

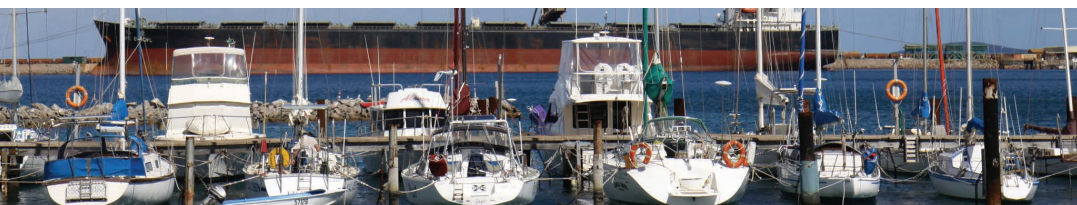


Goldfields- Esperance

Regional Planning and Infrastructure Framework

Part A: Regional Strategic Planning

June 2015



Department of
Planning



Western
Australian
Planning
Commission



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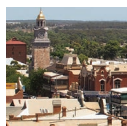
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Minister's Foreword

The Goldfields–Esperance region is Western Australia's largest. The region contains a diversity of physical and social characteristics, including vibrant communities and landscapes ranging from visually striking, mineral-rich deserts in its north to spectacular coastlines in its south. Against this backdrop, the region has developed a rich and proud history, initially lead by the traditional owners of country, that continues to this day, together with the evolution of the mining industry, which underpinned much of Western Australia's early economic prosperity.

The region remains an important contributor to the State's total economic output. With its economy being predominantly resource-based and with increasing diversity including agriculture and tourism, there are abundant opportunities to further develop the Goldfields–Esperance region as an economic powerhouse. Expanding the region's role in transport and logistics, given its location as the gateway to Western Australia from the eastern states and its proximity to nationally strategic infrastructure, provides additional prospects for growth.

In working towards developing the economy, integrating regional planning decisions will promote an agreed way forward on behalf of the region's key stakeholders, including local communities. In turn, this will maximise opportunities to attract private and public investment. Within this context, the *Goldfields–Esperance Regional Planning and Infrastructure Framework* sets out a regional planning approach for the Goldfields–Esperance region.

I congratulate the Western Australian Planning Commission and the Department of Planning on their collaborative work on this important policy framework that builds on the characteristics and opportunities of one of the State's most productive and vibrant regions.

A handwritten signature in black ink, reading 'John Day' with a stylized flourish at the end.

John Day MLA
Minister for Planning



Chairperson's Foreword

The Goldfields–Esperance region has played an important role in shaping Western Australia's economic development since the early days of the State. The region continues to prosper and offers many opportunities for further growth. Sustained prosperity in the region however, will depend primarily on the development of key infrastructure and diversification of local industries.

The *Goldfields–Esperance Regional Planning and Infrastructure Framework* will be a critical driver in identifying the region's economic potential through a whole-of-government approach. To achieve this, the Framework sets a regional overview for the Goldfields–Esperance region that encourages growth opportunities that respect its diversity

of economic industries, cultural backgrounds and natural environments.

Prepared by the Department of Planning under the guidance of the Western Australian Planning Commission, the *Goldfields–Esperance Regional Planning and Infrastructure Framework* affords leadership through providing a shared vision and a common way forward to deal with the regional issues that are being faced by the Goldfields–Esperance region.

The Commission will use the Framework to guide regional strategic planning in the Goldfields–Esperance region to assist the delivery of coordinated policy and planning solutions. Fundamentally, it will be instrumental in guiding growth in the region according to its specific strengths and constraints and, importantly, the needs of the people that live there.

The *Goldfields–Esperance Regional Planning and Infrastructure Framework* offers a new vision for the State's largest region, which is set to become an increasingly attractive place in which to live, work and invest.

A handwritten signature in black ink, appearing to read 'Eric Lumsden'.

Eric Lumsden PSM

Chairman

Western Australian Planning Commission



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1 Introduction

Encompassing nearly a third of Western Australia's geographic area, the Goldfields–Esperance region is the State's largest. Famously rich in mineral wealth, it contains diverse social, economic and natural environments. Historically and presently, the growth of the region's mining industry has heavily influenced infrastructure investment, population growth and the development of many of the region's settlements. Unique natural landscapes, including deserts and scenic coastal areas, also underpin valuable tourism and agricultural sectors.

The *Goldfields–Esperance Regional Planning and Infrastructure Framework* (the Framework) has been prepared for the region (Figure 1), which comprises nine local governments and is home to around 60,000 people.

1.1 Vision

The Goldfields–Esperance region will grow as a resilient and vibrant region with liveable communities that offer attractive lifestyles, natural environments and diverse economic opportunities. Its development will increase services and connectivity, and value of its natural assets.

In working towards realising the above vision for the Goldfields–Esperance region, key themes supported by the Framework include:

- a diverse Goldfields–Esperance region offering the diversity of ecosystems, landscapes, enterprises, people and cultures;
- a liveable Goldfields–Esperance region that is the place of choice for the brightest and best;
- a connected Goldfields–Esperance region that is as connected to the rest of the world as any other place; and
- a collaborative Goldfields–Esperance region enabling alignments that progress the region's sustained prosperity.

These key themes align with the *State Planning Strategy 2050* (Western Australian Planning Commission, 2014) vision for Western Australia¹.

¹ Refer to section 3.1.2 for an overview of the components that form the structure of the *State Planning Strategy 2050*.

1.2 Purpose

1.2.1 Objectives

In order to contribute to a whole-of-government approach to strong and healthy regional communities, the Framework objectives are to:

- provide the regional context for land-use planning in the Goldfields–Esperance region;
- provide an overview of the major regional issues facing the Goldfields–Esperance region including economic, social, cultural and environmental matters;
- identify the priority actions required to enable comprehensive regional planning and to guide local planning processes; and
- indicate regional infrastructure projects that are considered significant from the region's perspective to facilitate further economic and population growth.

1.2.2 Principles

The *State Planning Strategy 2050* identifies the following principles as being interrelated and applicable across all regions, local governments and communities. In this context they are considered strategic in supporting the objectives of this Framework, as well as the broader vision for the Goldfields–Esperance region.

Community	Enable diverse, affordable, accessible and safe communities
Economy	Facilitate trade, investment, innovation, employment and community betterment
Environment	Conserve the Goldfields–Esperance region's natural assets through sustainable development
Infrastructure	Ensure infrastructure supports development
Regional development	Build the competitive and collaborative advantages of the Goldfields–Esperance region
Governance	Build community confidence in development processes and practices



1.3 Strategic goals

With a vision of sustained prosperity for Western Australia, the *State Planning Strategy 2050* identifies five strategic goals and a number of associated priorities for each.

Table 1 presents the Framework's strategic goals for the Goldfields-Esperance region, following a consistent approach to the *State Planning Strategy 2050*. Specifically, these relate to the vision for the Goldfields-Esperance region established in the Framework; and are reinforced by the Framework objectives and their supporting principles. These strategic goals underpin the opportunities, strategies and initiatives identified in the Framework.

Table 1: Strategic goals

Strategic goal	Goldfields-Esperance vision themes			
	Diversity	Liveability	Connectedness	Collaboration
A globally competitive region	A diversified economic base	Attraction and retention of human and monetary capital	Global trade and high speed movements	Generating innovative ideas and enterprises
A strong and resilient Goldfields-Esperance region	Embracing diverse economic and social opportunities	Creating places where people want to live and work	Building strong relationships and accessibility	Enabling collaborative advantages across the Goldfields-Esperance and with other regions
Sustainable communities	Community specific development, responsive to diverse needs, places and contexts	Communities with attractive, liveable environments	Providing natural and built connections within and between communities	Collaborative and inclusive planning
Infrastructure planning and coordination	Supporting economic diversity, innovation and resilience	Providing contemporary, effective, resource-efficient services	Linking regional economic opportunities to the movement of people, goods and services; including connectivity with other regions	Sharing new ideas and creating new business and lifestyle opportunities
Conservation	Maintaining and conserving biodiversity, landscapes and environments	Enhances and secures natural environments and resources	Connecting ecosystems, people and resources	Realising opportunities through collaboration for environmental conservation and sustainable communities

Goldfields-Esperance

Regional Planning and Infrastructure Framework

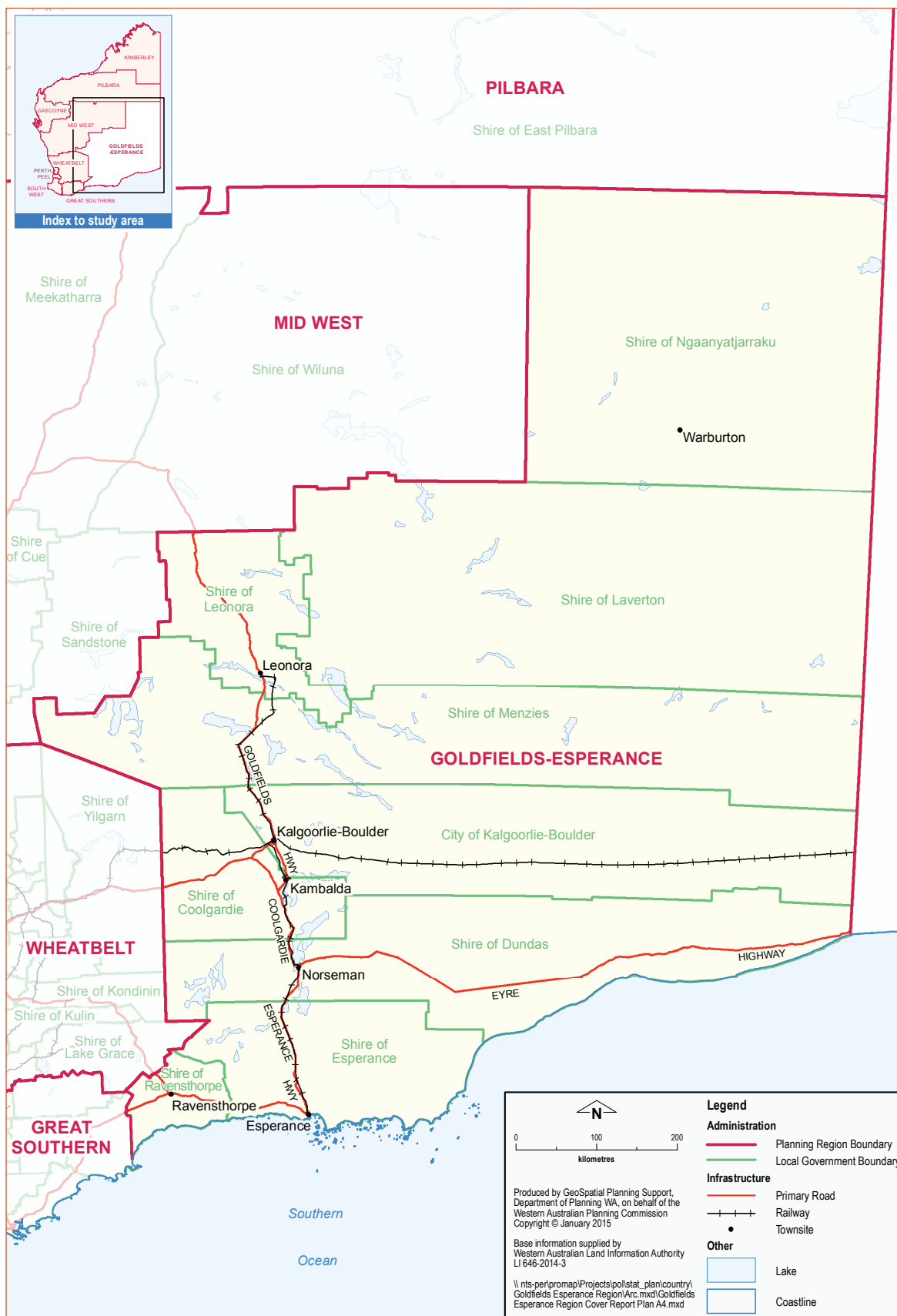


Figure 1: The Goldfields–Esperance region

1.4 Goldfields-Esperance regional planning approach

The *Goldfields-Esperance Regional Planning and Infrastructure Framework* was prepared by the Department of Planning. In order to focus on identifying key regional issues and priorities, its development has involved extensive consultation with regional stakeholders. It is recognised that fostering effective partnerships with clearly defined roles and responsibilities is key to the implementation of the Framework.

The Framework is a second tier document (Figure 2) preceded by the Western Australian Planning Commission's (WAPC) *State Planning Strategy 2050*, and will have a similar level of importance as a regional strategy under the State Planning Framework (State Planning Policy 1).

The Framework does not replace other policies that guide the WAPC's decision-making across the State. It will be taken into account by the Commission when preparing and reviewing strategies and policies that apply to the Goldfields-Esperance region and will inform local governments about local planning processes including local planning strategies and schemes.

The Goldfields-Esperance Planning Approach (Figure 3) provides strategic direction for regional planning in the Goldfields-Esperance region, within the context of the State Planning Framework. The key elements of this approach are:

- regional planning in the Goldfields-Esperance region will be guided by the *Goldfields-Esperance Regional Planning and Infrastructure Framework*;
- to pursue comprehensive regional planning in the Goldfields-Esperance region, a number of implementation actions are required. With respect to this, the Framework identifies several regional planning initiatives, a number of which are already underway;

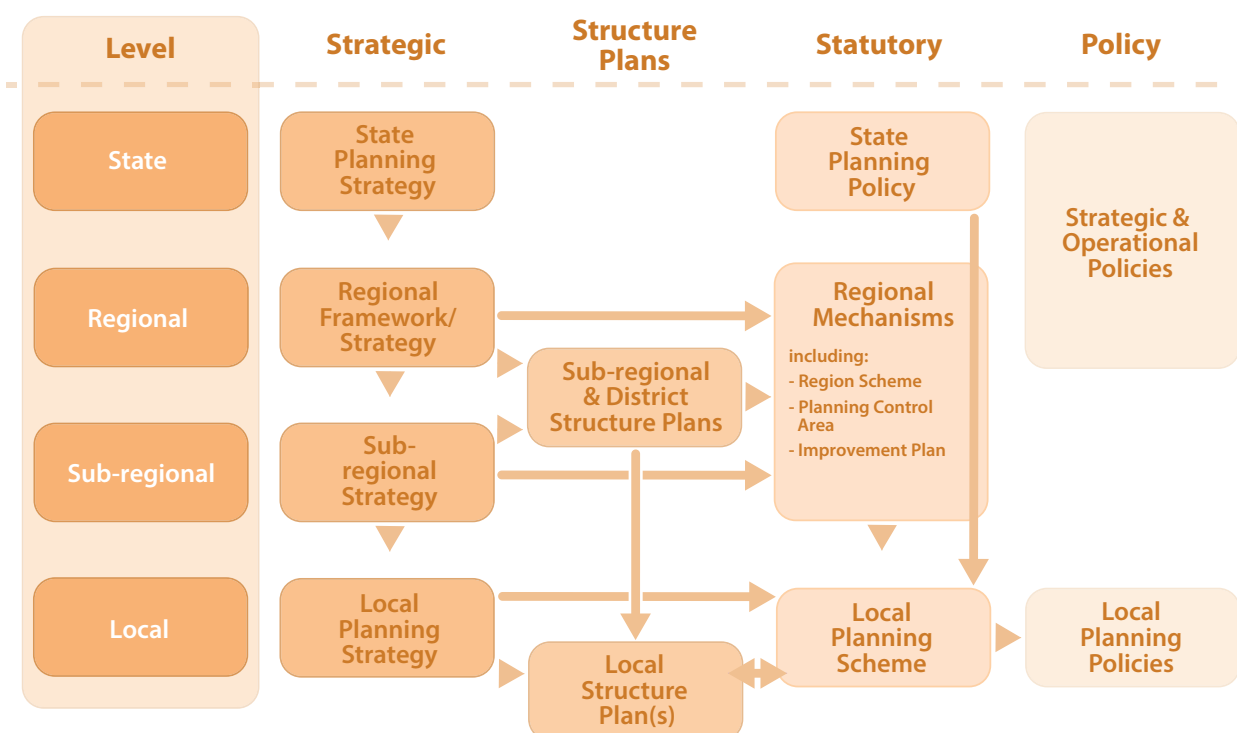


Figure 2: State Planning Framework

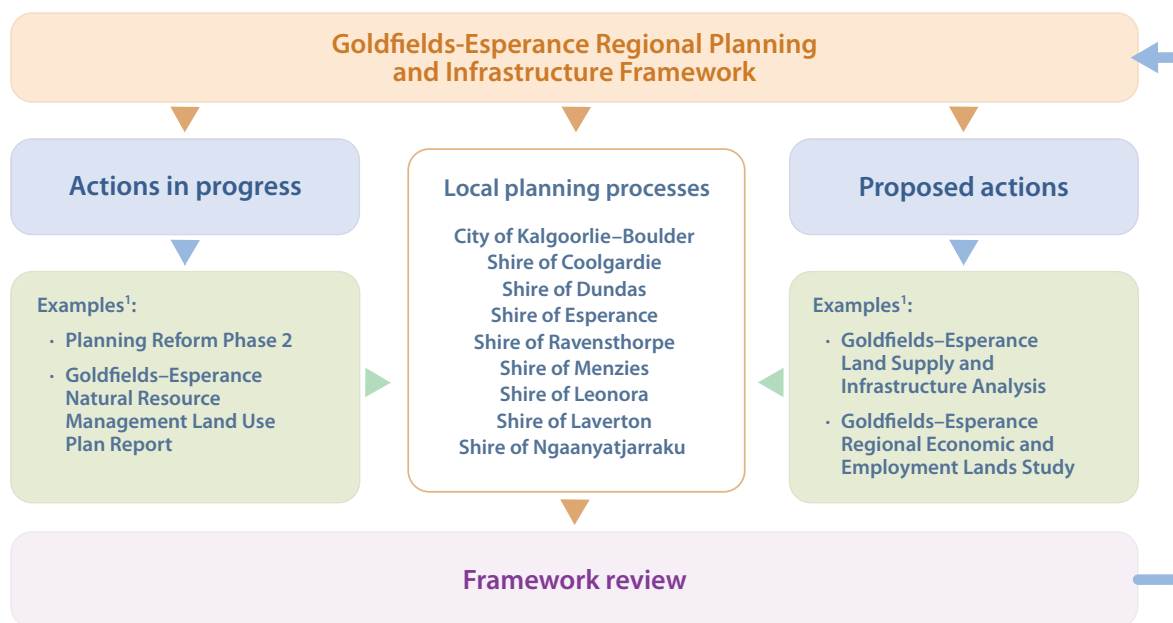
- it is intended that these will inform local planning processes, such as the preparation of and amendments to local planning strategies and schemes; and
- recognition that the *Goldfields–Esperance Regional Planning and Infrastructure Framework* is a living document that will need to be reviewed to maintain relevance.

The *Goldfields–Esperance Regional Planning Strategy* (Western Australian Planning Commission, 2000) is a previous region-wide planning strategy applicable to the Goldfields–Esperance region. This strategy and findings from subsequent audits of the document have been considered in the preparation of this Framework.

1.5 State strategic alignment

Figure 4 illustrates an integrated State-level strategic approach to planning and regional development, in the context of the State Planning Strategy. Significantly, this approach recognises the complementary nature of a number of strategic activities and initiatives occurring across various State Government portfolios, particularly planning, regional development and local government. As such, it encourages interaction between relevant State Government agencies and local government and reinforces the importance of a whole-of-government approach to regional planning and development.

Within this context, implementation of this Framework and consideration of regional planning issues will require decision-making at a State and regional level. The regional planning governance framework for this is outlined in Figure 5. This will be used to guide important decision-making on the direction for regional planning issues and may also be used to seek funding to allow regional planning initiatives, such as those identified in this Framework, to be implemented.

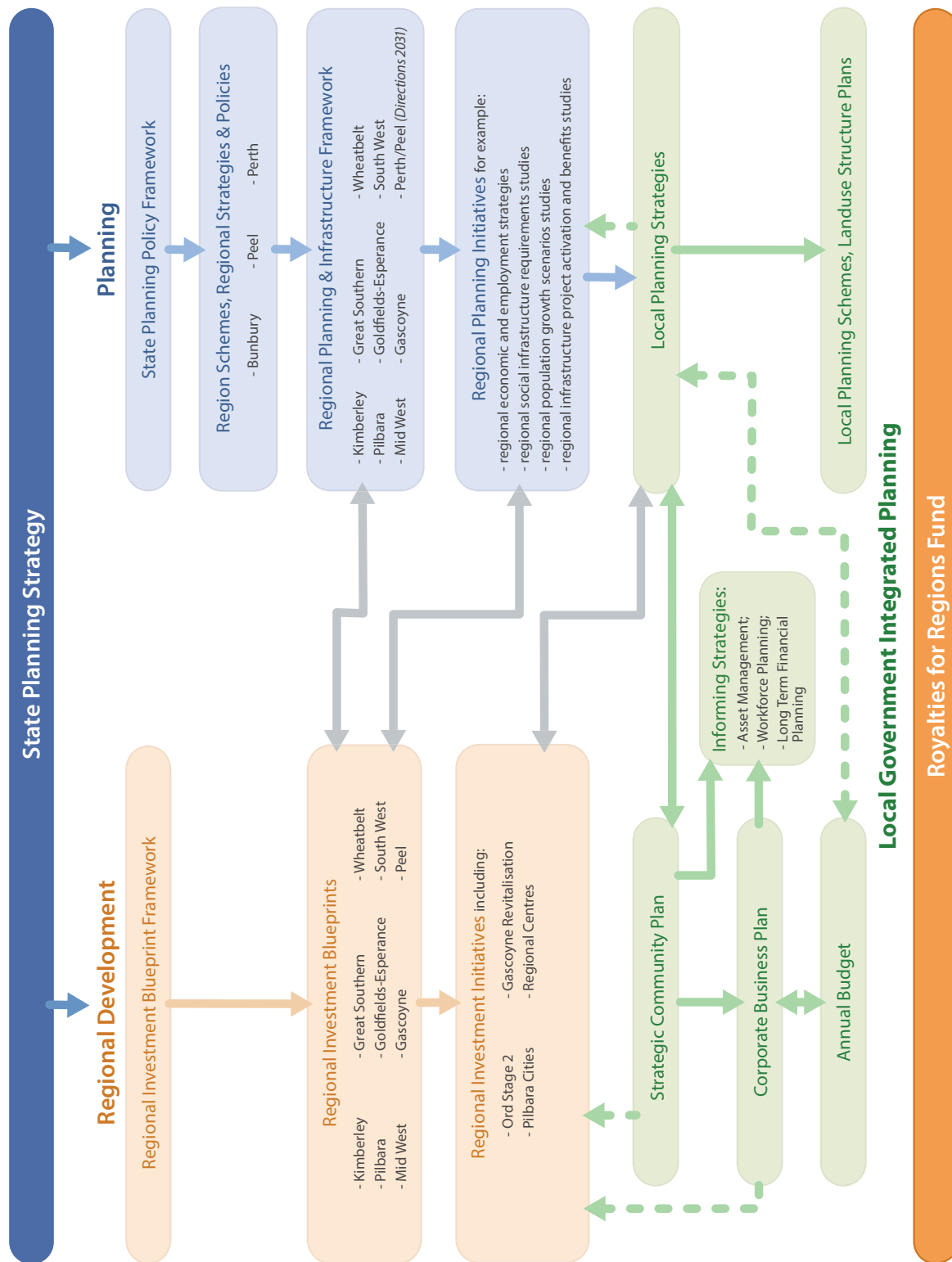


¹ for complete lists of actions, refer to Table 7 for Goldfields–Esperance regional planning initiatives.

Figure 3: Goldfields–Esperance Planning Approach

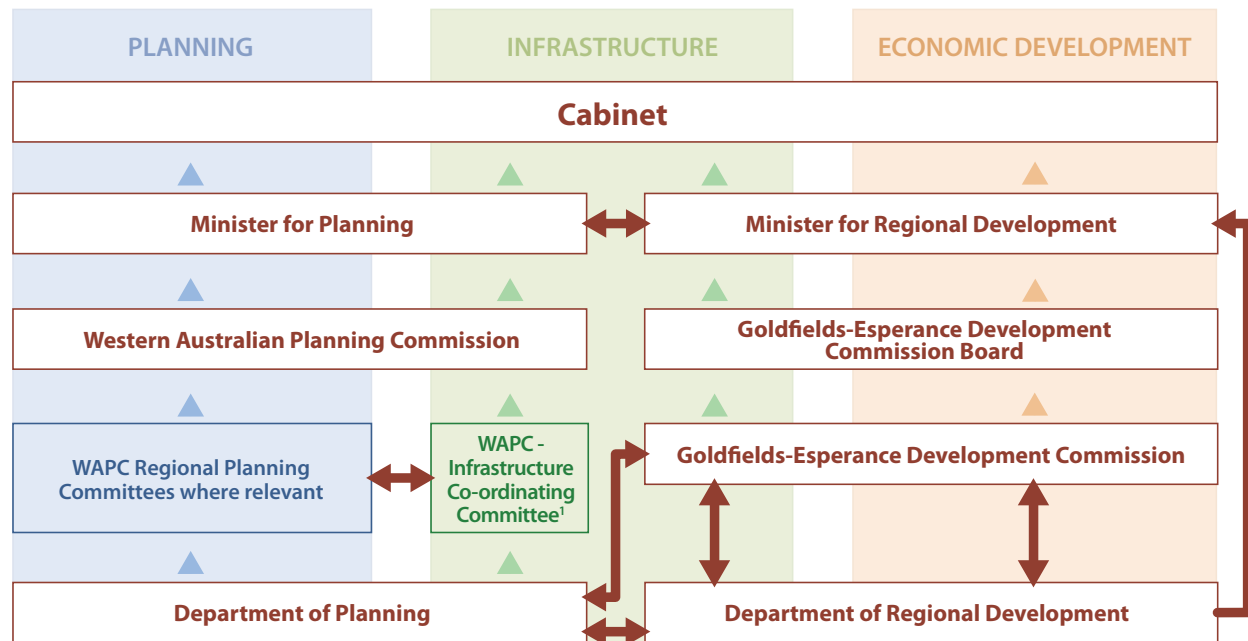
Goldfields-Esperance

Regional Planning and Infrastructure Framework



(source: Western Australian Planning Commission, 2014)

Figure 4: State planning and development framework



¹ The WAPC Infrastructure Coordinating Committee membership is comprised of the Chair of the WAPC and representatives from the local government sector; professional sector; Department of Commerce; Department of Education; Department of Education Services; Department of Finance; Department of Health; Department of Housing; Department of Mines and Petroleum; Department of Planning; Department of Premier and Cabinet; Department of Regional Development; Department of State Development; Department of Transport; Department of Treasury; Department of Water; LandCorp; Office of Environmental Protection Authority; Public Utilities Office; and the Water Corporation.

Figure 5: Governance framework

2 Key drivers

Unless otherwise noted, the majority of the statistical data in this chapter is by the Department of Regional Development (DRD). For further information on this and/or the latest available figures, please refer to the DRD's Regional Snapshot series at www.drd.wa.gov.au/publications/Pages/Statistics.aspx.

2.1 Economy and employment

A strong mining sector is the most valuable contributor to the Goldfields–Esperance economy (Figure 6). Other important economic sectors in the region include tourism, agriculture, fishing, retail and manufacturing. From a geographic perspective, the north of the region is predominantly focused on mining, whereas the south is generally more economically diverse.

The value of the Goldfields–Esperance gross regional product was estimated at \$10.1 billion in the 2012/13 financial year, which represents 4.6 per cent of the State total (Department of Regional Development, 2014).

For the 2013 December quarter, the labour force of the Goldfields–Esperance region was 39,017 persons, of whom 37,201 (94.9 per cent) were employed and 2005 (5.1 per cent) were unemployed (Department of Employment, 2014).

Future growth in the Goldfields–Esperance region, including the rate at which it occurs and the manner for which it is planned, will invariably be influenced by the strength of the regional economy. It is therefore critical to plan for land assembly and infrastructure to meet the needs of the economic drivers; and it is important that this is done in such a way so that land is available and affordable.

Growth in the region's economy will invariably require additional workers and particular skills for certain industry sectors. *Skilling WA* (Department of Training and Workforce Development, 2010) provides a workforce development plan for Western Australia to build, attract and retain a skilled workforce, and to ensure that the State has the capacity and capability for continued economic success.

It has a particular focus on growing the workforce through increased participation, targeted skilled migration and attracting and retaining a skilled labour



(source: Department of Regional Development, 2014)

¹ latest data available from DRD

Figure 6: Value of industry activities



force in the State's regions. In addition, a regional workforce development plan has been developed for the Goldfields-Esperance region which aims to build, attract and retain a skilled workforce to meet the economic needs of the region (Department of Training and Workforce Development, 2012).

2.1.1 Mining

Mining is the Goldfields-Esperance region's most valuable sector, contributing approximately \$9 billion to the gross regional product in 2012/13 (Department of Regional Development, 2014) and providing approximately 27 per cent of the region's jobs (Australian Bureau of Statistics, 2011). From a State perspective, Goldfields-Esperance is the second most valuable mining region, after the Pilbara. Historically, mining has been central to the development of the region's economy and establishment of many of its settlements including Kalgoorlie, Boulder, Coolgardie, and Norseman.

A range of commodities are currently mined in the region including gold, nickel, cobalt, copper, silver and other valuable minerals. Gold is the region's most valuable commodity, with gold mining accounting for 63 per cent of the value of regional mineral production in 2013 (Department of Mines and Petroleum, 2014). After gold, nickel is the next most significant contributor to the region's value of mineral production. At 2011, the Goldfields-Esperance region produced over 60 per cent of Western Australia's gold and 98 per cent of its nickel.

Mineral production is inherently underpinned by global demand and commodity prices, which can be volatile; and as such the amount and value of mining activity in the Goldfields-Esperance region is prone to fluctuation.

No petroleum products are currently produced in the Goldfields-Esperance region; however sedimentary basins in the north and north-eastern areas of the region provide a geological setting for potential oil and gas resources, including potential for shale gas. While there are economic returns on such resources, environmental impacts need to be considered carefully.

A ready supply of basic raw materials is important for future urban and industrial development. Potential sources of basic raw materials include sand, gravel and limesand deposits. In areas of rapid growth, land-use

conflicts can arise around basic raw material extraction sites. In these circumstances planning protection may be required to ensure a cost-effective supply of these strategic materials.

The resources sector relies on a range of public and private infrastructure to support the ongoing financial viability of projects. It is expected that development of proposed mineral projects may enhance the regional economy and generate the need for significant investment in infrastructure, including rail and road networks, port, power and water. A number of infrastructure upgrades and projects have been proposed to help facilitate the expansion of mining activity in the region, including capacity upgrades at Esperance Port. Quality infrastructure, built and operated efficiently, is the key to supporting future economic diversification in the region.

Currently there are several significant proposed or potential projects in the region, including those at Nova, Mt Thirsty, Goongarrie, Scotia and Siberia (Department of State Development, 2014). The start of these projects could potentially generate an expansion of regional businesses and industrial activities, including growth of the inbound transportation of goods, equipment and people for the construction and operation phases of these projects.

In recent times there has been an increasing reliance on fly-in fly-out (transient) workforces to service resource projects in Western Australia including a number of current and proposed projects in the Goldfields-Esperance region. Fly-in fly-out workforces help accommodate constantly changing labour requirements, particularly for specialist skills and during the construction stages of projects. However, as those employment opportunities associated with the ongoing operations of resource projects are generally more long-term in nature, it would be preferable from a community-building perspective to increase the amount of mine workers living in the region.

2.1.2 Industrial development

The Goldfields-Esperance region has approximately 1600 hectares of industrial zoned land, with the majority located at Kalgoorlie-Boulder and Esperance. Additionally, an area of approximately 700 hectares is zoned for industrial purposes at the currently undeveloped Mungari Industrial Park, 23 kilometres south-west of Kalgoorlie in the Shire of Coolgardie.





It is important that towns throughout the Goldfields–Esperance region have sufficient industrial land to cater for ancillary service industries that support primary industries, including mining and agriculture. This issue is most appropriately dealt with through local planning processes, in particular local planning strategies. In addition, this Framework identifies initiatives relating to industrial land supply within the Goldfields–Esperance region.

A preliminary draft audit suggests that most towns in the region contain an adequate supply of industrial zoned land to support activities within their hinterlands. There are some locations, however, such as Laverton and Coolgardie, where increased supply may be required.

2.1.3 Agriculture

Agricultural production from the Goldfields–Esperance region was valued at approximately \$570 million in the 2011/12 financial year, representing about eight per cent of the value of overall State production (Department of Regional Development, 2014). Southern parts of the region, including the shires of Esperance and Ravensthorpe, contain its most valuable agricultural areas and are where virtually all the region's cropping and intensive livestock production occurs. Extensive livestock and pastoral activities generally occur throughout the remainder of the region.

Crops, particularly wheat, barley and canola, are the region's most valuable agricultural commodity, accounting for approximately 80 per cent of the value of the region's total agricultural production in 2011/12 (Department of Regional Development, 2014). Livestock disposals and livestock products constitute other significant agricultural products from the region.

Regional agricultural production is reliant on favourable weather conditions and its value is dependent on global commodity prices. The value of agriculture to the region on an annual basis therefore tends to vary.

To further increase productivity, effort is being made to investigate more robust production systems and better decision-making tools for farmers. It is also important that pastoral lease-holders consider diversification into other income sources to ensure long-term viability. There may be opportunities to further diversify the region's agricultural sector through provision of

additional infrastructure and services, and maximising the potential of natural resources such as local water sources.

More broadly, various State Government initiatives – such as those being pursued through the Seizing the Opportunity program and others supported by this Framework — are to consider opportunities to improve the long-term profitability of the Western Australia's agriculture and food sector and to attract new investment in agriculture. These matters may be investigated as part of these initiatives.

Traditional agricultural productivity within the region is potentially threatened by factors including weather variability (particularly if changes in climate are realised), and the fragmentation of the rural land base. Identifying high quality agricultural land within the Goldfields–Esperance region would provide a basis for considering such areas through land-use planning. Mitigating conflicting land uses in the proximity of valuable agricultural areas would help maximise the value of agriculture to the region over the longer-term.

2.1.4 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 diverse range of tourism attractions and destinations. According to Tourism Western Australia, in 2010–12 an average of 337,700 people visited the region annually, with about nine per cent being international visitors. The total average annual value of tourism expenditure in the region was estimated to be \$260.2 million (Department of Regional Development, 2014). Global economic factors influence the prosperity of tourism in the region, which can fluctuate notably from year to year.

With tourism being an important economic sector for the region it is imperative that existing and potential tourism opportunities are maintained and developed in a strategic and sustainable manner. For example, the predicted increase in cruise shipping activity in Western Australia may present opportunities to further diversify the tourism sector in the Goldfields–Esperance region. In particular, Esperance has been identified as a key cruise destination in the *Western Australian Cruise Shipping Strategic Plan 2012–2020* (Tourism Western Australia, 2012).





A number of priorities for tourism product and infrastructure development within the region have been identified in *Australia's Golden Outback Tourism Development Priorities* (Tourism Western Australia, 2010). Analysis has been conducted at a sub-regional level, which includes an examination of each region's strengths and unique selling points. It also includes an analysis of the current status of, and potential gaps in access, accommodation, attractions, activities and amenities.

The Commonwealth Government's Australia's National Landscape Program identifies the Great South West Edge National Landscape, which encompasses parts of the shires of Esperance and Ravensthorpe within the Goldfields-Esperance region. The program is a long-term strategic approach to regional tourism development and conservation that aims to highlight the value of Australia's most remarkable natural and cultural environments as tourism assets, and in turn, increase support for their conservation. As the Great South West Edge is one of only 16 National Landscapes, its identification is significant and will promote further tourism opportunities in the region. As part of the program's implementation, a strategic framework for regional tourism development, planning and marketing has been developed for the Great South West Edge National Landscape. For further information, refer <http://www.australia.com/nationallandscapes.aspx>.

Regional tourism initiatives and priorities for the Goldfields-Esperance region are recognised in this Framework. These are considered to be valuable in facilitating further tourism opportunities in the region.

2.1.5 Fishing

Commercial fishing in the region predominantly occurs along the coastlines of the shires of Esperance and Ravensthorpe. In 2011/12 the industry produced a live weight catch of 1124 tonnes valued at approximately \$10 million, predominantly comprising molluscs (mostly scallops and abalone), lobster and finfish (Department of Regional Development, 2014).

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, there are a number of associated specialised and service industries that are locally based, which generate further employment in the region.

As the fishing industry depends on healthy functional ecosystems, sustainable development is imperative. The management of fisheries assets within the region falls under the Department of Fisheries, which is currently developing an ecosystem-based fisheries management plan for the South Coast Bioregion, which includes coastal areas of the Goldfields-Esperance region.

Presently there are no identified sites for aquaculture development in the region, however the Recherche Archipelago east of Esperance is considered to have good potential for commercial aquaculture development (Department of Regional Development and Lands, 2011).

2.1.6 Retail and manufacturing

Retail trade is the second largest employer in the Goldfields-Esperance region at approximately eight per cent of the region's workforce (Australian Bureau of Statistics, 2011). The region's retail trade was valued at \$736 million in 2011/12 (Department of Regional Development, 2014).

The region's manufacturing sector employs approximately seven per cent of its workforce (Australian Bureau of Statistics, 2011) and was worth an estimated \$2,277 million in 2006/07 (Department of Regional Development and Lands, 2011). The strong manufacturing base in the region is driven by the mining industry. Fabricated metal product manufacturing and machinery and equipment manufactories are the most numerous types of manufacturing establishments (Department of Regional Development and Lands, 2011).

Opportunities exist to expand the manufacturing sector within the Goldfields-Esperance region to support further development of the region's resources sector and other emerging industries. Expanded manufacturing capacity in the region may also present opportunities to service the mining industry in other regions, such as the Mid West and Pilbara.





2.1.7 Opportunities

Economy and employment opportunities:

- EE1** Investigation into the potential for an expanded resource industry in the Goldfields-Esperance region and its requirements.
- EE2** Promoting Goldfields-Esperance communities as sources of labour and bases for fly-in fly-out mine workers to reside.
- EE3** Develop strategies to ensure the region has an adequate sustainable labour force to meet the demands of all sectors.
- EE4** Improving training, employment and business opportunities for Aboriginal residents.
- EE5** Investigation into regional affordable housing requirements.
- EE6** Investigate areas for appropriately located and serviced land for general industrial and commercial expansion to complement development of the regional economy.
- EE7** Investigating opportunities to enable the agriculture and fisheries sectors to meet the potential challenges presented by forecast changes in climate, particularly over the longer-term.
- EE8** Promote the protection and development of high quality agricultural land.
- EE9** Diversifying economic activity on pastoral properties (e.g. tourist accommodation).
- EE10** Investigation into possible options for the expansion and diversification of the tourism and recreation sectors — including pastoral station accommodation, nature based tourism, caravanning and camping tours, marine charters and cruise shipping.
- EE11** Further promotion of national park tourist attractions.
- EE12** Fostering links between Goldfields-Esperance eco-tourism products and others within the State, especially remote locations.
- EE13** Managing the changes to fishing regulations to mitigate the impact on commercial fisheries.

2.2 Transport and infrastructure

Infrastructure is essential in supporting all of the Goldfields-Esperance region's economic sectors, in addition to its general population. From an economic perspective, inter-regional links are vital to ensure strong connectivity between the region and other markets; and to allow for the efficient movement of goods and people into and out of the region. Notably, crossing the region's boundary are major transport connections to the eastern states, including road and rail; positioning the region as a 'hub' of intra and inter-state network links.

The Goldfields-Esperance region's strategic regional and inter-regional connections have been considered in the *Western Australian Regional Freight Transport Network Plan* (Department of Transport, 2013). In addition, the PortLink Inland Freight Corridor concept will investigate the potential for strengthening the State freight network, including road, rail and port infrastructure, between the Mid West, Goldfields-Esperance and Pilbara regions. In its initial phase, PortLink will include completion of the planning for the upgrade of the Goldfields Highway between Wiluna and Meekatharra; planning studies for an intermodal terminal in Kalgoorlie, and for road and rail alignments to improve freight movements around Kalgoorlie; and economic modelling of the PortLink project concept to inform its next phase.

Coordinated infrastructure corridors, which can potentially accommodate multiple types of transport and utility services infrastructure, are considered to be an efficient means of delivering the land requirements for future regional and inter-regional infrastructure, particularly in areas where land is highly constrained. As such, infrastructure corridors should ideally be identified, planned for and secured well in advance of the additional regional infrastructure being required. A number of potential infrastructure corridors in the Goldfields-Esperance region, based on the alignment of existing and proposed infrastructure, are indicated on the Framework map (Figure 10).

2.2.1 Road

The Goldfields-Esperance region's primary road network services an extensive area and provides a number of important inter-regional and interstate connections. Many primary routes, for example the



Eyre Highway, accommodate significant freight traffic volumes relative to passenger traffic. Particular primary routes within the region also play a vital role in servicing the mining industry.

A road transport system free of serious trauma is essential for sustainable economic and community growth in the Goldfields-Esperance Region. Increased road trauma is not an acceptable or inevitable by-product of growth. Changes in managing travel demand, improvements in vehicle safety, technology and progressive upgrades to the region's road transport system will provide greater protection and build a safe system for a safe and prosperous community.

Road safety is a shared responsibility and as the region grows important partnerships involving Governments, business and the community such as the Goldfields-Esperance Industry Road Safety Alliance will continue as we work together to build a safe road transport system.

Road projects, including upgrades to existing roads and enhancing inter-regional links, may be required to support anticipated growth in the mining sector, and an increasing reliance on road transport within the region (Main Roads Western Australia, 2007). Improvements to strategic transport linkages, for example road access to Esperance Port, may enhance the effectiveness of other important regional infrastructure, such as Esperance Port. Upgrading links beyond the Goldfields-Esperance region's boundaries, such as proposed upgrades to the Wiluna-Meekatharra Road, are expected to enhance the effectiveness of inter-regional connections and ultimately benefit the region.

Regional road network planning, including freight and tourist network reviews, will help facilitate and identify future funding requirements to enhance regional roads to support regional growth and development. One opportunity is planning for an additional interstate route (Great Central Road, Outback Highway concept) to encourage development, better access and increased visitation into the northern Goldfields (Department of Regional Development and Lands, 2011).

2.2.2 Rail

The rail network in the Goldfields-Esperance region is largely operated by Brookfield Rail and primarily comprised of two standard gauge lines. The Eastern Goldfields Railway, which forms part of the main

transcontinental line that connects Western Australia to the eastern states, bisects the region. Its haulage task includes general freight, bulk freight and passenger services. The line accommodates a substantial volume of traffic — about 80 per cent of all general freight movements into Western Australia from the east coast travel on this line (Brookfield Rail, 2012). Haulage on the region's north-south rail line, which connects the northern Goldfields to Esperance Port, is predominantly bulk freight.

Understanding regional demand and service requirements are important in planning for rail network upgrades and maintenance work. Examples of recent projects to upgrade rail infrastructure within the region include the Eastern Goldfields Railway Freight Gateway Project to replace 185 kilometres of rail; and upgrading infrastructure between Kalgoorlie and Esperance Port to support regional resource projects.

2.2.3 Aviation

Remoteness and accessibility are significant issues in the Goldfields-Esperance region so aviation performs a key role in its transport network. A range of the region's community, business and industry needs are serviced through aviation infrastructure, from the facilitation of mineral exploration and provision of fly-in fly-out workforces through to the Royal Flying Doctor Service.

Accordingly, such infrastructure is vital to support economic activity in the region and the future development and diversification of aviation infrastructure and services.

State Government support for regional airports through the Department of Transport's Regional Airports Development Scheme (RADS) continues to foster incremental improvements to the regional aviation infrastructure. The Department of Transport has also developed the *State Aviation Strategy* (Department of Transport, 2015) to support the State's economic and social development through aviation infrastructure and services.

The region's main regional airports are located at Kalgoorlie-Boulder and Esperance and the majority of the passenger services from both airports fly directly to Perth. Regular Kalgoorlie-Boulder interstate passenger flights to Melbourne are also available. Within the region, regular passenger flights to and from Perth also service Leonora, Laverton, Kambalda and Ravensthorpe.



The Kalgoorlie–Boulder Airport, located on the city's southern outskirts, is managed by the City of Kalgoorlie–Boulder. Multiple passenger flights depart daily from the airport, which currently accommodates approximately 260,000 passengers per year. The airport's terminal building has recently been upgraded and the site allows for the runway to be extended from its current 2,000 to 3,500 metres.

Esperance Airport is located near Gibson, approximately 20 kilometres north of Esperance. It currently caters for around 50,000 passengers per year and is serviced by at least one regular passenger flight per day. The facility has been recently upgraded and the Shire of Esperance has developed a master plan for the airport's future use and development.

Leonora is another significant facility in the region. In addition, airfields at Laverton, Leinster, Ravensthorpe and Warburton all have sealed runways approximately 1,800 metres or longer.

Numerous larger mining companies operate private sealed airstrips and charter operators based at Kalgoorlie–Boulder service the smaller, more remote mining operations and exploration camps.

2.2.4 Ports

Esperance Port is the only regional port facility in the Goldfields–Esperance region. The port is a deepwater facility capable of handling Capesize vessels up to 200,000 tonnes. Notably, its catchment extends beyond the boundaries of Goldfields–Esperance as the facility also services economic activity in the Wheatbelt region. The port's operations are overseen by the Southern Ports Authority, which also oversees operations at the Bunbury and Albany ports in the South West and Great Southern regions respectively.

In 2012/13 iron ore exports, at 11 million tonnes, comprised the bulk of the port's trade, with grain exports totalling 1.7 million tonnes during the same period. Other exports from Esperance include various mineral commodities, such as nickel. Imports generally comprise only around six per cent of the port's total trade, with petroleum and fertilisers being the main products imported (Department of Transport, 2013).

Over the past decade growth of iron ore production, in the Yilgarn area in particular, has driven growth in export trade at Esperance Port. This has been the catalyst for recent expansions at the port, which have

included the creation of a third berth and additional on-site storage. Further port expansion will be required to cater for the predicted increase in output of the resources sector within the region and in this regard, the development of a new multi-user iron ore facility is being progressed. As of 2014, a preferred proponent has been selected to undertake the design, construction and operation of such a facility, which is expected to expand the iron ore capacity at the port to beyond 20 million tonnes per annum (Department of Transport, 2013). In addition, an integrated supply chain study has been undertaken by the Yilgarn Iron Ore Producers Association to consider possible infrastructure requirements, including port and associated transport infrastructure, between the Yilgarn iron ore province and Esperance Port in catering for future growth in iron ore exports.

Efficient port operations rely on being well-served by supporting infrastructure including energy, water and access. Improved infrastructure servicing Esperance Port, such as the road and rail upgrades comprising part of the Esperance Port Access Transport Corridor Project, will facilitate long-term growth at the port, including capacity expansion.

2.2.5 Public transport

The Goldfields–Esperance region is serviced by a number of regional and inter-regional public transport routes operated by TransWA, which provides important public transport connections between towns in the region and beyond. This includes the Prospector passenger rail service between Kalgoorlie and Perth, which operates at least one service per day; and road coach routes between Kalgoorlie and Esperance; Perth and Esperance; and Albany and Esperance. In addition, private operators run a weekly coach service between Kalgoorlie and Laverton via Leonora.

At present, Kalgoorlie–Boulder is the only centre in the region with regular timetabled intra-city public transport services and is currently serviced by three TransGoldfields bus routes. Numerous school bus services operate within the Goldfields–Esperance region, providing an important means for children to get to and from school, particularly those living in rural areas.

Provision of an adequate public transport system in a largely car-dominated region is a challenge. Additional public transport services in the Goldfields–Esperance



region may be introduced if demand levels are sufficient to warrant their provision. This will invariably be influenced by future population levels and densities.

2.2.6 Energy

The Goldfields–Esperance region is serviced by various electricity generation and transmission networks, due mainly because of its vast geographic area. Most of the region's customers are serviced through two main electricity distribution systems, the South West Interconnected System (SWIS) and Horizon Power's Esperance System. Most of the region is isolated from the two main grids and these areas including many mining operations and settlements such as Norseman, Hopetoun and those in the region's north, typically rely on locally generated electricity.

The eastern extent of the SWIS grid occurs within Goldfields–Esperance, connecting the region to the State's main power generators, which include the Muja and Kwinana power stations. Within Goldfields–Esperance, the SWIS services Ravensthorpe and a significant area around Kalgoorlie–Boulder, Coolgardie and Kambalda, which contains several mining operations. A 220 kilovolt line comprises the primary transmission infrastructure linking Kalgoorlie–Boulder to the SWIS and locally-generated power, including from the 60 megawatt West Kalgoorlie power station, also feeds back into the grid. Horizon Power's Esperance System services the Esperance townsite and surrounding areas. A 33 megawatt gas-fired power station is the primary source of generation for the Esperance System, which is supplemented by 5.6 megawatt from the Nine-Mile Beach and Ten-Mile Lagoon wind farms.

The region is traversed by a series of three major natural gas transmission pipelines - the Goldfields Gas Pipeline (which runs from the North-West Shelf to Kalgoorlie–Boulder), the Kalgoorlie to Kambalda Pipeline and the Kambalda to Esperance Gas Pipeline. Electricity generators are major customers of piped gas within the region and several lateral pipelines spurring from the main transmission lines supply various generators including mining operations. Reticulated gas networks also service customers in Kalgoorlie–Boulder and within the central area of Esperance.

A regional energy strategy investigating the future regional energy generation and transmission requirements for the Goldfields–Esperance region is proposed to be developed.

2.2.7 Water infrastructure

Water

Water supply in the Goldfields–Esperance region is from a variety of sources.

The Goldfields and Agricultural Water Supply supplies water to much of the region's population including Kalgoorlie–Boulder, Coolgardie, Kambalda and Norseman. The primary water sources for the supply are located hundreds of kilometres from the region and as such water is piped into the region. Surface water piped to the region from Mundaring Weir has historically provided the main source for the supply, however as the scheme is connected to the State's Integrated Water Supply System, water can be drawn from groundwater and seawater desalination in addition to surface water. (Water Corporation, 2011)

Those areas not serviced by the Goldfields and Agricultural Water Supply, which includes most of the region by area, are generally reliant on locally-sourced groundwater for their water supply. Many settlements have declared public drinking water source areas and water source protection plans to assist in separating water sources from incompatible land uses. For example, a drinking water source protection plan for the reserve that provides the Esperance town water supply was released by the Department of Water in 2012.

In addition to existing sources, there may be opportunities for alternative sources such as water recycling and other water efficiency measures to assist in meeting demand for additional water in the region.

The availability of drinking water to support new growth and the water required to support industry, business and environmental needs is an issue for future development and land use within the region. An ongoing need for regional water planning therefore exists to ensure sustainable groundwater allocation planning, drinking water source protection and rural water planning.

Wastewater

A number of reticulated wastewater schemes and treatment facilities operate throughout the Goldfields–Esperance region. Anticipated growth in demand for these facilities should be monitored and incorporated into planning for facility upgrades. This is generally undertaken by service providers, such as the Water



Corporation, who subsequently incorporate anticipated infrastructure requirements in their planning and investment programs.

Stormwater

The quantity and quality of stormwater entering the water resources of the Goldfields–Esperance region is also a management issue and requires careful consideration. In this regard, it is important that urban water management issues are taken into account when considering planning for new residential, rural-residential, commercial and industrial areas. *Better Urban Water Management* (Western Australian Planning Commission, 2008) provides guidance on such matters.

2.2.8 Social infrastructure and services

It is important for all communities to have access to adequate social infrastructure and services, including essential services such as educational and medical facilities. The provision of such infrastructure and services makes a significant contribution to the liveability and attractiveness of a local community, which can play an important role in attracting and retaining staff to a region. The type of social infrastructure and services varies from regional to local and it is important that future requirements for social infrastructure are identified through appropriate mechanisms. For example, local and regional priorities for social infrastructure and services could be identified through working with Goldfields–Esperance local governments and other key stakeholders such as the Goldfields–Esperance Development Commission.

Education

Government school facilities are 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 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.

Specialised tertiary education opportunities for the region are provided through the Curtin University Western Australian School of Mines (WASM) in Kalgoorlie. It is likely that there may be increased opportunity to expand the existing tertiary education services within the region as the growing mining sector increases demand for graduate and post graduate students. The Goldfields Institute of Technology, with campuses in Kalgoorlie and Esperance, offers tertiary education through a range of vocational and training courses.

In particular, education plays an important role in building the capacity of communities and in this regard is considered to be inherently linked to the economic and social development of the region.

Health

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. Several smaller district hospitals are located throughout the Goldfields–Esperance region, providing a range of health services to more localised populations. In addition, nursing posts operate at a number of other locations.

The Royal Flying Doctor Service (RFDS) is also of great 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 Garnbirringu Health Service Aboriginal Corporation in Kalgoorlie offers a range of health and medical services to the region's Aboriginal people.

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, which is recognised by





this Framework in Table 7, 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;
- Telehealth Investment;
- Residential Aged Care and Dementia Investment Program; and
- Small Hospital and Nursing Post Refurbishment Program.

Further information can be found at www.health.wa.gov.au/southerninland.

Emergency and corrective services

It is important that all communities have access to adequate social infrastructure and services. The provision of such infrastructure and services, especially emergency services, makes a significant contribution to the liveability and attractiveness of a local community.

There are currently 10 police stations located within the Goldfields–Esperance region. The region is predominantly within the Goldfields–Esperance police district, however the Shire of Ravensthorpe falls under the Great Southern police district. The Kalgoorlie Police Station is the district hub for the Goldfields–Esperance police district, whereas other stations are patrolling stations only. Multi-functional police facilities are located at Warburton, Blackstone and Warakurna.

Kalgoorlie and Esperance have the only courthouses in the region. The Eastern Goldfields Regional Prison at Boulder is the only prison facility in the region, however this will be replaced by a larger facility, which is currently under construction. (Department of Corrective Services, 2013)

The Department of Fire and Emergency Services (DFES) oversee a range of emergency service providers in the Goldfields–Esperance region, including:

- Country Fire and Rescue Services based at Kalgoorlie–Boulder;
- Volunteer Fire and Rescue Service Brigades based at Esperance, Coolgardie, Kalgoorlie–Boulder, Kambalda, Laverton, Leonora and Ravensthorpe;

- State Emergency Service Units at Esperance, Kalgoorlie–Boulder, Norseman and Ravensthorpe; and
- Volunteer Marine Rescue Services at Esperance and Hopetoun.

These services extend across the Goldfields/Midlands and Great Southern DFES regions.

Ambulance services are delivered by St John Ambulance WA, with sub branches located throughout the Goldfields–Esperance region.

Culture and arts

The Department of Culture and the Arts has developed the *Regional Arts and Cultural Action Plan 2014–2018*, which includes a number of actions specific to the Goldfields–Esperance region (Department of Culture and the Arts, 2014). Planning for cultural infrastructure is further supported by its Cultural Infrastructure Directions policy (Department of Culture and the Arts, 2012).

Regional sport and recreation

Sport and recreation is often considered to be the lifeblood for many communities, promoting social and community cohesion, healthier lifestyles and providing economic advantages. There are quality sporting and recreational facilities available within the Goldfields–Esperance region, including substantial facilities in Kalgoorlie–Boulder and Esperance that are of regional significance.

Maintenance and upgrading of sporting facilities are often considered to be essential for many regional communities, helping to ensure that adequate opportunities are provided for both individuals and sporting organisations.

There is a range of resourcing and training initiatives provided by the Department of Sport and Recreation, State sporting associations and other organisations to support the upgrading or maintenance of regional sporting facilities. The Royalties for Regions Grants Scheme can also provide funding for upgrading or new facilities.





2.2.9 Telecommunications

Being a vast and isolated region, telecommunications infrastructure performs a vital role in keeping the Goldfields–Esperance region well connected. A broad range of telecommunications services exists in the Goldfields–Esperance region; with the region's settlements generally having the greatest level of accessibility to networks and services. As large parts of the region are remote and virtually uninhabited, telecommunications services in these areas can be limited or otherwise reliant on delivery through satellite networks.

New and emerging telecommunications technologies may create opportunities for regional economic investment as well as innovation in service delivery, resulting in various economic and social benefits. This could include opportunities to increase or improve service delivery to remote locations for some services such as health and education. Projects currently proposed to deliver significant improvements to the standard of telecommunications infrastructure in the region include the:

- Regional Mobile Communications Project to increase coverage of the mobile network; and
- National Broadband Network, which is proposed to deliver significant improvements in bandwidth speeds and connection reliability throughout the region through a combination of optic fibre, fixed wireless and satellite technology.

2.2.10 Waste management infrastructure

A regional strategic waste management plan, encompassing the City of Kalgoorlie–Boulder and shires of Coolgardie, Dundas and Esperance, has been prepared to align with the statewide waste management planning process (ASK Waste Management, 2008). The management plan primarily facilitates waste infrastructure planning; and seeks to ensure the inclusion of provision for solid waste management infrastructure at strategic regional locations. Such infrastructure could include transfer stations, resource recovery facilities, recycling process facilities, landfills and requirements for waste related to industrial expansion. Additionally, other regional documents such as the *Goldfields–Esperance Strategic Development Plan 2011-2021* (GEDC, 2012) have

proposed the development of waste management facilities to service regional and/or sub-regional catchments within the Goldfields–Esperance region.

From a statewide perspective, the *Western Australian Waste Strategy* (Western Australian Waste Authority, 2012) provides strategic guidance on waste management issues.

2.2.11 Designing communities

Well-designed communities, transport and infrastructure underpin the attractiveness and liveability of a place, which contributes substantially to the general well-being of its population. Providing attractive and liveable communities with good social infrastructure may positively influence the attraction and retention of new residents to the Goldfields–Esperance region.

It is important that a community's diverse needs are accounted for through good design. In particular, consideration should be given to ensure that communities are designed to be adaptable to future change, encourage a high-quality built environment and promote physical activity.

Numerous strategic State Government documents including *Liveable Neighbourhoods* (Western Australian Planning Commission, 2007), *Better Urban Water Management* (Western Australian Planning Commission, 2008) and *Active Living for All: A Framework for Physical Activity in Western Australia 2012-2016* (Physical Activity Taskforce, 2011) have been prepared to guide the development of well-designed, active communities. Other resources also reinforce design principles to this effect, such as the Heart Foundation's Healthy Active By Design on-line design resource available at www.healthyactivebydesign.com.au. This tool in particular has been developed in partnership with other stakeholders including State Government agencies.





2.2.12 Opportunities

Transport and infrastructure opportunities:

- T11** Developing and maintaining appropriate regional infrastructure to stimulate economic investment and service the needs of the Goldfields-Esperance region.
- T12** Improving the safety and efficiency of the region's road network by minimising the conflict between freight and other traffic.
- T13** Improving interregional and inter-state connectivity by reinforcing infrastructure network linkages beyond the region's boundary.
- T14** Attracting residents and workforce by providing quality social infrastructure, services, affordable housing and well-designed communities, taking into account the region's remoteness and distance between settlements.
- T15** Establishing the role of a regional road network plan.
- T16** Identification and securing of road, rail and infrastructure corridors.
- T17** Improving air services within and to the region whilst maintaining appropriate support infrastructure.
- T18** Increasing the level of service and standard of the Goldfields-Esperance energy networks.
- T19** Enhancing the provision of wastewater infrastructure to meet the current and future requirements of the Goldfields-Esperance centres.
- T110** Ensuring the long-term viability of the Goldfields-Esperance population and industry through the sustainable development and management of regional water resources.

2.3 Natural resources and cultural heritage

2.3.1 Biodiversity

Interim Biogeographic Regionalisation for Australia (IBRA) classifies major divisions of land by climate, geology, landform, fauna and vegetation. According to IBRA, the Goldfields-Esperance region contains parts of nine bioregions: Esperance Plains, Mallee, Coolgardie, Murchison, Hampton, Nullarbor, Great Victoria Desert, Gibson Desert and Central Ranges. IBRA bioregions and sub-bioregions are the reporting unit for assessing the status of natural ecosystems and their protection in the National Reserve System. The Murchison IBRA bioregion is currently under-represented in the National Reserve System and as such, priority should be given to protecting ecosystems in this particular area, for example through the establishment of formal conservation reserves. (Department of the Environment, 2013)

The Goldfields-Esperance region contains the south-eastern portion of the biogeographic region Southwest Australia, which extends as far east as Israelite Bay. This area is considered as one of 25 international biodiversity hotspots, primarily as it supports a combination of high species diversity, high numbers of endemic species and high levels of threat to biodiversity at a scale of international significance (Department of the Environment, 2013). At a national level, the Fitzgerald River Ravensthorpe area is listed as one of Australia's 15 national biodiversity hotspots, with the Fitzgerald River National Park also designated as a biosphere reserve.

Some other key considerations regarding the region's biodiversity are:

- the Great Western Woodland is predominantly within the Goldfields-Esperance region. 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 represents 20 per cent of Australia's flora. *A Biodiversity and Cultural Conservation Strategy for the Great Western Woodlands* (Department of Environment and Conservation, 2010) provides a framework to manage the range of different uses of the woodlands to ensure the long-term protection of its natural and cultural values;



- the banded iron formations, including those in the northwest of the region and around Ravensthorpe, have significant value both in terms of biodiversity and mineral deposits;
- some aspects of biodiversity have identified conservation priorities and some sites have area management plans. However, to inform the identification of conservation priorities and manage the region's natural assets, there is a need to continue investigations into collecting further baseline data.

A number of programs aim to restore biodiversity in parts of the region through environmental and ecological rehabilitation, with one notable example being Credo Station, which is a former pastoral lease. In addition to ecological benefits the project has also delivered valuable benefits for regional science, recreation and tourism.

2.3.2 Water

Groundwater

Seven groundwater management areas, proclaimed under the *Rights in Water and Irrigation Act 1914*, are within the Goldfields–Esperance region: the East Murchison, Goldfields, Esperance, Gibson, Condingup, Hopetoun and Kondinin–Ravensthorpe. Within the region there are 11 artesian groundwater basins including the Capricorn, Yilgarn Murchison, Yilgarn South-West, Yilgarn Goldfields, Bremer, Albany–Fraser, Canning, Amadeus, Musgrave, Officer and Eucla. It should be noted that the quality and quantity of groundwater varies throughout the region, and this can affect the resource's suitability for certain applications.

Groundwater is a vital resource for many settlements and industrial developments in the region and should be managed accordingly to ensure its permanence. In particular, the development of mining operations can have a significant impact on overall demand for the resource in those areas.

Surface water

The main hydrographic catchments within the Goldfields–Esperance region include the Nullarbor Basin, Warburton Basin, Salt Lake Basin and Esperance Coast. West of Cape Arid, the region contains many watercourses terminating at the coast. The region's

major river systems are the Oldfield, Young and Lort, which all begin about 100 kilometres inland on the edge of the Yilgarn plateau and flow to intermittent inlets/estuaries. Away from the Esperance Coast catchment, watercourses generally drain into flat areas or shallow lakes rather than the ocean. Most of these waterways are short and all are ephemeral, flowing infrequently and for short periods following large episodic rainfall events. Large areas can be flooded as local basins fill and overflow (Rangelands NRM, 2005).

The Goldfields–Esperance region contains a diverse assemblage of wetlands, including large chains of intermittently inundated salt lakes and permanent freshwater wetlands, permanent springs and rock pools and intermittently inundated freshwater lakes and soaks. These wetlands support nationally and internationally significant communities of flora and fauna as well as habitats that support significant populations of migratory bird species (Rangelands NRM, 2005). The *Directory of Important Wetlands in Australia* (Department of the Environment, 2013) identifies nationally important wetlands in the Goldfields–Esperance region, such as Culham Inlet System, Fitzgerald Inlet System, Lake Mortijinup Lake System, Pink Lake, Lake Ballard, Lake Marmion, Lake Gore System, Lake Cronin, Rowles Lagoon System, Yeo Lake/Lake Throssell and Lake Gruska. Lake Gore and the Lake Warden System are also internationally recognised under the Ramsar agreement.

2.3.3 Landscape and geology

Generally, the underlying geology and subsequent geomorphological processes in the Goldfields–Esperance region have resulted in a gently undulating plateau, occasionally broken by hills of harder and more resistant rocks of granite and ironstone (Western Australian Planning Commission, 2000). The landscape rises gently from the Nullarbor Plain to 425 metres above sea level in the Great Victoria Desert.

A number of broad landscape character types occur in the Goldfields–Esperance region, including the:

- Wheatbelt Plateau, including the Esperance Plain landscape character sub-type;
- Kalgoorlie Plain;
- Nullarbor;
- Meekatharra Plateau;

- Great Victoria Desert Dunefields;
- Warburton Ranges; and
- Gibson Desert.

(Department of Conservation and Land Management, 1994)

Soils in much of the region are deeply weathered, generally lacking in nutrients and highly vulnerable to wind and water erosion which limits the potential for farming and pastoral activities.

The geological setting of the Goldfields–Esperance region is diverse, with five main geological and structural units occurring. Each unit consists of a distinctive suite of rock types which share a common location and geological history. The oldest unit, the Yilgarn Craton consists of granite, gneiss and volcanic and sedimentary rocks. The volcanic and sedimentary rocks of the Yilgarn Craton are generally referred to as greenstones and host all the major gold and nickel mines of the region. The Musgrave Block and Fraser Orogen consist of an assortment of metamorphosed and unmetamorphosed sedimentary and volcanic rocks ranging from early to mid-Proterozoic age. The Officer Basin consists of relatively undeformed and unmetamorphosed sedimentary rocks ranging from Late Proterozoic to Mesozoic in age. The Eucla Basin rocks comprise of limestones of tertiary ages, which outcrop on the Nullarbor Plain (Western Australian Planning Commission, 2000).

There are currently 16 sites in the Goldfields–Esperance region on the State's register of Geoheritage sites (Department of Mines and Petroleum, 2013). Geoheritage sites should be protected from incompatible activities by relevant government agencies including local government planning and approval processes. For further information, refer to www.dmp.wa.gov.au/791.aspx.

Mineral resources in the Goldfields–Esperance region are covered in section 2.1.1 Mining and their distribution is indicated on the Framework map (Figure 10).

2.3.4 Cultural heritage

The continuing cultural legacy of the region's Aboriginal people, early European exploration and more recent mining and pastoral activities largely constitute the Goldfields–Esperance region's cultural heritage. It is important that both the region's Aboriginal and historic heritage is identified, protected and managed as their significance will increase over time.

The *Aboriginal Heritage Act 1972* lists numerous sites of Aboriginal significance in the region and protects all sites, including those that remain undisclosed by the traditional owners. Numerous places in the region are also listed on the State Heritage Database under the *Heritage of Western Australia Act 1990*.

Aboriginal groups with a strong traditional connection to their country have inhabited the Goldfields–Esperance region for thousands of years. The landscape provides the basis for their spirituality, customs, beliefs and social systems. Aboriginal cultural heritage in the region encompasses archaeological, historical, ceremonial and mythological sites as well as living cultural practices. The Aboriginal population in the region is estimated to have numbered about 20,000 people prior to European settlement. The people of the Western Desert occupied the mid and north of the region, while the southern coastal areas were populated by Njunja in the west and the Ngadjunmaia/Mirning in the east (Western Australian Planning Commission, 2000).

Prior to European settlement the region was visited many times by Dutch, French and English explorers, the first of which was Pieter Nuyts in 1627 on the Gulde Zeepaard. The modern history of the region began in 1792 when two French frigates took refuge in Esperance Bay while mapping the south coast of Australia.

Following the discovery of gold at Coolgardie in 1892, Esperance became the principal port for the Goldfields. Although farming began in Ravensthorpe in 1866 it was not until the discovery of gold in 1898 near the Philips River that the area experienced a boom.

Coolgardie, Boulder and Kalgoorlie developed rapidly after gold was found in the 1890s and many other towns were established to service mining operations within the region.



The State Register of Heritage Places lists 103 places in the Goldfields–Esperance region (Table 2), including buildings, jetties, dams, cemeteries and ruins, located across townsites, rural and remote locations. Each place is unique and has its own combination of values, which together shows its cultural heritage significance.

Local planning schemes are one planning mechanism that allows local governments to provide statutory protection to heritage places. Scheme provisions can stipulate special planning approval requirements for identified heritage places.

2.3.5 Opportunities

Natural resources and cultural heritage opportunities:

- NC1** Seeking a balance between future development and resource utilisation with conservation in the Goldfields–Esperance region.
- NC2** Promoting the availability of natural resource management information to assist strategic regional planning.
- NC3** Investigations of science/education/tourism facility development within the region.
- NC4** Enhancement and expansion of the conservation estate within the region.
- NC5** Utilising and maintaining places of heritage value to support future growth and development within the region.
- NC6** Mitigating and adapting to the potential impacts of forecast climate change on regional water sources and existing land uses in the Goldfields–Esperance region.





Table 2: Goldfields–Esperance historic heritage places

Local government	Suburb/locality ¹	No. registered places	Total
City of Kalgoorlie–Boulder	Boulder	8	49
	Broad Arrow (Kanowna)	1	
	Kalgoorlie	31	
	Lamington	1	
	Piccadilly	2	
	Rawlinna	1	
	South Boulder	1	
	South Kalgoorlie	1	
	West Lamington	1	
	Williamstown	1	
	Wollubar Station (Feysville)	1	
Shire of Coolgardie	Benari (Bullabulling)	1	18
	Bullabulling	1	
	Coolgardie	14	
	Woolgangie (Wallaroo)	1	
	Victoria Rock	1	
Shire of Dundas	Balladonia	1	6
	Eucla	2	
	Eyre (Cocklebiddy)	1	
	Norseman	2	
Shire of Esperance	Lynburn Station (Boyatup)	1	9
	Stokes National Park (Coomalbidgup)	1	
	Esperance	5	
	Israelite Bay	1	
	Salmon Gums	1	
Shire of Ravensthorpe	Hopetoun	1	1
Shire of Menzies	Goongarrie (Menzies)	1	9
	Kookynie	1	
	Menzies	7	
Shire of Leonora	Gwalia (Leonora)	4	9
	Leonora	5	
Shire of Laverton	Laverton	1	2
	Mount Margaret (Laverton)	1	
Shire of Ngaanyatjaraku	-	0	0
Total			103

¹ the relevant suburb/locality is provided in brackets in instances where an informal location name has also been identified

(source: State Heritage Office, 2014)





3 Strategic directions

3.1 Governance

In recognition of a number of broad regional issues and challenges associated with the governance structure currently operating, the Framework identifies the following governance strategies:

- G1** Provide regional planning support for implementing the broader strategic context of the Framework and guiding the development of local planning strategies.
- G2** Communicate the relationship and roles of government, legislation and policy.
- G3** Promote a whole-of-government approach to regional planning and coordination.

Regional government offices and local government authorities in the Goldfields–Esperance region represent Commonwealth, State and local governments. These are supplemented by cross-government and cross-agency committees and commissions, which promote whole-of-government responses to the planning challenges presented by the region. In some instances, these committees may also include private and non-government stakeholders to promote cooperative and deliberative governance outcomes.

The Framework establishes a high level strategy to guide planning within the Goldfields–Esperance region. To facilitate high-quality planning outcomes for the region, planning support is required to develop and finalise local planning strategies in particular, and to assist in the implementation of the broader strategic context of the Framework. Consideration should be given to the future structure of local governments in the region and its implications for regional planning.

With the complex policy framework that exists, where several different agencies within three tiers of government administer a multitude of legislation, it is inevitable that some of the actions recommended in this Framework will fall outside of the direct jurisdiction of planning. This also demonstrates the complexity and difficulty of implementing a whole-of-government approach.

This document should therefore serve as a means to give advance notice to relevant agencies/authorities of future actions that may be required.

3.1.1 National framework

A number of Commonwealth statutes and policies have influence or control over land use, infrastructure development and overall economic development. For example, the *Environmental Protection and Biodiversity Conservation Act 1999* provides a legal framework to protect and manage nationally and internationally significant flora, fauna, ecological communities and heritage places.

The Council of Australian Governments (COAG) may also provide guidance on the implementation of State-level policies and legislation including where such instruments relate to economic development and associated land-use planning matters. For example, a Multiple Land Use Framework has been developed by the COAG's Standing Council on Energy and Resources as an approach to address challenges arising from competing land use, land access and land-use change. This is designed to operate within established regulatory and policy frameworks relating to land ownership, usage and access.

Beyond the spheres of legislation and policy, the Commonwealth Government supports a number of nationwide initiatives to facilitate regional development, which are relevant to the Goldfields–Esperance region.

Regional Development Australia, through collaboration with State and local governments, provides a framework for reporting to the Commonwealth Government on a range of issues facing the regions, including regional planning and regional development. A strategic development plan has been developed by Regional Development Australia Goldfields Esperance and the Goldfields–Esperance Development Commission recognises pertinent regional issues, goals and priorities for the Goldfields–Esperance region.

Desert Knowledge Australia is another initiative supported by the Commonwealth, in addition to the Northern Territory Government. A number of programs run by this organisation are focused on innovation and capacity-building in regional and remote Australia to facilitate beneficial business and social outcomes.



3.1.2 State and regional framework

Planning

The State Planning Framework is set out in State Planning Policy 1 (Variation No 2) (2006). It informs the Western Australian Planning Commission (WAPC), local government and others involved in the planning process to ensure integrated decision-making across all spheres of planning.

The State Planning Framework unites the State Planning Strategy, State Planning Policies, regional strategies (including regional planning and infrastructure frameworks), regional and sub-regional

structure plans, strategic policies and operational policies within a central framework. This provides a context for land-use planning decision-making in Western Australia. Broad relationships between these various planning instruments are indicated in Figure 2. For further information on the State Planning Framework, refer to the Planning WA website, www.planning.wa.gov.au.

The *State Planning Strategy 2050* provides the basis for long-term State and regional land-use planning. The Strategy's structure, presented in Figure 7 below, outlines its core elements including vision, principles, strategic goals and strategic directions.



(source: Western Australian Planning Commission, 2014)

Figure 7: State Planning Strategy 2050 structure



The Strategy aims to facilitate a whole-of-government approach to deliver sustained prosperity for land-use planning and development. Within this context, regional planning and infrastructure frameworks (such as this document) are strategic land-use plans focused at a regional level. They outline a structure for sustainable land use, provide guidance for future planning, and address broad planning considerations across local government areas. Significantly, regional planning provides a relevant context for other local level planning processes.

An important consideration for planning at a State level is that of collaboration across regions. As such, interregional issues are an important focus for the *State Planning Strategy 2050*; and where these relate to the Goldfields–Esperance region, they are acknowledged as being relevant in the context of this Framework.

Planning reform

In 2009 the Department of Planning and the Western Australian Planning Commission (WAPC) began a comprehensive reform program *Planning Makes it Happen: a blueprint for planning reform* to improve the land-use planning and development approvals system in Western Australia.

The State Government launched the second phase of the planning reform program in August 2014. The details are outlined in *Planning makes it happen: phase two – Blueprint for planning reform* (WAPC, 2014). Phase two builds on the first phase of reforms – which has now been substantially implemented – and identifies further opportunities to improve planning and decision-making processes and reduce timeframes, duplication and associated costs. The reform program continues to improve the planning system in Western Australia to give it better operational capacity and strategic capability.

A key of Phase Two is to reaffirm the strategic focus of the WAPC as a statutory authority with statewide responsibilities for urban, rural and regional integrated land-use planning. In particular, priority reforms aim to ensure the capacity of the WAPC and the Department of Planning to deliver a systematic approach to coordinating and integrating land-use and transport planning, economic and infrastructure development, environmental assessment, remote settlements, and urban and regional development. This will, in large part,

involve ensuring appropriate integration of powers and responsibilities across State agencies and local governments.

Further information on the current status of planning reform can be obtained at www.planning.wa.gov.au/planningreform.

State development

The Department of State Development, the lead agency for major resource and industry infrastructure projects, has developed an Infrastructure and Services Assessment Framework. This provides a consolidated approach to the identification of potential impacts on communities, and local regional infrastructure and services directly associated with major resource and infrastructure projects at a local, regional and State level. The Infrastructure and Services Assessment Framework outlines the State's requirements for proponents to manage their infrastructure and service impacts.

This standardised approach to impact assessment is intended to simplify the planning process for new or significantly expanded projects and to help the State Government improve the coordination of infrastructure planning and service delivery.

Regional development

Regionally-based regional development commissions, each of which have their own board, and the Department of Regional Development are currently the key State agencies for regional development.

The Goldfields–Esperance Development Commission is a statutory State Government authority that encourages the sustainable development of the Goldfields–Esperance region. It has regionally based staff and reports to a board of regional community representatives.

A review into the functions and responsibilities of regional development commissions was conducted. One of the resulting recommendations from this review is that regional investment blueprints be developed for each region to set future directions from a regional development perspective. It is intended that blueprints are developed with input from all levels of government





and the community in the region (Department of Regional Development and Lands, 2010). Importantly, they are expected to inform State Government investment in each region, including the allocation of future Royalties for Regions funding.

The Goldfields–Esperance Development Commission is developing its regional investment blueprint. This will establish a clear set of aspirations for the region and be a foundation document that triggers and guides regional investment initiatives. Projects that will feed into its development include the:

- Goldfields–Esperance Strategic Development Plan 2012–2021 – this document, prepared by the Commission with the assistance of Regional Development Australia Goldfields Esperance, identifies priority initiatives and projects and seeks to establish the foundations for advancing the region’s long-term sustainable development; and
- Goldfields–Esperance Revitalisation Initiative – this is a Royalties for Regions State Budget funding initiative for priority infrastructure projects in the Goldfields–Esperance region. Funding has been allocated across four financial years to 2016/17.

Royalties for Regions

The Royalties for Regions initiative has several streams of funding designed to deliver infrastructure, services and projects of State significance to regional Western Australia:

- the Regional Community Services Fund;
- the Regional Infrastructure and Headworks Fund; and
- the Country Local Government Fund

The funds support strong and vibrant regional communities by improving infrastructure and head works, establishing across government strategic and community service projects, providing a range of contestable grant opportunities and building capacity in local communities.

Royalties for Regions funding allocation is determined through various initiatives and processes, including those administered by the Department of Regional Development and Regional Development Commissions. For more comprehensive information on the current status of Royalties for Regions funding, including related projects and initiatives applicable to

the Goldfields–Esperance region, refer to the websites of the Department of Regional Development at www.drd.wa.gov.au and the Goldfields–Esperance Development Commission at www.gedc.wa.gov.au.

The Regional Centres Development Plan (SuperTowns) is a Royalties for Regions initiative that encourages regional communities in the southern half of the State to plan and prepare for the future to take advantage of opportunities created by Western Australia’s population growth to 2050. The initiative seeks to create the new business opportunities to attract investment and generate the jobs required to attract more people to live in those towns.

In the Goldfields–Esperance region, Esperance was selected for the Regional Centres Development Plan (SuperTowns) for 2011/12. As part of the Regional Centres Development Plan’s implementation, a SuperTown Growth and Implementation Plan has been developed for Esperance, which recognises opportunities for population and economic growth and how these can potentially be realised. In particular, it identifies projects to support Esperance’s development, including infrastructure projects such as the Esperance waterfront and town centre revitalisation and the preparation of an economic development strategy.

Further information on the Esperance SuperTowns project can be found at www.gedc.wa.gov.au/what-we-do/Supertowns.aspx and the Regional Centres Development Plan (SuperTowns) at www.drd.wa.gov.au.

Transport

The Department of Transport is developing transport network plans under the “Moving Freight” and “Moving People” themes. These documents define the transport response to the growth and development profiles outlined in the State Planning Strategy.

Under these plans, the Department of Transport and relevant stakeholders have developed the *Western Australian Regional Freight Transport Network Plan* to guide the future development of the regional freight transport network to successfully respond to the needs of the growing Western Australian economy and population, while protecting the environment and quality of life aspirations valued by the community. (Department of Transport, 2013)





This plan defines the Principal Freight Network as part of the larger Western Australian transport network over which the movement of heavy freight will be supported and gradually concentrated. It seeks to optimise the productivity of intensively utilised mixed-traffic networks, allowing the efficient operation of more, and increasingly productive, regional freight movements. The plan identifies the network development and investment priorities over the next two decades, and planning and policy review priorities.

The Department of Transport has also developed the *State Aviation Strategy* in consultation with relevant stakeholders to support the State's economic and social development through aviation infrastructure and

services. The Strategy provides a framework for policy setting and future planning and investment in Western Australian international and domestic air services and airport infrastructure.

Conservation

The management of the conservation estate is administered under the *Conservation and Land Management Act 1994*, through management plans prepared by the Department of Parks and Wildlife for the Conservation Commission of Western Australia and the Marine Parks and Reserves Authority. To effectively manage the estate, it is important that management plans are contemporary. Current management plans as they relate to the conservation estate in the Goldfields-Esperance region are presented in Table 3 below.

Table 3: Current status of Goldfields-Esperance conservation estate management plans

Park or reserve	Management plan
Boorabbin National Park	Goldfields Region Regional Management Plan 1994–2004 No. 27
Cape Arid National Park	South Coast Region Regional Management Plan 1992–2002 No. 24; <i>Draft Esperance and Recherche Parks and Reserves Management Plan 2012</i>
Cape Le Grand National Park	South Coast Region Regional Management Plan 1992–2002 No. 24; <i>Draft Esperance and Recherche Parks and Reserves Management Plan 2012</i>
Eucla National Park	South Coast Region Regional Management Plan 1992–2002 No. 24
Fitzgerald River National Park	Fitzgerald River National Park Management Plan 1991–2001 No. 15 [Amended 2003 & 2011]
Frank Hann National Park	South Coast Region Regional Management Plan 1992–2002 No. 24
Goldfields Woodlands National Park	Goldfields Region Regional Management Plan 1994–2004 No. 27
Goongarrie National Park	Goldfields Region Regional Management Plan 1994–2004 No. 27
Peak Charles National Park	South Coast Region Regional Management Plan 1992–2002 No. 24
Stokes National Park	South Coast Region Regional Management Plan 1992–2002 No. 24; <i>Draft Esperance and Recherche Parks and Reserves Management Plan 2012</i>
other State managed conservation parks and reserves	miscellaneous





State lands

The Department of Lands plays an important role in managing Crown land and native title across the State. These are very important issues in the Goldfields-Esperance region, where extensive Crown land exists. Crown land, including pastoral leases, is generally managed through the *Land Administration Act 1997*.

The Framework identifies applicable initiatives relating to State lands in Table 7. In particular, opportunities to diversify activities on pastoral leases are being investigated through the Rangelands Reform Program and with all pastoral leases due for renewal in 2015, other Crown land management issues may also be reconciled.

Native title

The Commonwealth *Native Title Act 1993* provides for the recognition and protection of Aboriginal and Torres Strait Islander peoples' native title rights and interests. Certain government actions, such as grants of freehold or other exclusive tenures to other parties, have been found to extinguish native title. Claims for native title generally do not affect areas where native title has been extinguished, for example, land held in freehold or exclusive tenure in developed areas.

The resolution of native title claims can provide Aboriginal communities with greatly improved opportunities for cultural, social and economic development and greater certainty over land management. Prior to settlement being reached, negotiation generally occurs between the State Government and relevant claim groups. One recent example is the State Government's progression of the South West Settlement, which involves a number of Noongar claim groups. The proposed settlement area includes a small portion of the Goldfields-Esperance region at its extreme south-western edge, in the Shire of Ravensthorpe. For further information please refer to www.dpc.wa.gov.au/lantu/Claims/Pages/SouthWestSettlement.aspx.

Tourism

Tourism Western Australia is the State Government agency responsible for promoting tourism in Western Australia. Its focus is on marketing the State; developing, attracting and promoting major sporting, cultural and business events; and developing significant tourism infrastructure and projects.

In this regard, Tourism WA undertakes strategic planning – which can have implications for regional areas, including the Goldfields-Esperance region – such as the:

- *Government Strategy for Tourism in Western Australia 2020*, which highlights partnerships and a whole-of-government approach to increasing the value of tourism to the State to \$12 billion by 2020;
- *Western Australian Cruise Shipping Plan 2012-2020*; and
- *Western Australian Caravan and Camping Action Plan 2013-2018*, which has secured Royalties for Regions funding for a number of regional projects.

Further information is available from www.tourism.wa.gov.au.

Mining

The Department of Mines and Petroleum (DMP) is the lead agency for the management of an equitable and secure titles system for the mining, petroleum and geothermal industries. DMP, in partnership with the Department of the Premier and Cabinet, has also been leading the State's implementation of the Multiple Land Use Framework approach which was endorsed by the Standing Council on Energy and Resources in December 2013.

Exploration and extraction of mineral and petroleum resources are regulated under the *Mining Act 1978* and the *Petroleum and Geothermal Energy Resources Act 1967*. All proposed resource projects are assessed under these acts and where appropriate they can also be assessed under the *Environmental Protection Act 1986* and the Commonwealth *Environment Protection and Biodiversity Act 1999*. For these activities, there is generally no requirement for planning approval under the *Planning and Development Act 2005*.

Basic raw material extraction on Crown land is regulated by the *Mining Act 1978*, while local government regulates quarrying basic raw materials on private land.

For more information on the legislation and policy framework applicable to the Department of Mines and Petroleum, in addition to the latest statistics on mining in Western Australia, refer to its website at www.dmp.wa.gov.au.



Housing

Affordable Housing Strategy 2010–2020: Opening Doors to Affordable Housing (Department of Housing, 2010) is the State Government's affordable housing strategy. From a statewide perspective, the strategy contains a number of broad strategic actions and initiatives in response to general challenges of providing affordable housing.

At a regional level, the Department of Housing is developing a Goldfields–Esperance Regional Housing Strategy, which is currently in draft form. Ultimately, the regional housing strategy is intended to provide an evidence base to assist decision makers to plan and provide optimal housing allocation for the region. In doing so, it is to consider a range of issues including cost of developing housing, social housing access, access to finance, housing age and quality, suitability of current housing and mix, capacity of infrastructure to service development and risks and challenges for the housing market.

The issue of social housing in the region has also been explored through the work of other agencies. For example, Regional Development Australia Goldfields Esperance's *Social Housing Study: Access to affordable, adaptable and secure housing in the Goldfields–Esperance region* (RDAGE, 2013) provides an analysis of a range of housing data and up-to-date commentary on region-specific Indigenous and social housing issues.

From a planning perspective, housing availability can be influenced by residential land supply. To better understand the current availability of relevant zoned land in the Goldfields–Esperance region, the Department of Planning is proposing to undertake a land supply and infrastructure analysis. This is identified in Table 7 as a Framework initiative.

Emergency services

The emergency management environment is diverse and involves a coordinated effort from volunteers, the community, local and State authorities and, on occasions, mutual support from other states and at the national level.

An annual report on Western Australia's preparedness for emergencies is prepared by the State Emergency Management Committee for the Minister for Emergency Services. It provides a broad view on the State's capacity to deal with large-scale emergencies, reports progress in the emergency management sector

and highlights work underway to enhance capacity. Significantly, this process serves as an objective assessment of the State's preparedness for emergencies and examines how much has been done as well as the need for continuing work. (State Emergency Management Committee, 2012)

Utilities

Various utilities services are delivered via a range of providers including Government Trading Enterprises such as Western Power and the Water Corporation, local governments and private companies.

Service providers generally undertake strategic planning, for example the Water Corporation's *Water Forever Whatever the Weather: A 10-year plan for Western Australia* (Water Corporation, 2012). This planning may occur as part of their general business planning and may also have implications for land-use planning in regional areas.

Local government and communities

Encouraging better collaboration between government agencies, not-for-profit organisations and local governments in the delivery of all services is one of the general roles of the Department of Local Government and Communities. The Department is focused on the delivery of a more collaborative and coordinated range of community services at the local level.

3.1.3 Local framework

The Goldfields–Esperance region has nine local governments, including the City of Kalgoorlie–Boulder and the shires of Coolgardie, Dundas, Esperance, Laverton, Leonora, Menzies, Ngaanyatjaraku and Ravensthorpe.

Table 4 identifies relevant local planning strategies and schemes as they relate to the Goldfields–Esperance region's local governments, including those currently in operation and others in draft form. Opportunities exist to incorporate key regional planning initiatives into these planning tools as they are reviewed. The proposed Local Government Assistance Program identified as a Framework initiative in Table 7 intends to investigate assistance mechanisms for local governments to facilitate local planning processes, including reviews and amendments to local planning strategies and schemes, structure plans and environmental assessment.

Layout plans provide another important local planning instrument. These are generally used to guide land-use planning in Aboriginal settlements (see section 3.2.6), many of which fall outside of, or are not recognised or zoned within local planning schemes. The Department of Planning's Planning for Aboriginal Communities Program, identified as a regional planning initiative in Table 7, has been instrumental in developing many layout plans throughout the State in consultation with the affected communities and other stakeholders.

Reviewing local planning instruments and practices provide the opportunity to better align and integrate local planning strategies and schemes with broader

local government operational plans, such as corporate business plans required under the *Local Government Act 1995*. Any future local government reform should seek to capitalise on this opportunity as well as increase the capacity of local governments in the Goldfields-Esperance region to undertake regular local planning reviews. This will ensure that when development opportunities arise, local governments can respond quickly to proactively influence investment decisions and direct development to the most appropriate areas.

Table 4: Local planning framework for the Goldfields-Esperance region

Local government	Local planning strategy	Local planning scheme	Layout plans
City of Kalgoorlie-Boulder	2013	TPS No. 1 (1997)	
Shire of Coolgardie	Draft 2015	TPS No. 4 (2003) Draft LPS No. 5 (2015)	Kurrawang LP No. 2 (2006)
Shire of Dundas		TPS No. 2 (1994)	Iragul LP No. 1 (2006)
Shire of Esperance	2008	LPS No. 23 (2010)	
Shire of Ravensthorpe	2003 Draft 2013	TPS No. 5 (2003) New Scheme in preparation	
Shire of Menzies		TPS No. 1 (2003)	Tjuntjuntjara LP No. 1 (2004)
Shire of Leonora		TPS No. 1 (Leonora Townsite and Surrounds) (1984)	
Shire of Laverton		TPS No. 2 (2003)	Cosmo Newberry LP No. 1 (2001) Mount Margaret LP No. 1 (2001) Mulga Queen LP No. 1 (2002)
Shire of Ngaanyatjaraku			Mantamaru LP No. 2 (2013) Papulankutja LP No. 2 (2013) Patjarr LP No. 2 (2013) Tjirrkarli LP No. 1 (2004) Draft Tjukurla LP No. 1 (2013) Wanarn LP No. 1 (2004) Warakurna LP No. 1 (2004) Warburton LP No. 1 (2004) Draft Wingellina LP No. 1 (2013)

LPS – Local Planning Scheme; TPS – Town Planning Scheme; LP – Layout Plan



3.2 Activity centres

This Framework identifies the role and function of activity centres based on current community focal points for people, services, employment and leisure.

The Activity Centres Framework and Settlement Hierarchy described in this section of the Framework and illustrated in Figure 8 are expected to provide the core focus of growth for the region over the next 20 years. It is intended that the region's permanent resident population will be consolidated within existing townsites. It is important to note that the role a centre plays in the future may vary dramatically from the function it serves now, however it is anticipated that this will not significantly change without planning intervention and/or considerable investment. Current population levels of Goldfields-Esperance settlements are presented in Table 5.

The growth of centres should be managed in accordance with the identified hierarchy. A centre is considered to have, or should have, the potential to develop into the level that they are identified within the hierarchy. The following strategies have been developed in response to the Goldfields-Esperance region's key drivers and opportunities.

Activity centres strategies:

- AC1** Accommodate future Goldfields-Esperance region's population growth in general accordance with the proposed Activity Centres Framework and Settlement Hierarchy.
- AC2** Improve the social attractiveness of the region's activity centres as places to live, work and invest.
- AC3** Develop the region's settlements to be sustainable and liveable communities.
- AC4** Encourage fly-in fly-out workers to reside in the region.
- AC5** Locate workers accommodation within the Settlement Hierarchy to maximise local economic benefit and to enable its ultimate conversion for local purposes.

3.2.1 Regional City

Kalgoorlie-Boulder is considered to be the Goldfields-Esperance region's Regional City. From a regional perspective, regional cities are typically dominant centres for population, economic activity and employment and are considered to offer the most extensive and diverse range of high-order services and functions. They often service a catchment that includes the majority of the regional population as well as industrial, retail, commerce, administration, government and social services. Importantly, regional cities contain substantial regional health, education and recreation infrastructure.

With considerable existing hard and social infrastructure and about half of the region's population residing in the city, Kalgoorlie-Boulder offers the most diverse set of activities within the region. It plays a significant role in developing much of the region's industry and employment, is a regional cultural and entertainment hub and contains a wide range of comparative retail. Kalgoorlie-Boulder provides civic administration through its role as the seat of the region's most populous local government and contains regional and branch offices of several government departments.

3.2.2 Regional Centre

Esperance has been identified in this Framework as a Regional Centre. Regional centres typically offer a diverse range of high-order services and functions, but to a lesser degree than a Regional City. They are also distinguished from regional cities as they generally service a smaller population.

Regional centres are significant centres of economic activity, employment and population and form important hubs for regional industry, commerce and civic administration functions, including government offices and services. They typically provide comparative retail as well as higher-order education, recreation and health services.

As an important regional agricultural service centre and commercial and industrial hub, Esperance contains a substantial permanent population and provides civic administration, government offices and services, comparative retail, education, recreation and health. Tourism is also an important part of the local economy and its population swells noticeably due to seasonal influxes of tourists. Significantly, Esperance contains



regional port infrastructure that plays an indispensable role in supporting the region's mining and agricultural industries. The location of this strategic regional infrastructure further contributes to the Esperance's regional importance.

3.2.3 Sub-regional Centre

The Goldfields-Esperance region's sub-regional centres are Kambalda, Leonora, Norseman, Ravensthorpe and Warburton. Through the provision of goods and services, sub-regional centres support the population and economic activities within their surrounding hinterlands. The catchment areas of sub-regional centres usually extend beyond the immediate centre to include surrounding centres and districts and as such their services are utilised by a broader population.

Retail services offered in sub-regional centres largely focus on the day-to-day needs of their service population, however some comparative retail may also occur, particularly in larger centres. Other commercial and light industrial activities, which generally exist to service the local economies, are important functions of sub-regional centres. Sub-regional centres often provide local government administrative functions and a range of social infrastructure and services, including local recreation, health services and secondary education.

3.2.4 Local Centre

Local centres offer a level of service that generally deals with the daily needs of their service population, but with a lower level of choice than regional or sub-regional centres. Some local centres may also be the seat of local government. Major local centres are identified in instances where particular settlements are considered to service a larger population catchment and/or offer a greater number of services relative to other local centres. Most of the region's Aboriginal settlements are considered to function as local centres (see section 3.2.6).

3.2.5 Service Centre

Service centres are generally located on major State arterial roads and offer basic 'roadhouse' facilities, including minor vehicle repair and servicing. Service centres may play an important role in inter and intra-regional travel.

3.2.6 Aboriginal settlements

Aboriginal settlements are often remote from service and economic centres however, they can provide a number of urban functions and amenities such as housing, health, education, retail and recreation. *State Planning Policy 3.2 Aboriginal Settlements* defines an Aboriginal settlement as a discrete place that is not contiguous with a gazetted town; is inhabited or intended to be inhabited wholly or principally by persons of Aboriginal descent, as defined under the *Aboriginal Affairs Planning Authority Act 1972*; and which has no less than five domestic dwellings and/or is supported by essential services that are provided by one or more State agency(s).

In this context, Aboriginal settlements are considered to fit within the Settlement Hierarchy of the Goldfields-Esperance Activity Centres Framework. Of the 15 Goldfields-Esperance Aboriginal settlements, only Warburton is considered to function as a sub-regional centre, with the others considered to function as local centres.

3.2.7 Specialised Centre

Specialised centres are essentially centres of employment that concentrate on a specific type of activity. These centres can play an important part in regional development as they are often key drivers of innovation, education, economic growth and industrial development. They generally do not provide functions similar to those provided in other Goldfields-Esperance activity centres and are therefore considered to sit outside the proposed Settlement Hierarchy. Currently, operating mine sites in the region are considered to be the only specialised centres in the Goldfields-Esperance region.

3.2.8 Conservation areas

State-managed conservation parks and reserves (including national parks, marine parks and other State-managed conservation reserves) are distinguished from other activity centres as they purposely provide a conservation function and as such are considered to sit outside the proposed Settlement Hierarchy. They are considered to be influential to activity within the Goldfields-Esperance region and are therefore recognised as being important to the region's Activity Centre Framework.



The Goldfields–Esperance region’s 10 national parks and other conservation reserves are acknowledged as places where important activity occurs. They are important from an economic perspective as, through the promotion and conservation of some of the region’s standout natural and landscape assets, they attract visitors from outside the region. State-managed conservation parks and reserves are administered through management plans prepared by the Department of Parks and Wildlife.

State-managed conservation parks and reserves in the Goldfields–Esperance region generally contain numerous attractions and provide basic visitor facilities, which can include visitor information centres, campsites, picnic areas, walk trails, interpretation of natural and cultural values and boat launching facilities. As such, a single park or reserve can often contain several individual sites that provide amenity. The process for planning recreation and tourism use in these sites is considered through management plans (Table 3) and this is outside the scope of this Framework. Refer to individual management plans for specific locations and details on the concentration of particular activities, including camping and day-use sites, within State-managed conservation parks and reserves.

3.2.9 Local day-use sites

There are numerous day-use sites within and outside other Goldfields–Esperance activity centres. These sites offer various visitor amenities and facilities but generally have extremely limited or no formal provision for overnight accommodation. It is considered that the planning and management of individual sites constitute a local level issue and as such individual sites are not recognised as part of this Framework. Notwithstanding this, collectively day-use sites are acknowledged broadly as being important nodes for tourism activity at a regional level.

The management of day-use sites varies throughout the region and can often depend on the tenure of the subject land. Where relevant, the responsibility for the management of sites can include the:

- Department of Parks and Wildlife, particularly for those sites within World Heritage Areas and State-managed conservation parks and reserves, including national parks. The management of these sites are usually administered by management plans, which are outside the scope of this Framework;
- local government; or
- pastoral leaseholder.



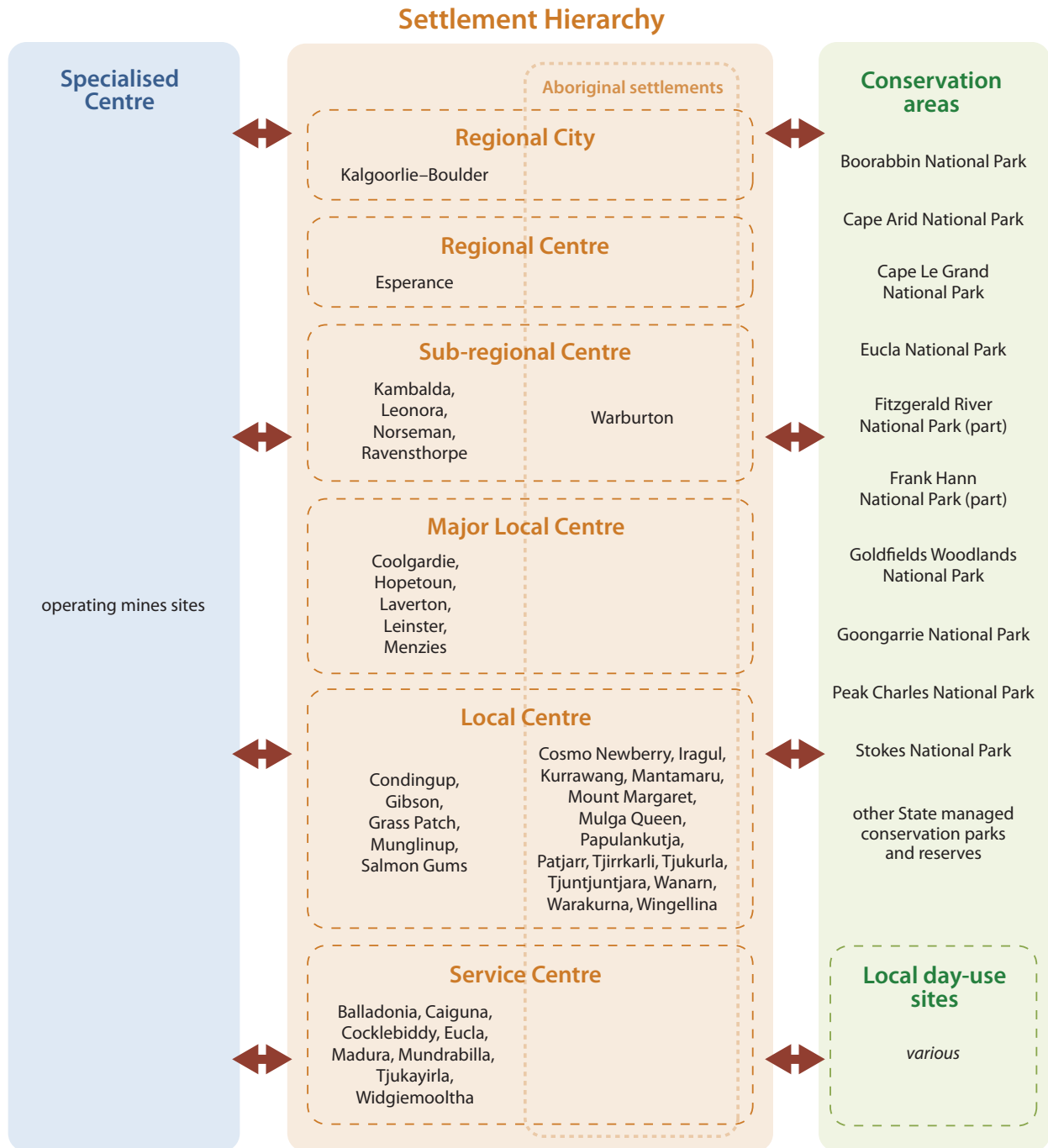


Figure 8: Goldfields–Esperance Activity Centres Framework

Table 5: Population of Goldfields–Esperance settlements

	Centre	2011 population ¹		Centre	2011 population
Regional City	Kalgoorlie–Boulder	30,844	Service Centre	Balladonia	n/a
Regional Centre	Esperance	11,432		Caiguna	n/a
Sub-regional Centre	Kambalda	2,700		Cocklebiddy	n/a
	Leonora	778		Eucla	n/a
	Norseman	777		Madura	n/a
	Ravensthorpe	391		Mundrabilla	n/a
	Warburton*	474		Tjukayirla	n/a
				Widgiemooltha	n/a
Major Local Centre	Coolgardie	954			
	Hopetoun	788			
	Laverton	417			
	Leinster	711			
	Menzies	n/a			
Local Centre	Condingup	n/a			
	Gibson	n/a			
	Grass Patch	n/a			
	Munglinup	n/a			
	Salmon Gums	n/a			
	Cosmo Newberry*	74			
	Iragul*	n/a			
	Kurrawang*	82			
	Mantamaru*	128			
	Mount Margaret*	93			
	Mulga Queen*	n/a			
	Papulankutja*	187			
	Patjarr*	n/a			
	Tjirrkarli*	n/a			
	Tjukurla*	n/a			
	Tjuntjuntjara*	205			
	Wanarn*	148			
	Warakurna*	178			
	Wingellina*	150			

* denotes Aboriginal settlements

¹ Each settlement's population has been derived from 2011 ABS Census where applicable. Due to very low population densities in parts of the Goldfields–Esperance region, the smallest geographic areas in which Census data is released (Statistical Areas Level 1) often extend over a very large geographical area much broader than a single settlement; and in some cases encompass several Goldfields–Esperance settlements. In these instances, where accurate 2011 Census data relating specifically to individual Goldfields–Esperance activity centres is unavailable, the table is denoted with n/a.



3.3 Population planning

The current Goldfields–Esperance population (2014 Preliminary Estimated Residential Population) is approximately 61,000 people (Australian Bureau of Statistics, 2015), with more than half (approximately 33,000) living within the City of Kalgoorlie–Boulder. The Shire of Esperance contains approximately 14,000 people, nearly a quarter of the region's population.

Historically, population growth in the Goldfields–Esperance region has generally been driven by growth in the resource sector. As such, future population growth is likely to continue to follow trends in economic growth and investment.

Population forecasts and growth scenarios are important to guide future regional planning. They, along with economic projections, can be applied to inform analysis of possible future demand in planning for infrastructure, land supply, townsite capacity and other considerations that require a medium to long-term timeframe for planning and/or construction.

3.3.1 Western Australia Tomorrow

Western Australia Tomorrow (Western Australian Planning Commission, 2015) contains population forecasts produced by the State Demographer. These are considered to be the State's official population forecasts. Forecasts have been produced for each local government area and planning region in Western Australia to the year 2026; and provide comprehensive demographic information about the age and sex structure of future populations.

Table 6 below summarises several forecasts that are applicable to the Goldfields–Esperance region, including those that are indicative of low (Band A), median (Band C) and high growth (Band E) forecasts. For further information on these forecasts, including the full range of forecast bands and an explanation as to how they were derived, please refer to the Planning WA website at www.planning.wa.gov.au. The WA Tomorrow forecasts are regularly reviewed so please refer to the above website for the latest status of the forecasts.





Table 6: Goldfields–Esperance population projections

Local government area/region	Band	Current population ¹	Population forecast (median value) ²			
		2014	2016	2021	2026	
Coolgardie	A	4,239	3,980	3,760	3,840	
	C	4,239	4,360	4,300	4,540	
	E	4,239	4,750	4,880	5,260	
Dundas	A	1,158	1,110	1,030	1,030	
	C	1,158	1,210	1,170	1,210	
	E	1,158	1,310	1,320	1,390	
Esperance	A	14,487	14,040	14,230	14,220	
	C	14,487	14,320	14,680	14,910	
	E	14,487	14,610	15,140	15,620	
Kalgoorlie–Boulder	A	33,310	33,440	34,100	34,780	
	C	33,310	34,650	35,860	37,020	
	E	33,310	35,950	37,690	39,340	
Laverton	A	1,291	1,330	1,390	1,430	
	C	1,291	1,400	1,500	1,570	
	E	1,291	1,480	1,620	1,720	
Leonora	A	2,630	2,500	2,520	2,500	
	C	2,630	2,630	2,700	2,720	
	E	2,630	2,760	2,890	2,960	
Menzies	A	401	370	360	370	
	C	401	420	440	470	
	E	401	470	520	570	
Ngaanyatjarraku	A	1,507	1,680	1,630	1,570	
	C	1,507	1,780	1,770	1,750	
	E	1,507	1,880	1,910	1,930	
Ravensthorpe	A	2,310	2,050	1,980	1,960	
	C	2,310	2,190	2,180	2,200	
	E	2,310	2,320	2,370	2,440	
Goldfields–Esperance Planning Region	A	61,333	60,500	61,000	61,700	
	C	61,333	62,960	64,600	66,390	
	E	61,333	65,530	68,340	71,230	

¹ 2014 Preliminary Estimated Residential Population (Australian Bureau of Statistics, 2015)

² WA Tomorrow (Western Australian Planning Commission, 2015)





3.3.2 Future scenarios

To provide an alternative to the population forecasts, population scenarios would have to be developed. Scenarios are not an official population forecast, but allow the investigation of opportunities over and above the historical trends, which may lead to alternative population futures. In addition, scenario population planning allows for greater timeframes to be considered as they are not expected to be as accurate as a forecast model. The development of scenarios may consider the possible population impacts of seasonal population influxes and additional economic activity and investment that may occur in the region.

The development of population growth scenarios is anticipated to commence through the regional investment blueprints that are under development by the regional development commissions.

3.4 Economic and regional infrastructure development

The following economic and regional infrastructure development strategies have been developed in response to the Goldfields-Esperance region's key drivers and opportunities:

- E11** To encourage a whole-of-government approach to providing advice on regional infrastructure requirements to support the activation and development of the Goldfields-Esperance regional economy.
- E12** Encourage the diversification of the Goldfields-Esperance regional economy.

For the purpose of the Framework, regional level infrastructure is broadly considered to enable or support the development of the regional economy; and/or perform a function that caters for a regional catchment. Regional infrastructure provision generally results in economic and/or social benefits for the region. This distinguishes it from sub-regional and local infrastructure, where the benefits predominantly extend to a more localised area.

The expansion of economic activity in the Goldfields-Esperance region will underpin its prosperity and population growth. Opportunities for economic expansion have been recognised across various sectors of the regional economy including mining, agriculture, industrial and tourism sectors. However, the expansion of these sectors and further economic diversification relies on key infrastructure including water, power, sewerage, roads, port and airport facilities. The provision of supporting infrastructure and essential services, particularly at a regional level, must be coordinated to support economic development and capitalise on opportunities for growth.

The provision of regional infrastructure can lead to the activation or stimulation of multiple sectors of the regional economy. It can also provide opportunities for economic diversification within the region and greater amenity to the region's population. The expansion and diversification of industries in the Goldfields-Esperance region would make its regional economy more robust, which is essential to attracting investment and growth to the region. The benefits of a strong, prosperous and more diversified regional economy extend to the communities and residents within the region and more generally to the State.

Planning regional infrastructure is important to support future regional development and growth. Investigations and planning projects that specifically examine regional infrastructure requirements is often an essential first step in infrastructure delivery. Infrastructure planning at this targeted level allows potential solutions to be considered well in advance of when actual built infrastructure is required. It allows the consideration of numerous options, potentially including an evaluation of benefits, future demand, limitations and obstacles that may impact on the efficient delivery of further infrastructure. This process helps justify any measures required to secure or protect necessary land and resources to facilitate the delivery of future regional infrastructure efficiently and effectively.

Providing additional regional infrastructure and replacing or upgrading existing infrastructure that has either aged or has inadequate capacity is likely to contribute to the development of the Goldfields-Esperance region's economy. The State Government has already invested in a number of regional infrastructure





projects that may contribute to the region's development. For example, a range of Goldfields–Esperance regional infrastructure projects have been recently undertaken or committed to, including:

- Esperance Port capacity expansion, including development of a multi-user iron ore facility;
- achieve defined interstate rail network standards for the Eastern Goldfields Railway via a program of duplications and crossing loops¹;
- Esperance Port Access Corridor – including Coolgardie–Esperance Highway stage 1¹ and associated rail realignment;
- construct Ravensthorpe heavy vehicle bypass¹;
- Regional Mobile Communications Project;
- Kalgoorlie Health Campus redevelopment – stage 1;
- Esperance Health Campus redevelopment – stage 1;
- Kalgoorlie–Boulder Community High School redevelopment;
- Eastern Goldfields Regional Prison redevelopment;
- Kalgoorlie Courthouse redevelopment;
- Kalgoorlie–Boulder Indigenous Visitors Accommodation Project;
- Peak Charles National Park Campground and Day Use Area redevelopment; and
- Fitzgerald River National Park Improvement Project.

In addition, potential regional infrastructure projects may encompass a breadth of different infrastructure types including hard infrastructure (e.g. transport and energy projects), social infrastructure (e.g. health and education projects) and infrastructure planning. It needs to be recognised that any potential Goldfields–Esperance regional infrastructure projects will need to compete with infrastructure projects in other regions for funding and resources and funding for individual infrastructure projects will be subject to normal budgetary and Treasury processes. In this regard, Figure 9 illustrates the considerations for identifying infrastructure requirements throughout the State.

² Project is identified as a *Freight Transport Priority to 2031* from the Department of Transport's *Western Australian Regional Freight Transport Network Plan*.



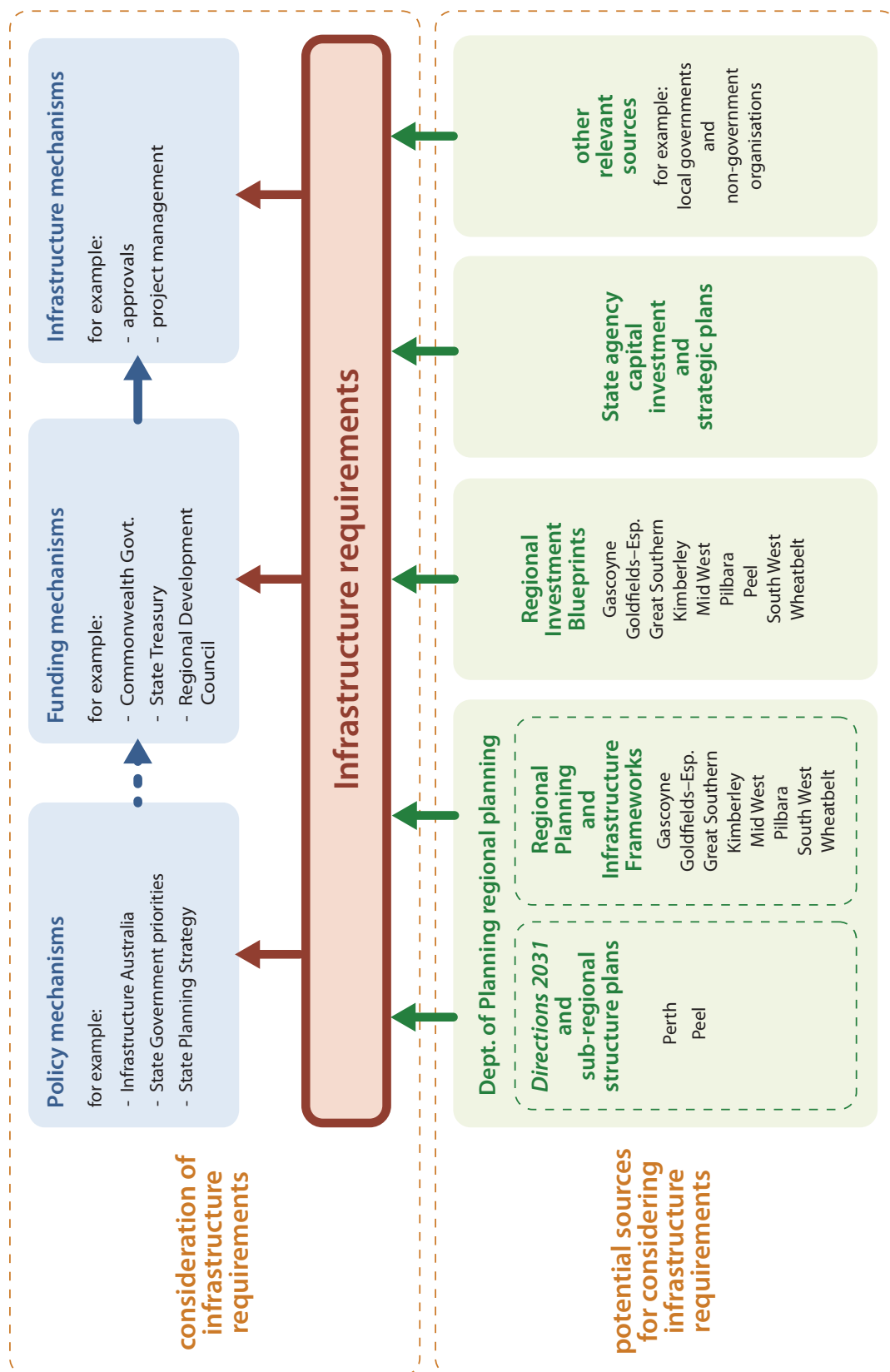


Figure 9: Considerations for identifying infrastructure requirements throughout the State



3.5 Environmental and heritage planning

The Goldfields–Esperance region's environmental and heritage values are abundant and diverse and are of intrinsic importance at local, State, national and international levels. Natural and cultural resources are invariably linked to regional economic activity, and are indispensable to the region's tourism, agricultural and resource industries in particular. The Goldfields–Esperance region is within the Rangelands natural resource management (NRM) region.

The following environmental and heritage planning strategies have been developed in response to the Goldfields–Esperance region's key drivers and opportunities:

- EH1** Protect and manage the region's significant natural resource assets.
- EH2** Investigate means to enable all sectors of the regional economy to meet the possible challenges presented by forecast long-term weather trends.
- EH3** Investigate more equitable ways to manage a balance between natural resource demands and environmental values.
- EH4** Protect and manage the region's cultural heritage and arts, including significant Aboriginal places, historic places and landscapes of significance.
- EH5** Determine the need for additional tourism and recreation sites to cater for an expected increase in demand.

Land-use planning has an important role in helping protect and manage natural resources and cultural assets, as it provides a means through which the impacts of land uses in areas containing significant resources and assets can be controlled. In particular, strategic planning at a regional scale allows upfront consideration of these assets early in the land-use planning process and at a scale that is consistent with the extent of natural resource assets. It also allows greater effectiveness in dealing with possible cumulative impacts of individual planning proposals. Regional strategic planning also provides a context

for planning by local governments, which are encouraged to integrate natural resource management considerations into local planning strategies and schemes.

Numerous government and non-government agencies undertake natural resource management planning and projects in the Goldfields–Esperance region. For example, non-government organisations such as Rangelands NRM Western Australia and South Coast NRM have a number of strategic priorities to support and encourage the sustainable use of natural resources. Between them, they are responsible for many natural resource management activities and projects within the region.

Responding to an evolving environment, including through adapting management practices, is an important economic and environmental consideration for the Goldfields–Esperance region. For example, recent trends in the temperature, wind and rainfall in the region have progressively departed from historical weather patterns and forecasts indicate that these tendencies are set to continue. Climate change potentially 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; and
- coastal development setbacks and acceptable shoreline stabilisation techniques in response to sea level rise, storm events and changes in wave and wind patterns.

Initiatives to investigate such matters are occurring at a Federal, State and local level. It is important that these are given due consideration as they may have implications for future land-use planning in the Goldfields–Esperance region.

The desire to expand the region's economy to attract growth poses a challenge, as a large degree the Goldfields–Esperance region's economy depends on its significant environmental and heritage assets. Maximising the economic return from the region's significant environmental and heritage assets without





damaging the assets is fundamental in ensuring ongoing sustainability and prosperity for the region on both economic and environmental fronts. Based on this premise, the following initiatives are supported by the Framework:

- the preparation of a natural resource management plan report for Goldfields-Esperance to assist strategic regional land use planning for the region;
- identification of high quality agricultural land;
- investigation of basic raw materials needs and resources for the region;
- development of a fisheries management plan for the South Coast Bioregion;
- coastal management vulnerability and risk assessment study, including coastal geomorphology mapping;
- adaptation planning for economic activities and land uses that may be affected in the event that forecast climatic changes are realised; and
- review of sites identified in Goldfields-Esperance local government municipal heritage inventories.

The Framework also supports the ongoing implementation of current practices, programs and recently completed initiatives that aim to manage natural resource assets, including the:

- implementation of *A Biodiversity and Cultural Conservation Strategy for the Great Western Woodlands* (Department of Environment and Conservation, 2010);
- incorporation of *Better Urban Water Management* framework principles in new development such as residential, rural residential and industrial areas;
- implementation of regional water planning to guide sustainable water allocation for future potable and non-potable water uses;
- protection of public drinking water source areas through appropriate strategies, reservations and special control areas in local planning strategies and schemes; and
- preparation and/or implementation of management plans for national parks and marine parks.



Table 7: Implementation Actions

No	Initiative	Details	Lead agency	Status	Local govt	SPS ¹
Planning and Governance						
1	Planning Reform	Ongoing implementation of strategic priorities and actions for the reform of the planning system as a result of Phase 1: Planning Makes It Happen – a blueprint for planning reform; and the development of Phase 2.	DoP	Underway	All	Ec, PI, SI, Env
2	Planning for Aboriginal Communities Program	Implementation of the DoP Planning for Aboriginal Communities Program within the Goldfields-Esperance region.	DoP	Underway	All	Ec, PI, SI
3	Regional Population Scenarios for the Goldfields-Esperance	To advise on population growth scenarios and/or aspirations for the Goldfields-Esperance region.	GEDC	Proposed	All	Ec, PI, SI
4	Goldfields-Esperance Land Supply and Infrastructure Analysis	Investigate the need for a residential and industrial land supply analysis for settlements in the Goldfields-Esperance region including an investigation of the required infrastructure to service demand.	DoP	Proposed	All	Ec, PI, SI
5	Goldfields-Esperance Local Government Coastal Planning Study	Investigate the need for a Goldfields-Esperance Coastal Planning Study to inform regional and local government planning.	DoP	Proposed	SoR, SoE, SoD	Ec, Env
6	Local Government Assistance Program	Investigate assistance mechanisms to local governments, similar to that within the Mid West and Gascoyne, for the Goldfields-Esperance region to facilitate local planning processes including reviews and amendments to local planning strategies and schemes, structure plans and environmental assessment.	DoP	Proposed	All	Ec, PI, SI, Env
7	Southern Inland Health Initiative	To dramatically improve medical resources and 24 hour emergency coverage within the Southern Inland catchment area, including areas within the Goldfields-Esperance region.	WA Health	Underway	All	SI
8	Draft Country Sewerage Policy	Review the draft Country Sewerage Policy 2002.	WA Health	Underway	All	PI
9	WA Port Reform	Refine the governance structure of WA ports, including the consolidation of existing regional port authorities, in response to the recent WA ports review.	DoT	Underway	SoE	Ec, PI
10	PortLink	PortLink Inland Freight Corridor Development Plan. The concept aims to ultimately link Port Hedland, Kalgoorlie-Boulder, Esperance and Geraldton, and has the potential to build a more robust and flexible freight network.	DoT	Underway	All	Ec, PI

No	Initiative	Details	Lead agency	Status	Local govt	SPS ¹
Planning and Governance (cont.)						
11	Goldfields-Esperance Regional Housing Strategy	To develop a regional housing strategy to develop an evidence base to assist decision makers to plan and provide optimal housing allocation for the region. Relevant issues to be considered include cost of developing housing, social housing access, access to finance, housing age and quality, suitability of current housing and mix, capacity of infrastructure to service development and risks and challenges for the housing market.	DoH	Underway	All	SI
12	Regional Waste Management Planning	To investigate the need for comprehensive strategic regional waste management planning in alignment with the WA Waste Authority's <i>Western Australian Waste Strategy</i> , including strategic waste management plans and associated landfill environmental management plans.	DER, GEDC, LGA	Proposed	All	PI, Env
Economy and employment						
13	Goldfields-Esperance Regional Economic and Employment Lands Study	Investigate the need for a regional economic and employment lands strategy for the Goldfields-Esperance region to inform regional and local planning.	DoP	Proposed	All	Ec
14	Goldfields-Esperance Regional Tourism Planning Study	To understand current and potential tourism demand and investigate the need for additional tourism initiatives and requirements in the Goldfields-Esperance region.	GEDC	Underway	All	Ec, Env
15	Goldfields-Esperance Regional Digital Economy Strategy	Establish a strategy to guide the development of the Goldfields-Esperance region's telecommunications infrastructure to adequately service the region's economic and social requirements, including consideration of the impacts of new and emerging communications technologies.	DoC	Proposed	All	Ec
16	Rangelands Reform Program	Review land tenure arrangements in the Rangelands including diversification of uses in pastoral lands.	DoL	Underway	All	Ec
17	Esperance Region Economic Development Strategy	To provide economic analysis and evidenced based guidance to assist investment and decision making. This is to involve consideration of the region's natural comparative advantages; identifying new, durable economic drivers and strategic employment opportunities; and fostering entrepreneurial activity.	GEDC	Underway	SoE, SoR, SoD	Ec
18	AgriFood 2025+	Scenarios based initiative to examine future opportunities for a globally competitive agriculture and food industry in WA.	DAFWA	Underway	All	Ec

No	Initiative	Details	Lead agency	Status	Local govt	SPS ¹
19	Pathways to Resilience	Contribute to building profitable, innovative and sustainable farm businesses in lower rainfall environment.	DAFWA	Underway	SoE, SoR	Ec
20	Future Horticulture	Aims to improve planning and policy outcomes that support the continuing development of fresh food in southern WA (>26°S), as well as identify new and alternative water supply options to support future growth opportunities for irrigated agriculture.	DAFWA	Proposed	SoE, SoR	Ec
21	More Sheep	More Sheep is a partnership initiative of the Department of Agriculture and Food Western Australia (DAFWA) and the Sheep Industry Leadership Council (SILC) to address the critical issue of the decline in the Western Australian flock. Its primary focus is Western Australian producers, to assist them become more profitable by producing more sheep for the investment in their current flocks.	DAFWA	Underway	All	Ec
Transport and infrastructure						
22	Goldfields-Esperance Regional Investment Blueprint	Development of a Regional Investment Blueprint to inform State Government investment, that from a regional development perspective outlines the future direction of the Goldfields-Esperance region, including the identification of priority infrastructure.	GEDC	Underway	All	Ec, PI, SI
23	Goldfields-Esperance Revitalisation Initiative	The Goldfields-Esperance Revitalisation Initiative is a Royalties for Regions State Budget funding initiative that will be available for priority infrastructure projects in the Goldfields-Esperance region. Funding has been allocated across four financial years to 2016-17.	GEDC	Underway	All	Ec, PI, SI
24	Goldfields-Esperance Regional Infrastructure Corridor Planning	To investigate wider regional corridor planning for the Goldfields-Esperance region.	DoP	Proposed	All	PI
25	Goldfield-Esperance Regional Social Infrastructure Requirements Study	Undertake the Goldfields-Esperance Social Infrastructure Requirements Study to investigate social infrastructure requirements within Goldfields-Esperance to inform regional and local government planning.	DoP	Proposed	All	SI
26	Goldfields-Esperance Regional Energy Planning Study	Undertake a study of the Goldfields-Esperance regional energy infrastructure requirements, including transmission and generation, to meet demand and support regional development.	GEDC	Proposed	All	PI

No	Initiative	Details	Lead agency	Status	Local govt	SPS ¹
Natural resources and cultural heritage						
27	Basic Raw Materials Study	To investigate the need for a study into basic raw material needs and resources for the Goldfields-Esperance region.	DMP	Proposed	All	Env
28	Goldfields-Esperance regional water planning	Coordination of regional water planning issues including groundwater allocation planning, drinking water source protection planning and rural water planning.	DoW	Underway	All	Env
29	Coastal management vulnerability and risk assessment study	Investigate the need to undertake mapping of coastal geomorphology to determine coastal stability.	LGA's	Proposed	SoE, SoR, SoD	Env
30	Greater Esperance Flora and Vegetation Survey	Investigate the need to identify flora and vegetation communities/assemblages in the greater Esperance region.	DPaW	Proposed	SoE	Env
31	Goldfields-Esperance Conservation Estate management planning	Increasing forward management planning for the region's conservation estate (both marine and terrestrial) including Cape Le Grand National Park – Nature Bank Project, Fitzgerald River National Park Initiative, and the Great Western Woodlands; as well as developing management plans for Eucla NP, Stokes NP and Cape Arid NP.	DPaW	Underway	All	Ec, Env
32	Fisheries Management Plan for the South Coast Bioregion	Finalise an ecosystem based fisheries management report for the South Coast Bioregion, which includes coastal areas of the Goldfields-Esperance region. Develop and review fishery resource management plans for key south coast fisheries and resources in accordance with Department of Fisheries priorities.	DoF	Underway	SoE, SoR, SoD	Ec, Env
33	Natural Resource Management Land Use Plan Report	Prepare a natural resource management land use plan report to investigate the integration of natural resource management into strategic regional land use planning for the region.	DoP	Underway	All	All
34	Identification of High Quality Agriculture Land	Investigate the need to determine state and regional areas of High Quality Agriculture Land following identification and mapping of agricultural land quality for dryland and irrigated agriculture	DAFWA	Proposed	SoE, SoR	Ec
35	Risk Management Strategy	Minimise vulnerability to agricultural industries seasonal variability through mitigation and adaptation strategies.	DAFWA	Underway	All	Ec
36	Review of Goldfields-Esperance Local Government Municipal Heritage Inventories	To investigate the need to conduct a review of municipal heritage inventories in the Goldfields-Esperance region to identify conservation priorities and inform subsequent updates to inventories.	LGA's	Proposed	All	SI

¹ This column indicates an initiative's alignment with the strategic directions as presented in the *State Planning Strategy 2050* (Western Australian Planning Commission, 2014). The abbreviations for relevant strategic directions are explained in the list following this table.





List of acronyms

Lead agencies and local governments

DAFWA	Department of Agriculture and Food WA
DoC	Department of Commerce
DCA	Department of Culture and the Arts
DER	Department of Environment Regulation
DoF	Department of Fisheries
WA Health	Department of Health
DoH	Department of Housing
DoL	Department of Lands
DMP	Department of Mines and Petroleum
DPaW	Department of Parks and Wildlife
DoP	Department of Planning
DoT	Department of Transport
GEDC	Goldfields–Esperance Development Commission
LGAs	local government authorities
SoD	Shire of Dundas
SoE	Shire of Esperance
SoR	Shire of Ravensthorpe

Strategic directions from the *State Planning Strategy 2050*

Ec	Economic development
PI	Physical infrastructure
SI	Social infrastructure
Env	Environment
Sec	Security







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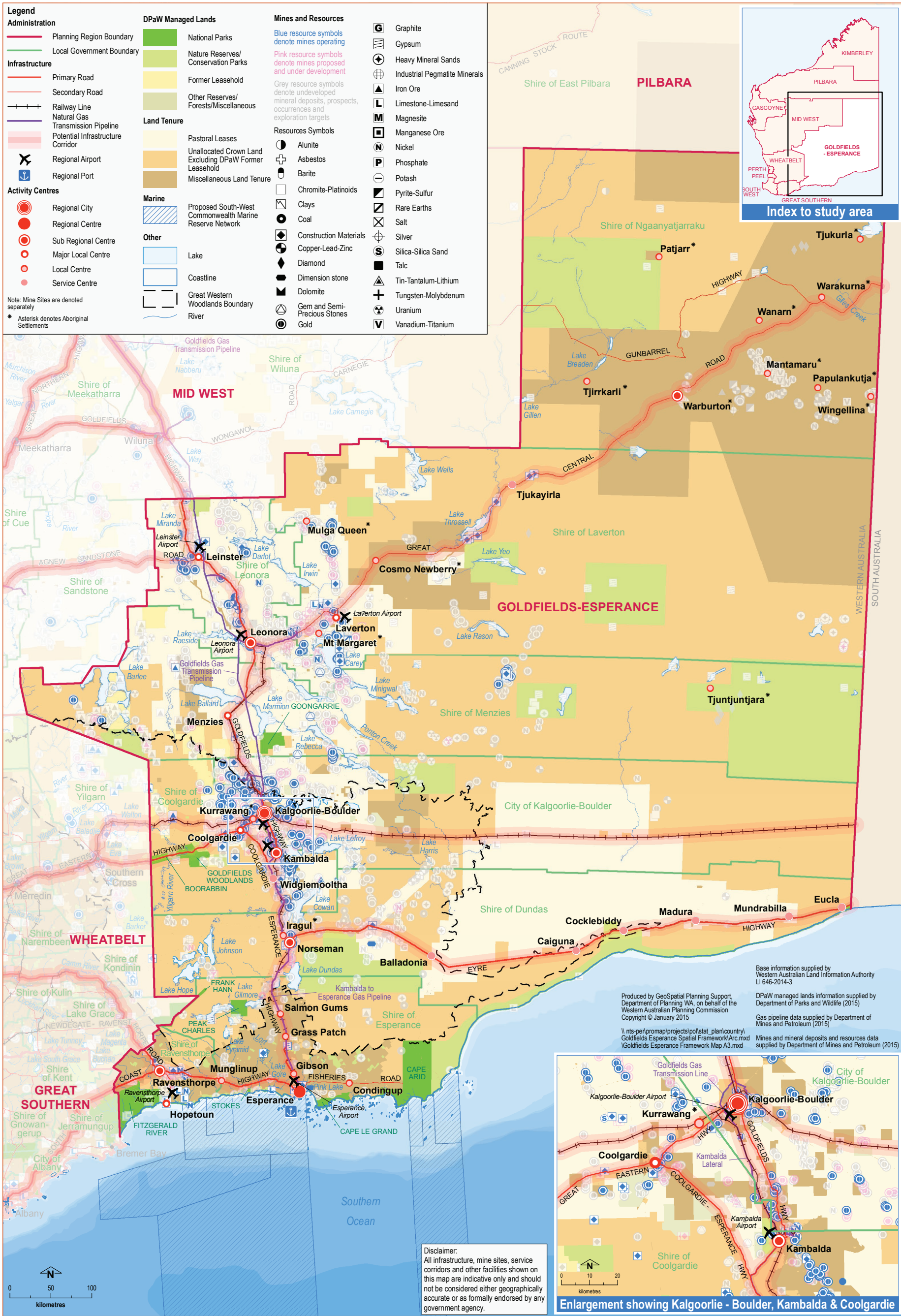


Figure 10: Goldfields-Esperance Regional Planning and Infrastructure Framework map

