



## PART 1 STRATEGIC OVERVIEW

PLANNING FOR GROWTH UNDER THE  
REGIONAL CENTRES DEVELOPMENT PLAN



Government of **Western Australia**  
Department of **Regional Development**



Department of **Planning**  
**Western Australian Planning Commission**



**ROYALTIES**  
FOR REGIONS



**GOLDFIELDS**  
**ESPERANCE**  
DEVELOPMENT COMMISSION



*City of*  
**KALGOORLIE-BOULDER**



**LANDCORP**



**WSP** | **PARSONS**  
**BRINCKERHOFF**

This Growth Plan has been prepared by the Kalgoorlie-Boulder Growth Plan Partnership as the basis for a locally owned and driven strategic plan for the future of the Kalgoorlie-Boulder economic zone. The preparation of the Growth Plan was made possible by the State Government's Royalties for Regions program.



## PART 1

# STRATEGIC OVERVIEW

PLANNING FOR GROWTH UNDER THE  
REGIONAL CENTRES DEVELOPMENT PLAN

APRIL 2017

## **Barna Bulkaringu “from the ground up”**

*Cover art and story by Kgukgi Catherine Noble*

The yilba – goanna represents people that have had their paths broken and changed. Some have lost their way and are searching for meaning and fulfilment.

Along that journey is goodness from nature..... plenty of fresh water from the rockholes and bush tucker....quandongs, bardies (wichetty grubs) and karlkurlas (silky pears)....the seeds of the silky pear are floating through the bush and will start a new cycle of life and create new growth.

The seven sisters (which coincide with the seven priority Focus Areas of the Growth Plan) represent a spiritual journey of togetherness and helping each other. The seven sisters came from the Dreamtime and had to travel across the land and overcome many challenges such as hunger, fear, pain and also celebrated with joy, sharing and love before they could return back to the ancestral spirits and continue to shine to remind those on earth to live a good way.....

## ACKNOWLEDGEMENTS

Our thanks go to all those individuals and organisations who gave their time, knowledge and ideas during the development of this Growth Plan. In particular, we acknowledge the contributions made by:

### *The Growth Plan Partners*

#### **Mayor John Bowler (Chair)**

Tony Crook / Kate Fielding (Deputy Chair)

Cr Laurie Ayers

Cr Mandy Reidy

John Walker

Shayne Flanagan

Jessica Biddle

Bill McKenzie

Carol Mann

Julia Shadlow-Bath

Trevor Donaldson

Ian Butler

Holly Phillips

Jim Coxon

Christine Boase

Terrence Winner

Georgia Foulkes-Taylor

Tendai Magadza

Andrew Mann

Kat Neve

Paul Ferrante / Patrick Smit

#### **City of Kalgoorlie-Boulder**

Goldfields-Esperance Development Commission

City of Kalgoorlie-Boulder

City of Kalgoorlie-Boulder

City of Kalgoorlie-Boulder

Goldfields Esperance Development Commission

Kalgoorlie-Boulder Chamber of Commerce and Industry (KBCCI)

KBCCI Education Committee, Central Regional TAFE, Goldfields-Esperance Tertiary Education Alliance

Regional Development Australia Goldfields Esperance

Regional Development Australia Goldfields Esperance

Goldfields Land and Sea Council

Kalgoorlie Consolidated Gold Mines

The Chamber of Minerals and Energy WA

Northern Star Resources Limited

AngloGold Ashanti

YMCA

Fleck Perry Photos

Creative Kulcha

Department of Regional Development

Department of Planning

LandCorp



## FOREWORD

The development of a Growth Plan for Kalgoorlie-Boulder has been a very timely and important initiative for our city. It complements the strategic directions set with the Goldfields-Esperance Regional Investment Blueprint, and is provided at a time when Kalgoorlie-Boulder faces some significant socio-economic challenges.

The Growth Plan has compelled us to review where we are, where we are going and to interrogate our potential futures. It has never been more important to have a plan that not only sets out a vision, but establishes a framework and priority actions for getting there.

As a regional centre, Kalgoorlie-Boulder has much going for it – our globally significant mining industry, high levels of employment and incomes, a high standard of living, world-class institutions such as the Western Australian School of Mines and a thriving commercial sector. Our people and our industries have a proud history and reputation for getting things done and for innovation and adaptation in the face of challenges.

There is, however, a lot more we can do and a lot that we have to do to ensure that Kalgoorlie-Boulder reaches its full potential and provides future generations with a quality of life that is sustainable, prosperous and rewarding for all that call Kalgoorlie-Boulder home.

The development of the Growth Plan has been a partnership that brought together key local, regional and State Government stakeholders with industry and the broader community. Over 1000 direct stakeholder interactions were recorded during the project, including workshop and forum attendances, and survey responses, with more than 31,300 social media interactions via the project website, Facebook, Twitter and LinkedIn.

It has been an intensive process with a multitude of specialist reports, analysis and engagement processes to help develop the evidence base and the local context to inform our future strategic direction. It has also been a rewarding experience.

The Growing Kalgoorlie-Boulder Futures Forum held in May 2016, provided a fantastic opportunity to hear from internationally renowned speakers and to learn from other locations that have successfully brought about change and collaborated to drive future economic development. The Forum was attended by more than 300 participants and provided an opportunity to collaborate, celebrate, motivate and cogitate. It generated many ideas and conversations that not only assisted to inform the Growth Plan, but which will continue to inform future possibilities. Hopefully, it is something that we repeat in the future.

The Growth Plan itself will rapidly become superseded if we let it – in fact the economic outlook has changed significantly even in the past 12 months of the project. It is a tool and a resource to be used and kept alive. If it ends up sitting on your shelf gathering dust – then remember who left it there!

**John Bowler**

*Chair Growth Plan Partnership  
April 2017*

## TABLE OF CONTENTS

Acknowledgements	3
Foreword	4
1. STRATEGIC OVERVIEW .....	8
1.1 ABOUT THIS GROWTH PLAN .....	8
1.1.1 Why a Growth Plan? .....	8
1.1.2 Kalgoorlie-Boulder Economic Zone .....	8
1.1.3 State, Regional and National Planning Context .....	9
1.1.4 Who Has Been Involved? .....	11
1.2 A VISION FOR KALGOORLIE-BOULDER .....	12
1.3 STRATEGIC POSITION AND IDENTITY.....	14
1.3.1 Kalgoorlie-Boulder Today.....	14
1.3.2 Our Economy.. .....	17
1.3.3 Current Industry Performance and Emerging Opportunities.....	21
1.3.4 Planning for the Future .....	21
1.3.5 Enabling Economic Growth.....	24
1.4 GROWING KALGOORLIE-BOULDER - AN INTEGRATED GROWTH STRATEGY.....	28
1.4.1 Priority Focus Areas.....	29
1.4.2 Our Growth Priorities. ....	56
1.5 GOVERNANCE OF THE GROWTH PLAN.....	58
1.6 PERFORMANCE MANAGEMENT FRAMEWORK.....	60
1.6.1 Theory of Change .....	60
1.6.2 Monitoring and Evaluation .....	62
1.6.3 Implementation Requirements .....	64
1.7 SUPPORTING DOCUMENTS .....	66
Glossary of Terms	67
Summary of Acronyms	70
Footnotes	73
Bibliography	76

## FIGURES

1.1	Kalgoorlie-Boulder Economic Zone and Local Government Areas .....	9
1.2	Western Australian Planning Context .....	10
1.3	An Integrated Planning Approach.....	11
1.4	A Vision for Kalgoorlie-Boulder .....	13
1.5	Kalgoorlie-Boulder and the Goldfields-Esperance Region.....	15
1.6	Major Importers of Gold and Nickel from Kalgoorlie-Boulder.....	18
1.7	Points of Interest.....	20
1.8	Growth Scenarios - Real Output by Industry, Kalgoorlie-Boulder 2015-16 to 2029-30 .....	23
1.9	Growth Scenarios - Kalgoorlie-Boulder Population Projections, 2015-16 to 2029-30 .....	23
1.10	Economic Development Paradigm.....	24
1.11	Summary of Key Strengths and Challenges .....	27
1.12	Kalgoorlie-Boulder Strategic Growth Themes and Key Enablers .....	29
1.13	Kalgoorlie-Boulder Priority Focus Areas.....	30
1.14	Physical Constraints to Growth .....	53
1.15	Interim Structure of the Growing Kalgoorlie-Boulder Partnership.....	59
1.16	Growing Kalgoorlie-Boulder - Initial Implementation Priorities.....	60
1.17	Dynamics of Socio-Economic Development.....	60
1.18	Summary of Growth Plan Theory of Change.....	61

## TABLES

Table 1.1	Potential Priority Transport Projects.....	38
Table 1.2	A Snapshot of Kalgoorlie-Boulder's Growth Priorities.....	56
Table 1.3	Headline Indicators.....	62
Table 1.4	Intermediate Indicators .....	63

## APPENDICES

Appendix 1.1	Physical Constraints to Growth .....	80
--------------	--------------------------------------	----

### Specialist Scopes of Works

A number of specialist studies were conducted as part of the development of the Growth Plan. These studies have been referred to in all three parts of the Growing Kalgoorlie-Boulder documentation. The documents and consultancy reports were not endorsed by the Growth Plan Partnership (GPP) and do not necessarily represent the views of the GPP. A list of these documents can be found in Section 1.7.

The reports are available on request from the City of Kalgoorlie-Boulder and the Goldfields Esperance Development Commission.

# 1. STRATEGIC OVERVIEW

## 1.1 ABOUT THIS GROWTH PLAN

The Kalgoorlie-Boulder Growth Plan is comprised of three parts:

### Part 1: Strategic Overview

This provides an introduction to the Growth Plan and outlines the key strategies, actions, governance arrangements and performance management framework underpinning the Plan.

### Part 2: Program of Action

This provides more detail on the key actions, priority initiatives and implementation requirements.

### Part 3: Background Report

This provides further context and background on the preparation of the Growth Plan, the evidence base underpinning the Plan and summarises the findings of specialist consultants and the stakeholder engagement process.

### 1.1.1 Why a Growth Plan?

Kalgoorlie-Boulder is at a critical time in its development. We are no longer just a mining town but a major regional city servicing a diverse and growing population. Our future growth and prosperity requires a long term plan that builds on our strengths and promotes sustainable economic growth. A plan that is based on a clear vision, well researched priorities and strong local leadership.

Kalgoorlie-Boulder is one of eleven regional centres identified in the Western Australian Planning Commission's State Planning Strategy 2050 (SPS) as being of particular strategic importance to the future development of Western Australia (WA). These regional centres have a critical role in supporting the State's

future development, with each centre partnering with the State Government to develop and implement Growth Plans under the Regional Centres Development Plan (RCDP).

This Growth Plan is a socio-economic development strategy that has been developed by Kalgoorlie-Boulder for Kalgoorlie-Boulder. It seeks to promote a sustainable and prosperous future for the city as part of a network of competitive, growing and resilient regional centres across WA, linking Kalgoorlie-Boulder and WA to the rest of Australia and the world.

The Growth Plan provides an important strategic planning platform for governments to improve collaboration and decision making. It is also a tool to assist businesses to realise their growth potential and a catalyst for the community to engage in the future of Kalgoorlie-Boulder and to drive improved wellbeing and prosperity.

The Growth Plan represents an important milestone, but it is not an end-point. The strategies and actions contained in this document are based on the input of key stakeholders as well as research at a given point in time. To achieve its objectives, the growth planning process must be ongoing in order to adapt to new circumstances, new ideas, new opportunities and new barriers as they emerge.

### 1.1.2 Kalgoorlie-Boulder Economic Zone

The Kalgoorlie-Boulder Economic Zone has been defined as the seven Statistical Area Level 2 (SA2) boundaries that make up the Goldfields sub-region. These seven SA2s are Boulder, Kalgoorlie, Kalgoorlie – North, Kalgoorlie Airport, Kambalda – Coolgardie – Norseman, Leinster – Leonora, and Trafalgar (WA). This provides a comprehensive representation of Kalgoorlie-Boulder's key industry base by capturing key mine sites and supply networks serviced from the city.<sup>1</sup> The Kalgoorlie-Boulder Economic Zone is illustrated in Figure 1.1 by Local Government Area.

### 1.1.3 State, Regional and National Planning Context

Kalgoorlie-Boulder's role as a designated regional centre has its genesis in the SPS. The SPS defined a network of strategic regional centres across WA that are now the focus of the RCDP.

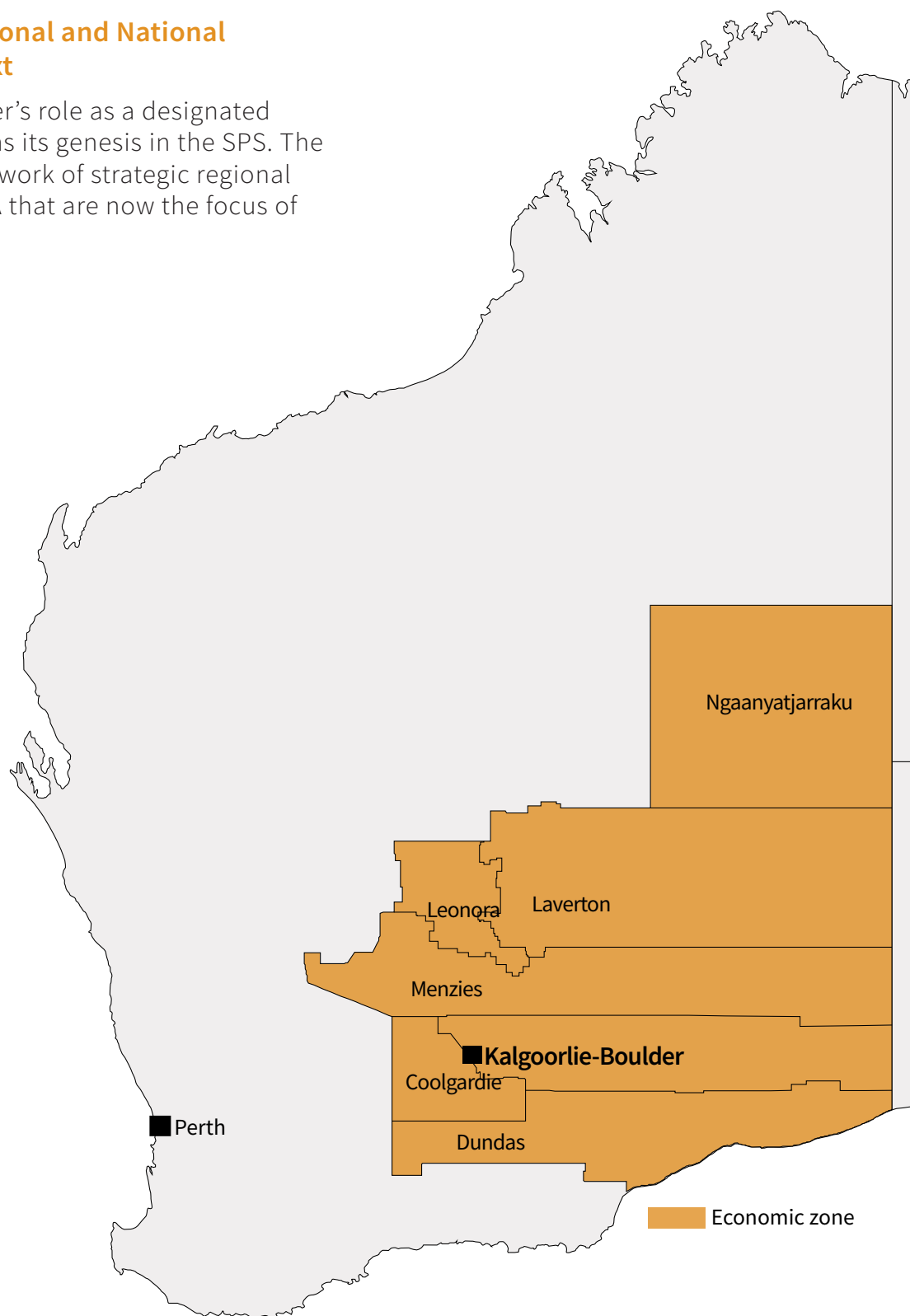


Figure 1.1 Kalgoorlie-Boulder Economic Zone and Local Government Areas

Source: ACIL Allen (2016) *Kalgoorlie-Boulder Growth Plan: Economic Analysis*

The Regional Centres Development Plan has three objectives:

1. Strengthen the capabilities of WA's strategic regional centres to drive long run investment, business and employment growth.
2. Accommodate regional population growth that is generated by WA's long run economic growth.
3. Support the efficient and effective delivery of the WA Government's regional development effort and investment.

The RCDP is an initiative of the Regional Development Council, the peak advisory body to the WA Government on regional development issues. The RCDP Framework provides the strategic basis for the program and supports the implementation of the SPS and the Regional Investment Blueprints as illustrated in Figure 1.2.

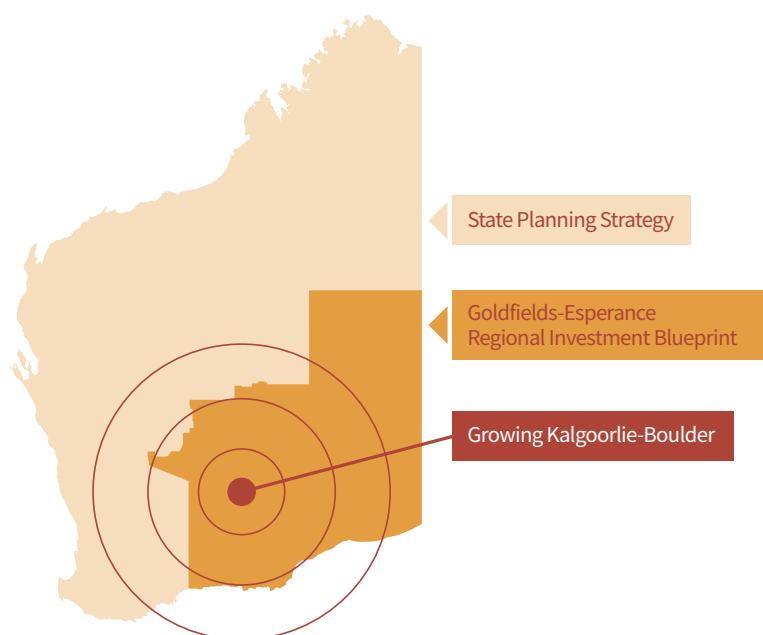


Figure 1.2 Western Australian Planning Context

The *Goldfields-Esperance Regional Investment Blueprint* (the Blueprint) was released in March 2016 and provides a detailed and contemporary regional context for the Growth Plan. The Growth Plan is aligned with the vision, aspirations and priorities identified for the region with a specific focus on the City of Kalgoorlie-Boulder (CKB) and the Economic Zone defined above.

The Growth Plan supports, rather than replicates, existing regional and local planning frameworks and has been developed within the strategic context provided by the SPS and key planning documents (see Figure 1.3), including the:

- CKB Strategic Community Plan (2015–2025);
- CKB Local Planning Strategy (2013–2033);
- Goldfields-Esperance Region 2011–2021 Strategic Development Plan (Regional Development Australia, Goldfields-Esperance Development Commission (GEDC), Goldfields Voluntary Regional Organisation of Councils);
- Goldfields-Esperance Regional Planning and Infrastructure Framework (Western Australian Planning Commission, 2015);
- Goldfields-Esperance Workforce Development Plan 2013-2016; and
- Kalgoorlie-Boulder Chamber of Commerce & Industry Inc. (KBCCI) Strategic Business Plan 2015-2017.

There is also an important national context for the Growth Plan. The Federal Government’s policy agenda including the “Smart Cities Plan”, the Industry Innovation and Competitiveness Agenda and the National Innovation and Science Agenda, provide significant opportunities for Kalgoorlie-Boulder and for WA.<sup>2</sup>

A specially convened Growth Plan Partnership (GPP) set the direction for the Growth Plan and oversaw its development. The GPP involved the above stakeholders as well KBCCI, the Chamber of Minerals and Energy (CME), Regional Development Australia Goldfields Esperance (RDAGE), the Goldfields Land and Sea Council,



Figure 1.3 An Integrated Planning Approach

#### 1.1.4 Who Has Been Involved?

The Growth Plan has been developed through a partnership between the CKB, the GEDC, and the State Government, including the Departments of Regional Development, Planning and LandCorp. Funding was provided through the Royalties for Regions Program under the RCDP.

and invited representatives from industry, community and non-government organisations.

Specialised inputs from a team of consultants led by WSP | Parsons Brinckerhoff were commissioned by LandCorp on behalf of the GPP, to undertake research, provide strategic advice and to assist in identifying opportunities, constraints and priorities for future growth.

Targeted consultation as well as a number of community forums and stakeholder workshops, were held throughout the process including the Kalgoorlie-Boulder Futures Forum in May 2016.

## 1.2 A VISION FOR KALGOORLIE-BOULDER

Kalgoorlie-Boulder's future will build on its rich mineral resources and specialist expertise to maximise the subsequent benefits for the region and for WA. The future will see a more diversified economy and a Kalgoorlie-Boulder no longer perceived as 'just a mining town' but a welcoming, sustainable, inclusive, vibrant and resilient regional city.

The Blueprint established a clear and contemporary vision for the Goldfields-Esperance region and detailed six regional aspirations established after extensive public consultation. This vision and these aspirations (as seen in Figure 1.4) were adopted by the GPP in order to provide a consistent regional framework for the establishment of Growth Plan priorities and to assist to translate these aspirations into actions.



Melissa Drummond Photography, [www.melissadrummond.com.au](http://www.melissadrummond.com.au)

## OUR VISION

In 2050, KALGOORLIE-BOULDER enjoys exceptional lifestyle opportunities and a prosperous, diverse economy built upon our skills, natural resources, rich cultures and heritage.

In 2050, Kalgoorlie-Boulder aspires to be:

### KNOWLEDGE BASED

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

### GLOBALLY CONNECTED

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

### ECONOMICALLY DIVERSE AND RESILIENT

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

### INCLUSIVE

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

### SUSTAINABLE & RENEWABLE

Where our unique natural assets are valued, alternative and renewable energy sources are exploited and waste and soil management are optimised.

### WORLD-RENOINED

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

Figure 1.4 A Vision for Kalgoorlie-Boulder

## 1.3 STRATEGIC POSITION AND IDENTITY

### 1.3.1 Kalgoorlie-Boulder Today

#### Overview

Kalgoorlie-Boulder is located in the Goldfields-Esperance region of WA, approximately 600 kilometres (km) east of Perth, on the edge of the Great Victoria Desert (refer Figure 1.5 overleaf). The city is WA's largest inland city and Australia's largest outback city. In terms of area, Kalgoorlie-Boulder is the largest city in Australia, and the third-largest city in the world, with a total expanse of 95,575 km<sup>2</sup>.

### Kalgoorlie-Boulder is 'WA's Inland Capital' and the largest city in outback Australia.

Prior to European settlement, the area was the traditional home of a number of Aboriginal language groups that continue to maintain close connections to the land and provide a foundation for Kalgoorlie-Boulder's cultural history and contemporary identity. The Town

of Kalgoorlie was founded in 1893 during the Coolgardie gold rush. The name 'Kalgoorlie' is derived from the Wongi word Karlkurla, which means 'silky pear'.<sup>3</sup>

Kalgoorlie-Boulder is known for its globally significant mining industry and rich mineral deposits that have made the Goldfields-Esperance region the second largest resources producing region in WA. While mining continues to have a dominant presence, Kalgoorlie-Boulder has built on its strengths in the mining sector, leading to significant growth and activity in a number of industries and a thriving business community. Kalgoorlie-Boulder's rich heritage and character is today complemented by modern amenities and excellent education, health, retail, recreational and cultural facilities. Kalgoorlie-Boulder is also the access point to ecologically important natural landscapes.

Kalgoorlie-Boulder provides the inland gateway to WA from the eastern states and is strategically located at the junction of major road and rail networks. Kalgoorlie-Boulder has one of WA's major regional airports with daily return flights to Perth by two major airlines and a weekly connection to the east coast.



Melissa Drummond Photography, [www.melissadrummond.com.au](http://www.melissadrummond.com.au)

## A Unique History

The history of Kalgoorlie-Boulder since the discovery of gold in 1893 has been well documented. Within a few years of the initial gold discoveries made by Paddy Hannan, Daniel O'Shea and Tom Flanagan, the Goldfields experienced rapid population growth and quickly became a major economic centre that continues to be one of the most significant mining areas in the world.

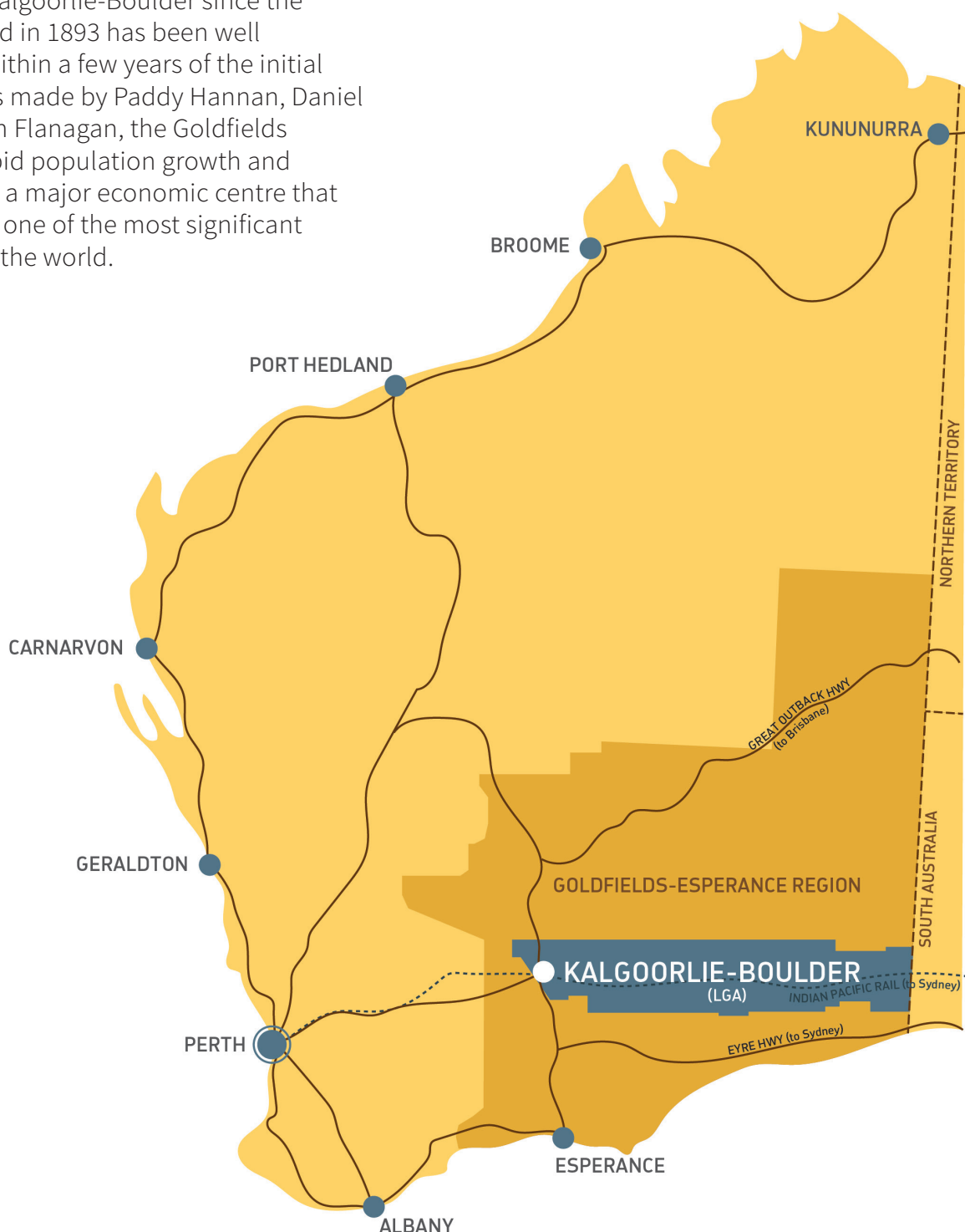


Figure 1.5 Kalgoorlie-Boulder and the Goldfields-Esperance Region

Kalgoorlie-Boulder's colonial history is reflected and celebrated today in the many heritage buildings, museums and monuments that are part of the city's landscape. The city has a rich and proud history of innovation and technical excellence with iconic institutions and events that are world-renowned. The famous Goldfields Water Supply Scheme is a 552km long reminder of the types of engineering feat and foresight required to sustain the growing population of the region.

Kalgoorlie-Boulder officially became a city with the amalgamation of the Town of Kalgoorlie and the Shire of Boulder in 1989. Kalgoorlie-Boulder has gained a reputation as a working town, known for its 'work hard-play hard' culture. While remnants of this history remain and help to explain Kalgoorlie-Boulder's current socio-economic characteristics, the city suffers from ongoing negative perceptions that are not fully reflective of this major regional centre.

Less understood is the Aboriginal history of the region. The 1890s gold rush and the subsequent European settlement of the region, forever changed the physical, social, cultural and economic landscape and had devastating and long term effects on the local Aboriginal population.

An understanding of our history is important, not only to appreciate how far we have come, but also to understand where we are now and how far we still have to go.

### **Environmental Hotspot**

The environment forms one of eight regional priorities identified in the Blueprint in recognition of the region's world-renowned environmental assets. The Goldfields region harbours outstanding natural environments, the protection of which, has been recognised as essential for the preservation of the world's biodiversity.

The Goldfields now boasts 12 existing and proposed nature reserves, with a combined land area of 8 million hectares.<sup>4</sup> The Great Western Woodlands are regarded as the largest remaining area of intact Mediterranean-climate woodland left in the world and provides opportunities in conservation, tourism and medicinal research. The Blueprint proposes the preparation of a major regional conservation strategy to ensure the protection of such areas and to ensure that future economic growth and human activity remain sustainable, balancing social, economic and environmental imperatives.

### **Demographic and Socio-Economic Characteristics**

As of June 2015, the Kalgoorlie-Boulder Economic Zone was home to almost 43,800 people, of which more than 33,000 lived in the CKB.<sup>5</sup>

The following summarises the key characteristics of the population:

#### **Culturally Diverse**

Only 66% of the CKB population at the time of 2011 Census identified as being born in Australia. Aboriginal people currently represent 9% of the resident population in the city.<sup>6</sup>

#### **Slowing Population Growth**

Kalgoorlie-Boulder experienced considerable population growth during the years of high commodity prices. However, growth rates have subsequently declined with the CKB experiencing negative growth over the period of 2013-2015.<sup>7</sup> Since 2002, the broader Kalgoorlie-Boulder Economic Zone has grown at an average annual rate of just 0.7%.<sup>8</sup>

#### **High Non-Resident Population**

The total service population of Kalgoorlie-Boulder is considerably larger than the resident population, due largely to the number of additional fly-in-fly-out or drive-in-drive-out workers. At the time of the 2011 Census, there were 1,848 non-residents in the CKB.<sup>9</sup>

### Young, Working and Transient

Kalgoorlie-Boulder has seen a recent influx of young adults and has a median age of 31 years. Young working adults represent over 70% of new migrants, with many coming to the region for employment on a short to medium term basis.

### High Fertility Rate, but Low Retention

A fertility rate of 2.4 versus 1.9 across WA has seen an increase in the number of children aged less than five years old in Kalgoorlie-Boulder. However, there has been a decline in maturing and established family households in recent years.

### High Average Incomes, but High Welfare Levels

In 2011, Kalgoorlie-Boulder had a median weekly household income 39.3% above the WA median. Some 45% of all employees above the median income level in Kalgoorlie-Boulder work in the mining industry.<sup>10</sup> Despite historically high wages and low unemployment, Kalgoorlie-Boulder has some of the highest levels of government welfare in the country, with 35.5% of adults in the CKB receiving government welfare assistance.

### High Percentage of Technical and Trade Workers

The highest proportion of employees in the Kalgoorlie-Boulder Economic Zone are either technicians and trade workers (22%) or machinery operators and drivers (19%), with the mining and manufacturing industries being largest employers. There is a much lower proportion of managers and professionals in the Kalgoorlie-Boulder workforce when compared to WA's workforce. In WA, these two occupation types make up 12% and 20% of all employees, while in Kalgoorlie-Boulder, they make up 9% and 13%, respectively.<sup>11</sup>

### Lower Education Levels

38% of the working age population hold a non-school qualification, compared to 48% for the WA working age population. Of the

Kalgoorlie-Boulder working age population, 10% hold an education at or above the Bachelor degree level, compared to 19% of the WA working age population.<sup>12</sup>

### High Population Turnover

Kalgoorlie-Boulder has had an average annual population turnover rate of 22% since 2007.<sup>13</sup> The city is ranked 510 out of 563 for population retention in Australia.<sup>14</sup>

### High Homelessness

The homeless rate in Kalgoorlie-Boulder is more than twice as high as the WA average with high levels of transient homelessness due, in part, to the influx of residents from remote regions, many of whom are seeking access to government and community services.<sup>15</sup>

### Ageing Population

While the median age in Kalgoorlie-Boulder is relatively young, the city has experienced significant increases in the number of older residents over the past decade. The number of residents aged 50 or older increased by 38.7% between 2004 and 2014. The 60-74 year old age group increased by 54.1% over this period.<sup>16</sup>

### Aboriginal Disadvantage

Aboriginal people are much more likely to suffer ill health or disability, have lower educational outcomes, be unemployed, suffer housing stress or come into contact with the criminal justice system than non-Aboriginal people. The average income per person in an Aboriginal household in Kalgoorlie-Boulder of \$379 per week, is only 52% of the average for the total population (\$730).<sup>17</sup>

### 1.3.2 Our Economy

Kalgoorlie-Boulder is a major contributor to the WA and Australian economies, with a Gross Regional Product (GRP) estimated at \$7.9 billion in 2015-16, representing 3.2% of WA's Gross State Product (GSP) of \$248.6 billion.<sup>18</sup>

## A Globally Significant Mining Industry

Kalgoorlie-Boulder is rich in two of Australia's most dominant resource commodities – gold and nickel. Australia is the second biggest gold producing country in the world after China and holds almost 18% of the world's gold reserves – the highest of any country.<sup>19</sup> Australia also dominates the world's nickel reserves holding approximately 24%.<sup>20</sup>

The Goldfields-Esperance region is the second largest resource producing region in WA and one of the most significant in the world. In 2014-15, the region produced close to \$9 billion worth of minerals comprising mainly of gold (just under \$6 billion) and nickel, platinum and palladium (\$2.6 billion).<sup>21</sup> Asia and the United Kingdom are the major importers of gold and nickel from Kalgoorlie-Boulder as illustrated in Figure 1.6.

Mining accounts for approximately 57% of the total output within the Kalgoorlie-Boulder Economic Zone.<sup>22</sup> Mining is also the largest employer, with around 27% of the workforce, employed in the industry.<sup>23</sup>

Gold mining is still one of our main sources of revenue. The 'Super Pit' operated by Kalgoorlie Consolidated Gold Mines (KCGM) is one of the largest open pit gold mines in the world. In addition to gold, our region has rich nickel reserves, with key discoveries taking place during the 1960s in the Leinster, Kambalda and Mount Windarra areas.

Overall, the Goldfields-Esperance region accounts for 66% of the value of gold production in WA and around 80% of the value of nickel, platinum and palladium production.

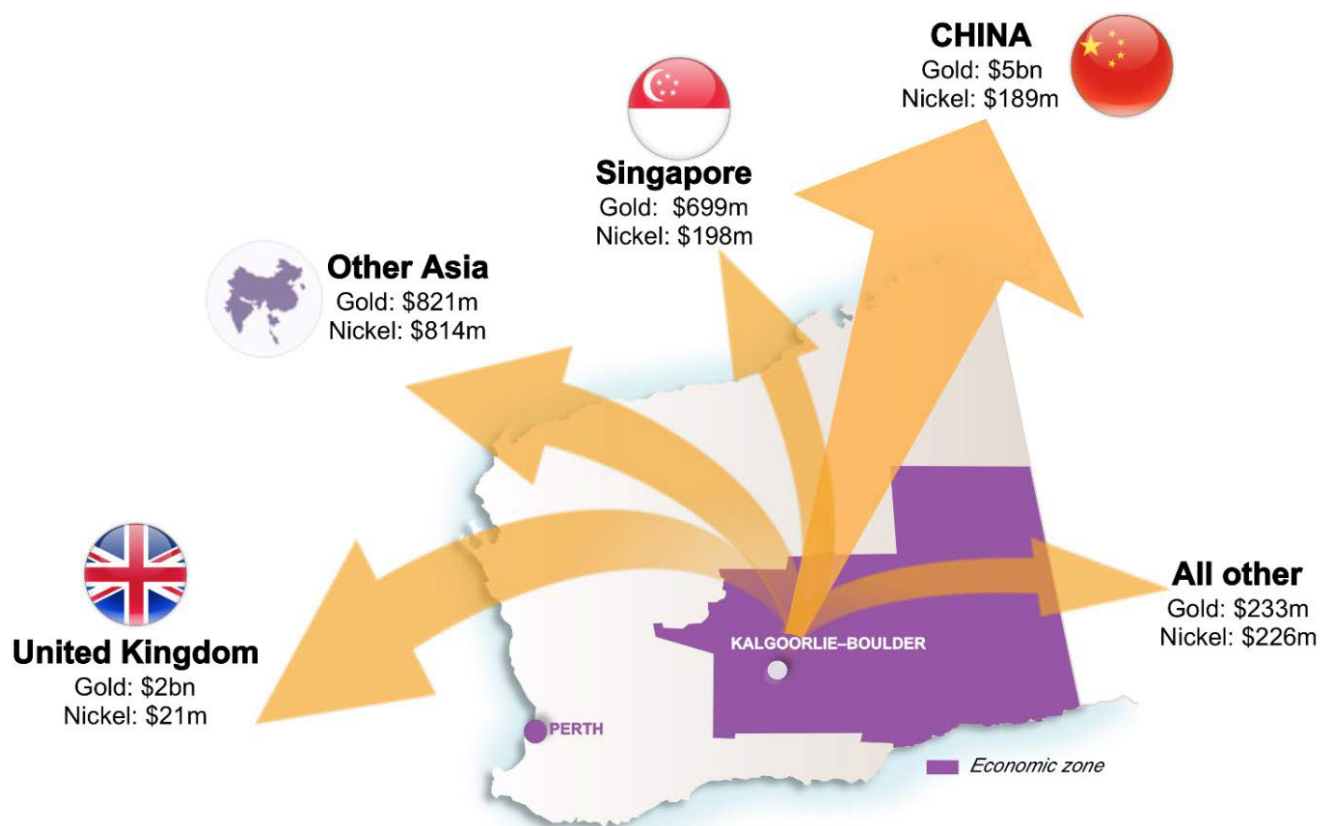


Figure 1.6 Major Importers of Gold and Nickel from Kalgoorlie-Boulder

Importantly, over the past 20 years, nickel and gold price movements (in real Australian dollars) have shown a negative correlation. The region's diverse resource base is therefore a natural hedge against global price fluctuations and an inherent strength of the economy despite the dominance of the resource sector.

Further opportunities to broaden the mineral portfolio of the region are rapidly emerging, with a number of other commodities of interest and economic value including, uranium, iron ore and lithium. According to the SPS, the Goldfields-Esperance region has \$5.8 billion of planned or possible resource projects.

A comprehensive mining sector and growth outlook was developed for the Growth Plan<sup>24</sup> and is summarised in Part Three. In September 2016, there were 51 active mining properties in the Kalgoorlie-Boulder Economic Zone with 49 of these operational and two under construction. A further 697 mining properties are classified as either under consideration or possible. These are generally gold, nickel, iron ore, uranium or lithium.

The growth of lithium mining provides an exciting opportunity for downstream processing and value adding in the region. The Mt Marion Lithium project, located approximately 40km southwest of Kalgoorlie-Boulder, is now in production and a memorandum of understanding was signed in September 2016 between the joint owners to progress the development of a downstream lithium processing plant.

### **An Increasingly Diverse Industry Base**

Kalgoorlie-Boulder has built on its strengths in the mining sector enabling the emergence of a number of other significant industries.

The manufacturing industry is a key supplier to the mining industry and has become the second largest sector in terms of economic output and

the fourth largest employing industry at 7%. The next largest employing industries after mining are retail trade (8%) and construction (8%).<sup>25</sup>

Education is a substantial sector in Kalgoorlie-Boulder and one of the key contributors to the economy and to the community. There are four secondary schools and one education support centre located in Kalgoorlie-Boulder, which provide secondary schooling for around 2,400 students. Kalgoorlie-Boulder is also home to Curtin University's WA School of Mines (WASM) and Central Regional TAFE (CRT).

The movement of mining and manufacturing inputs and outputs has generated significant transport and logistical opportunities in Kalgoorlie-Boulder, building on the city's strategic location at the junction of freight flows from Leinster in the north, to Esperance in the south, as well as linking east-west flows between the eastern states and Perth.

Other industries which have become important contributors to Kalgoorlie-Boulder include tourism, creative industries and population based services, such as retail, professional, health and social support services, all of which provide significant economic and social contributions.

### **A Dynamic Business Community**

In 2014-15, there were 1,100 employing businesses in the Kalgoorlie-Boulder Economic Zone, of which 1,005 (or 91%) were employing small business, and the remaining 95 businesses (or 9%) were medium and large businesses.<sup>26</sup>

The construction sector accounted for the largest number of employing businesses. While the overall number of employing businesses has declined slightly since a peak in 2010-11, a number of sectors have continued to experience growth in business numbers in the period to 2014-15. This includes professional services, logistics, healthcare and social assistance.



Figure 1.7 Points of Interest

Kalgoorlie-Boulder is serviced by an active Chamber of Commerce and Industry, which has represented and serviced the local business community since 1903.

### 1.3.3 Current Industry Performance and Emerging Opportunities

Detailed analysis of the economic and social contribution of key industries to Kalgoorlie-Boulder was undertaken for the Growth Plan, in order to understand the strengths and risks associated with each industry group and to identify opportunities to further contribute to the Kalgoorlie-Boulder economy.<sup>27</sup>

The industry performance analysis identified the potential for each of seven industry groups to contribute to the Kalgoorlie-Boulder's economic growth or to liveability. In summary, the key findings were that:

- The mining and manufacturing sectors present the greatest opportunity to generate regional economic growth. While their direct contribution to Kalgoorlie-Boulder lifestyle and culture is limited and could be improved. With more than 50% of regional employment, these sectors make significant contribution to the population base with resident workforces and related domestic expenditure;
- The infrastructure and logistics industry group has the potential to generate above average economic growth;
- Growth in the service sectors (which comprises information, media and telecommunication, financial and insurance services, rental hiring and real estate services, and administration and support services industries) is critical to the longer term diversification of the economy;
- Professional and social services (including, scientific and technical services, education and training, and health care and social assistance industries) and community

and lifestyle services (retail trade, accommodation and food services, arts and recreation services industries), whilst underrepresented in the region in terms of economic output, make an important contribution to local diversity and liveability;

- The education and training sector is a key contributor to both the economy and liveability, with significant opportunities for future growth; and
- Tourism, in particular leisure tourism, is an underperforming market in Kalgoorlie-Boulder and provides opportunities for future growth.

The findings of the industry assessment are supported by a state-wide analysis of industry clusters undertaken in 2016 under the RCDP.<sup>28</sup> The industry cluster analysis demonstrated that the Kalgoorlie-Boulder economy is strongly aligned to WA state-wide economic activity and is highly specialised in resource-based traded activities. Metal and non-metal mining were identified as the dominant industry clusters in Kalgoorlie-Boulder, with relatively high levels of employment also seen in transportation and logistics, construction products and in downstream metal products.

The cluster analysis also highlighted hospitality and tourism as a point of diversification in the Kalgoorlie-Boulder economy and suggested that local population based industries and services were underrepresented, and provide opportunities for growth.

### 1.3.4 Planning for the Future

Economic analysis is generally based upon historic information and assists to understand the relative strengths and characteristics of the economy at a given point of time. However, this is not a prediction of future strengths, economic drivers or the expected impact on local economies.

The development of growth strategies for Kalgoorlie-Boulder has therefore been informed and tested by an examination of key economic drivers and uncertainties that may disrupt current trends and impact on future growth scenarios.

### **Global Megatrends**

The world is changing rapidly. Innovation, creativity and knowledge are increasingly the foundations of international competitiveness. Technological advances are empowering and connecting people across the globe and reshaping the social, cultural and economic landscape. They are also driving demand for new products and commodities.

Technology can help overcome isolation, but a lack of capability and connectivity in the digital age can further entrench it. Kalgoorlie-Boulder must have the infrastructure, technological readiness and human capacity to take advantage of emerging opportunities and to be internationally competitive.

Kalgoorlie-Boulder and WA know only too well that sudden economic and political changes in one part of the world can have significant and unforeseen consequences across the globe and on local economic conditions. The changing circumstances of our key trading partners, climate change, diminishing natural resources and the demand for more sustainable development approaches, are critical drivers of change. New powers are emerging in the world economy creating new opportunities and potentially new market barriers and competition for resources.

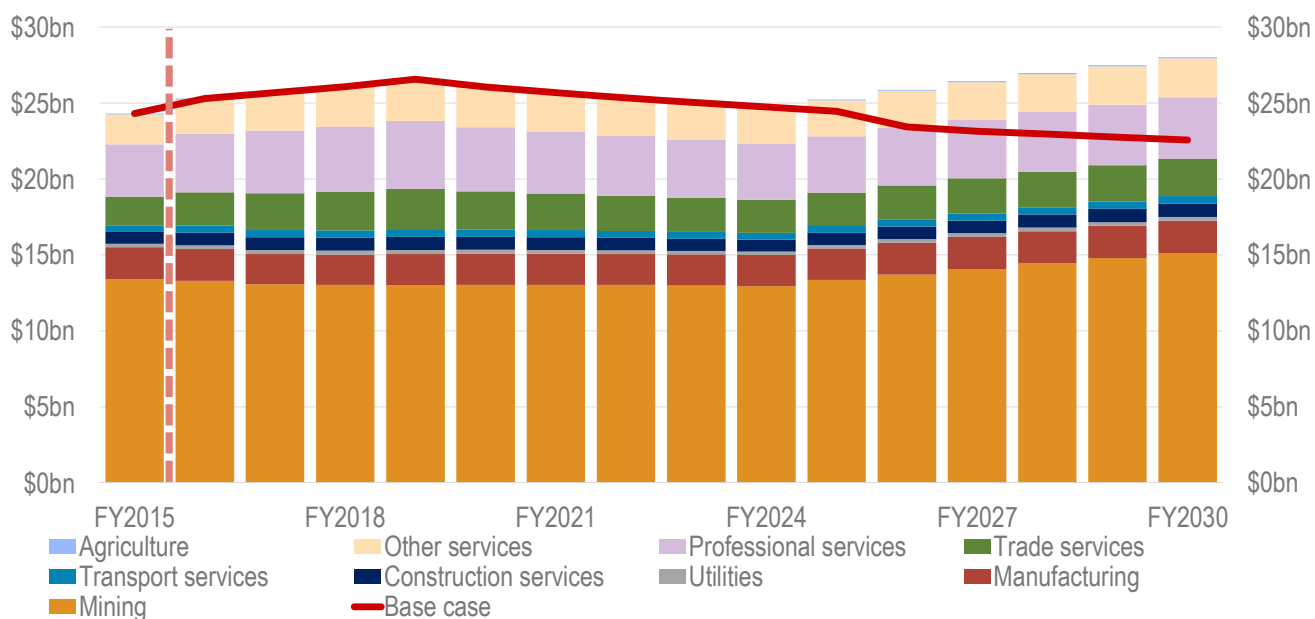
Despite its geographic isolation, Kalgoorlie-Boulder is closely connected to the global economy as a significant exporter of minerals and equipment, the demand for which is driven by factors largely outside the control of the region. Kalgoorlie-Boulder's workforce is drawn

from many parts of the world and our tourism and educational industries are significantly impacted by global influences and changing population demographics.

Understanding the impacts these megatrends have on the Kalgoorlie-Boulder economy is vital to effectively mitigate identified risks and reap the rewards of emerging opportunities. Further information on key megatrends and their implications for Kalgoorlie-Boulder is summarised in Section 3.3 of Part Three.

### **Growth Forecasts**

An important foundation for the development of growth strategies is an understanding of Kalgoorlie-Boulder's growth outlook. Given the significant impact of mining on local economic conditions, detailed modelling of commodity price impacts and subsequent growth projections has been undertaken.<sup>29</sup> These are summarised in the following figures and explained in more detail in Section 3.4 of Part Three.



Other services includes information media and telecommunications, financial and insurance services, rental, hiring and real estate services, administrative and support services, public administration and safety, education and training, healthcare and social assistance, arts and recreation services, and all other services not elsewhere classified. Trade services includes retail trade, wholesale trade and hospitality and tourism.

Figure 1.8 Growth Scenarios - Real Output by Industry, Kalgoorlie-Boulder 2015-16 to 2029-30

Source: ACIL ALLEN CONSULTING

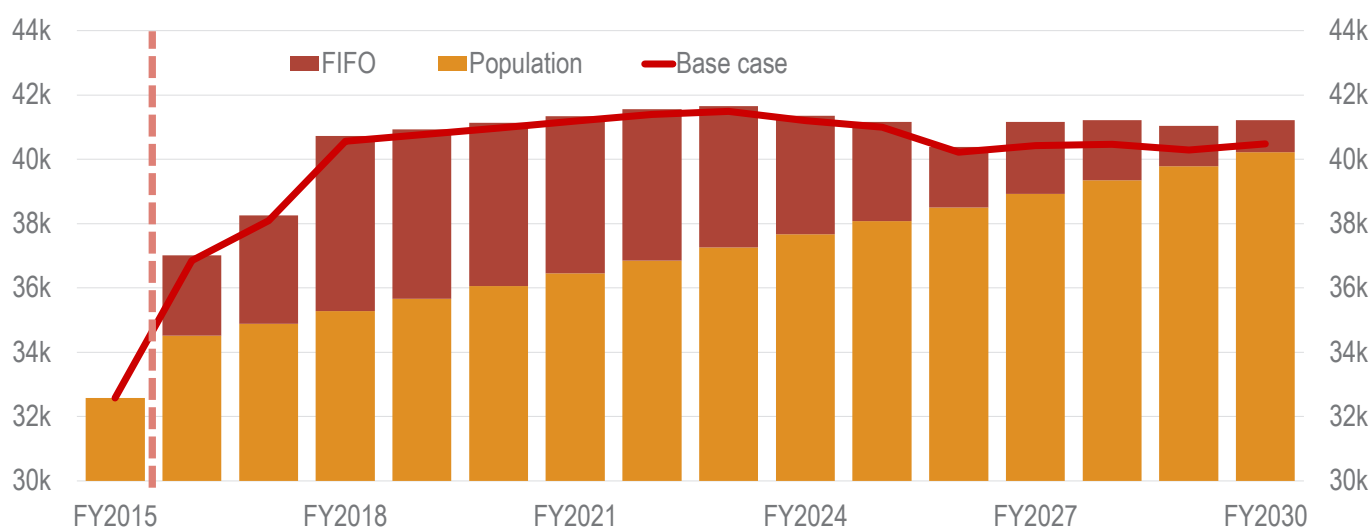


Figure 1.9 Growth Scenarios - Kalgoorlie-Boulder Population Projections, 2015-16 to 2029-30

Source: ACIL ALLEN CONSULTING

In summary:

- In a scenario where commodity prices remain unchanged (base case), the Kalgoorlie-Boulder economy is expected to record sub-par rates of growth, due largely to the impact of declining mining production as a number of mines are depleted and eventually closed;
- A growth scenario where commodity prices are forecast to progressively increase over time, is projected to result in additional mining properties becoming operational, resulting in the Kalgoorlie-Boulder economy generating positive growth rates of 3.1% per annum from 2024-25 through to 2029-30;
- The impact of new mining properties becoming operational will stimulate growth across all industries in Kalgoorlie-Boulder, with total industry output expected to increase by 15.3% between 2014-15 and 2029-30;
- This is estimated to generate increased employment opportunities across the economy, with almost 4,500 additional jobs created in Kalgoorlie-Boulder in 2029-30 relative to the base case;
- Under the base case Economic Growth Outlook, it is estimated that Kalgoorlie-Boulder's resident population will continue to grow in line with its long term trends of around 1% per annum, reaching a forecast 40,200 in 2029-30; and
- Major fluctuations in economic conditions are likely to impact predominantly on the Fly-in Fly-out (FIFO) workforce, with the permanent residential population taking on an increasing share of employment opportunities relative to the FIFO workforce over time.

### 1.3.5 Enabling Economic Growth

Supporting the sustained growth of the Kalgoorlie-Boulder economy requires strategic interventions to build its global competitiveness as a place to live, work and invest. Opportunities for economic growth occur where global drivers and local capacities intersect as illustrated in Figure 1.10 below.

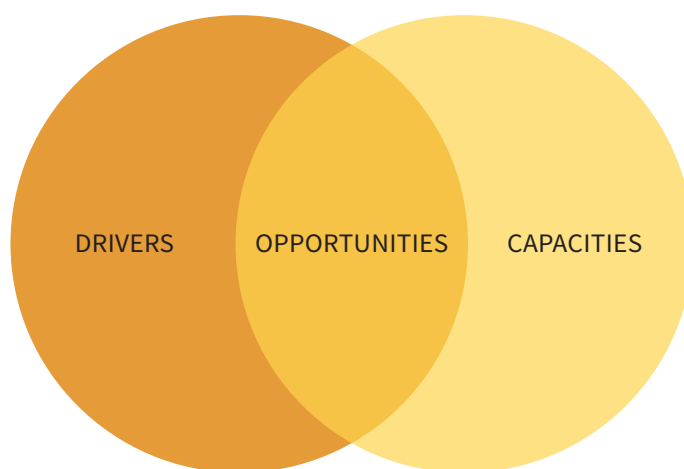


Figure 1.10 Economic Development Paradigm

#### Kalgoorlie-Boulder's Competitive Edge

Kalgoorlie-Boulder has well established competitive strengths that are built largely off its significant and diverse resource base – in particular, but not limited to, gold and nickel production. The most obvious driver for future growth is therefore the source of much of our historic growth, that is, the discovery, exploitation and exportation of minerals.

**The most obvious driver for future growth is the source of much of our historic growth, that is, the discovery, exploitation and exportation of minerals.**

Kalgoorlie-Boulder's natural and human resources provide comparative advantages that are supported by excellent access to air, rail and road transport infrastructure. Our specialist expertise in mining, manufacturing, logistics and education services provide a point of difference and a key foundation for future growth.

Curtin University's WASM is a unique institution and a major asset to Kalgoorlie-Boulder. It is important to build on this strength and to continue to foster research, industry collaboration and the development and retention of industry professionals, in order to drive future innovation and to foster the next generation of entrepreneurs.

Extensive economic analysis and stakeholder engagement activities have identified a number of exciting opportunities to reinforce and leverage these comparative advantages and to diversify the Kalgoorlie-Boulder economy by enabling new and emerging industries to develop – thus building new competitive strengths.

### **Constraints on Future Growth**

Kalgoorlie-Boulder faces some significant challenges in fully optimising its future growth potential due to a number of capacity constraints. The socio-economic profile outlined in Section 1.6.1 demonstrates that despite many economic positives, there are structural weaknesses that constrain economic development. These include relatively low rates of education and skills, high population turnover, high levels of welfare and social housing and a reliance on imports from outside the region for skilled labour and key utility services. Improving the health, wellbeing and economic participation of the growing Aboriginal population, both within Kalgoorlie-Boulder and in the broader region, requires long term, coordinated reform and leadership.

Kalgoorlie-Boulder faces challenges associated with its remote geographic and inland location, situated in a country where 85% of the population choose to live within 50 km of the coast and where the world-wide trend is for population drift to major cities and urban environments.

Connectivity is a major determinant of international competitiveness and liveability. Kalgoorlie-Boulder faces challenges associated with road, rail and air infrastructure, all of which will require significant future investment to adequately service growing needs. The cost of air travel is a significant impediment to tourism as well as reinforcing social isolation.

Kalgoorlie-Boulder relies on effective communications and internet access for the delivery of key health and education services to the region and to participate in the global economy. However, this is currently constrained by slow broadband speeds, access limitations and a lack of local technical support and training.<sup>30</sup>

Being located in a world-class, highly mineralised region also means that mining and mineral tenements are a dominant feature of the landscape. This impedes economic diversification, as emerging industries must compete for key resources such as land, skilled labour, energy and infrastructure.

Kalgoorlie-Boulder is heavily reliant upon external sources of energy and water, with subsequent risks associated with reliability and high costs. Providing adequate energy to service Kalgoorlie-Boulder's growing needs is a major constraint to growth due to current network limitations.

Benchmarking Kalgoorlie-Boulder against other comparable regional cities and its relative competitiveness, as measured against the



Melissa Drummond Photography, [www.melissadrummond.com.au](http://www.melissadrummond.com.au)

Australian Regional Competitiveness Index, demonstrates that while there are many strengths, Kalgoorlie-Boulder has work to do to improve its performance against key quality of life indicators.<sup>31</sup> These include school retention, tertiary education and training, improving access to early childhood development services, community inclusiveness and access to key social infrastructure.

Regional migration and perception research undertaken for Kalgoorlie-Boulder as part of the RCDP,<sup>32</sup> highlighted challenges in the marketing of the region. A survey found that respondents who had visited or lived in Kalgoorlie-Boulder for any length of time, held positive perceptions about the tight knit community, good employment opportunities, community

facilities and relaxed lifestyle. However, those respondents who had not visited Kalgoorlie-Boulder had contrastingly negative views.

Overcoming these constraints, strengthening local capacity and promoting a collaborative and inclusive social and cultural environment, is a key to realising Kalgoorlie-Boulder's economic potential. Strategic interventions that build human and social capital, as well as ensure adequate services, infrastructure and local amenity, will be vital for developing Kalgoorlie-Boulder as a city for all residents, and for meeting local aspirations for a more diverse and liveable community.

A summary of Kalgoorlie-Boulder's key strengths and challenges is provided in Figure 1.11.

KEY STRENGTHS	KEY CHALLENGES AND CAPACITY CONSTRAINTS
<ul style="list-style-type: none"> <li>- Quantity and diversity of mineral resources.</li> <li>- Specialist expertise and strong industry performance around mineral extraction, processing and mining services.</li> <li>- High degree of specialisation in associated transport and logistics and local industrial products and services.</li> <li>- Regional commercial and services centre for the Goldfields (Economic Zone Fig 1.1 page 9).</li> <li>- Strategic location and access to rail, road and air transport.</li> <li>- Well-developed local education and training sector with a specialised tertiary institution in the WA School of Mines.</li> <li>- Successful history of iconic events.</li> <li>- Rich culture and heritage and active arts sector.</li> <li>- Natural attractions and ecological significance.</li> <li>- Strong social capital with history of collaboration and innovation.</li> </ul>	<ul style="list-style-type: none"> <li>- Historical reliance on the resource sector and a relatively small number of large employers with subsequent sensitivity to resource demand and supply.</li> <li>- Remote, inland location that is not the focus of many government programs and strategies that tend to target the south-west coastal zones or northern Australia.</li> <li>- Slowing population growth, high population turnover and difficulty attracting and retaining labour.</li> <li>- Relatively poor educational outcomes and local skills shortages.</li> <li>- Land, infrastructure and service capacity and related reliability, security, connectivity and cost issues.</li> <li>- Limited tourism infrastructure and market awareness.</li> <li>- Social challenges associated with high levels of welfare dependence, Aboriginal disadvantage, an ageing population and service deficiencies.</li> <li>- High housing construction costs and a resource driven housing market.</li> <li>- Negative external perceptions of lifestyle, amenity and local opportunities.</li> </ul>

**Figure 1.11 Summary of Key Strengths and Challenges**

Some of Kalgoorlie-Boulder's key strengths are illustrated by the number of local success stories.

A fundamental objective of the Growth Plan is to grow employment and to develop new and expanded businesses that contribute to the local economy. During the course of the

growth planning process, numerous examples of successful local businesses emerged during consultations. Much can be learned from these local success stories in terms of the obstacles that have been overcome, the reforms that may still be required and the fact that much can be achieved by an entrepreneurial spirit and a good idea.

## 1.4 GROWING KALGOORLIE-BOULDER - AN INTEGRATED GROWTH STRATEGY

While world demand for mineral resources will continue to be a major driver of the Kalgoorlie-Boulder economy, this economic strength also creates challenges. Although Kalgoorlie-Boulder has sufficient size and critical mass of population to weather major short-term changes in economic circumstances, its economy is still closely linked to the strength of the mining industry. Our economic fortunes are therefore strongly influenced by the rise and fall of global commodity prices and the lifecycle of individual mining operations.

Kalgoorlie-Boulder's dominant and globally competitive mining industry has sustained its strong regional economy for more than 100 years and will continue to be the major economic driver for the foreseeable future. However, dependence on this driver for long-term sustainable growth is a risk. Future sustained growth in mining will depend upon the identification of new mineral deposits or technological advances to enable cost effective extraction of minerals from existing mature deposits.

Commodity price cycles and the subsequent ebbs and flows of the economy have significant impacts on a range of businesses, service providers and on our community. A significant challenge facing Kalgoorlie-Boulder is to further diversify the economy within and beyond mining and to create an urban environment and quality of life that will develop, attract and support a skilled and motivated population.

A clear message from the Futures Forum and from consultations undertaken throughout the growth planning process, was that the Growth Plan needed to ensure that Kalgoorlie-Boulder's economic strengths are maintained and enhanced. It was also made evident that local stakeholders wanted the Growth Plan to challenge current perceptions of what Kalgoorlie-Boulder is and to help create a future based on what Kalgoorlie-Boulder could be.

To achieve our vision of 'exceptional lifestyle opportunities and a prosperous, diverse economy' requires an investment not only in enabling business and industry, but in harnessing and developing the significant skills, creativity and energies of our population and attracting the best talent and expertise from around world.

Three mutually reinforcing Strategic Themes emerged as consistent priorities from the analyses and from community engagement activities as the basis for the Growth Plan:

1. Recognising that the Kalgoorlie-Boulder economy is built off its geology and resultant mining activity and therefore ensuring that this competitive strength in mining is maintained and enhanced;
2. Strengthening the economy through diversification beyond mining into other existing and emerging industries; and
3. Enhancing liveability in order to ensure that there is a growing and diverse local population and workforce to drive and support a growing economy.

**While rich in precious metals,  
Kalgoorlie-Boulder's most  
important asset is its people.**

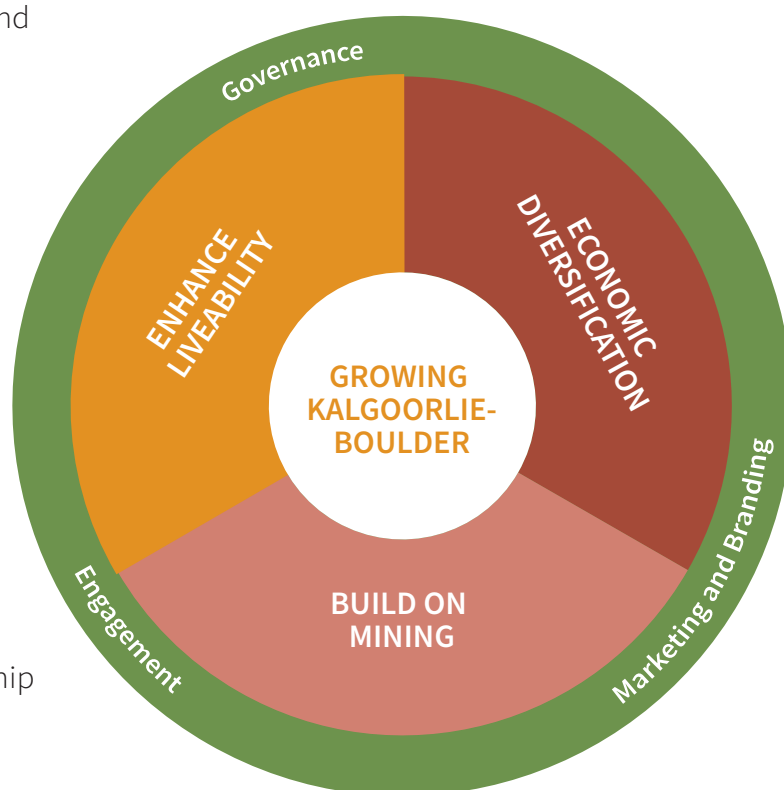
The Growth Plan is built upon three strategic themes:

1. Building on our competitive strength in mining.
2. Economic diversification.
3. Enhancing community liveability.

### Our Growth Enablers

These Strategic Themes are supported by three Key Enablers, as illustrated in Figure 1.12:

- **Effective governance**  
Our leaders need to be strong, visionary and collaborative in order to effectively advocate on behalf of Kalgoorlie-Boulder and to build partnerships with regional, state, national and international stakeholders, as well as with the local industries and institutions that are critical for our future.
- **Effective marketing**  
The establishment of a positive brand and effective marketing strategy is vital in order to address negative perceptions and reinforce the many positives of Kalgoorlie-Boulder now and in the future as a place to visit, live and invest.
- **Effective community engagement**  
Harnessing the local skills and knowledge of the population requires effective engagement with Kalgoorlie-Boulder's residents to build a future based on a shared vision and a sense of partnership between all sectors of the community.



#### 1.4.1. Priority Focus Areas

In order to achieve our three Strategic Themes, seven Priority Focus Areas were established following extensive research, analysis and engagement with Kalgoorlie-Boulder stakeholders.<sup>33</sup>

These Priority Focus Areas recognise that growth in the traded economy, driven by mining, mineral processing, education and

Figure 1.12 Kalgoorlie-Boulder Strategic Growth Themes and Key Enablers

transport, will continue to be the engine room of the economy. Importantly, they also recognise that strong foundations are required for sustainable growth by promoting economic diversification and addressing the endogenous factors that will enhance human capital, local population based services and provide more diverse life opportunities.

The seven Priority Focus Areas are illustrated in Figure 1.13.

Each Priority Focus Area:

- Contributes to one, two or all three of the Strategic Themes and ultimately to achieving the objectives of the RCDP; and
- Is dependant for successful implementation on the three Key Enablers.

The following section provides an overview of each Focus Area and the associated Key Actions that will drive implementation. Part Two of the Growth Plan provides greater detail on these Key Actions and the associated Initiatives that form the basis of the implementation framework.

## FOCUS AREA ONE – BUILD THE KNOWLEDGE ECONOMY

Increasingly it is innovation and the knowledge underpinning it, which are the key sources of competitive advantage of organisations, countries and regions and the key drivers of economic growth. These are the building blocks of an information society and a knowledge economy. How societies promote, manage and disseminate knowledge are the keys to economic and social development.

Building the knowledge economy is a critical strategic intervention that will contribute to each of the three Growth Plan strategic themes. In order for Kalgoorlie-Boulder to stay competitive in the modern economy, there is an economic imperative to develop and sustain a skilled workforce by investing in the education system and the learning environment.

The potential for Kalgoorlie-Boulder to build a knowledge economy is greater than any other regional centre in WA, as the home of the world-class and unique tertiary institution, the WASM. However, action is required to ensure



Figure 1.13 Kalgoorlie-Boulder Priority Focus Areas

that this competitive advantage is effectively leveraged and to build the capacity of the education system more broadly to develop the skills and knowledge of Kalgoorlie-Boulder's population.

Initiatives to build the knowledge economy focus on:

- Ensuring quality student outcomes in secondary schools;
- Ensuring that there are student pathways and increased local options for further education;
- Ensuring that the existing advantages of the WASM in relation to teaching and research are maintained and grown; and
- Further developing Kalgoorlie-Boulder's education precinct as a centre of excellence.

### Improving Secondary Education Outcomes

The benefits of secondary education, and in particular reducing disengagement from education prior to completion of Year 12, advantage not only the individual but also the community and the economy. Students in Kalgoorlie-Boulder display poorer levels of participation and attendance, when compared to the levels reported for the broader WA student population, as well as against benchmarked regional cities.<sup>34</sup>

It is recognised that student participation and attendance is a complex issue comprising many factors including geographical, societal, community and family influences. As such, a broad range of initiatives are required to establish the foundations for a knowledge economy – including addressing underlying issues of social disadvantage and marginalisation.

It is a key priority for Kalgoorlie-Boulder to increase the participation and attendance rates of students in secondary schools

through interventions that impact students during their early years of development, as well as throughout and beyond their schooling life. There are already innovative local initiatives on which further success can build. These include the Clontarf and Kalgoorlie Girls Academies, the Aboriginal Workforce Development Centre and the KBCCI's Aboriginal Youth Transition Strategy, and associated pathway programs. Further national and international examples of successful initiatives include the 'Hands on Learning' alternate education program; the US-based 'Big Brothers Big Sisters' mentoring program; and the development of flexible learning centres.<sup>35</sup>

The East Kalgoorlie Primary School (EKPS) was highlighted on a number of occasions during the growth planning process, as looking outside the traditional boundaries of schooling by providing comprehensive health, family support and early intervention programs that address the many challenges impeding academic progress.

**Students from the EKPS are often from disadvantaged families who face significant challenges. This home-grown Kalgoorlie-Boulder model has evolved based on the continuity and depth of relationship that the school has with students and their families, thus enabling a holistic and family centred approach to improving educational outcomes.**

The EKPS model has shown enormous potential to address complex and interrelated issues

that are typically resistant to traditional service delivery approaches. Options to further support and expand this approach will be explored.

Three key priorities have been determined to promote a best practice approach to student retention and engagement in secondary education:

- Expanding early intervention and alternative learning programs;
- Teacher retention and attraction; and
- Improved student pathways planning.

As the only Non-Independent Public School in the region, the Kalgoorlie-Boulder Community High School (KBCHS) is currently at a disadvantage in terms of attracting and retaining quality teachers. A key initiative to improve local educational outcomes is to support KBCHS to achieve Independent Public School status.

To understand the net community benefit and feasibility of the above initiatives, a Benefit-Cost Assessment (BCA) was undertaken on improving student outcomes in secondary schools by re-engaging students who are at risk of poor attendance and participation, and who are unlikely to complete year 12.<sup>36</sup>

The Net Present Value (NPV) of one additional student becoming reengaged in school, participating in an early intervention program, participating in a career guidance and pathway planning program and subsequently completing year 12, is just under \$21,000, with a Benefit Cost Ratio (BCR) of 1.39. This indicates that the benefits of the above identified initiatives to improve student outcomes in secondary schools outweigh the costs involved.

### Growing Tertiary Education

Tertiary institutions in regional areas make an essential contribution to the creation of a diverse, sustainable and vibrant economy through their role as educators and employers,

as well as through their significant research and development functions.

The education and training sector has the potential to become an area of strong competitive advantage for Kalgoorlie-Boulder. Institutions such as the WASM and the CRT have evolved because of the human capital needs of industry. Their long term success is predicated on their ability to deliver education, training and research that meets the needs of both local industry and the community.

WASM is a world renowned institution with more than a century of experience and proven capability in training mining professionals and undertaking research that has been instrumental in growing the industry. However, student numbers since 2012 have been in decline, which is consistent with the downturn in the resources sector. A significant proportion of WASM students are international students, whose number have remained relatively constant. There is a significant opportunity to increase international student enrolments.

Curtin University and the CRT are currently planning for the development of a combined Centre for Mining Education and Training (CMET). This centre will leverage the strength of the WASM, the vocational mining courses available through CRT and the support of the Kalgoorlie-Boulder mining industry. This model would be similar to the Australian Centre for Energy and Process Training at South Metropolitan TAFE.

WASM is also working with the Cooperative Research Centre for Optimising Resource Extraction (CRC ORE) to develop a research delivery hub focused on the gold industry in Kalgoorlie-Boulder. CRC ORE also interested in funding PhD students at WASM. A current study is investigating the optimal structure, key relationships and operational model for the proposed hub.

While the responsibility for these future developments sits with WASM and Curtin University, they are significant potential growth drivers for Kalgoorlie-Boulder and will require broad local stakeholder engagement and support. A key priority for the Growth Plan is to support Curtin University to:

- Further invest in the current research and learning facilities at WASM;
- Develop a research fund to promote world-leading mining research;
- Develop a marketing plan for the WASM to showcase its virtues to prospective international, domestic and post-graduate students; and
- Strengthen industry engagement in the sector and the region.

Despite the strengths and growth potential of WASM, the current tertiary offering in Kalgoorlie-Boulder is limited for those not wanting to enter

the mining industry. There is an imperative to expand the tertiary offering in Kalgoorlie-Boulder for prospective students in the region. This is critical both to build our human capital and to retain our population.

Curtin University has plans to build a collaborative education and research model for Kalgoorlie-Boulder that includes secondary schools and the CRT, providing a comprehensive education precinct. This includes expanding its local tertiary offering in areas such as education, nursing and commerce.

Recent studies commissioned by the GEDC to determine the viability of establishing a Regional Universities Centre (RUC) in Kalgoorlie-Boulder, revealed that unmet tertiary aspirations<sup>37</sup> and demand for more locally delivered education exists in the region. It was identified that there is considerable potential for a model allied to the Geraldton Universities Centre to meet this market. More detailed analysis will be required in order to



develop a full business case for the RUC. It is anticipated that a RUC, and Curtin University's expansion plans would be complementary.

To understand the net community benefit and feasibility of these tertiary expansion plans, a BCA was undertaken based on expanding the tertiary course offering in the region, either through Curtin University or the RUC. Both models show considerable positive benefits for the region, with the Curtin University option showing a NPV of just over \$110 million and a BCR of 2.16, meaning the benefits of the project outweigh the costs. If a RUC was to be established, with additional capital costs, the NPV may reduce to around \$103 million and the BCR to 1.99.<sup>38</sup>

Another exciting initiative is the proposed establishment by CRT of a \$3.5 million Specialised Centre of Excellence in Hard Rock Processing and Engineering Training at its Kalgoorlie-Boulder campus. This three stage proposal involves re-purposing an existing facility on the Kalgoorlie Campus, building a gold and nickel processing plant, as well as advanced engineering, flexible learning and 3D visualisation/simulation facilities. The project adds huge value to the proposed WASM research delivery hub concept and has the potential to be a key feature of the Kalgoorlie-Boulder Educational Precinct.

## FOCUS AREA ONE

### BUILD THE KNOWLEDGE ECONOMY

Action: 1.1 Improve Secondary Education Outcomes

Action: 1.2 Expand Tertiary Education and Knowledge Exports

## FOCUS AREA TWO – PROVIDE ENERGY SOLUTIONS

Kalgoorlie-Boulder is reliant upon electricity from Western Power's South West Interconnected Network (SWIN). There are current limitations in relation to the transmission of electricity to Kalgoorlie-Boulder and capacity constraints for new connection block load customers.

This has created uncertainty across the local business community, and has the potential to constrain future growth, particularly in the energy-intensive mining industry. Improving energy security is a critical issue for Kalgoorlie-Boulder, given its reliance on energy imports and increasing concerns about the reliability of supply.<sup>39</sup>

Kalgoorlie-Boulder is also serviced via the Goldfields Gas Pipeline, which transports natural gas from Carnarvon basin producers in the north-west of WA. ATCO Gas supplies 97% of the City with natural gas and there are currently no reported constraints on gas supplies.<sup>40</sup>

In the long term, Kalgoorlie-Boulder aspires to achieve total independence from the SWIN. In the short to medium term, strategic and timely planning of investments to improve energy security are urgently required to ensure that energy systems respond appropriately to supply requirements.

Research commissioned as part of the growth planning process indicated that private sector investment into renewable energy has the potential to address the current and future energy requirements of Kalgoorlie-Boulder.<sup>41</sup> Such an investment would take the form of either peaking renewable energy generation and/or base load or mid-merit renewable energy generation.

To highlight the renewable energy opportunity in Kalgoorlie-Boulder, a high level financial

and economic analysis of the construction and operation of an indicative large scale base load solar photovoltaic farm in the region has been undertaken.<sup>42</sup>

For the purposes of the study, the indicative solar farm is based on the following:

- A 50 Megawatt (MW) solar farm with a useful life of 20 years;
- \$141 million to construct the solar farm, of which 50% is underwritten by government from the combination of both ARENA and Royalties for Regions funding; and
- Power Purchase Agreement (PPA) is secured at \$55 per Megawatt hour (MWh).

Based on these characteristics, it is estimated that while the project would generate revenues of \$82 million over its useful life, because of the impact of high upfront capital costs, the net present value of the project would be negative \$17 million.

It is estimated that the indicative solar project would generate a BCR of 0.94, meaning the benefits of the project are slightly outweighed by the costs. However, the results are sensitive to changes in the financial parameters, with the BCR increasing to 1.12 under the assumption that the capital costs reduce to \$113 million or 1.1 under the assumption that the PPA is increased to \$84 per MWh.

More detailed financial analysis and economic forecasting will be required to fully assess potential renewable energy projects in the region. The results show the importance of government funding and in securing a high price for the energy produced by the project in a long term PPA.

It should be noted that in order to generate greater energy security, network solutions may be required. While the potential upfront capital costs required to provide network solutions to

the region are significant, the economic benefits would improve productivity and facilitate industry development. This is a significant and strategically important project for Kalgoorlie-Boulder, with potential for significant long term economic and productivity benefits.

## FOCUS AREA TWO

### PROVIDE ENERGY SOLUTIONS

Action: 2.1 Address current and future energy requirements while stimulating economic and productivity benefits

## FOCUS AREA THREE – CONNECT KALGOORLIE-BOULDER WITH THE WORLD

Connectivity is a fundamental determinant of international competitiveness. This includes both physical linkages through roads, rail and air transport, and electronic means through digital media, communications and related networks across the world. These connections need to be fast, efficient and affordable – especially for a remote location such as Kalgoorlie-Boulder.

### Our Physical Connections

Kalgoorlie-Boulder occupies a strategic position as the gateway to WA and at the nexus of both the national east-west road and rail networks, and the north-south road and rail line between the Northern Goldfields and the Port of Esperance.

A number of studies and government initiatives have identified the potential to enhance Kalgoorlie-Boulder's position as a hub in WA's overland freight transport network. This has

been clearly articulated in the WA Government's PortLink Project, which sought to open up the Goldfields-Esperance, Pilbara and Mid West regions to development opportunities.<sup>43</sup>

Analysis of current and projected freight flows through the region, however, suggest that large scale investments to further develop Kalgoorlie-Boulder as a freight and logistics hub (including the development of a new intermodal terminal), are unlikely to be financially viable in the short to medium term.<sup>44</sup>

As an export-orientated economy, Kalgoorlie-Boulder relies on high quality infrastructure to ensure that industry can access national and global markets efficiently. It is vital that commercial operations in Kalgoorlie-Boulder and surrounding areas, including mines and mineral processing plants, are able to move inputs and outputs efficiently and without compromising the health, safety or efficiencies of other transport users.

There are a number of smaller scale infrastructure improvements that have the potential to strengthen Kalgoorlie-Boulder's current position as a regional service and logistics centre, and which will position the region to benefit from new mining developments and opportunities such as tourism. This initial 'short-list' of potential projects is provided in Table 1.1.<sup>45</sup>

Further analysis is required to prioritise these projects and to develop a pipeline of transport projects based on current economic drivers and a transparent BCA in order to maximise opportunities to attract private and public investment.

### **Our Digital Connectivity and Capability**

Kalgoorlie-Boulder's ability to embrace the global economy and compete on the world stage is dependent on the capacity to access,

utilise and generate innovative technologies. Access to high speed symmetrical internet is now essential to engage in e-commerce, service a global customer base, export digital products, collaborate with distributed teams and to stay in touch with international trends and opportunities. Digital connectivity and the adequacy of key communications infrastructure has an important impact on service access and community well-being, with effective and universal communications being critical for the delivery of education, health and emergency services in our remote region.

While the National Broadband Network (NBN) will significantly improve current internet speeds and be a key enabler for business and industry development, at present there is minimal NBN connectivity within the city, with only an isolated



site in Karlkurla currently being serviced.<sup>46</sup> It is essential that there is comprehensive access to the NBN for all commercial, industrial and residential properties in the short term.

Enhancing Kalgoorlie-Boulder's general technological capacity through 'smart city' initiatives is critical in order to enhance future growth, innovation and prosperity.

This will involve:

- Facilitating access to the best available technology and training;
- Providing free WiFi access in key public areas; and
- Creating dedicated spaces that facilitate collaboration, innovation and entrepreneurship.

The need to establish a central 'hub' in Kalgoorlie-Boulder that can serve as a meeting point and provide support for new and emerging business and individuals, was identified in a number of specialist consultancy reports and was a key theme emerging from the Futures Forum.

In the longer term, Kalgoorlie-Boulder will explore options to become a 'digital destination' that attracts innovators and businesses because of its reputation for innovation, creativity, enabling infrastructure and world class facilities. This will likely require co-investment with NBN or independent service providers to provide alternative and best practice broadband solutions.



**Table 1.1 Potential Priority Transport Projects**

Initiative	Purpose	Target Market	Economic Indicator	Economic Trigger
i) Outback Way	Traffic generator	Tourism	Tourist numbers	Substantial increase in tourists wanting to travel through central Australia
ii) Outback Way	Service road	Mining	Mining activity	Development of Wingellina Nickel Mine or other large projects in the Musgrave region
iii) Esperance Port expansion	Facilitate growth in minerals production and exports  Facilitate regional tourism through cruise ships	Mining and Tourism	Iron ore price/ mining activity  Tourist numbers	Iron ore price would likely need to return to 2012 levels to re-spark interest in the Yilgarn projects  Commitment to cruise ship docking
iv) Construct a rail spur line to service the Yilgarn province	Facilitate growth in minerals production	Mining	Iron ore price/ mining activity	Iron ore price would likely need to return to 2012 levels to re-spark interest in the Yilgarn projects
v) Upgrade the West Kalgoorlie rail terminal to cater for the operation of longer trains	Facilitate growth in minerals production	Mining	Iron ore price/ mining activity	Existing need but may require iron ore prices to return to 2012 levels to re-spark interest in the Yilgarn projects
vi) Upgrade the Leonora to Esperance line, including passing loops between Kalgoorlie and Esperance.	Facilitate growth in minerals production	Mining	Iron ore price/ mining activity	Iron ore price would likely have to return to 2012 levels to re-spark interest in the Yilgarn projects

Initiative	Purpose	Target Market	Economic Indicator	Economic Trigger
vii) Upgrade the Kalgoorlie-Perth line, including passing loops of 1.8km and sidings that cater for public transport and logistic needs between Kalgoorlie and Perth	Facilitate liveability and tourism by improved transport, and economic growth for rail users	Community, Tourism, General freight and mining	Population growth, increase in rail traffic	Ongoing requirement to expedite regional service efficiencies
viii) Dual carriage way from ANZAC Drive to Gatacre Drive	Improve flow of heavy vehicles in Kalgoorlie	Logistics	Freight demand and/or population growth	Increasing freight demand, visitation or population will increase congestion levels and further drive need for this project
ix) Upgrade of Great Eastern Highway route to Perth	Improve flow of heavy vehicles and freight. Improve efficiency and safety	Logistics Tourism	Freight efficiencies Road safety	An ongoing requirement based on traffic flows and road safety
x) Improve fog management at the Kalgoorlie-Boulder Airport	Reduced disruption to flights	Mining Business Tourism	Reduced flight delays	Assessment of economic impacts of flight delays versus cost of mitigation measures

## FOCUS AREA THREE

### CONNECT KALGOORLIE-BOULDER WITH THE WORLD

- Action 3.1 Enhance Kalgoorlie-Boulders' strategic position as a regional transport and logistics centre
- Action 3.2 Develop Kalgoorlie-Boulder as a 'smart city' with globally competitive information and communications capability

## FOCUS AREA FOUR – DEVELOP AND PROMOTE TOURISM

The Blueprint identified tourism and visitation as one of eight regional priorities to drive future economic and social development in the Goldfields-Esperance region. Tourism related industries are an important contributor to economic output, employment and economic diversification in Kalgoorlie-Boulder, with significant potential for growth.

### The Potential for Tourism Growth

The economic contribution of the Kalgoorlie-Boulder tourism industry is spread across a broad range of industries that provide tourism related services, including accommodation, food, recreation and retail. These tourism related sectors generated just over \$470 million of economic output (3.6% of total output) in 2013-14, and employed just under 15% of the total Kalgoorlie-Boulder Economic Zone's workforce. By comparison, these same industries currently account for 4.9% of total output in WA, and employ just

over 19% of all workers in the WA economy.<sup>47</sup>

Business related tourism is currently a strength of the visitor economy in Kalgoorlie-Boulder and is likely to continue to be a significant contributor due to the strong industry and business sectors, Kalgoorlie-Boulder's strategic, yet isolated geographic location, and the success of major events such as the Diggers and Dealers Mining Forum. It is important to build on the business tourism market and promote Kalgoorlie-Boulder as an event and convention destination. There is also a significant opportunity to expand the leisure tourism market.

Tourism is currently a primary point of diversification in the Kalgoorlie-Boulder economy and opportunities for growth exist if an improved value proposition is developed to attract more visitors, retain visitors for a greater length of time and/or capture greater spend per visit.<sup>48</sup>

The benefits of growing tourism extend beyond the direct economic impacts. Tourism infrastructure and services also benefit the local population and increased visitor numbers can increase the benefits of improving community facilities and assist to attract new investment. Tourism can also assist to overcome misconceptions of Kalgoorlie-Boulder and ultimately turn visitors into residents, employees and investors.

There is an ongoing perception of Kalgoorlie-Boulder as a working 'town' rather than a regional city and a tourist destination. However, Kalgoorlie-Boulder has a number of experiences and attractions to offer visitors, many of which are unique to both the region and WA.

We are only a one hour flight, six hour drive, or seven hour train ride from Perth. We occupy a key strategic location as the entry point to WA

## THE BEATEN TRACK BREWERY

A love of science that sparked when he was 15 was the catalyst for the development of this “loKal” business success story, the Beaten Track Brewery. From his inconspicuous premises in Boulder, owner and master brewer Nick Galton-Fenzi boasts International visitors specifically travelling to Kalgoorlie-Boulder to visit the brewery, which is now in the top 10 TripAdvisor list of things to do in Kalgoorlie-Boulder.

It was not a smooth path to developing the business, with the proposed move in 2005 from homebrewer to finally establishing a commercial operation five years later. Nick noted that he almost lost his house twice as costs tripled and the anticipated business development time doubled.

After the initial council rejection against his business development, Nick worked over 12 months to achieve a unanimous decision of council. In many ways Nick has been a trailblazer for the state-wide growing boutique brewing industry. In 2012, Nick began working with the local Member of Parliament, Wendy Duncan MLA, to encourage change around the use of the term “consumption” in legislation, with the aim of elevating breweries to the same status as wineries. Advantageous changes to legislation were realised in 2015.



Nick epitomises the “can-do” attitude of the Goldfields in turning a dream into reality. It is clear that a thriving local business community relies on the support of a proactive local government, a willingness to take on the establishment where required and the value of local small business advisory bodies.

The Beaten Track Brewery now employs five staff, annually produces 50,000 litres of beer from Kalgoorlie-Boulder and has a turnover of \$0.5 million.

from the eastern states and link the southern coast of Esperance with the northern Goldfields and northern parts of WA. Kalgoorlie-Boulder has a major regional airport and is well serviced by daily flights from Perth – noting that the high cost of airfares is an ongoing challenge for air travellers to Kalgoorlie-Boulder.

Kalgoorlie-Boulder has a number of established tourism markets, particularly amongst self-drive, grey nomad and business travellers, with emerging opportunities to broaden the tourism market in event tourism, 4WD, backpackers, and broader international markets in Asia and Europe.<sup>49</sup>

### Enhancing the Tourism Experience

The competitive nature of the tourism market and the growing global expectations of the visitor experience, mean that Kalgoorlie-Boulder must have a quality tourism product to attract and retain visitors and an effective marketing strategy that highlights our unique tourism attractions. We need to make it easier for visitors to find out about, get to, and navigate their way around our great city and our many regional attractions.

To attract increased tourist visitation, there is a need to further develop and diversify the tourism product and improve customer service. Key opportunities include building on Kalgoorlie-Boulder's positive reputation as an event destination; promoting our premier golf course, developing Aboriginal and nature-based tourism experiences, better showcasing our unique mining heritage and promoting opportunities in areas of natural advantage such as astro, geo and adventure tourism.<sup>50</sup>

We need to develop our tourism infrastructure including signage, entry statements, our digital presence, multilingual interpretations and our accommodation options, particularly if we want to grow new tourism markets and attract more international tourists.

### Branding and Marketing

Local and regional tourism organisations such as the Goldfields Tourism Network Association, the Pure Gold Kalgoorlie-Boulder Visitors Centre and Australia's Golden Outback, as well as local business and social enterprises, work cooperatively to promote the many virtues of visiting the



region. However, there is a lack of consistent messaging and coordinated marketing. Current national and state tourism marketing campaigns and program priorities also tend to focus on coastal and aquatic destinations or the southern and northern regions of the state.

The Golden Outback region incorporates 54% of WA, however, it currently has a relatively low market share and does not have a strong brand awareness compared to other tourist regions in WA. Research has shown that there is a latent demand for the Golden Outback tourism offer, but a lack of awareness negatively impacts on visitor intentions and tourism numbers.<sup>51</sup>

A Strategic Tourism Plan was developed as part of the Growth Plan process, to assist in guiding future tourism development in Kalgoorlie-Boulder and to increase the contribution of this sector to Kalgoorlie-Boulder's future economic growth. The Plan provides a comprehensive range of initiatives to further develop the Kalgoorlie-Boulder visitor economy, including the development of a new Kalgoorlie-Boulder brand and marketing strategy as the basis for future promotional activities.

## FOCUS AREA FIVE – SUPPORT ABORIGINAL ECONOMIC DEVELOPMENT

The Growth Plan seeks to promote an inclusive future where Aboriginal people have the opportunity to contribute to and benefit equally from future economic growth in terms of jobs, involvement in business, wealth creation and associated community development opportunities. Participation in the economy through employment and business development can lead to improved prosperity for individuals, families and communities, as well as enhanced self-esteem, increased opportunities for self-development and reduced social isolation.

### A Social and Economic Imperative

Aboriginal people represent 9% of the resident population in the CKB and a significantly higher proportion of the population in shires such as Menzies, Laverton and Ngaanyatjaraku. Importantly, in 2015-2016, Aboriginal students represented 20% of the total student population in the Goldfields-Esperance region.<sup>52</sup>

The much younger age profile of Aboriginal people will see an increase in the number of

## FOCUS AREA FOUR DEVELOP AND PROMOTE TOURISM

- Action 4.1: Establish appropriate mechanisms to coordinate and drive local tourism and to promote cross regional collaboration
- Action 4.2: Develop new and improved tourism experiences building on the Growing Kalgoorlie-Boulder Strategic Tourism Plan
- Action 4.3: Improve the marketing and promotion of tourism to Kalgoorlie-Boulder and the Goldfields region in order to increase visitor numbers and establish new tourism markets



Image supplied by WA Country Arts

Aboriginal people living in the area, both in absolute terms and as a proportion of the overall population. The Australian Bureau of Statistics (ABS) population forecasts suggest a 22% increase in the number of Aboriginal people living in the ABS Kalgoorlie Indigenous region by 2026.<sup>53</sup>

While Kalgoorlie-Boulder struggles to attract and retain its population in order to provide a stable and skilled workforce, there is a growing imperative to ensure that this emerging local cohort of human capital is enabled to reach their potential and to participate equally in Kalgoorlie-Boulder's future. Aboriginal economic development will contribute to each of the three Growth Plan strategic themes. While it is a specific area of focus, measures to address current disadvantage and improve economic inclusion are integrated throughout all seven Focus Areas.

### Looking to the Future and Reconciling the Past

Tragically, the history of Aboriginal involvement in the development of the Goldfields region has been one of exclusion and disempowerment. While many Aboriginal people have made significant contributions to the social and economic development of the region and forged successful careers and enterprises, too many Aboriginal people suffer from significant social and economic disadvantage. This has created inequities in outcomes but also in terms of opportunity, as many Aboriginal people face fundamental barriers to economic participation. The economic cost of managing the symptoms of disadvantage and despair are significant and growing. The social costs are immeasurable.

The 1890's gold rush and subsequent colonial activity had a devastating impact on the local Aboriginal population. The discovery

of gold, which created significant wealth and prosperity for WA, reduced most Aboriginal people around Kalgoorlie-Boulder to a life of beggary on the fringes of mining towns by 1921.<sup>54</sup>

An understanding of the history of displacement, disempowerment, racism and brutality is important in the context of the socio-economic position of many Aboriginal people in Kalgoorlie-Boulder today. It also provides vital insights into how the future growth and development of Kalgoorlie-Boulder can avoid further entrenching Aboriginal disadvantage and instead ensure that Aboriginal people participate in and drive future economic opportunities, for the benefit of the whole community.

There is a lack of comprehensive records in relation to the Aboriginal history of the Goldfields compared to many other regions of the state. Some effort has therefore been made through the growth planning process to document some of this history as context for the development of an Aboriginal Economic Development Strategy.<sup>55</sup>

An improved appreciation of this history and its ongoing legacy is critical in terms of building improved relationships and community cohesion between Aboriginal and non-Aboriginal people. Reconciliation must be a key foundation of Kalgoorlie-Boulder's future and a key component of efforts to address current levels of socio-economic disadvantage.

### Building on What Works

Native title can be a strong driver of Aboriginal economic participation. Successful claims and determinations can provide a foundation for Aboriginal economic development and independence, and in many areas have stimulated a number of substantial agreements with mining companies that provide financial benefits and strong

commitments to Aboriginal employment, training and business development.

Despite significant native title activity and the positive benefits emerging from the Ngadjju and Goldfields-Esperance Nyungar determinations, there is a notable absence of determinations and agreements in the immediate vicinity of Kalgoorlie-Boulder and areas to the north. As a result, native title is less of an economic driver for Aboriginal people in Kalgoorlie-Boulder than in some parts of the state. This is largely due to the extremely complex and litigious environment, the catastrophic disruption to traditional settlement patterns, complex Aboriginal cultural relationships and relatively poor historical records.

There are a number of excellent examples of partnerships and programs already in place in Kalgoorlie-Boulder, which if expanded and sustained, will assist to address current constraints to economic participation and facilitate improved employment and business development opportunities. Initiatives such as the 'Family Central' model implemented by EKPS, the Aboriginal Workforce Development Centre and Business Local, have been highlighted throughout the consultation processes.<sup>56</sup>

We need to pursue opportunities with key industries, including the mining industry, to explore further the reasons for the under-representation of Aboriginal people in some sectors and to work together to find solutions that lead to improved economic participation, with obvious benefits for all parties.

There are numerous examples of existing successful Aboriginal businesses and business people that can provide support and advice through networking and mentoring opportunities. We need to provide more support and networking opportunities to promote and extend these success stories.

## LIVE FOOTAGE

Live Footage has been a vibrant feature on Hannan Street for over a decade. Originally stocking mens and ladies shoes, the business has evolved to become a thriving retail space boasting designer labels in shoes, clothing, handbags and accessories.

Seeking a career change Yvonne Phelan seized the opportunity to purchase the business in 2004 and since then, has seen a number of changes including her daughter, Roisin (Rosie) joining the business.

In August 2016, Live Footage commenced a new chapter, with the move to larger premises on Hannan Street, which enabled the business to expand in a bigger, brighter space. The move was driven by Rosie who, with her background in retail clothing, saw an opportunity to diversify the existing range with men's and ladies clothing lines, accessories and a greater variety for customers. With the move, came the need for more staff, with the business now employing eight customer service staff, one of which has been with the business from the beginning.

Live Footage has endured through a hard retail market by changing and adapting to market needs. They have used their local knowledge along with a strong team, supportive suppliers and great brands, to build the business and provide Kalgoorlie-Boulder with a quality, independent shoe store, and much more.

Yvonne and Roisin are passionate about the future of Kalgoorlie-Boulder and the local retail sector. They support local businesses and promote buy-local at every opportunity. The retail landscape in Kalgoorlie-Boulder continues to change and provide challenges however Live Footage embraces these with a positive attitude.



### Partnering for Reform

There are emerging opportunities through the State Government's Regional Services Reform Agenda<sup>57</sup> to tackle long term, entrenched and pervasive challenges that require fundamental reforms to the way services are provided to Aboriginal people and communities. Kalgoorlie-Boulder will embrace the Reform Agenda based on a partnership with Aboriginal people and an approach that promotes prevention, early intervention and reducing current welfare dependence.

The opportunity to implement a Transitional Housing Program in Kalgoorlie-Boulder is a priority strategy to improve educational, employment and home ownership outcomes for Aboriginal people. An analysis of household eligibility in the CKB<sup>58</sup> revealed that 182 of 1,131 households could be eligible for the program. This is expected to increase to 210 households by 2019.

The program would be expected to:

- Reduce long-term unemployment with an estimated economic and social benefit in excess of \$50,000 per annum;<sup>59</sup> and
- Reduce public housing investment and ongoing costs, which are estimated to require in the order of \$6-\$7.8 million per annum over the next 15 years.<sup>59</sup>

There has been limited opportunity to engage fully with Aboriginal stakeholders through the growth planning process, yet Aboriginal leadership and genuine partnerships with government and the private sector are a key to successful strategy development and implementation. A united and empowered Aboriginal community will be critical to the success of future Aboriginal economic development initiatives.

## FOCUS AREA FIVE

### SUPPORT ABORIGINAL ECONOMIC DEVELOPMENT

- Action 5.1: Establish appropriate forums and resources to coordinate and drive Aboriginal Economic Development
- Action 5.2: Address Aboriginal social disadvantage and develop positive community relationships as prerequisites to equitable economic participation
- Action 5.3: Support Aboriginal employment and business development through the framework provided by the Growing Kalgoorlie-Boulder Aboriginal Economic Development Strategy



## FOCUS AREA SIX – DEVELOP THE BUILT ENVIRONMENT AND SENSE OF PLACE

A prosperous, competitive and resilient regional centre is one that is able to attract and retain businesses, investment and people. Population growth drives employment growth and the creation of new economic development opportunities. The standard of living and the relative attractiveness of a place to live, work and invest is therefore a vital consideration in seeking to promote future economic growth.

### Enabling Infrastructure and Appropriate Service Delivery

Appropriate enabling infrastructure is critical both for supporting the needs of our existing population and industries and in planning for future growth. In addition to the actions detailed under Focus Areas 2 (Energy) and 3 (Connectivity), priorities for Kalgoorlie-Boulder are to ensure sustainable and affordable water

supplies, promote new technologies that utilise and minimise waste, and support innovative planning and housing options that will meet the diverse and growing needs of the community.

Our large migrant and Aboriginal populations, and high population turn-over, present challenges for service providers and community organisations, and for the development of a cohesive sense of community. It is important that Kalgoorlie-Boulder not only provides its residents with high quality services and facilities, but that these services are accessible and appropriate for all sectors of the community, including seniors, youth and new arrivals.

Proactive planning is required that engages and resources community leaders and representatives to improve current understandings of need, promote awareness and ensure culturally appropriate service delivery. We must continue to invest in and celebrate our



diverse cultures and our creative industries for their leadership in developing a rich, vibrant and welcoming community and for the opportunities they present to harness and showcase local talent and diversity.

Not all initiatives are capital intensive. A mix of 'hard and soft' infrastructure is required with a focus on process, engagement and community capacity building in order to harness local skills and energies.

### Best Practice Community Engagement

To be a great city where the community feels engaged and there is shared ownership and drive of local initiatives, a place based approach is essential. Every location is different and needs and expectations change. A place based approach that breaks down traditional silos and boundaries can facilitate a collaborative and proactive response to community needs and break down traditional barriers between service providers and consumers.

To establish an authentic sense of place and to create an environment conducive to collaboration, learning and creativity, it is important that we provide opportunities, both physical and virtual, for community stakeholders to come together, to exchange information and to feel part of the community. The provision of dedicated facilities with access to efficient digital technologies that can act as community and industry hubs, is a priority for Kalgoorlie-Boulder. This will form a key component of the revitalisation of the City Centre Precinct.

### Revitalising the Kalgoorlie City Centre Precinct

An enhanced city revitalisation project is a key initiative to improve liveability and to promote Kalgoorlie-Boulder as a vibrant, stimulating and welcoming regional centre. As the major regional city in the Goldfields-Esperance region<sup>60</sup> and WA's largest inland city, Kalgoorlie-Boulder needs to make a



bold statement that encapsulates its unique qualities, the history of the region and its place in the world.

Following the successful revitalisation of Burt Street Heritage Precinct, the CKB has developed a plan to revitalise the Kalgoorlie City Centre.<sup>61</sup> The State Government has committed \$8 million through the Royalties for Regions Program for the revitalisation of the St Barbara Square area and Cassidy Street. The CKB and the Kalgoorlie-Boulder community have indicated a desire to revisit the project scope and to ensure a best practice approach that fully engages the community and provides a comprehensive approach to the regeneration of the city.

A review of urban design and place making in the City Precinct was undertaken as part of the Growth Plan<sup>62</sup> in cooperation with the CKB, in order to inform the next iteration of the city's revitalisation plans. A key to successfully transforming the built environment will be

enhancing Kalgoorlie-Boulder's public spaces and entry points, and enabling a strong voice for residents, retailers and community organisations in order to:

- Create a better place to visit, live, work, run a business, shop and socialise;
- Encourage and promote the unique heritage and history of Kalgoorlie-Boulder;
- Develop new initiatives and projects to enhance Hannan Street and the city surrounds that recognise the Central Business District (CBD) as a place for all people, cultures, interests and ages;
- Continue to grow the creative community by coordinating key events, programs and festivals, and recognising that arts and culture can drive economic prosperity through creating a 'vibe' and energy in the CBD;
- Create space and digital access to bring minds together and stimulate innovation, learning and creativity; and
- Share responsibilities between governments, the private sector and the community.

A suite of strategies and actions are proposed to guide the revitalisation of the city in a coordinated manner and in response to the aspirations articulated by the local community during stakeholder consultations.<sup>63</sup> These will be considered by the CKB as part of ongoing city centre revitalisation activities.

## **FOCUS AREA SEVEN – SUPPORT BUSINESS AND INDUSTRY DEVELOPMENT**

### **Addressing the Regulatory Burden**

Successful regional economic development relies on effective cross-sectoral cooperation and partnerships between governments and with the private sector. Industry leaders and businesses will drive economic growth and attract investment, with government having a vital role in setting in place the key enablers.

A key objective of the Growth Plan is to promote policy innovation at all levels of government to ensure continual progress towards easing the regulatory burden on business and to encourage future investment

## **FOCUS AREA SIX**

### **DEVELOP THE BUILT ENVIRONMENT AND SENSE OF PLACE**

- Action 6.1: Ensure adequate enabling infrastructure for Kalgoorlie-Boulder's future needs and promote the use of sustainable and renewable natural resources
- Action 6.2: Undertake an enhanced city revitalisation initiative focused on the Kalgoorlie City Centre Precinct and key entry points to the city
- Action 6.3: Implement best practice community engagement in order to promote a connected, collaborative and empowered local community
- Action 6.4: Provide appropriate, accessible services and community facilities to meet the needs of a growing and diverse population

in the region, whilst maintaining social, cultural and environmental safeguards.

WA is seen as an attractive place to invest in mining because of its natural endowment of resources and its favourable regulatory environment relative to other jurisdictions around the world. However, there are areas where WA could improve its performance. For example, according to the Fraser Institute's 2015 Survey of Mining Companies,<sup>64</sup> out of 109 jurisdictions evaluated, WA ranks:

- 16th in relation to uncertainty regarding environmental regulations;
- 31st in relation to the impact of labour regulations and employment agreements;
- 36th in relation to the quality of infrastructure; and
- 46th in relation to uncertainty regarding disputed land claims.

Policy innovation to facilitate the ease of doing business is a shared responsibility, requiring industry to provide regular feedback on the regulatory issues that have the greatest cost and productivity impact. It is therefore important that a regular dialogue is maintained between the private sector and all levels of government, to ensure that the key regulatory burdens impacting business in the region, and the overall costs to the Kalgoorlie-Boulder economy, are better understood.

The CKB plays an important role as a regulator, an enabler and as the level of government that most closely affects the daily life of its citizens. The CKB underwent some significant changes in 2016, including a new Mayor, a new Chief Executive Officer and a major review of its operations and staffing.

Economic development and growth is now a key focus area for the CKB, which is committed to ongoing review of planning and regulatory

operations to ensure that development projects are processed quickly and promote responsible business development. The CKB has a vital role in facilitating and incentivising innovation and entrepreneurship to enhance business growth and economic diversification. It also has a vital role in advocating for change to address growth constraints at a state and national level.

Ongoing close working relationships with key organisations such as the GEDC, the KBCCI and the CME will be critical. Kalgoorlie-Boulder must present a united front, both in terms of escalating issues of policy and regulation that cannot be resolved at a local level, and providing a welcoming environment and consistent message for prospective proponents and investors.

We need to explore opportunities to better promote local suppliers and support more local content in contracting opportunities by supporting increased industry networking events and through promoting opportunities for collaboration and joint ventures on major contracts. For example, assisting local construction companies to compete for and win non-residential contracts that too often go outside our region.

Technology platforms can be utilised to help improve supply opportunities for our local businesses by publishing supply opportunities and facilitating communication between project buyers and suppliers. It is proposed to establish a 'Kalgoorlie-Boulder Online Marketplace', to provide a digital platform for suppliers and contractors to connect with project opportunities in the region.

A strong regional presence and leadership from state government agencies is critical to support positive regional development and to facilitate improved economic and social outcomes in all local government areas within the Kalgoorlie-Boulder Economic Zone.

## HAHN ELECTRICAL CONTRACTING PTY LTD

For a company now operating internationally, it is interesting to reflect that Hahn Electrical started in a home garden shed in Kalgoorlie-Boulder. Since 1990, Allan and Daphne Hahn have grown their business to now employ more than 200 employees across the Hahn group of companies. The company has worked in every state and territory in Australia as well as internationally.

Hahn Electrical have been delivering electrical power, along with associated services and systems, to the hard rock underground and surface mining industry for over 25 years. They are proud to operate at every level of the mining industry, from junior miners and start-ups, to multi-nationals operating major underground and open cut mines.

Hahn has been at the forefront of the development of new approaches and technologies, as a pioneer in 1000 volt electrical distribution systems across Australia. As a leader in their industry, you know they are setting the standard when their competitors copy them, the regulators ask them how they do it and system designers need their opinions.

Critically, they value their employees and are invested in their wellbeing. As a result, Hahn has a positive work culture with many long term, passionate staff with a deep commitment to the business. This has formed the foundation for their continued expansion and overall business success. Locally, many hundreds of electricians got their start in the mining industry through Hahn, including many apprentices investing in the next generation. Their roots in the Kalgoorlie-Boulder community run deep, and they contribute back to the community they still call home.

Hahn are a major contributor to the great export industry that the Australian mining industry is renowned for around the world, both in exporting capability through expat personnel and also equipment and technology. Kalgoorlie-Boulder is a town of opportunity, with Hahn Electrical just one example of a local backyard operation growing to service and supply WA, the nation and international markets.



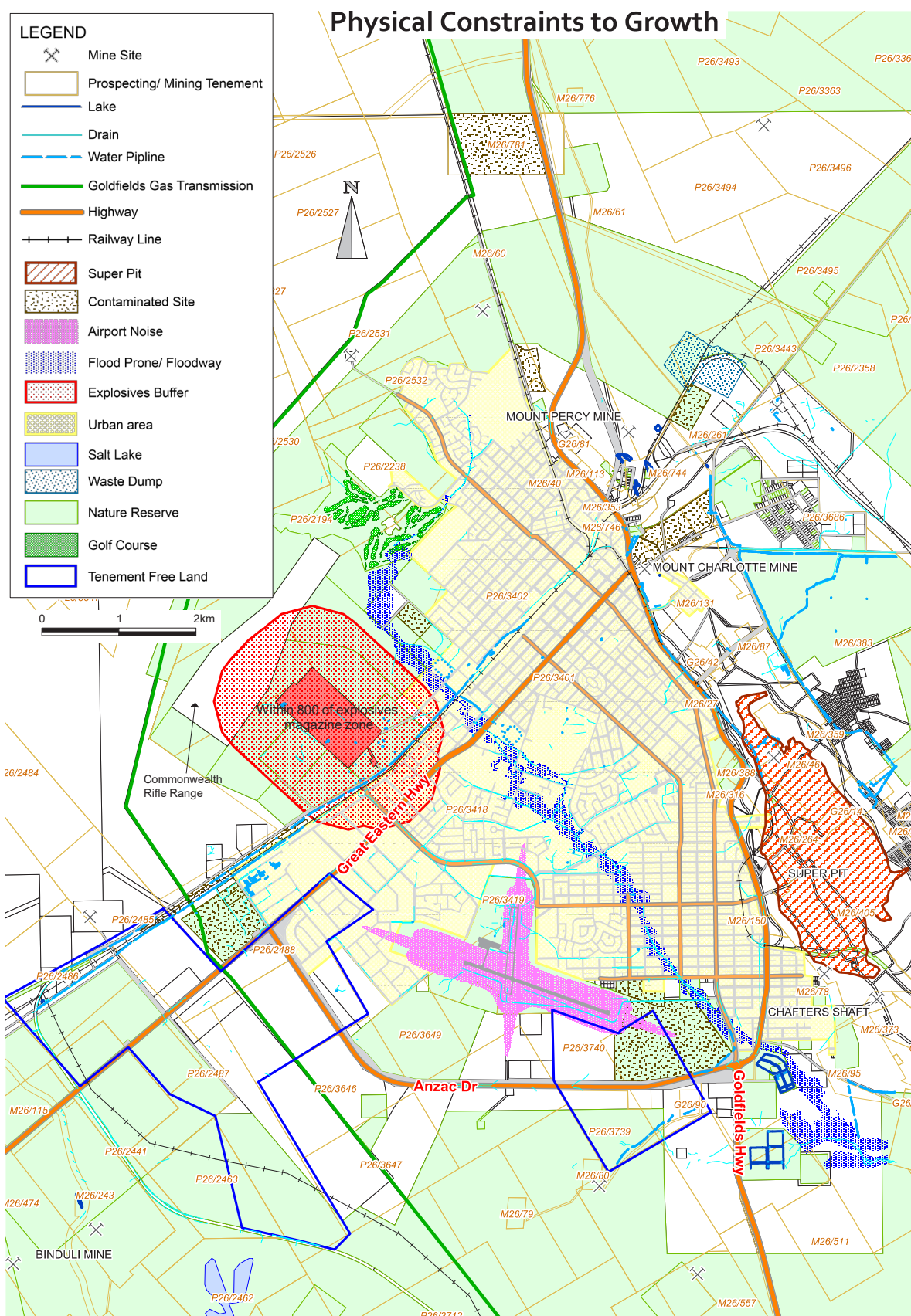


Figure 1.14 Physical Constraints to Growth

## Tackling Land Constraints

Industry diversification and expansion in Kalgoorlie-Boulder is currently constrained by the availability of suitable land for special industrial purposes that are not suitable for development within the town site. Given the enormous mineral prospectivity and existing mining operations adjacent to the city, most available land is subject to various forms of mineral tenement and/or incompatible land uses, as illustrated in figure 1.14. The Mungari Industrial Estate in the Shire of Coolgardie is a 700-hectare strategic industrial area established to create heavy and strategic downstream processing opportunities in the Goldfields-Esperance region. The Department of State Development is the Lead Agency for the Estate, while LandCorp is the Estate Manager. Mungari has so far remained undeveloped.

A clear priority for Kalgoorlie-Boulder is to work with industry and government stakeholders to release land that may be required for future higher order economic purposes, while maintaining access to key areas of high mineralisation.

## Enabling Innovation and Entrepreneurship

We need to build on our history and reputation for technical and professional excellence by further developing a culture of innovation and creativity. Kalgoorlie-Boulder already has a unique asset in WASM, with some significant plans to expand local learning, research and development capacities, as discussed under Focus Area One.

There are many successful service and manufacturing businesses that are linked to the mining, transport and construction sectors, locally, nationally and globally. These businesses, as well as other small and emerging enterprises that have potential for growth and economic diversification, can be supported by providing opportunities for collaboration, incentives, space and enabling technology. There are a number of successful innovation hubs and business incubators operating in metropolitan and regional areas of WA, generally as private sector led, social enterprises. These will be explored and adapted for application in Kalgoorlie-Boulder.



Melissa Drummond Photography, [www.melissadrummond.com.au](http://www.melissadrummond.com.au)

Incubators help innovative enterprises to accelerate the transformation of ideas into commercial outcomes and potentially globally competitive businesses by giving them support, resources and access to business networks. Enabling the creation of a centralised hub – the current unofficial name being the ‘Kalgoorlie Innovation Centre for Supporting Technological Advancement, Research and Training’ (KICSTART), is a key short-term priority.

### Supporting Cultural and Creative Industries

Cultural and creative industries are a significant and growing segment of the Kalgoorlie-Boulder economy and a major contributor to innovation and community liveability. Cultural and creative industries include a number of ‘creative segments’ including music, visual and performing arts, film, television and radio, advertising and marketing, architecture and design, software and digital content, and publishing.<sup>65</sup> Importantly, in addition to these specific categories of creative industries, a significant proportion of creative industry employment is found embedded as specialist positions within other sectors of the economy.

Supporting our cultural and creative industries is important in terms of prospective employment, diversity and economic outcomes. They are also vital contributors to a vibrant and liveable community, as well as contributing to the tourism experience through public art and improved community amenity.

Creativity is an integral component of an innovative and entrepreneurial economy, and its generative nature is an important balance to the extractive nature of mining. Enhancing the contribution of creative industries has capacity to catalyse ‘creative places’ and attract skilled and talented people to Kalgoorlie-Boulder.

### Attracting Investment

Ultimately, the sustained growth of Kalgoorlie-Boulder is dependent upon attracting new investment to the region to establish new enterprises, enable business growth, provide infrastructure, financing and industry diversification.

To ensure that Kalgoorlie-Boulder is an attractive place to invest and do business, there must be a consistent and welcoming message to ensure that potential investors are aware of both the investment opportunities, and how to navigate the local regulatory and approval processes when required.

Local businesses and industry representatives need to have the financial literacy, cross-cultural competency and business planning skills to position their businesses to attract finance and investment. This will enable business development, create employment and contribute to a stronger Kalgoorlie-Boulder economy.

The development of an investment prospectus as a key marketing and investment attraction tool, is a key priority for the Growth Plan. The prospectus will promote Kalgoorlie-Boulder and local investment opportunities to regional, national and international markets. It will be a dynamic document available both in hard copy and online, providing important local context for attendees at industry events such as Diggers and Dealers or future investment forums.

Kalgoorlie-Boulder needs to continue to build its international reach and relationships. We already have networks throughout the world through our exporters and tertiary alumni. There is an opportunity to formalise sister city relationships with major economic partners such as China,

## FOCUS AREA SEVEN

### SUPPORT BUSINESS AND INDUSTRY DEVELOPMENT

- Action 7.1: Ensure that policy, planning and regulatory settings enable and encourage sustainable business development
- Action 7.2: Create an environment that stimulates and rewards innovation, collaboration, creativity and entrepreneurship
- Action 7.3: Build Kalgoorlie-Boulder's strategic linkages to international markets and investment opportunities

India, the United States and other emerging partners and to further develop a mutually rewarding partnership with the City of Golden, the home of the Colorado School of Mines. We also need to explore opportunities to collaborate with state, national and other regional locations to promote our investment opportunities internationally.

#### 1.4.2 Our Growth Priorities

Part Two provides a detailed Program of Action, which includes the Key Actions and related Initiatives that arise from our seven Priority Focus Areas. The process and criteria for prioritising these Initiatives is explained in Part Three. The following table summarises this Program of Action into ten Growth Priorities.<sup>66</sup>

**Table 1.2 A Snapshot of Kalgoorlie-Boulder's Growth Priorities**

Priority	Description
1) Improving Secondary Education Outcomes	Involves a number of initiatives that focus on early intervention, improving attraction and retention of teachers and developing personalised pathway planning for students.
2) Growing Tertiary Education and Knowledge Exports	Includes initiatives to grow WASM, through the establishment of a research and development hub for the gold industry, the development of a RUC (including an option for an expanded Curtin University offering) and the establishment of the CRT Specialised Centre of Excellence in Hard Rock Processing and Engineering Training.
3) Developing Renewable Energy Generation Capacity	Providing an energy solution and stimulating economic and productivity benefits through the development of local baseload renewable power generation capability.

Priority	Description
4) Advancing a Transport Infrastructure Investment Pipeline	Enhancing our strategic position as a regional transportation and logistics centre by developing a pipeline of priority transport projects based on a short list of projects that require further benefit cost assessment and possible economic triggers.
5) Building a Smart, Creative and Digitally Connected City	Ensuring Kalgoorlie-Boulder has globally competitive information and communication capability through the effective rollout of the NBN, the establishment of a central innovation centre, providing free WiFi zones, and exploring possibilities for Kalgoorlie-Boulder as a future digital destination.
6) Attracting and Accommodating Leisure Tourism	Involves the development of new and improved tourism experiences building on the Growing Kalgoorlie-Boulder Strategic Tourism Plan – including a number of specific tourism products and projects. A priority is to finalise a local branding and marketing strategy.
7) Partnering with Aboriginal People to Achieve Equality of Outcomes	Establishing appropriate mechanisms to lead and drive Aboriginal economic development, addressing socio-economic disadvantage and increasing employment and enterprise development, building on the Growing Kalgoorlie-Boulder Aboriginal Economic Development Strategy.
8) Revitalising the Kalgoorlie City Centre Precinct	Partnering with the community to undertake an enhanced city revitalisation initiative focused on the Kalgoorlie City Centre Precinct and key entry points to the city, by progressing the recommendations of the Growing Kalgoorlie-Boulder Urban Design and Place Making Review.
9) Creating Community and Industry Hubs for Engagement, Innovation and Learning	Includes proposals for a central innovation and business incubator centre; an Aboriginal Cultural and Interpretive Centre; establishing an integrated community resource centre(s) to improve access to information and services; and an enhanced education precinct as outlined above.
10) Enabling a Business and Investment Friendly Environment	Ensuring that policy, planning and regulatory settings enable and encourage sustainable business development, stimulate innovation and entrepreneurship, and create and expand linkages to international markets and investments opportunities.

## 1.5 GOVERNANCE OF THE GROWTH PLAN

In developing the Growth Plan, the GPP recognised that the establishment of sustainable institutional arrangements to drive its implementation and to continuously review and adapt to changing circumstances, is the key to its success and to long term economic growth. Effective governance was endorsed as one of our three Key Growth Enablers.

An effective and collaborative partnership between the public and private sectors and the community was seen as critical to the successful achievement of the Growth Plan objectives. It was also recognised that the governance process itself needed to be adaptive and have the potential to evolve over time, as part of the Growth Plan's implementation.

The GPP identified best practice governance models, key success factors and potential options suitable to the unique circumstances of Kalgoorlie-Boulder.<sup>67</sup> Using a deliberative process it was agreed to initially establish an interim Growing Kalgoorlie-Boulder Partnership (GKBP) that would be responsible for overseeing and driving the implementation of the Growth Plan and facilitating future economic development in Kalgoorlie-Boulder.

The key principles agreed were that the GKBP will:

- Have clarity of responsibility;
- Be results orientated;
- Have local ownership;
- Be evolving and effective; and
- Balance commitment to the Growth Plan against the need to be innovative.

The following organisations and groups, which have a particular interest in local economic

development, will be involved in the Interim Governance Framework:

- Organisations responsible for regional development (e.g. GEDC, RDAGE);
- Specific industry and other stakeholders aligned with the strategic themes and focus areas in the Growth Plan;
- The universities and education sector;
- KBCCI;
- The CME;
- CKB;
- Goldfields Land and Sea Council/other Aboriginal groups; and
- The broader community and not-for-profit sector.

The core membership of the GKBP has a stable membership of seven (the Core Group), which includes two representatives from CKB, two from GEDC, and one each from RDAGE, the CME and the KBCCI. There are two additional rotating positions that are filled in response to particular agenda items that will be drawn from the stakeholder groups within the seven Focus Areas as required.

Representatives from stakeholders within the seven Focus Areas will fill the rotating seats on the GKBP as required. These representatives will be drawn from stakeholder groups involved in particular Growth Plan priorities, which may be especially convened or build on existing forums. The Interim Governance Framework is represented in Figure 1.15.

The chair of the Interim GKBP Core Group is a merit-based selection from the Core Group, unless or until, funding can be secured for an independent chair. Initial priorities for the GKBP will be to negotiate appropriate interim funding arrangements to support



Figure 1.15 Interim Structure of the Growing Kalgoorlie-Boulder Partnership

the ongoing operations of the group and to develop its terms of reference including roles, responsibilities and decision making framework. Its key functions will include:

- Coordinating and driving the implementation of the Growth Plan;
- Maintaining the currency of the Growth Plan and driving long term economic growth;
- Auspicing the establishment of stakeholder groups and industry led sector development opportunities;
- Facilitating linkages with state, regional and local strategic plans and planning processes, including the Blueprint and the Local Government Integrated Planning Framework;
- Fostering collaboration with other regional centres and regions to advance common economic objectives; and
- Establishing effective monitoring and performance management arrangements.

An informal officers group drawn from the core membership of the GKBP will meet on a regular basis to progress the establishment of the governance framework.



Figure 1.16 Growing Kalgoorlie-Boulder - Initial Implementation Priorities

## 1.6 PERFORMANCE MANAGEMENT FRAMEWORK

### 1.6.1 Theory of Change

The purpose of the Theory of Change is to explain the rationale for the key themes and priorities in the Growth Plan and their causal linkages with the expected outcomes and the overall objectives of the RCDP.

Implementation of the Growth Plan will address both the economic and the societal factors that drive socioeconomic development and seek to extend Kalgoorlie-Boulder's sphere of influence through effective governance, networks and partnerships. The relationship between these two interconnected growth factors is illustrated in Figure 1.17.

### Assumptions

Actions under these Priority Focus Areas will contribute to one, two or three of the Strategic Themes.

Strategic Themes and enablers are valid and capture the unique advantages and needs of Kalgoorlie-Boulder in order to capitalise on economic opportunities.

Research and analysis has identified key drivers, constraints and emerging opportunities.

### RCDP Principles

- Empowered
- Distinctive
- Collaborative
- Agile
- Intergenerational

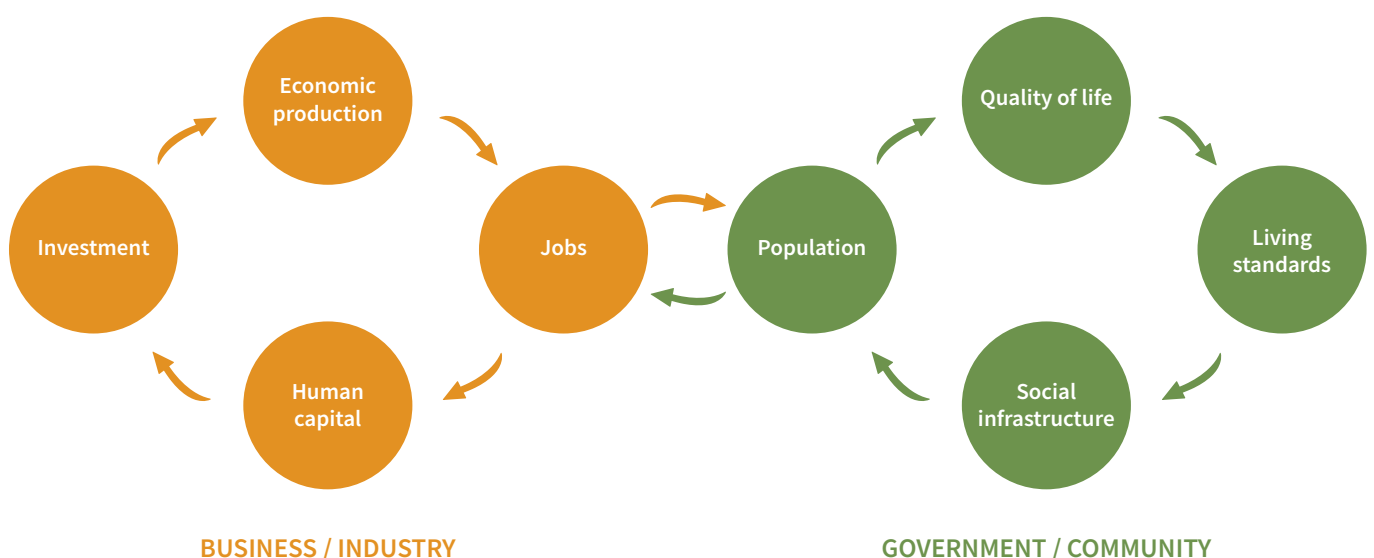


Figure 1.17 Dynamics of Socio-Economic Development

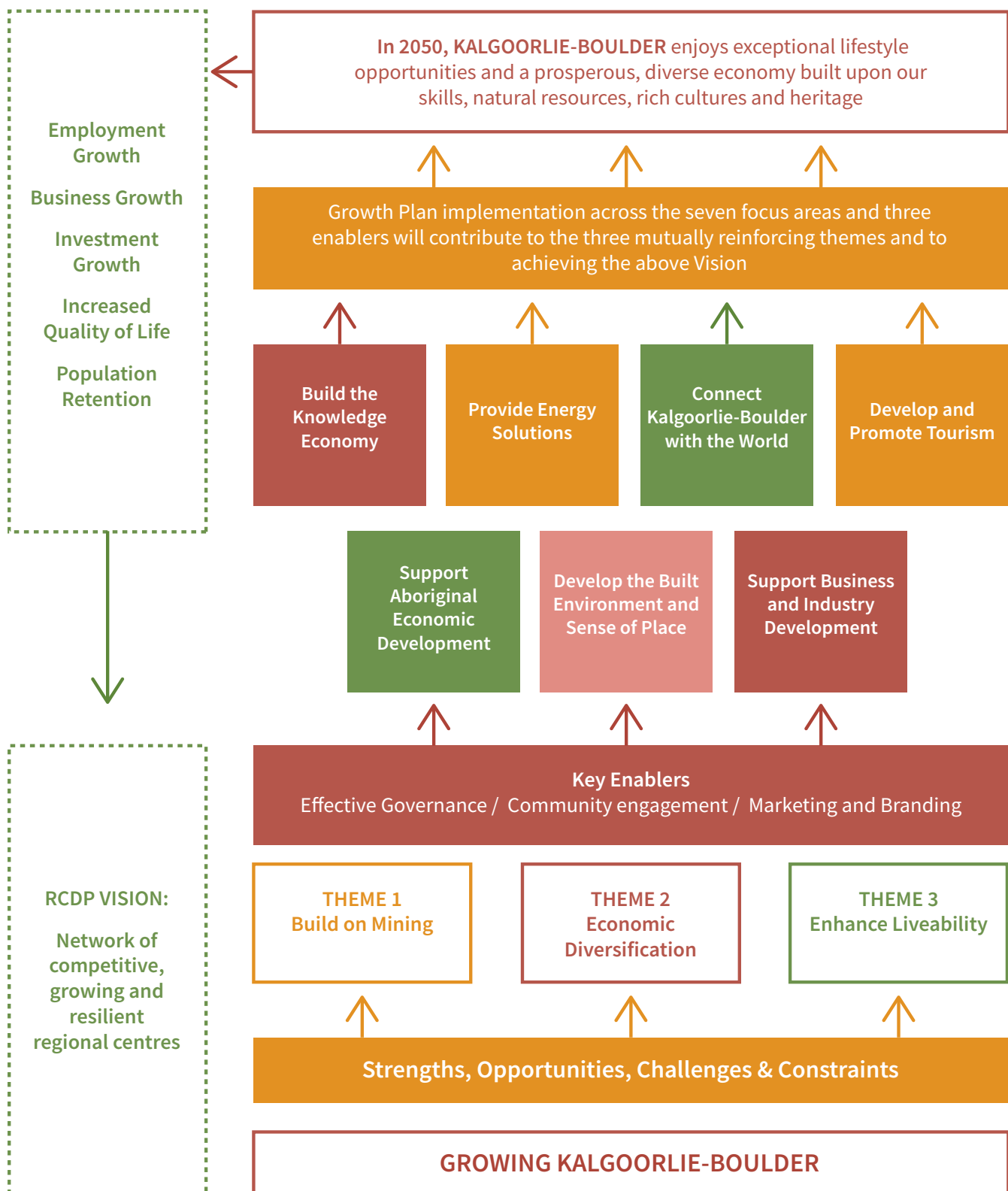


Figure 1.18 Summary of Growth Plan Theory of Change

## 1.6.2 Monitoring and Evaluation

### Key Performance Indicators

The framework for monitoring Growth Plan outcomes is organised in three tiers:

- 1. Headline Indicators** – which measure long term changes to economic conditions that emerge from the three strategic themes. To be reviewed every four years.
- 2. Intermediate Indicators** – which measure progress in each of the priority focus areas as the key drivers of change. To be reviewed every two years.
- 3. Program Indicators** – which measure progress in implementing the key actions and initiatives detailed in the Program of Action. To be reviewed annually, commencing Year 2.

**Table 1.3 Headline Indicators**

Indicators	Means of Measurement	Baseline	Target (by 2020)
Economic Growth	Gross Regional Product (at Kalgoorlie-Boulder Economic Zone level)	\$7.9 billion (2015-16)	10% increase in GRP
Industry Diversification	Industry Value Added (at the Kalgoorlie-Boulder Economic Zone level)	43% (\$3.4 billion in 2015-16)	5 percentage points improvement in relative contribution of all sectors (other than mining) to GRP
Regional Competitiveness	Regional Australia Institute (RAI) Regional Competitiveness Index	2015-16	Improve all rankings towards Australian local government average or better
Increased Employment	ABS Small Area Labour Market Data (Quarterly)	23,953 (2015-16)	5% increase in total employment
Increased Population	ABS Annual Population Survey	34,510 (2014-15)	5% increase in residential population
Business Numbers	Number of employing businesses	1,100 (2014-15)	5% increase in business numbers

**Table 1.4 Intermediate Indicators**

Focus Area	Indicators	Means of Measurement
Knowledge Economy	Increased secondary school retention	ABS Census
	Increased secondary school participation	ABS Census
	Increase in proportion of secondary students that go to university	ABS Census
	Increase in number of international students studying in Kalgoorlie-Boulder	Curtin University / WASM Enrolment Data
Energy Solutions	Increased energy availability and reliability	Western Power Reports
	Increased percentage of local renewable energy sources	Department of Finance - Energy Generation Report
Connectivity	Efficiency and safety of transport	Bureau of Infrastructure, Transport and Regional Economics Department of Transport Road Safety Statistics
	Percentage of households with internet connection	ABS Census
	Percentage households and businesses with broadband internet access	Social Atlas of Australia
Tourism	Increased visitor numbers	Tourism WA
	Increased visitor length of stay	Tourism Research Australia
	Increased employment and economic contribution	ABS Labour Market Data
Aboriginal Economic Development	Increased Aboriginal employment and labour force participation	ABS Census
	Increased incomes	HealthInfoNet
	Increased Aboriginal owned businesses	WA Country Health Service Goldfields Health Profile
	Reduced socio-economic inequities	Small Business Development Corporation - Aboriginal Business Directory

Built Environment and Sense of Place	Improved liveability and quality of life	Quality of Life (QoL) Indicator Framework
	Population attraction and retention	Regional Competitiveness Index
	Community satisfaction	CKB Perceptions Survey
Business and Industry Development	New business start ups	Annual Red Tape Survey of Kalgoorlie-Boulder Businesses (To be developed)
	Annual priority list of issues for business	Annual Survey of Kalgoorlie-Boulder Businesses (To be developed)
	Increase in the number of creative industry businesses	ABS Counts of Australian Businesses (Annual)
	Non-mining exports (ex region and ex nation)	Exports benchmark comparison to 2016 <sup>68</sup>

### Program Indicators

The Program of Action outlined in Part Two, provides details of the lead agencies, key stakeholders and estimated timeframes associated with the key actions and initiatives that will drive the implementation of the Growth Plan.

The GKBP will oversee the implementation of the Growth Plan and will establish specific governance mechanisms to drive the implementation of actions under each Focus Area (refer Section 1.5). A more detailed implementation plan and evaluation framework for each Focus Area will be developed at that time, in consultation with the relevant key stakeholders. This will include the negotiation of program level key performance indicators where applicable.

### Monitoring and Review

The GKBP will be responsible for the monitoring and review of the Growth Plan. The Growth Plan and the Performance Management Framework are structured in order to provide a tiered and progressive approach to monitoring and review.

- Part One (Strategic Overview) will be reviewed every four years, along with progress against the Headline Indicators.
- Part Two (Program of Action) is designed to be a more dynamic document, to be reviewed and updated on an annual basis along with progress against the agreed Program Indicators.<sup>69</sup>
- Progress against the Intermediate Indicators within each Focus Area will be undertaken every second year as part of the review of the Program of Action.

### 1.6.3 Implementation Requirements

#### Integrated Planning and Implementation

The Growth Plan has been developed within the strategic context provided by a number of state, regional and local planning processes. The ongoing alignment of these processes is important, in order to ensure the consistent expression of local priorities and efficient integration of implementation processes.

The close alignment between the Growth Plan and the Blueprint will facilitate efficiencies in implementation of both plans. The CKB has

brought forward its review of the Strategic Community Plan to ensure that it aligns with the Growth Plan. The ongoing alignment of growth priorities with statutory planning processes will be important in order to coordinate implementation and to streamline administrative reporting processes.

At a national level it is proposed to liaise with the relevant federal departments and agencies, in order to seek Commonwealth Government support for implementation and to explore opportunities that may arise from the Smart Cities and other national policy agendas.

### **Policy and Regulatory Considerations**

Future industry growth is dependent upon a supportive policy and regulatory environment to ensure that Kalgoorlie-Boulder is a favourable investment destination. Many of these policy issues are national and state matters such as taxation, labour relations, infrastructure, service delivery and regulatory reforms – many of which Australia ranks relatively poorly compared to many other countries.<sup>70</sup>

Policy and program consistency is required to achieve the objectives of regional development. A shared and long-term vision is required to support the growth of regional centres and to ensure that economic development efforts are not undermined by short-term budget imperatives, or perceived administrative efficiencies.

While many of these policy reforms require action on the part of State and Federal Governments, effective local leadership is required to advocate on behalf of local industries and to ensure a consistent message is given to governments at all levels about ongoing issues of reform.



## 1.7 SUPPORTING DOCUMENTS

The following documents and consultancy reports provided important input to the Growth Plan. The reports were not endorsed by the GPP and do not necessarily represent the views of the GPP.

1. *Kalgoorlie-Boulder Growth Plan – Economic Analysis (ACIL Allen)*
2. *Kalgoorlie-Boulder Growth Plan – Strategy Development and Economic Projections (ACIL Allen)*
3. *Growing Kalgoorlie-Boulder Stakeholder Engagement Summary (Puzzle Consulting)*
4. *Kalgoorlie Regional Centre Housing Study (RPS)*
5. *Kalgoorlie-Boulder Aboriginal Economic Development Strategy (Keogh Bay)*
6. *Historical Narrative - Aboriginal Peoples- Goldfields, Western Australia (Goldfields Community Services Aboriginal Corporation)*
7. *Kalgoorlie-Boulder Urban Design and Place Making Review (Hames Sharley)*
8. *Growing Kalgoorlie-Boulder Strategic Tourism Plan (Economic Transitions)*
9. *Greater Kalgoorlie-Boulder Infrastructure Capacity Assessment (Cardno)*
10. *Kalgoorlie-Boulder Liveability and Social Services Review (Hames Sharley)*
11. *Kalgoorlie Scenario Planning Report (AEC Group)*
12. *Industrial Land Use and Availability Assessment (Urban design/Pracsys)*
13. *Growing Kalgoorlie-Boulder Partnership Interim Governance Model (Curtin University Sustainable Policy Unit)*
14. *Raw List of Initiatives and Ideas*
15. *Multi-Criteria Analysis – Summary of Assessment Criteria and Weightings*

These documents are available from the City of Kalgoorlie-Boulder (08 9021 9600) or from the Goldfields-Esperance Development Commission (08 9080 5001).

## GLOSSARY OF TERMS

<b>Benchmarking</b>	A method for comparing one regional centre against others. Functional benchmarking involves breaking down the indicators of performance of a regional centre, into their component parts.
<b>Benefit Cost Assessment</b>	A tool used to estimate the strengths and weaknesses of a proposal, in order to determine if the benefits outweigh the costs and/or to compare the value of different options. The result is usually expressed as a Net Present Value (NPV) or a Benefit Cost Ratio (BCR).
<b>Benefit Cost Ratio</b>	An indicator used in Benefit Cost Assessment (BCA) to summarises the value for money of a project or proposal.
<b>Business Case</b>	A document designed to convince a prospective investor, either government or private, of the merits of a business proposition, project or initiative.
<b>Clusters</b>	Geographic concentrations of industry or other business activities that relate to each other or work together.
<b>Comparative Advantage</b>	The relative advantage that relates to the ability of an entity to carry out a particular economic activity (specialisation) more efficiently (at lower opportunity cost) than another activity.
<b>Competitive Advantage</b>	The absolute advantage that an entity (jurisdiction or business) has relative to its competitors. This can be reflected in higher market shares through lower prices (e.g. commodities) or product differentiation.
<b>Economic Growth</b>	An increase in the amount of goods and services produced per head of the population over a specified period of time.
<b>Futures Forum</b>	A public event held in May 2016 to engage the Kalgoorlie-Boulder community in the Growth Plan, to hear from keynote speakers and to share ideas about the future of Kalgoorlie-Boulder.
<b>Gross Regional Product</b>	The market value of all final goods and services produced within a specified area in a given period of time.
<b>Human Capital</b>	The skills, knowledge, and experience possessed by an individual or population, viewed in terms of their value or cost to an organisation or country.

<b>Industry Growth Matrix</b>	Provides a visual representation of the competitive positioning of each industry or group of industries at a particular point in time by mapping their relative socio-economic contributions.
<b>Input-Output Analysis</b>	A formal methodology for representing the economy as a matrix of flows between individual industries, households, government and overseas trade. It provides a tool for tracing the flow-on consequences of a change in one industry through the rest of the economy.
<b>Kalgoorlie-Boulder Economic Zone</b>	The focus of economic activity and analysis, which extends beyond artificial boundaries or jurisdictions in order to capture key mine sites and supply networks serviced from the city. Defined as the seven SA2 boundaries that make up the Goldfields sub-region.
<b>Liveability</b>	Refers to the quantitative and qualitative factors that contribute to the quality of life for residents and impacts on residents' and potential residents' decisions on whether or not it is a good place to live, raise children, work, play and retire.
<b>Megatrends</b>	Known as significant global forces that may have far-reaching impacts on business, economies, industries, societies and individuals.
<b>Multi-Criteria Analysis</b>	A decision support tool to evaluate the optimal outcomes of a project, taking into consideration a range of predetermined criteria or variables. MCA establishes preferences between options by reference to an explicit set of identified objectives for which there are measurable criteria.
<b>Net Present Value</b>	The sum of discounted flows of costs and revenues over the life of the project. A NPV of zero indicates that a project is covering costs only and there is no profit or loss.
<b>Opportunity Cost</b>	The cost of production measured as the value of alternative production foregone.
<b>Productivity</b>	Refers to the efficiency with which an activity is done. Usually efficiency is measured in relation to a scarce resource such as labour, but it is equally applicable to measures such as productivity per dollar of capital or per hectare of land.
<b>Program of Action</b>	Sets out what needs to be done to implement a strategy, including responsibilities, timeframes and project management arrangements.

<b>Quality of Life</b>	The standard of health, comfort, and happiness experienced by the community.
<b>Quality of Life Indicator Framework</b>	A framework of indicators, which measure a community's 'vital signs'. Individually, indicators explain and track progress in relation to a particular issue or feature, while collectively, they provide a basis for viewing the larger picture and helping to guide appropriate responses.
<b>Regional Centres</b>	The 11 regional centres identified in the State Planning Strategy 2050 – Albany, Bunbury, Busselton, Broome, Carnarvon, Geraldton, Kalgoorlie-Boulder, Karratha, Kununurra, Mandurah and Port Hedland.
<b>Scenario Planning</b>	A process of comparing and assessing alternative future scenarios and uncertainties, to inform future strategies and maximise the prospects of achieving the desired future.
<b>Socio-Economic Development</b>	The process of social and economic development in a society as measured through means such as GDP, life expectancy, literacy and levels of employment.
<b>Theory of Change</b>	A comprehensive description and illustration of how and why a desired change is expected to happen in a particular context. It is focused in particular on mapping out the impacts of an action or initiative and how these lead to desired goals and objectives.
<b>Traded Cluster</b>	Groups of related industries that serve markets beyond which they are located and are therefore highly exposed to external competition.
<b>Value Chain</b>	Refers to the production chain for a product, including the upstream flow of inputs to the production process and the downstream flow of outputs from production.

## SUMMARY OF ACRONYMS

<b>ABS</b>	Australian Bureau of Statistics
<b>AEDS</b>	Aboriginal Economic Development Strategy
<b>AGO</b>	Australia's Golden Outback
<b>AusTrade</b>	Australian Trade and Investment Commission
<b>AWDC</b>	Aboriginal Workforce Development Centre
<b>BCA</b>	Benefit Cost Assessment
<b>BCR</b>	Benefit Cost Ratio
<b>CKB</b>	City of Kalgoorlie-Boulder
<b>CME</b>	The Chamber of Minerals and Energy
<b>CRC ORE</b>	Cooperative Research Centre for Optimising Resource Extraction
<b>CRT</b>	Central Regional TAFE
<b>CUSP</b>	Curtin University Sustainable Policy Unit
<b>DAA</b>	Department of Aboriginal Affairs
<b>DCA</b>	Department of Culture and the Arts
<b>DIIS</b>	Department of Industry, Innovation and Science
<b>DMP</b>	Department of Mines and Petroleum
<b>DoE</b>	Department of Education
<b>DoL</b>	Department of Lands
<b>DoP</b>	Department of Planning
<b>DoT</b>	Department of Transport
<b>DoW</b>	Department of Water
<b>DPMC</b>	Department of Prime Minister and Cabinet
<b>DRD</b>	Department of Regional Development
<b>DSD</b>	Department of State Development
<b>DTWD</b>	Department of Training and Workforce Development
<b>ECF</b>	Employment Concentration Factor

<b>EKPS</b>	East Kalgoorlie Primary School
<b>FIFO</b>	Fly-in Fly-out
<b>GAWS</b>	Goldfields and Agricultural Water Supply Scheme
<b>GCSAC</b>	Goldfields Community Services Aboriginal Corporation
<b>GEDC</b>	Goldfields-Esperance Development Commission
<b>GEMIA</b>	Goldfields Education and Mining Industry Alliance
<b>GETEA</b>	Goldfields-Esperance Tertiary Education Alliance
<b>GKBP</b>	Growing Kalgoorlie-Boulder Partnership
<b>GLSC</b>	Goldfields Land and Sea Council
<b>GP</b>	General Practitioner
<b>GPP</b>	Growth Plan Partnership
<b>GRP</b>	Gross Regional Product
<b>GSP</b>	Gross State Product
<b>GTNA</b>	Goldfields Tourism Network Association
<b>GVROC</b>	Goldfields Voluntary Regional Organisation of Councils
<b>KBCCI</b>	Kalgoorlie-Boulder Chamber of Commerce and Industry
<b>KBCHS</b>	Kalgoorlie-Boulder Community High School
<b>KBVC</b>	Kalgoorlie-Boulder Visitors Centre
<b>KCGM</b>	Kalgoorlie Consolidated Gold Mines
<b>KICSTART</b>	Kalgoorlie Innovation Centre for Supporting Technological Advancement, Research and Training
<b>MCA</b>	Multi-Criteria Analysis
<b>MoU</b>	Memorandum of Understanding
<b>MRWA</b>	Main Roads Western Australia
<b>NBN</b>	National Broadband Network
<b>NGO</b>	Non-Governmental Organisation

<b>NPV</b>	Net Present Value
<b>PCG</b>	Project Control Group
<b>PPA</b>	Power Purchase Agreement
<b>QoL</b>	Quality of Life
<b>RAP</b>	Reconciliation Action Plan
<b>RCDP</b>	Regional Centres Development Plan
<b>RDAGE</b>	Regional Development Australia Goldfields Esperance
<b>RfR</b>	Royalties for Regions
<b>RSRU</b>	Regional Services Reform Unit
<b>RUC</b>	Regional Universities Centre
<b>SBDC</b>	Small Business Development Commission
<b>SPS</b>	State Planning Strategy 2050
<b>SWIS</b>	South West Interconnected System
<b>WASM</b>	Western Australia School of Mines

## FOOTNOTES

1. A number of different sources of information have been used in this Plan and depending on the level of availability of data or the context of the discussion, specific references have been made to the 'Kalgoorlie-Boulder Economic Zone', the City of Kalgoorlie-Boulder (CKB) or the Goldfields-Esperance region or its sub-regions.
2. Further information on Federal Government opportunities can be found in Part 3.
3. Goldfields Community Services Aboriginal Corporation (2016) Historical Narrative - Aboriginal Peoples.
4. <http://www.kalgoorlietourism.com>.
5. ACIL Allen (2016) Kalgoorlie-Boulder Growth Plan - Economic Analysis.
6. Hames Sharley (2016) Kalgoorlie-Boulder Liveability & Social Services Review.
7. RPS (2016) Kalgoorlie-Boulder Regional Centre - Housing Study.
8. ACIL Allen (2016) Kalgoorlie-Boulder Growth Plan - Economic Analysis.
9. The non-resident population refers to those people in Kalgoorlie-Boulder, on Census night, who usually reside elsewhere. This includes tourists and other visitors.
10. ACIL Allen (2016) Kalgoorlie-Boulder Growth Plan - Economic Analysis.
11. ACIL Allen (2016) Kalgoorlie-Boulder Growth Plan - Economic Analysis.
12. ACIL Allen (2016) Kalgoorlie-Boulder Growth Plan - Economic Analysis.
13. Painted Dog (2016) Regional Migration and Perceptions Analysis.
14. RPS (2016) Kalgoorlie-Boulder Regional Centre - Housing Study.
15. RPS (2016) Kalgoorlie-Boulder Regional Centre - Housing Study.
16. RPS (2016) Kalgoorlie-Boulder Regional Centre - Housing Study.
17. Keogh Bay Consulting (2016) Kalgoorlie-Boulder Aboriginal Economic Development Strategy.
18. Figures for Kalgoorlie-Boulder Economic Zone provided by ACIL Allen.
19. United States Geological Survey estimates
20. U.S. Department of the Interior; U.S. Geological Survey (2016) Mineral Commodity Summaries 2016.
21. ACIL Allen (2016) Kalgoorlie-Boulder Growth Plan - Economic Analysis.
22. ACIL Allen (2016) Kalgoorlie-Boulder Growth Plan - Strategy Development and Economic Projections.
23. ACIL Allen (2016) Kalgoorlie-Boulder Growth Plan - Economic Analysis.
24. ACIL Allen (2016) Kalgoorlie-Boulder Growth Plan - Strategy Development and Economic Projections.
25. ACIL Allen (2016) Kalgoorlie-Boulder Growth Plan - Economic Analysis.
26. ACIL Allen (2016) Unpublished Briefing Note.
27. Further details on the Industry Assessment Methodology are provided in Part Three. See also ACIL Allen (2016) Kalgoorlie-Boulder Growth Plan - Economic Analysis.
28. An explanation of cluster analysis and a summary of the findings relevant to Kalgoorlie-Boulder are provided in Section 3.2 in Part Three. See also - Pracsys (2016) Regional Cluster Analysis; Phase 3 and Phase 5 Reports.
29. ACIL Allen (2016) Kalgoorlie-Boulder Growth Plan - Strategy Development and Economic Projections.

30. Cardno (2016) Greater Kalgoorlie-Boulder Infrastructure Capacity Assessment.
31. Refer Part Three and Hames Sharley (2016) Kalgoorlie-Boulder Liveability and Social Services Review.
32. Painted Dog (2006) Regional Migration & Perception Analysis.
33. This research and analysis is summarised in Part Three.
34. ACIL Allen (2016) Kalgoorlie-Boulder Growth Plan - Strategy Development and Economic Projections; Hames Sharley (2016) Kalgoorlie-Boulder Liveability and Social Services Review.
35. More information is available in ACIL Allen (2016) Kalgoorlie-Boulder Growth Plan - Strategy Development and Economic Projections; and Hames Sharley (2016) Kalgoorlie-Boulder Liveability and Social Services Review.
36. ACIL Allen (2016) Kalgoorlie-Boulder Growth Plan - Strategy Development and Economic Projections.
37. Carpe Diem (2016) Feasibility Study of a Regional Universities Centre for the Goldfields-Esperance Region - ADDENDUM 2016; Carpe Diem (2015) Feasibility Study of a Regional Universities Centre for the Goldfields-Esperance Region.
38. ACIL Allen (2016) Kalgoorlie-Boulder Growth Plan - Strategy Development and Economic Projections.
39. Cardno (2016) Greater Kalgoorlie-Boulder Infrastructure Capacity Assessment; ACIL Allen (2016) Kalgoorlie-Boulder Growth Plan - Strategy Development and Economic Projections.
40. Cardno (2016) Greater Kalgoorlie-Boulder Infrastructure Capacity Assessment.
41. ACIL Allen (2016) Kalgoorlie-Boulder Growth Plan - Strategy Development and Economic Projections.
42. ACIL Allen (2016) Kalgoorlie-Boulder Growth Plan - Strategy Development and Economic Projections.
43. The PortLink Project is summarised in the Goldfields-Esperance Regional Investment Blueprint.
44. ACIL Allen (2016) Kalgoorlie-Boulder Growth Plan - Strategy Development and Economic Projections.
45. Projects have been informed by the Goldfields-Esperance Regional Planning and Infrastructure Framework, the Growing Kalgoorlie-Boulder Infrastructure Capacity Assessment Report prepared by Cardno, input from the Chamber of Minerals and Energy and further assessment by ACIL Allen.
46. Cardno (2016) Greater Kalgoorlie-Boulder Infrastructure Capacity Assessment.
47. ACIL Allen (2016) Kalgoorlie-Boulder Growth Plan - Economic Analysis.
48. Pracsys (2016) Regional Cluster Analysis Draft Phase 5 Report.
49. Economic Transitions (2016) Growing Kalgoorlie-Boulder - Development of a Strategic Tourism Plan for Kalgoorlie-Boulder.
50. Economic Transitions (2016) Growing Kalgoorlie-Boulder - Development of a Strategic Tourism Plan for Kalgoorlie-Boulder.
51. ACIL Allen (2016) Kalgoorlie-Boulder Growth Plan - Economic Analysis.
52. Keogh Bay (2016) Kalgoorlie-Boulder Aboriginal Economic Development Strategy.
53. Keogh Bay (2016) Kalgoorlie-Boulder Aboriginal Economic Development Strategy.

54. Keogh Bay (2016) Kalgoorlie-Boulder Aboriginal Economic Development Strategy.
55. Goldfields Community Services Aboriginal Corporation (2016) Historical Narrative - Aboriginal Peoples; Keogh Bay (2016) Kalgoorlie-Boulder Aboriginal Economic Development Strategy.
56. Keogh Bay (2016) Kalgoorlie-Boulder Aboriginal Economic Development Strategy.
57. Regional Services Reform Unit (2016) Resilient Families, Strong Communities: A roadmap for regional and remote Aboriginal communities.
58. RPS (2016) Kalgoorlie-Boulder Regional Centre Housing Study.
59. RPS (2016) Kalgoorlie-Boulder Regional Centre Housing Study.
60. The WAPC's Goldfields-Esperance Regional Planning and Infrastructure Framework identifies Kalgoorlie-Boulder as a 'Regional City', as part of the Settlement Hierarchy for the region.
61. City of Kalgoorlie-Boulder (2014) Kalgoorlie City Centre Master Plan & Implementation Strategy.
62. Hames Sharley (2016) Kalgoorlie-Boulder Urban Design and Place Making Review.
63. Hames Sharley (2016) Kalgoorlie-Boulder Urban Design and Place Making Review.
64. ACIL Allen (2016) Kalgoorlie-Boulder Growth Plan - Economic Analysis.
65. Department of Culture and the Arts (2013) Creative Industries Statistical Analysis for Western Australia.
66. These 10 priorities represent a summary snapshot of the detailed information provided in Part Two.
67. The process was facilitated by Curtin University's Sustainable Policy Unit. Refer Curtin University Sustainable Policy Unit (2016) Growing Kalgoorlie-Boulder Partnership Interim Governance Model - Phase 1 Report.
68. REMPLAN Regional Economic Modelling. Retrieved from [www.remplan.com](http://www.remplan.com).
69. Depending on progress in the first year, it is proposed that the first review may be most practical at the end of year two.
70. World Economic Forum (2016) Global Competitiveness Report 2016-2017.

## BIBLIOGRAPHY

- AEC Group (2016) Kalgoorlie Scenario Planning. AEC Group.
- ACIL Allen (2016) Kalgoorlie-Boulder Growth Plan - Economic Analysis. ACIL Allen.
- ACIL Allen (2016) Kalgoorlie-Boulder Growth Plan – Strategy Development and Economic Projections. ACIL Allen.
- ACIL Allen Consulting (2015) Effect of the Mining Sector on Kalgoorlie-Boulder’s Society and Economy. ACIL Allen.
- Artgold (2016) Promoting Arts & Culture in the Goldfields. Retrieved from [www.artgold.net.au/artgold/](http://www.artgold.net.au/artgold/).
- Australian Bureau of Statistics, A. (2011) Australian Bureau of Statistics Census Data. Australian Government.
- Australian Bureau of Statistics, A. (2013) Estimate of Aboriginal and Torres Strait Islander Australians June 2011. Australian Government.
- Cardno (2016) Greater Kalgoorlie-Boulder Infrastructure Capacity Assessment. Cardno.
- Carpe Diem Strategic Solutions (2015) Feasibility Study for a Regional University Centre for the Goldfields-Esperance Region. Carpe Diem.
- Carpe Diem Strategic Solutions (2016) Feasibility Study for a Regional University Centre for the Goldfields-Esperance Region ADDENDUM. Carpe Diem.
- Catalyse, R. & S. (2015) City of Kalgoorlie-Boulder Community Perceptions 2015. City of Kalgoorlie-Boulder.
- City of Kalgoorlie-Boulder (2011) Social Plan 2011-2015. City of Kalgoorlie-Boulder.
- City of Kalgoorlie-Boulder (2012) Local Planning Strategy - Shaping our Future 2013 – 2033. City of Kalgoorlie-Boulder.
- City of Kalgoorlie- Boulder (2015) City of Kalgoorlie-Boulder Public Open Space Strategy & Survey. City of Kalgoorlie-Boulder.
- City of Kalgoorlie-Boulder (2011) City of Kalgoorlie-Boulder Social Plan 2011-2015. City of Kalgoorlie-Boulder.
- City of Kalgoorlie-Boulder (2015) Strategic Community Plan 2015 – 2025. City of Kalgoorlie-Boulder.
- CSIRO (2013) Climate Adaptation in Regional Mining Value Chains - A Case-study of the Goldfields-Esperance Region, Western Australia. CSIRO.
- Curtin University Sustainable Policy Unit (2016) Growing Kalgoorlie-Boulder Partnership Interim Governance Model – Phase 1 Report. Curtin University.
- Country Arts WA (2015) Goldfields-Esperance Arts & Cultural Framework, 2015-2020. Country Arts WA.

- Deloitte Access Economics (2014) 2015-2025 Western Australian Resources Sector Outlook. Deloitte Touche Tohmatsu Limited.
- Department of Culture and the Arts (2014) Regional Arts and Culture Action Plan 2014-2018. Department of Culture and the Arts.
- Department of Culture and the Arts (2013) Creative Industries Statistical Analysis for Western Australia, Perth. Department of Culture and the Arts.
- Department of Industry Tourism and Resources (2007) Working with Indigenous Communities: Leading Practice Sustainable Development Program for the Mining Industry. Australian Government.
- Department of Industry, Innovation and Science (2016) Working in Partnerships Workshop Draft Report, Kalgoorlie 25-26 May 2016. Department of Industry, Innovation and Science.
- Department of Regional Development (2013) Living in the Regions 2013, Goldfields-Esperance Report. Kalgoorlie: Department of Regional Development.
- Department of Training and Workforce Development (2012) Goldfields-Esperance Workforce Development Plan 2013-2016. Government of Western Australia.
- Department of Transport (2016) Questions and Answers: PortLink Inland Freight Corridor Development Plan Community Consultation. Retrieved from <http://www.transport.wa.gov.au/imateine/portlink.asp>.
- Department of Water (2016) Western Australia's Water Supply and Demand Outlook 2050. Department of Water.
- Economic Transitions (2016) Growing Kalgoorlie-Boulder – Development of a Strategic Tourism Plan for Kalgoorlie-Boulder. Economic Transitions.
- Ernst & Young (2016) Regional Investment Analysis Final Report. Ernst & Young.
- Florida, Mellander, and Stolarick (2008) Inside the Black Box of Regional Development – Human Capital, the Creative Class and Tolerance. Journal of Economic Geography.
- KPMG (2014) Future State 2030: The Global Megatrends Shaping Governments. Retrieved from <http://www.kpmg.com/Global/en/IssuesAndInsights/KPMG INTERNATIONAL>.
- Goldfields Community Services Aboriginal Corporation (2016) Historical Narrative – Aboriginal Peoples, Goldfields, Western Australia. Goldfields Community Services Aboriginal Corporation.
- Goldfields Esperance Development Commission (2016) Goldfields Esperance Regional Investment Blueprint - A Plan for 2050. Goldfields Esperance Development Commission.
- Goldfields-Esperance Development Commission (2012) 2011 – 2021 Strategic Development Plan. Goldfields-Esperance Development Commission.
- Government of Western Australia (2016) Regional Development Strategy 2016-2025. Government of Western Australia.

- Hajkowicz, Stefan (2015) Global Megatrends Seven Patterns of Change Shaping Our Future. CSIRO Publishing.
- Hames Sharley (2016) Kalgoorlie-Boulder Liveability and Social Services Review. Hames Sharley.
- Hames Sharley (2016) Kalgoorlie-Boulder Urban Design and Place Making Review. Hames Sharley.
- Keogh Bay Consulting (2016) Kalgoorlie-Boulder Aboriginal Economic Development Strategy. Keogh Bay Consulting.
- Minerals Council of Australia (2016) Indigenous Economic Development Communique. Minerals Council of Australia.
- Mulholland, Tom and Anna Piscicelli (2012) Population Report No.7 Western Australia Tomorrow Forecast profile for Kalgoorlie-Boulder (C) Local Government Area. Western Australian Planning Commission.
- Painted Dog Research (2016) Migration in Regional WA: Desktop Research Opportunities & Constraints, Perth, Australia. Painted Dog Research.
- Painted Dog Research (2016) Migration in Regional WA: Primary Research Results – Kalgoorlie, Vision and Strategic Planning, Perth, Australia. Painted Dog Research.
- Pracsys (2016) Regional Cluster Analysis - Draft Phase 5 Report. Pracsys.
- Pracsys (2016) Regional Cluster Analysis - Phase 3 Report. Pracsys.
- Puzzle Consulting (2016) Growing Kalgoorlie-Boulder: Stakeholder Engagement Summary – February to October 2016. Puzzle Consulting.
- Regional Australia Institute (2015) Access to Finance – Growing SMEs in Regional Western Australia. Regional Australia Institute.
- Regional Australia Institute (2015) Cities Beyond Perth. Regional Australia Institute.
- Regional Australia Institute (2012) Insight: Australia's Regional Competitiveness Index. Regional Australia Institute.
- Regional Australia Institute (2015) Login or Logout? Online Work in Regional Western Australia. Regional Australia Institute.
- Regional Development Australia Goldfields Esperance (2015) Goldfields-Esperance Arts and Culture Framework 2015-2020. Regional Development Australia.
- Regional Development Council (2016) Regional Centres Development Plan Framework – Poised for Prosperity. Regional Development Council.
- Regional Services Reform Unit (2016) Resilient Families, Strong Communities: A roadmap for regional and remote Aboriginal communities. Department for Regional Development. Government of Western Australia.

- REMPLAN data incorporating Australian Bureau of Statistics (2015) Gross State Product, 2012 / 2013 National Input Output Tables and 2011 Census Place of Work Employment Data. REMPLAN data.
- RPS Australia East Pty Ltd (2016) Kalgoorlie-Boulder Regional Centre Housing Study. RPS Group.
- SDF Global (2016) WA Regional Centres Development Policy Stage One Report. Department for Regional Development.
- SDF Global (2016) WA Regional Centres Development Policy Stage Two Report. Department for Regional Development.
- Talis (2016) Goldfields Waste Data and Priorities Study. Talis.
- Tourism Australia (2015) Tourism 2020 Implementation Plan 2015 – 2020, Canberra, Australia. Tourism Australia.
- Tourism Research Australia (2013) The Economic Impact of the Current Mining Boom on the Australian Tourism Industry, Canberra, Australia. Tourism Research Australia.
- Tourism WA. State Government Strategy for Tourism in Western Australia 2020 – Detailed Strategy. Government of Western Australia.
- The Planning Group (2014) Kalgoorlie City Centre Revitalisation Project Master Plan & Implementation Strategy, City of Kalgoorlie-Boulder. The Planning Group
- Tracker Development (2015) Goldfields Esperance Arts and Cultural Trail. Goldfields-Esperance Development Commission.
- UrbanPlan & Pracsys (2016) Kalgoorlie-Boulder Industrial Land Use and Availability Assessment. UrbanPlan.
- Western Australian Planning Commission (2008) Better Urban Water Management. Government of Western Australia.
- Western Australian Planning Commission (2014) State Planning Strategy, 2050. Government of Western Australia.
- Western Australian Planning Commission (2015) Goldfields–Esperance Regional Planning and Infrastructure Framework. Government of Western Australia.
- Western Australian Planning Commission (2012) Household Forecasts - Western Australia Tomorrow, Population Report No.8, 2006-2026. Government of Western Australia.
- World Economic Forum (2016) Global Competitiveness Report 2016-2017. World Economic Forum.

## APPENDICES

### Appendix 1.1 Physical Constraints to Growth



