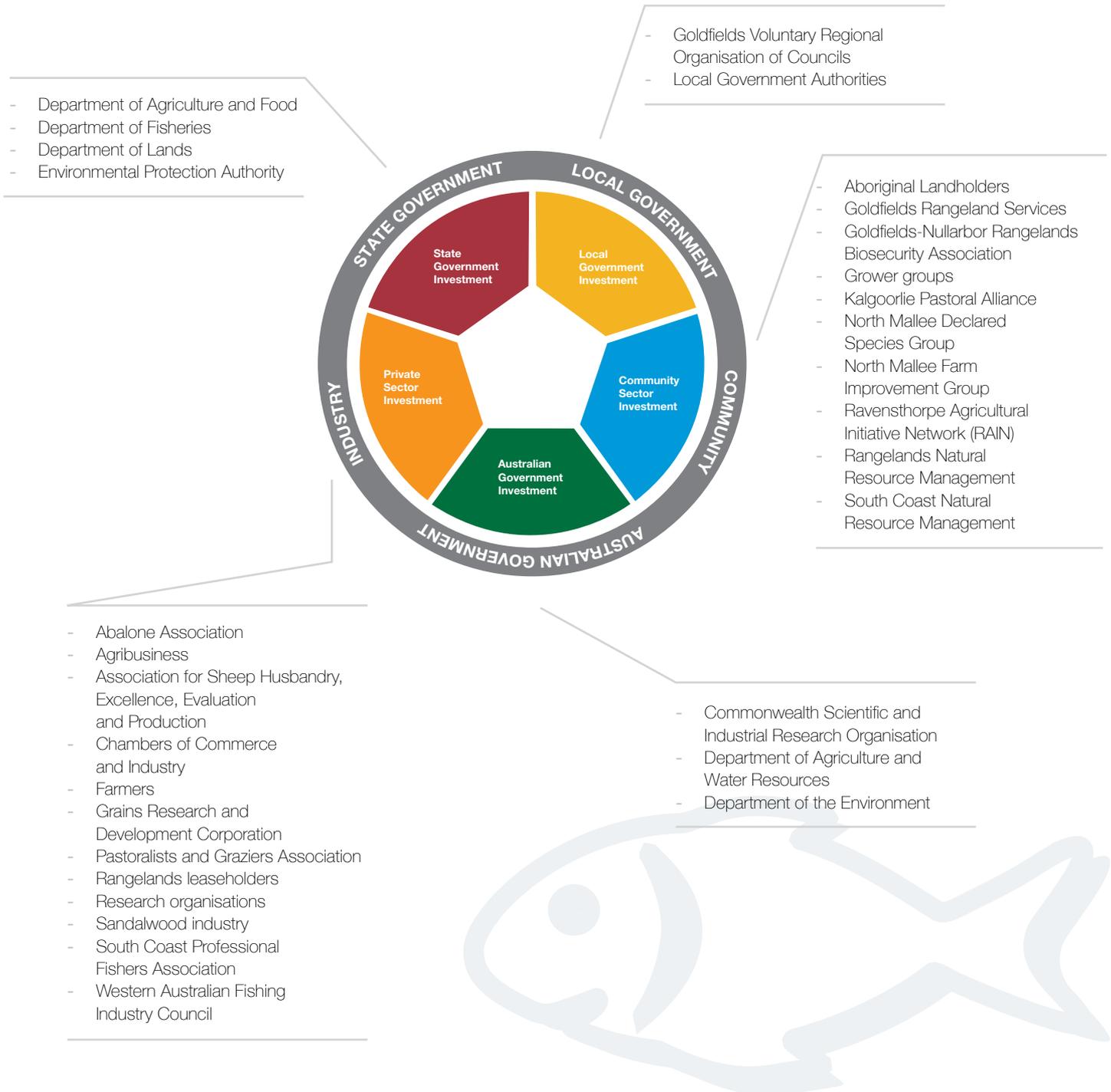


Figure 43 Agriculture, Fisheries and Food Stakeholders

9.0

Implementation and Monitoring Framework

Successful transformation of the present day of the Goldfields-Esperance region to the regional lifestyle and economy of 2050 that is exceptional, prosperous, and diverse will require an engaged, collaborative, knowledgeable and resourced cross-regional and sector partnership to deliver the Regional Investment Blueprint.

Associated with the six aspirational aspects of the Vision for Goldfields-Esperance 2050 as knowledge-based, inclusive, globally connected, sustainable and renewable, economically diverse, resilient and world-renowned, outcomes for 2035 and 2050 have been presented under eight Regional Priorities. Practical actions, initiatives and projects for these priorities will be identified, delivered and managed through a partnership approach. Monitoring and measuring their impact on the region and their contribution to the realisation of the Blueprint's vision will require a detailed implementation-focussed delivery framework. Similarly, ensuring the Blueprint remains a living, flexible and highly responsive tool requires ongoing feedback, review and renewal. This overview details the important tasks as part of the Blueprint implementation.

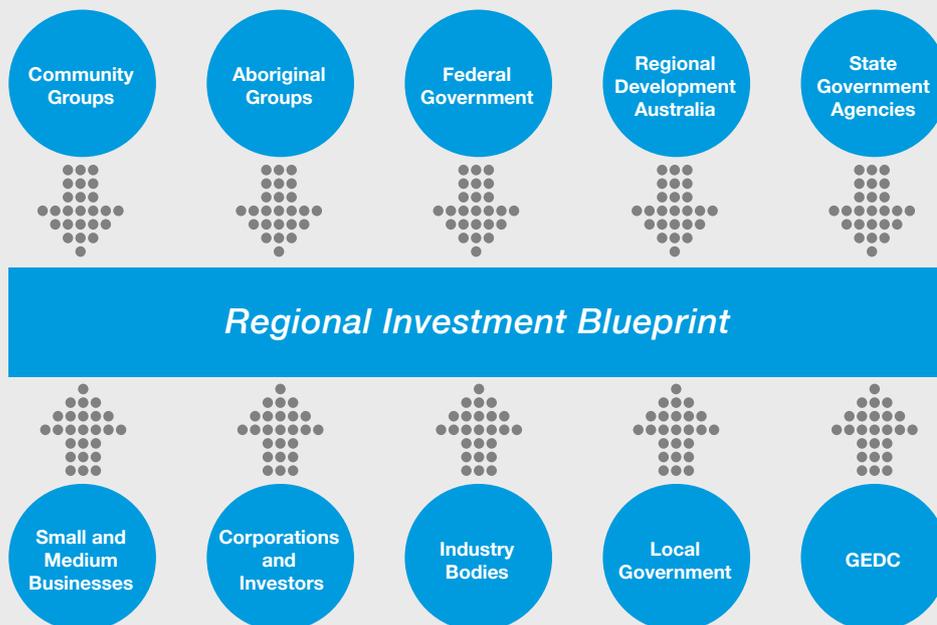


Figure 44 Stakeholders Goldfields-Esperance 2050

9.1 Blueprint Implementation

Implementation Actions

The implementation of the Goldfields-Esperance Blueprint will be through partnerships: building coalitions and leveraging expertise, knowledge and investment funding to ensure optimal outcomes are achieved for the region through targeted, well-planned and effective investment.

This approach to implementation of the Blueprint will be comprised of a number of interrelated, coordinated, supportive actions broadly outlined below:

- Investment Promotion – including promoting and marketing of the Blueprint to stakeholders, engagement with financiers and leveraging investment, mobilisation of new investment, business case preparation, industry coordination and sector specific investment coordination;
- Advocacy and Leadership – including policy and process change advocacy, government policy input, planning and strategy implementation coordination, reform promotion and advocacy;
- Facilitation and Enablement – including delivery coalition and partnership formation, public-private partnership fostering, public funding leveraging to attract and leverage private and community funding and promote knowledge and information about the region to inform decision-making; and
- Governance and Regulation – including monitoring, reviewing and assessing Blueprint implementation, stakeholder engagement, community engagement, regional governance and regulatory reform promotion and promoting coordination between all levels of Government.



Values to Guide Implementation

The implementation of the Blueprint will be guided by a series of values. These values provide important context for the different approaches to economic and community development that must be adopted to implement the Blueprint.

Critical values include:

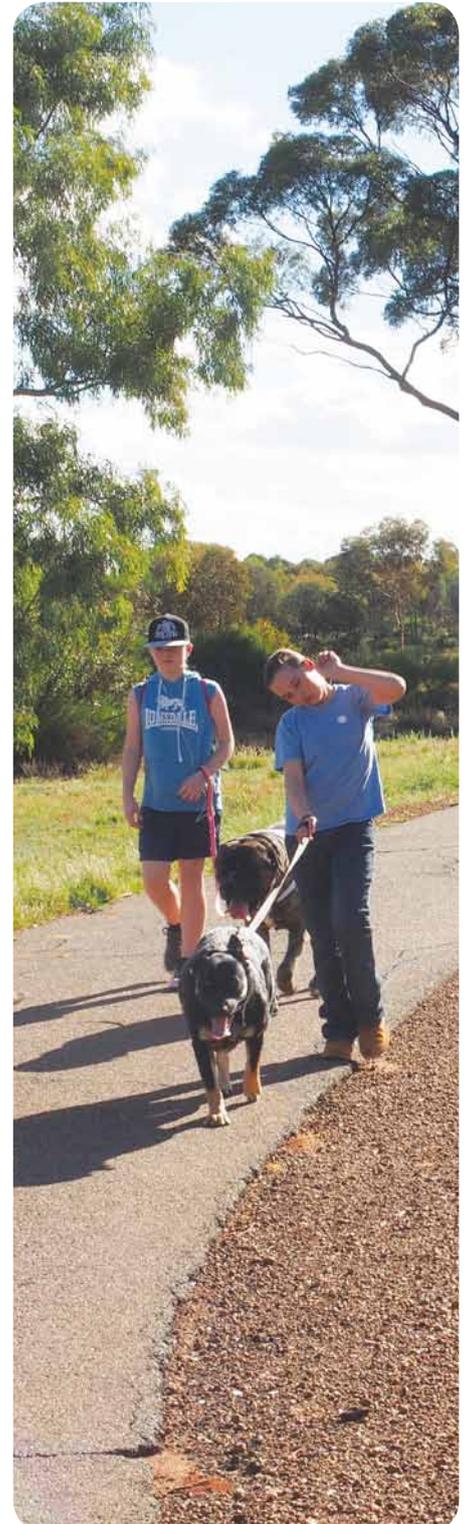
- Innovation – seek new, novel and different solutions to the challenges facing the region in the future;
- Leadership – strive 'to be in front' through a strong culture of leadership across government, business and the community;
- Stakeholder Ownership – the Blueprint is 'owned' by community and industry, not government;
- Ongoing Improvement – the Blueprint is a 'living document' which will be reviewed, renewed and revitalised on a continuous basis;
- Informed Decision Making – decisions are based on a strong evidentiary foundation; and
- Proactive – successful regional development requires identifying and capturing opportunities, rather than responding to changes in circumstances.

A Collaborative Approach to Implementation

The Commission recognises that realising the Blueprint's vision for the region in 2050 will necessitate a long-term commitment by all stakeholders. The Blueprint is not simply a strategy for government; it is a holistic economic and community development strategy that requires active buy-in and investment from all sections of the Goldfields-Esperance community. It aims to provide a forum to bring regional development stakeholders together around a common plan for action or investment in the region.

Public consultation in the development of the Blueprint demonstrated the interest and willingness of the Goldfields-Esperance community to participate in realising the 2050 vision with a record level of detailed written submissions, as well as engagement in workshops and other personal communication.

All members of the Goldfields-Esperance community have an important role to play in implementing the Blueprint. This will be achieved through collective and coordinated actions and investment in a broad range of projects that will stimulate and facilitate the growth and development of the Goldfields-Esperance economy and community for the benefit of local residents and businesses.



Alignment of objectives of stakeholders and close coordination between the tiers of government and public and private sectors is therefore critical to the effective implementation of the Blueprint.

Specific stakeholders in the growth and development of the Goldfields-Esperance region that will play a role in the implementation of this Blueprint.

Only by working together in a coordinated and concerted approach can the Blueprint be successfully implemented and the vision and regional priorities of the Blueprint realised.

Need for Stakeholder Input and Involvement

In light of this, the Goldfields-Esperance Development Commission considers stakeholder input and involvement in shaping the Blueprint's implementation strategy critical to its success. Only when all stakeholders have ownership of the implementation of the Blueprint can the full economic potential of the region be achieved. It is proposed that one or several 'implementation committees' could be established by the Commission to help identify and develop actions and initiatives under each of the regional priorities.

These committees would be comprised of stakeholders from industry, government and the community, allowing the implementation of the Blueprint to be tailored and targeted to the needs and requirements of the region.

The Commission would play a supporting secretariat role, with ownership and responsibilities for the committees vesting with participating stakeholders. The Commission would also support the committee/s through advocacy of the Blueprint and associated priorities and initiatives.



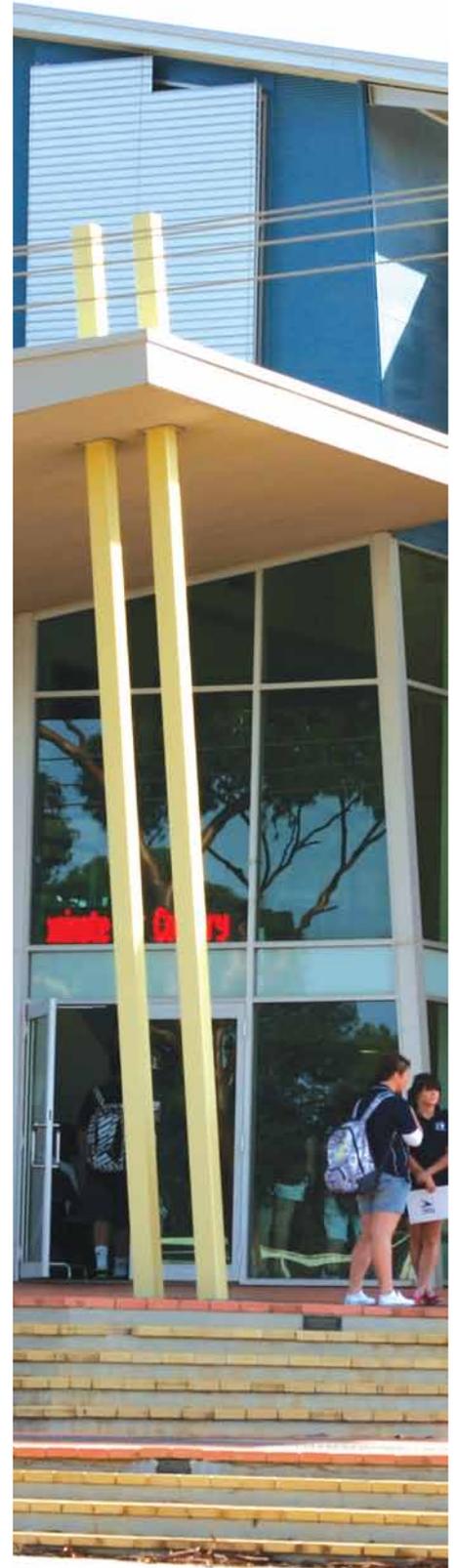
Funding and Financing Implementation

The Minister for Regional Development has advised that the Blueprints will provide direction for Royalties for Regions to support significant regional projects to improve and develop local infrastructure and services. Royalties for Regions provides significant opportunity, through partnerships with Federal and State agencies and the private sector, to work collaboratively with regional and remote country communities that they may grow and develop.

However, government funding alone cannot realise the vision for the Goldfields-Esperance region outlined in the Blueprint. While Royalties for Regions funding has the potential to facilitate important enabling infrastructure, facilities and land release, the 'heavy lifting' needed to generate jobs, high incomes and a dynamic economic and business community requires strong ongoing investment by the private sector. Only when investor, business and community groups invest in their own operations or in new and emerging commercial opportunities can the vision for the Goldfields-Esperance region be realised.

There are a numbers of funding sources available which will have to be accessed in order to realise the Blueprint's vision and facilitate the implementation of key actions and initiatives. The funding sources to be targeted include:

- **Local and National Businesses** – the private business sector represents the principal source of funding for economic development in Australia. It is the investment by local and national businesses that creates high income employment opportunities for the workforce and value-adding in the economy.
- **Foreign Investors** – the increasingly interconnected nature of the global economy means that foreign investment plays an increasingly important role in driving regional development in Australia. Attracting foreign investment not only secures for the region significant new funds to support major projects, but also brings with it strong connections to key global markets and customers.
- **Federal Government** – The Federal government is the major source of public sector infrastructure and service funding in the country. Additionally, major Federal government agencies in areas such as defence, aviation, immigration, quarantine and human services have operations across regional Australia supporting local employment and the quality of life of residents.
- **Community Groups** – the not-for-profit sector plays an increasingly prominent role in delivery of essential services to the community. Community organisations make important investments in a range of sectors such as aged care, health, disability, arts and culture, environmental protection and community housing.
- **New and emerging funding approaches** – funding innovation is gaining increasing attention and success including revenue generation for not-for-profits, increased and diverse philanthropy approaches including venture philanthropy and crowd funding, start-up social enterprise, peer-to-peer lending and payment for outcome such as social investment business and social benefit bonds.



9.2 Monitoring and evaluation framework

Achieving Outcomes

Eight regional priorities have been identified in the Blueprint to grow the Goldfields-Esperance region under which a series of indicative and achievable outcomes and strategies have been developed for the medium term (2035) and long term (2050). Suggested measures are provided for the strategies sourced mainly from the scorecard methodology used in earlier Blueprint chapters for benchmarking regional social and economic factors against national indicators.

During the implementation phase of the Blueprint, targets will be set specific to assessable areas or particular actions for each outcome. Both scorecard metrics and additional measures of performance may be applied to track these targets. Further targets may be associated with specific projects or actions. Use of standard measures will allow regular assessment of the Blueprint and will provide the evidence necessary to guide medium to long-term implementation.

Monitoring and Evaluation Framework

Implementation planning will determine responsibility for the monitoring and evaluation of outcomes from the Blueprint. The GEDC and stakeholders will jointly develop a framework for monitoring and evaluation, including performance measures. The monitoring and evaluation framework will serve several purposes, including to:

- Measure investment across the region disaggregated by sector;
- Assess business case development including the number and focus of business cases prepared;
- Capture policy and procedural initiatives and reforms that improve the investment and development in the region;
- Monitor demographic and population changes, wellbeing and social cohesion; and
- Report on outcomes, achievements and any shortcomings in implementation of the Blueprint.



Implementation planning will also establish a review, evaluation and reporting process. This review process will be iterative and ongoing, reinforcing the living nature of the Blueprint and ensuring continuous improvement. The review process will be comprised of four discrete tasks:

- **Performance monitoring** – review of the performance of strategic actions and investment decisions in achieving positive outcomes;
- **Regional priority update** – adjustment to the regional priorities to reflect changes in the socioeconomic environment, shifting community priorities, State level regional priorities and the outcomes of performance monitoring;
- **Alignment with Blueprint vision** – identification of new and additional actions and confirmation of their alignment with the overarching vision for the region in the Blueprint; and
- **Impact and resourcing** – establishment of workforce and procurement plans to appropriately resource the implementation of the actions and track key implementation indicators and metrics.

Community consultation and feedback on investment and development outcomes and issues would be sourced during this process of review. The Blueprint's contemporary relevance would also be assessed and updates or amendments made to ensure the document remains useful and relevant, as the guide for investment and development of the region.

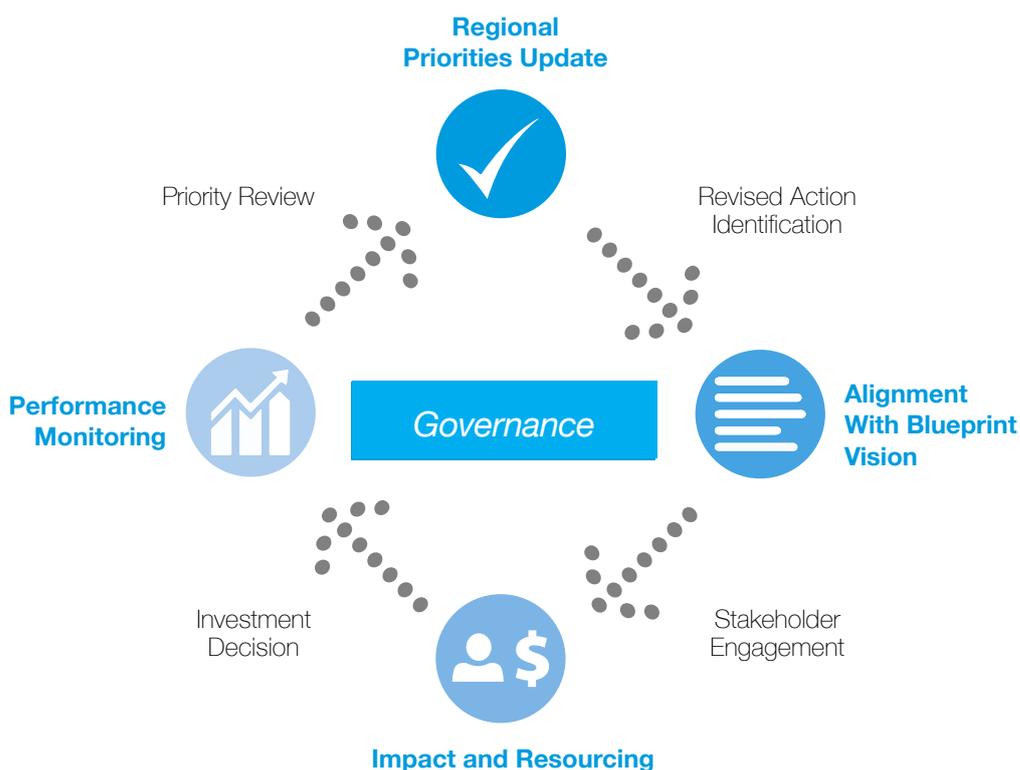
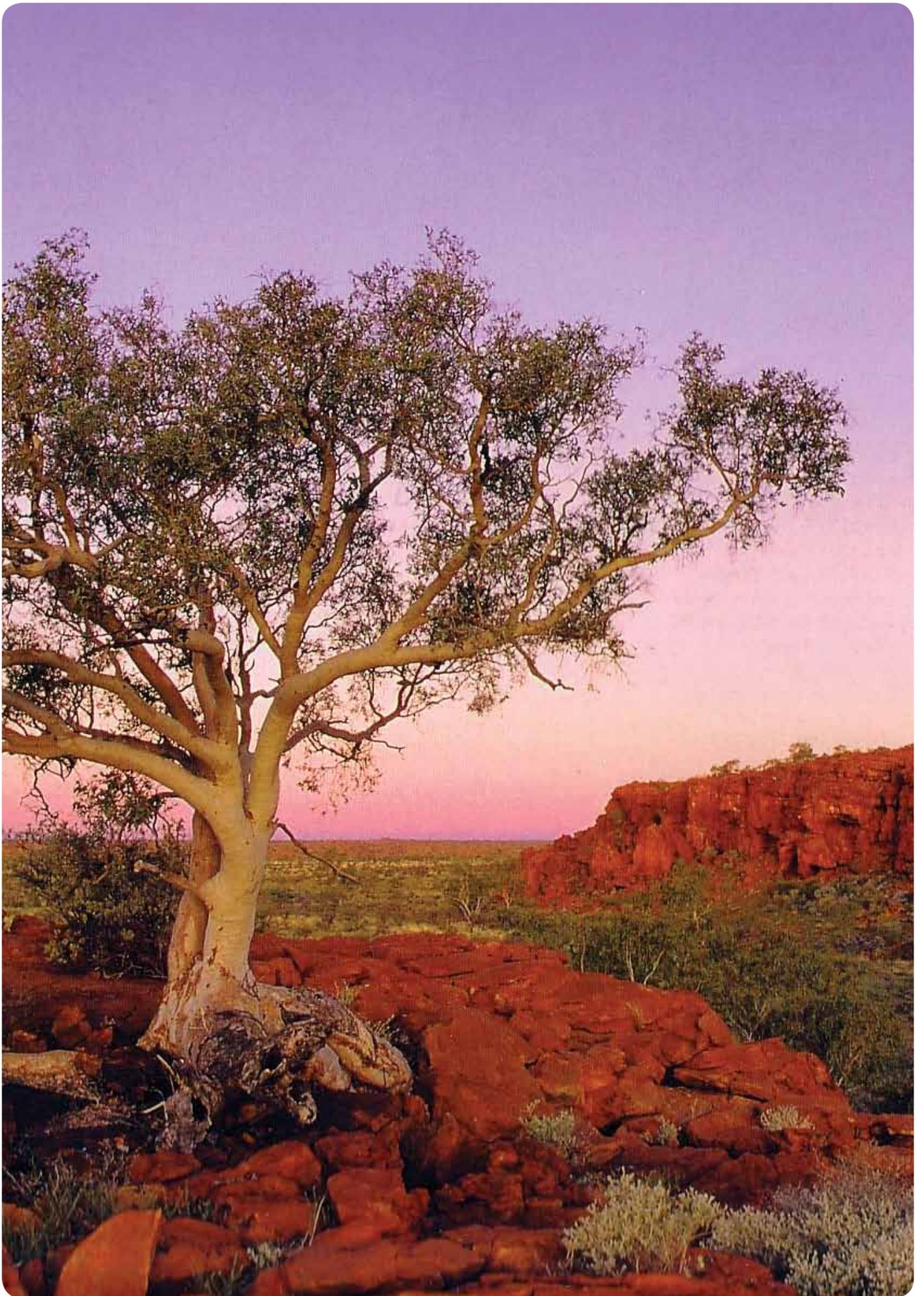


Figure 45 Governance Framework



Appendix 1

Existing Plans and Strategies

To facilitate change, the Blueprint relies on, links to and builds upon other strategic priorities put in place by Federal, State and local partners. These include:

State Planning Strategy 2050: The lead strategic planning document for the Western Australian Government which highlights principles, strategic goals and strategic directions which are important to the land-use planning and development of Western Australia. A vision of sustained growth and prosperity underpins the Strategy and is framed around diversity, liveability, connectedness and collaboration.

Council of Australian Governments (COAG) Themes of Economic Importance: The Council of Australian Government (COAG) five themes of strategic importance lie at the intersection of jurisdictional responsibilities and cover economic and social participation, competitive advantages, liveability, sustainable health and Aboriginal disadvantage.

Regional Freight Transport Network Plan: The Plan identifies the strategic long-term planning, policy and project priorities required to facilitate growth and ensure optimal network performance for the Western Australian regional freight network to 2031.

State Aviation Strategy: The Strategy aims to support the economic and social development of regional Western Australia through the provision of safe, affordable, efficient and effective aviation services and infrastructure. It considers future infrastructure needs and identifies proposals to encourage investment and fosters the development of tourism through improved and affordable air services.

Portlink Inland Freight Corridor Plan and other Documents: This document provides an overview of the Portlink concept and the current and future activities underway by the Department of Transport to undertake planning studies on Portlink concept options.

Goldfields-Esperance Planning and Infrastructure Framework: The Goldfields-Esperance Planning and Infrastructure Framework sets out a range of strategic planning goals, objectives and actions to address opportunities and challenges in the Goldfields-Esperance region, with a strong focus on identifying regional infrastructure and planning priorities. The Framework additionally identifies an economic development vision whereby the Goldfields-Esperance region will have a robust, diverse and sustainable regional economy to service the needs of its industry and commerce effectively. Key to this vision is the development of a Goldfields-Esperance economy which is diversified on the basis of resource industry supply chain completion in the first phase, widening in the later phases to encompass more knowledge-based industries, with an increasing capacity to export goods and services.

Goldfields-Esperance Strategic Development Plan 2011-2021: The Goldfields-Esperance Strategic Development Plan 2011-2021 is the product of collaboration between the three tiers of government and is built on addressing the critical needs of the region. The Plan identifies five key aspirations for the region, with a focus on infrastructure, workforce, quality of life, renewable energy and regional decision making. The Plan is supported by 39 regional priority projects.

Goldfields-Esperance Workforce

Development Plan 2013-2016: The Plan aims to build, attract and retain a skilled workforce to meet the economic needs of the Goldfields-Esperance region. It contains a range of priority actions which were identified by local stakeholders to address local workforce development challenges.

Regional Development Australia – Goldfields-Esperance Strategic Plan

2011-2014 and Regional Plan 2013-2016: Regional Development Australia (RDA) is a partnership between the Australian, state, territory and local governments to support the growth and development of Australia's regions. The RDA plan has developed key priorities around infrastructure investment, economic diversification, longevity and sustainability, and liveability.

Esperance Region – Economic

Development Strategy: The Esperance Region Economic Development Strategy guides the future growth and development of the Esperance Region. The Strategy is supported by the Investment Attraction Program designed to proactively target business and investment attraction in the region. The Strategy is underpinned by a regional vision and six guiding principles. The Strategy includes regional and local focus initiatives and actions required of key stakeholders to deliver the priority regional and local economic development initiatives.

Planning our Future – A Growth Plan for Esperance and the South East

Region: Planning our Future: A Growth Plan for Esperance and the South East Region sets out a vision and guiding principles to enable economic growth, prosperity and wellbeing for the communities of the South East Region. The Growth Plan includes actions, projects and initiatives to promote and share the benefits of growth across the region and accommodate a population of up to 25,000 in Esperance by 2036. The Plan is a result of Esperance being selected as a Super Town under the Royalties for Regions program.

Numerous local strategies and plans:

Myriad local plans, strategies and priorities informed the Blueprint, in particular growth plans and community strategic plans. Including:

- Shire of Coolgardie Strategic Directions Plan 2012 – 2021;
- Shire of Dundas Strategic Community Plan 2012 – 2022;
- Shire of Esperance Strategic Community Plan 2012 – 2022;
- City of Kalgoorlie-Boulder Strategic Community Plan 2013 – 2023;
- Shire of Laverton Strategic Community Plan 2013 – 2023
- Shire of Leonora Strategic Community Plan 2010 – 2015
- Shire of Menzies Strategic Community Plan 2013 – 2023
- Shire of Ravensthorpe Strategic Community Plan 2014 – 2024

Stakeholder Referred Strategies and Plans:

- A Biodiversity and Cultural Conservation Strategy for the Great Western Woodlands (2010) Department of Parks and Wildlife
- Affordable Housing Strategy 2010-2020 (2010) Department of Housing
- Goldfields-Esperance Arts and Culture Trail (2015) Acker Tim
- Goldfields-Esperance Arts and Culture Framework 2015-2020 (2015) Country Arts WA and Regional Development Australia Goldfields-Esperance
- Great South West Edge National Landscape – Experience Development Strategy (2013) Tourism Australia
- Regional Arts and Cultural Action Plan 2014-2018 (2014) Department of Culture and the Arts

- Water Forever Whatever the Weather, a Plan for WA (June 2012) Water Corporation
- Skilling WA – A workforce development plan for WA 2014 Department of Training and Workforce Development

Appendix 2

Benchmarking Methodology

Area of Focus	Indicator	Description (source)
Economic Fundamentals and Sustainability	Local Businesses	Businesses per 1,000 residents (Counts of Australian Businesses, including Entries and Exits, Jun 2010 to Jun 2014, ABS 8165.0. and Counts of Australian Businesses, including Entries and Exits, Jun 2009 to Jun 2013, ABS 8165.0)
	Business Turnover	Per capita business turnover (Counts of Australian Businesses, including Entries and Exits, Jun 2010 to Jun 2014, ABS 8165.0. and Counts of Australian Businesses, including Entries and Exits, Jun 2009 to Jun 2013, ABS 8165.0)
	Long Term Unemployment	Proportion receiving an unemployment benefit for longer than 6 months (Public Health Information Development Unit (PHIDU), Social Health Atlas of Australia: Local Government Areas)
	Youth Unemployment	Proportion of unemployed 15-24 year olds (Goldfields-Esperance, Labour Market Efficiency, Youth Unemployment, Insight, Regional Australia Institute)
	Economic Diversification Rating	Hachman Index of Diversification – higher score indicates more diversity (Goldfields-Esperance, Business Sophistication; Economic Diversity, Insight, Regional Australia Institute)
	Welfare Dependence	Adults who had government support as main source of income in last 12 months or more within the past 24 months (Public Health Information Development Unit (PHIDU), Social Health Atlas of Australia: Local Government Areas)
	Senior Dependency Ratio	Seniors (65+ years) as a proportion of the working age (15-64 years) population (Goldfields-Esperance, Demography; Senior Dependency, Insight, Regional Australia Institute)
Entrepreneurship and Innovation	New Business Start-ups	New businesses since 2009 as a proportion of all businesses (Counts of Australian Businesses, including Entries and Exits, Jun 2010 to Jun 2014, ABS 8165.0. and Counts of Australian Businesses, including Entries and Exits, Jun 2009 to Jun 2013, ABS 8165.0)
	Non-employing Microbusinesses	Non-employing businesses per 1,000 residents (Counts of Australian Businesses, including Entries and Exits, Jun 2010 to Jun 2014, ABS 8165.0. and Counts of Australian Businesses, including Entries and Exits, Jun 2009 to Jun 2013, ABS 8165.0)
	Income Source Own Business	Average own unincorporated business income (Estimates of Personal Income for Small Areas, Time Series, 2005-2006 to 2010-2011 ABS 6524.055, ABS 2011)
	Local Economic Development Support	Assessment of the availability of business information and pro-business policies (Goldfields-Esperance, Institutional Foundations: Local Economic Development Support, Insight, Regional Australia Institute)
	Local Patenting Rating	Number of patents certified and granted between 2009 and 2014 per 1,000 residents (Goldfields-Esperance, Innovation; Number of Patents, Insight, Regional Australia Institute)
	Small Businesses	Small businesses (less than 5 employees) per 1,000 residents (Counts of Australian Businesses, including Entries and Exits, Jun 2010 to Jun 2014, ABS 8165.0. and Counts of Australian Businesses, including Entries and Exits, Jun 2009 to Jun 2013, ABS 8165.0)
	Human Resources in Science and Technology	Workforce employed by technology related businesses (2011 Census, Table Builder, Counting Persons, Place of Usual Residence, Employment, Income, and Unpaid Work, Industry of Employment, ABS Census)

Area of Focus	Indicator	Description (source)
Workforce Participation and Skills, and Education	Adult Participation Rate	Population 15+ in the workforce (2011 Census Goldfields QuickStats, People – Demographics & Education, ABS Census, and 2011 Census Esperance QuickStats, People – Demographics & Education, ABS Census)
	Aboriginal Adult Participation Rate	Aboriginal population 15+ in the workforce (2011 Census Goldfields Community Profile, Aboriginal and Torres Strait Islander Peoples (Indigenous) Profile, 2011 ABS Census, and 2011 Census Esperance Community Profile, Aboriginal and Torres Strait Islander Peoples (Indigenous) Profile, 2011 ABS Census)
	Early School Leavers	Adult population that did not complete Year 12 (2011 Census, Table Builder, Counting Persons, Place of Usual Residence, Highest Year of School Completed, ABS Census)
	University Qualified	Working age population with university qualifications (2011 Census, Table Builder, Counting Persons, Place of Usual Residence, Non-School Qualification: Level of Education, ABS Census)
	Technical Qualified	Working age population with certificate or diploma qualifications (2011 Census, Table Builder, Counting Persons, Place of Usual Residence, Non-School Qualification: Level of Education, ABS Census)
	English Proficiency	Population with English as a first language, or if second language, speaks English well (2011 Census, Table Builder, Counting Persons, Place of Usual Residence, Cultural and Language Diversity: Proficiency in Spoken English, ABS Census)
	Youth Learning or Earning	Proportions of 15-19 year olds engaged in school, work or further education/ training (Public Health Information Development Unit (PHIDU), Social Health Atlas of Australia: Local Government Areas)
	Primary School Performance	Percentage of high bands achieved by NAPLAN participants (My Schools, Australian Government and Goldfields-Esperance, Human Capita; Primary School Attainment, Insight, Regional Australia Institute)
	Secondary School Performance	Percentage of high bands achieved by NAPLAN participants (My Schools, Australian Government and Goldfields-Esperance, Human Capita; Secondary School Attainment, Insight, Regional Australia Institute)
	Distance to Primary Education Services	Average distance for residents to a primary school (GIS Calculations, My Schools, Australian Government, and Goldfields-Esperance, Infrastructure and Essential Services; Access to Primary Education Services, Insight, Regional Australia Institute)
	Distance to Secondary Education Services	Average distance for residents to a high school (GIS Calculations, My Schools, Australian Government, and Goldfields-Esperance, Infrastructure and Essential Services; Access to Primary Education Services, Insight, Regional Australia Institute)
Adults in Higher Education Learning	Proportion of working age population (15-64) in tertiary or technical education (2011 Census, Table Builder, Counting Persons, Place of Usual Residence, Education and Qualifications; Type of Educational Institution Attending, ABS Census)	

Area of Focus	Indicator	Description (source)
Health, Community and Services Access	Major Services Presence Rating	Presence of university, TAFE, hospitals and other major facilities (Goldfields-Esperance, Institutional Foundations, Presence of Major Organisations, Insight, Regional Australia Institute)
	Allied Health Services Employment	Proportion of workforce employed in health services excluding hospitals (Goldfields-Esperance, Infrastructure and Essential Services; Access to Allied Health Services, Insight, Regional Australia Institute)
	GP Services Per Capita	Number of GP services per capita (Public Health Information Development Unit (PHIDU), Social Health Atlas of Australia: Local Government Areas)
	Adult Health Risks	Adults with at least one of four of the health risk factors of smoking, harmful use of alcohol, physical inactivity and obesity (Public Health Information Development Unit (PHIDU), Social Health Atlas of Australia: Local Government Areas)
	Developmentally Vulnerable Children	Percentage of developmentally vulnerable children (Public Health Information Development Unit (PHIDU), Social Health Atlas of Australia: Local Government Areas)
	Local Government Discretionary Expenditure	Local road and general spending per capita (Goldfields-Esperance, Institutional Foundations; Local Government Expenditure, Insight, Regional Australia Institute)
Freight Infrastructure Access and Capacity	Average Distance to Port	Average distance for business to a port (GIS Calculations, Map of Australian Ports, Ports Australia)
	Port Throughput Per Capita	Total mass tonnes imported and exported (WA Ports Handbook, Transport WA, 2013-2014)
	Major Roads Access	Distance to major (class 1 or 2) road (GIS Calculations, GeoData Topo 2.5M 2003, Geoscience Australia)
	Average Distance to Nearest Rail Station	Distance for residents and businesses to nearest rail station (GIS Calculations, GeoData Topo 2.5M 2003, Geoscience Australia)

Area of Focus	Indicator	Description (source)
Movement of People	Overseas Born Residents	Percentage of residents born overseas (2011 Census, Table Builder, Counting Persons, Place of Usual Residence, Cultural and Language Diversity, Country of Birth of Person, ABS Census)
	Population Turnover	People who moved to or from the region in 2006-11 as a percentage of the total population in 2006 (2011 Census, Table Builder, Counting Persons, Place of Usual Residence, ABS Census, and 2006 Census, Table Builder, Counting Persons, Place of Usual Residence, ABS Census). Substitute with inward migration or population growth.
	Average Distance to Commercial Airport	Average distance for residents and businesses to a commercial airport (GIS Calculations, Airport Traffic Data 1985-2011, Bureau of Infrastructure transport and Regional Economics)
	Airport RPT Usage (per capita)	RPT passenger numbers per capita (GIS Calculations, Airport Traffic Data 1985-2011, Bureau of Infrastructure transport and Regional Economics)
Digital Connectivity	Broadband Access Rating	Scale of access to high quality broadband 1-10 (Goldfields-Esperance, Technological Readiness, Broadband Coverage, Insight, Regional Australia Institute)
	Mobile Coverage	Percentage of area with 3G coverage (Telstra and Goldfields-Esperance, Technological Readiness, Mobile Coverage, Insight, Regional Australia Institute)
	Quality of Mobile Internet Access	Quality of access score – 1 poor and 6 excellent (Telstra and Goldfields-Esperance, Technological Readiness, Mobile Coverage, Insight, Regional Australia Institute)
	Household Internet Connectivity	Percentage of households with internet connection (Goldfields-Esperance, Technological Readiness, Internet Connections, Insight, Regional Australia Institute)
	Employment in Technology Related Industries	Proportion of workforce employed in technology and related businesses (Goldfields-Esperance, Technological Readiness, Employment in ICT and Electronics, Insight, Regional Australia Institute)

Appendix 3

Local Government Benchmarking

	Indicator	Coolgardie	Dundas	Esperance	Kalgoorlie-Boulder	Laverton	Leonora	Menzies	Ravensthorpe	Ngaanyatjarraku
Economic Fundamentals and Sustainability	Local Businesses	35.5	34.9	126.2	73.4	20.4	19.9	20.7	156.6	19.4
	Business Turnover	\$11,941	\$12,157	\$66,589	\$36,529	\$9,712	\$9,743	\$9,795	\$102,194	\$9,740
	Long Term Unemployment	5.6%	5.5%	5.8%	4.1%	7.1%	4.0%	-	2.1%	25.6%
	Youth Unemployment	10.9%	6.9%	9.4%	8.3%	6.1%	3.4%	8.3%	10.7%	10.6%
	Economic Diversification Rating	0.08	0.14	0.53	0.30	0.06	0.07	0.27	0.15	0.24
	Welfare Dependence	14.9%	21.9%	22.5%	13.3%	15.0%	8.8%	-	15.9%	43.7%
	Senior Dependency Ratio	8.1%	16.1%	22.5%	7.6%	5.7%	3.9%	14.9%	20.3%	5.6%
Entrepreneurship and Innovation	New Business Start-ups	15.5%	15.0%	6.8%	12.6%	12.0%	14.0%	0.0%	6.9%	10.7%
	Non-employing Microbusinesses	22.5	77.9	83.8	35.3	53.1	25.9	168.8	531.5	45.2
	Income Source Own Business	\$23,050	\$10,468	\$36,176	\$23,915	\$20,013	\$12,525	\$29,776	\$38,595	\$19,389
	Local Economic	0.4	0.6	0.9	2.0	0.4	0.1	0.3	1.4	0.9
	Local Patenting Rating	0.00	0.00	0.07	0.06	0.00	0.00	0.00	0.45	0.00
	Small Businesses	14.8	51.6	45.3	18.6	28.6	13.9	90.9	286.9	24.4
	Human Resources in Science and Technology	1.8%	1.1%	3.4%	4.3%	0.4%	1.6%	0.0%	2.2%	1.1%
Workforce Participation and Skills, and Education	Adult Participation Rate	35.5	34.9	126.2	73.4	20.4	19.9	20.7	156.6	19.4
	Aboriginal Adult Participation Rate	\$11,941	\$12,157	\$66,589	\$36,529	\$9,712	\$9,743	\$9,795	\$102,194	\$9,740
	Early School Leavers	5.6%	5.5%	5.8%	4.1%	7.1%	4.0%	-	2.1%	25.6%
	University Qualified	5.6%	7.4%	10.8%	11.1%	9.0%	9.6%	7.6%	11.7%	7.7%
	Technical Qualified	28.0%	25.8%	32.7%	30.5%	32.7%	27.2%	9.3%	39.6%	11.2%
	English Proficiency	88.5%	87.4%	94.0%	88.0%	88.2%	73.8%	87.5%	93.2%	81.4%
	Youth Learning or Earning	59.3%	62.5%	76.5%	65.9%	40.9%	52.8%	53.8%	51.2%	16.8%
	Primary School Performance	35.9%	21.9%	52.0%	46.5%	7.0%	32.2%	-	41.2%	2.3%
	Secondary School Performance	10.5%	16.3%	30.3%	24.5%	0.0%	1.1%	0.0%	29.9%	0.0%
	Distance to Primary Education Services	36.1km	160.3km	6.2km	6.6km	253.1km	269km	425.4km	20.3km	649.8km
	Distance to Secondary Education Services	1.8km	82.5km	12.2km	5.4km	13.8km	11.1km	175.4km	26.5km	351.3km
	Adults in Higher Education Learning	3.9%	2.8%	3.7%	5.3%	3.0%	3.2%	1.4%	3.7%	3.0%

	Indicator	Coolgardie	Dundas	Esperance	Kalgoorlie-Boulder	Laverton	Leonora	Menzies	Ravensthorpe	Ngaanyatjarraku
Health, Community and Education Services Access Connectivity	Major Services Presence Rating	4.0	2.0	3.0	7.0	1.0	1.0	0.0	4.0	3.0
	Allied Health Services Employment	3.7%	4.9%	8.2%	6.9%	2.7%	2.4%	3.0%	4.3%	10.3%
	GP Services Per Capita	4.2	2.5	2.9	3.7	1.4	1.5	1.1	3.4	3.5
	Adult Health Risks	60.1%	61.2%	57.5%	59.7%	-	-	-	-	-
	Developmentally Vulnerable Children	33.3%	43.6%	23.7%	27.1%	12.2%	33.3%	16.1%	26.9%	12.1%
	Local Government Discretionary Expenditure	\$199	\$840	\$306	\$83	\$973	\$230	\$4,358	\$604	\$2,641
Freight Infrastructure Access and Capacity	Average Distance to Port	304.4km	228.3km	11.3km	347.8km	586.6km	581.6km	598.9km	164.2km	921.5km
	Port Throughput Per Capita	n/a	n/a	1,106 mts	n/a	n/a	n/a	n/a	n/a	n/a
	Major Roads Access	1.0km	9.8km	7km	3.3km	13.8km	6.5km	223.5km	18.5km	333.7km
	Average Distance to Nearest Rail Station	13.8km	41.6km	10.0km	3.1km	90.1km	63.2km	153.8km	125.5km	544.7km
	Employment in Technology Related Industries	1.8%	1.1%	3.4%	4.3%	0.4%	1.6%	0.0%	2.2%	1.1%
Movement of People	Overseas Born Residents	33.5%	35.7%	19.8%	33.7%	30.5%	45.2%	9.9%	23.9%	2.1%
	Population Turnover	84.2%	87.5%	43.2%	74.6%	147.7%	264.8%	87.1%	88.6%	29.0%
	Average Distance to Commercial Airport	50.4km	207.5km	11.2km	3.4km	105.1km	64.9km	359.5km	164.7km	353.7km
	Airport RPT Usage (per capita)	-	-	3.8	7.6	-	3.0	-	-	-
Digital Connectivity	Broadband Access Rating	6.3	6.3	3.5	5.3	5.3	6.3	2.0	3.9	2.0
	Mobile Coverage	55%	24%	42%	17%	4%	57%	6%	80%	8%
	Quality of Mobile Internet Access	2.0	1.9	3.6	2.1	1.0	1.0	1.0	1.0	1.0
	Household Internet Connectivity	77.1%	61.7%	74.8%	80.6%	46.8%	76.1%	38.8%	78.5%	40.6%

Appendix 4

Acknowledgements

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- Shire of Esperance
- Shire of Laverton
- Shire of Leonora
- Shire of Menzies
- Shire of Ngaanyatjaraku
- Shire of Ravensthorpe
- Shire of Wiluna
- City of Kalgoorlie-Boulder
- Chamber of Minerals and Energy
- Esperance Chamber of Commerce and Industry
- Kalgoorlie-Boulder Chamber of Commerce and industry
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- National Party of WA
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- Goldfield Naturalists
- Goldfields Rangeland Services
- Ngalia Foundation
- 24-7 Community
- City of Kalgoorlie-Boulder Youth Council
- Department of Aboriginal Affairs
- Department of Agriculture and Food
- Department of Child Protection
- Department of Commerce
- Department of Corrective Services
- Department of Education
- Department of Environment Regulation
- Department of Fisheries
- Department of Health
- Department of Housing
- Department of Land
- Department of Mines and Petroleum
- Department of Parks and Wildlife
- Department of Planning
- Department of Regional Development
- Department of Sport and Recreation
- Department of State Development
- Department of Training and Workforce Development
- Department of Transport
- Department of Water
- Main Roads WA
- Disability Services Commission
- Duet28 Pty Ltd
- EBM Insurance Brokers
- Elaine Currie
- Esperance Professional Fishermen's Association
- Esperance Regional Forum
- Esperance Volunteer Centre
- Goldfield Individuals and family Support Association
- Goldfields Catholic Community
- Goldfields Indoor Plant Hire
- Goldfields Institute of Technology
- Goldfields Land and Sea Council
- Goldfields Tourism Network Association
- Goldfields Rehabilitation Centre
- Goldfields Settlements
- Goldfields Voluntary Regional Organisation of Councils
- Goldfields Women's Health Care Centre
- Goldrush Tours
- Graduate Future Leaders Program
- Hope Community Services
- Horizon Power
- Kalgoorlie Consolidated Gold Mines
- Kalgoorlie-Boulder Visitor Centre
- LandCorp
- Laverton Police
- Leonora Community Health
- Life Without Barriers
- LMS
- Local farmers
- Local real estate agents
- Lynas Corporation Ltd
- Minara Mines
- Many Rivers
- McKenzie & McKenzie
- Monika Dvorakova
- Mono Pumps
- National Australia Bank
- Ngaanyatjarra Council
- Northcoats Pty Ltd
- Northern Manganese
- Pastoral Lands Board
- Professionals Real Estate
- Regional Development Australia Goldfields-Esperance
- Remote Control Technologies
- Restore Hope Foundation
- ACIL Allen Consulting
- Small Business Centre – Goldfields
- South Coast Natural Resource Management Inc
- South East Premium Wheat Growers Association
- Southern Ports Authority – Esperance
- Synergy
- The Wilderness Society WA
- TLS Kalgoorlie
- Tourism Esperance
- Tourism WA
- Water Corporation
- Western Power
- Westralia Homes

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Appendix 5

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Appendix 5

Acronyms

Acronym	Full name
ATAR	Australian Tertiary Admission Rank
CME	Chamber of Minerals and Energy
CPI	Consumer Price Index
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DAA	Department of Aboriginal Affairs
DFES	Department of Fire and Emergency Services
DIDO	Drive-In Drive-Out
DMP	Department of Mines and Petroleum
DRD	Department of Regional Development
DTWD	Department of Training and Workforce Development
EPZ	Esperance Port Zone
FIFO	Fly-In Fly-Out
GAWS	Goldfields and Agricultural Water Supply Scheme
GEDC	Goldfields-Esperance Development Commission
GEMIA	Goldfields Education Mining Industry Alliance
GEWDA	Goldfields-Esperance Workforce Development Alliance
GGEM	Girls and Guys Exploring Mining
GGTP	Goldfields Gas Transmission Pipeline
GIFSA	Goldfields Individual and Family Support Association

GP	General Practitioner
GRDC	Grains Research and Development Corporation
GRP	Gross Regional Product
GVROC	Goldfields Voluntary Organisation of Regional Councils
GWW	Great Western Woodlands
HSR	High Speed Rail
KCGM	Kalgoorlie Consolidated Gold Mines
NGO	Non-Government Organisation
NGROAC	Northern Goldfields Regional Office and Administration Centre
PAA	Precision Agronomics Australia
R&D	Research and Development
RFDS	Royal Flying Doctor Service
RMCP	Regional Mobile Communications Project
RTO	Registered Training Organisation
SEPWA	South East Premium Wheat Growers Association
SWIS	South West Interconnected System
WASM	Western Australian School of Mines

Goldfields-Esperance
Regional Investment

BLUEPRINT

A Plan for 2050

Goldfields-Esperance Regional Investment **BLUEPRINT**

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