Growing
Kalgoorlie-Boulder

PART 3
BACKGROUND & ANALYSIS

PLANNING FOR GROWTH UNDER THE
REGIONAL CENTRES DEVELOPMENT PLAN

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.

Growing
Kalgoorlie-Boulder

PART 3

BACKGROUND & ANALYSIS

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)	City of Kalgoorlie-Boulder
Tony Crook / Kate Fielding (Deputy Chair)	Goldfields Esperance Development Commission
Cr Laurie Ayers	City of Kalgoorlie-Boulder
Cr Mandy Reidy	City of Kalgoorlie-Boulder
John Walker	City of Kalgoorlie-Boulder
Shayne Flanagan	Goldfields-Esperance Development Commission
Jessica Biddle	Kalgoorlie-Boulder Chamber of Commerce and Industry (KBCCI)
Bill McKenzie	KBCCI Education Committee, Central Regional TAFE, Goldfields-Esperance Tertiary Education Alliance
Carol Mann	Regional Development Australia Goldfields Esperance
Julia Shadlow-Bath	Regional Development Australia Goldfields Esperance
Trevor Donaldson	Goldfields Land and Sea Council
Ian Butler	Kalgoorlie Consolidated Gold Mines
Holly Phillips	The Chamber of Minerals and Energy WA
Jim Coxon	Northern Star Resources Limited
Christine Boase	AngloGold Ashanti
Terrence Winner	YMCA
Georgia Foulkes-Taylor	Fleck Perry Photos
Tendai Magadza	Creative Kulcha
Andrew Mann	Department of Regional Development
Kat Neve	Department of Planning
Paul Ferrante / Patrick Smit	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

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 3.7.

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

FIGURES

TABLES

3. BACKGROUND AND ANALYSIS

Part One of the Growth Plan outlines seven priority Focus Areas and the Key Actions, which if implemented, will contribute to the three Strategic Themes of:

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

Part Two provides details on the 19 Key Actions and 76 associated initiatives that are required to be implemented to achieve the Growth Plan's vision and aspirations, through a detailed Program of Action. The Theory of Change, detailed in Section 1.6.1 and illustrated again in Figure 3.1, summarises 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 Regional Centres Development Plan (RCDP).

The following sections provide further context and background on the preparation of the Growth Plan and the evidence base that has informed the development of Growth Plan priorities. Summaries of all specialist consultancy reports that were commissioned during the planning process are also provided. The full reports are available on request from the City of Kalgoorlie-Boulder (CKB) or the Goldfields-Esperance Development Commission (GEDC).

Theory of Change Diagram

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

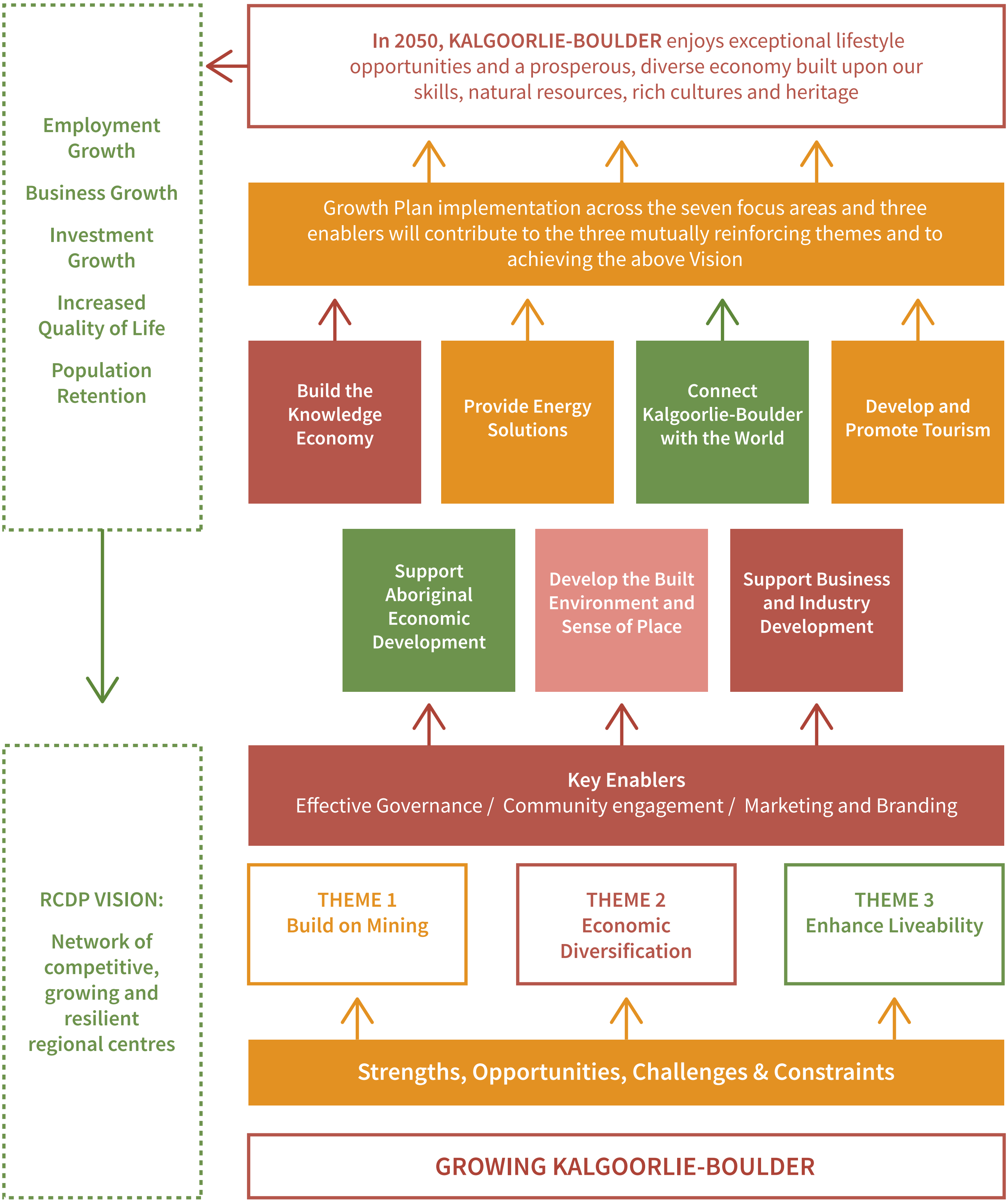


Figure 3.1 Summary of Growth Plan Theory of Change

3.1 PARTNERSHIP AND PROCESS

3.1.1 The Growth Plan Partnership

The Kalgoorlie-Boulder Growth Plan has been developed as a partnership between key local stakeholders, including the CKB and the GEDC, working with the State Government Departments of Regional Development and Planning, and LandCorp. Funding for the Project was provided through the Royalties for Regions Program under the RCDP.

Project objectives, resource requirements, governance arrangements and respective roles and responsibilities were established in a Memorandum of Understanding (MoU) agreed between the above parties in February 2016.

A local Growth Plan Partnership (GPP) was established to oversee the Project and to ensure that it met the objectives of the Memorandum of Understanding (MoU). The GPP involved the above stakeholders as well as the Kalgoorlie-Boulder Chamber of Commerce and Industry (KBCCI), the Chamber of Minerals and Energy (CME), Regional Development Australia Goldfields Esperance (RDAGE), the Goldfields Land and Sea Council (GLSC) and representatives from industry, community and non-government organisations. The full membership is acknowledged on page 3 of this report.

The GPP represented a cross section of industry, non-government and community representatives as well as key government agencies, in order to provide for meaningful and collaborative oversight of the Growth Plan process. While this provided for a challenging governance and administrative structure, the diversity of views and perspectives was a strength of the process.

The GPP was chaired by the Mayor of the CKB and supported by a Project Control Group (PCG) comprising officers from CKB, GEDC, LandCorp and WSP | Parsons Brinckerhoff, as Lead Consultant. The PCG coordinated the day to day operations of the Project, managed the procurement of consultants and associated deliverables and developed regular progress reports for the GPP and the RCDP Steering Committee. The PCG was very active throughout the Project, meeting more than 40 times including for the selection and management of specialist consultants. LandCorp provided project management support throughout the Project. WSP | Parsons

Brinckerhoff was appointed as the Lead Growth Plan Consultant and was responsible for supporting the GPP and the PCG in the development and delivery of the Growth Plan.

The GPP met formally on ten occasions during the Project in addition to undertaking a number of specific workshops – including project scoping, risk management, economic situation analysis, scenario planning, governance development, strategy development and project prioritisation.

The GPP was responsible for the finalisation and endorsement of the Growth Plan prior to submission to the RCDP Steering Committee and to the WA Planning Commission.

3.1.2 Building the Growth Plan

The Growth Plan was developed within the strategic context provided by the *Regional Centres Development Plan Framework* and was guided by the Draft Growth Plan Toolkit (the Toolkit). These documents provide a comprehensive overview of the purpose and scope of the Growth Plans as well as the state policy and planning context as summarised in Figure 3.2.

The Kalgoorlie-Boulder Growth Plan project methodology and approach generally followed ten key stages, consistent with the methodology proposed in the Toolkit as summarised in Figure 3.3.

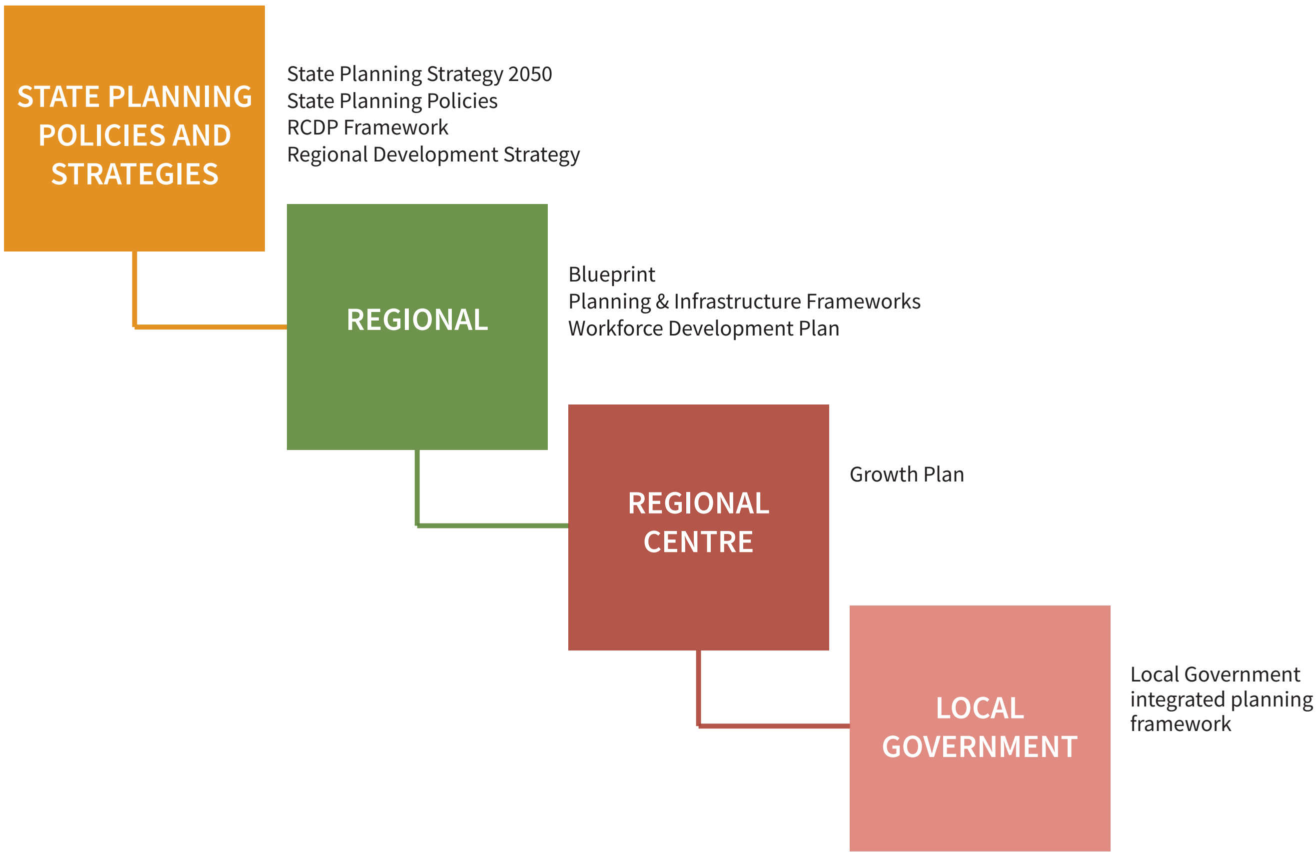


Figure 3.2 State Policy and Planning Context

Figure 3.3 Growth Plan Development Process

A series of review points were staged throughout the Project for formal progress reporting to the RCDP Steering Committee. These review points provided the opportunity to share information and challenges with other regional centres.

Following an initial situational review, a preliminary project scope statement was developed by WSP | Parsons Brinckerhoff and approved by the GPP. This outlined some of the key drivers, constraints, information gaps and resource needs, and proposed a number of project focus areas. This was followed by a more detailed project plan and budget proposal that was approved by the GPP and then by the RCDP Steering Committee.

3.1.3 Developing the Evidence Base

The foundation of the Growth Plan has been the development of a sound and transparent evidence base to underpin the development of strategies and initiatives that will drive future economic development in Kalgoorlie-Boulder and achieve the objectives of the RCDP.

This evidence base built on the substantive body of knowledge that already existed in current reports and strategies and was further developed through the procurement of additional expert consultants to engage with key stakeholders and to provide important input to the Growth Plan. The reports from these consultancies provided advice to the GPP, but do not necessarily represent the views of the GPP. These reports are summarised in Section 3.5.

In addition to these specialist consultancies, a number of scopes of work were procured at a program level, to address common needs across the four regional centres (refer Section 3.1.5). These reports are referenced where applicable throughout the Growth Plan and summarised in Table 3.2 below.

ACIL Allen provided specialist economic analysis, building on the high level priorities and strategies identified in the Goldfields-Esperance Regional Investment Blueprint (the Blueprint). This economic analysis was undertaken in two stages. The first stage involved the development of the economic and social profile for the Kalgoorlie-Boulder Economic Zone; an assessment of the economic and social contribution of key industries to Kalgoorlie-Boulder; and the development of key strategic themes to inform future growth strategies and the work of the other subject matter experts.

The second stage involved more detailed strategy development in key areas of agreed focus, the development of a number growth projections, and advice on the prioritisation of actions and initiatives across all of the key focus areas for inclusion in the Growth Plan. The findings from these reports are incorporated into Parts One and Two and also elaborated on in Section 3.2.

3.1.4 Stakeholder Engagement

The growth planning process acknowledged the extensive consultation and engagement activities that have recently been undertaken in the Goldfields-Esperance region through other strategic planning initiatives and in particular the Blueprint, which was released in March 2016.

The development of the Growth Plan therefore sought to achieve a balance between the need to build on these previous community engagement activities and to provide for genuine input from local stakeholders to generate ideas, inform strategies, ground-truth key findings and establish locally agreed priorities.

The GPP adopted the regional vision and

aspirations already endorsed through the Blueprint as appropriate to the Kalgoorlie-Boulder Economic Zone. Future consultations, presentations and strategy development were therefore conducted within this context.

Puzzle Consulting, a Kalgoorlie-Boulder-based consultant, was appointed to assist to coordinate the stakeholder engagement process and to ensure meaningful local input to the scopes of work of each specialist consultant. Puzzle Consulting assisted in the organisation and running of local engagement activities and workshops, with a major focus being the Kalgoorlie-Boulder Futures Forum, held in May 2016.

The Futures Forum was a key method of engagement with the broader community to share ideas on the future of Kalgoorlie-Boulder. The Forum ignited conversation and engaged people with the Growing Kalgoorlie-Boulder process. The event involved a community BBQ in the evening followed by a full day forum. This ensured that all community members had the chance to engage in the growth planning process. The Futures Forum was attended by more than 300 people over both events.

A Stakeholder Engagement Strategy was endorsed by the GPP as well as a communications plan to promote effective engagement of key stakeholders at all levels and a regular and consistent flow of information about Growth Plan activities. A comprehensive stakeholder engagement database was built up over the life of the project. More than 1000 direct stakeholder interactions were recorded during the project, including attendees at workshops and forums, and through responses to surveys.

A distinctive brand and consistent messaging were identified as key priorities in the development of the Growth Plan. A local graphic design specialist was engaged to develop the Growth Plan brand, style guide and tagline, which were adopted for all marketing and promotion.

A website was established using a digital platform specifically designed for stakeholder engagement. The website enabled program documents to be made available to the public and supported digital consultation, such as linking posts to LinkedIn and capturing community ideas through various forums and subject-specific surveys. The website also enabled videos to be uploaded ensuring they were easily accessible to the public. This was used to feature the “Our Future” video and other video presentations provided at the Futures Forum.

More than 31,300 social media interactions were recorded via the website and through profiles established on Facebook, LinkedIn and Twitter. A summary report from Puzzle Consulting on the stakeholder engagement process is available upon request.

In addition, the Goldfields Community Services Aboriginal Corporation (GCSAC), a commercial subsidiary of the Goldfields Land and Sea Council, was contracted to facilitate local Aboriginal input to the Growth Plan process. GCSAC provided advice to specialist consultants and the lead consultant on key matters impacting on Aboriginal participation and on relevant draft consultancy findings.

3.1.5 Procurement and Management of Consultancies

The Growth Plan development process sought to procure the best available technical advice to support the knowledge, experience and commitment of local and regional stakeholders. A Registration of Interest for specialist consultancy services to support the RCDP process was released by LandCorp on 2 November 2015, in order to source appropriate expertise and to encourage local contractor involvement.

The Lead Consultant and LandCorp provided a vendor briefing in Kalgoorlie-Boulder in December 2015, to outline the scope of the Growth Plan Project and the upcoming opportunities for local consultants and contractors.

All successful consultants were contracted by LandCorp following a competitive selection process managed by the PCG in accordance with State Government procurement guidelines. Each selection panel involved a majority of local stakeholders, including representatives from the CKB, the GEDC and/or a member of the GPP and the Lead Consultant. An independent probity auditor attended a number of selection processes.

Each consultant attended an initial inception meeting and was provided with a package of information about the project, responses to frequently asked questions and key background documents and references. Each was required to liaise with the local Stakeholder Engagement Consultant and the Lead Consultant in developing a stakeholder engagement plan appropriate to each scope of work and integrated with other project activities, for the approval of the PCG.

Draft deliverables were reviewed by the PCG before advanced draft reports and executive summaries were made available to the GPP for comment. Given the number, length and complexity of many of them, the GPP did not endorse the reports, but instead noted the findings and prioritised key strategies and initiatives that emerged from each for inclusion in the Growth Plan.

The following tables summarise the various consultancies. An overview of the findings from each subject matter expert is provided in Section 3.5.

Image supplied by WA Country Arts

Table 3.1 Summary of Kalgoorlie-Boulder Growth Plan Consultancies

Project Activity	Consultant	Role
Lead Consultant	WSP | Parsons Brinckerhoff	• Development of project scope, project plan and budget • Support and advice to PCG and GPP • Development of progress reports and communications • Scoping, oversight and review of specialist consultancies • Development of Growth Plan
Stakeholder Engagement	Puzzle Consulting	• Develop stakeholder engagement strategy and manage database • Assist to organise the Futures Forum and local engagement opportunities • Advice to GPP and consultants • Facilitate effective engagement, communications and input to project activities
Economic Analysis	ACIL Allen	• Desk-top analysis and development of socio-economic profile • Assess relative industry performance and competitive advantages • Identify areas of economic potential and constraints • Detailed strategy development in priority areas • Support the Lead Consultant and the GPP in assessing the economic impact of proposed strategies and initiatives • Benefit-Cost Analysis and growth scenarios
Housing Needs Assessment	RPS Australia East (RPS)	• Desktop update of data on housing needs and issues • Develop priority strategies and actions

Project Activity	Consultant	Role
Aboriginal Economic Development	Keogh Bay Consulting	• Identify key constraints and opportunities for increased Aboriginal participation • Development of Aboriginal Economic Development Strategy
Aboriginal Engagement and History	Goldfields Community Services Aboriginal Corporation	• Strategic advice and facilitation of Aboriginal engagement • Development of Aboriginal Historical Narrative
Industrial Land Use and Availability	UrbanPlan & Pracsys	• Identify available land for industrial and special industrial purposes • Identify land constraints to future economic development • Recommend actions to de-constrain suitable land
Urban Design and Place Making	Hames-Sharley	• Review current approaches to urban design and place making • Promote best practice urban design, place activation and community inclusiveness • Recommend changes to local policies and practices • Identify key actions and initiatives to improve urban design and sense of place
Tourism and Branding Strategy	Economic Transitions	• Review current tourism information and strategies • Assessment of current tourism product • Develop priority actions to address opportunities and gaps • Assess current marketing and branding and related perceptions • Develop Draft Tourism Marketing and Branding Strategy

Project Activity	Consultant	Role
Infrastructure Capacity Assessment	Cardno	• Identify potential infrastructure capacity constraints to economic development – including energy, water, waste, communications and transport • Identify gaps in future planning and identify opportunities to enhance social and economic development • Identify opportunities for innovative technologies, renewables and increased sustainability and self-sufficiency
Review of Liveability and Social Services	Hames Sharley	• Consider relevant research and benchmarks relating to liveability and perceptions • Assessment of key strengths and weaknesses • High level mapping and gap analysis of relevant government and non-government services • Benchmark Kalgoorlie-Boulder against three comparable locations • Identify opportunities and strategies to improve social capital, community participation and social inclusion • Develop priority strategies and actions to address gaps and negative perceptions • Develop appropriate KPIs
Governance for Economic Development	Curtin University Sustainability Policy	• Review current governance arrangements and related roles and responsibilities • Identify best practice governance models and associated key success factors • Develop appropriate options and recommendations for Kalgoorlie-Boulder • Work with the GPP to develop a preferred model, including financing and implementation requirements • Work with the GPP to develop and implement the agreed model • Provide advice and change management support as required

Table 3.2 Summary of Supporting Program Level Consultancies

Project Activity	Consultant	Key Activities
State and Regional Cluster Analysis	Pracsys	• Identify the most important existing and emerging industry clusters in the WA traded economy and their supply chains and linkages • Identify the spatial distribution of clusters in the traded and localised economies in regional centres • Identify key drivers of growth for selected clusters
Investment Attraction Analysis	Ernst and Young	• Undertake regional investment analysis and develop investor community profile • Analyse the investment pipeline and identify investment activity and sentiment • Provide advice on investment channels and intermediaries and advise how regional centres can build investor channels
Migration and Market Perception Analysis	Painted Dog	• Investigate and report on factors affecting migration and the perceptions of migrants and potential migrants to regional centres • Provide advice to address negative perceptions and facilitate regional migration pathways
Performance Management Framework	SDF Global	• Develop theory of change and evaluation framework for the RCDP • Advise on theory of change and evaluation framework for regional centres • Assist in peer review at each review point
Scenario Planning	AEC Group & Chasing Sunrises	• Build the capacity of the Project Team, regional centres and relevant government agencies to better understand scenario planning • Facilitate a consistent approach with each regional centre to scenario planning to generate plausible futures for each • Assist in developing effective strategic responses to these futures, where required

3.1.6 Establishment of Growth Plan Priorities and Multi-Criteria Analysis

The Strategic Themes, Key Enablers and Priority Focus Areas outlined in Part One, evolved during the Project in response to the findings of key consultancies and the outcomes from stakeholder engagement activities. These were progressively endorsed by the GPP as the strategic framework for the Growth Plan.

More than 300 initiatives and proposals were identified either through direct stakeholder engagement activities such as the Futures Forum and ideas factory, or through research and consultation by the Lead or Specialist Consultants. A complete list of all the potential initiatives and ideas are available from CKB and GEDC.

These Initiatives were prioritised by the PCG based on the level of information available, their potential for long term positive economic impacts and their alignment with the objectives of the RCDP and of the Growth Plan. In many cases a number of related Initiatives and recommendations from consultants were grouped together to ensure a manageable implementation framework. The consultancy reports themselves remain significant reference sources and provide another level of detail to complement the summaries provided in Section 3.5. These reports will provide an important resource for the Growing Kalgoorlie-Boulder Partnership (GKBP) and the key forums established to progress activities in each Focus Area.

From this process, 19 Key Actions and 76 initiatives emerged. These were aligned with the seven Focus Areas and endorsed by the GPP as the basis the Growth Plan's Program of Action, which is detailed in Part Two.

An independent Multi-Criteria Analysis (MCA)[1] of the Key Actions associated with each priority Focus Area was undertaken by ACIL Allen, LandCorp and the Lead Consultant. The MCA involved an assessment of the Key Actions against a number of foundational criteria to ensure their alignment to the RCDP objectives and to other State Government policies and strategies.[2]

The scoring component of the assessment comprised a series of weighted impact criteria relating to the three RCDP objectives, as well as regional unique criteria that aligned with the key priorities identified by the GPP for Kalgoorlie-Boulder. These regional unique criteria referred to economic diversification, population attraction and retention, and Aboriginal economic development. Further detail on the assessment criteria and weightings utilised in the MCA process is available from the CKB and GEDC. A summary of the MCA results is provided in Figure 3.4. The initiatives represented on the X Axis[3] are outlined in Table 3.3 as the Key Actions 1.1.to 7.3.

Table 3.3 Summary of the Key Actions Subject to Multi-Criteria Analysis

Priority Focus Area		Action Number	MCA Number	Key Actions
1	Build the Knowledge Economy	1.1	PA1	Improve Secondary Education Outcomes.
		1.2	PA2	Expand Tertiary Education and Knowledge Exports.
2	Provide Energy Solutions	2.1	PA3	Address current and future energy requirements while stimulating economic and productivity benefits.
3	Connect Kalgoorlie-Boulder with the World	3.1	PA4	Enhance Kalgoorlie-Boulder's strategic position as a regional transport and logistics centre.
		3.2	PA5	Develop Kalgoorlie-Boulder as a 'smart city' with globally competitive information and communications capability.
4	Develop and Promote Tourism	4.1	PA6	Establish appropriate mechanisms to coordinate and drive local tourism and to promote regional collaboration.
		4.2	PA7	Develop new and improved tourism experiences building on the Growing Kalgoorlie-Boulder Strategic Tourism Plan.
		4.3	PA8	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.
5	Support Aboriginal Economic Development	5.1	PA9	Establish appropriate forums and resources to coordinate and drive Aboriginal Economic Development.
		5.2	PA10	Address Aboriginal social disadvantage and develop positive community relationships as prerequisites to equitable economic participation.
		5.3	PA11	Support Aboriginal employment and business development through the framework provided by the Growing Kalgoorlie-Boulder Aboriginal Economic Development Strategy.

Priority Focus Area		Action Number	MCA Number	Key Actions
6	Develop the Built Environment and Sense of Place	6.1	PA12	Ensure adequate enabling infrastructure for Kalgoorlie-Boulder's future needs and promote the use of sustainable and renewable natural resources.
		6.2	PA13	Undertake an enhanced city revitalisation initiative focused on the Kalgoorlie City Centre Precinct and key entry points to the city.
		6.3	PA14	Implement best practice community engagement in order to promote a connected, collaborative and empowered local community.
		6.4	PA15	Provide appropriate, accessible services and community facilities to meet the needs of a growing and diverse population.
7	Business and Industry Development	7.1	PA16	Ensure that policy, planning and regulatory settings enable and encourage sustainable business development.
		7.2	PA17	Create an environment that stimulates and rewards innovation, collaboration, creativity and entrepreneurship.
		7.3	PA18	Build Kalgoorlie-Boulder's strategic linkages to international markets and investment opportunities.

3.2 KALGOORLIE-BOULDER'S STRATEGIC POSITION

3.2.1 Industry Performance Assessment

A comprehensive socio-economic profile and analysis of the key attributes of the Kalgoorlie-Boulder economy[4] is provided in two reports by ACIL Allen Consulting. The key findings, strategies and initiatives that emerged, as approved by the GPP, are incorporated into Parts One and Two of this report.

This section provides further detail on the key industries in Kalgoorlie-Boulder and their economic and social contributions as quantified in the economic analysis.[5] These findings, supported by an industry cluster analysis (see 3.2.3), provided an important foundation for identifying future priorities and growth strategies.

The analysis by ACIL Allen grouped industry sectors based on common characteristics, with only mining, manufacturing, and agriculture,

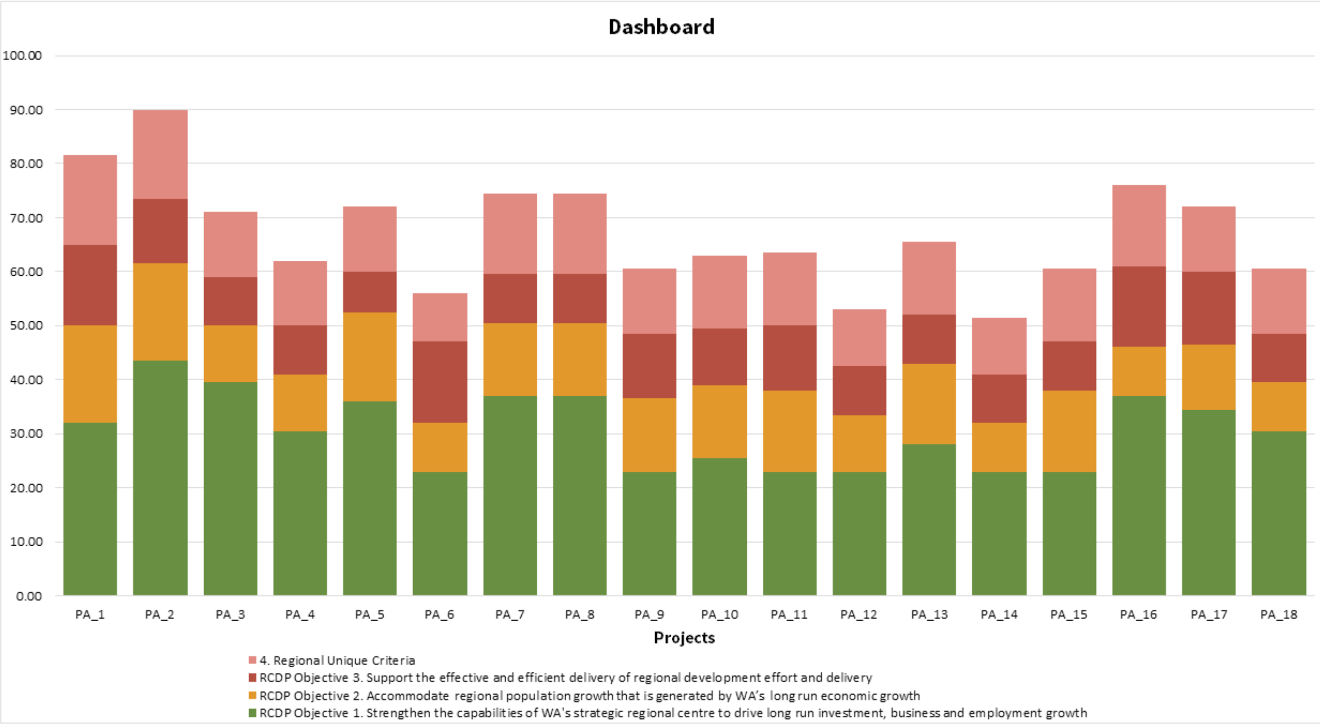


Figure 3.4 Summary Dashboard of MCA Results

forestry and fishing reviewed as stand-alone industries. The industry sector groups were:

- Mining, as the largest sector in economic output terms;
- Manufacturing, which includes mineral processing, being the second largest industry in terms of economic output and a key input to the mining sector;
- Agriculture, forestry and fishing, a relatively small sector with its own unique characteristics compared to other industries;
- Professional and social services, which includes professional, scientific and technical services, education and training and health care and social assistance industries;
- Infrastructure and logistics, which comprises the construction, electricity, gas, water and waste services, wholesale trade, transport, postal and warehousing industries;
- Community and lifestyle services, which comprises the retail trade, accommodation and food services, arts and recreation services industries, and is considered a proxy for the tourism industry; and
- Support services, which comprises information, media and telecommunications, financial and insurance services, rental hiring and real estate services, administration and support services industries.

The relative performance of each industry group was measured by assessing a range of performance indicators in two broad categories:

1. Industry specific attributes

Which describe an industry's production process and which were used to quantify its direct (monetary) contribution to the regional economy. These comprised:

- **Economic output –** The economic output performance score reflects an industry's economic contribution to the region's economy. A higher score indicates that an industry produces more economic output.

- Imports – The true contribution an industry makes to a regional economy is greater when it sources its inputs from within the region, rather than importing them from outside the region. The imports performance score gives an indication to how reliant each industry is on utilising imports from outside the region. This is measured by calculating an industry's imports as a proportion of its economic output. A higher score indicates a smaller proportion of its economic output is imported.
- Regional strength – The regional strength performance score reflects how an industry's contribution to the region's economy compares to the national economy. It is measured as the ratio of an industry's relative contribution (excluding exports) to the economy of the region to the same figure on a national level. A ratio greater than one indicates that an industry's contribution to the regional economy is greater than its contribution to the national economy, and is therefore an industry of strength for the regional economy.

2. Socio-economic attributes

Which are designed to capture the interaction between an industry and the population by analysing the opportunities and incentives an industry creates to individuals by providing employment. These comprised:

- Employment – The employment performance score reflects the strength of each industry in terms of its total number of employees. An industry that employs a larger number of workers relative to other industries in the region, will receive a higher employment performance score.
- Income – The income performance score reflects an industry's capacity to better remunerate and therefore attract talented employees. It is measured by calculating the proportion of employees in each industry that earn more than the region's annual median income of $65,000. An industry that has a higher percentage of employees with an annual income above the median, receives a higher income performance score.
- Skill mix – The skill mix performance score reflects how diverse each industry is in terms of the number of varying occupation types and therefore skills within it. An industry that has greater diversity in reference to occupation types will receive a higher skill mix performance score.
- Education – The education levels of a region are a direct influence on social capital of a region. The education performance score gives an indication to the education levels by calculating the proportion of employees in an industry that have completed their education at the postgraduate degree level, graduate diploma, graduate certificate level or the bachelor degree level. An industry that has a higher percentage of employees with an education at or above the bachelor degree level receives a higher score.
- Employment equality – The employment equality performance score measures the proportion of indigenous employees in an industry's workforce. An industry with a high score employs a higher percentage share of indigenous employees in their workforce.
- Social services – The social services performance score reflects the degree to which an industry contributes to the region's liveability. It is measured by calculating the proportion of employees with social service relevant occupations in

an industry relative to its total workforce. A higher score indicates that an industry's workforce is made up of a higher proportion of social service providing employees.

Kalgoorlie-Boulder Industry Growth Matrix

Each industry group was represented on an Industry Growth Matrix that maps the socio-economic contribution of the industries to the region against the economic contribution and competitive strength of the industry. Mapping each industry within the Industry Growth Matrix provides a snapshot of the competitive positioning of Kalgoorlie-Boulder's industries at a point in time. This in turn provides the high level data for the development of strategies and initiatives that will support growth in the region.

The growth matrix is divided into four zones:

1. Challenge zone – Industries that are located in this zone make a relatively small contribution to local economy and liveability. They are of a scale that is small relative to a national industry benchmark.

2. Risk zone – Industries in the risk zone are key contributors to liveability, but do not necessarily have strong or enduring competitive advantage, when measured against a national industry benchmark.

3. Economic strength zone – Industries that are located in this zone may not make a large contribution to liveability, but when measured against a national industry benchmark, are considered to have competitive advantages that are worth leveraging further.

4. Paragon zone – Industries that are located in paragon zone exhibit a strong local presence, contribute to community liveability and exhibit competitive advantages when measured against a national industry benchmark.

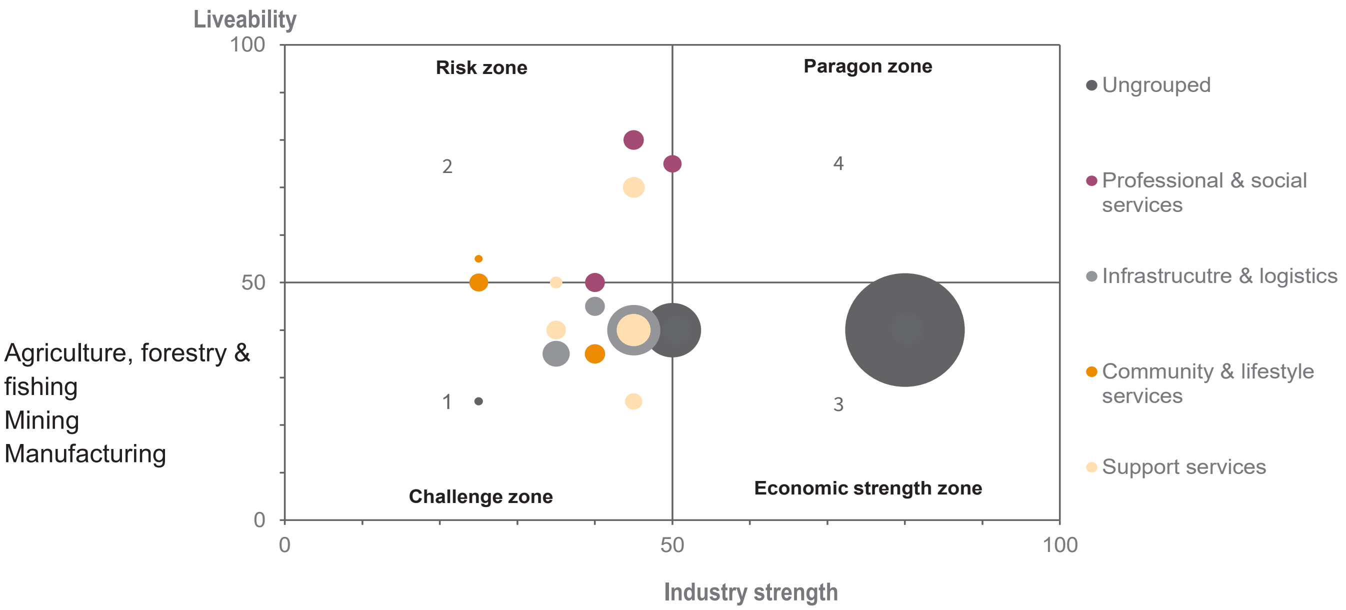


Figure 3.5 Kalgoorlie-Boulder Industry Growth Matrix

The Industry Performance Analysis identified the potential for each of the seven industry groups to contribute to Kalgoorlie-Boulder's economic growth or its lifestyle. From an economic perspective, the mining and manufacturing sectors present the greatest opportunity to generate regional economic growth, however their direct contribution to Kalgoorlie-Boulder's lifestyle and culture is limited. The economic contribution of the infrastructure and logistics group isn't as significant as the mining and manufacturing sectors, however, this sector has the potential to generate above average economic growth to the region.

Growth in the service sectors in Kalgoorlie-Boulder was seen as critical to the longer term diversification of the economy. ACIL Allen's analysis found that professional and social services and community and lifestyle services, whilst underrepresented in the region in terms of economic output compared to the Australian average, make an important contribution to local diversity and liveability.

The three Strategic Themes outlined in Part One emerged from this economic analysis, as reinforced by the findings of the cluster analysis, stakeholder discussions and their alignment with the agreed vision and aspirations. The mutually reinforcing nature of these themes and the various aligned strategies and initiatives are illustrated in Figure 3.6.

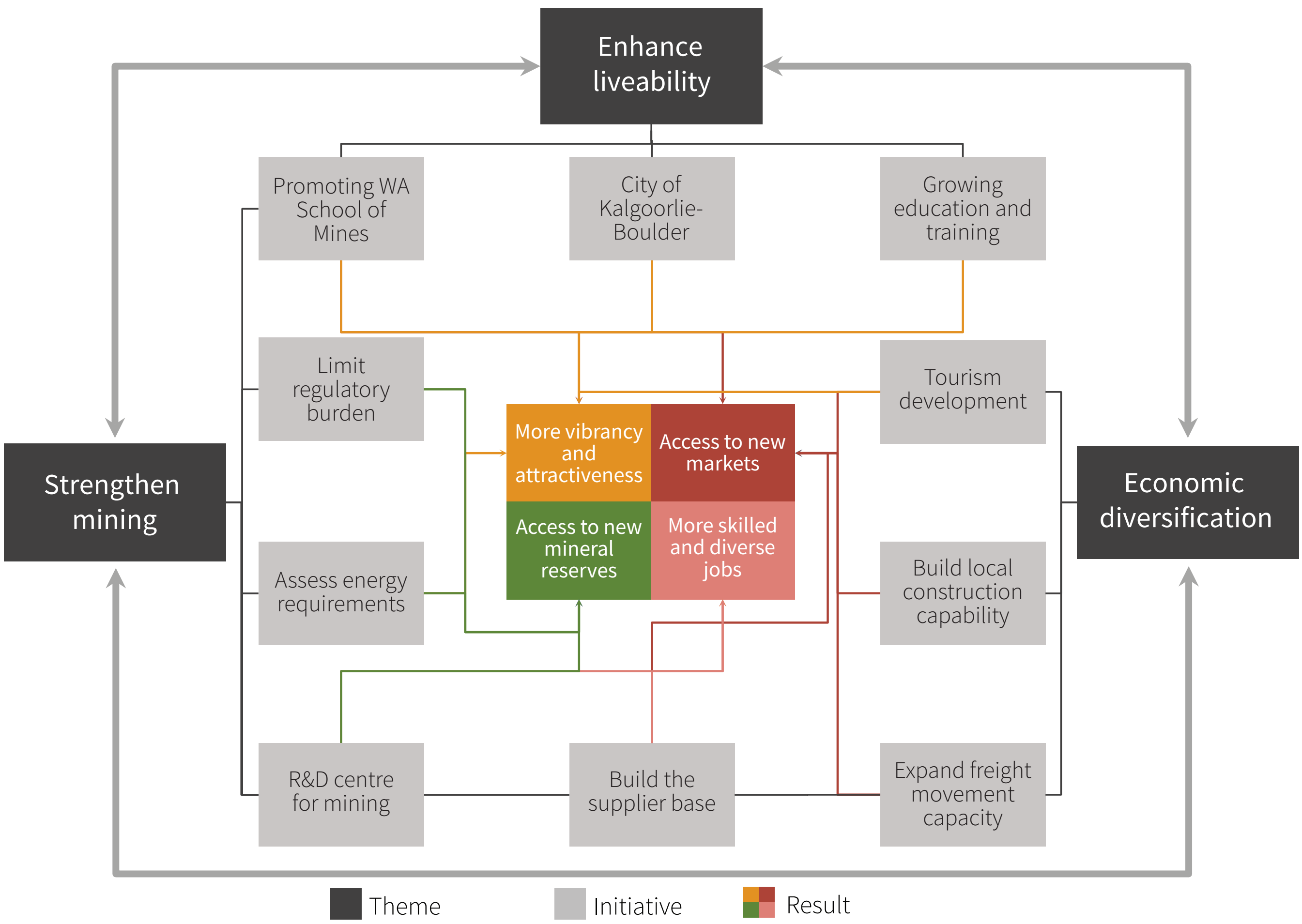


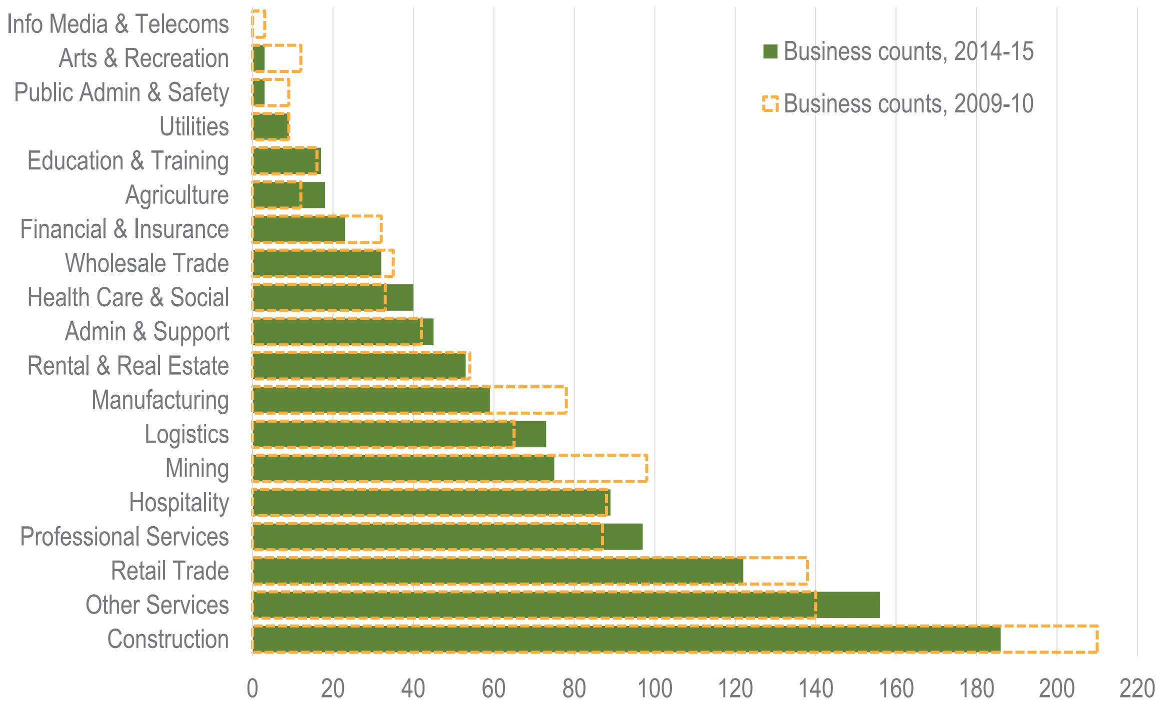
Figure 3.6 An Integrated Growth Strategy for Kalgoorlie-Boulder[6]

3.2.2 Business Numbers in Kalgoorlie-Boulder

Analysis was undertaken by ACIL Allen on the business numbers in Kalgoorlie-Boulder in order to provide further insights into the local economy. 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. The remaining 95 businesses (or 9%) were medium and large businesses.[7] The construction sector accounted for the largest number of employing business in 2014-15 (186), followed by retail (122), professional services (97), hospitality (83) and mining (75).

Business numbers in Kalgoorlie-Boulder have typically followed the economic cycle of the region, with numbers peaking at 1,207 in 2010-11 and since declining by 9% over the past five years. Driving this decline has been a 10% fall in the number of employing small businesses, with the number of medium and large businesses increasing by 8% over the same period.

The largest declines in business numbers since 2010-11 have been in construction (24 employing businesses), mining (23 employing businesses) and manufacturing (19 employing businesses). The sectors that have experienced growth in the number of employing businesses over the same period include professional services (increase of 10 employing businesses), logistics (increase of 8 employing businesses) and healthcare and social assistance (increase of 7 employing businesses).



Note: 'Other services' as defined by the ABS includes repairs and maintenance (e.g. automotive, machinery, household), personal services (e.g. hairdressing and beauty services, dry cleaning and laundry services, funeral services, brothel keeping and prostitution services).

Figure 3.7 Counts of Employing Businesses by Industry, Kalgoorlie-Boulder Economic Zone

Source: ACIL ALLEN CONSULTING, ABS Cat. 8156.0

Overall, the trends in business numbers reflect the trends across the Kalgoorlie-Boulder economy and the WA economy more broadly. In WA, there has been a 3% fall in the number of employing businesses, between a peak in 2011-12 (at 86,535 employing businesses) and 2014-2015, with small businesses falling by 2% and medium and large businesses falling by 5%.

The fact that business numbers tend to follow broader economic trends in Kalgoorlie-Boulder creates a potential vulnerability amongst the business community (particularly small businesses) and the broader economy as many industries such as manufacturing and transport, are largely dependent on the mining industry. In addition, although mining employs 27% of the Kalgoorlie-Boulder workforce, it is only the sixth largest industry in terms of employing businesses. This creates a further economic vulnerability due to a dependence on relatively few large employers, thus exposing the economy to the fluctuating fortunes of both the mining industry and individual mining operations.

3.2.3 Kalgoorlie-Boulder Industry Cluster Analysis

Industry cluster analysis has gained increased attention as part of regional economic development policy, in particular in the United States and the European Union, over the past decade.

The State Government, through the Department of Regional Development and LandCorp, appointed Pracsys in January 2016 to undertake a state-wide regional cluster analysis to assist in the development of the Regional Centres Development Plan Phase 2 Growth Plans, by providing an understanding of state and regionally significant clusters and the role each centre plays in the network of activity.

The Regional Cluster Analysis undertaken by Pracsys is based on the method employed by the U.S. Cluster Mapping project[8] and provides an application of this internationally applied methodology to the WA economy.

The project was undertaken in five phases and the findings are presented in two reports presented at the end of Phase 3 and Phase 5 – totalling 270 pages. The information is sourced from Pracsys' Phase 3 and Phase 5 final reports – unless otherwise referenced.[9]

What are Clusters?

Clusters are defined as "…Geographic concentrations of industry or other business activities that relate to each other or work together."[10]

Regional economies are generally made up for two types of clusters: traded clusters and local clusters.

Traded clusters are groups of related industries that serve markets beyond where they are located and are therefore highly exposed to external competition. In contrast, local clusters service a local market and the scale of activity is highly correlated to population growth ('population driven') and predominately exposed to local competition only.

Traded clusters are characterised by concentrations of employment that are disproportionate to the local population base, which indicates the trading of goods and services beyond the local region. Conversely, local clusters are characterised by a more even distribution of employment that primarily serves the local population and market.

According to the U.S. Cluster Project:

"While local clusters account for most of the employment and employment growth in regional economies, traded clusters register higher wages, and much higher levels of innovation. Local clusters provide necessary services for the traded clusters in a region, and both are needed to support a healthy and prosperous regional economy."

The Pracsys analysis concentrated on traded clusters as the drivers for economic growth. Traded clusters generally capture the output of goods and services that attract external income to a region. Traded clusters are therefore considered to be the 'engines' of regional economies, while local clusters are considered to be the 'foundation' of local economies.

Local clusters provide necessary support services for traded clusters and for the local population, however, without strong traded clusters, it is virtually impossible for a region to reach high levels of overall economic performance.

Cluster analysis offers a useful spatial perspective of an economy, with boundaries defined by linkages in knowledge, skills, inputs and demand as opposed to conventional industrial or sectorial classifications.

A cluster-based approach to economic development relies on the recognition that increased productivity, employment growth and innovation can be achieved by strengthening the linkages within and between clusters, specifically those that provide goods and services for export. The benefits derived from a cluster therefore hinge on the ability of stakeholders to collaborate with one another.

Cluster mapping is based on an historic analysis of what has happened to date. It therefore provides an insight into clusters that have shown evidence of a sustained comparative advantage in a particular location. This is not a prediction of future clusters and firm competitive advantage.

How Clusters are Selected

Identification and examination of clusters involves a combination of economic data and local knowledge.[11] A range of data sources were used including *Australian Business Registration* (2016), *Australian Bureau of Statistics Census of Population and Housing* (2011) and consultation with local stakeholders.

The method used was designed to identify the traded clusters that were deemed most important to the state economy based on strategic measures including:

- Type of cluster (traded or local);
- Scale;
- Relative performance to the wider economy;
- Growth trajectory; and
- Concentration.

The impact of these clusters on the economy is measured using a mix of measures involving the standard metrics of average salary, output, exports and Gross Value Add (GVA). It therefore does not equate simply to a list of top output or export clusters.

The results presented in the reports provide evidence of sustained comparative advantage in particular locations, which are informed through an analysis of clusters that outperform national averages in terms of employment concentration, employment growth, or both of these measures.

Employment Concentration Factors (ECFs) are provided for each regional centre, which provide insights into areas of specialisation and the role the regional centre plays in both regionally significant and state significant clusters. An ECF value of greater than 1.0 indicates an area of specialisation compared to national averages.

Critical supporting clusters that may provide significant inputs to outperforming clusters are also identified, as are potential emerging clusters based on the available data.

Key Findings

The reports present findings from cluster analysis undertaken at a state-wide, regional and regional centre level.

The activities of most value to the state as a whole was found to be natural resource based, which is spatially distributed according to the availability and location of the resources. With some exceptions, centre based activities of highest value are generally those which directly support these natural resource based clusters.

The regional analysis of traded and local clusters provides evidence that the Goldfields-Esperance regional economy is strongly aligned to the WA state-wide economic activity. Employment concentrations and growth are strongly directed towards conducting and servicing traded activity.

The Goldfields-Esperance region is therefore highly specialised in resource based Traded Cluster activities and associated activities.

Metal mining is the dominant cluster in the region. Apart from this cluster, relatively high levels of employment are seen in business services, agriculture and transportation and logistics.

Hospitality and tourism is noted for its relatively high levels of employment and the fact that it provides a point of difference in the region.

Traded clusters	ECF	Local clusters	ECF
*Metal Mining	28.18	Local Industrial Products and Services	3.55
*Non-metal Mining	9.98	Local Education and Training	1.07
*Downstream Metal Products	7.85	Local Hospitality Establishments	0.66
*Agricultural Inputs and Services	1.75	Local Logistical Services	0.66
*Construction Products and Services	1.50		
*Business Services	1.35		
*Transportation and Logistics	1.27		
*Hospitality and Tourism	1.02		

*Statewide significance

Figure 3.8 Outperforming Clusters withing the Goldfields-Esperence Region (ranked by ECF)

Source: Pracsys (2016)

In Kalgoorlie-Boulder, employment concentrations and growth are strongly directed towards conducting and servicing traded activity with metal and non-metal mining being the dominant clusters. Apart from these clusters, relatively high levels of employment are seen in transportation and logistics, construction products and in downstream metal products.

Hospitality and tourism performs better at the centre level than the regional level. This result highlights hospitality and tourism as the current primary point of diversification in the Kalgoorlie-Boulder economy. The region appears to be somewhat underserviced in local population based industries and services.

Selected traded clusters represented approximately 34% of regional employment, while selected local clusters represented approximately 19% of regional employment.

Traded clusters	ECF	Local clusters	ECF
Metal Mining	2.35	Local Industrial Products and Services	4.76
Non-metal Mining	2.30	Local Education and Training	1.07
Downstream Metal Products	1.32	Local Hospitality Establishments	0.83
Agricultural Inputs and Services	0.03	Local Logistical Services	1.08
Construction Products and Services	1.60		
Business Services	0.92		
Transportation and Logistics	1.76		
Hospitality and Tourism	1.30		

Figure 3.9 Kalgoorlie-Boulder ECFs for Regionally Significant Clusters (ranked by regional ECF)

Source: Pracsys (2016)

Implications for Kalgoorlie-Boulder

The cluster results and input from stakeholder consultation conducted by Pracsys, suggest that Kalgoorlie-Boulder currently displays the following high-level comparative advantages and opportunities for further development.

- Access to rail infrastructure;
- High degree of connection to regional traded clusters;
- High degree of specialisation in associated transport and logistics and local industrial products and services clusters; and
- A well-developed local education and training cluster.

A number of potential future drivers for growth for the Kalgoorlie Regional Centre were identified around which more detailed examination may be warranted. These included:

- External demand for minerals (metal mining and non-metal mining);
- Demand for supply chain linkage activities (transportation and logistics, construction products and services, and downstream metal products); and
- Hospitality and Tourism.

These initiatives broadly reflect growth in a range of the major traded activities where an existing centre specialisation has been shown to exist.

A further opportunity for development is to support under-performing local clusters in order to support further population growth within the region.

Discussion

The reports acknowledge that the major driver for future growth in Kalgoorlie-Boulder, is the discovery and exploitation of deposits of minerals and metals demanded by external markets. It is also noted that to a large extent growth in resource-based industries is dependent on both global factors and local availability and cannot easily be supported through government or local industry based initiatives.

There is however a role for regional centres to play in supporting these state-wide significant clusters and it is important for each centre to be in a position to respond if or when growth in these industries next occurs.

For growth in mining to occur, substantial new deposits will need to be discovered and developed as current deposits are mature and will require technological advancement to remain a high contributor to the local economy. Dependence on this driver for future growth (or even to sustain existing conditions) is therefore considered risky.

Despite the vulnerabilities associated with continued reliance on mineral discovery and exploitation for the future growth in Kalgoorlie-Boulder, associated industries may also be potential drivers for future growth. In particular, the report identified opportunities to build on the strong employment concentration in transportation and logistics, construction products and services, and downstream metal product manufacturing traded clusters.

Consultation suggested that expansion and linkage with other relatively remote regional resource markets, both in Australia and throughout the southern hemisphere, may represent a significant opportunity around which markets could be developed. Building on existing local expertise and capacity, and furthering market opportunities for specialist servicing and manufacturing industries supporting the mining, transport, and construction sectors is also of interest.

Another opportunity, acknowledged as having been given significant attention in recent years, is the potential to utilise Kalgoorlie-Boulder's geographic position as a meeting point for cross-continental transport infrastructure, as the basis for an inland logistics hub. Whilst large scale infrastructure investment around the proposed Portlink and Intermodal Hub have been shown to be uneconomic in the short term, it was suggested that a refined project focusing on Kalgoorlie-Boulder as a central point, linking regional ports and clusters seeking eastern markets, may represent a future driver for investment.

Finally, leveraging the international networks of the Western Australia School of Mines (WASM) alumni also represents a potential driver for future growth. In particular, linking the extensive international network of graduates and academics to Kalgoorlie-Boulder based mining service enterprises, may achieve significant agglomeration benefits usually associated with geographic clusters. This would require a combination of the incubation of local resources service enterprises and the development of meaningful international networks that incorporate flows of information and capital.

Business and recreation tourism represents a significantly concentrated cluster of activity within Kalgoorlie-Boulder. The cluster has an employment concentration factor of 1.3 and represents a substantial contribution to the local economy. The report stated that 71% of tourism visitation is associated with business or visiting family and friends, with the remaining 29% associated with holidays.

The holiday tourism segment represents a relatively low proportion but significant scale of visitors (43,000 visits per annum). This segment which stays between 5.2 and 15 days per visit (2014/15) may be a potential driver for future growth for the 304 tourism businesses operating within the city, 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.

Consultation with industry suggested that development of Aboriginal tourism products; heritage, industry related infrastructure and activities; and utilisation of Kalgoorlie-Boulder's natural capital to meet new niche markets, may represent potential opportunities to expand the tourism value proposition.

Capacity Constraints

Capacity refers to the ability of the regional centre to take advantage of identified economic drivers for the benefit of the local economy. The report discussed a number of potential capacity constraints.

a) Retention of Professional Population

Consultation raised a significant capacity challenge to the development of local clusters of activity. One point that was raised by multiple stakeholders was the attraction and retention of highly-skilled individuals to the community. Anecdotally, it was suggested that attraction and retention of health and education professionals was particularly challenging. This is evident in historic data which shows that between the years of 2006 and 2011 only 28% of professionals lived in the City of Kalgoorlie-Boulder for both Census dates.

When the data is examined in more detail, the three groups of professionals with the lowest retention rates were:

- Design, engineering, science and transport professionals (23%);
- Education professionals (27%); and
- ICT professionals (24%).

Overall this equates to a minimum turnover of 1,544 professionals within Kalgoorlie-Boulder over a five-year period. Initiatives to address this turnover are likely to be critical to future growth for a variety of reasons, as this subset of employment is:

- Largely responsible for the development of local human capacity through their roles in educating and training the existing and future workforce;
- A major source of expenditure for local businesses including retail, entertainment and construction activities; and
- A future source for endogenous development of traded activities that may develop into future clusters of export activity.

b) Dominance of Mining

Consultation suggested that the very high concentration of resource and related industries in Kalgoorlie-Boulder potentially has had a 'crowding out' impact on other opportunities in the region. This is likely due to high value industries outbidding for key inputs such as land, labour and capital.

These are particularly important in areas such as Kalgoorlie-Boulder, where there may be constraints on available land or labour. The opportunity to leverage the natural capital of the region for renewable energy, water, food and tourism-related industries was discussed as areas that have received limited consideration in recent times.

c) Reliability/Quality of Road Linkages

The weather dependence of some roads was identified as a potential capacity constraint, to the development of Kalgoorlie-Boulder as a logistics hub to industry throughout the interior of WA. This was reported to impact on the ability of operators to access and service remote operations, with alternative servicing arrangements instead being made (e.g. utilising Fly-in Fly-out (FIFO) arrangements via airstrips).

Hospitality and Tourism Case Study

Pracsys undertook further analysis in the area of tourism development and related community amenity. These were considered appropriate areas of research, given the relative under-performance of many local clusters within Kalgoorlie-Boulder, and high resident turnover, which poses a constraint to economic development. The clusters identified for further examination included:

- Hospitality and tourism;
- Local hospitality establishments; and
- Local retailing of clothing and general merchandise.

Key findings included:

- In the Goldfields-Esperance region, hospitality and tourism is a traded cluster with current total output of approximately $112million.

The results presented in the report showed that:

- The cluster is a moderate area of specialisation of the region and the Centre, with ECF of 1.02 and 1.30 respectively;
- Kalgoorlie-Boulder holds a reasonable portion of regional employment, accounting for 52% of employment within this cluster; and
- Very few Kalgoorlie-Boulder residents employed in the cluster work outside of the centre, with 4% out-of-centre employment.

Major clusters linked by supply chain include:

- Business services;
- Local commercial services;
- Local real estate;
- Construction and development;
- Transportation and logistics; and
- Local retailing of clothing and general merchandise.

Ongoing Use of Cluster Analysis

The information provided through the Regional Cluster Mapping Project forms a basis for cluster identification and profiling. The primary benefit of cluster based economic development approaches is in identifying existing or emerging networks of communication and collaboration, which can be formalised, supported and empowered to develop coordinated and cooperative industry led initiatives.

The methodology suggests that RCDP Centres build upon this understanding with ground-up consultation and cluster engagement to clearly identify champions, and understand the gaps and goals of key actors operating within each traded cluster.

Generally cluster groups are industry led with public agencies and academia (e.g. tertiary or training organisations) in support. A Cluster Manager may be appointed to support cluster governance.

It is suggested that cluster policy is more likely to be beneficial if focused on leveraging existing clusters rather than attempting to create clusters.

The information in the Pracsys reports is focused specifically on economic development initiatives stemming from a focus on traded clusters. It is proposed that such an approach may be considered as a component of a comprehensive package of Growth Plan initiatives, with other activities focusing on areas including local cluster performance, innovation systems, risk management and governance structures, activity centre performance and human capital development. The efficacy of the approach and the benefits that can be gained by intervening in existing traded clusters may vary in each region.

3.3 THE IMPLICATIONS OF GLOBAL MEGATRENDS ON KALGOORLIE-BOULDER

The following section provides additional information to that provided in Part One on the key global influences likely to impact on Kalgoorlie-Boulder.

3.3.1 Technology and the Digital Age

Overview

- Changes to information and communications technology have transformed society over recent decades and continue to gain momentum.
- New on-line sources of information, communication, services and entertainment have lessened isolation, expedited processes and empowered individuals and communities.
- These changes create significant opportunities for businesses to take advantage of digital technologies to capture and store information, to enter new markets, and to introduce new business models.
- They also present challenges, including the capacity to access and utilise technology, changing workforce requirements, increased global competition, changing customer bases and consumer expectations, as well as increased scrutiny and cybersecurity risks.

Implications for Kalgoorlie-Boulder

- 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 and technological readiness to enable its population and businesses to take advantage of emerging opportunities and be internationally competitive.
- Businesses need to be flexible and forward look in order to prepare for and adapt to tomorrow's technological changes.
- The emergence of robotics and driverless vehicles has implications for future labour requirements and the balance of unskilled versus skilled employment opportunities. This reinforces the need for investment in the knowledge economy and alternative employment opportunities.
- Integrated on-line education options can assist to broaden the tertiary education offering and provide increased opportunities for local education and training providers.
- Improved connectivity including online retail, entertainment and social media can assist to overcome geographic and social isolation, improve perceptions of liveability and provide new 'local to world' business opportunities.

- Effective communications technology is essential for the delivery of emergency and health services in remote areas.
- Technological readiness requires adequate training and IT support mechanisms that may also create opportunities for business development.
- Emerging technologies create new resource demands and opportunities. For example, lithium battery technology and nuclear power options are driving demand for lithium and uranium – both abundant in the region.

3.3.2 Diminishing Resources, Environmental Pressures and Climate Change

Overview

- Growing populations and societal transformations are placing increasing pressure on limited world resources.
- Pressure to supply key commodities such as water, energy, food and minerals will drive competition, efficiencies, innovation and further technological change.
- The need to balance economic, environmental and societal factors is placing greater emphasis on sustainable development practices.
- Decreasing biodiversity and ecosystem degradation is a major driver for conservation of environmental assets, remediation of environmental disturbances and environmental regulation.
- The resilience of the natural and built environs is being further tested by changes to climatic conditions – both natural and man-made.
- International governments are focused on reducing greenhouse gas emissions and on actions to adapt to and mitigate future risks associated with climate change.

Implications for Kalgoorlie-Boulder

- Kalgoorlie-Boulder is heavily reliant upon extractive industries as the basis for its economy. There is pressure to find new sources of minerals and to be more efficient in order to compete in the global market. This will drive the need for greater mineral exploration as well as mining, processing and workforce efficiencies.
- Kalgoorlie-Boulder is reliant upon imports from outside the region including power and water, making it vulnerable to changes to supply and demand that are beyond its control. Initiatives that improve self-sufficiency and sustainability will become increasingly beneficial.
- Kalgoorlie-Boulder has a plentiful supply of alternative and renewable energy sources such as wind, solar, geothermal and uranium. These will become increasingly attractive as traditional energy sources become limited or too expensive.
- Climate change predictions for the Goldfields Region include warmer, drier winters and hotter, wetter summers. According to the CSIRO[12] this will increase demand for energy and increase the risks of service interruptions. Water sourced from a drying climate in the south west will be progressively more vulnerable and potentially more expensive, thus increasing demand for local efficiencies and supplies. Potential increases in the occurrence of summer storms, flooding and bush fires all have implications for local industries, community planning, conservation efforts and regional transport planning.
- Future city planning, streetscapes and infrastructure provision need to not only account for future growth forecasts but the impact of a changing climate and sustainability requirements.

- World class biodiversity hotspots such as the Great Western Woodlands become increasingly important and vulnerable.
- Changing circumstances and unpredictability are further drivers for an adaptive and innovative local economy.

3.3.3 Urbanisation, Lifestyle and Consumer Expectations

Overview

- The world is currently experiencing an unprecedented movement of population from predominantly rural to urban settings.
- The United Nations Department of Economic and Social Affairs estimates that 54% of the world's population currently live in cities and that by 2050, this proportion will increase to 67%.
- Urbanisation is creating significant opportunities for improved social and economic outcomes, but also exerts pressure on infrastructure and key resources.
- Urbanisation in countries such as India and China is leading to a rising numbers of middle class, with greater expectations and increased levels of consumption.
- Increased access to education, improved health and technology, have helped empower and inform individuals and societies, leading to increased demands for services and greater accountability by decision makers.
- Increased mobility, social and other media and global tourism exposes populations to new experiences, cultures and motivations. This can result in changing consumer expectations for services, experiences and social interaction.

Implications for Kalgoorlie-Boulder

- Kalgoorlie-Boulder already has a high degree of population churn and struggles to attract and retain population. The draw to larger cities with greater work and lifestyle choices such as Perth is already a major issue.
- As the major city in the region, Kalgoorlie-Boulder may experience a population drift from outlying towns and communities to Kalgoorlie-Boulder. Kalgoorlie-Boulder already experiences a relatively high level of transience. The long term sustainability of many small remote Aboriginal settlements may place growing pressure on accommodation and services in Kalgoorlie-Boulder.
- Enhancing liveability and local amenity become more important as people seek greater opportunities and lifestyle choices. Kalgoorlie-Boulder has the added challenge of being an inland city in a country where around 85% of the population choose to live within 50 km of the coast.
- Future branding and marketing need to overcome negative perceptions and emphasise the positives of living away from large cities and the associated congestion, social and affordability issues.
- Home ownership needs to be more attainable in a regional centre such as Kalgoorlie-Boulder to attract and retain residents. Ensuring readily available land and reducing construction costs become key strategies.
- As consumer expectations increase, so must the quality of products and services – particularly in tourism, hospitality and related industries that are competing within international markets.
- The importance of enhancing lifestyle and amenity to promote population attraction and retention is essential for economic growth and increases the importance of investment in industries that service the local population and may not be as significant in the traded economy.

3.3.4 Changing Population Demographics

Overview

- Higher life expectancy and falling birth rates are increasing the proportion of elderly people across the world.
- This creates challenges for governments to sustain growing needs for health and welfare services, with a potentially declining tax base.
- Changing demographics also create changing requirements for housing, aged care services, health, public transport and retirement planning.
- An ageing population also creates opportunities where older residents may have more time for tourism, entertainment, recreational activities and volunteerism.

Implications for Kalgoorlie-Boulder

- There has been a significant increase in the older population demographic in Kalgoorlie-Boulder with the 60-74 year old cohort increasing 54% between 2004 and 2014.
- There is currently unmet and growing needs for aged care, retirement living and independent aged living options. Addressing these needs is a key factor to enhance community liveability and to retain retirees who seek access to quality health and aged care services.
- Promoting the benefits of living and retiring in Kalgoorlie-Boulder is important but this also emphasises the need to retain young people and families to support the ageing population.
- Servicing the needs of an ageing population provides employment and economic development opportunities both in terms of growing health and social support service needs, but also in providing entertainment and leisure activities.
- Kalgoorlie-Boulder is a key destination for the self-drive tourism market and there are increasing opportunities to develop facilities and products to maximise these benefits.
- In contrast to the growing aged population, the high Aboriginal population of Kalgoorlie-Boulder and the Goldfields is generally younger. While the Aboriginal population of the Goldfields is less than 10% of the population, Aboriginal students make up 20% of school enrolments. There is a growing urgency to ensure that this rapidly growing proportion of the population has equitable social and economic opportunities and outcomes.

3.3.5 Global Political Uncertainty and Conflict

Overview

- While global uncertainty and political crises are not new, the trend is towards increasing security fears, global financial shocks and heightened geopolitical and religious conflicts in various parts of the world.
- Crisis in one part of the world can have a sudden and dramatic impact on world affairs leading to financial and political uncertainty, growing insecurity and long term impacts on local economies.
- The rising threat of terrorism, growing refugee crises and the shift in global economic and political powers, all create uncertainty and increase the risk of conflict.

Implications for Kalgoorlie-Boulder

- Kalgoorlie-Boulder's heavy reliance on mining as a mainstay of its economic output makes it vulnerable to world events that can impact commodity prices and the value of the Australian dollar.
- Although a generalisation, the price of gold tends to vary inversely with levels of certainty. Historically, the more uncertain

- the environment, the higher the price of gold as investors buy gold as an apparent hedge against uncertainty in global markets.
- This contrasts with many other commodities such as iron ore and nickel, which tend to benefit from certainty and reach higher prices when economies such as China and India are growing rapidly and investing in new developments.
- Diversity within and beyond the mining sector is vital for Kalgoorlie-Boulder to reduce the impact of world events that are outside its control. Kalgoorlie-Boulder also needs to be ready to reap the rewards of global circumstances that favour growth in industries in which it has a competitive advantage.
- The uncertain economic and political environment reinforces the need for long term strategic planning and testing of future scenarios, to ensure that Kalgoorlie-Boulder can plan for and adapt to changing circumstances.
- Kalgoorlie-Boulder, as part of the broader Australia, represents a stable social, economic and political environment in which to live or invest. This may prove attractive in challenging global times and therefore benefit the region's growth aspirations.

3.3.6 Shifting Global Economic Power

Overview

- The rapid economic growth of Asia is expected to be a defining feature of the 21st century.
- The emerging markets of China, India Brazil and Russia are creating significant new trade opportunities.
- China and India in particular are emerging powerhouses and are already major importers of Australian goods and services.
- As economic power continues to shift from the west to the east, new markets and new trade linkages are emerging.
- A rising Asian middle class and ageing populations within the region, offer opportunities to export products and services.
- The number of tourists visiting Australia from China exceeded one million for the first time in 2015. Future visitor growth is likely to come from India, as well as other emerging countries in Asia.
- International student enrolments are also growing strongly, as demand from Asian countries grows.

Implications for Kalgoorlie-Boulder

- Asia is a dominant and growing importer of commodities from Kalgoorlie-Boulder. This shift in economic power and increased consumption is likely to provide greater demand and therefore greater export opportunities.
- There are growing opportunities for the WASM to attract international students as the demand for education in Asia grows.
- There is an increasing requirement for quality international tourism experiences, providing opportunities for the development and marketing of the Goldfield's unique tourism offering. This will require investment in tourism product development and quality tourism experiences.

3.4 FUTURE SCENARIOS

GPP Scenario Planning Workshop

Scenario Planning was undertaken as part of the growth planning process to enable the GPP to explore future drivers and uncertainties that have the potential to impact on the sustained growth of Kalgoorlie-Boulder. AEC Group, in conjunction with Chasing Sunrises, were appointed to facilitate a process of identifying solutions and opportunities, to understand the future and to inform future strategy development.[13]

A number of different scenarios were workshopped by the GPP in order to:

1. Identify the significant external factors (drivers of change), which could shape Kalgoorlie-Boulder's economy and community between 2016 and 2050;
2. Generate future scenarios for 2050 that describe the potential impacts of these drivers of change;
3. Assess the subsequent challenges to Kalgoorlie-Boulder in achieving economic diversification and becoming a healthy, liveable community; and
4. Inform future strategies and actions that may be required to overcome these challenges.

During the workshop the following drivers of change were examined for their potential to impact on Kalgoorlie-Boulder's future economy and community:

- Technology;
- Management of natural resources;
- Diversification and improved opportunities for youth; and
- Social integration and participation.

Table 3.4 summarises the priorities that emerged from the Workshop in order to respond to these drivers of change and to address future challenges.

Table 3.4 Summary of Scenario Planning Priorities

Scenario	Priorities for Kalgoorlie-Boulder
Technologically advanced and globally connected	• Address capability gaps: – In technology, by advocating for improved technology infrastructure, to service the needs of the region (speed, coverage, facilities) and enhance appeal to tele-commuters, creatives, and entrepreneurs; – In tourism and hospitality, by designing a pathway to create a city-wide, world-class hospitality, service and tourism culture; and – In community development, by ensuring people with the right skills and attitudes are in the most appropriate roles to take advantage of impending opportunities presented by social megatrends. • Develop consensus and buy-in of a future vision to ensure cohesive action. • Facilitate research into innovation and entrepreneurial activities to drive jobs growth and economic diversification into areas beyond mining. • Develop policies that incentivise identified investment opportunities. • Improve education around the issue of Aboriginal culture in both formal and informal settings, to increase the city's awareness, understanding and cohesion. • Improve the appeal beyond 'blokes', particularly for Perth families. • Develop an advocacy plan to lobby all levels of government for improved access to key infrastructure (in addition to technology requirements as mentioned above). • Develop an authentic, measurable and realistic marketing campaign to improve image perceptions of Kalgoorlie-Boulder.

Scenario	Priorities for Kalgoorlie-Boulder
Sustainable natural resources management	• Advocate to the State and Federal Government, to decentralise offices and relocate different departments to regional areas such as Kalgoorlie-Boulder. • Investigate and implement partnership opportunities, to drive investment and business relocation outcomes. • Lobby the government to improve the connectedness between Kalgoorlie-Boulder and Perth. • Develop appropriate policies and regulatory controls to maintain the sustainability of the regions natural resources. • Facilitate connections with the private sector that result in the development of increased education and training opportunities in the region, which are directly linked to future employment options, with a particular focus on opportunities for Aboriginal people. • Develop events and activities that encourage community engagement and participation. These activities will have a positive impact on social connectedness and issues relating to public perception of the region. • Develop a campaign to promote the positive attributes of the region to break down perceptions around image and isolation.
Increased diversification and opportunities for youth	• Develop events and activities that will foster a culture of inclusion and community participation. • Community leaders need to play a proactive role in driving the culture of inclusiveness. • Build strong social networks across the community to facilitate increase community participation and connectedness. • Develop an investment attraction strategy that identifies opportunities to attract research, innovation and education, which will drive a diverse mix of new jobs and industries to the region. • Develop an advocacy plan that identifies priority projects which will support future economic development and act as a catalyst for sustainable growth. • Identify and incentivise opportunities to foster an entrepreneurial culture that drives innovative opportunities to develop the economy.

Scenario	Priorities for Kalgoorlie-Boulder
High level of social integration, participation and cohesion	• Develop programs that foster greater levels of social inclusion, connectedness and participation, e.g. Reconciliation Action Plans and other opportunities with other cultural groups. • Utilise technology and multi-media platforms to promote Aboriginal learning and knowledge sharing. • Identify and encourage opportunities to grow the tourism sector, by supporting and promoting a multitude of authentic Aboriginal tourist experiences. • Developing Aboriginal capabilities with regards to providing unique, world class tourism experiences. • Need to develop a marketing image campaign, to change people's negative views and drive awareness and understanding of what the real Kalgoorlie-Boulder has to offer. This program needs to start locally and build support from within the community first. • Work with local mining companies to introduce family friendly work rosters and improve the work-life balance and appeal of Kalgoorlie-Boulder. • Build capacity and skills that enable new technology to be embraced and utilised. • Explore opportunities to attract new university and higher education institutions and courses. • Work with all tiers of government to develop policy incentives which stimulate industry confidence and investment. • Advocate for an increased presence of state and federal government institutions in Kalgoorlie-Boulder.

Commodity Price Modelling

The future of the mining sector and the external drivers of that sector such as resource demand and supply and subsequent commodity prices, are key drivers of the Kalgoorlie-Boulder economy. A detailed social and economic impact study and commodity price modelling tool was developed by ACIL Allen for the CKB and GEDC in 2015.[14] This study explored the relationships between commodity prices, mining activity in Kalgoorlie-Boulder and economic and social outcomes in the region.

The Study included four different commodity price scenarios and the resultant social and economic impact scenarios and presented a range of price, production and impact projections. In summary, the Study identified four types of linkages between mining activity and the broader Kalgoorlie-Boulder economy and society:

1. **Direct linkages –** that apply to industries that supply a significant share of the goods and services they produce as intermediate inputs to the mining sector. Industries with direct linkages are exploration and mining support services, other mine support servicing, construction and manufacturing.
2. **Structural linkages –** that apply when key indicators are driven by production tonnages rather than commodity market conditions, unless very low prices trigger mine closures. Indicators found to be structurally linked to the mining sector are employment, room nights, emergency department attendance and reported offences.
3. **Market linkages –** which are those linkages between mining production values and economic or social indicators and are consequently driven by commodity prices, making them more volatile than structural linkages. Indicators with direct linkages to the market are house prices, average takings per room, airport passengers.
4. **Buffered relationship –** Kalgoorlie-Boulder's population was found to have a buffered relationship to the mining sector. The current population does not sustain current employment requirements and the gap is therefore filled with FIFO workers. The FIFO workforce prevents production fluctuations from having a direct impact on Kalgoorlie-Boulder's population, because FIFO workers tend to be laid off before the resident workers and therefore population size remains largely unaffected, unless the mining sector's required workforce drops to a critically low level.

The Study provided detailed quantitative information on the social and economic impact of various commodity price scenarios on Kalgoorlie-Boulder and demonstrates the significant impact that these different price scenarios have on key social and economic indicators, through the linkages outlined above.

Population Scenarios

Updated estimates of future population growth were developed by RPS[15] based on two scenarios that are informed by the State Government's official projections. These scenarios were:

- A Medium (Business as Usual) Growth Scenario, with growth in line with WA Tomorrow Band C estimates; and
- A High (Blueprint) Growth Scenario, with growth projections in line with WA Tomorrow Band E estimates as used in the Blueprint.

The population scenarios have been re-based considering lower than expected population growth over the past couple of years, with Kalgoorlie-Boulder's population expected to increase by between 24.3% and 51.5% by 2050.

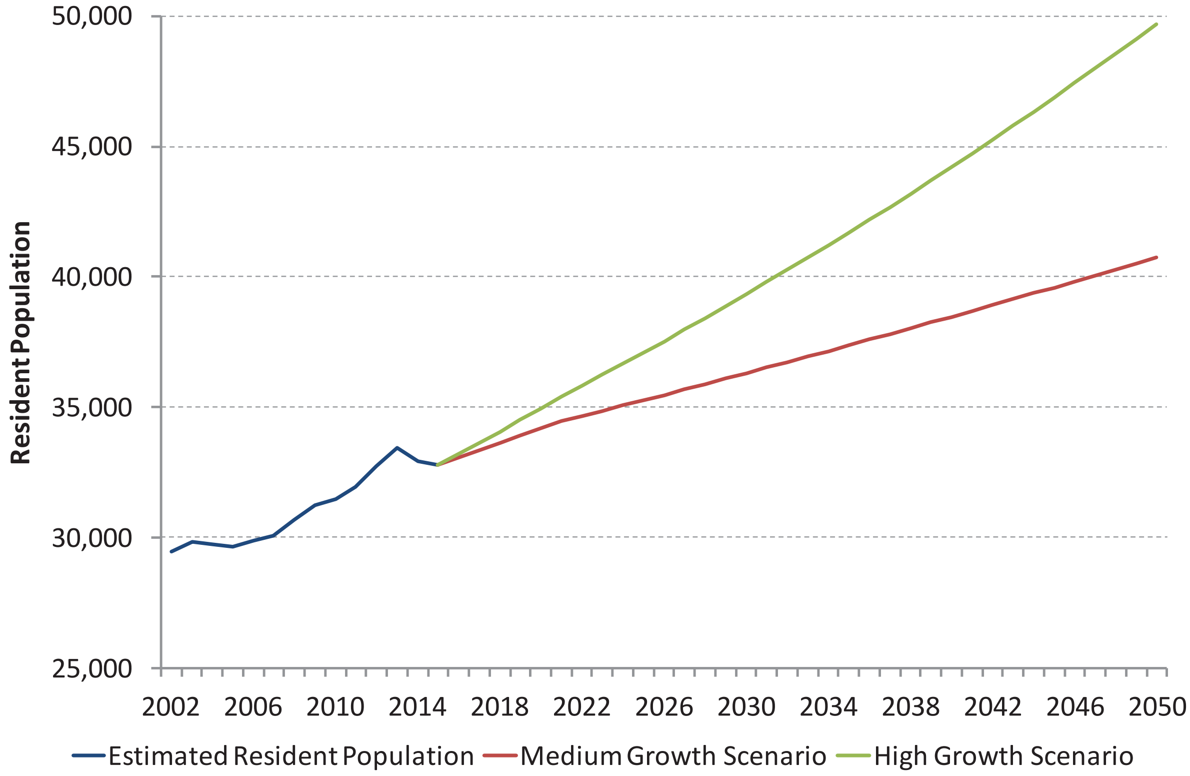


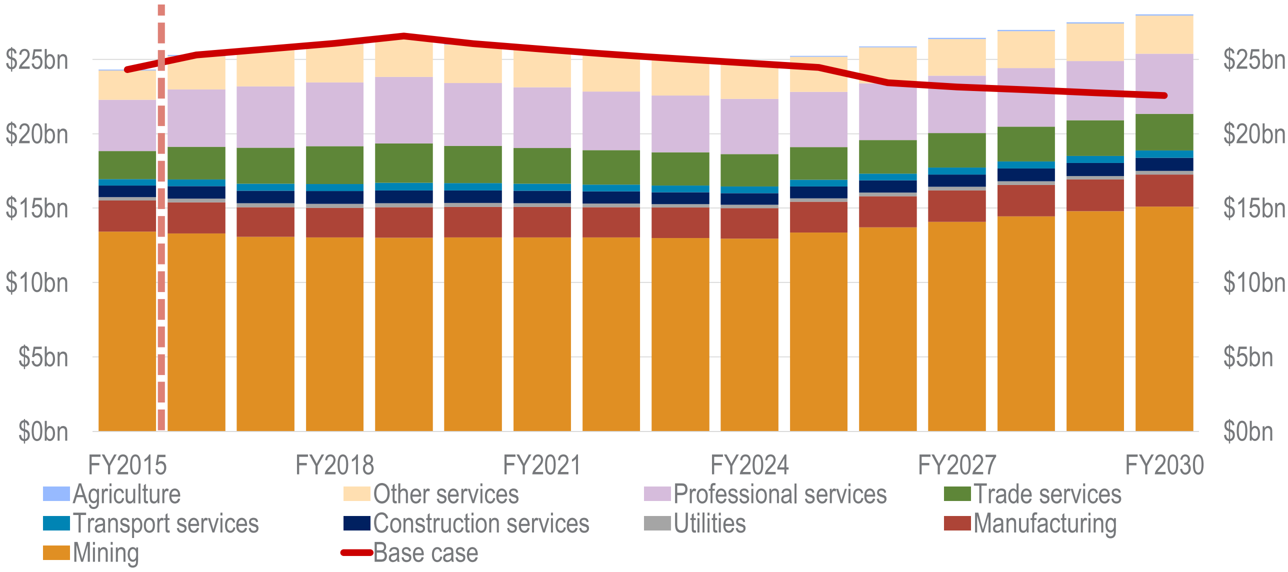
Figure 3.10 Population Scenarios, Kalgoorlie-Boulder, 2002-2050

Detailed Growth Projections, 2015-16 to 2029-30

In developing a long term growth outlook for Kalgoorlie-Boulder, it is important to understand the outlook of the mining sector, given its dominant role in the growth and development of the region. Given the mining sector outlook is heavily influenced by current and future commodity prices, ACIL Allen developed two growth scenarios utilising the Commodity Price Modelling Tool outlined above.[16] These were:

1. A Base Case Growth Outlook: This is based on the continuation of current prices for gold and nickel, and therefore the maintenance of current production profile for these commodities. Under this scenario, the price assumption does not incentivise new mines being developed, nor does it provide an incentive for existing mines to be closed.
2. An Upside Growth Outlook: This is based on a higher commodity price environment, which in turn progressively incentivises new mines to be developed as the commodity price rises over the forecast period.

The Upside and Base Case Scenarios are summarised in Figure 3.11.



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

Source: ACIL ALLEN CONSULTING

Under the Base Case Scenario, where commodity prices remain unchanged, the Kalgoorlie-Boulder economy is expected to record sub-par rates of growth over the study period, due largely to the impact of declining mining production as a number of mines are depleted and eventually closed.

By contrast, under an Upside Growth Scenario, where commodity prices are forecast to progressively increase over time, this is projected to result in new mining properties becoming operational. Relative to the Base Case, the Kalgoorlie-Boulder economy is expected to generate 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.

Importantly, with the estimated residential population forecast to grow by 1% per annum to 2029-30, new employment opportunities are projected to be taken by the resident population, reducing the need for businesses to require a large FIFO workforce.

The projections highlight the importance of the mining industry to the Kalgoorlie-Boulder economy, but also the benefits that can be realised if new mines are developed in the region.

The population and workforce trends in Kalgoorlie-Boulder are largely influenced by the prevailing economic conditions. 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.

Reduced economic activity resulting from the declining levels of mining production in the Base Case Scenario, are forecast to predominantly impact the FIFO workforce, which the Model predicts will result in the permanent residential population taking on an increasing share of employment opportunities relative to the FIFO workforce. In a higher commodity price environment, increased labour demands are predicted to be met by higher FIFO numbers as illustrated in Figure 3.12.

Mining Sector Outlook

Recent trends in the macro economy have shown that there is renewed activity and interest in mining in Kalgoorlie-Boulder. The lower Australian/United States currency pairing has supported growth in spot gold and nickel prices, the two major commodities for Kalgoorlie-Boulder.

After a prolonged period where costs of production were rising (due to factors such as high labour costs), the cost of mining in Australia has fallen in recent years as a result of a focused effort across the industry, to reduce production costs in an environment of falling commodity prices. Recent optimism in the mining industry therefore not only reflects the improvements in commodity prices, but the productivity improvements that continue to be made in the industry to lower the costs of production.

Rising prices in commodities such as gold and lithium have generated significant interest in new mining developments in Kalgoorlie-Boulder. According to ACIL Allen's Mining Sector Model[17] there are 2,194 mining properties in WA. Of these mining properties, some 748 fall in the Kalgoorlie-Boulder Economic Zone. Gold mining properties make up the largest share of

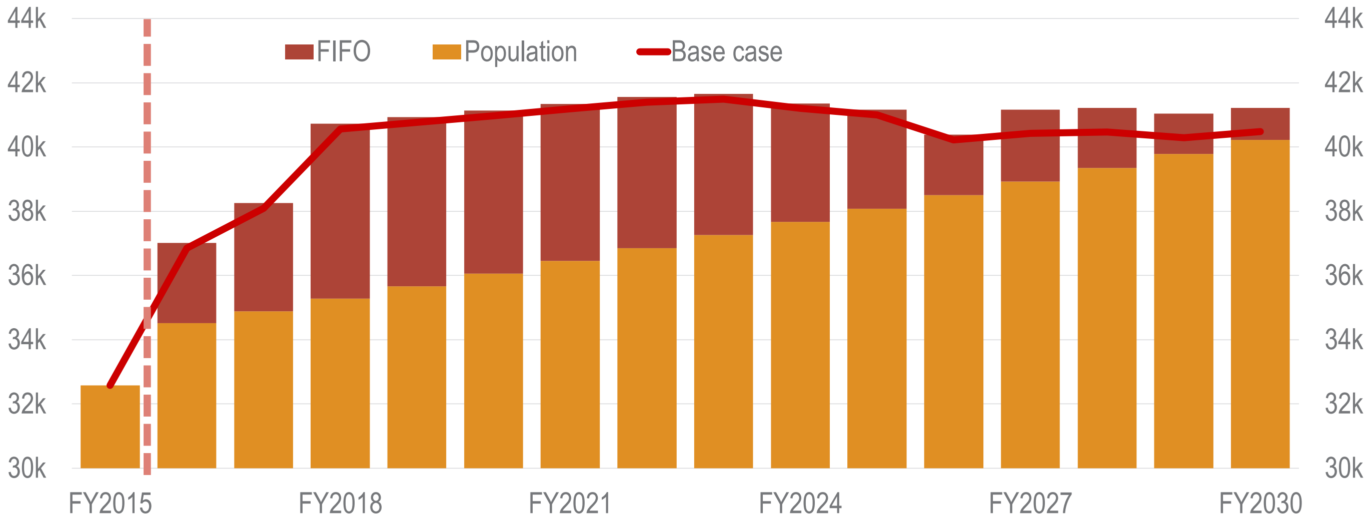


Figure 3.12 Growth Scenarios - Kalgoorlie-Boulder Population Projections, 2015-15 to 2029-30

Source: ACIL ALLEN CONSULTING

these properties (63%), followed by nickel (23%), iron ore (4%), uranium (3%) and lithium (1%).

Importantly, 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. This significant potential for growth in the mining sector is summarised in Figure 3.13 and 3.14.

Operational and Under Construction

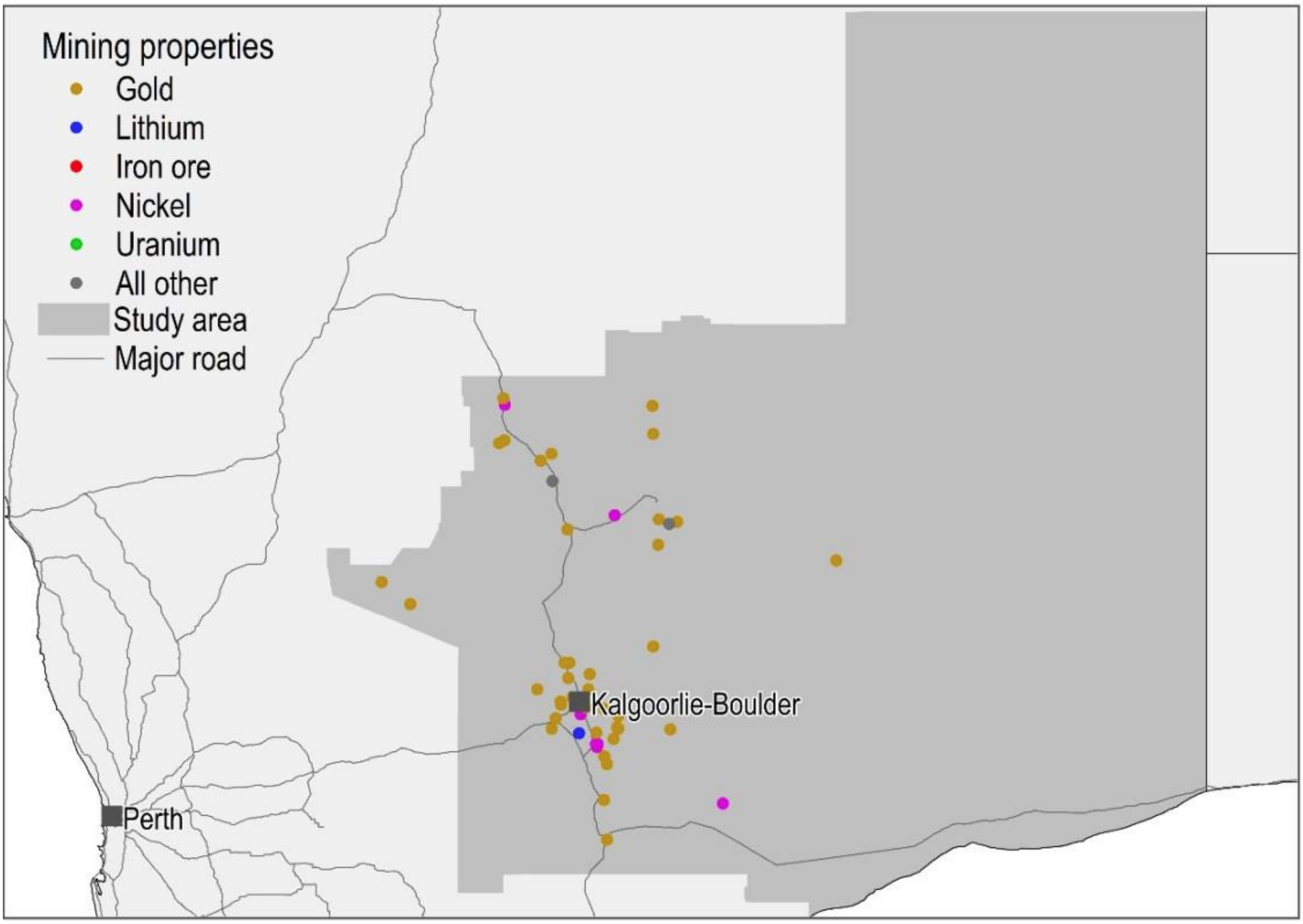


Figure 3.13 Operational and Under Construction Mining Properties, Kalgoorlie-Boulder

Prospective

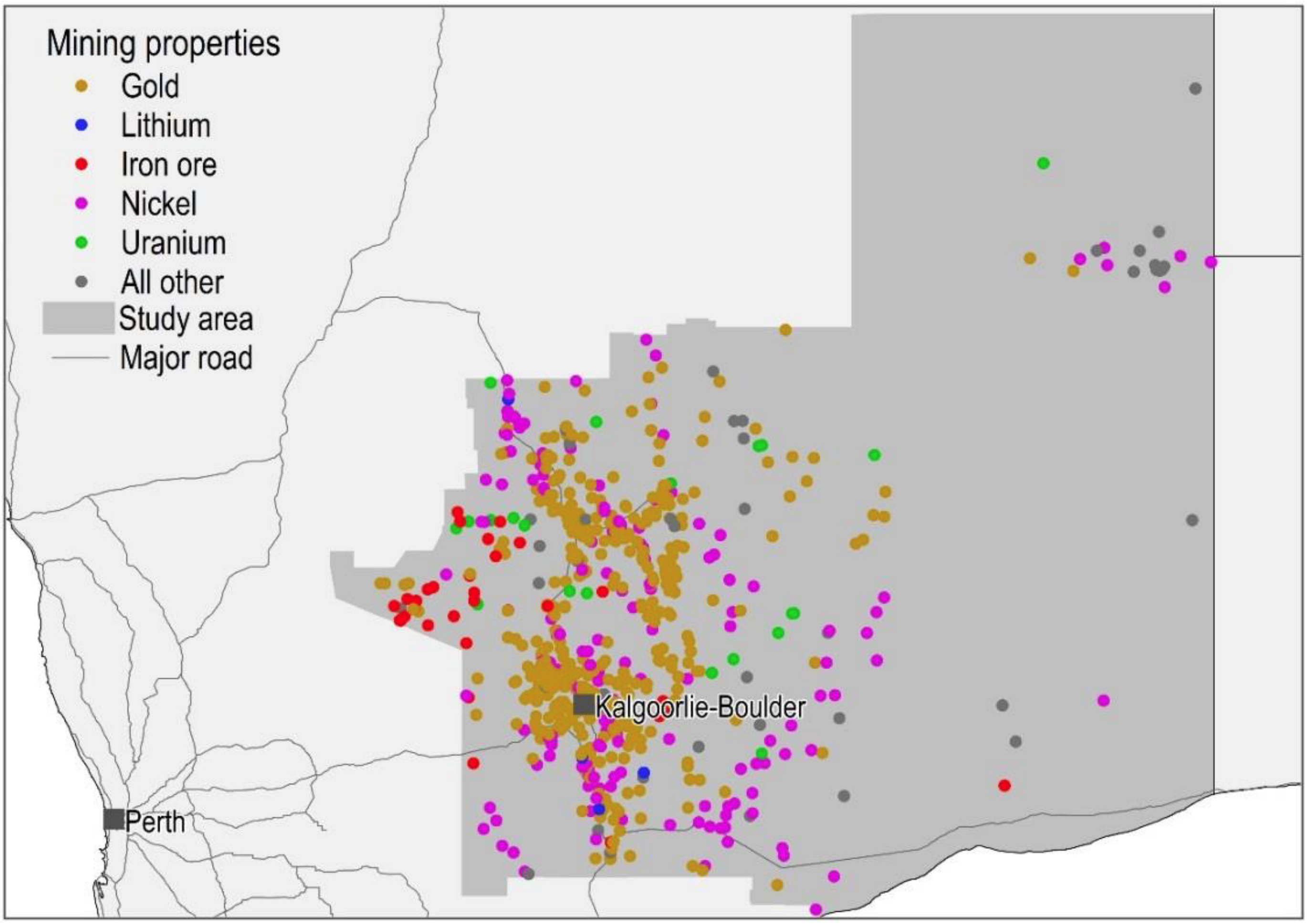


Figure 3.14 Prospective Mining Properties, Kalgoorlie-Boulder

3.5 FINDINGS OF SPECIALIST CONSULTANCIES AND ADDITIONAL ANALYSIS

The following sections provide a summary of the specialist consultancy reports commissioned by LandCorp on behalf of the GPP, to support the development of the Growth Plan and the economic analysis outlined above. More detailed information is available in the full reports. Also presented is some additional information that has been researched by WSP | Parsons Brinckerhoff, to address information gaps or to provide further context for the Priority Actions and Initiatives outlined in Parts One and Two.

The Growth Plan has sought to provide clear direction and practical initiatives to address key identified needs, rather than just document those needs. For this reason the consultancy reports contain quite detailed strategies in some areas, including urban design, tourism and Aboriginal economic development. While key directions and initiatives have been captured in the Growth Plan, these reports and strategies will provide an important resource for the GKBP and for stakeholders operating in these sectors. The tables and figures provided in the following sections have generally been taken from the specialist consultancy reports unless otherwise specified.

3.5.1 Kalgoorlie-Boulder Housing Study

The health and well-being of Kalgoorlie-Boulder's population and its ability to attract and retain new residents, is dependent in part on people's access to secure, appropriate and affordable housing. The cyclical nature of Kalgoorlie-Boulder economy has had an enduring impact on housing construction and availability and has created a number of challenges for residents and housing service providers. The resource sector outlook tends to drive conditions in the property market, creating issues relating to housing availability, affordability, housing stock diversity and retention of residents.

The Growth Plan provides an opportunity for a more coordinated and targeted approach, to address these property market challenges as a key factor in enhancing liveability and economic prosperity in Kalgoorlie-Boulder.

RPS was engaged to develop targeted research, building on work they had already been involved with through the Blueprint and a previous regional housing needs study, in order to identify key challenges that should be addressed as part of the growth planning process and recommend key priority actions.

The RPS Report provided:

- An analysis of property market conditions and the current land and housing needs in Kalgoorlie-Boulder;
- An assessment of medium and long term housing and land needs;
- A high level assessment of infrastructure capacity and constraints in relation to housing and land availability; and
- Recommended actions and priorities to address key identified housing needs and gaps in Kalgoorlie-Boulder.

The Report was completed in May 2016. It should be noted that housing market conditions and trends are somewhat dynamic. The findings below are based on the data available to RPS at that time.

The Housing Market

Population Characteristics and Trends

RPS explored the socio-economic and demographic determinants of demand for housing within the Kalgoorlie-Boulder area. The analysis revealed the following key findings as referenced in the RPS Report:

Declining Population: Kalgoorlie-Boulder experienced considerable population growth during the years of high commodity prices, but population levels have subsequently declined in response to reduced labour needs in the region. The declining population has had an immediate impact on housing turnover and rental availability, with the number of rentals on the market increasing 451% between 2012 and February 2016, to an average vacancy rate of 4.6%. Additionally, social housing requirements have subsided in the short term from levels in 2012. However, there is a perceived risk that a prolonged period of high unemployment and lower wages, will translate into higher housing stress and social housing need.

High Non-Resident Population: The service population of Kalgoorlie-Boulder is considerably larger than the resident population, especially during the construction phase of several large resource investments, due largely to the number of FIFO or drive-in-drive-out workers.[18]

This affects the availability of non-traditional accommodation such as motels during periods of high labour requirements, despite policy controls in place which endeavour to limit the level of workers in tourist accommodation.

Young Working Population: Young and maturing families are the major cohorts in Kalgoorlie-Boulder, with much lower proportions of elderly families and singles compared to the Western Australian average. The decline in the population in recent years is therefore perceived to be characterised by a loss of many young adults, which could affect the retention of families and has implications for housing planning.

High Welfare Levels: Despite historically high wages and low unemployment, the CKB has some of the highest levels of government welfare in the country, with this rate increasing in recent years. There is therefore a large and growing cohort of residents which rely on support for housing.

High Population Turnover: The CKB is ranked 510 out of 563 for population retention in Australia, which is a reflection of workers coming to and leaving the region for employment purposes, especially overseas-born workers which represented over a third of new migrants. The housing market is therefore characterised by high levels of rental households, including employer-subsidised housing.

High Homelessness: As with many regional centres in WA, Kalgoorlie-Boulder experiences transient homelessness due, in part, to the influx of residents from remote regions. This issue has been recognised in the past and several initiatives have attempted to address the concern, including, most notably, the development of the Kalgoorlie-Boulder Indigenous Visitors' Hostel in 2012, which provides temporary accommodation for Aboriginal persons that would have otherwise slept rough. The level of homelessness and those persons in informal accommodation remains a key challenge for the social housing sector.

Residential Market Trends

Housing market conditions in Kalgoorlie-Boulder were analysed by RPS to provide important context to the future demand and development of residential dwellings in the area and changing housing preferences experienced over the last few years. The key attributes and trends are summarised below.

Resource Sector-Driven Market: In contrast to traditional cycles, which are heavily driven by macro-economic conditions and borrowing costs, housing sales and construction activity move in tandem with conditions in the local resource sector and the perceived outlook for future resource sector investment.

Deteriorating Short Term Market Conditions: As a result of the price of commodities declining significantly from 2011-12 highs, the Kalgoorlie-Boulder market has experienced deteriorating conditions since 2012. The broader housing market has also responded to declining population, with the number of rentals on the market increasing 451% between 2012 and February 2016, to an average vacancy rate of 4.6%. However it should be noted that increasing gold price and resource expansion opportunities could support an improvement in housing market conditions in the near term.

High Stock Levels: Typically, stock levels will represent around 5-7 months of housing turnover, on average. However, stock levels in Kalgoorlie-Boulder have represented an average of 11-12 months of turnover since 2010. This suggests that vendor and buyer expectations do not match. Part of this trend could be due to the lack of observed capital growth.

No Capital Growth: Growth to capital values, as measured by the median house price, has been minimal since 2008, with the median house price in 2015 just 4.5% above 2008 levels. Land values have also been broadly stable in the low-$180,000 range, though declined in 2015 to $170,000 based on fewer sales. The lack of capital growth is considered a major constraint to new housing development and particularly undermines the ability for diverse medium density housing choices to be developed, as well as other more innovative housing designs. It can also discourage renovation and maintenance of properties.

High Yields: Yields are largely in excess of 6.0% compared to 4.3% across Australia and 5.4% across country areas in Western Australia. Yields have historically been above average in Kalgoorlie-Boulder, which is a reflection of the high demand for rentals from workers migrating to the area.

Diversity of Price Points: The analysis confirmed the diversity of price points available across Kalgoorlie-Boulder, with median values broadly ranging from $230,000 to $640,000. The northern and western suburbs are generally more affluent and are home to larger and newer homes priced from the mid-$350,000 range and upwards. The central Kalgoorlie and Boulder areas are home to the more affordable housing stock, as well as much of the older pre-1960s fibro and weatherboard homes.

Affordable Housing Stock: RPS undertook a purchasing power assessment for buyers in Kalgoorlie-Boulder. The median house price was considered relatively affordable for all the main household types. In particular, 50% of houses in Kalgoorlie were considered relatively affordable to 96% of family households and 87% of couple households. Whilst the median house price was only considered affordable to around 53% of lone person and one parent households, this was above proportions across Western Australia. This conclusion is supported by estimates of mortgage and rental stress, with only 5.4% of low income households under mortgage stress and 12.4% experiencing rental stress, compared to 10.0% and 23.3% across Western Australia as 2011, respectively.

Housing Stock and Development

RPS assessed the characteristics of the housing stock, with the key findings summarised as:

Older Housing Stock: Close to one third of the housing stock was built prior to 1960, with much of the older stock occurring within the suburbs of Kalgoorlie and Boulder and a much higher proportion being three bedrooms rather than four bedrooms. However, as in most urban areas in Australia, four bedroom dwellings have been much more popular in recent years.

Relatively High Medium Density Stock: Despite a growing number of medium density developments in the area between 2001 and 2011, Kalgoorlie-Boulder is still characterised by a large proportion of detached housing.

Low Aged Care and Retirement Living Options: There are two aged care facilities currently in Kalgoorlie-Boulder, with a total of 140 beds. However given Kalgoorlie-Boulder is the main service centre for the region, there is an unmet need for aged housing, with providers indicating waitlists for low and high care facilities. There are also limited dedicated independent aged living options in Kalgoorlie-Boulder, despite the number of residents aged 50 years and older increasing by 38.7% between 2004 and 2014.

High Public Housing Stock: The public housing stock represented 7.4% of the occupied housing stock, compared to the Western Australian average of 4.8% as of 2011, with Aboriginal households representing about 30.8% of social houses occupied in Kalgoorlie-Boulder. Social housing is more likely to be medium density than non-social housing, this is reflective of a greater need for one and two bedroom dwellings. The waitlist and waiting times for social housing have declined in recent years due to greater availability in the private rental market; however there remain a high number of households in search for social housing. Approximately two-thirds of the applicants on the waiting list were seeking one-bedroom dwellings, with only limited demand for three and four bedroom family homes.

Low Community Housing Presence: Despite the high level of social housing, community housing providers only provide approximately 11.3% of Kalgoorlie-Boulder's social housing stock. Social housing is therefore reliant on State Government funding availability, more so than the WA average. Challenges that restrict community housing include, the lack of stock transfers and housing management agreements. There is also perceived to be limited partnerships with local government to support community and affordable housing development. Moreover, in recent years, the current housing market and declining population has not supported public housing development. Due to this perceived lack of demand for social housing in the region, community housing providers with land holdings have been unable to source State Government contributions.

Low Levels of Development: Whilst improved property market conditions in 2012 led to an increase in development intentions, a subsequent deterioration in turnover, capital growth and population growth, have seen a reduction in residential building approvals. In addition to the reduction in residential population, building costs and the lack of capital growth are major challenges. Houses developed in Kalgoorlie-Boulder were estimated to cost 23.3% more than the WA average (35% above Perth metropolitan costs).

Dwelling Needs Modelling

Population Scenarios

RPS, in collaboration with the Department of Housing, LandCorp and the GEDC developed a Regional Housing Needs Model in 2014. The RPS Report updated the analysis to explore dwelling requirements under two population scenarios for Kalgoorlie-Boulder. These scenarios included:

- **Medium (Business as Usual) Growth Scenario,** with growth in line with WA Tomorrow Band C estimates; and
- **High (Blueprint) Growth Scenario,** with growth projections in line with WA Tomorrow Band E estimates used as part of the Goldfields Esperance Regional Investment Blueprint.

Based on the age profile, family characteristics and population projections, RPS estimated the growth in households for both scenarios. The findings are illustrated in Table 3.5.

Table 3.5 Projected Households, Kalgoorlie-Boulder

Scenario	2015	2030	2050
Medium Growth Scenario	12,705	14,017	15,853
High Growth Scenario		15,282	19,550

Dwelling Preferences

In order to recognise the change in housing preferences in Kalgoorlie-Boulder as the population expands, the study assessed potential demand based on a greater shift towards medium density housing typologies, in line with observed trends over recent years.

The level of housing need is expected to be dependent on the population outlook, which will be driven by a range of economic factors, with demand for housing expected to vary between 3,149 and 6,840 dwellings.

Table 3.6 Indicative Dwelling Need, Kalgoorlie-Boulder

Net Dwelling Need		Detached Houses	Terrace / Townhouses	Units
Medium Growth Scenario	2030	1,006	167	139
	2050	2,390	414	345
High Growth Scenario	2030	1,954	337	282
	2050	5,171	909	760

Given the trend towards smaller household sizes, there is an estimated greater need for one and two bedroom dwellings, which has not historically been met. The absence of this product will see a greater share of lone person and couple only households choose terrace/townhouse and traditional detached housing instead.

The RPS Study explored the need for aged and social housing. It found that while the family home is expected to continue to be the primary form of housing for ageing households, there is a growing need for aged care and independent living. However, there appears to be a growing demand for a diverse range of accommodation types.

According to modelling undertaken by RPS, by 2030 Kalgoorlie-Boulder is expected to require up to 177 independent living units (from approximately 70) and up to 290 aged care places (from 139 places).

If there is no change in the proportion of households requiring social housing (at 7.4% of the occupied housing stock in 2011), there will be a requirement for significant social housing development under both scenarios, with between 20 and 26 dwellings developed per annum over the next 15 years. It is therefore crucial to explore different avenues to service social housing requirements, such as through greater community and transitional housing provision and housing services which reduce the need for extended public housing requirements.

Recommended Core Focus Areas

Regional housing markets, like that of Kalgoorlie-Boulder, are influenced by a diverse range of factors not present or significant in capital city housing markets. These include issues such as geography, cyclical economic conditions, demand for worker accommodation and transient homelessness. These factors have influenced rapid changes in the level of housing affordability, choice and supply in many regional communities over the past two decades.

Building on previous research, the RPS Report identified a range of core focus areas to guide the identification of actions and initiatives.

These focus areas are based on consideration of housing characteristics and attributes within the context of current and emerging issues and trends. Many of these focus areas are shared with other regional centres, though all are particularly relevant to Kalgoorlie-Boulder's current and future social and economic development. These core focus areas include:

- *Housing costs,* in particular the high cost of construction and redevelopment in relation to established dwelling values;
- *Urban revitalisation and diversity,* especially within central Kalgoorlie and Boulder;
- *Indigenous and social housing,* including the expansion of alternative housing options for low-income residents; and
- *Housing an ageing population,* including consideration of aged care, retirement living and ageing in place requirements.

RPS assessed each of the core focus areas and identified a list of critical issues that require specific focus and attention. These core issues have been summarised in Table 3.7.

Table 3.7 Overview of Core Focus Areas

Core Area of Focus	Issue	Importance
Housing Costs	Cost of New Construction	High
	Cost of Infrastructure and Services	Moderate
Urban Revitalisation and Diversity	Financing & Promoting Innovative Housing Products	High
	Market Feasibility	Moderate
	Aged Housing Stock	Low
Indigenous & Social Housing	Transient, Permanent Homelessness and 'At Risk' Housing	High
	Transitional Housing Requirements	High
	Low Community Housing Presence	High
	Affordable Private Rental Accommodation	Low
Housing an Ageing Population	Independent Living Unit Supply	High
	Aged Care Supply	Moderate

Recommended Actions

RPS subsequently developed a list of key proposed initiatives and actions to progress the above areas of focus. This list drew upon a number of sources, including recommendations from previous research and background reports, existing project lists, projects identified through consultation processes and projects identified through analysis.

Table 3.8 identifies a range of initiatives as the basis for further discussion and analysis. Further details on these initiatives are provided in the RPS Report.

Table 3.8 Summary of Preliminary Actions

Action Name	Action Classification	Focus Area/s	Relevant Issues & Barriers
Community Independent Living Unit Supply	Direct Housing Supply	Housing an Ageing Population	Independent Living Unit Supply
Indigenous Transitional Housing Project	Direct Housing Supply	Indigenous & Social Housing	Transient Housing Requirements Affordable Private Rental Accommodation
Affordable Housing Initiative Promotion	Information Development & Publication	Indigenous & Social Housing	Transient Housing Requirements Affordable Private Rental Accommodation
'At Risk' Housing Provision	Direct Housing Supply	Indigenous & Social Housing	Transient & Permanent Homelessness and 'At Risk' Housing
Student Accommodation	Enabling Infrastructure Delivery	Urban Revitalisation & Diversity	Market Feasibility
Housing an Ageing Population Investor Prospectuses	Information Development & Publication	Housing an Ageing Population	Independent Living Unit Supply Aged Care Supply
Innovative Housing Co-Investment Scheme	Feasibility Demonstration	Housing Costs Urban Revitalisation & Diversity	Cost of New Construction Financing & Promoting Innovative Housing Products Market Feasibility
Modular & Alternative Housing Promotion	Information Development & Publication	Housing Costs	Cost of New Construction

Action Name	Action Classification	Focus Area/s	Relevant Issues & Barriers
Town Centre Renewal	Enabling Infrastructure Delivery	Urban Revitalisation & Diversity	Market Feasibility Aged Housing Stock
Implement Age in Place Program	Enabling Infrastructure Delivery	Housing an Ageing Population	Independent Living Unit Supply Aged Care Supply
Granny Flat Promotion	Information Development & Publication	Housing an Ageing Population	Independent Living Unit Supply
Unlock Karlkurla Planning Area	Enabling Infrastructure Delivery	Urban Revitalisation & Diversity	-
Promotion of 'Shop Top' Housing	Information Development & Publication	Urban Revitalisation & Diversity	Financing & Promoting Innovative Housing Products Market Feasibility
Encourage Re-Use of Vacant Buildings	Information Development & Publication	Urban Revitalisation & Diversity	Financing & Promoting Innovative Housing Products Market Feasibility
Establish Home Industry Zone	Information Development & Publication	Urban Revitalisation & Diversity	Financing & Promoting Innovative Housing Products
Affordable Land Program	Information Development & Publication	Indigenous & Social Housing	Affordable Private Rental Accommodation
Community Housing Promotion	Direct Housing Supply	Indigenous & Social Housing	Low Community Housing Presence

Next Steps

Tackling the key housing challenges in Kalgoorlie-Boulder must be achieved through collective and coordinated actions and investment in a broad range of projects and initiatives. RPS has recommended that the responsibility to oversee the implementation of priority projects and initiatives and facilitate positive outcomes should be assigned to a **Kalgoorlie-Boulder Housing Working Group.**

The Working Group would assume a planning, coordination and support role in the implementation and monitoring of the identified initiatives, including assessment of progress against key measures of success. The relevant representatives would be sourced from the public, community and private sectors.

RPS identified a range of actions to be implemented and potential projects requiring funding. The Report prioritised several of the identified actions and undertook extended analysis of these projects and initiatives, to provide guidance for short-term actions. These preliminary prioritised projects included:

Indigenous Transitional Housing Project: This Program is managed by the WA Housing Authority and forms a key plank of the State Government's Regional Services Reform Agenda. The Project differs from traditional social housing programs by providing subsidised new housing to Aboriginal people, either in full-time employment or study within regional WA. The housing can then subsequently be purchased by the occupant.

An analysis was undertaken on the indicative number of household eligible for the Program in Kalgoorlie-Boulder. The Analysis revealed that 182 of the 1,131 households as of 2014 would be eligible. This is expected to increase to 210 households by 2019. The Project would be expected to improve employment outcomes and reduce dependency, with a reduction in long-term unemployment expected to provide an economic and social benefit in excess of $50,000 per annum. This will also reduce the need to invest in public housing and associated ongoing costs. It is estimated that $6-$7.8 million per annum (in today's dollars) is required to meet the needs of public and community housing in Kalgoorlie-Boulder over the next 15 years.

Community Independent Living Unit Development: In Kalgoorlie-Boulder, it was found that an increase in older residents is placing increased pressure on the need to for age-appropriate housing options. This is evident through the low vacancy rates and significant wait lists experienced across independent living villages and aged care developments, with increases in home and community care usage, particularly home maintenance and modification requirements.

It is expected that the provision of independent living units in Kalgoorlie-Boulder to cater for current and future needs would:

- Increase social interaction, with reduced levels of loneliness and depression which can result in substantial health cost savings to individuals and communities;
- Increase volunteerism, which provides substantial physical, human, social and symbolic capital to individuals and communities;
- Improve physical health, with appropriate home design and training, reducing falls among the elderly; and
- Increase population attraction and retention which will support local expenditure.

The RPS Modelling suggested that by 2030 there will be a need for between 70 to 177 additional units to meet growing demand.

NOTE: Since the RPS Report was finalised in May 2016, Goldfields Masonic Homes has been granted $9.8 million in Royalties for Regions funding to build 45 individual units for seniors at the old Kalgoorlie Golf Course.

3.5.2 Aboriginal Economic Development Strategy

The Kalgoorlie-Boulder 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 real jobs, involvement in business, wealth creation and associated community development opportunities.

Aboriginal people can make a significant contribution to local and regional economies, particularly where they represent a relatively high proportion of the resident population and where there are workforce and skills shortages. Employment and business development lead not only to improved prosperity for individuals, families and communities, but also to enhanced self-esteem, increased opportunities for self-development, reduced social isolation and decreased social problems associated with disadvantage.

The GPP recognised the need to increase Aboriginal economic participation in Kalgoorlie-Boulder, as a key priority in the Growth Plan. Keogh Bay Consulting was appointed to engage with key stakeholders to identify the key gaps, needs, opportunities and constraints impacting on Aboriginal employment and economic participation in Kalgoorlie-Boulder. This was the basis for the development of an Aboriginal Economic Development Strategy (AEDS) to provide high level strategic direction and practical actions to support and drive Aboriginal economic development.

The GCSAC provided additional support in facilitating local Aboriginal input to AEDS as well as assisting to provide an important historical and contemporary context for the current socio-economic position of Aboriginal people in Kalgoorlie-Boulder (refer also Section 3.5.3).

Summary of Key Findings and Recommended Actions from the AEDS

The AEDS briefly discusses the Aboriginal history in the region, setting the context for the challenges that many Aboriginal people face in participating equitably in economic development. As outlined in Section 3.5.3, this history shows that the gold rush and subsequent settlement of the region, which created enormous wealth and prosperity for WA and the nation, had a dramatic impact on Aboriginal people in the Goldfields.

Socio-Economic Position of Aboriginal People Today

Many Aboriginal people face fundamental barriers in participating in employment and enterprise. The Report from Keogh Bay presents a range of socio-economic data relating to Aboriginal people living in Kalgoorlie-Boulder and the wider Goldfields-Esperance region. Importantly, given the young age profile of Aboriginal people in the region and higher birth rates, the number of people affected by these barriers is likely to grow overtime. This will result in rising costs to governments and service providers in dealing with the symptoms of disadvantage.

The socio-economic data summarised below is taken from the analysis conducted by Keogh Bay as referenced in the Report:

- According to the 2011 Census, the CKB had a population of 32,209 including 2,899 Aboriginal people (9%).[19] Other significant local government areas in the Goldfields-Esperance region that have sizable Aboriginal populations include Laverton (36%), Menzies (75%) and Ngaanyatjarraku (90%).

- The Aboriginal population in the CKB has a much younger age profile than the non-Aboriginal population. This reflects the significantly lower life expectancy and higher birth rates of Aboriginal people in the region.
- The number and proportion of Aboriginal people living in the area is increasing. ABS population forecasts suggest a 22% increase in the number of Aboriginal people living in the Kalgoorlie Indigenous Region[20] from 8,024 in 2016 to 9,760 in 2026.
- 2011 ABS statistics show that there is an average of 3.5 people typically living in each Aboriginal household, compared to an average of 2.7 persons per household in the CKB. Aboriginal households are 30% more overcrowded and the number of people per bedroom is 75% higher than the average in the CKB.
- The average weekly income per Aboriginal household in the CKB is $1,327, significantly lower than that of the average household ($1,972) (ABS, 2011f). The average income per person in an Aboriginal household is $379 per week, 52% of the average for the area ($730).
- The overall Aboriginal unemployment rate for WA is 17.9% compared to a non-Aboriginal unemployment rate of 4.5%. In the CKB, this gap is wider with the Aboriginal unemployment rate being 19.7% and the non-Aboriginal unemployment rate at 3.6%.
- The workforce participation rate for Aboriginal people in the CKB is 50.7% and the non-Aboriginal rate is 84.5%.
- The industry sector employment profile of Aboriginal people in the Goldfields-Esperance region is very different to the non-Aboriginal population. While mining is the major regional employer of the general population at 27%, most Aboriginal people are employed in the government sector with mining accounting for only 3% of Aboriginal employment.
- Between 2001 and 2010 the overall hospitalisation rate of Aboriginal residents of the Goldfields Health Region, was significantly higher than the Aboriginal rate across the state and was four times higher than non-Aboriginal residents. Many hospitalisations result from preventable conditions.
- 46% of Aboriginal people in the ABS Kalgoorlie Indigenous Region have reported living with a disability or long term restrictive health condition. This rate is significantly higher than the rate for Aboriginal people across Australia (36%) and is far higher than the rate for the Australian population, which was 18.5% in 2012.[21]
- In the Goldfields-Esperance region in 2015-16 there were 1,463 Aboriginal students representing 20% of the total student population. Attendance figures for schools in the region during this time show that only 31% of Aboriginal students were attending school at least 90% of the time.
- Aboriginal people, particularly men, make up a disproportionate number of the prison population with the Aboriginal prisoner population of the Eastern Goldfields Regional Prison being typically above 75%.

Native Title

The Report from Keogh Bay highlighted the importance of native title as a potential driver of economic participation and the positive impacts of successful native title claims and Indigenous land use agreements in many parts of Australia.

Successful claims and determinations can provide a foundation for Aboriginal economic development and in many areas have stimulated a number of substantial agreements with mining companies, which provide financial benefits and strong commitments to Aboriginal employment, training and business development. A number of trusts and corporations have been established to administer the benefits provided under these agreements and many of these organisations are investing in programs that alleviate poverty and support community development and autonomy.

However, the Report points out that in many parts of the Goldfields there have been few successful native title claims and as a result native title has less potential to drive Aboriginal economic participation. This is despite significant activity managed by the Goldfields Land and Sea Council (GLSC) as the Native Title Representative Body.

According to the GLSC, there have been 102 native title claims within their region that have either been determined, dismissed, struck-out, discontinued or remain active since 1994. As at 18 July 2016, there were also 43 active future act applications and determinations.

Native title in the Goldfields region is seen to have some marked differences from many other remote regions in Australia:

- Despite significant activity, there is a notable absence of determinations in the immediate vicinity of Kalgoorlie-Boulder and areas to the north;
- There are fewer native title agreements with government, miners or corporate interests than in many other remote regions;
- Native title representative bodies are battling in a very complex and litigious environment; and
- The catastrophic disruption to traditional settlement patterns, complex Aboriginal cultural relationships and relatively poor historical records, mitigate against successful native title claims.

Despite these difficulties there are two significant native title determinations in the southern part of the Goldfields Region (the Ngadju and Goldfields Esperance Nyungar determinations), with another consent determination on the horizon for the Mirning people. In June 2016, after almost 20 years, the Federal Court found that the Yilka people hold native title over the Cosmo Newberry Reserve, about 200 km north-east of Laverton – a decision that could have implications for future native title claims in the area.

Kalgoorlie-Boulder AEDS

Keogh Bay worked with key stakeholders, to identify barriers and proposed solutions for improving Aboriginal economic participation as the basis for the AEDS. The resultant report provides recommended actions under the following categories:

- Strategy Drive, Coordination and Implementation;
- Addressing Foundational Issues – Reconciliation, Education, Families, Health and Wellbeing;
- Aboriginal Employment; and
- Aboriginal Enterprise.

The following summarises the key findings and recommendations as detailed in the report by Keogh Bay Consulting.

a) Strategy Drive and Coordination and Implementation

Many of the recommendations in the report can be implemented independently by government agencies and other relevant organisations. However, a means of driving and coordinating the overall Strategy is seen as an important factor in its success.

‘Strategy Drive and Coordination’ is proposed as a collaboration between Aboriginal representatives, government and business. The AEDS recommends the establishment of a Strategy Coordination Group with an Aboriginal Leaders Group at its centre, working alongside local government, state and federal agencies, industry and business.

Empowering representative Aboriginal leadership is at the heart of Strategy Drive and Coordination. A number of respondents, including senior Aboriginal people, felt that a Leaders’ Group was possible as long as it was guided by appropriate membership criteria, terms of reference and governance support.

It is proposed that the Leaders’ Group include regional Aboriginal leaders in business, government, and native title as well as Aboriginal representatives of major Aboriginal organisations such as the Goldfields Land and Sea Council and Bega Garnbirringu Health Services. Additionally, a process is required whereby key Aboriginal organisations and leaders must agree on the Aboriginal leaders’ group membership criteria and terms of reference. There may be an opportunity to build on existing structures (such as the GLSC), but any structure needs to be supported by and representative of the wider Aboriginal community.

It is proposed that the Strategy Coordination Group oversee the implementation of the AEDS, facilitate key projects and advise others on how they can contribute through Reconciliation Action Plans or policy. The promotion and monitoring of reconciliation action plans that link and align the activities of numerous and diverse organisations, is proposed as a primary function of the group. The Strategy Coordination Group should work closely with Reconciliation Australia in promoting, supporting and monitoring RAPs.

The final structure of Strategy Coordination Group will need to integrate with and add value to existing and emerging coordination mechanisms, including the Growing Kalgoorlie-Boulder Growth Partnership. It is proposed that key forums will require the funding and support of at least one coordinator/manager. It is suggested that this could be funded in part through contributions from member agencies.

The AEDS recommends that an Interim Strategy Coordination Group be established with a brief to start work on a focused and practical pilot project, which can deliver a tangible outcome in the short term. The aims of this pilot project are to:

- Deliver an outcome;
- Develop confidence of the Group in working together;
- Refine membership and governance; and
- Create momentum and profile.

The AEDS suggests that possible pilot projects include:

- To create a new employment pathway with a major employer;
- To research and communicate the Aboriginal history of the region;
- To support the East Kalgoorlie Primary School (EKPS) Family Central Model;
- To develop an Aboriginal cultural centre; and
- To develop a youth centre focused on disengaged Aboriginal youth.

b) Foundational Issues

The AEDS suggests that addressing the foundational issues of Aboriginal social disadvantage and community relations, is a key to substantial and long-term improvement in economic participation.

The recommendations relating to these foundational issues are divided into:

- Education, Families, Health and Wellbeing; and
- Reconciliation.

Education, Families, Health and Wellbeing

The AEDS highlights the innovative and holistic approach to education being implemented through the EKPS Strategy known as 'Family Central'. This Model is seen to have enormous potential to address complex and interrelated issues that are typically resistant to siloed service delivery and which can improve educational outcomes as well as health and wellbeing over time. The Keogh Bay Report promotes the EKPS approach as a successful and home-grown program, which should be strongly supported and expanded.

The AEDS makes a number of recommendations relating to broader issues of health and wellbeing, including meeting the needs of Aboriginal youth and disengaged adults. It also notes that it is not possible within the scope of an economic development strategy, to provide comprehensive direction in this space. Therefore the AEDS recommends that strategies need to be developed in cognisance of other initiatives and coordinating mechanisms within government, that are seeking to address social disadvantage.

The AEDS acknowledges the importance of appropriate housing as an enabler of inclusive economic participation and supports the recommendations on Aboriginal housing in the RPS Report (see Section 3.5.1). In particular, the AEDS supports the need for adequate crisis and temporary housing support and the potential for the future development of a transitional housing project, to support Aboriginal education, employment and home ownership.

Reconciliation

A number of stakeholders, both Aboriginal and non-Aboriginal, that were consulted by Keogh Bay felt that racism and negative perceptions of Aboriginal people was a serious barrier to economic participation in the Kalgoorlie-Boulder Region. This barrier was seen to:

- Reduce the number of non-Aboriginal employers willing to take on an Aboriginal employee, especially in the area of small business;
- Reduce the willingness of Aboriginal people to put themselves forward for opportunities and work in predominantly non-Aboriginal workplaces;
- Reduce access to the private housing rental market;
- Influence decision making processes in ways not beneficial to Aboriginal people;
- Reduce trust in programs and service providers;
- Isolate Aboriginal people from social networks where opportunities are created; and
- Contribute to distress, anxiety and depression among many Aboriginal people.

Addressing uninformed and negative perceptions through reconciliation initiatives was seen a critical enabler of Aboriginal economic participation in the region. Additionally, the arts sector was seen to have been particularly successful in bringing people of different backgrounds together.

The Report makes a series of recommendations aimed at building a more inclusive community, through improved cultural awareness; Reconciliation Action Plans (RAPs); and better recognition of Aboriginal people, history and local success stories, through research, arts, public spaces and cultural events.

c) Aboriginal Employment

Navigating the pathway of post-school training, work experience, job applications, interviews and career progression is a serious challenge for many job seekers, even when the foundations for employment are in place. Employers also need support to connect with Aboriginal candidates and manage retention and multi-cultural teams.

The AEDS outlines a number of practical barriers to Aboriginal employment in addition to the foundational issues outlined above. These include, the adequacy and appropriateness of training programs; the effectiveness of job placement services; the adequacy of on-the-job support and mentoring; cultural obligations; lack of drivers licences; criminal records; employment conditions; the inability of small scale businesses to implement effective attraction and retention strategies; and the level of skills, confidence and motivation of potential Aboriginal employees.

The AEDS seeks to improve employment outcomes through:

- Adequate resourcing of effective individualised case management;
- Creating additional demand for Aboriginal employees;
- Incentivising partnerships and collaboration to achieve employment outcomes; and
- Developing and supporting retention strategies.

The AEDS notes a number of strong programs and potential networks that are already in place in Kalgoorlie-Boulder to address these challenges and recommends that these be supported and expanded. These include:

- The work of the Aboriginal Workforce Development Centre, which connects with youth leaving high school, helps with transitions into training, assists in making connections with employers, and works with local JobActive providers to place work ready Aboriginal people;
- The Youth Transitions Program operated by the Kalgoorlie-Boulder Chamber of Commerce and Industry, which has the potential to connect and place Aboriginal employees in small to medium enterprise in Kalgoorlie-Boulder; and
- Building on existing Aboriginal business networks to provide professional support and mentoring.

The AEDS identifies the need for stronger policy and program commitments on the part of business and industry to employ Aboriginal people, particularly to address the under-representation of Aboriginal employment in the mining sector.

The Chamber of Commerce and Industry has a Community Relations Working Group, which has Aboriginal employment and Aboriginal contracting as part of its terms of reference. The AEDS suggests that the Group have a role in coordinating activity, to address a number of barriers to employment in the mining sector and related industries.

d) Aboriginal Enterprise

There are many good examples of successful Aboriginal enterprises operating in the Goldfields Region, particularly connected with the mining industry. There are also numerous business opportunities in areas such as tourism, land care, arts, sandalwood harvesting, retail and contracting in mining and construction.

The AEDS states that many of these opportunities are not realised due to a lack of Aboriginal business capacity and a lack of drive on the part of organisations, large and small, to foster and engage with Aboriginal enterprises.

Mining agreements linked to native title have driven the development of Aboriginal businesses in some areas, but is not seen to be a major factor in Kalgoorlie-Boulder.

The AEDS identifies the need for stronger policy commitments on the part of government, business and industry, to foster and engage with Aboriginal enterprises and to provide additional support for Aboriginal business development.

The AEDS seeks to support existing initiatives such as the Business Local Aboriginal Engagement Strategy, the work of the GLSC and other Aboriginal organisations in promoting economic development, and the Aboriginal Leadership and Governance Program, supported by the Department of Regional Development, which will provide opportunities for Aboriginal people in corporate governance, procurement and business leadership.

The recommendations in the AEDS address the need to promote increased Aboriginal business participation and increased Aboriginal business capacity through strengthened local procurement policies, approval processes, RAP commitments and increased awareness and development of local Aboriginal enterprise opportunities.

3.5.3 An Aboriginal Historical Perspective

The GCSAC was contracted to provide a brief overview of the Aboriginal history of Kalgoorlie-Boulder and the Goldfields Region. This was important in order to address an identified information gap and to provide an historical context for and insights to the development of initiatives, to address the relatively poor socio-economic position of many Aboriginal people in contemporary Kalgoorlie-Boulder.

The Historical Narrative developed by GCSAC acknowledges the lack of comprehensive historical records compared to many other regions of the state and combines local historical knowledge with references to existing documented history.

Both the GCSAC Report and the Aboriginal Economic Development Strategy (see Section 3.5.2) provide a stark picture of the devastating impact of European settlement on local Aboriginal people and the legacy of this impact today. The Reports also outline the strong cultural connection that Aboriginal people continue to have with their traditional lands.

The following summary is based on the Historical Narrative provided by GCSAC and is also informed by the historical context provided in the *Aboriginal Economic Development Strategy* developed by Keogh Bay Consulting:

Pre-European Settlement

- Before settlement there was a large population of Aboriginal people in the Kalgoorlie-Boulder area. They were very adaptive and represented some of the world's most successful desert dwellers.
- Archaeological evidence suggests that the number of Aboriginal people and communities living in the Goldfields, expanded and contracted over hundreds of years prior to the 1800s for reasons including, spreading deserts, drying water sources and availability of food.
- Aboriginal people generally lived in small, scattered family groups for long periods of the year. Occupation of the Western Desert Region predominantly revolved around drought evasion – where groups and individuals generally stayed in their area, but moved towards the most reliable sources of available water. As a result, Aboriginal groups needed to maintain good relationships with neighbouring groups.

- From time to time or when favourable, there were larger gatherings of groups, to fulfil social and legal obligations like marriages, initiations, dispute resolution, exchange of objects (like artwork, utensils and weapons), the performance of rituals, intergenerational knowledge sharing through storytelling, and the construction of new rituals. These community meetings were crucial to ensuring the continuity of life in the desert among the various language groups.

Culture, Language and Group Differentiation

- The Eastern Goldfields Region is situated on the margins of the Western Desert Cultural Bloc, a common cultural region covering the vast arid zone of central Australia. This is significant in understanding the history of the Aboriginal people that have cohabited and identify with the Kalgoorlie-Boulder Area.
- The various groups of Aboriginal people around Kalgoorlie-Boulder shared a way of life with other groups to the north and east. Some of the most common concepts shared include the understanding of universal powers, communal values and a very intrinsic legal system established during Tjukurrpa – Aboriginal Dreaming. Tjukurrpa is part religion, part law, part history and part moral and social charter that defines the people and groups of the region.
- As a result of this shared understanding of Tjukurrpa, many groups have interwoven

Image supplied by WA Country Arts

histories and ceremonies, which complicates efforts to define borders of language and tribal groups across the Goldfields.

- Many of the groups around Kalgoorlie-Boulder appear to have used the local lands interchangeably, including the Manduwongga, Ngurlu, Kalaku, Kalaamaya, Waijen, Tjararidjal, Wangatja and Wongatha language groups.
- There are varying opinions about the traditional owners over the Kalgoorlie-Boulder Area. Many tribal groups including the Widji, Martu, Nyungars, Kaprun, Wongatha, Ngadju, Tjupan heritage and Ngaanyatjarra peoples overlapped in their use of the lands and identify with distinct Aboriginal sites today.
- The Kaalamaya language is currently spoken by the Kaprun people in and around Kalgoorlie-Boulder. The Kaalamaya language group is believed to have originated from country roughly between the towns of Southern Cross, Coolgardie, Norseman and Kalgoorlie-Boulder.
- A number of people (200-250) identify as Tjupan heritage. These people are spread between Wiluna, Laverton, Leonora, Kalgoorlie-Boulder as well as other towns and stations. The Tjupan's relationship with traditional country appears to have been unbroken, although some people were relocated to missions and stations during early European settlement.
- The Wongatha language is used by the Wongi people that cover the area from Warburton to Kalgoorlie-Boulder and live in towns such as Coolgardie, Coonana, Menzies, Leonora and also make brief visits to Kalgoorlie-Boulder.
- The name Kalgoorlie is derived from the Wongi word Karlkurla, meaning 'silky pears.'

The Impact of Settlement

- With the discovery of gold in 1892, Coolgardie saw the influx of thousands of settlers and business corporations. In 1898, 5008 settlers were registered, but influxes of over 30,000 visitors were recorded in the region.
- The Town of Kalgoorlie had a population of around 20,000 people by 1897. In addition, over 700 corporations were at this time registered on the London Stock Exchange.
- Contact with the new settlements enmeshed Aboriginal people in two worlds and a dual economy. Whilst traditional people continued to rely on hunting and gathering in the bush, they increasingly took up occasional employment opportunities and accepted government rations.
- The growing numbers of settlers who arrived in the Goldfields had an immense negative impact on the lives of Aboriginal people, in particular impacting on the availability of scarce sources of water. Traditional land had always had a very small number of reliable and permanent water supplies, which were well known to traditional groups but were not disclosed to outsiders.
- There are stories of Aboriginal people helping early settlers to find water who may have otherwise died of thirst. However, the discovery of traditional water sources by settlers soon led to damage and overuse of this fragile resource and growing tensions between Aboriginal people and settlers.
- Local traditional people were captured and often tortured to reveal the location of water supplies with escalating conflict, violence, murders and massacres of Aboriginal people who had little or no police protection.
- The new settlers also bought with them disease and in particular influenza and typhoid, to which Aboriginal people had no

resistance and these accounted for many recorded deaths after European settlement.

- Surviving Aboriginal people were driven from much of their traditional land either due to the loss of access to their natural resources such as water, or for fear of violence. The GCSAC Report details a number of accounts and public records of the racist attitudes, violence, rape, forced sexual slavery and massacre of Aboriginal people during this time.
- Laws and regulations were introduced to both control and attempt to change the way of life of Aboriginal people. The marginalisation and disempowerment of Aboriginal people was enshrined in legislation such as the Goldfields Act 1886, the Mining Act 1904 and the Mines Regulation Act 1906 that saw a comprehensive set of exclusions applied to 'aliens' of Asiatic or African background as well as to non-English speakers. Legislation ensured that Aboriginal people could not work in the goldmining industry.
- In the early 1900s, ration depots were established in remote points outside the main township of Kalgoorlie-Boulder, including some pastoral stations, with the intent of keeping Aboriginal people away from the towns. A number of church missions, including the Mt Margaret Mission at Laverton, were established by different religious orders for reasons including, to support, educate and evangelise Aboriginal people.
- From 1924, the government placed children of mixed parentage at Mt. Margaret. Previously these members of the "stolen generation" had been removed from their families and sent to settlements in the southwest of WA. At Mt Margaret they were placed in a controlled dormitory and kept separate from other (full blood) Aboriginal people.
- Combined police reports from Kalgoorlie and Coolgardie in 1912 show that there were no recorded Aboriginal people left living permanently in the area, although it was recognised that Aboriginal people passed through the townships periodically. In 1915, the population was declining significantly there were just thirteen Aboriginal people recorded to be living in the entire Kalgoorlie district.
- The pastoral industry also had a large negative impact on Aboriginal people. Wide areas of land were used by pastoralists, further displacing Aboriginal people who were considered to have no property rights, because they did not 'labour over the lands'. Instead, Aboriginal people were denied access to their traditional lands and were considered a nuisance as the displaced population formed what was considered by settlers as an 'objectionable presence'.
- The combined effects of hunger, thirst, violence and disease led, in official and anthropological accounts, to the deaths (or "virtual extinction") of most of the Aboriginal people in the Eastern Goldfields.
- Kalgoorlie and Boulder experienced two major race riots in 1919 and in 1934 generally between settlers of British heritage and southern Europeans.[22] These lead to a number of deaths and the destruction of a number of "foreign owned" businesses.
- Following these events, entry into the township became even more volatile for Aboriginal people. Police attempted to restrict movement within the town and in 1936 the town was declared a prohibited area, and Aboriginal people not in lawful employment could be legally excluded.
- Aboriginal people remaining in the area were reduced to living on the fringes of towns and begging for food and water. Attitudes towards these 'fringe dwellers' were generally hostile, with police charged

with the responsible for keeping Aboriginal people out of town.

- The 1940s, 50s and 60s saw major legislative changes that affected the lives of Aboriginal people across the state. *The Native Citizenship Act (1944)* provided for the citizenship of Aboriginal people in WA on the condition that they cut off all connections with other Aboriginal people, other than their immediate family. Up until 1967, only 23 Aboriginal adults had taken up this option in Kalgoorlie.
- The *Native Welfare Act (1954)* marked the first substantive departure from policies that excluded and controlled Aboriginal people, instead adopting an approach that sought to include them in the community through education and employment. The 1954 Act ended:
  - The Employment Permit System that bound people to work for an approved employer;
  - The ability of the state to declare areas (such as the Town of Kalgoorlie) as prohibited areas for Aboriginal people; and
  - The ability of the Minister to have Aboriginal people removed to reserves by the police.
- In spite of these legal changes, many townspeople and their representatives, continued to be opposed to the presence of Aboriginal people. A public meeting in Kalgoorlie in 1950 called for the enforcement of the 1936 Prohibition on Aboriginal people entering the town. At that time, up to 150 Aboriginal people had gathered on the town outskirts and the camp was being ravaged by influenza.
- General access to education has only been available to Aboriginal people from the mid-1950s. While legal barriers to education were removed, the physical, economic and social circumstances of people's lives has strongly mitigated against successful participation in education.
- Aboriginal people did not gain access to welfare benefits until 1960 and access to unemployment benefits remained extremely restricted until the early 1970s. Aboriginal people were not formally recognised as Australian citizens until after the 1967 Referendum.
- The 1890's gold rush and subsequent colonial activity appears to have had a more devastating impact on local Aboriginal people in the Goldfields Region than almost anywhere else in WA.
- The introduction of western diets, alcohol and other harmful substances to the Aboriginal community has exacerbated the poor health and social conditions of Aboriginal people and further widened the socio-economic gap between Aboriginal and non-Aboriginal people.
- Today, Aboriginal people represent 9% of the population in the City of Kalgoorlie-Boulder. Many face fundamental barriers to equal participation in the future development of the city. Homelessness, destitution, disempowerment, increasing rates in youth suicide and a history of broader community ignorance and hostility, are still barriers to be overcome.

3.5.4 Kalgoorlie-Boulder Industrial Land Use and Availability Assessment

The availability of suitable land to support future industrial expansion and in particular to enable Kalgoorlie-Boulder to realise future opportunities to develop large scale, non-typical land uses, is a potential constraint to future economic growth and diversification.

The Growth Plan seeks to support future business and industry development, including the development of new and more diverse industries. This may increase the demand for suitable industrial land. In addition, previous industrial land use proposals have failed to materialise because of a lack of suitable, unencumbered land for large scale developments, which may not be suitable within the city's boundaries.

UrbanPlan and Pracsys were commissioned to investigate future demand and supply associated with industrial land in Kalgoorlie-Boulder. They also assessed the availability of suitable new industrial land within a 15-20 km radius of the city that may be appropriate for future special industrial developments (e.g. sustainable energy generation).

The investigations by UrbanPlan and Pracsys involved:

- Analysis to quantify existing supply and demand;
- Quantification of expected future demand based on an industrial growth scenario and employment to land use ratios, derived from benchmark industrial areas; and
- Identification and ranking of suitable land areas to accommodate future demand.

Based on the findings of the Analysis, the report from UrbanPlan and Pracsys (the Report) recommends future actions to ensure an adequate supply of industrial land into the future. This includes identifying and overcoming current encumbrances to land availability and highlighting future industrial land opportunities, to ensure Kalgoorlie-Boulder is positioned to take advantage of future strategic industrial opportunities as they arise.

The key findings as presented in the Report are summarised as:

- Based on an optimal growth scenario there is a small deficit in light industrial land and a surplus in general industrial land. It is therefore expected that there is sufficient zoned land to accommodate the demands of future industrial land use within the CKB.
- The Report recommends that identified parcels of land to the east of the Airport, proximate to the existing Light Industrial Zone, should be reclassified to Light Industrial Zone over the next 3-5 years to accommodate the expected growth in demand for light industrial land (this is consistent with the directions of the Local Planning Strategy).
- The *Mining Act 1978* (the Act) and tenements established under the Act, significantly impact a number of land uses, including for industrial uses, in the Greater Kalgoorlie-Boulder Area. An investigation of land availability within a radius of approximately 17 kilometres (km) of Kalgoorlie-Boulder shows that the majority of this land is constrained by mineral tenements.
- Potential land uses within the CKB are also constrained by other factors that include, existing buffer zones around the Waste Water Treatment Plant; an explosives magazine that services the mining industry; the Gribble Creek Flood Plain; the Mining Safety Exclusion Zone; Aboriginal sites of significance; and transport corridors and service mains.
- Native title is a potentially significant issue impacting on future proposed activities on Crown land around Kalgoorlie-Boulder. Although there are currently no native title determinations or current claims impacting on the CKB, the report states that a newly researched claim may soon be submitted. A future act (such as the granting of leases or land titles) may therefore become invalid to the extent that it affects native title, unless it

complies with the procedures set out in the *Native Title Act 1993* (Cth). Registered native title claimants and native title holders have the right to negotiate regarding proposed activities and developments on land, insofar as the proposal may affect their native title rights and interests.

- The Mungari Industrial Park, located within the Shire of Coolgardie, comprises 696 hectares of land plus a 1 km Special Control Area buffer classified as Special Use Zone, for the purposes of strategic industrial use. LandCorp is the lead agency for land release in Mungari, subject to the agreement of the Department of State Development. Historically, there have been prospects put to the government for use and development of Mungari, however, these have not been successful. The apparent need to not constrain the strategic industrial use potential of the site with lower order or less hazardous uses has exacerbated the perceived land shortage.
- In assessing potential new parcels of land suitable for industrial purposes, the Report categorised and ranked each parcel of land based on:
  - Suitability of the location for industrial land uses;
  - Proximity to contiguous development;
  - Access to service mains;
  - Presence of lower order land uses;
  - Under-developed existing uses;
  - Site access and potential transport connection; and
  - Land use conflicts presented by tenure or tenement encumbrances.
- Most sites suitable and adjacent to services for future industrial land use have some form of encumbrance, whether it is a physical constraint, an existing lower order land use, buffers, or a mining activity or tenement.
- Expansive mining use, mining leases, Aboriginal heritage and a railway marshalling reserve, largely restrict land development east of the township, limiting the prospects of future industrial land development in that vicinity.
- The most likely areas identified for future industrial development and subject to the least mining constraints, are to the south and southwest of the city near the junction of Great Eastern Highway, and Anzac Drive, connecting to the Goldfields Highway. The large proportion of this land has existing prospecting and mining lease arrangements, however, the status of some of the prospecting tenements is subject to expiration.
- The Report identified and ranks prospective areas of land that are subject to tenements that have limited terms or are about to expire and so may potentially become available for other uses and therefore justify further investigation.
- LandCorp has a registered interest in a large parcel of land to the west of the intersection of Great Eastern Highway and Anzac Drive, which may be available for industrial use in the future.
- The Report identified a number of constraints on land that impact the ability to accommodate large scale, non-typical industrial developments such as, an algae farm or a solar array (assuming that the Mungari Industrial Precinct is unavailable for such uses in the short term).
- The Report examined the land use requirements of such industrial developments in other parts of Australia

and identified a number of potential sites that could accommodate these, or other strategic industrial activities in the vicinity of Kalgoorlie-Boulder, pending the removal of current encumbrances.

- The Report identified and ranked land areas both within and surrounding the CKB based on their land tenure characteristics, existing lower order (e.g. recreational) uses, expiration dates of leases and tenements, and the total land area available. The Report then recommends actions to relinquish existing encumbrances and to release priority land in a staged manner.
- The total amount of potential land identified in the Report, exceeds the amount of industrial land that is estimated to be required. However, the Report does not consider the political or social impacts of implementing these recommendations (such as the practicality or willingness to impact on existing "lower order' land users).
- The Report makes a number of recommendations for actions to release parcels of land, which have been identified as suitable to meet future industrial land requirements. These actions require the cooperation and support of key state government agencies such as the Departments of Planning, Lands, Mines and Petroleum, and LandCorp and the consideration of the CKB in terms of future land use planning.

3.5.5 Urban Design and Place Making Review

Hames Sharley, in collaboration with REALM Studios, was engaged to undertake a review of existing urban design and place making initiatives in Kalgoorlie-Boulder, with the aim of supporting future growth through improving the urban environment and promoting a best practice place-making approach.

Hames Sharley subsequently reviewed the qualitative and quantitative factors impacting on the human experience within the City Centre and engaged with key stakeholders to develop evidence based revitalisation and place making strategies, which sought to direct and nurture future development. The review aimed to:

- Establish a vision for the CKB;
- Identify aspirations to guide place initiatives and actions;
- Aid the coordination of place initiatives;
- Create a sense of ownership for Kalgoorlie-Boulder locals in both the place and the process; and
- Promote Kalgoorlie-Boulder as a place to visit for business and pleasure.

The Context

Kalgoorlie-Boulder is at the heart of the Goldfields-Esperance region. As the central hub, Kalgoorlie-Boulder's future needs to solidify its role within the region.

The CKB also sits within the unique landscape of the Great Western Woodlands and has a rich Aboriginal and more recently multicultural history. This connection with the landscape, combined with the history of Kalgoorlie-Boulder is key to understanding how the city functions. The review focused on the Kalgoorlie city centre precinct (City Centre), as the focus of the previous CKB Revitalisation Master Plan (2014).

The Process

The process brought together the GPP, including the CKB, GEDC, key community stakeholders, local businesses, community organisations and local residents, all of whom seek to develop a better place to work, live and play.

A key to a successful revitalisation initiative was seen to be the transformation of Kalgoorlie-

Boulder's public spaces, along with local governance, by empowering the community to become involved and work together to:

- Encourage and promote the unique heritage and history of Kalgoorlie-Boulder;
- Develop new initiatives and projects to enhance Hannan Street and the city surrounds;
- Inspire and foster the creative community by coordinating key events, programs and festivals; and
- Provide a strong voice for residents, retailers and community organisations.

During Hames Sharley's stakeholder engagement, common priorities and key aspirations emerged within the local community. These aspirations were translated into place initiatives and proposed actions, which address both hard and soft infrastructure.[23] Soft infrastructure and community capacity building was seen as crucial to the success of the revitalisation of the City Centre.

Key Themes and Aspirations

The Report identified the key themes of **Prosperity, People and Place** to capture the consistent messages emerging from the regional Blueprint, other strategic planning documents, GPP priorities and the outcomes of stakeholder engagement. These themes provided the framework for the development of key place initiatives and actions.

Place Initiatives

The review considered both the measurable and intangible elements of the urban landscape, to ensure that these are oriented towards creating comfort, security and enjoyment for the people living, working and passing through Kalgoorlie-Boulder.

Figure 3.15 Themes and Aspirations for Kalgoorlie CBD

A gap analysis of existing literature showed very little quantitative and qualitative data had been collected to understand and critically analyse Kalgoorlie-Boulder's urban environment.

Hames Sharley therefore undertook a detailed place review of the City Precinct to gain a greater understanding of Kalgoorlie-Boulder's opportunities, issues and constraints.

A place audit was undertaken along Hannan Street and the immediate surrounds to assess the human experience of place along with the built environment and to understand the detail of the pedestrian environment, existing issues, constraints and synergies with existing plans. This assessment was undertaken through the lenses of:

- **Activity,** which focused on the range of shops and land uses on offer; the number of vacant tenancies, key destinations and landmarks; and where opportunities were provided for alfresco dining and casual seating to enable users to stay a while longer.
- **Movement and Connection,** which addressed both pedestrian and vehicle movements within the City Centre. The arrival experience, both on foot and by vehicle was identified as a key issue for navigating users through the city environment. This also highlighted the limitations of virtual connections throughout the City Centre.
- **Character,** which focused on key elements contributing to the quality of place, such as, the expression of heritage, unique points of interest, the location of tree canopies, and the level of pedestrian comfort provided.

Assessing all three aspects of activity, movement and character provided an understanding of the current urban environment and the sense of place as perceived from the point of view of locals and visitors to the city.

The Report documents a number of key observations, issues and opportunities that were discussed with stakeholders as the basis for the development of key strategies and nine place making initiatives. Specific actions were then recommended aimed at guiding the revitalisation of the city in a coordinated manner and consistent with the aspirations articulated by the community.

The Report suggests that actions to address both hard and soft infrastructure, including community capacity building, will be crucial to the success of the CBD revitalisation. To build this local capacity, it is seen as essential that there is:

1. A responsive local policy framework based on clear community objectives to enable nimble, holistic decision-making across areas of responsibility.
2. Recognition of the CBD as a place for all people by nurturing inclusion and participation across all cultures, interests and ages.
3. Recognition of the CBD as a place to bring like-minds together, to stimulate innovative economy and technology across sectors of education and industry.
4. Recognition of the streets of the CBD as places for people with improved accessibility, comfort and street life.
5. Recognition that arts and culture can drive economic prosperity through creating a vibe and energy in the CBD.

The Report provides an Action Plan for the consideration of the GPP and the CKB that is intended to:

- Be practical and achievable;
- Include quick wins, short, medium and long term goals;
- Share responsibilities between governments, businesses, visitors and residents; and
- Create a better place to live, work, run a

business, shop and socialise.

Key Strategies: City Revitalisation

A suite of strategies are recommended to guide the revitalisation of the city in a coordinated manner and in response to the aspirations articulated by the local community, including the development of:

- A community engagement strategy to provide a model for future engagement in Kalgoorlie-Boulder.
- A CBD movement strategy for people to improve walkability and shift away from the car centric approach to CBD streets.
- A wayfinding and signage strategy covering thematic, directional and advertising signage.
- An arrival strategy – coordinating entry statement initiatives and thematic links to the region.
- A public art strategy – telling Kalgoorlie-Boulder's unique stories, both past and present.
- A place branding strategy – defining and embedding the unique, authentic place qualities of Kalgoorlie-Boulder and the region.

Priority initiatives are detailed in the Action Plan under the key themes of people, prosperity and place, in order to improve place activity, movement, connection and character.

Priority Actions

Prosperity

- Prioritise free Wi-Fi access at Innovation Hub and in Saint Barbara's Square.
- Hold a youth innovation forum in CBD to stimulate ideas and interest in the CBD and set up networking and mentoring program.
- Develop cohesive design for all city centre entrances: signage, landscape, lighting, and materials linked to branding and public art strategies.
- Expand role and presence of the Visitor Centre to include community information and review location, facilities and street presence.
- Buskers Initiative – register interest from local performers for busking, agree appropriate locations.
- Build on existing events and opportunities to hold new events within an annual program, include business owners to strategise and address concerns regarding business interruption, building trust that a livelier CBD will be good for business.

People

- Prepare community engagement strategy to ensure buy-in from all sectors of community and business, and address aspirations about revitalisation and place making project to nurture trust that it will be delivered.
- Put something on the ground i.e. Prototype streetscape and plaza elements ('quick, light, cheap' approach) to test bigger and future ideas. For example: moveable parklets, skip bins or bucket theme, seating zones, displays in vacant shop fronts.
- Temporary 'pop ups' in car bays on Hannan Street. Test and prototype.
- Provide well defined and safe Hannan Street mid-block pedestrian crossings.
- Engage with Aboriginal and other cultural groups.
- Capture and reveal the Indigenous stories, interpretation, and art.

Place

- Develop brief for the Place Manager, to enable, coordinate, consult and communicate place initiatives.
- Carry out crime prevention through

environmental design audit, to address perceptions and reality.

- Coordinate with wayfinding, signage and public art strategies. Map and brand places as a connected network, focusing on Hannan Street as the spine.
- Hold community conversations/ engagement (broad, inclusive) in a place branding strategy, updating the city identity beyond gold and mining, reaching into the landscape and across cultures.
- Tell Kalgoorlie-Boulder stories – recapture its history.
- Access heritage grants and funding to upgrade/maintain and light heritage buildings and to integrate Kalgoorlie-Boulder's unique stories.

Policy Review: City of Kalgoorlie-Boulder

The Report recommends that the CKB review a range of local policies and approaches, to enable future urban design and city revitalisation initiatives to proceed in a holistic, inclusive and place-based manner. It is recommended that this review seek to:

- Ensure that policies and practices enable activities rather than restrict and control them. 'Red-tape' should be minimised and relevant forms, templates and application processes should be user friendly, using simple language while still maintaining a level of control appropriate to a growing city.
- Enshrine a place based approach into local strategies and policies that recognise the importance of the public realm in the life of the city. Additionally strategies and policies should also recognise the importance of the streets and public spaces of the CBD, which are essential elements of community infrastructure and that connectivity, usage and quality of these spaces, are key place-making issues.
- Address both hard and soft infrastructure issues in a holistic manner.
- Develop robust community engagement policies to ensure effective, inclusive and authentic engagement of all interest groups.

3.5.6 Development of a Strategic Tourism Plan

The Blueprint identified tourism and visitation as one of eight regional priorities, to drive future economic and social development in the Goldfields-Esperance region. The Kalgoorlie-Boulder Growth Plan is seeking to build on the region's existing natural competitive advantages in mining and to pursue opportunities to diversify the economy and promote sustainable development.

Economic analysis has identified tourism as one of the key points of diversification in the Kalgoorlie-Boulder economy and a valuable contributor to economic and social development, with significant potential for growth.[24] The GPP considered that there is a lack of awareness of the current and potential local tourism product and a lack of collaboration between key local, regional, state and national tourism organisations.

Economic Transitions, in conjunction with Flametree Creative and Wanderlust Communications were engaged to develop the Strategic Tourism Plan, including a potential marketing and branding strategy, to foster improved collaboration; guide future tourism development and promotion activities in Kalgoorlie-Boulder; and maximise the contribution of this sector to Kalgoorlie-Boulder's future economic growth.

Economic Transitions analysed both qualitative and quantitative data impacting on tourism in Kalgoorlie-Boulder. This involved a review of key secondary data sources, including relevant national, state, local and regional tourism information, strategies and marketing materials, as well primary data, which was collected through perception based interviews, community participation workshops and surveys distributed to three target markets:

- Internal community members;
- Current visitors; and
- The community external to Kalgoorlie-Boulder.

A community participation approach was applied to the development of the Strategic Tourism Plan in order to engage the community in the process and to build on local knowledge, document commonly perceived problems and develop and share collaborative solutions.

Analysis of the primary and secondary data identified a number of key findings and gaps, which create both challenges and opportunities for tourism development in Kalgoorlie-Boulder.

Adequacy and Appropriateness of Current Tourism Strategies and Marketing for Kalgoorlie-Boulder

Summary of Key Findings:

- The National Marketing Campaign and Brand Strategy for Tourism Australia – 'There's nothing like Australia' – focuses on aquatic and coastal destinations. This follows food and wine and Indigenous experience campaigns in 2015. The current Marketing and Branding Campaign does not provide a focus to encourage visitors to the Goldfields-Esperance region.
- Of the seven 'State Tourism Development Priorities' outlined in the *State Planning Strategy 2050* (SPS), only one is considered relevant to Kalgoorlie-Boulder, which relates to the development of regional infrastructure such as caravan parks. The overview provides for a range of unique experiences including outback adventures, ecotourism and nature based activities, to capitalise on a regions competitive advantage. However, opportunities to further enhance ecotourism and nature based tourism offerings in Kalgoorlie-Boulder is challenged, as current priorities focus on initiatives such as the Kimberley Science and Conservation Strategy.
- The $4.6 million Aboriginal Tourism Development Program 2015-2018, which is funded by the State Government's Royalties for Regions Program and implemented by Tourism WA and the WA Indigenous Tourism Operators Council, has focused to date on only on two regions – the Kimberley and the Broader Southern with future funding uncertain.
- The SPS outlines a strategic approach to planning tourism through five key elements. Of particular relevance to Kalgoorlie-Boulder are tourism planning and cultural planning, with each providing an opportunity to further enhance tourism through, high quality arts events and festivals; engagement of creative industries to help build upon and promote tourism efforts; promotion of geo-tourism to capitalise on the state's unique geo-heritage values; and an ongoing collaborative approach to the development of the state's Aboriginal tourism industry.
- Tourism WA has identified seven key pillars for tourism growth in WA with two providing particular opportunity for Kalgoorlie-Boulder – regional travel seeking to increase visitors to regional WA; and Indigenous tourism seeking to provide every visitor with the opportunity to have an Aboriginal experience.
- For the 2015/16 financial year, Tourism WA has five key initiatives for implementation including the State Strategy Review, new marketing campaign, Perth Stadium activation, destination Perth marketing partnership and regional aviation. At

present, Kalgoorlie-Boulder does not have reference in these initiatives.

- The Tourism WA 'Experience Extraordinary' Campaign has shifted focus to incorporate the 'Just Another day in WA' brand. The current campaign includes a selection of single and multi-experience destinations from throughout the state. Single experience destinations include Kookynie, Lake Ballard and Lucky Bay which have been considered for social media marketing only (short digital video). Multi-experience destinations will receive full media and television coverage and includes whale sharks along the Coral Coast, Rottnest, Perth, the Kimberley and Margaret River. The current campaign does not include Kalgoorlie-Boulder.
- Review and analysis of documentation created by all levels of government and associated agencies has indicated many reports and project briefs have been planning documents only, with little implementation. This was also supported through feedback received in stakeholder meetings and survey comments.

Economic Contribution of Tourism to the Local Economy

The Report from Economic Transitions outlines the following key economic attributes of the tourism industry based on data sourced from the GEDC REMPLAN for the Goldfields sub-region:[25]

- Total economic output from tourism related industries is $179.97 million or 1.3% of total economic output.
- A total of 806 jobs are directly related to tourism or 3.8% of the total jobs.
- Tourism provides total wages and salaries of $44.2 million or 1.8 per cent of the total across all industries.

The Reports notes that since 2011, a number of tourism operators have reduced or closed their operations, including the tourist mine previously operated by the Australian Prospectors & Miners Hall of Fame (now operated by KCGM as Hannans North Tourist Mine), Langtrees which provided guided tours, Goldrush Tours and Kalgoorlie Tours and Charters. This has resulted in job losses, a reduced tourism offering and lower visitor numbers.

Tourism Visitation and Satisfaction

Key findings include:

- International visitation to Kalgoorlie-Boulder for the period 2005 – 2015 has remained relatively unchanged. However the average length of stay has increased from 13 nights in 2005, to 20 nights in 2015. Domestic overnight visitor trends have varied little over the same period.
- 52% of visitors surveyed during 2015 at the Kalgoorlie Boulder Visitor Centre were interstate visitors, with 32% being intrastate visitors. Over the same period, 62% of visitors surveyed were staying between 2-4 nights, 72% were on holiday, and 69% were aged 55+.
- Passenger numbers through Kalgoorlie-Boulder Regional Airport have increased by 26.6% between 2005/2006 and 2015/2016. Over the same period, revenue generated has increased 72%.
- Of the external environment survey respondents, 72% had previously visited Kalgoorlie-Boulder, with 87% of these respondents being satisfied with their experience.
- Only two websites record any significant data as reference sites – www.tourism.wa.gov.au at 39.75% and www.westernaustralia.com at 27.25%. This is significant as the Tourism WA site provides very limited information or coverage of Kalgoorlie-Bolder as a tourist destination. The most familiar brands with

this survey group were Tourism WA at 79.75% followed by Tourism Australia at 68.75% and the City of Kalgoorlie-Boulder at 56.75%. 49.75% of respondents suggested that Tourism WA would be their first point of contact to find out about tourism activities in Kalgoorlie-Boulder.

- Of the internal environment survey respondents, 72% of respondents had previously visited Kalgoorlie-Boulder. 78% of respondents stated the tourism activities met with their expectations, with 72% stating the visual appearance of the attraction could be improved, 62% felt product and tourism offering could be improved, and 58% stated customer service could be improved. 61% of respondents thought Kalgoorlie-Boulder needs a single brand to provide a unified vision for tourists.

The Current Tourism Experience

Kalgoorlie-Boulder has a number of experiences and attractions to offer visitors, many of which are unique to both the region and Western Australia. Economic Transitions undertook an analysis of the key strengths, weaknesses, opportunities and threats facing tourism and related industries in Kalgoorlie-Boulder. The Report also documented comments from stakeholders on the current tourism offering, tourism related infrastructure, accommodation, visitor transport and access, service availability, quality and affordability.

The Report categorised the existing tourism offering as well as gaps and opportunities in Kalgoorlie-Boulder under the following eight categories:

Cultural tourism – tourism product encompassing historical sites, arts and crafts, fairs, festivals, museums of all kinds, performing and visual arts.

Eco-tourism – focusing on the biological, physical and cultural features of the natural environment.

Event tourism – short-term staged attractions or hall mark events providing a host community with an opportunity to secure high prominence in the tourism market place for a short, well-defined period of time.

Geo-tourism – specifically focusing on landscape and geology.

Heritage tourism – experiential tourism in the sense of seeking an encounter with nature or feeling part of the history of a place.

Indigenous tourism – a tourism product which is either Aboriginal owned or part owned, employs Aboriginal people or provides consenting contact with Aboriginal people, culture or land.

Mining tourism – experiential tourism specifically based around the mining environment.

Nature based tourism – viewing the natural landscape and engaging in nature based activities.

Identified tourism gap areas were found to include eco-tourism, geotourism, Aboriginal tourism, mine heritage tourism, and nature based tourism. Event tourism was also seen to provide an opportunity for growth.

Feedback from key stakeholders, surveys and workshops provided a number of key areas of comparative advantage for tourism, which are summarised in Figure 3.16.

+ Kalgoorlie-Boulder as the hub of the Goldfields-Esperance region

+ Unique landscapes and natural environments such as the Great Western Woodlands

+ The history of Kalgoorlie-Boulder lends itself to the genealogy connection

+ The rich diversity of prospecting product, gold and gemstones

+ Natural environment for astronomy

+ The heritage of the city is well preserved

+ A rich history surrounding the city, federation and gold

+ Well-designed drive trails suitable for 2WD and 4WD

Figure 3.16 Kalgoorlie-Boulder Tourism - Comparative Advantage

Tourism Opportunities – Summary of Proposed Initiatives and Recommendations

Based on feedback received from stakeholder interviews, surveys and workshops, Economic Transitions collated a list of proposed actions and projects for consideration in key areas including:

- Tourism product development in the key areas of comparative advantage;
- Improving tourism infrastructure including signage and accommodation options;
- Improving customer service; and
- Marketing and branding.

A review of marketing by Tourism Australia and Tourism WA identified the challenges faced with marketing Kalgoorlie-Boulder and the Goldfields-Esperance region through the current marketing campaigns. It was therefore considered imperative that a consistent marketing and brand approach be adopted by tourism focused organisations and agencies in Kalgoorlie-Boulder and the Goldfields-Esperance region.

Kalgoorlie-Boulder is a feature destination in all marketing activities conducted by Australia's Golden Outback (AGO), which is one of five tourism marketing regions funded by the State Government. This includes, print and TV advertising; digital marketing and advertising, packages and offers; creation of a holiday planner; and many cooperative campaigns. The funding is split across the region, with a portion being given to Kalgoorlie-Boulder.

At a regional level, the Goldfields Tourism Network Association (GTNA) promotes the Goldfields region. This predominantly focuses on the Golden Quest Discovery Trail with current marketing through the 'Drive Yourself Wild' Campaign. It encompasses promotion for all shires in the catchment area and focuses on promoting the Trail to the interstate and intrastate markets.

On a local level, the Kalgoorlie-Boulder Visitors Centre (KBVC) has the primary role as the Local Tourism Organisation. They have a dual role which covers promotion and marketing, as well as visitor information and services. They are financially supported by the

City of Kalgoorlie-Boulder, however the City conducts minimal independent marketing for tourism. The KBVC has a strong online presence, with a good website, calendar of events and social media strategy. However funding for additional marketing is limited.

KBVC, GTNA and AGO work in a collaborative environment. However, the Report identifies that the key organisations such as the KBCCI, CKB, 'We Love KB' and the GEDC do not have a consistent existing strategy for destination marketing. A more cohesive approach is recommended with a potential to pool current limited resources.

Current Target Markets

A review of the key agencies' marketing strategies and statistical information was conducted to determine current target markets and status. The table below, provides a summary of the target markets, current status and rating of potential from 1 to 5 as determined in consultation with KBVC and AGO.

1 = New category (new market entry);

2 = Underdeveloped (some visitation, lots of potential);

3 = Limited (some visitation but room to grow);

4 = Established (good visitation but room to grow); and

5 = Well defined.

Table 3.9 Summary of Key Target Market Status

Target Market	Current Status	Potential Rating
Grey Nomad	Established	4
Perth Weekender	Established, but room to grow	2
Self-drive Interstate	Established, but room to grow	2
Self-drive Intrastate	Established	3
Business Traveller	Established, but room to grow	3
Visiting Friends & Relatives	Established, lots of potential	3
International (Europe)	Established, lots of potential	3
International (Indonesia, China, Singapore)	New category, rapid growth	2
Backpackers	Limited, has potential to grow	3
4WD Enthusiasts	Limited, has potential to grow	2
Event Attendees	Limited, has potential to grow	3

Stakeholder interviews and workshops conducted by Economic Transitions identified a lack of clear tourist identity in Kalgoorlie-Boulder with participants unable to identify any one key 'WOW' experience.

To effectively market Kalgoorlie-Boulder, further unique and authentic experiences need to be identified. These experiences are required to provide Kalgoorlie-Boulder with a point of difference, to distinguish remarkable activities and attractions and to appeal to a range of target markets.

Marketing Strategy

The Report proposes that the Marketing and Brand Strategy focus on four main outcomes, as highlighted below, in order to promote a positive image of Kalgoorlie-Boulder, increase new visitors, extend stay of existing visitors and improve collaboration and engagement locally.

Figure 3.17 Proposed Kalgoorlie-Boulder Marketing Framework

A Consistent and Marketable Brand

Destination branding identifies the unique identity and personality of a destination that makes it different from all competing destinations. The Economic Transitions team worked with key local stakeholders to review the many current and diverse brands employed by tourism related organisations in Kalgoorlie-Boulder and the region.

It was evident that the current brands did not carry the unique identity and personality that a 'tourism alliance' representing Kalgoorlie-Boulder region, would require and that a new and consistent brand would be desirable. It was also agreed that a new tourism brand should deliver the following benefits:

- **Unity** – provide a unified identity for marketing all Kalgoorlie-Boulder tourism activities;
- **Message** – convey a clear message expressing Kalgoorlie-Boulder's unique positioning;
- **Imagery** – display a visual identity representative of the destination;
- **External recognition** – gain greater recognition with increased frequency of use across all tourism offerings;
- **Internal recognition** – build increased awareness among local residents;
- **Consistency** – guided by the style guide, the brand will communicate in a uniform manner each time it is used;
- **Accessibility** – the brand and its assets will be readily accessible and easy to use; and
- **Personality** – communicate the destination's personality across all media.

The brand '**Heart of Gold**' was subsequently developed through community feedback in consideration of the target audience, and the unique offering, position, personality and values. Feedback from key stakeholders established a shared vision and formed the core of a brief, to develop a brand and provide a 'Brand Guide' for its future use.

Brand Values

The values that the Heart of Gold Brand seeks to embrace are:

- Resilience;
- Resourcefulness;
- Engaging;
- Welcoming; and
- Earthy.

Brand Implementation

The Heart of Gold Brand seeks to support the implementation of a marketing strategy by providing a consistent message and unique Kalgoorlie-Boulder identity, which helps present its unique offerings to the market.

It is proposed that the implementation of the Brand Guide and Marketing Strategy has a twofold approach:

a. Acceptance of the Brand as part of the broader tourism strategy.

b. Implementation of the Marketing and Branding Guide and Strategy – to be overseen by one organisation such as an overarching tourism alliance.

Coordination, Governance and Advocacy

The Report found that there are a number of tourism organisations marketing and promoting tourism both nationally and internationally. The success of collaboration and co-ordination both internally and externally and the ultimate success of the tourism outcome for Kalgoorlie-Boulder, cannot be achieved without specific effort from each of these organisations. However, a review of current strategies of each organisation identified gaps which are detrimental to the growth of tourism and related economic benefits in Kalgoorlie-Boulder and the Goldfields-Esperance region.

Although there has also been a number of informal tourism groups convened over the past 8 years with specific interest on tourism and events in Kalgoorlie-Boulder, it was considered that there is currently no active group or overarching mechanism to provide an adequate level of governance or advocacy for the tourism sector in Kalgoorlie-Boulder.

The Report therefore recommends that two levels of governance be implemented providing both:

- An informal, networking forum for local industry to promote coordination and cooperation; and
- A formal overarching governance mechanism to represent and advocate on behalf of the broader tourism industry.

The Report recommends that these governance forums be supported by the GEDC and the GPP due to their ongoing support of tourism in the region. The positioning of the alliance could provide for one full time equivalent employee to implement and report on the strategy, and manage the brand and consistency across the city.

3.5.7 Infrastructure Capacity Assessment

The RCDP aims to increase investment, employment and business development in Kalgoorlie-Boulder leading to enhanced population growth and therefore increased demand for key services and infrastructure. *The Goldfields-Esperance Regional Investment Blueprint* (March 2016) identified 'Infrastructure and Connectivity' as one of eight regional priorities to drive future economic and social development in the region.

Kalgoorlie-Boulder is seeking to promote sustainable development approaches that enhance the city's reputation for innovative, renewable energy projects and water recycling as well as to promote increased self-sufficiency and affordability.

Cardno was appointed to work with key stakeholders to assess the capacity of key infrastructure and related services in Kalgoorlie-Boulder to support and contribute to economic growth. In particular, they were required to identify potential constraints to future growth or where current infrastructure services and future infrastructure planning and management may provide opportunities to build on Kalgoorlie-Boulders' competitive advantages.

Cardno subsequently conducted research into the current capacity of key infrastructure and services within the City of Kalgoorlie-Boulder. This involved:

- A review of all available infrastructure documents and policies;
- High level stakeholder engagement; and
- An analysis of constraints, opportunities and potential solutions.

Stakeholder Engagement

Targeted stakeholder engagement was undertaken to ensure the desktop assessment for this project was based on the most current information available. Stakeholders contacted included the CKB, KBCCI, CME, Main Roads Western Australia (MRWA), Department of Transport and local infrastructure providers.

Key constraints emerging from the consultation included:

- The price of energy and water;
- Poor road infrastructure;
- Uncertainty of resource demand; and
- Policy and regulations.

Key Findings

Challenges for the Region

The Report from Cardno (the Report) states that increased demand for energy, transport, digital communication, water and solid waste services, will be driven by population growth. Existing infrastructure such as electricity assets are approaching the end of their design life or are non-compliant with current standards. It is considered that the infrastructure networks serving Kalgoorlie-Boulder need significant public and private investment.

Energy

To enable the region to grow, the provision of energy is vital. The Kalgoorlie-Boulder Region is connected to the Western Power South West Interconnected Network (SWIN). Electrical energy is transferred from Perth to Kalgoorlie-Boulder via a 220 kilovolt transmission line. There are a number of major constraints on the line affecting energy supplies. Western Power has confirmed planned indicative expenditure in the order of $31 million, to address some constraints. However they are not currently undertaking a network solution as the network upgrade requirements are estimated to cost hundreds of millions of dollars.

Cardno's consultations indicated that local businesses have expressed concern at the rising cost of electricity, which is reported to have doubled in the last six years.

The Report suggests that in order to reduce the energy burden from the SWIN, renewable energy needs to be promoted. At present renewable energy is seen as an expensive option, however, education is required to increase understanding amongst local and regional businesses of the long term benefits of renewable energy.

A factor seen to be contributing to the energy supply problem, is the number of mining companies purchasing electricity off the grid and in some instance not using the electricity allowance for several years. The Report proposes that mining companies not utilising this energy should be made to relinquish the power, until they require it for their operations.

Providing energy to Kalgoorlie-Boulder is currently a major constraint to the region's growth and prosperity. Future energy infrastructure investment will be affected by the regulatory framework for electricity and gas markets, environmental targets, technology changes and the need to replace existing infrastructure.

Western Power has advised that electrical transmission capacity to the region is severely constrained; however load forecasts do not warrant the need for additional infrastructure. Customers wishing to significantly increase electricity demand will therefore need to investigate non-network solutions.

Typical non-network solutions for the region include local renewable energy or gas power generation installations.

Regulatory Framework

The electricity sector is undergoing policy reform, which will impact on future energy solutions. In March 2014, the Minister for Energy announced the Electricity Market Review with three objectives:

1. Reduce the cost of production and supply of electricity;
2. Reduce government exposures to energy market risks; and
3. Attract private sector investment.

The review is being progressed in stages and is looking at:

- Transferring the regulation of pricing, connection and access;

- Enhancing market competitive outcomes through contestability and removing retail and wholesale market barriers;
- Transferring system management functions and market operation functions to the Australian Energy Market Operator; and
- Wholesale electricity market improvements.

Gas

Kalgoorlie-Boulder is serviced via the Goldfields Gas Pipeline (GGP), which transports natural gas from the Carnarvon basin producers in the north-west of WA. ATCO Gas has 167km of gas distribution network and supplies 97% of the City with natural gas from Hannans to South Boulder.

The Report states that GGP and ATCO Gas have identified no issues with supplying additional gas to the region. GGP have stipulated that they can supply an additional 5% of gas through their pipelines by installing a 3rd compressor on to their network. ATCO Gas has advised that they are looking to expand their gas distribution network in CKB and currently have 25% spare capacity in the existing network, to meet an estimated five years of growth in CKB.

Renewable Energy

Mining proponents in Kalgoorlie-Boulder recognise that renewable energy is part of the solution for future energy supply, but it is still seen as an expensive option. At present typical costs for one unit of renewable energy is 20cents per kilowatt hour (KWh), compared to 15 cents per kWh for electricity supplied from Western Power.

Synergy is exploring the potential for isolated energy networks at a subdivision-level. This new technology could also be used in the expansion of industrial zones in the vicinity of the Airport.

Transportation

The Goldfields-Esperance region is the gateway for road and rail freight coming into WA from the eastern states. Kalgoorlie-Boulder is linked by the Goldfields Highway running south to north and the Great Eastern Highway running west to east. These road networks link Kalgoorlie-Boulder with Perth and Esperance, as well as via other major roads to many other locations within the state and beyond.

The Great Eastern Highway forms part of the principal interstate road link together with the Coolgardie-Esperance Highway and the Eyre Highway. Additionally the Outback Way through Laverton to the Central Desert, Alice Springs and Queensland, is considered the region's second interstate link.

The strategic roads linking Kalgoorlie-Boulder to other long-distance destinations are currently single-carriageway roads. However, plans exist to dual some sections, described further below.

With the majority of freight from within the region transported by road, the upgrade of the local road network is seen as critical. The Report documents a number of constraints on the road network including:

- Stormwater drainage;
- Service re-locations;
- Funding limits;
- For 'Portlink' road/rail link, a 200m road reserve is needed;
- Limited feasibility for expansion of Eastern Bypass as it passes through an urban area;
- Realignment is also constrained due to the close proximity of the Super Pit;
- Geometric constraints for trucks; and
- Long unsealed sections of Outback Way (an important interstate route).

Significant work has been undertaken to examine a number of enhanced transport options through the Portlink Proposal – including a proposed intermodal terminal in Kalgoorlie-Boulder. The Department of Transport (DoT) states that 'Portlink is a large scale nation-building project. It seeks to create a stronger, more robust state freight network, and open up the Goldfields-Esperance, Pilbara and Mid-West regions to regional and whole of state development opportunities'. DoT has advised that there are no drivers at present for the Portlink Scheme. However, some elements of the Proposal may be feasible in the short term.

A project has been identified to seal the Wiluna-to-Meekatharra Highway, thereby enabling more efficient freight movements between the Esperance, Kalgoorlie, Midwest and Pilbara regions. Upgrades to this section of road infrastructure would enable companies located in Kalgoorlie-Boulder, to provide improved services to the Midwest and Pilbara regions.

The Report outlines a number of proposed upgrades to the road network identified by MRWA. The Report also recommends undertaking a holistic review of the city's road network, particularly in developed areas, in the form of a 'TransPriority' review. The TransPriority concept – also known as "SmartRoads" or the "Moving People Framework" – is an approach that has been used by VicRoads in Victoria. It is understood that VicRoads have applied the concept to both metropolitan areas and in regional areas.

This review would identify which routes are to be prioritised for competing transport modes (freight, buses, commuter car trips, through traffic, access traffic, pedestrians and cyclist movements) and could include varying the modal priority at different times of the day.

It is recommended that a TransPriority review be completed prior to investment in new transport infrastructure, to ensure that future investment decisions reflect, as much as is practicable, and the needs of all transport users.

Rail

Kalgoorlie-Boulder is at the junction of the interstate east-west railway line and the north-south railway line between the Northern Goldfields and the Port of Esperance on the south coast. As with road freight, Kalgoorlie-Boulder is a rail hub for the region and beyond.

Broadly speaking, Brookfield Rail is responsible for the management of the rail network west of Kalgoorlie-Boulder while the Australian Rail Track Corporation is the operator to the east.

Aurizon is a publicly listed freight company with access rights to Brookfield Rail's network and currently transports freight on behalf of BHP Billiton through Kalgoorlie-Boulder. Aurizon currently owns and operates the West Kalgoorlie Rail Yard located 5km from the Kalgoorlie-Boulder Town Centre to service its intrastate freight trains. It is well located to service both the Trans-Australian Railway (east-west) and Leonora-Esperance (north-south) Railway.

The Report outlines a number of constraints associated with the current rail network:

- At present the Eastern Goldfields Railway and the Kalgoorlie-Boulder-to-Esperance Line is at full capacity. Due to the current economic climate, there are no plans to increase capacity on the lines. Also there is no port capacity at Esperance or Kwinana to take additional rail freight.
- The current size of the Terminal is small and can only accommodate intrastate trains (which are 800 metres in length) rather than pacific national interstate trains which are up to 1,800 metres long).
- The lack of additional rail sidings around the Terminal means that trains are unable to move off the main line for short periods, to unload cargo at West Kalgoorlie. Safety and amenity constraints in the use of the West Kalgoorlie Intermodal Depot for rail

- transport of hazardous and dangerous goods, have also been identified as a key issue. Congestion occurs due to passenger rail and freight rail demands.
- The north-south line mainly carries bulk freight and is frequently subject to hold-ups due to weather or volume of rail traffic. These hold-ups impact on passenger and freight movements.

Kalgoorlie-Boulder Airport

The Kalgoorlie-Boulder Airport is owned and operated by the CKB. It currently accommodates approximately 230,000 passengers annually with a capacity in the order of 350,000 passengers annually. The Airport is a major hub for FIFO services supporting mining in the region. It is also a base for the Goldfields Air Services which offers chartering and flying lessons, along with the Royal Flying Doctor Service, which uses Kalgoorlie-Boulder as a base to provide medical assistance to people in the region and transporting major injuries to Perth.

The CKB's Kalgoorlie-Boulder 2025 Airport Master Plan indicates the following planned upgrades for the Airport:

- Apron expansion allowing Code E aircraft operations;
- Expansion of passenger terminal;
- Identification of the alignment of a parallel taxiway for the main runway; and
- Potentially increasing the runway length to 3,500 metres.

Furthermore, there is potential to expand the Airport to accept greater volumes of air freight. CKB has given consideration to the upgrade of Kalgoorlie-Boulder Airport to provide an alternative to Perth for wide-bodied domestic and international operations.

Communications

Kalgoorlie-Boulder is serviced by Telstra telecommunications infrastructure with optical fibre cable and pits running through the city. The Telstra Mobile 4G Network covers the entire City. However, at present there is minimal National Broadband Network (NBN) connectivity within the City, with only an isolated site in Karlkurla currently being serviced.

The Report states that effective communication is vital to the region. Kalgoorlie-Boulder is a corporate city and many businesses rely on e-commerce for access to global markets. People who live in remote parts of the region require access to the internet for healthcare and educational services.

Telehealth is a growing service within the region which enables remote communities to access healthcare professionals, without the need to travel hundreds of kilometres to see the local doctor. The Department of Health has identified that effective communications along the Highway are critical for health professionals when dealing with emergencies.

Cardno's discussions with the Chamber of Commerce and Industry, Department of Health and Curtin University, identified that the region is heavily reliant on digital communication. For example, Curtin University relies heavily on the internet to conduct lectures, with university representatives stating that unreliable information technology (IT) systems affect student attendance.

At present the digital infrastructure for the region is considered by Cardno to be poor, with telecommunications for households and businesses generally of a lower standard than elsewhere in WA. Stakeholders consulted by Cardno identified high costs and restrictive internet bandwidths, as major constraints to business activity in the region. There are also reported issues with mobile phone coverage outside of the City Centre.

A review of the NBN 3 year construction roll out program by Cardno concluded that Kalgoorlie-Boulder will be supplied with 'Fibre to the Node' technology in the final quarter of 2016. However, stakeholder consultations with CKB have suggested that NBN will not begin rolling out infrastructure before 2018. Additionally, it has been identified that NBN will only provide service to selected suburbs within the City.[26]

The Report considers that without effective digital communication, progress within the region will be hindered.

Water and Waste Water

The Water Corporation (WC) is the main service provider delivering the production, storage and distribution of potable water in the CKB and surrounding areas. The City is supplied with approximately 11 gigalitres (GL) of potable water each year via the Goldfields and Agricultural Water Supply Scheme (GAWS) Main Conduit, which transports water from Mundaring Weir near Perth.

The WC has committed capital expenditure exceeding $300 million over the last 10 years on the GAWS Main Conduit of which approximately $100 million was within the CKB.

The WC advises that the total storage capacity in the Kalgoorlie-Boulder Service Zone currently exceeds 700,000 kilolitres (kL). Under normal operating modes, the WC can transfer up to 50,000kL per day into this zone and under special circumstances can provide additional quantities for short periods. However, to date this has not been required and the maximum peak-day water demand experienced in the last three years, was approximately 38,000kL, while the maximum across the last 20 years was just under 50,000kL in a single day.

Improving Reliability

Cardno's consultations with the WC confirmed that there is no shortfall in meeting water demand. WC has stated that they will be providing an additional 7GL of potable water to meet predicted population growths for Kalgoorlie-Boulder.

Cardno consider Kalgoorlie-Boulder to be overly reliant on the GAWS and suggest that the Department of Water undertake research to determine alternative groundwater resources, which could provide additional water security to the region.

Potable Water Pricing

The cost of supplying water to Kalgoorlie-Boulder is over $7 per kL, due to the fact that the water supply is pumped over 600km via the GAWS pipeline. Major consumers such as mining proponents have stipulated that this cost is expensive. Cardno consultations with WC identified that they encourage major consumers to explore and access alternative, cheaper fit-for-purpose water supplies, if these can meet their requirements.

Local mining operators utilise hypersaline water for use within their operations, for example KCGM uses approximately 80% hypersaline water mixed with potable water. KCGM also utilises a water efficiency management plan, which is aligned to WC's Waterwise Business Program and aimed at minimising potable water use.

The Goldfields-Esperance region has vast amounts of water underground in reservoirs and in palaeochannels but this water is hypersaline and the cost of treating the water and pumping it to Kalgoorlie-Boulder, is seen to be prohibitive. Cardno's discussions with the WC concluded that at present there is no viable alternative water supply to the region, but the WC will supply all additional water needs as and when required. WC has advised that they can expand the existing network to meet future needs as required.

Waste Water

CKB operates an extensive sewerage network, consisting of approximately 207kms of sewer pipeline; the 8 megalitres intermittently decanted extended aeration South Boulder Wastewater Treatment Plant; sludge and holding lagoons; balance ponds; pump stations; and ancillary infrastructure such as, flow metres and pipe networks. At present the Waste Water Treatment Plant is operating slightly above 50% capacity and treats 8ML of waste water per day, as such it has sufficient capacity to process additional 4ML of waste water. The CKB has advised that when the population expands to over 35,000 people then the City will review the need to build a new waste water treatment facility within the city.

Solid Waste

The existing Yarri Road landfill is expected to close in 2020. The CKB has stated that they are working with the Department of Environment Regulation to determine if they can increase the size of cells within the facility and extend the life of landfill.

CKB has entered a Memorandum of Understating (MoU) with the Shire of Coolgardie, to investigate the possibility of constructing a landfill within the Shire of Coolgardie, which can cater for the waste disposal needs of the entire Goldfields-Esperance region and potentially beyond. It is considered that this may also create opportunities for waste incineration and waste to energy technologies.

The Cardno Report provides a number of recommendations for further action and some indicative cost information. These are summarised in Table 3.10.

Table 3.10 Summary of Identified Infrastructure Issues and Recommendations

Issues	Recommendations	Cost Estimates No cost/>\$100k/ >\$1m/>\$10m/ >\$100m	Priority Short Term/ Medium Term/ Long Term
ENERGY			
Limitations to transmission capacity	It is recommended that the Regional Development Council petition the State Government, Economic Regulation Authority and Western Power to ask them remove the constraints on the Perth to Kalgoorlie Transmission Line. Removing the constraints on the transmission line will enable the Line to be reinforced, which would provide additional electrical energy to be transmitted to Kalgoorlie-Boulder.	No cost	Long term

Issues	Recommendations	Cost Estimates No cost/>$100k/ >$1m/>$10m/ >$100m	Priority Short Term/ Medium Term/ Long Term
TRANSPORTATION			
Multi-modal transport mobility	A holistic review of the city's road network should be undertaken, in the form of a 'TransPriority' review.	<$10m	Short term
Sustainable transport growth	Improve provision of non-car transport modes, initially focusing on low-cost improvements such as wider coverage of the city by buses with greater frequency.	<$10m	Short term
Vulnerable road user safety and mobility	Improve provision of pedestrian and cycling facilities within the city.	<$10m	Short term
Existing road infrastructure is near the end its design life	Upgrade the road network throughout Kalgoorlie-Boulder to allow local mining operators to continue to move freight via road.	<$10m	Short term
Missing link for freight movements to Esperance Port	Upgrade Outback Way.	$10m to $100m	Medium term
Missing link to Midwest and Pilbara regions.	Upgrade the Wiluna-to-Meekatharra Highway.	$10m to $100m	Short term (shires and the State Government have reached an agreement on the Project)
Rail network constraints	Construction of passing loops on Kalgoorlie-Boulder to Esperance Line.	$10m to $100m	Medium term
Limits on usability of existing Intermodel Transportation (IMT)	Enhancement of the existing IMT's capability, to handle longer interstate trains and suitable train marshalling and shunting infrastructure off the main line.	$10m to $100m	Medium term

Issues	Recommendations	Cost Estimates No cost/>$100k/ >$1m/>$10m/ >$100m	Priority Short Term/ Medium Term/ Long Term
The need for a Perth-alternative airport and better connections to/ from Kalgoorlie-Boulder	Expansion of the Airport to become the Perth-alternative and to accommodate larger aircrafts.	$10m to $100m	Long term
COMMUNICATIONS			
Utilising the benefits of the internet	The internet is a powerful tool if used correctly. Educating local residents and businesses on the benefits of the internet, is critical for growth of the region. It is recommended that local businesses and residents are provided with community support and/or training within the local TAFE, to enable them to learn how to use the internet safely.	>$10m	Long term
Lack of education and/ or training of IT	At present no IT training courses are available in Kalgoorlie-Boulder. Training courses are only available in Perth which makes training IT expensive. It is recommended that IT training courses are established at the local TAFE. Provision of local training course will enable people to take up IT and use it efficiently.	>$1m	Long term
Poor IT support	At present all IT support is provided by internet providers from Perth. It is recommended that a regional IT centre is established within the region to provide additional onsite IT support.	>$1m	Long term
Poor access to IT	Access to IT is critical for development of local business and residents. It is recommended that internet cafés are established to enable free access to the internet. Additionally, local businesses should be encouraged to collaborate and share IT equipment.	No cost	Long term

Issues	Recommendations	Cost Estimates No cost/>$100k/>$1m/>$10m/>$100m	Priority Short Term/ Medium Term/ Long Term
Poor mobile phone coverage in regional hospitals	Trial lower wave length bands in hospitals to allow for effective mobile communication with hospital staff.	>$1m	Long term
Poor mobile phone coverage along road corridors	To enable effective telecommunications for all road users, it is recommended that additional mobile phone towers are constructed along the regions road corridors to provide better mobile phone coverage.	>$10m	Long term
WATER AND WASTE WATER			
Access to water resources	CKB implement better urban water management practices via the City's Local Planning Scheme and development of Local Planning Policies.	No cost	Short term
Issues with existing sewage sludge process	CKB to utilise alternative technology to dry out sewage sludge.	>$1m	Medium to long term
Excess treated effluent	CKB to liaise with local mining proponents to determine if there is a requirement for additional treated water to be utilised in mining operations.	No cost	Long term
SOLID WASTE			
No share use agreements in place	Local governments to develop share use agreements which would enable them to actively manage their waste.	No cost	Long term

Issues	Recommendations	Cost Estimates No cost/>$100k/ >$1m/>$10m/ >$100m	Priority Short Term/ Medium Term/ Long Term
Need for a regional waste hub	CKB and the Shire of Coolgardie have collaborated together to identify a new regional waste hub for the region. It is recommended that the CKB and the Shire of Coolgardie write a business case underlining the cost benefits for the proposed waste hub in the region. It is recommended that the business case also investigates the need for constructing a waste incineration plant within the new waste hub. Waste Incinerators convert waste products into a form of energy such as heat, steam or synthetic gas, which can then be used directly or further converted into products such as electricity or synthetic fuels.	>$100m	Long term
CKB Waste Minimisation Strategy	To reduce waste within the Kalgoorlie-Boulder Region, it is recommended that CKB produce a waste minimisation plan. Effective communication of CKB's waste minimisation plan can be undertaken via a series of educational programs in local primary and secondary schools. Additionally, CKB should also develop a community education and awareness initiative program.	<$1m	Long term
Capacity constraints in existing landfill sites	To extend the life of landfill sites within the Kalgoorlie-Boulder Region, it is recommended that the latest compaction equipment is acquired. Utilising latest machinery to compact waste products will maximise the volume of the landfill and extend the life of the tips.	<$10m	Short to medium term
Landfill operation not cost-effective	Application of landfill levies will divert waste from landfill and encourage investment into alternative waste treatment options.	No cost	Long term

3.5.8 Liveability and Social Services Review

The need to improve liveability and lifestyle opportunities is a key regional priority in the Blueprint. It is also a key theme that emerged from Growth Plan research and stakeholder engagement activities, in order to address the current high level of population turnover and to improve population attraction and retention. As a major regional centre, it is vital that key services and facilities, levels of amenity and community support mechanisms are in place to sustain the population, support a high quality of life and to promote Kalgoorlie-Boulder as a destination of choice.

Research from Painted Dog on migration perceptions[27] highlighted the preconceived negative views held by many people from outside of Kalgoorlie-Boulder, in regards to local amenity and lifestyle. It was therefore important to test these perceptions and develop strategies to address identified gaps, as well as misconceptions.

Hames Sharley, in association with Thao Ashford Planning, were appointed to assess the current factors impacting on liveability and perceptions of liveability in Kalgoorlie–Boulder and to identify the key gaps, issues and opportunities that will lead to improvements in quality of life, contribute to population retention and attraction, and increase local competitiveness.

Liveability in this context refers to the quantitative and qualitative factors that contribute to the quality of life of the residents of Kalgoorlie-Boulder and which impact on residents' and potential residents' decisions on whether or not it is a good place to live, raise children, work, play and retire. Liveability is about realising values that are central to healthy communities: independence, choice and security.

Building on the urban design review summarised in Section 3.5.5, Hames Sharley identified 'Prosperity, People and Place' as summary themes that carried through each stage of the liveability review and captured linkages with the Blueprint and other strategic planning documents. These themes provided a framework to capture hard and soft infrastructure initiatives and to address the elements required to improve the overall liveability of the city. This process is summarised in Figure 3.18.

Quality of Life (QOL) Indicators Framework

The Quality of Life (QOL) Indicators are a basis for measuring a community's 'vital signs'. Individually, indicators explain and track progress in relation to a particular issue or feature while collectively, QOL indicators are a basis for viewing the larger picture and helping to continuously guide key institutions and policy makers in choosing appropriate responses.

As a key component of the Liveability Review, the Quality of Life (QOL) Indicators Framework was developed for Kalgoorlie-Boulder, as a tool for measuring progress towards achieving a more liveable city and improved community wellbeing and to provide sound information and evidence upon which to base decisions and actions. The QOL Indicators Framework (refer Table 3.11) is modelled on Community Indicators Victoria, which is seen as a comprehensive and best practice Australian example, that encompasses both urban and rural areas.

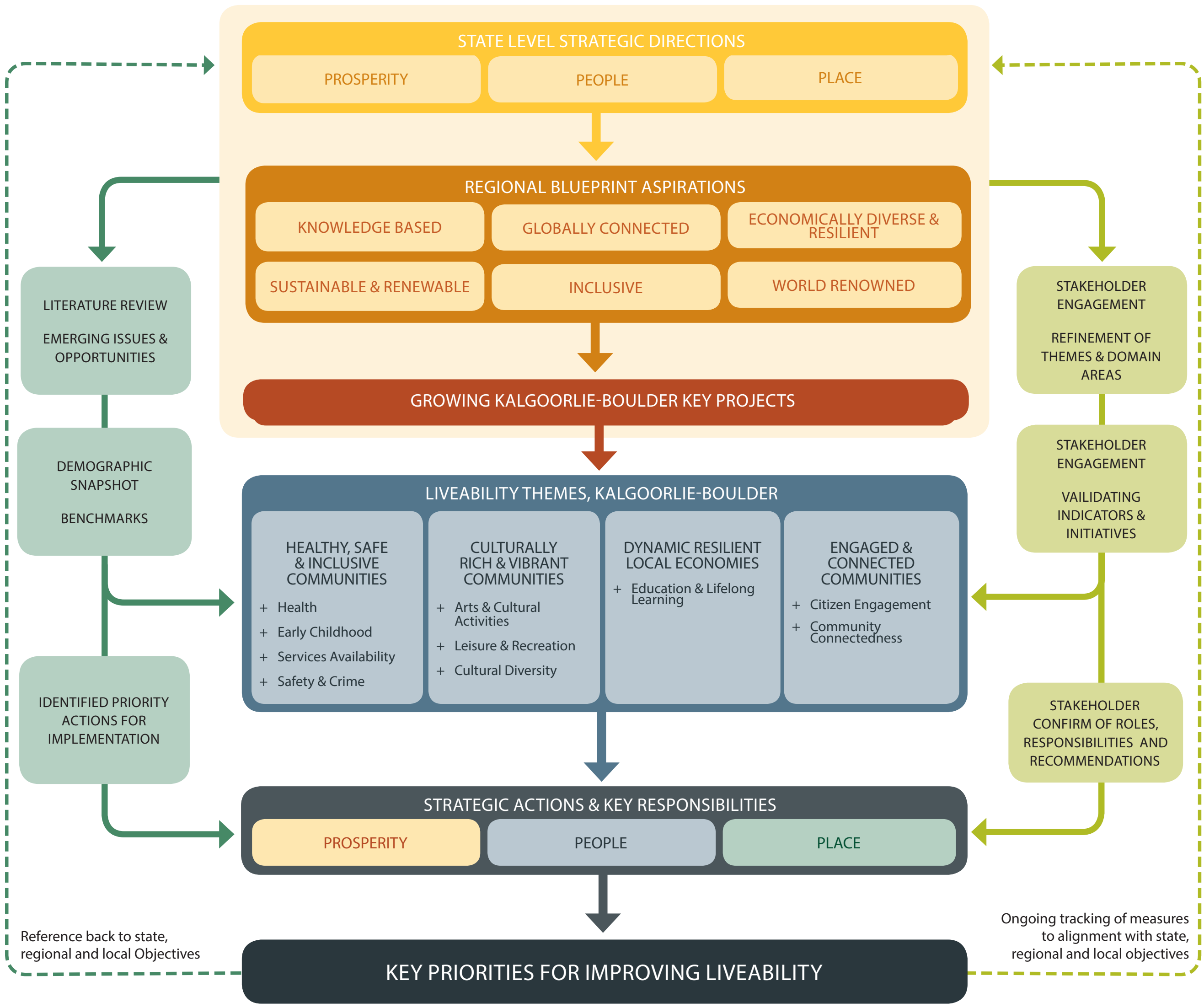


Figure 3.18 Process of Reviewing Liveability and Social Service

Table 3.11 Framework for Quality of Life Indicators for Kalgoorlie-Boulder

Theme	Domain	Indicators
Healthy Safe & Inclusive Communities	Personal Health	GP Services Per Capita
		Perceptions of Access to Health and Aged Care Services
	Early Childhood	Australian Early Development Index
		Playgroup Participation
		Attendance at Preschool
	Services Availability	Perceptions of Access to Services and Facilities
		Access to Services
		Major Services Presence
	Personal & Community Safety	Perceptions of Safety
		Incidence of Crime (person/property)
Culturally Rich & Vibrant Communities	Arts and Cultural Activities	Perceived Opportunities to Participate in Arts and Cultural Activities
		Participation in Arts and Cultural Activities
	Leisure and Recreation	Participation in Sporting and Recreation Activities
		Perceived Opportunities to Participate in Sporting & Recreation Activities
	Cultural Diversity	Aboriginal Population
		Cultural Background
		Cultural Services Available
		Cultural Events
		Perceived Acceptance of Multiculturalism

Theme	Domain	Indicators
Dynamic Resilient Local Economies	Education & Lifelong Learning	Home Internet Access
		School Retention
		Early School Leavers
		University Qualified
		Technical Qualified
		Youth Learning or Earning
		Adults in Higher Education Learning
		Primary School Performance
		Secondary School Performance
		Distance to Primary Education Services
		Distance to Secondary Education Services
Engaged & Connected Communities	**Citizen Engagement**	**Opportunity to Have a Say on Important Issues**
		Perceptions of Involvement in Community Activities
	Community Connectedness	Perceptions of Feeling Part of the Community
		Social and Support Networks
		Volunteering Rates

The Indicators include a mix of objective and subjective measures, given the importance of identifying differences between perception and reality, and the need for the Framework to include priority values, goals and issues important to the Kalgoorlie-Boulder community, irrespective of their ease of measurement.

Benchmark Review

Regional benchmarking was undertaken as part of the Review to compare and contrast the characteristics of Kalgoorlie-Boulder and to assess relative performance against key liveability indicators. Three benchmark regional cities were identified for analysis based on their comparability with Kalgoorlie-Boulder. These were:

- The City of Dubbo, New South Wales;
- The City of Greater Geraldton, Western Australia; and
- The City of Mount Isa, Queensland.

The following table provides an overview of benchmark comparisons and the relative performance of Kalgoorlie-Boulder in relation to a review of key indicators. One of the important limitations identified through this process, was the relative lack of current data, particularly in relation to intangible measures of perception. Where possible, every effort was made to validate available data through a review of online initiatives and strategies, as well as through the consultation process with key stakeholders.

Figure 3.19 Regional Benchmarking Locations

Table 3.12 Summary of Kalgoorlie-Boulder Performance against Benchmark Cities

Benchmark Comparison				KB Performance		
Theme	**Domain**	**Indicators**	**Note**	**Low**	**Med**	**High**
Healthy Safe & Inclusive Communities	Personal Health	GP Services Per Capita				
		Perceptions of Access to Health and Aged Care Services				
	Early Childhood	Australian Early Development Index				
		Playgroup Participation				
		Attendance at Preschool				
	Services Availability	**Perceptions** of Access to Services and Facilities	N/A			
		Access to Services				
		Major Services Presence				
	Personal & Community Safety	**Perceptions** of Safety				
		Incidence of Crime (person/property)				

Benchmark Comparison				KB Performance		
Theme	Domain	Indicators	Note	Low	Med	High
Culturally Rich & Vibrant Communities 	Arts and Cultural Activities	**Perceived** Opportunities to Participate in Arts and Cultural Activities				
		Participation in Arts and Cultural Activities	N/A			
	Leisure and Recreation	Participation in Sporting and Recreation Activities	N/A			
		Perceived Opportunities to Participate in Sporting & Recreation Activities	N/A			
	Cultural Diversity	Aboriginal Population				
		Cultural Background				
		Cultural Services Available				
		Cultural Events				
		Perceived Acceptance of Multiculturalism	N/A			

Benchmark Comparison				KB Performance		
Theme	**Domain**	**Indicators**	**Note**	**Low**	**Med**	**High**
Dynamic Resilient Local Economies	Education & Lifelong Learning	Home Internet Access				
		School Retention				
		Early School Leavers				
		University Qualified				
		Technical Qualified				
		Youth Learning or Earning				
		Adults in Higher Education Learning				
		Primary School Performance				
		Secondary School Performance				
		Distance to Primary Education Services				
		Distance to Secondary Education Services				
Engaged & Connected Communities	Citizen Engagement	Opportunity to Have a Say on Important Issues	N/A			
		Perceptions of Involvement in Community Activities	N/A			
	Community Connectedness	**Perceptions** of Feeling Part of the Community				
		Social and Support Networks				
		Volunteering Rates				

The relative position of Kalgoorlie-Boulder was also compared against the **Australian Regional Competiveness Ranking**, to further assess and cross-check performance. The following benchmark snapshots provide a preliminary picture of Kalgoorlie-Boulder's performance to guide future data analysis and investigation.

The areas where Kalgoorlie-Boulder appears to perform least well and therefore require further analysis include:

- Access to health services, in particular, early development and learning diagnostic services;
- School retention and university qualification;
- Youth and adult education and training opportunities; and
- 'Feeling part of the community' and volunteering.

In addition, the presence of and access to major services is generally lower than in the benchmark regional centres. This is an indicator that key social infrastructure and service providers are not readily accessible. It is considered that this requires further analysis and could be partly due to the population size of Kalgoorlie-Boulder falling between thresholds of provision. Community feedback raised access issues relating to transport, especially to the outer suburbs, shortfalls in early diagnostic and mental health services, the need for more diverse recreation and entertainment options, and the relocation of key government agencies from the CKB to centralised locations.

Home internet connectivity was considered high in terms of performance, however, business connection and quality or speed was not captured. Additionally there is potential that households most at risk for education outcomes have less access to internet. Further data was required to capture a clear picture of this element of regional liveability.[28]

Areas of Relative Low Level Performance – A Snapshot

Figure 3.20 provides a snapshot of the benchmark comparisons. Out of the 28 Indicators measured, 10 are flagged as being under-performing compared to the benchmark cities.

As seen alongside the Australian Regional Competitive rankings, there is a degree of correlation between these indicators and the national averages for local governments. Compared nationally, access to GP services is however, placed within a 'less competitive' band. The Report notes that access to GPs has been largely resolved under the Forward to Fellowship Program, however, ongoing funding could be an issue.

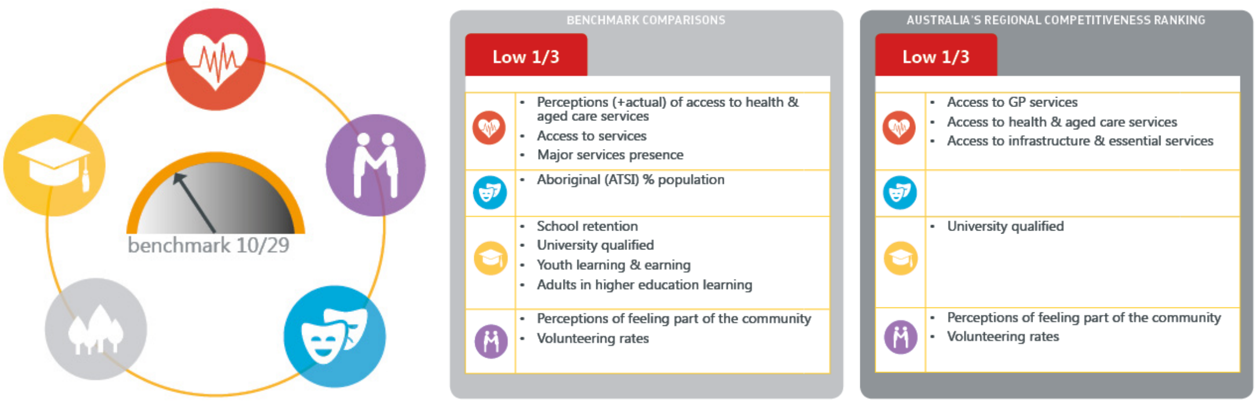


Figure 3.20 Snapshot of Relative Low Levels of Performance for Kalgoorlie-Boulder

Relative Mid-Level Performance – A Snapshot

From the Snapshot of Mid-Level Performance (Figure 3.21), Kalgoorlie-Boulder has 16 out of the 29 Indicators placed within this band. This indicates that overall the city is competing on par with the benchmark cities in regards to these indicators. The relative performance of these indicators are also in line with regional competitiveness rankings.

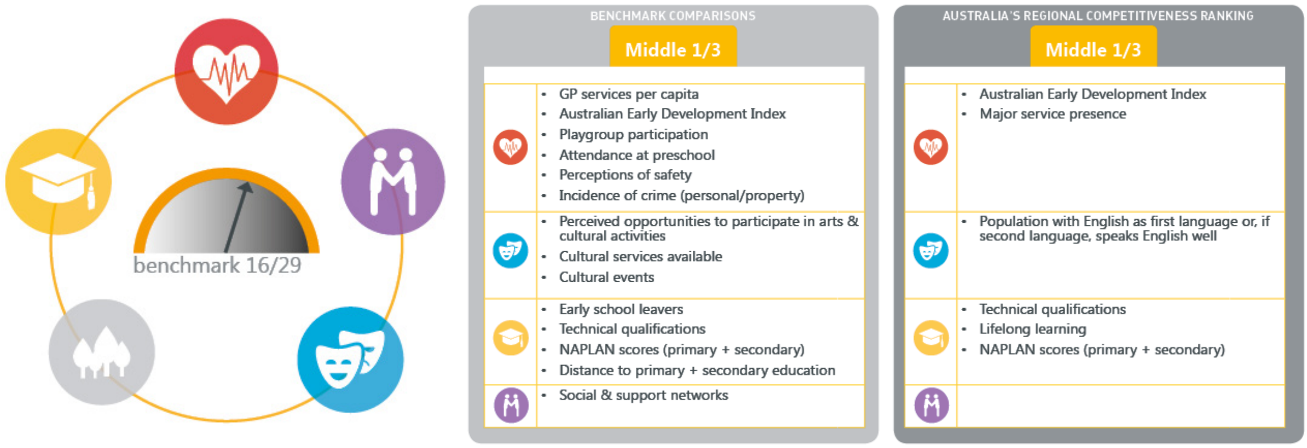


Figure 3.21 Snapshot of Relative Mid-Levels of Performance

Relative Top Level Performance – A Snapshot

Of the 29 Indicators, Kalgoorlie-Boulder only has 2 indicators, which place higher than the benchmark cities. These relate to the proportion of the population born in non-English speaking countries and household connection to the internet (Figure 3.22). When compared to other regional local governments nationally, Kalgoorlie-Boulder is placed in the 'most competitive' band for early school leavers. However, there is a higher proportion of early school leavers going into local trades.[29]

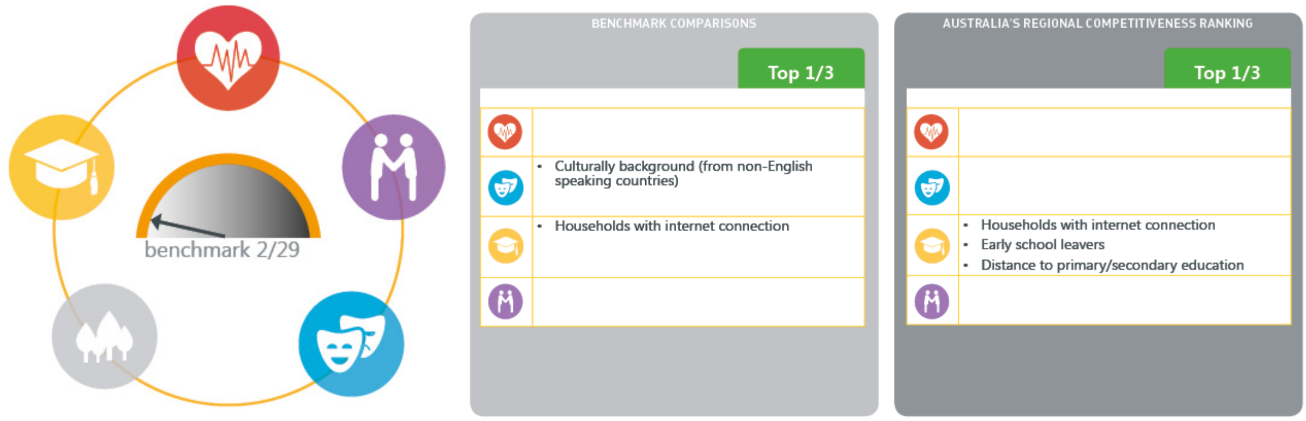


Figure 3.22 Snapshot of Relative Top Levels of Performance

Priority Actions

Hames Sharley noted the many initiatives and programs already in place across government agencies and other parties that are aimed at improving liveability in Kalgoorlie-Boulder. The key Initiatives that emerged from the Review by Hames Sharley are those that came into sharper focus through the assessment against the liveability indicators and stakeholder discussions.

As with the review of urban design, the process for addressing issues of liveability was seen as critical to its success. It is proposed that actions progress on the basis of:

A place-based approach - Local sensitivity to liveability issues is critical. Each place is different and the approach to liveability requires careful tuning to the context. Community engagement will be needed to capture all voices and fine tune the approach in order to guide measurement and implementation of liveability in Kalgoorlie-Boulder into the future.

A joined up approach - Many of the issues that arise relate to lack of continuity in support. These issues that sit in the 'cross hairs' of the liveability themes and responsibility are potentially more easily neglected. It is therefore important to promote collaboration across sectors and traditional areas of responsibility.

Local skills and energy in a digital world - As regional delivery of services and other support mechanisms become more reliant on digital and remote delivery, a focus on retaining and building local capacity and energy is important. Digital connectivity enables the local community to engage in the world but also poses a risk that delivery is no longer geographically constrained and local skills, employment opportunities and resilience are lost.

A shift in thinking and language - with the aim to encourage a shared ownership of place and liveability issues across all sectors of the community may assist in reducing hurdles and barriers to shared responsibility and full engagement of the community. This implies a focus on 'it's our place' away from providers and users toward assets and capacity.

Community leadership - when the local community is involved in projects that contribute to improving place and liveability, there is an increase in social capital. This is relevant to the design and conceptual phase where involvement and ownership is valued as well as on-going 'place making' when local skills and talent can be used and extended.

Combining hard and soft initiatives - with a priority for low capital expenditure and optimum community participation.

Sustainable delivery - ensuring programs are funded and sustained over time not reliant on individuals.

Sixteen initial priorities were subsequently identified under four headings:

Healthy, safe and inclusive community

1. **Culturally appropriate support -** provide culturally appropriate delivery of health and well-being services.
2. **Community assets and capacity -** undertake a community assets and capacity assessment to ascertain gaps and future requirements.
3. **Neighbourhood house -** Initiate neighbourhood house program (e.g. Dubbo) to ground support in local places.
4. **Engage leaders in safety strategy -** on-going engagement with community leaders to build relationships that foster a whole of community approach to perceptions of safety and crime.

Culturally rich and vibrant community

5. **Continue support for diverse arts and culture -** focus on events programing that promotes and celebrates cultural diversity and local talent.
6. **Engage youth beyond sport -** engage with youth to identify initiatives that provide recreational opportunities beyond sport and support these with access to appropriate facilities and funding.
7. **Cultural diversity action plan -** Engage with community leaders and representatives to develop a cultural diversity policy and action plan that promotes awareness and knowledge of Aboriginal and other cultures and is implemented with the support of a cultural officer.
8. **Local knowledge and skills -** Support networks and partnerships that nurture Aboriginal culture and harness local knowledge and skills in community led projects.

Dynamic, resilient, local economy

9. **'You can do it' -** expand the 'you can do it' education programs to help bridge the support gap between school year 7 and 9.
10. **Life without barriers -** support employment skills and lifelong learning programs such as 'life without barriers'.
11. **Wi-Fi access -** provide Wi-Fi access in public places and support fast internet access to business and homes in Kalgoorlie-Boulder.
12. **'Joining the dots' -** focus on 'joining the dots' to encourage continuity and better pathways in education and training through support programs and networking.

Engaged and connected community

13. **Shift in thinking -** from 'service providers and users with needs' to an engaged and collaborative community with a shared responsibility as custodians of place.
14. **Community charter -** that articulates shared aspirations and identity that are defined through community forums and reviewed regularly.
15. **Central information portal -** central community platform (virtual) and hub location (physical) as one stop-shop for all community information.
16. **Buddy network -** co-ordinated volunteer, mentoring and 'buddy' network that supports initiatives and activities beyond sport.

Next Steps

The report recommends that:

- Further analysis and consultation be undertaken in key areas to deepen understanding of the issues and priority actions within the domains reviewed, forming part of a detailed Kalgoorlie-Boulder Social Services Review.
- Further analysis and consultation be undertaken in other areas such as sustainability, to broaden understanding of the issues outside of the domains reviewed.
- Further funding be sought to enable the Kalgoorlie-Boulder community to progress liveability initiatives and policy review and to establish an on-going framework for community assets and capacities.

3.5.9 Cultural and Creative Industries

Cultural and creative industries were identified in a number of specialist reports and stakeholder engagement activities as an important and growing sector in Kalgoorlie-Boulder. The Blueprint also acknowledges the emergence of creative industries as a significant contributor to the economy and to quality of life in the Goldfields-Esperance region. The following information has been compiled by WSP | Parsons Brinckerhoff in consultation with the Department of Culture and the Arts (DCA), WA Country Arts (WACA) and the GEDC.

Cultural and creative industries are defined in the Creative Industries Statistical Analysis for Western Australia (November 2013), as follows:

> *"…those areas of practice that turn original individual creativity into social and commercial outcomes. They draw on Western Australia's unique identity to produce new artistic, cultural and aesthetic-functional products and services for local, national and international markets."*

The statistical analysis further categorises these industries into the following 'creative segments:

- Music, visual and performing arts;
- Film, TV and radio;
- Advertising and marketing;
- Architecture and design;
- Software and digital content; and
- Publishing.

In addition, to these specialist categories of creative industries, a significant proportion of creative industry employment is found embedded as specialist positions within other sectors of the economy. According to the above report, employment in the creative industries represents 3.76% of the state's total workforce and 5.29% nationally. Employment in WA's creative industries grew at an average annual rate of 3.2% between 2006 and 2011.

Creative industries are a relatively small but an important emerging sector in Kalgoorlie-Boulder. While information is difficult to disaggregate, information about creative industry activity for the CKB can be considered by looking at the five statistical destination zones of the city in REMPLAN, and viewing six sub-sectors that are considered creative industries by the Australian Bureau of Statistics: Publishing (except Internet and Music Publishing), Broadcasting (except Internet), Motion Picture and Sound Recording, Internet Publishing, Broadcast, Websearch and Data Services, Library and Other Information Services and Heritage, Creative and Performing Arts.

Over the period April 2014-April 2016 the six sectors above, contributed $145 million in local output, $7.49 million in exports and imports of $50.22 million of related creative industry goods and services. Publishing (except Internet and Music Publishing) produced a significant 45% of output, Broadcasting (except Internet) 20%, Motion Picture and Sound Recording 13 %, Internet Publishing, Broadcast, Websearch and Data Services 11%, Heritage, Creative and Performing Arts 9% and Library and Other Information Services 2%.[30]

These industries are an important potential area of growth in Kalgoorlie-Boulder, not only because of prospective employment, diversity and economic outcomes, but because they are seen as a critical component of a vibrant and liveable community. In addition:

- Creativity as an integral component of an innovative and entrepreneurial economy;
- Creative industries are by nature generative and assist to balance the extractive nature of mining;
- They provide particular opportunities for Aboriginal employment and enterprise development;
- Public and community art, visual and performing arts all assist to improve community amenity, wellbeing, inclusiveness and add to the tourism experience; and
- Many creative industries provide services such as marketing, software, design, digital content and architecture which are an important and growing component of the knowledge economy.

Access to high quality education and training in areas such as digital media, broadcasting, printing, design and marketing as well as access to appropriate technologies are important enablers for creative industries if Kalgoorlie-Boulder is to grow these industries and reduce imports from outside the region.

The *Goldfields-Esperance Arts and Culture Framework 2016-2021* (GEACF) was developed by Country Arts WA in partnership with Regional Development Australia Goldfields-Esperance following the success of the National Regional Arts Summit held in Kalgoorlie-Boulder in October 2014. The Framework outlines the key assets and stakeholders in the arts and culture sector in the region. Of particular note for Kalgoorlie-Boulder are:

- The Goldfields Arts Centre is the centrepiece of the cultural scene in the City of Kalgoorlie-Boulder and provides the only multi-functional arts venue in the Goldfields Region. Its features include a 700-seat theatre, function room, ensemble room, dance studio and an A-class art gallery;
- ArtGold is the peak arts organisation in Kalgoorlie-Boulder and services and promotes arts organisations, events and individual artists and craftspeople throughout the region;
- The Heart of Gold Festival is a week-long community Arts and Cultural Festival held each May as a celebration of arts and culture in the Goldfields. It offers a diverse program of performing and visual arts, workshop, exhibitions and theatre to promote and celebrate the local arts identity;
- The Western Australian Museum – Kalgoorlie-Boulder is an excellent asset showcasing the rich history of the eastern Goldfields and the City's mining heritage;
- The Goldfields Repertory Club, the Stage Left Theatre Troupe, the Wongutha Birni Aboriginal Corporation and the Tjuma Pulka Media Aboriginal Corporation provide a valuable local presence dedicated to arts and cultural activities;
- Kalgoorlie-Boulder serves as a major regional centre for a number of thriving arts and cultural enterprises throughout the Western Desert and Ngaanyatjarra lands;
- The "Artful Leadership for Community Building Group," formed following the participation by 15 people in an innovative arts and culture leadership program developed by Country Arts WA and the GEDC, is an important emerging stakeholder in the development of arts and cultural activities in the region.

The *Regional Arts and Cultural Action Plan 2014-2018* (RACAP) developed by the DCA is based on the premise that access to arts and culture, increases the amenity of regional towns and improves the quality of life for regional communities. The Action Plan supports activities and strategies in WA's nine regions that contribute to the outcome areas of 'Creative People, Environments, Communities and Economies'.

The RACAP seeks to encourage regional arts and cultural organisations to build hubs of creative activity, to engage in research and provide ideas that contribute to the creative economy of a region. DCA is keen to partner with key organisations to provide advice to and support for the development of creative industries in Kalgoorlie-Boulder.

The GEACF provides a number of priorities and goals identified by the arts and culture sector for further development in the region. Key among these priorities is a focus on leadership and skills training, the need for a central coordinating hub, improved resilience and sustainability, public art, regional tours, cultural exchange, Aboriginal arts and culture, young people and the digital media.

A robust arts and culture sector is a key component of growing creative industries and there is opportunity for further work with local stakeholders within this framework to maximise the economic and social benefits for Kalgoorlie-Boulder from this sector.

WACA has worked with the community to update and operationalise the Arts and Culture Framework and Artgold is being supported to take on the role of the central coordinating hub and act as the custodian for the latest iteration of the Framework. Country Arts WA is working with Artgold to build the organisation's capacity so that Artgold can also assume responsibility for the branding and marketing of a regional arts and culture trail.

The Goldfields-Esperance Arts and Culture Trail is being supported by GEDC and DCA, in recognition of a number of high-quality but dispersed art and cultural sites and events in the region, that would contribute to and benefit from the Trail.[31] The Trail is currently in the development stages and seeks to:

- Identify and aggregate the arts and cultural sites from around the Goldfields-Esperance region;
- Promote and market these destinations in ways that individual people/organisations cannot;
- Complement and extend the existing marketing of visitor experiences and tourism services operating in the region;
- Attract visitors and encourage longer visits to and within the region;
- Contribute to better professional networks in the arts and culture sector; and
- Support the development of the sector, for individuals and groups/organisations.

The Trail has potential to benefit Kalgoorlie-Boulder as the major centre in the region, through increased visitor numbers and reinforces the need for the city to continue to develop its potential in the cultural and creative industries sectors.

While arts and culture is an important and visible component of the creative industry sector, the trends outlined above[32] suggest that areas such as digital media, advertising, marketing and publishing provide significant opportunities for growth and diversity of employment in Kalgoorlie-Boulder.

The RACAP includes a specific action to partner with local authorities and other key regional stakeholders, to progress the development of digital networks and market opportunities for regional artists and creatives. The aim is to improve the skills of professional artists and community arts groups in digital media and to provide access to expertise, to take advantage of new technologies.

It is recommended that the Growth Plan:

- Support the growth of cultural and creative industries as contributors to innovation, economic diversity and social outcomes consistent with the *Goldfields-Esperance Arts and Culture Framework 2016-2021*;
- Considers formalising a local creative industries advocacy group, to work with the Department of Culture and the Arts and Country Arts WA and local stakeholders, to develop a specific creative industry growth strategy;
- Support the further development and resourcing of ArtGold as a regional coordinating hub in cooperation with local artists, arts and cultural organisations and relevant community groups; and to help grow school and community involvement in the creative industries.

3.6 FEDERAL GOVERNMENT OPPORTUNITIES

There are a number of federal government initiatives of direct relevance to the Kalgoorlie-Boulder Growth Plan and that are in a position to support the achievement of the objectives of the RCDP. The following section provides a brief overview of three key Initiatives.

Smart Cities Plan

In September 2015, the Prime Minister announced the development of "liveable, accessible and productive cities" as a national priority for the Federal Government. The *Smart Cities Plan* was launched in April 2016 and outlines the Federal Government's desire to support metropolitan and regional cities in order to build a more innovative and prosperous national economy.

The *Smart Cities Plan* prioritises innovative policy and investment approaches and smart technology to improve accessibility, create more jobs, provide more affordable housing and build healthy living environments. The Plan includes:

- The establishment of an infrastructure financing unit to work closely with the private sector on innovative financing solutions; and
- A $50 million commitment to accelerate planning and development works on major infrastructure projects to develop business cases and investment options.

The Plan promotes strong partnerships with state and territory governments in order to underpin future successful infrastructure projects and to maximise economic benefits for the nation.

The Federal Government is keen to get involved in the early stages of project planning and to work with project proponents such as state and local governments and the private sector on project proposals.

"City Deals" are emerging as a key plank of federal government policy based on the UK City Deals initiative, which has been used to prioritise government investment in UK cities since 2012. Through City Deals, the Federal Government is seeking to deliver more strategic outcomes through coordinated investment that is linked to reforms, incentivised actions and accountabilities at the state and local level.

Part of the Federal Government's agenda is to facilitate the transition from the mining investment boom to a more diversified economy and to prioritise projects that support the growth of cities and which have demonstrable economic benefits. This provides potential opportunities for regional centres such as Kalgoorlie-Boulder to develop cooperative plans for growth and to commit to the actions, investments, reforms and governance needed to implement them.

Three city deals have been announced to date in Townsville, Launceston and Western Sydney.

It is recommended that the final Kalgoorlie-Boulder Growth Plan be forwarded to the Federal Minister for Cities seeking Commonwealth Government support for its implementation consistent with the Smart Cities Agenda.

Industry Innovation and Competitiveness Agenda

The Federal Government's Industry Innovation and Competitiveness Agenda was announced on 14 October 2014. The Agenda is focused on providing economic incentives to enable businesses to grow and to increase global competitiveness.

Key initiatives under the Agenda are:

- Encouraging employee share ownership;
- Reforming the vocational education and training sector;
- Promoting science, technology and mathematics skills in schools;
- Accepting international standards and risk assessments for certain product approvals;
- Enhancing the 457 visa and investor visa programs; and
- Establishing Industry Growth Centres.

Establishing Industry Growth Centres is a key component of the Agenda. These centres seek to encourage collaboration and the commercialisation of new products; enhance management and workforce skills; identify opportunities to reduce regulatory burden; and improve capabilities to engage with international markets and global supply chains.

The Initiative is ongoing with $250 million in Australian Government funding over the four years from 2016/17 to 2019/20. Growth Centres are being established to deliver the Initiative in six industry sectors of competitive strength and strategic priority:

1. Advanced Manufacturing;
2. Cyber Security;
3. Food and Agribusiness;
4. Medical Technologies and Pharmaceuticals;
5. Mining Equipment Technology Services (METS); and
6. Oil, Gas and Energy Resources.

'METS Ignited' is the not-for-profit company responsible for delivering the activities of the Mining Equipment, Technology and Services Growth Centre with the aim of strengthening the competitive advantage of the Australian mining equipment, technology and services industry nationally and globally. METS Ignited has signed a Memorandum of Understanding with the Cooperative Research Centre for Optimising Resource Extraction (CRC ORE) and is seeking to improve commercialisation outcomes for industry-led research.

National Innovation and Science Agenda

In December 2015, the Federal Government announced its "National Innovation and Science Agenda" in order to promote a more innovative economy and to embrace technological change, science and new ideas as a source of growth, competitive advantage and economic prosperity. The National Innovation and Science Agenda has four key pillars:

1. **Culture and capital** – Including new tax breaks to remove bias against businesses that take risks and innovate.
2. **Collaboration** – Including allocating more university funding to encourage research that is done in partnership with industry.
3. **Talent and skills** – Including supporting students to embrace science and the digital age, as well as changing the visa system to attract more entrepreneurial and research talent from overseas.
4. **Government as an exemplar** – Including making data available to the public and making it easier to establish new businesses and for innovative small businesses to do business with the government.

The Agenda includes initiatives worth $1.1 billion over four years including a new $200 million CSIRO Innovation Fund.

The *Innovation and Science Australia Bill* was introduced to Parliament in 1 September 2016 to establish in legislation 'Innovation and Science Australia' – the organisation charged with helping the government implement the *National Innovation and Science Agenda*. Innovation and Science Australia will also work across government, providing guidance around the $10.1 billion investment in 2016/17 in innovation, science and research. It will also directly engage international, business and community sectors to improve the overall performance of the national innovation and science system.

In September 2016, the Federal Government announced a $23 million Incubator Support initiative as part of the *Innovation and Science Agenda.* The *Incubator Support* initiative provides funding to deliver Incubator Support projects, which require matched funding from applicants. There are two components to the Initiative:

1. Support for new and existing incubators:
    - To help develop new incubators in regions or sectors with high potential for success in international trade;
    - To boost the effectiveness of high performing incubators, including funding support to expand their services and/or develop the innovation ecosystem; and
2. The second is support for 'Expert-in-Residence', to provide access to top quality research, managerial and technical talent through secondments of national or international expert advisers who will improve their chance of commercial success in international markets.

It is recommended that information on the opportunities and networks emerging through the Federal Government's Industry Innovation and Competitiveness Agenda; and through the Innovation and Science Agenda, be made readily available to relevant industry, academic, community and government organisations in Kalgoorlie-Boulder.

3.7 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

Benchmarking	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.
Benefit Cost Assessment	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).
Benefit Cost Ratio	An indicator used in Benefit Cost Assessment (BCA) to summarises the value for money of a project or proposal.
Business Case	A document designed to convince a prospective investor, either government of private, of the merits of a business proposition, project or initiative.
Clusters	Geographic concentrations of industry or other business activities that relate to each other or work together.
Comparative Advantage	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.
Competitive Advantage	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.
Economic Growth	An increase in the amount of goods and services produced per head of the population over a specified period of time.
Futures Forum	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.
Gross Regional Product	The market value of all final goods and services produced within a specified area in a given period of time.
Human Capital	The skills, knowledge, and experience possessed by an individual or population, viewed in terms of their value or cost to an organisation or country.

Industry Growth Matrix	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.
Input-Output Analysis	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.
Kalgoorlie-Boulder Economic Zone	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 Statistical Area Level 2 (SA2) boundaries that make up the Goldfields sub-region.
Liveability	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.
Megatrends	Known as significant global forces that may have far-reaching impacts on business, economies, industries, societies and individuals.
Multi-Criteria Analysis	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.
Net Present Value	The sum of discounted flows of costs and revenues over the life of the project. A Net Present Value of zero indicates that a project is covering costs only and there is no profit or loss.
Opportunity Cost	The cost of production measured as the value of alternative production foregone.
Productivity	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.
Program of Action	Sets out what needs to be done to implement a strategy, including responsibilities, timeframes and project management arrangements.

Quality of Life	The standard of health, comfort, and happiness experienced by the community.
Quality of Life Indicator Framework	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.
Regional Centres	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.
Scenario Planning	A process of comparing and assessing alternative future scenarios and uncertainties, to inform future strategies and maximise the prospects of achieving the desired future.
Socio-Economic Development	The process of social and economic development in a society as measured through means such as GDP, life expectancy, literacy and levels of employment.
Theory of Change	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.
Traded Cluster	Groups of related industries that serve markets beyond which they are located and are therefore highly exposed to external competition.
Value Chain	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

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

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

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

FOOTNOTES

1. The MCA is used in complex processes that require screening or prioritisation of different options. An MCA tool was developed by the RCDP Program team for use across the four regional centres. The MCA contains a series of criteria and weightings that help to filter and prioritise a range of initiatives.
2. The MCA did not include the overarching Key Action (0.1) relating to the establishment of the governance and implementation framework.
3. This does not include Key Action 0.1 relating to the establishment of the governance and implementation framework.
4. The Kalgoorlie-Boulder Economic Zone is defined in Part One, as detailed in ACIL Allen (2016) Kalgoorlie-Boulder Growth Plan – Economic Analysis.
5. For a full explanation of the assessment methodology, please refer to ACIL Allen (2016) Kalgoorlie-Boulder Growth Plan - Economic Analysis.
6. ACIL Allen (2016) Kalgoorlie-Boulder Growth Plan - Economic Analysis.
7. Employing small businesses are defined as between 1 and 19 employees, and medium and large businesses are defined as over 20 employees.
8. Refer to Pracsys reports for further information and references.
9. Pracsys (2016) Regional Cluster Analysis Draft Phase 5 Report; and Pracsys (2016) Regional Cluster Analysis Phase 3 Report.
10. Draft RCDP Growth Plan Toolkit V 12.
11. Pracsys attended an all day workshop in Kalgoorlie-Boulder on March 3rd 2016. The Workshop was attended by representatives from various industry groups and key stakeholders.
12. CSIRO (2013) Climate Adaptation in Regional Mining Value Chains – A Case-study of the Goldfields-Esperance Region, Western Australia.
13. AEC Group (2016) Kalgoorlie Scenario Planning.
14. ACIL Allen Consulting (2015) Effect of the Mining Sector on Kalgoorlie-Boulder's Society and Economy.
15. RPS (2016) Kalgoorlie-Boulder Regional Centre Housing Study.
16. ACIL Allen (2016) Kalgoorlie-Boulder Growth Plan – Strategy Development and Economic Projections.
17. ACIL Allen (2016) Kalgoorlie-Boulder Growth Plan – Strategy Development and Economic Projections.
18. The non-resident population refers to those people in Kalgoorlie-Boulder, on Census night, who usually reside elsewhere. This includes tourists and other visitors.
19. ABS 3238.0.55.001 Estimates of Aboriginal and Torres Strait Islander Australians, June 2011.
20. Keogh Bay (2016) Kalgoorlie-Boulder Aboriginal Economic Development Strategy.
21. (ABS 2013, CAT 4727.0.55.001).
22. The historical narrative pre-dates the tragic events of 30 August 2016.
23. 'Hard Infrastructure' was defined by Hames Sharley as including capital works or project development / design, requiring budgets and/or external funding or ongoing recurrent funding. 'Soft Infrastructure' includes operational recurrent/organisational resources, council processes and systems requiring change or new approaches, organisational or planning policy development and program implementation.

24. Pracsys (2016) Regional Cluster Analysis Draft Phase 5 Report; and ACIL Allen (2016) Kalgoorlie-Boulder Growth Plan - Economic Analysis.
25. It should be noted that this data is not directly comparable to the economic assessment of the tourism industry provided by ACIL Allen or by Pracsys, due to different definitions of tourism sector industries and different regional applications.
26. It has since been confirmed that negotiations with the CKB have resulted in the inclusion of additional areas previously excluded from the rollout, including West Kalgoorlie.
27. Painted Dog (2016) Regional Migration and Perceptions Analysis; and Department for Regional Development.
28. See also discussion on communications in Cardno (2016) Greater Kalgoorlie-Boulder Infrastructure Capacity Assessment.
29. See also ACIL Allen (2016) Kalgoorlie-Boulder Growth Plan – Strategy Development and Economic Projections.
30. Retrieved from http://www.remplanlogin.com.au/Economy/.
31. Goldfields-Esperance Arts and Culture Trail (2015) Tracker Development.
32. Department of Culture and the Arts (2013) Creative Industries Statistical Analysis for Western Australia.

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/.
- 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/imarine/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.