



Central East Sub-Regional Economic Strategy

Prepared by RPS in collaboration with the Wheatbelt Development Commission
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Valuable support and input to the project was provided by the Central East Local Governments including:

- Shire of Bruce Rock;
- Shire of Kellerberrin;
- Shire of Koorda (Avon);
- Shire of Merredin;
- Shire of Mount Marshall;
- Shire of Mukinbudin;
- Shire of Narembeen;
- Shire of Nungarin;
- Shire of Trayning;
- Shire of Westonia; and
- Shire of Yilgarn.

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Summary

The Central East Sub-region represents the heart of dryland broadacre grain production in the Wheatbelt. Home to 10,345 people in 2011, the Central East is the largest sub-region in the Wheatbelt by land area. Its population is primarily concentrated in the major townships of Merredin, Southern Cross and Kellerberrin, which act as service centres for the Sub-regional economy. The key findings of this Strategy, developed collaboratively by RPS and the Wheatbelt Development Commission and in consultation with the Central East Shires, are outlined on the following page.



The core competitiveness and strengths of the Central East economy in agriculture and food production have been increasingly complemented in recent years by emerging mining and support services sectors. This increase in economic diversity and dynamism, and the Sub-region's strategic location adjacent the Goldfields region, present considerable opportunities for major growth in local economic activity and prosperity.

This Sub-regional Economic Strategy for the Central East provides economic analysis and evidence based guidance to assist in investment and decision making. It can therefore make a major contribution to sub-regional and whole-of-region planning. This Strategy also establishes a framework for the promotion and facilitation of economic and population growth across all Local Government Authorities (LGAs) of the Central East.

CENTRAL EAST SUB-REGIONAL ECONOMIC STRATEGY

THE WHEATBELT'S GATEWAY ECONOMY



CENTRAL EAST AND THE WORLD

The Central East is at the heart of regional Western Australia and is the Wheatbelt's Gateway to the Goldfields. The sub-region has historically had an export-based agricultural economy, characterised by extensive coarse grain production. However, the emergence of mining activity, particularly in Yilgarn and Westonia, is changing local economic dynamics. This has the potential to help stabilise the Central East population and support future growth.



GLOBAL FOOD DEMAND



MINING SUPPLY CHAINS



POPULATION AGEING

ECONOMIC PROFILE



POPULATION GROWTH

The Central East Sub-Region has experienced moderate population decline over the past decade. Despite projections for further population losses, the sub-region has the economic capacity to stabilise and grow over the next 20 years.



AGRICULTURAL PRODUCTION

Broadacre grain production is the foundation of the Central East economy. Sub-Regional coarse grain product averages 1.6 millions tonnes but is highly volatile. This reflects sub-region's low rainfall and hot dry summers. Bruce Rock is the primary concentration of agriculture activity, though Narnbeen and Mount Marshall are also strong. Below average per hectare yields are offset in the sub-region by large land holdings. Livestock production is the next largest agricultural sector comprised of disposals and the wool.



STRATEGIC LOCATION

The Central East is strategically located adjacent the Goldfields Esperance region. This provides the sub-region with strong connections to the Goldfields economy, with many local businesses trading into the Goldfields.

Similarly, the sub-region is located on a major "Grey Nomad" travel route through to Kalgoorlie, with many Central East communities benefiting from both passing day-trip and overnight experiential visitation.



MINING ACTIVITY

Yilgarn is the centre of mining activity in the Central East Sub-Region, though Westonia is also home to Gold mining. Gold and iron ore are the most common commodities, with Southern Cross located in the southern part of the broader Yilgarn Iron Province. Despite the relatively new nature of mining activity in the sub-region, strong growth in production since 2007/08 has seen the value of product exceed \$1.6b in 2011/12, the vast majority of which is generated in Yilgarn. The development of mining activity in the sub-region provides a diverse range of supply chain opportunities in transport, logistics, training and equipment maintenance as well as direct and indirect employment opportunities.

KEY ECONOMIC OPPORTUNITIES FOR THE CENTRAL EAST ECONOMY



BROADACRE AGRICULTURE

Agriculture will remain a core industry of the Central East economy. However, the hot dry climate and below average rainfall will continue to impact production, which could be impacted further by climate change. Supporting R&D in dryland grain farming and promoting niche and novel products will be key to the sub-region's agricultural future.



MINING AND SUPPORT SERVICES

The medium and long-term potential of the Yilgarn Iron Province and sub-regional gold mining presents an opportunity to underpin economic activity in the Central East. However, maximising the benefit will require the growth and integration of local businesses into key supply chains, servicing sub-region and wider mining activity.



POPULATION SERVICES

The effective and innovative delivery of services to residents, including education, training, health and other community services is critical to retaining and growing the Central East population. Higher quality service offering can also help attract and support tourists and visitors to the sub-region, helping sustain and grow the sub-region's tourism sector.

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1.0 Introduction

1.1 Background

The Central East Sub-region (the Central East) covers an expansive area in central Western Australia, bordering the Midwest and Goldfields Esperance regions. It is home to a large number of small communities supported by agriculture and mining sectors.

The Wheatbelt Development Commission sees merit in researching regional centres and their sub-regions in context to each other, highlighting how the Central East functions as a distinct economic unit. Detailed investigation at the sub-regional level is fundamental given the spatially-dispersed population and industry profile of the Wheatbelt.

This Sub-regional plan is prepared by the Wheatbelt Development Commission and RPS for the Central East. It will provide regional context and strategic planning to support economic and population growth in the sub-region.

The findings in the sub-regional economic strategies undertaken in the Wheatbelt contribute to the inaugural Regional Blueprint Investment Plan, prepared by Wheatbelt Development Commission in 2014. The Blueprint Investment Plan outlines strategies, along with areas for intervention and investment that will drive growth in the Wheatbelt.

1.2 Project Purpose

RPS has been engaged by the Wheatbelt Development Commission to prepare this Sub-regional Economic Strategy for the Central East. This Strategy provides economic analysis and evidence based guidance to assist in investment and decision making and will therefore make a major contribution to sub-regional and whole-of-region planning. This Strategy also establishes a framework for the promotion and facilitation of economic and population growth across all LGAs in the Sub-region.

1.3 Central East Sub-Region

For the purpose of this Strategy, the Central East Sub-region includes the following Local Government Areas:

- Bruce Rock;
- Kellerberrin;
- Koorda (Avon);
- Merredin;
- Mount Marshall;
- Mukinbudin;
- Narembeen;
- Nungarin;
- Trayning;
- Westonia; and
- Yilgarn.

This is illustrated in Figure 1.

Koorda, which is officially part of the Avon Sub-region, has been included in this analysis in response to the recommendation of the Avon Sub-regional Economic Strategy. This reflects the economic, social and environmental similarities of Koorda to the Local Government Areas of the Central East and that Koorda in effect functions as part of the Central East economic area.



Figure 1 Sub-Regions and LGAs, Wheatbelt¹

1.4 Strategy Structure

This Strategy is comprised of the following key sections:

- **Future Central East** – an overview of key global and national macro-economic drivers relevant to the Central East Sub-region;
- **Profile of the Central East Economy** – detailed profile of the Central East Sub-regional economy including population and socio-demographics, labour force and skills, employment and industry, housing and affordability, and community services and facilities. Analysis covers each LGA and the broader sub-region;
- **Key Economic Opportunities** – identification and summary of key economic opportunities for the sub-region including rationale, drivers and trends, and sub-regional characteristics; and
- **Opportunity Network Analysis** – identification and analysis of the distribution of economic competitive advantages and opportunities across towns and LGAs in the Central East.

¹ WDC (2012), Provided by Wheatbelt Development Commission.

In addition, concise Local Government profiles, distilling the results of the Strategy for each local area have been developed and included in Appendix A.

The Strategy's structure is illustrated in the following diagram.

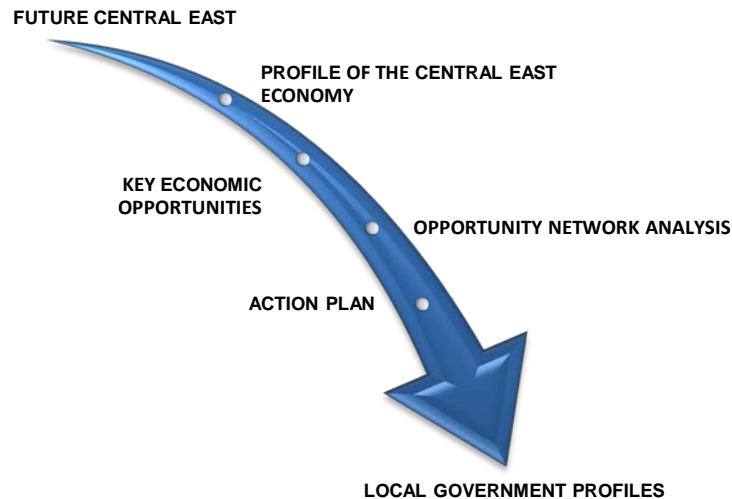


Figure 2 Economic Strategy Structure

This structure ensures the flexibility of the Strategy, recognising the various roles and audiences of the document. These include:

- Providing an overall strategy for the economic development of the sub-region;
- Informing sub-regional and regional land use and strategic planning activities;
- Providing an evidence base for investment prospectuses and funding business cases;
- Providing content for marketing and branding material for the sub-region; and
- Informing and guiding all levels of Government in major investment and expenditure decisions.

To meet the requirements of these various audiences, this Strategy has been structured to allow key sections and analysis to be read and utilised independently of the broader document.

1.5 Approach

This Sub-regional Economic Strategy has been developed by RPS in partnership with the Wheatbelt Development Commission. This project has applied the principles of “collaborative consulting” where the project client is actively involved in the development of the report including data collection, strategic overview and stakeholder consultation tasks.

This approach is highly advantageous for a number of reasons:

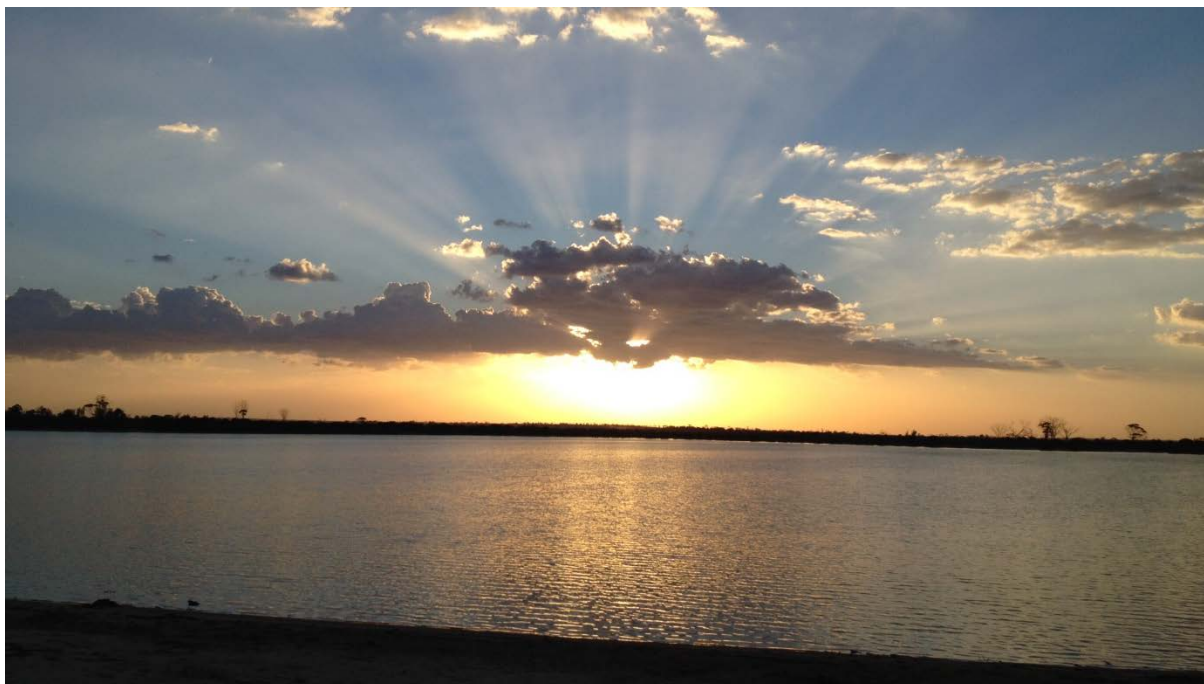
- Draws upon the Wheatbelt Development Commission’s existing resources to support data collection and consultation tasks;
- Allows the Wheatbelt Development Commission’s unique understanding of the region to be incorporated into the Strategy;
- Ensures value for money for the client by allowing RPS to concentrate on more detailed modelling

and strategic analysis tasks; and

- Enables strategic and objective analysis to be undertaken by RPS, ensuring the Strategy's evidence base is rigorous and suitable to inform investment decision and funding business cases.

1.6 Glossary and Abbreviations

Term/Abbreviation	Definition
ABS	Australian Bureau of Statistics
ABARES	Australian Bureau of Agricultural and Resource Economics and Services
BREE	Bureau of Resource and Energy Economics
BOM	Bureau of Meteorology
DIDO	Drive in, drive out – the commute of the mining sectors workforce by road.
FIFO	Fly in, fly out – the commute of the mining sectors workforce by air.
GFC	Global Financial Crisis
GRP	Gross Regional Product
g/t	Grams per tonne
LGA	Local Government Area
Median Multiple	Ratio measure of housing affordability. Represents the number of years of median household income required to equate to median house prices in an area.
MPS	Multipurpose Service (Health)
Mt, Mtpa	Million Tonnes Per Annum
RBA	Reserve Bank of Australia
Separation	An episode of care for an admitted patient, which can be a total hospital stay (from admission to discharge, transfer or death), or a portion of a hospital stay beginning or ending in a change of type of care (for example, from acute to rehabilitation)
T/Ha	Tonnes per Hectare
WAPC	Western Australian Planning Commission
WDC	Wheatbelt Development Commission



2.0 Future Central East

The Central East Sub-region of Western Australia is home to 10,345 people in 2011², or some 2% of Western Australia's non-metropolitan population. It is primarily characterised as an agricultural Sub-region with a large number of small towns and communities. The Central East's sustainability and prosperity in the future will be increasingly dependent on its connections with the global economy and leveraging its natural advantages in a competitive environment.

2.1 Global Food Demand & Climate Change

Agriculture is the foundation industry of the Central East and broader Wheatbelt region. The Sub-region includes 3,951,989 hectares of agricultural land in 2010/11 or some 4.0% of holdings in WA³. Despite this, in 2013/14, the Central East produced over 2.15 million tonnes of coarse grains – accounting for more than one eighth (13.7%) of total State grain production. This reflects the comparatively large land holdings of Central East, offsetting lower per hectare yields.

Global food demand has increased in recent years in response to accelerating population growth and growing incomes in developing countries⁴. This has led to a spike in food prices over the past 10 years following decades of real price declines in response to technology and land management-based productivity increases⁵. This productivity increase is evident in WA's long term trend of wheat production (tonnes per hectare). This is illustrated in the following figure.

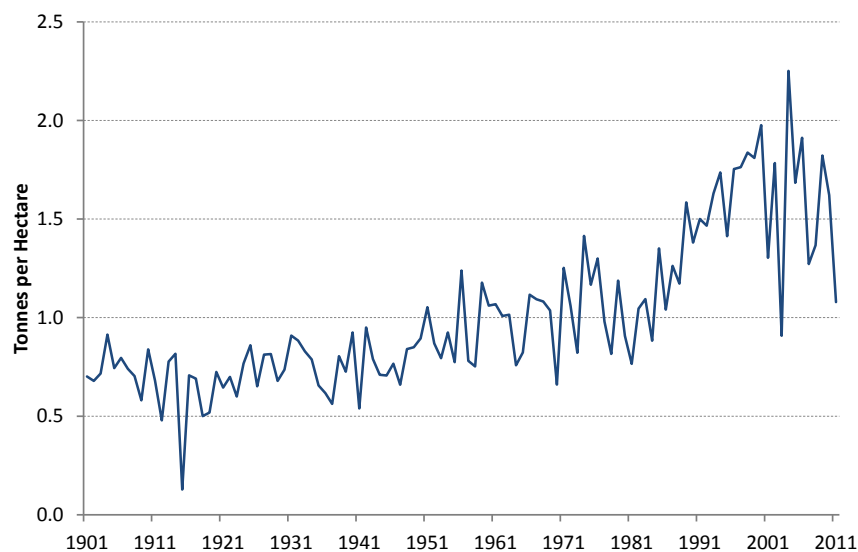


Figure 3 Production per Hectare, Wheat, WA⁶

Australia is the fifth largest exporter of wheat in the world⁷ and Western Australia accounts for approximately 18% of national production⁸. Australia's competitive advantage in both broadacre crops

² ABS (2012), Estimated Residential Population, Cat No 3218.0, Australian Bureau of Statistics, Canberra

³ ABS (2012) Agricultural Commodities, Small Area Data Cat No 7125.0, Australian Bureau of Statistics, Canberra.

⁴ RBA (2011), Bulletin March 2011, Reserve Bank of Australia, Melbourne

⁵ FOA (2012), OECD – FAO Agricultural Outlook 2012-2021, Food and Agricultural Organisation, Rome Italy

⁶ ABS (2012), Historical Selected Agricultural Commodities, Cat No 7124.0, Australian Bureau of Statistics, Canberra

and horticulture production positions sub-regions like the Central East well to reap the reward of structural uplifts in global agricultural commodity prices.

While livestock is currently run as a relatively small proportion of the broadacre agricultural enterprises in the Central East, there is the opportunity for further expansion of livestock production. Sheep numbers were at their highest in the Central East during 2004-05 at 2,113,837, from which numbers declined through to 2009-10. Sheep numbers have increased since this period and now represent almost 8% of the States flock. The trend from 2002-03 to 2012-13 indicates that this proportion is consistently high, varying between 7% and 8.3% of the State's total sheep numbers reflecting changes in seasonal and market conditions⁹.

This provides an opportunity to build resilience into the farm business enterprise through livestock production in areas where the return on investment in livestock production is greater than that of broadacre agricultural production. The expansion of the livestock industry (sheep, wool) will be dependent on market conditions, access to markets, marketing, infrastructure, access to labour and pasture establishment. Underpinning any growth in the livestock industry will require the investment in upgrades to the State Barrier Fence to be completed to allow for greater stocking densities, and for some, the re-introduction of livestock into their farm enterprise.

Agricultural production globally is expected to be significantly impacted by changes in global climatic conditions in the future. Analysis by the Australian Government indicates that south-west WA is likely to experience yield reductions in wheat in the long-term with other locations, particularly those in the dry margins expected to experience strong warming and significant reductions in rainfall¹⁰. Projections indicate that wheat production in WA could decline by 8.9% by 2030 and 13.4% by 2050, with similar declines for sheep meat. Regional centres and economies dependent on agriculture may be adversely impacted. For this reason the development of innovation and technology to reduce or mitigate the impacts of seasonal variations and climate change on production is integral for the agricultural industry's future. While seasonal variations in broadacre agricultural production occur from year to year, it is important for the industry to develop strategies to mitigate the impacts of medium-long term climate change.

This combination of accelerating global food demand and agricultural production threatened by climate change will define the agricultural sector over the next 50 years.

2.2 Mining & Support Services

The global economy continues to recover from the GFC, despite broader imbalances and underlying volatility in the short-term. This is expected to underpin continued structural demand for resource commodities and related services. The transformation of the Asian region into the economic powerhouse of the world is now an established trend, with Australia set to benefit from Asia's appetite for raw materials and energy in the medium and long-term¹¹.

⁷ ABARES (2013), Agricultural Commodities Statistics, March 2013, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra.

⁸ ABS (2012), Historical Selected Agricultural Commodities, Cat No 7124.0, Australian Bureau of Statistics, Canberra.

⁹ DAFWA (2013), Unpublished Data, Western Australian Government, Perth

¹⁰ Australian Government (2013), Climate Change Impacts in Australia – WA accessed at <http://www.climatechange.gov.au/climate-change/climate-science/climate-change-impacts/western-australia> on 12 November 2013

¹¹ Australian Government (2012), Australia In The Asian Century, Canberra

While iron ore and gold has historically dominated Western Australia's resource development profile, this has diversified in recent years, to include offshore LNG, mineral sands, rare earths and construction-related materials. The number of committed projects reflects Western Australia's diverse resource base and the increased resource demand as part of increasingly complex technological and manufacturing processes. The emergence of mining activity in the Central East has seen the mining industry overtake agriculture in terms of local value add¹². Similarly the proximity of the Sub-region to the major mining area of the Goldfields, presents significant opportunities to capture investment in machinery and equipment operations, services and labour force supply chains.

2.3 Population Ageing

Australia's population is ageing. Over the next thirty years the share of the population aged 65 and over is expected to increase from 12.5% in 2010 to over 20% in 2040¹³. This is illustrated in the figure below.

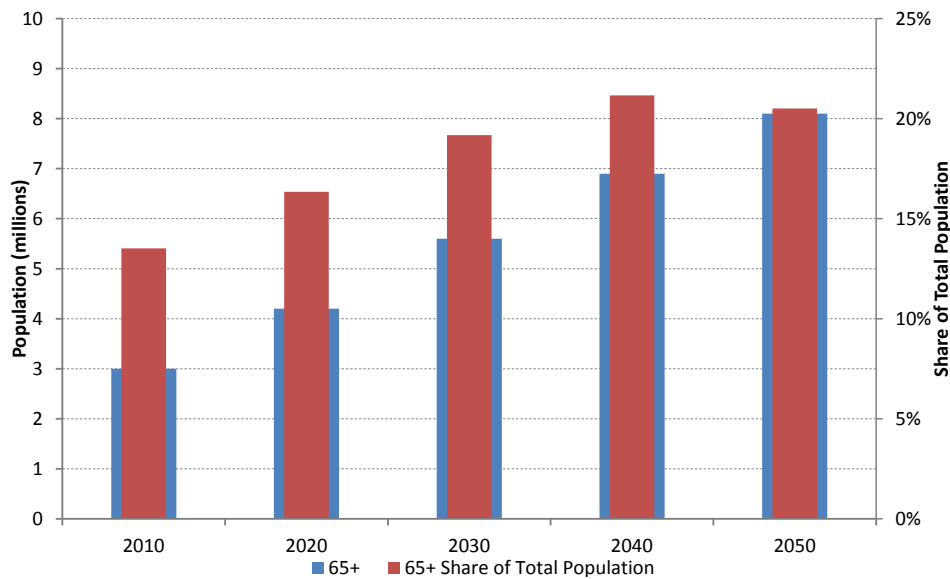


Figure 4 Share of Population aged 65+, Australia

This trend is common across the Western World, with countries such as Japan and Italy experiencing rapid ageing. This ageing is driving changes in Australia's economy with health care and social assistance overtaking retail in 2011 and again in 2014 as the largest employing industry Western Australia.

¹² DSD (2013) Gross Value Added – by Industry, WA State Government, Perth

¹³ IGR (2010) Intergenerational Report 2010, Australian Government, Canberra

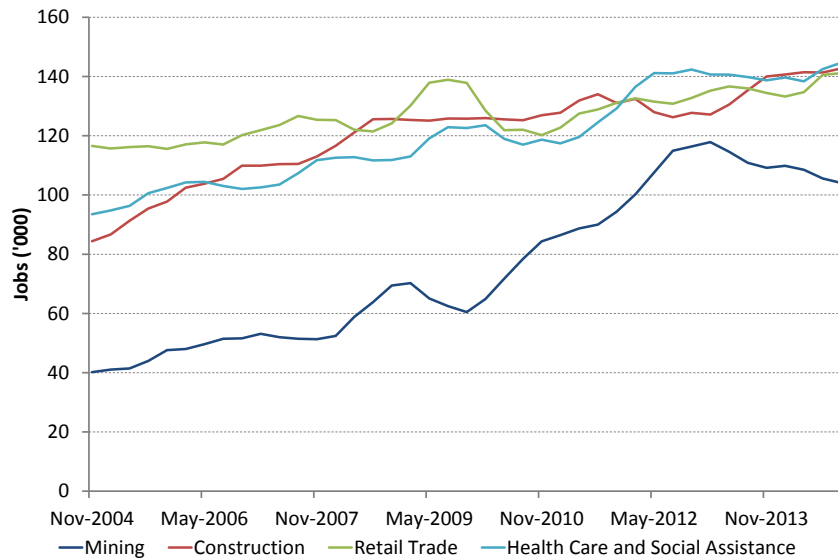


Figure 5 Employment by Industry, Western Australia, 2003-2014¹⁴

This structural change reflects increased demand for health care, due to the ageing of the population. However, health care is not readily accessible to all Australians with rural and regional communities suffering from a deficit in health related services. This is further exacerbated by the fact that regional Australia is ageing at a faster rate than the broader population. Initiatives including increased adoption of telehealth and decentralised health care provision models are seeking to address this deficit. This is expected to underpin growth of health care employment and activity in rural communities in regions such as the Wheatbelt.



¹⁴ ABS (2013), Labour Force, Australia, Detailed, Quarterly, Cat No 6291.0.55.003, Australian Bureau of Statistics, Canberra

3.0 Profile of the Central East Economy

3.1 Population and Socio-Demographics

The Central East Sub-region was home to 10,345 people in 2011¹⁵. This population is primarily concentrated in the major townships of Merredin, Southern Cross and Kellerberrin; the Local Government Areas (LGAs) of which collectively account for almost two in every three Central East residents.

The Central East has experienced a moderate population decline over the past decade, averaging a 1.2% decrease per annum compared to growth of 2.2% for Western Australia as a whole. The WA Tomorrow Population Estimates from the Western Australian Planning Commission project that this trend will continue, with another 1,125 residents projected to leave the Central East by 2021¹⁶.

However, this represents trend analysis, based on historical factors, and does not take into consideration changing economic drivers and conditions of the sub-region and its relationship with the broader national and global economies. Instead, an aspirational population of 12,500 by 2031 is targeted for the Sub-region, representing a stabilisation and growth of local residents. This is illustrated in the following figure.

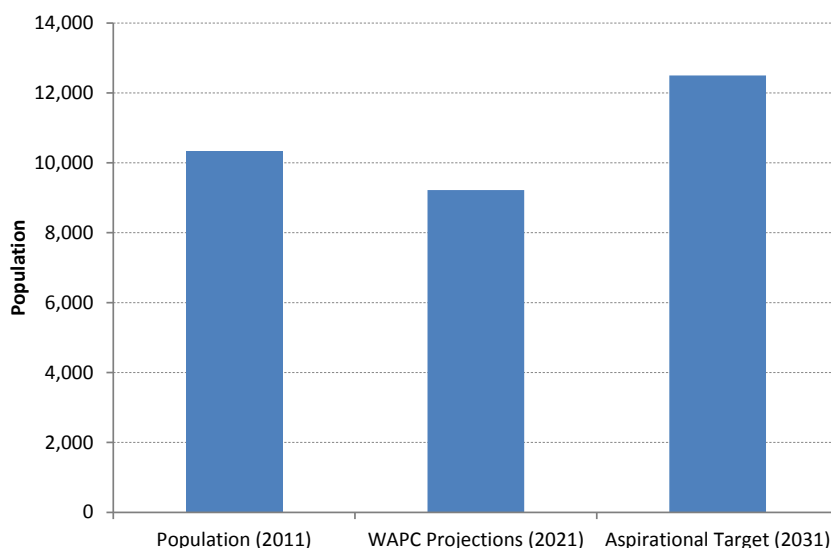


Figure 6 Current and Future Residential Population

This aspirational growth target reflects the recent transformation of the Central East economy with the establishment of mining activity. The mineral wealth of the Central East is expected to underpin long-term mining investment and operations which will support the retention and growth of the sub-region's residential population.

The population of the Central East is expected to age rapidly over the next decade. This reflects the fact that the sub-region and associated population centres already possess a comparatively older

¹⁵ ABS (2012) Estimated Residential Population, Cat Not 3218.0, Australian Bureau of Statistics, Canberra

¹⁶ WAPC (2012), WA Tomorrow Population Projections (Band C), Western Australian Planning Commission, Perth

population profile than State averages. According to the results of the 2011 Census of Population and Housing, the residential populations of all LGAs in the Central East have higher proportions of people aged 65+ (14.9%) than the State Average (12.3%). Towns such as Trayning (22.7%) and Kellerberrin (20.7%) have more than one fifth of their current populations aged 65 and over¹⁷.

3.2 Labour Force and Skills

A significant driver of current and future residential population growth in the Central East will be the increasingly constrained nature of local labour markets. In 2011, the Sub-region had an average annual unemployment rate of 3.7%, below the comparative State average of 4.7%¹⁸. This is illustrated in the following figure.

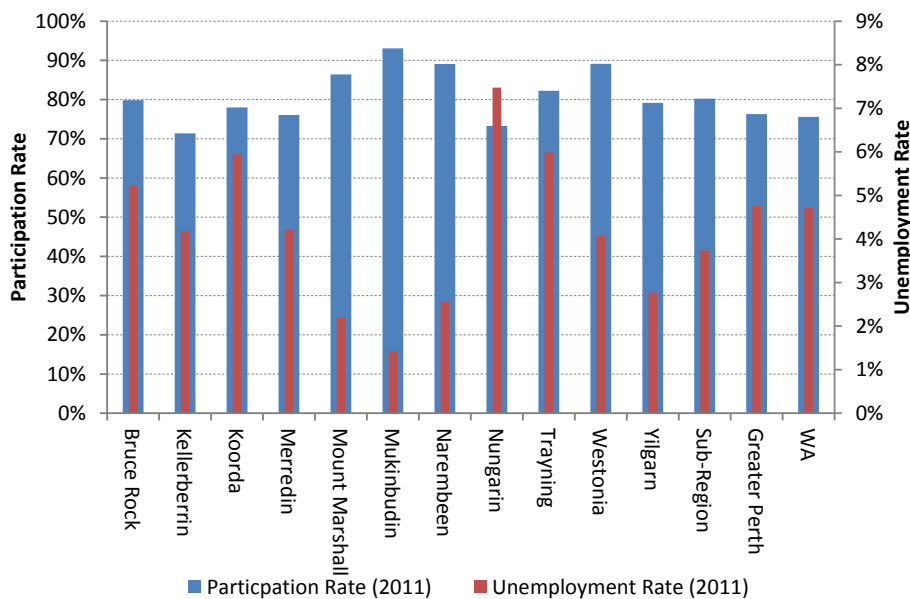


Figure 7 Unemployment and Participation Rate, Central East Sub-Region LGAs, 2011

Unemployment rates vary considerably across the Central East. This reflects differences in the economic and social structures of individual communities and their role and function in the broader sub-region. Mukinbudin, Mount Marshall, Narembeen and Yilgarn all have very low unemployment rates and moderate to higher participation rates. This reflects the predominantly agricultural nature of these locations, where employment opportunities are linked to farming activities. In contrast, Nungarin, Trayning and Koorda all have higher unemployment rates, exceeding the State averages in 2011. These towns are characterised by lower levels of resident mobility with residents less likely and able to migrate away for employment opportunities.

The low unemployment rate environment in the Central East has supported a labour force participation rate that is higher (80.3%) than the State average (75.6%). Labour force participation rate is the share of the population aged 15 and over actively participating in the workforce (either employed or unemployed). A number of towns have rates above 70%, which is a common characteristic among smaller, agricultural communities. With a low unemployment rate and solid

¹⁷ ABS (2012), Census of Population and Housing, 2011, Australian Bureau of Statistics, Canberra

¹⁸ ABS (2012) Census of Population and Housing, 2011, Australian Bureau of Statistics, Canberra

participation rate, any major employment growth in the Central East in the future will need to be accommodated by migration and population growth.

3.3 Employment, Industry and Investment

The Central East Sub-region had a Gross Regional Product¹⁹ in 2012/13 of approximately \$1.32 billion²⁰. The economy has experienced rapid growth in recent years on the back of mining activity, which is generating considerable industry value add to the economy. Other major drivers of economic activity include construction, agriculture and transport, which collectively account for a further 22% of the local economy. The economic structure of the Central East differs to the traditional understanding of the sub-region's economy, which is illustrated in the figure below.

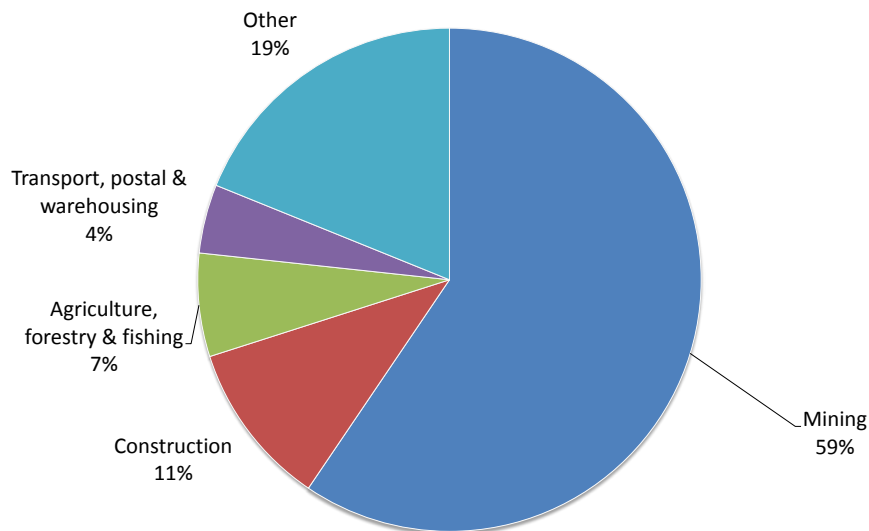


Figure 8 Share of Industry Value Add²¹, Central East Sub-Region, 2012/13

This economic activity has underpinned local employment and business activity. In 2011, there were 5,259 jobs in the Central East, representing an employment self-sufficiency rate of 107%²². This high employment self-sufficiency rate indicates that there are more jobs in the Central East than the local workforce meaning labour is being sourced external to the Sub-region. This is typically seen in mining regions where FIFO or DIDO workforces are utilised and reflects the growing mining activity in the sub-region. Employment in the Central East is highly concentrated with approximately 29% located in Merredin and a further 27% in Yilgarn. This concentration of employment mirrors the distribution of the population in the Central East.

¹⁹ Gross Regional Product is the value of the economic activity produced in the region, discounting for inputs produced in other regions. It aligns with measures such as Gross State Product and Gross Domestic Product for States and Territories.

²⁰ RPS (2013), RPS Economics Gross Regional Product Model, RPS, Gold Coast

²¹ Industry value added is the primary component of Gross Regional Product, excluding only the Ownership of Dwellings, Taxes and Subsidies and Statistical Discrepancies. It represents the component of GRP associated with production and value added by businesses and industries within the economy excluding inputs to product imported from other regions. Refer to Appendix B for the Industry breakdown of Value Add in the Central East economy.

²² ABS (2007), Census of Population and Housing 2006, Australian Bureau of Statistics, Canberra
Employment self-sufficiency rate refers to the ratio of local jobs to local workers.

The number of business registrations has remained mostly stable between 2009 and 2012 (decreasing slightly by 5.2%). Despite being a period of global economic downturn, most businesses in the Central East remained resilient and continued to operate at pre GFC levels. This is illustrated in Figure 9.

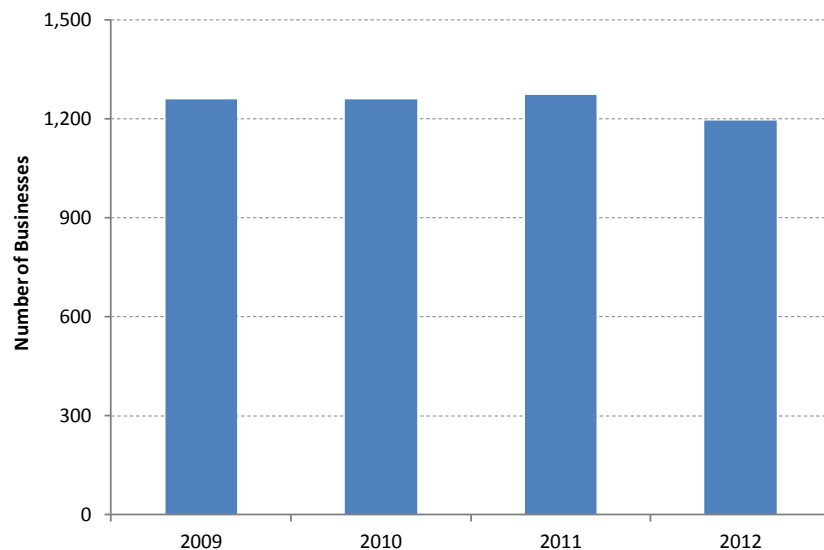


Figure 9 Share of Locally Registered Businesses, Central East Sub-Region LGAs, 2009 to 2012

Note that this data covers locally registered businesses only. Major mining and other national registered businesses located in the Central East are not captured as part of this data.

A review of small business numbers in the Central East reveals a concentration of business creation in Merredin, with 450 small businesses in 2012. This is followed by Yilgarn with 260. However, when adjusted for population size, Koorda has the highest rate of small business formation with 180 small businesses per 1,000 residents, just ahead of Nungarin at 171. In contrast, Merredin had only 136 businesses, though this remains above the whole of Wheatbelt (134 businesses per 1,000 residents) and Perth (85 businesses) averages. This is outlined in the table below.

Table 1 Small Business Population and Rate, Central East LGAs, 2012²³

LGAs	Small Business Population	Small Businesses per 1,000 Residents
Bruce Rock	130	134
Kellerberrin	150	123
Koorda	80	180
Merredin	450	136
Mount Marshall	80	165
Mukinbudin	80	158
Narembeen	110	135
Nungarin	40	171
Trayning	60	170

²³ ABS (2013), Count of Businesses, Cat No 8165.0, Australian Bureau of Statistics, Canberra and ABS (2013) Estimated Residential Population, Cat No 3218.0, Australian Bureau of Statistics, Canberra

LGAs	Small Business Population	Small Businesses per 1,000 Residents
Westonia	40	143
Yilgarn	260	157
Central East	1480	144

3.4 Housing and Affordability

The Central East housing market is comprised of almost 5,100 dwellings, of which approximately 73.8% are occupied²⁴. This would suggest that the Sub-regional housing stock has excess capacity. However, consultation with stakeholders indicates that a number of these unoccupied dwellings, at the time of the Census in 2011, were no longer vacant. Similarly, stakeholders also indicated that many of the unoccupied dwellings were vacant due to housing quality issues and that the ability for new and existing residents to secure quality housing options is limited. The current housing stock is predominantly comprised of detached housing, which accounted for 98.8% in 2011.

Over the past five years, the Central East Sub-region and the broader Western Australian housing market has experienced price volatility due to the impact of the global financial crisis (GFC). This has resulted in depressed levels of consumer confidence affecting median house prices and price growth. While there has been volatility in the Central East housing market, the Sub-region's median house price has increased from \$86,000 in 2006 to \$150,000 in 2012²⁵. This is illustrated in the figure below.

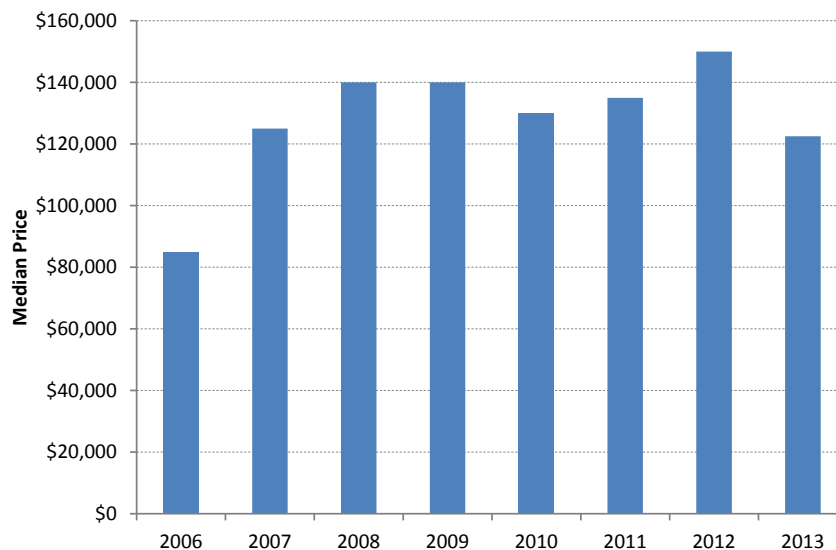


Figure 10 Median House Prices, Central East Sub-Region, 2006 and 2013

Individual median house price figures and growth for each of the Central East's LGA's to 2012 can be reviewed within Appendix C. The small size of the real estate market within some LGA's may impact the median house price which is dependent on sales recorded during the period. Despite this, many LGAs experienced positive price growth over the 6 years with Yilgarn, Bruce Rock, and Mount Marshall experiencing the strongest growth.

²⁴ ABS (2012), Census of Population and Housing 2011, Australian Bureau of Statistics, Canberra

²⁵ RPData (2012), Online Data Subscription, RPData, Brisbane

Price growth is generally regarded as positive as it contributes to the wealth and affluence of a region. However, for the Central East, maintaining affordable housing options is critical to underpinning employment and lifestyle based migration required to increase local population critical mass. A simple and effective measure of whole-of-market affordability is the Median Multiple – the ratio of median house prices to median household income²⁶. In other words, the Median Multiple illustrates the number of years of household income required to equal current prices. This approach is effective as it allows for differences in local income levels within a region – like the Central East – to be considered, ensuring that variations in purchasing power and relative affordability are determined.

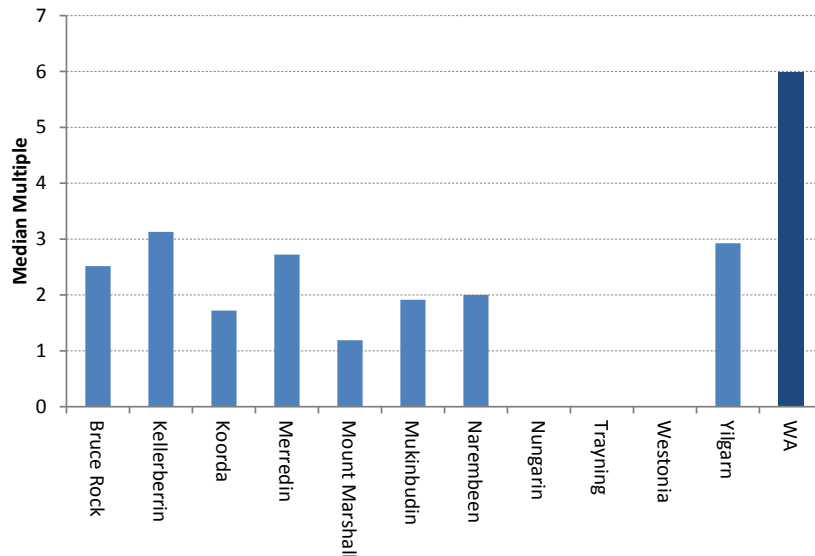


Figure 11 Median Multiples, Central East Sub-Region, 2011²⁷

RPS calculated the Median Multiple for LGA's with available datasets in the Central East and found their Median Multiple to be less than the WA average of 6.0. This reflects the fact that while house prices are relatively low by State standards, local household incomes are more favourable, meaning local buyers have relatively greater purchasing power in the market. Note that the current State average is regarded as seriously unaffordable by international standards, with the Reserve Bank of Australia considering a ratio of 4.0 to 4.5 affordable in Australia. Due to the lack of property sales statistics for the 2011 period, the Shire's of Nungarin, Trayning and Westonia lack median multiple calculations for comparison against other Central East LGA's.

Kellerberrin and Yilgarn had the highest median multiples in 2011, at or just below 3.0. This is significantly higher than the Shires of Mount Marshall and Koorda, but is almost half the WA average in 2011. The growth of mining activity, and associated employment generation is expected to place increased pressure on certain towns and Shires in the region, which will likely see affordability worsen. Managing and maintaining affordability in the Central East is critical to stabilising and accelerating the population growth needed to underpin local economic prosperity.

²⁶ Demographia (2013), International Affordable Housing Report 2013, Demgraphia, USA

²⁷ Note that data was not available in the 2006 and 2011 for a number of Local Government Areas. This reflects the small size of these markets and the lack of critical mass of sales for median house prices to be calculated.

3.5 Community Services and Facilities

The residential population in the Central East has and will continue to underpin demand for community services and facilities in the Sub-region. This includes, but is not limited to:

- Child Care Services;
- Primary, Secondary and Tertiary Education;
- Community Resource Centres and Libraries;
- Aged Care and Retirement Villages; and
- Hospitals and Health Services.

The current offering and drivers of these community services and facilities are examined below.

3.5.1 Child Care

The provision of childcare and flexibility in delivery to suit rural areas is a critical component of service delivery for the Central East. As outlined in Section 3.2 the Central East labour market is constrained. Access to childcare allows greater parent participation in the workforce as well as offering early learning opportunities for children and boosting human capital.

Fertility rate data is an effective leading indicator of the level of demand for child care services. In 2010, almost all towns in the Central East had fertility rates above replacement levels (2.1 children) and were mostly well above the average for Greater Perth (1.8²⁸). Interestingly, the fertility rates of the various towns varied quite significantly – Narembeen and Yilgarn – are among the lowest for the sub-region. In contrast, Koorda, Trayning and Mukinbudin have the highest fertility rates, with Trayning more than doubling that of Narembeen and Yilgarn, approaching 4.5. At over 6, Koorda's rate is one of the highest in the State and has been steadily climbing in recent years. This is illustrated in the figure below.

²⁸ ABS (2012), Births Australia, Cat No 3301.0, Australian Bureau of Statistics, Canberra

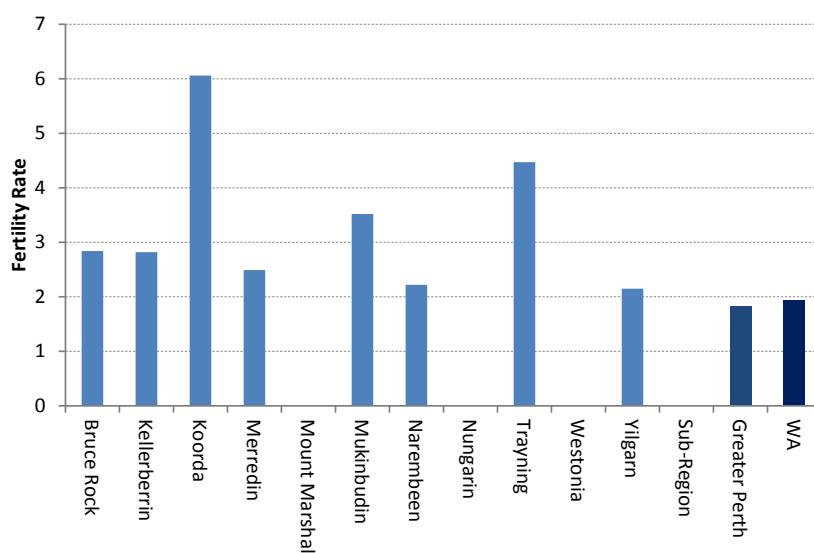


Figure 12 Fertility Rate, Central East Sub-Region and Greater Perth, 2011

This high fertility rate, coupled with low unemployment and strong labour force participation, will generate demand for child care services. There are currently 5 Child Care centres in the Central East Sub-region and 3 family day care operations:

- Long Day Care (Centre Based Care)
 - » Bruce Rock, Merredin
- Occasional Care (Flexible Centre Based Care)
 - » Mukinbudin, Narembeen and Southern Cross
- Family Day Care (Individual Home Based Care)
 - » Merredin, Bencubbin and Mukinbudin

Fertility rates are calculated year by year, and then averaged over three years to the year of the current release. When raw data numbers fall below 3 data is suppressed to protect individuals identities. This is the case for the Shire's of Mount Marshall, Nungarin and Westonia in 2011. As the fertility rate is a ratio of births to population, low population sizes can produce large variations in the fertility rate.

3.5.2 Primary, Secondary and Tertiary Education

Despite the ageing of the population in the Central East, many towns in the Sub-region also have above average shares of residents aged 0-14 years. This reflects the long-term impact on the Central East's demographic profile of structurally high fertility rates. A review of the demographic data from the ABS reveals that, with the exception of Narembeen, Trayning, Westonia and Yilgarn, all other towns in the Central East have 0-14 shares above the average for Greater Perth²⁹. This is illustrated in the figure below.

²⁹ ABS (2012) Population by Age and Sex, Cat No 3235.0 Australian Bureau of Statistics, Canberra

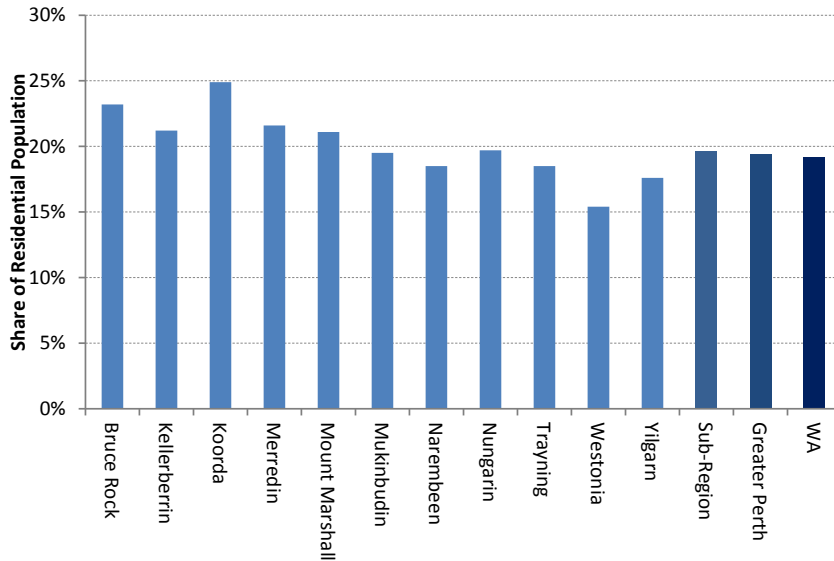


Figure 13 Share of Residential Population Aged 0-14, Central East Sub-Region, Greater Perth and WA, 2011

The Central East Sub-region has 15 schools, 9 primary schools (7 public schools and 2 private schools), 5 district high schools (K-10) and one college (K-12) which offer primary and secondary education. Primary education is evenly distributed with most towns having a primary school. Secondary schooling is more concentrated with district high schools in 5 of the 11 LGA's and one college. As a result of the population distribution in the Sub-region, there is considerable variation in school sizes (e.g. 24 students at Nungarin Primary School³⁰ to 563 students at Merredin College). Merredin College provides the only formal K-12 education within the region although SIDE (School of Isolated and Distant Education) curriculum is provided through some district high schools for year 10-12 students. Merredin College also includes a residential boarding facility, providing access to high quality education for students who are otherwise disadvantaged by distance.

Merredin College was formed through the amalgamation of Merredin North and Merredin South Primary Schools and the Merredin Senior High School onto the redeveloped Merredin Senior High School campus, in 2011-12. The redevelopment of the Merredin Residential College to complement the Merredin College development has resulted in greater demand for student residential boarding. Merredin Residential College is set to increase student boarding capacity from 48 to 72 students after the State Government committed a further \$3.9 million in the 2014-15 budget³¹. The investment and provision of secondary schooling and boarding in the Central East enhances education choice and is critical to the attraction and retention of working age families necessary to support local economic development. Education reform measures (e.g. Year 7 transition to Secondary Schooling from 2015) and increased metropolitan education expenses may potentially impact families making education decisions for their children.

The labour force in the Central East is characterised by an expected concentration of applied tertiary education qualifications (i.e. formal training and TAFE). This is reflected both in the local employment

³⁰ DET (2014) Schools Online accessed at http://www.det.wa.edu.au/schoolsonline/main_page.do on 27 August 2014

³¹ WA Government (2014) Media Statements access at <http://www.mediastatements.wa.gov.au/pages/StatementDetails.aspx?listName=StatementsBarnett&StatId=8340> on 21 July 2014

mix but also local tertiary education provision. The C.Y. O'Connor Institute is the primary tertiary education and training facility in the Central East and the Wheatbelt region with locations in Northam, Merredin, Moora, Narrogin and Muresk³². A wide range of practical courses are offered with a strong focus on administration, tourism, agricultural and manufacturing related qualifications. Opportunities exist to strategically diversify offerings into mining-related occupations to support increased cross-industry mobility of the Central East labour force in response to macro-economic opportunities and decreased unemployment levels.



3.5.3 Libraries and Community Resource Centres

In 2011 in metropolitan Perth, there was one library for every 23,794 residents equating to a total supply of 77 libraries. The provision of libraries and associated facilities in the Central East is more considerable with one library for every 900 residents³³. There are a number of potential explanations for this apparent over-provision:

- The decentralised and distributed population of the Central East has required a more dispersed library network than in metropolitan Perth;
- The number of libraries doesn't comment on the size and service capabilities of those libraries. Metropolitan libraries tend to be larger and therefore have the capacity to service larger population catchments; and
- Libraries are most often provided by local governments. Every LGA in Central East is home to a library and or a Community Resource Centre.

Community Resource Centres (CRCs) are heavily relied on in the Central East for public internet access, some government services such as Centrelink, library services and in some cases visitor servicing. Ongoing utilisation of library and CRC facilities will enable communities to anchor improvements in local technology and communication networks and ensure continued provision of support for local community groups and associations and small businesses.

³² C.Y. O'Connor Institute accessed via [http:// www.cyoc.wa.edu.au](http://www.cyoc.wa.edu.au) on 23 August 2012

³³ SLWA (2012), List of Libraries in Western Australia, State Library WA, Perth

3.5.4 Aged Care, Hospitals and Health Services

The older age profile of the Central East will underpin continued demand for aged care and retirement village offerings. In 2012, there were 7 registered Aged Care facilities offering 94 dedicated aged care beds (residential high, low care and respite only). The distribution of these beds is concentrated in Kellerberrin and Merredin, although Bruce Rock, Narembeen, Trayning (Kununoppin Hospital) and Southern Cross also provide aged care services. This total figure includes Wyalkatchem-Koorda as it is incorporated under the Eastern Wheatbelt MPS (Multipurpose Service) area³⁴.

There appears to be some misalignment between the distribution of aged care facilities in the Central East and the concentration of people aged 65+ in the sub-region. Figure 14 below highlights that Kellerberrin currently plays a greater role in aged care facility distribution than its local 65+ population would indicate, while Merredin which is home to 28% of people aged 65+ currently has local aged care bed capacity for only 21.3%.

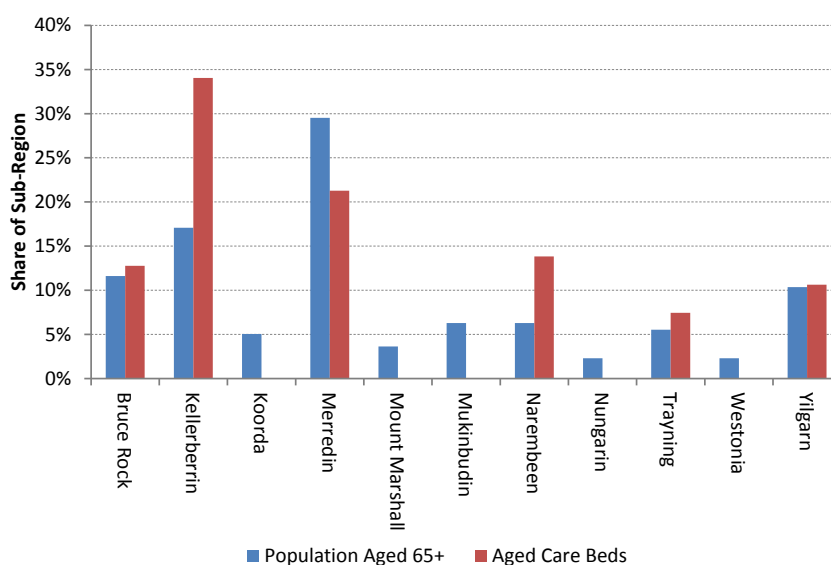


Figure 14 65+ Population and Aged Care Beds, LGA Share of Central East, 2012

In 2012, there were 78 public hospital beds in the Central East³⁵, spread across Bruce Rock, Kellerberrin, Merredin, Narembeen, Trayning (Kununoppin) and Yilgarn. Merredin is recognised as an Integrated District Health Service whereas Bruce Rock, Kellerberrin, Narembeen, Kununoppin and Yilgarn are all small hospitals.

Merredin Hospital supports the MPS sites/small hospitals and nursing posts to deliver services to the Eastern Wheatbelt Health District³⁶. The Eastern Wheatbelt Health District Services Plan has identified a number of reform measures to modernise and strengthen health service delivery for the Eastern Wheatbelt to support the delivery of regional health services. This includes an extensive capital works program funded through the Southern Inland Health Initiative to perform major works to

³⁴ Verso Consulting, Central East Aged Care Needs Study, November 2012 pg. 40

³⁵ AIHW (2012), Australian Hospital Report, 2010/11, Australian Institute of Health and Welfare, Canberra

³⁶ DoH (2012), Services Plan Eastern Wheatbelt Health District, WACHS Wheatbelt 2011/12-2021/22 pg.2-3

Merredin Hospital³⁷ and other works for small hospitals (Bruce Rock, Kellerberrin, Kununoppin, Narembeen and Southern Cross³⁸) and nurses outposts.

Within the sub-region there are 94 dedicated aged care beds³⁸. There are no residential aged care beds in Mt Marshall, Mukinbudin, Nungarin and Westonia. These LGA's generally access aged care beds within surrounding Shire's (Trayning, Merredin and Kellerberrin). In the Aged Care sector, Community Care Packages (CCP's) are continuing to gain recognition as an effective delivery mechanism to servicing regional populations. Operationally, they reduce hospital/residential inpatient admissions and socially respect the aspirations of residents to maintain independence and remain in their local community for as long as possible. Within this vision, it is imagined that older persons can enter a system that supports a continuum of care, from basic home care through to palliative care in the home. Service provision is likely to require collaboration across WACHS, and private providers.

The Central East Aged Care Alliance (CEACA) - a partnership that includes all LGA's within the Central East plus Koorda & Wyalkatchem - has played a critical role in identifying solutions to accommodate an ageing population and enable people to remain living in the Central East as they age. Their research focuses on four strategies and builds on existing community capacity, infrastructure and services. The strategies include:

- Continued development of age friendly communities;
- Further development of older persons housing;
- Broadening community aged care; and
- Reshaping residential aged care.

The final report (Central East Wheatbelt Aged Support and Care Regional Solution/s, 2012) identifies five recommendations that CEACA are working toward implementing. Suitable older persons housing is a key element of the recommendations, and critical in enabling older people to remain living in the community of their choice. CEACA have identified a critical shortage of suitable housing and are investigating modern design concepts such as 'universal design' and 'cluster housing' to deliver contemporary aged care provisions to communities in the Central East.

³⁷WA Government (2014) Media Statements accessed at <http://www.mediastatements.wa.gov.au/Pages/StatementDetails.aspx?listName=StatementsBarnett&StatId=8460> on 22 July 2014

³⁸WA Government (2014) Media Statement accessed at <http://www.mediastatements.wa.gov.au/Pages/StatementDetails.aspx?listName=MinisterialStatementsBarnett&StatId=288> on 22 July 2014



4.0 Key Economic Opportunities

RPS has identified a series of key economic themes for the Strategy, which will define the future economic growth and dynamism of the Central East Sub-region. These themes represent areas where the Central East has a distinct competitive advantage or where socio-demographic, investment or infrastructure-based drivers underpin current and future demand.

The key themes identified for the Central East Sub-Regional Economic Strategy include:

- Broadacre Agriculture;
- Mining & Support Services; and
- Population Services.

These themes and associated actions and locations are explored in the sections below.

An overarching competitive advantage of the sub-region across all identified economic opportunities is the strategic location of the Central East atop State and Nationally significant transport infrastructure. The Central East's major centres of Kellerberrin, Merredin and Southern Cross are all located on Great Eastern Highway, connecting Perth with the Goldfields. Similarly, national freight rail networks pass through the region. This connectivity and centrality in regional WA has long underpinned the ability for agricultural producers to access key domestic and global export markets. This infrastructure is also key to the emerging mining sector, established tourism routes to and through the sub-region and the free movement of residents to access employment, services and facilities.

4.1 Broadacre Agriculture

4.1.1 Rationale

The Central East, as part of the Wheatbelt region, is one of the major agriculture producing areas in the country. Broadacre agriculture as well as livestock production are likely to continue to underpin agricultural activity in the Central East along with associated storage and processing activity.

4.1.2 Drivers and Trends

Global food production will need to increase by 60% by 2050 to meet projected demand levels³⁹. This increase in global food demand is expected to come from the developing countries where growing populations, higher incomes and urbanisation are driving greater per capita food consumptions⁴⁰. Per capita consumption is projected to expand most rapidly in Eastern Europe and Central Asia followed by Latin America and the broader Asian region.

At the same time, global food production is projected to grow at only 1.7% per annum over the next 10 years, as a combination of limited expansion of agricultural land, rising production costs, increased resource competition from biofuel sectors and increased environmental protections constrains

³⁹ FAO (2012), OECD-FAO Agricultural Outlook 2012, Food and Agriculture Organisation, Rome Italy

⁴⁰ OECD-FAO (2013), OECD-FAO Agricultural Outlook 2013-2022, Organisation for Economic Co-operation and Development, Paris and Food and Agriculture Organisation, Rome

production. Demand is already outpacing supply in international markets, with food price volatility increasing dramatically since 2006 and prices trending upwards from 2000 lows. This is after decades of real food price declines resulting from increased productivity⁴¹.

This rate of production growth is insufficient to meet the demand needed over the next few decades. Bulk food commodity producers like Australia are therefore uniquely positioned (relative to other net food exporters) to service these markets, through geographical proximity and quality/reputation perspectives.

The demand for protein is projected to be particularly high and this will in turn require significant increases in cereal production, to support intensive livestock production systems. The impact of increased protein demand will be felt across the agricultural sector, which will extend to farm inputs, production, post-harvest, logistics, supply chains and distribution channels. Animal husbandry, including the raising of beef cattle, sheep (lamb and mutton) and goats, is well suited to Australia due to the large expanses of grazing land.

Increased seasonal volatility as a result of climate change is expected to undermine production certainty in the Australian agricultural sector. Continued training in farm management skills and the adoption of technology and innovation will provide farmers with the best opportunity to mitigate potential risk factors from climate variability. Farm managers may need to adopt different management styles and innovations, such as different planting times, new fertiliser regimes, farming systems or alternative crops⁴². Therefore, enhanced farm management techniques (such as Yield Prophet WA, Innovation Forums and farm resilience and efficient farm management practices) will allow farmers to adjust operational and input expenses to seasonal changes in predicted yields⁴³.

4.1.3 Sub-Regional Characteristics

The Central East has a temperate climate with hot, dry summers and predominantly winter rainfall in the southwest. Over the last several decades, the Sub-region's annual rainfall has ranged from a low of 109mm in Koorda to a high of 661mm in Kellerberrin. Similarly, the annual mean maximum temperature ranged from a low of 23.4 degrees Celsius in Kellerberrin to a high of 27.4 degrees Celsius in Bencubbin⁴⁴.

Broadacre grains like wheat, barley, oats and canola represent the major source of agricultural production in the Central East. Since 1999, the Central East has had an average annual production of coarse grains of almost 1.6 million tonnes⁴⁵. This production has been volatile however, reaching as high as almost 3.0 million tonnes in 2003/04, following a low of 500,000 tonnes in 2002/03. This is illustrated in the Figure 15.

⁴¹ FAO (2012), Food Price Index – August 2012, Food and Agriculture Organisation, Rome Italy

⁴² DEC (2013), Climate Change Case Studies: Agriculture, Department of Environment and Conservation, Perth.

⁴³ DAFWA(2012), A Year in Grains 2011, Department of Agriculture, Perth

⁴⁴ BOM (2013), Climate Data, Bureau of Meteorology, Canberra.

⁴⁵ CBH (2013) Unpublished Production Data, CBH, Perth

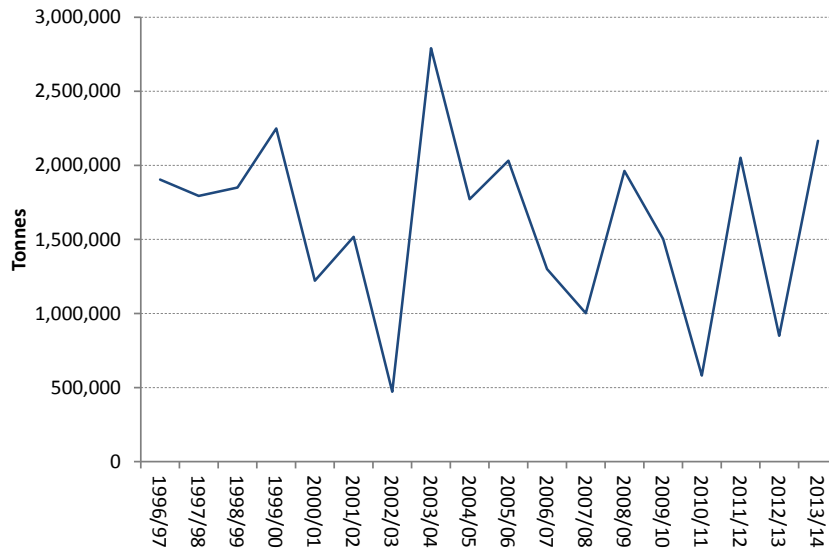


Figure 15 Annual Coarse Grain Delivered, Central East

Coarse grain production is broadly distributed in the Central East, reflected by relatively consistent yields across the region. Trayning, Kellerberrin and Bruce Rock have averaged the highest yields over the past decade, at approximately 1.7 tonnes per hectare. In contrast, Yilgarn, Mukinbudin and Nungarin all had lower yields (averaging 1.2 and 1.3 tonnes/ha). All parts of the Central East have had average yields below the State average at 1.9 tonnes per hectare over this period, reflecting the dryland nature of agricultural production in the Sub-region.

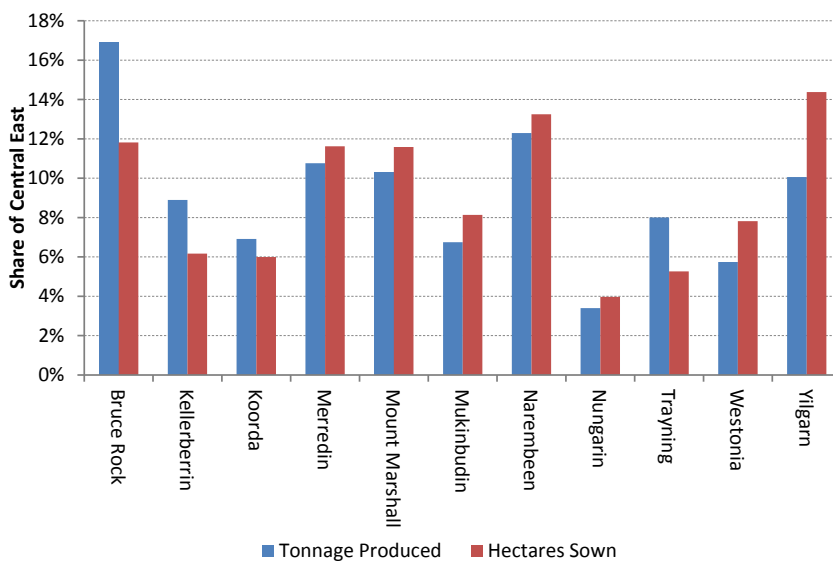


Figure 16 Cereal Crop Production and Hectares Sown, LGA Share of Central East, 2012/13⁴⁶

The dryland conditions and lower average yields per hectare have been the focus of continued research and development (R&D) investment, with diverse crop varieties being investigated to help improve the sustainability of agricultural production in the sub-region. The Department of Agriculture

⁴⁶ CBH (2013) Unpublished Production Data, CBH, Perth

and Food Western Australia – Merredin Dryland Research Institute conducts national wheat phenology trials as well as dryland agricultural research through its New Genes for New Environments facility. Continued trials of dry, heat conducive and frost tolerant crop species, improved farm management practices and integrated distribution and export networks will further enhance the Sub-region's competitive advantage.

Livestock is the next largest food production sector in Central East, with the sub-region producing over \$41.1 million in disposals and a further \$45.6 million in animal products (namely wool) in 2010/11⁴⁷. The following products have high gross production values, supplying both the domestic and international market in 2010-2011:

- Wheat - \$325 million;
- Wool - \$45.6 million.
- Sheep & Lambs Slaughtered & Other Sales - \$41.1 million; and
- Canola - \$21.8 million;
- Barley - \$17.5 million;
- Oats - \$4.4 million;
- Lupins - \$3.2 million; and
- Hay - \$1.9 million.

4.2 Mining & Support Services

4.2.1 Rationale

The strategic location of the Central East to major mining regions and inter and intrastate transport infrastructure, positions the Sub-region as an ideal location for mining support services. The expansion of the mining industry within the Central East will drive economic growth, resulting in both population growth and the underpinning of further demand for industry services and mining and support services within the region. This can include leveraging the proximity to the mining investment activity to attract and retain mining-support manufacturing and fabrication industries.

4.2.2 Drivers and Trends

Australia's iron ore production and exports is forecasted to increase by 52.7% over the next five years from 2013 to 2018. Major export ports in Port Hedland and Dampier have iron ore throughput at record levels, with exports to China still growing⁴⁸. The mining cycle has now transitioned from investment to production phases. Increased Western Australian supply, coupled with slower economic conditions globally, has seen iron ore spot prices fall sharply in recent years. This fall has impacted the viability of smaller iron ore producers and domestic Chinese producers significant, but does place larger lower cost producers (like BHP and Rio Tinto) well to capture global market share.

On the other hand, gold production is forecast to remain relatively stable (3.9%) over the next five years for a range of reasons, some of which include investor speculation the recovery of the US economy as well as investor preferences shifting to other asset classes, as interest rates return to

⁴⁷ ABS (2013) Value of Agricultural Commodities, 2010/11 Cat No 7503.0, Australian Bureau of Statistics, Canberra

⁴⁸ Ports Australia (2015) Trade Statistics, Unpublished, Ports Australia Melbourne

normal levels⁴⁹. These factors, along with others, have caused the downward move in gold prices which would be offset by increasing consumption demand for jewellery and industrial applications once the price hits a support level. This is illustrated in the following figure.

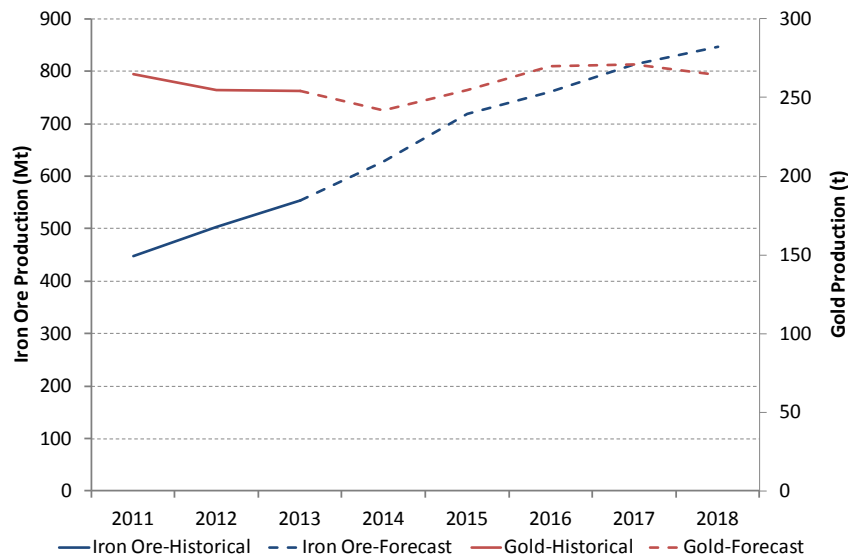


Figure 17 Outlook for Iron Ore and Gold Production, Australia, 2011-2018

In April 2013, Western Australia had 75% of all Australian gold projects by number, which accounted for 61% of national value. This was also the same for iron ore projects, where Western Australia had 76.2% of Australian iron ore projects, which accounted for 76% of national value⁵⁰.

The Australian Bureau of Statistics Census currently does not accurately capture the demographic impacts of the mining industry on Local Government Areas, specifically numbers of fly-in fly-out and drive-in drive out workers. Statistical comparison between 'place of residence' and 'place of work' registers indicates that mining workers are captured by their Perth residence or workplace, rather than in the mining regions of the Wheatbelt. Interviews with stakeholders indicate that the Central East has a combination of fly-in/fly-out workers working on mine sites in the Sub-region as well as fly-in/fly-out workers residing in the Central East and working in other regions.

4.2.3 Sub-Regional Characteristics

The Central East benefits from a combination of gold and iron ore mining as well as the relative centrality to other Western Australian major mineral resource and population regions (i.e. Pilbara, Mid West, Goldfields and South West), proximity to the Perth Metropolitan Region, and access to major State and National transport infrastructure. As existing and future mineral resource identification, development and extraction will continue to be dependent on commodity prices and input costs, the Central East is well positioned to take advantage of growth in both mining and support services and ancillary and related industry. Accessible and cost effective freight, high quality infrastructure, access to labour markets and existing mining and support service industry hubs provide economic opportunities for the further development of the mining industry within the Central East. Building on

⁴⁹ BREE (2013), Resources and Energy Quarterly - September 2013, Bureau of Energy and Resource Economics, Canberra

⁵⁰ BREE (2013), Mining Industry Major Projects, Bureau of Resources and Energy Economics, April 2013, Canberra

existing capacity will enable future growth in the mining and support service sector, enabling larger economies of scale and increased scalability of businesses in the region.

The eastern parts of the Central East are part of the southern Yilgarn Iron Province. Currently mining and exporting 16 million tonnes per annum of iron ore, the Yilgarn Iron Province is regarded as a Brownfield iron ore region in terms of infrastructure requirements. Pre-existing agricultural infrastructure including port access, road and rail freight links mean that incremental upgrades can provide a cost effective freight network for the mining industry. This includes established rail connections to Esperance Port, which has been given approval to expand its iron export facility increasing capacity from 11Mt (million tonnes) to in excess of 20Mt⁵¹. This will enable future exploitation of mineral resources within the Yilgarn Iron Province. Mineral exploration and extraction is focused to the South of the Province with proposed future expansion into Northern areas of the Southern Mid-West and Goldfields region. A further 10Mt per annum of iron ore production is expected to be brought online within the Yilgarn Iron Province in the near term⁵².

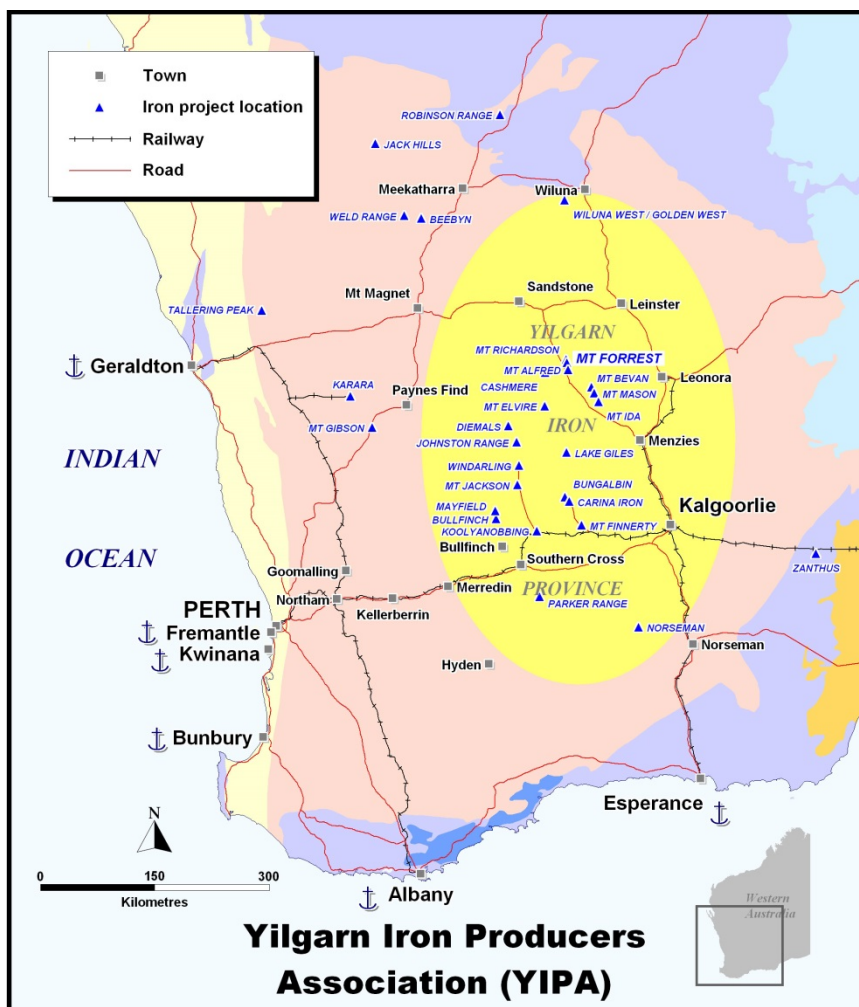


Figure 18 Yilgarn Iron Province⁵³

⁵¹ Esperance Ports (2014) access at <http://www.esperanceport.com.au/muiof.asp> on 10 October 2014

⁵² YIPA (2014) Yilgarn Iron Province accessed at <http://www.yipa.com.au> on 12 June 2014

⁵³ Hanking Mining (2014) Access at <http://www.hankingmining.com/gold-mining-business> on 10 October 2014

Major mining companies located in the Central East include China Hanking Holdings Limited⁵⁴, Cliffs Natural Resources, Evolution Mining, Polaris Metals, and WA Salt.

Hanking Gold has operations located in the Shire of Yilgarn. The Southern Cross Operations Gold Project is an open cut gold mine situated within the Cornishman Deposit of the Southern Cross greenstone belt; with accumulated gold production having exceeded 10 million ounces (amount of gold mined over the active life of the mine, regardless of change in ownership). The forecasted production of Hanking Gold's operations consist of a measured, indicated and inferred gold resource reserve of approximately 2.5 million ounces at an average grade of 3.7 g/t gold. Hanking Gold also operates a well maintained processing plant with the ability to process 2.4 million tonnes of stripped mine material per annum.

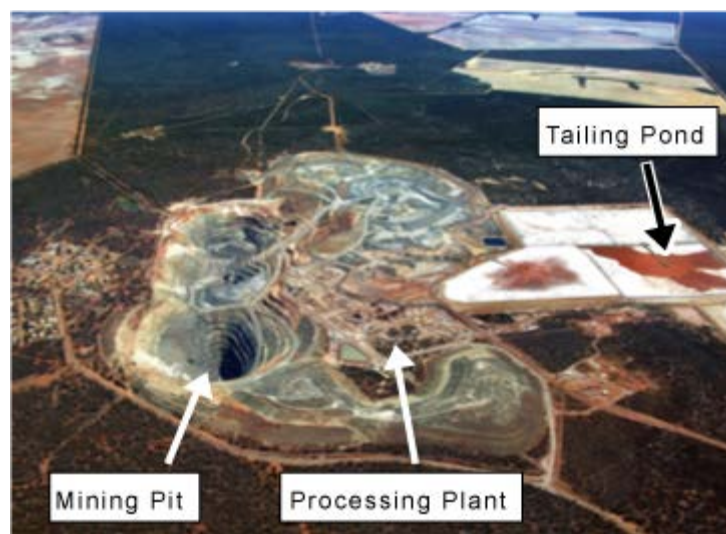


Figure 19 China Hanking Holdings Limited, Gold Mine, Yilgarn, 2013⁵⁵

On 8 January 2013, Hanking Gold entered into an acquisition agreement with St Barbara Limited for 100% of its Southern Cross Operations (Cornishman Deposit) which includes 932km² of exploration and mining licenses containing the 2.5 million ounces gold resources, mine infrastructure, camps, office buildings, accommodation, as well as production equipment and processing plant. According to a preliminary study by Hanking Gold, the Southern Cross Operations has an annual production capability of 200,000 ounces for 10 years. In August 2014, Hanking Gold awarded Watpac Limited the contract to strip mine the Cornishman Deposit on its behalf, with mine stripping commencing 28th August 2014. Hamptons Transport is contracted to transport material from the mine site to the Hanking Gold Processing Plant⁵⁶.

Cliffs Natural Resources operates an iron ore mine at Koolyanobbing in the Shire of Yilgarn located approximately 48 km north east of the town of Southern Cross. Iron ore material is sourced from 8 separate open pit mines and delivered by trucks or road trains to a crushing and screening facility, which is then transported by rail to Esperance for shipment to Asian customers. The annual rated

⁵⁴ China Hanking Holdings Limited wholly-owned Australian subsidiary is Hanking Gold Mining Pty Ltd, from here on referred to as "Hanking Gold"

⁵⁵ Han King Mining (2014) Access at <http://www.hankingmining.com/gold-mining-business> on 12 June 2014

⁵⁶ Watpac (2015) access at <http://www.watpac.com.au/project/hanking-gold-mining/> and http://www.watpac.com.au/workspace/attachments/140804_asx-announcement_hanking-gold-cornishman-project-contract-announcement_final.pdf on 19 January 2015 and

capacity of the mine is 8.5Mt (million tonnes) and a recently completed expansion project is expected to raise annual production to approximately 11Mt. The mine has a capacity of 89.1 Mt.

Evolution Mining's Edna May Gold Project development and construction was announced in 2009/10 with first gold poured in April 2010. The mine is located in the Shire of Westonia near the northern end of the Westonia Greenstone Belt. The current mine life is 9 years and gold production has increased from 10,222 ounces in the 2010 financial year to 80,165 ounces in the 2014 financial year.

Forecasted production for the 2015 financial year is consistent with 2014 production, indicated at 80,000 to 90,000 ounces⁵⁷.

Polaris Metals, a wholly owned subsidiary of Mineral Resources Limited, is developing over 1,000km² of mining tenements north of Southern Cross. Located close to existing rail infrastructure, the project consists of five prospects spread over 50km, with significant direct shipping ore grade iron mineralisation. Some 80-90Mt were established by previous explorers' drilling (e.g. Bungalbin East, J4 and J5), with new prospects (Carina, and Chamaeleon) found by Polaris. With a target potential of 100-150Mt, the Company believes the Yilgarn Project is capable of sustaining exports of 5Mt of iron ore annually for up to 20 years, subject to securing environmental approvals. To support their business focus, Mineral Resources Limited launched its newly purchased \$70 million rail fleet on the 23 July 2014⁵⁸.

WA Salt harvests salt from Lake Deborah at Koolyanobbing, harvesting an estimated 200,000 tonnes per annum which is delivered to Fremantle to be processed for sale to the domestic and international market⁵⁹.

Between 2001/02 to 2011/12, mining production in the Central East increased by over 500%, mainly driven by mine production in the Shire of Yilgarn. However, since 2009/10 the Evolution Mining Edna May mine operation in the Shire of Westonia has been increasing its contribution of total production for the Sub-region. This is illustrated in the following figure.



⁵⁷ Evolution Mining (2014) accessed at <http://www.evolutionmining.com.au/projectsEdnaMay.html> on 10 October 2014

⁵⁸ DMP (2014) access at http://www.dmp.wa.gov.au/7105_20474.aspx on 19 January 2015

⁵⁹ WA Salt (2014) access at http://www.wasalt.com.au/koolyanobbing_Head.html on 10 October 2014

Figure 20 Mineral Production, Central East Sub-Region, 2001/02 to 2011/12⁶⁰

There is a well-established transport network connecting the Central East in all directions with the heavy haulage routes supporting mining and industrial activity outside of the Sub-region as well as within. Local and regional mining activity is expected to increase demand for mining support services over the coming years, such as in construction and manufacturing for mining (metal/steel fabrication), engineering services, mechanical support and heavy duty diesel machinery (i.e. earthmoving, etc.). Furthermore, mining activity in the Central East is strategically located with close proximity to Perth, Kalgoorlie and Merredin as well as being located on the Great Eastern Highway, which provides opportunities for freight and logistics related industry to support mine operations.

The growth of the mining industry is expected to continue to generate employment opportunities for skilled workers in the Central East and broader Wheatbelt. Existing shortfalls in the labour force will, unless resolved through theoretical and work placed learning aligned to the requirements of the mining sector, result in increased employment of fly-in fly-out specialists and workers. The development of strategic partnerships between mining companies, support industries and education providers will ensure the benefits of mining activity are captured locally.

An example of this education and industry engagement is Cliffs Natural Resources involvement with the local school in Southern Cross. This engagement has given students exposure to the mining industry and associated opportunities and has successfully engaged several students to look towards employment in the sector. The potential expansion of these kinds of education programs, including links to the C.Y. O'Connor Institute in Merredin, will benefit not only mining businesses but also enhance the skills of the Central East's workforce and support the broader economic development of the region.

4.3 Population Services

4.3.1 Rationale

The accessibility of quality services and infrastructure in a community is central to its competitiveness, prosperity and success. A lack of education and health facilities are regularly identified as reasons for residents to migrate from regional and rural communities, particularly when they reach certain key points in life (e.g. children entering high school, or entering retirement). Similarly, quality infrastructure and services are essential to support the attraction and maintenance of a vibrant tourism sector. Managed effectively, tourism utilisation of infrastructure can assist in justifying and supporting a higher capacity and quality of offering than would otherwise be supported by local residents alone. Hence education and training, health and aged care and tourism are identified as integral components of the Central East's population services profile and indeed the sub-regional economy.

A combination of strategic, catalysing investment and innovative delivery models is key to improving the quality of infrastructure and services in the Central East. This would go a long way to support the stabilisation and growth of the Sub-region's population and underpin growth of tourist visitation.

⁶⁰ DMP (2013), Minerals Production in Western Australia Adjusted for Petroleum, Department of Mines and Petroleum, Perth

4.3.2 Drivers and Trends

Education & Training

Education contributes to economic growth (through employment and skills development), improves individual wellbeing, and also plays an important role in fostering and maintaining a positive and cohesive social environment. Higher levels of educational attainment are associated with increased employment opportunities and higher wages and contribute to improving Australia's economic standing. Between 2001 and 2009, the number of persons with a bachelor degree or higher qualification saw the highest proportionate increase (4.9%), while those with no post-school qualifications had highest proportionate decrease (6.9%). As expected in a knowledge based economy, more people are keen to undertake higher learning qualifications along with lifelong training. This indicates the up-skilling of the workforce through the attainment of higher tertiary education qualifications, illustrated in the Figure 21.

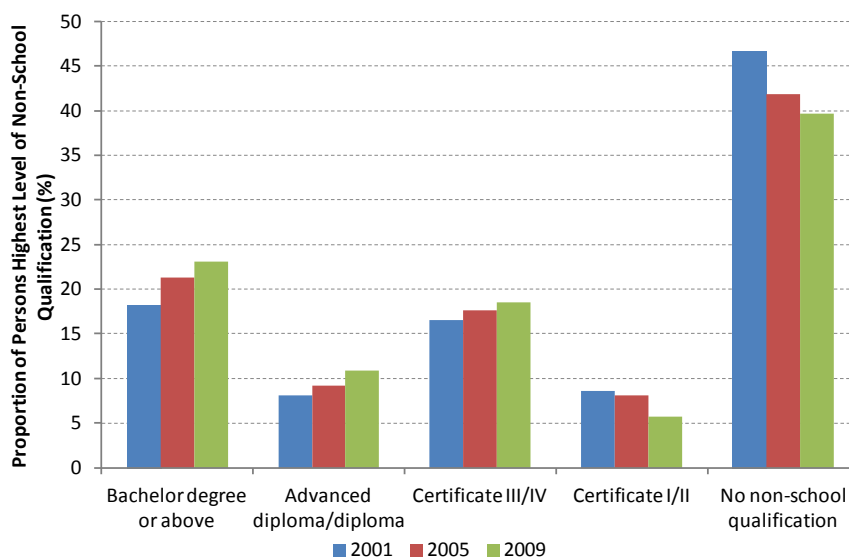


Figure 21 Proportion of Persons Aged 15-64 years Highest Level of Non-School Qualification, Australia, 2001, 2005 and 2009⁶¹

Health & Aged Care

Over the next few decades, it is expected that the ageing of Australia's population will see the share of residents aged 65+ increase from around 13% in 2010 to 20% in 2040⁶². This will present Australia with economic opportunities in health care and social services. Health is the second largest employment sector in the WA economy (marginally less than retail trade), generating tertiary qualified and knowledge intensive employment opportunities in primary, general and acute health care and social service delivery. This is illustrated in Figure 6 in Section 2.3

⁶¹ ABS (2013), Education and Training Experience, Cat No 6278.0, Australian Bureau of Statistics, Canberra

⁶² Treasury (2010), Intergenerational Report 2010, Commonwealth Government, Canberra

Tourism

Between 2008 and 2012, the Central East attracted an average 124,376 tourists/short-term visitors per year⁶³, representing an average 12 visitors per resident. This is well above the State average of 8 visitors per resident, highlighting the strong performance of the sub-region in spite of the small population. During this time, approximately 52% of visitors to the Central East were day trip visitors, with the domestic overnight visitors accounting for 46%, which is much higher than some of the other Wheatbelt sub-regions. This is illustrated in the following figure.

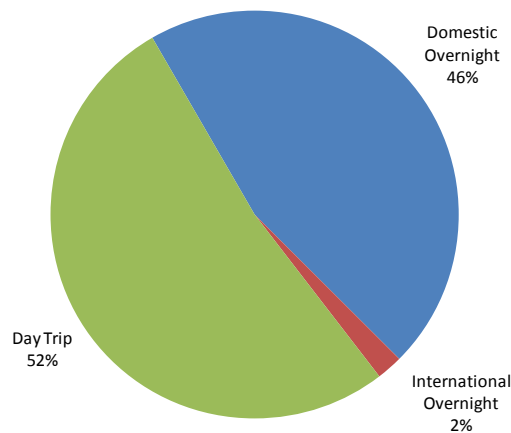


Figure 22 Breakdown of Visitors to Central East Sub-Region, by Type, 2008-12

This is an unusual profile for a region relatively remote from the major capital city. It reflects the fact that the Central East is viewed as a stopover or passing destination for daytrip activity, particularly by more mobile and transient visitors travelling between Perth and Kalgoorlie. This approach to travel is increasingly common among older visitors, colloquially referred to as “Grey Nomads”. The natural landscape of the Central East provides popular rural retreats for this market segment.

Also, there will be an increase in demand from international tourists, as visitation numbers are expected to increase with the burgeoning economies of developing nations over the next few decades, particularly from Asia. The higher average expenditure profile of international tourists means only a small increase in visitation levels from the current base will provide a significant increase in local tourism value add to the economy. However, this segment of the market requires quality (4 and 5 star) accommodation and structured packages for experiential tourism activities. Improved multi-lingual skills among workers and culturally-sensitive practices will also enhance tourist experiences, leading to increased international visitation.

4.3.3 Sub-Regional Characteristics

Education & Training

There are opportunities to enhance the educational and training services in the Central East through creative and flexible approaches that utilise innovative technology and methodology, leadership capacity at all levels and whole of government approaches.

⁶³TRA (2013), Online Data Sets NVS and IVS, Tourism Research Australia, Canberra

With a higher than average portion of population aged 0-14 the Central East will require more educational and training resources, such as schools, teachers, mobile virtual classrooms including information and communication technologies (ICT) infrastructure and access to a range of youth services. Currently, there are 15 primary schools, including those that are part of the District High Schools (K-10) and College (K-12). The provision of primary and secondary schooling in the Central East is critical to the attraction and retention of working age families to build the regions workforce. Recent developments at both the Merredin College and the Merredin Residential College boarding facilities provide the platform to retain increased numbers of youth in the sub-region for secondary education. This is, in turn likely to increase demand for tertiary education.

With an Employment Self Sufficiency rate of 107% the Central East is currently a net importer of labour with more jobs than local labour force. Therefore any further economic growth will need to be supported through the attraction of labour or up skilling and retention of youth in the Sub-region. In this context an education system that facilitates the development and growth of the local workforce is vital. The provision of high quality education services, as well as expansion of apprenticeship and traineeship places for skilled labour development will enable young people to receive their education locally and develop a strong skilled workforce for the future.

The labour force of the Central East is characterised by a concentration of tertiary education qualifications (i.e. formal training and TAFE), which is reflected both in the local employment mix and local tertiary education provision. The main tertiary provider in the sub-region is the C.Y.O' Connor Institute in Merredin, which offers a wide range of regionally related courses, such as administration, tourism, agricultural, health, education and manufacturing related qualifications⁶⁴. There is potential for the C.Y. O'Connor Institute to offer cross sector mining and agriculture pathway courses to assist in increasing cross-industry mobility of the Central East work force. Other course offerings could also have a focus on art, culture, sustainability and the environment⁶⁵.

There are opportunities to develop additional training opportunities through collaboration between industry, including local businesses and mining companies, and other tertiary institutions including C.Y. O'Connor Institute.

Rapidly expanding ICT infrastructure availability to rural and regional locations is a powerful means of providing high quality education access to all students and families. It is essential that infrastructure cost issues are addressed to ensure that computer/ICT competency levels are developed to enable benefits from new technology options and services to be realised.

Health & Aged Care

Health and aged care services and infrastructure present a significant opportunity for the Central East. An ageing population, changing methods of aged care service delivery and enhancements to health services and infrastructure positions the Sub-region to benefit socially and economically through the growth of the healthcare sector.

The Central East Wheatbelt Aged Care Needs Study highlights the Central East's ageing population and subsequent opportunities to enable the population to 'age in place'. The percentage of population in the Central East aged 55+ was 28.4% compared to WA at 24.6% in 2012. This is

⁶⁴ C.Y. O'Connor Institute (2012) accessed via [http:// www.cyoc.wa.edu.au](http://www.cyoc.wa.edu.au) on 23 August 2012

⁶⁵ RDA (2012), RDA Wheatbelt Launches New Youth Project, Regional Development Australia, Wheatbelt Region

projected to rise to 37.6% in the Central East compared to 29.2% for WA by 2027⁶⁶. With the 55+ demographic eligible for entry into retirement living (Independent Living Units), this is an indicator of the potential demand for housing and subsequent aged care services. For the Central East the feasibility of universal housing design and cluster housing modelling to meet this growing population demographic needs to be determined.

Changes to home care packages as part of the Australian Government's Living Longer Living Better Aged Care reforms complements investment into older person's housing. Community Aged Care, Respite and Palliative Care provides significant scope to support a continuum of care from the most basic Home and Community Care (HACC) service through to palliative care in the home⁶⁷. This not only provides a significant cost saving to the Government by delaying/reducing the need for a person to enter into a residential age care facility but increase the overall health and wellbeing of the individual (thus reducing their need to access health services).

Though efforts are concentrated on enabling people to remain in their home and community of choice for as long as possible, the full spectrum of age care across the sub region must not be overlooked. Currently residential care is provided through MPS Services (Bruce Rock, Kellerberrin, Kununoppin Merredin, Narembeen, Southern Cross and Wyalkatchem-Koorda) and the Dryandra Residential & Community Care facility in Kellerberrin. By 2022 an estimated 60 new residential beds will be required to meet National aged care residential standards and increase in the ageing population⁶⁸.

The Royalties for Regions Southern Inland Health Initiative focuses on six streams of health service delivery as part of a \$565m reform to improve access to health care and outcomes across the Southern Inland area of Western Australia (which includes the Central East). The Central East has received a significant investment toward 24 hour emergency services (Stream 1: District medical Workforce Investment Program), telehealth equipment (Stream 5: Telehealth investment) and \$26.4m for capital works for the redevelopment of the Merredin Hospital (Stream 2: District Hospital and Health Services Investment Program) and commitment to the capital works upgrades to smaller hospitals at Bruce Rock, Kellerberrin, Kununoppin, Narembeen and Southern Cross (Stream 4: Small Hospital and Nursing Post Refurbishment Program). These upgrades will provide improved services for residents and also present greater opportunities toward workforce attraction and retention.

Tourism

The Central East already possesses a diverse offering of tourism attractions and activities, including but not limited to:

- The lookout over the Westonia gold mine pit is the only other mine lookout aside from the Super Pit lookout in Kalgoorlie. This will complement the existing Hood-Pen Museum;
- King of the Cross and Collectors Car Show located in Yilgarn;
- Rail and military museums in Merredin and Nungarin;
- Nungarin Wheatbelt Markets and Mangowine Concert
- Wildflowers;

⁶⁶ Verso Consulting (2012), Central East Wheatbelt Aged Care Needs Study, Perth

⁶⁷ Verso Consulting (2012), Central East Wheatbelt Aged Support and Care Regional Solution/s, Perth

⁶⁸ Verso Consulting (2012), Central East Wheatbelt Aged Support and Care Regional Solution/s, Perth

- Golden Pipeline Trail in Kellerberrin;
- Wadderin Wildlife Sanctuary and Grain Discovery Centre in Narembeen;
- Vietnam Veterans Reunion in Bruce Rock, Granite Way (Kokerbin Rock);
- The Koorda and Districts Agricultural Show in Koorda;
- Dirt Kart Track in Mukinbudin; and
- Mudbog Competition in Trayning.

The Central East's agricultural and mining base provides tourism attractions, particularly relating to experiential, heritage, adventure and eco-tourism. This diversity of tourist attractions provides opportunities for the Central East to value-add to the existing industry base and more broadly position the Central East as a destination in which to explore the region.

Some of the challenges to achieving this goal include the limited availability of tourist accommodation, restaurants, pubs and cafe's in the sub-region. Many Shires are currently either planning or undertaking facility upgrades and expanding their services to better cater to the diverse needs a range of visitors. Since the Central East is not as close to Perth as other sub-regions of the Wheatbelt, the area has a proportionately higher share of domestic overnight visitors, though the share is slightly less than the daytrip share.

Recent developments relating to tourism in the sub-region include:

- North East Wheatbelt Regional Organisation of Councils (NEWROC) has appointed a part time tourism officer as a point of contact for tourism activities in the Sub-region;
- Shire of Bruce Rock is implementing options to improve accommodation options to encourage overnight stays and the facilitating the Granite Way project,
- Shire of Nungarin is providing visitor and customer service training to its community;
- Shire of Narembeen is focussed on retaining tourists in the shire for 1 to 2 nights through the Roe Tourism Marketing Plan particularly the Pathways to Wave Rock project;
- Shire of Mount Marshall launched an incentive in July 2013 to encourage visitors to spend locally. Following a trial period this has now been extended permanently;
- Shire of Kellerberrin is increasing its investment in tourism marketing to capture visitors from Great Eastern Highway, the Granite Way and Golden Pipeline Trail to stopover in the town and visit local attractions;
- Shire of Mukinbudin is expanding its tourist offerings, continuing upgrades on its caravan park/campers kitchen and adjoining facilities;
- Shire of Westonia is investigating the development of larger scale short term accommodation to house bus tour groups; and
- Shire of Yilgarn is investigating the development of a visitor's centre on Great Eastern Highway.



5.0 Opportunity Network Analysis

5.1 Outline

The Central East Sub-regional economy possesses a range of competitive advantages and opportunities. However, these advantages and opportunities manifest themselves differently across the towns and LGAs of the sub-region with each major town possessing a unique set of demographics, business and infrastructure characteristics and therefore playing a different role in the sub-regional economy.

RPS has reviewed and analysed the characteristics of each LGA to develop a Network Matrix. This Network Matrix illustrates the spatial distribution of the Key Economic Opportunities in the Strategy across the major towns/LGAs of the sub-region.

Each town can have three possible relationships with the whole-of-sub-region opportunities:

- The town already has an above average competitive advantage in the relevant industry/sector and/or has existing activity leveraging this opportunity (represented as a solid circle in the matrix);
- The town has the potential to have an above average competitive advantage in the relevant industry/sector (due to either changing or emerging drivers) over the next decade (represented as a dotted circle in the matrix); or
- The town does not have an above average competitive advantage in the relevant sector.

5.2 Network Matrix

The Network Matrix results are illustrated in the diagram below.

As expected, Merredin has competitive advantages in most economic opportunities identified, reflecting its central role in the broader Central East economy. However, other shires, namely Westonia and Yilgarn, also exhibit a strong diversity of current and potential economic drivers, leveraging from mining and related services to drive greater economic activity, growth and diversity.

In contrast, the Shires of Trayning and Mount Marshall have more specialised competitive advantages, with broadacre agriculture forming the base of local economic activity. The small size of residential populations in these communities, coupled with low unemployment rates, means that greater economic diversification will require significant increases in migration.

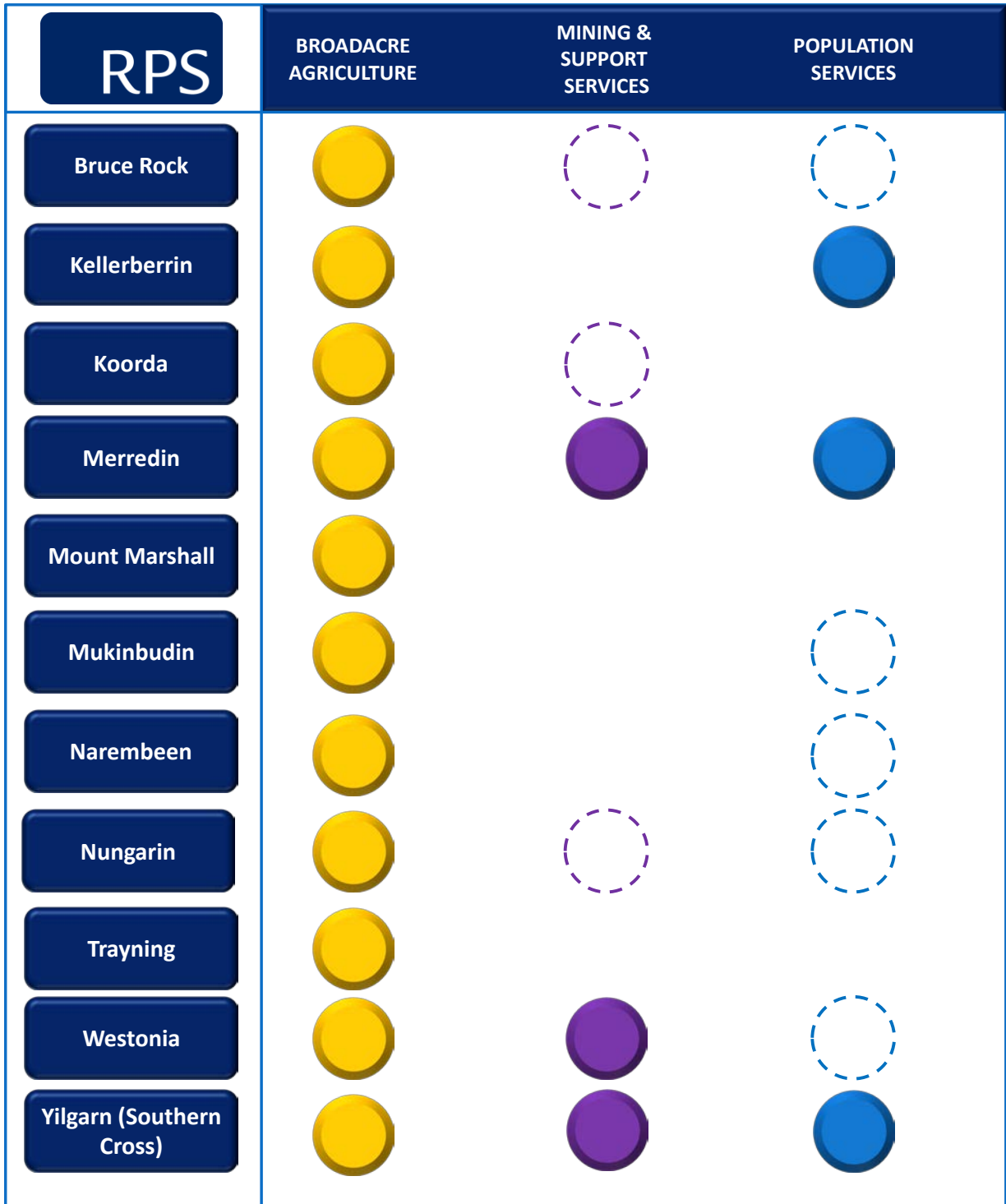


Figure 23 Opportunity Network Matrix, Central East Sub-Region

5.3 Spatial Analysis

The results of the Network Matrix have also been analysed for the spatial distribution of economic opportunities across the Central East. This approach allows the relative distribution and concentration of economic opportunities to be identified.

5.3.1 Broadacre Agriculture

As expected, broadacre agriculture represents the most distributed economic opportunity in the Central East and is likely to remain the foundation industry in the medium and long-term. Each town and Local Government has a competitive advantage in broadacre agriculture, though there has been some variation in coarse grain yields over the past decade.

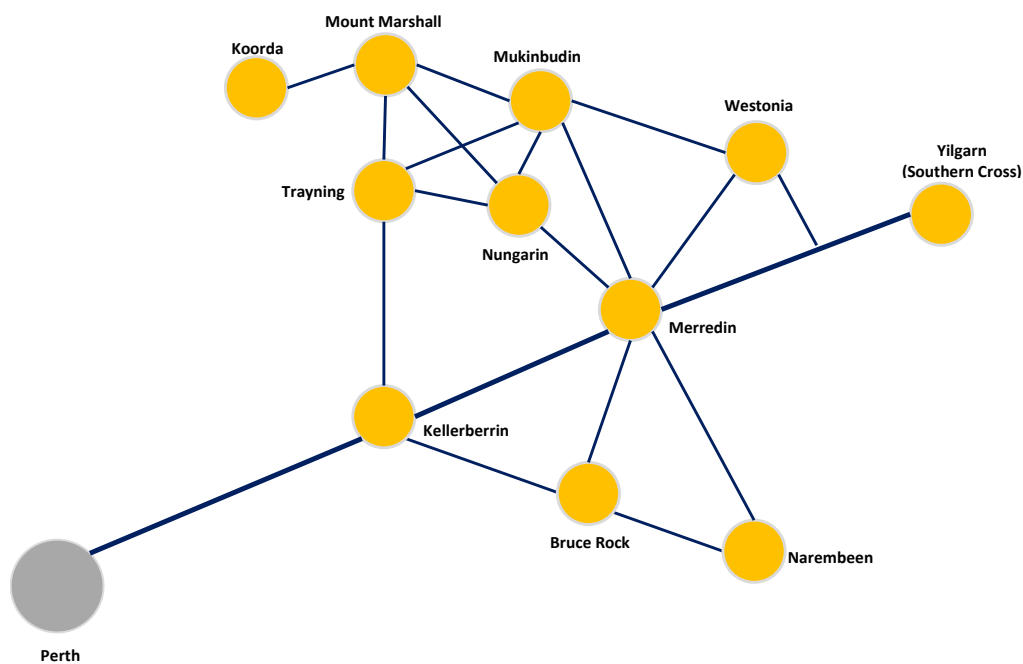


Figure 24 Spatial Distribution, Broadacre Agriculture, Central East Sub-Region



5.3.2 Mining & Support Services

Mining activity in the Shires of Westonia and Yilgarn is of increasing significance to the Central East economy. This is and will continue to generate direct economic activity, as well as supply chain and support service opportunities for a number of parts of the Central East, particularly Merredin, Koorda, Bruce Rock and Nungarin.

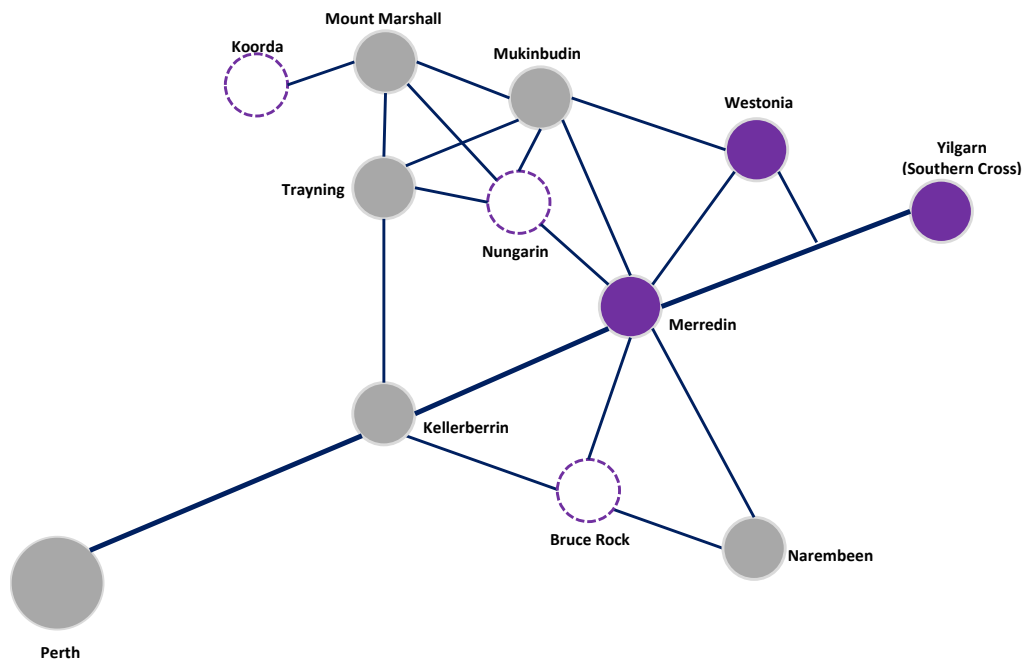


Figure 25 Spatial Distribution, Mining & Support Services, Central East Sub-Region



5.3.3 Population Services

Merredin has and will continue to be the major service centre of the Central East, with associated concentration of health, education and community services and facilities. Secondary centres of Southern Cross and Kellerberrin will play a supporting role, while towns like Bruce Rock, Mukinbudin, Naremben and Nungarin will provide more local services. The role of Merredin, Kellerberrin and Southern Cross are further enhanced by their position on the Great Eastern Highway. This provides these towns with direct access to major transport infrastructure for industry and service delivery, as well as strong exposure to tourists, particularly Grey Nomad travel from Perth to Kalgoorlie.

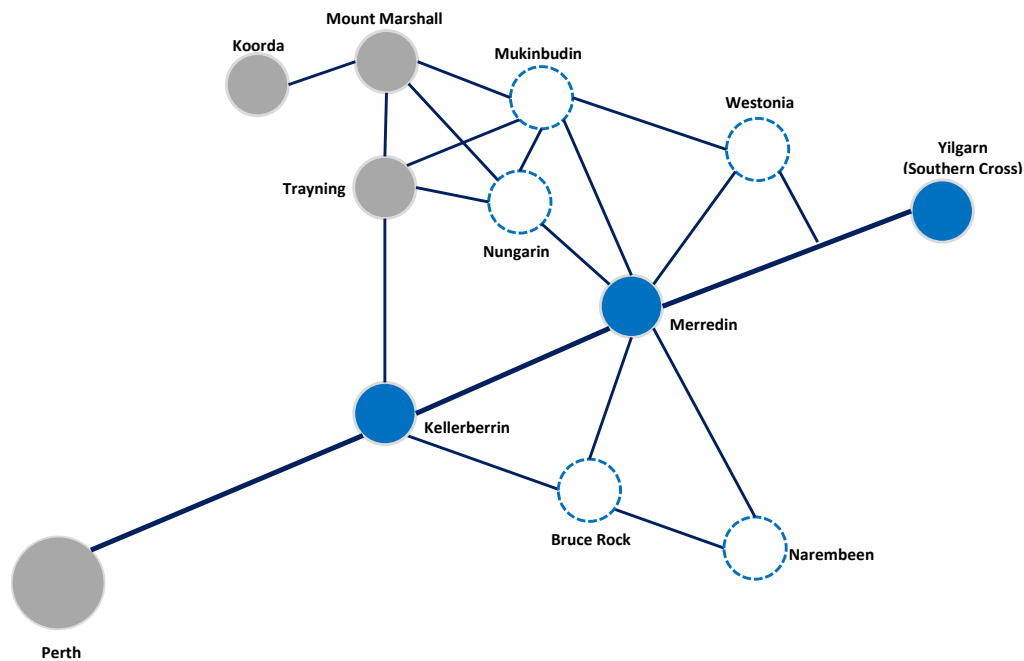


Figure 26 Spatial Distribution, Population Services, Central East Sub-Region



6.0 Economic Development Actions

RPS, in collaboration with the Wheatbelt Development Commission, has compiled a list of actions and initiatives required to facilitate, support and underpin the realisation of key economic opportunities for the Central East identified in section 4.0 of this Strategy. These Actions have been identified through consultation with Local Government, and refined within the Spatial Distribution Framework outlined in section 5.3.

The actions identified represent a short-list of initiatives for which business cases could be prepared for funding applications. This includes both State and Federal Government funding opportunities as well as potential private sector investment.

Further details on the individual actions are contained in the Local Government Area Profiles, included in Appendix A of this Strategy.

Note that the identified actions have been categorised under individual economic opportunities. However, it is acknowledged that some actions will have enabling and supporting effects for a range of opportunities and for the Central East economy generally.



Table 2 Economic Development Actions

LGA	Broadacre Agriculture	Mining & Support Services	Population Services	Other
Bruce Rock		<ul style="list-style-type: none"> ▪ Investigate the capacity of the electricity network for Bruce Rock town site to determine a cost effective solution to reduce the frequency of brown-outs and allow for potential investment in both industrial and residential land. ▪ Investigate solutions to water pressure and water availability issues to meet Building Code of Australia (BCA) requirements for fire fighting equipment in the industrial area. There is the potential for shared water service systems to provide a cost effective structure for future businesses to be able to afford initial setup costs. ▪ Identify the requirements for freight and logistics companies in consideration of further industrial land development to support the economic driver. ▪ Completion of 5 industrial lots that are currently under development 	<ul style="list-style-type: none"> ▪ Consult with Main Roads WA and the Public Transport Authority to resolve right of access issues for road/rail crossings within the townsite boundary. ▪ Install infill sewerage to allow residential development at increased density. ▪ Investigate the potential for short term workers accommodation to attract professionals. ▪ Continue to support and implement the project endeavours of the Central East Aged Care Alliance and its Aged Care Support/Solutions Report recommendations. ▪ Foster the retention and/or relocation of doctors and allied health professionals to Bruce Rock to continue the enhancement of health service delivery in Bruce Rock. ▪ Completion of a 25 lot residential subdivision 	<ul style="list-style-type: none"> ▪ Investigate potential off grid power solutions to mitigate the extent of power capacity issues in the townsite for development.
Kellerberrin		<ul style="list-style-type: none"> ▪ Investigate methods to reduce the cost of utility connections and headwork fees to increase business attraction and relocation to Kellerberrin. 	<ul style="list-style-type: none"> ▪ Continue support for the expansion of Dryandra Residential & Community Care (currently a 26 bed facility) to 47 beds including 13 dementia care beds. ▪ Plan for the expansion of Milligan independent living units to develop additional units. ▪ Investigate developing health support services to benefit from Kellerberrin's economic advantage in aged care and disability care. ▪ Continued installation of deep sewer in Kellerberrin to allow infill residential 	<ul style="list-style-type: none"> ▪ Construction of new dams (1 of 4 proposed) to increase the townsite's capacity to capture runoff from Kellerberrin Hill through 2 existing drainage channels. This will enable industry expansion and ensure that parks and gardens continue to be irrigated in a sustainable manner. ▪ Investigate solar power generation within the

LGA	Broadacre Agriculture	Mining & Support Services	Population Services	Other
			<p>development as well as the up-coding of residential areas.</p> <ul style="list-style-type: none"> ▪ The development of universally designed accommodation for young professionals, apprentices, disabled, and the aged ▪ Continue to support and implement the project endeavours of the Central East Aged Care Alliance and its Aged Care Support/Solutions Report recommendations. 	<p>Kellerberrin Shire, taking advantage of existing network connections and capacity.</p>
Koorda	<ul style="list-style-type: none"> ▪ Investigate a lime/stockpile depot to provide agricultural products to the Central East, Central Midlands and the Avon. 	<ul style="list-style-type: none"> ▪ Industrial land in Koorda needs to be adequately serviced to allow for industrial development and industry investment. ▪ Investigate methods to reduce the cost of connection to utilities and the impact on attractiveness for businesses to relocate to Koorda. 	<ul style="list-style-type: none"> ▪ Initiatives to promote population migration to increase the size of the local labour force and the skill base. ▪ Continue to support and implement the project endeavours of the Central East Aged Care Alliance and its Aged Care Support/Solutions Report recommendations. ▪ The development of additional independent living units (ILU's) to support aged care requirements. ▪ Develop a collaborative marketing group (Shires of Koorda, Mount Marshall, Mukinbudin, Nungarin and Trayning). 	<ul style="list-style-type: none"> ▪ Investigate a State funded, developed and maintained (State Route) Northern Heavy Haulage linkage extending from Southern Cross through Koorda and across to the Great Northern Highway (bypasses Perth freight bottleneck for freight needing to move North).
Merredin		<ul style="list-style-type: none"> ▪ Investigate solutions for issues pertaining to power infrastructure capacity in existing lines and water pressure for industrial areas ▪ Investigate potential methods to reduce the cost of connection to utilities and its impact on attractiveness for businesses to relocate to Merredin. 	<ul style="list-style-type: none"> ▪ Merredin Residential College (stage two) new works: \$3.9 million for new single bedrooms to increase student boarding capacity from 48 to 72 places (Funded). ▪ Investigate methods to diversify housing stock to meet demand from professionals, aged, families and singles. ▪ Investigate programs to intensify apprenticeships and traineeships and reduce the cost burden for business to 	<ul style="list-style-type: none"> ▪ Investigate the potential utilisation of ground de-watering project for desalination purposes for Shire, business and industry utilisation.

LGA	Broadacre Agriculture	Mining & Support Services	Population Services	Other
			<ul style="list-style-type: none"> undertake on-site training of students. Continue to support and implement the project endeavours of the Central East Aged Care Alliance and its Aged Care Support/Solutions Report recommendations. The development of additional independent living units (ILU's) to support aged care requirements. 	
Mount Marshall	<ul style="list-style-type: none"> Investigate how agro-forestry can be used to diversify agricultural operations and provide environmental benefit to marginal agricultural lands. 		<ul style="list-style-type: none"> Continue to support Notre Dame in financing the Regional Health Outcomes (Kununoppin Hospital – General Practice) Medical Scholarship program (\$25,000p/a for three years) in association with the Shire's of Trayning, Mukinbudin, Nungarin and Mount Marshall to attract and retain a medical practitioner. Identify demand for rural residential/lifestyle blocks and facilitate the release of such land if there is adequate demand. Continue to support and implement the project endeavours of the Central East Aged Care Alliance and its Aged Care Support/Solutions Report recommendations. Develop a collaborative marketing group (Shires of Koorda, Mount Marshall, Mukinbudin, Nungarin and Trayning). Develop a marketing program to capture the Wheatbelt Way, available investment and employment opportunities and the services of Mount Marshall for potential economic development and population growth. 	<ul style="list-style-type: none"> Support the upgrading of the Wyalkatchem airstrip to provide emergency service access and service the Northern Wheatbelt. Continue working with NEWROC to promote the Shire within a regional collaborative partnership.
Mukinbudin			<ul style="list-style-type: none"> Marketing of the recently developed serviced residential land available in Mukinbudin. Continue to support Notre Dame in 	

LGA	Broadacre Agriculture	Mining & Support Services	Population Services	Other
			<p>financing the Regional Health Outcomes (Kununoppin Hospital – General Practice) Medical Scholarship program (\$25,000p/a for three years) in association with the Shire's of Trayning, Mukinbudin, Nungarin and Mount Marshall to attract and retain a medical practitioner.</p> <ul style="list-style-type: none"> Investigate and advocate for the upgrade of the existing nursing post. Continued leveraging of investment into the District High School and its SIDE programs to provide a K-12 institution to alleviate pressure for students to relocate elsewhere. The development of additional independent living units (ILU's) to support aged care requirements. Continue to support and implement the project endeavours of the Central East Aged Care Alliance and its Aged Care Support/Solutions Report recommendations. Redevelop the caravan park and address drainage and water utilities to provide additional capacity 	
Narembeen		<ul style="list-style-type: none"> Investigate methods to reduce the cost of connection to utilities and the impact on attractiveness for businesses to relocate to Narembeen. 	<ul style="list-style-type: none"> Development of accommodation for young professionals and apprentices for businesses to fill existing skill shortages. Ensure that Roe Tourism Marketing Plans take into account trip generation targets and infrastructure assembly. Completion of the Narembeen Recreation Centre redevelopment (expected completion date early 2015) Investigate the expansion of the Community Service Centre (CRC and Health Centre) 	<ul style="list-style-type: none"> Upgrade and underground the potable water pipe from Narembeen to Wadderin.
Nungarin	<ul style="list-style-type: none"> Support the Department of Agricultural and Food Western 	<ul style="list-style-type: none"> Investigate methods to reduce the cost of connection to 	<ul style="list-style-type: none"> Investigate the development of young professional's accommodation to 	<ul style="list-style-type: none"> Investigate alternative methods for fuel supplies

LGA	Broadacre Agriculture	Mining & Support Services	Population Services	Other
	<p>Australia (DAFWA) in its local research and development program. This is also facilitated through the local agricultural action committee (Traying, Merredin, Nungarin, Mount Marshall, Mukinbudin and Westonia).</p>	<p>utilities.</p>	<p>service local businesses and Merredin.</p> <ul style="list-style-type: none"> ▪ Develop rural lifestyle blocks to meet demand locally and from Merredin. ▪ Continue to support the development of tourism related events and supporting infrastructure to increase trip generation and utilisation of local services. ▪ Continue to support Notre Dame in financing the Regional Health Outcomes (Kununoppin Hospital – General Practice) Medical Scholarship program (\$25,000p/a for three years) in association with the Shire's of Traying, Mukinbudin, Nungarin and Mount Marshall to attract and retain a medical practitioner. ▪ Develop a collaborative marketing group (Shires of Koorda, Mount Marshall, Mukinbudin, Nungarin and Traying). ▪ Upgrade tourism facilities in the Shire to support the Wheatbelt Way. ▪ Continue to support and implement the project endeavours of the Central East Aged Care Alliance and its Aged Care Support/Solutions Report recommendations. ▪ The development of additional independent living units (ILU's) to support aged care requirements. 	<p>in Nungarin.</p>
<p>Traying</p>	<ul style="list-style-type: none"> ▪ Identify potential for agro-forestry to provide agricultural industry development and environmental benefit to salinity affected agricultural land. 	<ul style="list-style-type: none"> ▪ Diversify and expand the industry base in order to attract new goods and services to town. ▪ Develop light industrial blocks to attract businesses to Traying. 	<ul style="list-style-type: none"> ▪ Development of accommodation for young professionals and apprentices to provide a developable skill base for businesses to utilise to fill skill shortages. ▪ Develop a collaborative marketing group (Shires of Koorda, Mount Marshall, Mukinbudin, Nungarin and Traying). ▪ Continue to support Notre Dame in 	

LGA	Broadacre Agriculture	Mining & Support Services	Population Services	Other
			<p>financing the Regional Health Outcomes (Kununoppin Hospital – General Practice) Medical Scholarship program (\$25,000p/a for three years) in association with the Shire's of Trayning, Mukinbudin, Nungarin and Mount Marshall to attract and retain a medical practitioner.</p> <ul style="list-style-type: none"> ▪ Continue to support and implement the project endeavours of the Central East Aged Care Alliance and its Aged Care Support/Solutions Report recommendations. ▪ The development of additional independent living units (ILU's) to support aged care requirements. 	
Westonia		<ul style="list-style-type: none"> ▪ Investigate and develop industry in Westonia related to the end of life of the mine site and potential uses once the mine life has ended. 	<ul style="list-style-type: none"> ▪ Develop tourism activity in Westonia linked to the legacy fund of Evolution Mining for the mine site (potential tourism/lifestyle uses once the mine life has ended). ▪ Investigate the development of the school site as a seniors centre/recreation area. ▪ Investigate the expansion of the Westonia caravan park including the development of a camper kitchen. ▪ Investigate the potential expansion of accommodation options to cater to bus tourism operators. ▪ Marketing of the Shire's natural amenity, Hood Penn Museum and Edna May Gold Mine lookout. ▪ Continue to support and implement the project endeavours of the Central East Aged Care Alliance and its Aged Care Support/Solutions Report recommendations. ▪ The development of additional 	<ul style="list-style-type: none"> ▪ Investigate requirements for Westonia to act as a satellite town or commuter belt for Merredin.

LGA	Broadacre Agriculture	Mining & Support Services	Population Services	Other
			independent living units (ILU's) to support aged care requirements.	
Yilgarn	<ul style="list-style-type: none"> Support the Far Eastern Agricultural Research Group (FEARG) (previously Bodallin Catchment Group) in its dryland agricultural research/trials. Completion of the State Barrier Fence to increase the agricultural security of livestock operations 	<ul style="list-style-type: none"> Strengthen the development of industry ties of mining companies within the sub-region. This will help identify economic opportunities which local businesses can potentially build upon to service the mining sector. Specific analysis of the potential for transport and logistics companies to develop in Southern Cross. 	<ul style="list-style-type: none"> Support the further development and enhancement of educational services at Merredin College and support the expansion of Merredin College's boarding facilities to provide regional access to high quality education. Liaise with education and training partners and mining companies to develop appropriate cross sector training courses that meet demand in both mining and agriculture. The construction of additional units to be utilised by young professionals and apprentices/ trainees. Development of a visitor centre and co-located services/facilities to expand the tourist capture in Southern Cross The staged redevelopment of the Southern Cross Caravan Park to encourage overnight visitors/tourists. Development of visitor centre and co-located services/facilities to expand the tourist capture in Southern Cross for the Shire of Yilgarn. This will enhance the development of tourism around mining, aviation and other unique attractions in the region. Continue to support and implement the project endeavours of the Central East Aged Care Alliance and its Aged Care Support/Solutions Report recommendations. The development of additional independent living units (ILU's) to support aged care requirements. 	
Central East Region	<ul style="list-style-type: none"> Investigate a lime/stockpile depot to provide agricultural products to the Central East, Central Midlands and the Avon. 	<ul style="list-style-type: none"> Investigate solutions to water pressure and water availability issues to meet Building Code of Australia (BCA) requirements 	<ul style="list-style-type: none"> Install infill sewerage to allow residential development at increased density. Investigate the potential for short term 	<ul style="list-style-type: none"> Investigate potential off grid power solutions to mitigate the extent of power capacity issues in

LGA	Broadacre Agriculture	Mining & Support Services	Population Services	Other
	<ul style="list-style-type: none"> ▪ Investigate how agro-forestry can be used to diversify agricultural operations and provide environmental benefit to marginal agricultural lands. ▪ Support the Department of Agricultural and Food Western Australia (DAFWA) in its local research and development programs. 	<p>for fire fighting equipment in the industrial area. There is the potential for shared water service systems to provide a cost effective structure for future businesses to be able to afford initial setup costs.</p> <ul style="list-style-type: none"> ▪ Investigate methods to reduce the cost of utility connections and headwork fees to increase business attraction and relocation to towns within the sub-region. ▪ Strengthen the development of industry ties of mining companies within the sub-region. This will help identify economic opportunities which local businesses can potentially build upon to service the mining sector. 	<p>workers accommodation to attract professionals.</p> <ul style="list-style-type: none"> ▪ Continue to support and implement the project endeavours of the Central East Aged Care Alliance and its Aged Care Support/Solutions Report recommendations. ▪ The development of additional independent living units (ILU's) to support aged care requirements in line with the Central East Aged Care Report. ▪ Initiatives to promote population migration to increase the size of the local labour force and the skill base. ▪ Develop a collaborative marketing group (Shires of Koorda, Mount Marshall, Mukinbudin, Nungarin and Trayning). ▪ Investigate methods to diversify housing stock to meet demand from professionals, aged, families and singles. ▪ Identify demand for rural residential/lifestyle blocks and facilitate the release of such land if there is adequate demand. ▪ Continue support of Kellerberrin's Dryandra Residential & Community Care Facility ▪ Continue to support Notre Dame in financing the Regional Health Outcomes (Kununoppin Hospital – General Practice) Medical Scholarship program (\$25,000p/a for three years) in association with the Shire's of Trayning, Mukinbudin, Nungarin and Mount Marshall to attract and retain a medical practitioner. ▪ Support the further development and enhancement of educational services at Merredin College and support the 	<p>townsites for development.</p> <ul style="list-style-type: none"> ▪ Investigate a State funded, developed and maintained (State Route) Northern Heavy Haulage linkage extending from Southern Cross through Koorda and across to the Great Northern Highway (bypasses Perth freight bottleneck for freight needing to move North). ▪ Support the upgrading of the Wyalkatchem airstrip to provide emergency service access and service the Northern Wheatbelt.

LGA	Broadacre Agriculture	Mining & Support Services	Population Services	Other
			expansion of Merredin College's boarding facilities to provide regional access to high quality education.	



APPENDIX A – LOCAL GOVERNMENT PROFILES

Shire of Bruce Rock

Context

The Shire of Bruce Rock covers an area of 2,724.7km² and has an estimated population of 996 (9.6% of the Central East population). The Shire contains the localities of Ardath, Babakin, Belka, Bruce Rock, Erikin, Eujinyin, Kwolyin, Shackleton, and Yarding. The administrative centre of the Shire is the town of Bruce Rock, which is located approximately 243 km East of Perth.

Broadacre agricultural production has been identified as the primary industry and economic driver for the Shire. The Shire of Bruce Rock sees the advantage of the area being its proximity to Perth and the development of land suited for industrial purposes. The Shire's vision is to see population growth through the removal of infrastructure barriers to industry development.

Characteristics

The Shire of Bruce Rock (Bruce Rock) has the following characteristics:

- An estimated residential population of 996 persons in 2011 – a decline of 11.6% relative to the estimated 1,127 residents in 2001. The WA Planning Commission forecasts this trend to accelerate over the next decade, declining a further 19% to 806 people in 2021 (rebased).
- A significant proportion of the population (23.8%) is under 14 years of age– greater than the Perth Metropolitan Region (19.2%) and the WA (19.7%) averages. 17.0% of Bruce Rock's population is aged over 65 years, which is significantly greater than that of the Perth Metropolitan Region (12.5%) and the WA average (12.3%). Bruce Rock had a fertility rate of 2.84 children in 2011 – above replacement levels (2.1).
- Median personal income levels for Bruce Rock (\$41,568) are comparable to the sub-regional average (\$41,490); however they are below the Perth Metropolitan Region (\$53,864) and WA (\$53,227) averages.
- At 80% (392 of 490 dwellings), Bruce Rock's dwelling occupancy rate is well above the sub-regional average (73.8%). While the dwelling occupancy rate would suggest that there is additional housing capacity available, there is likely a lack of housing or lack of appropriate types of housing in the main centre, available dwellings located in more isolated settlements in terms of access to employment and essential services.
- The median house price for Bruce Rock increased from \$65,000 to \$150,000 over the 6 year period (2006 to 2012) a 131% increase. Demand for housing in Bruce Rock, limited availability and related circumstances have placed upward pressure on the market. Income levels compared to housing prices indicate that Bruce Rock's housing market is still considered very affordable, below both the subregional and WA average with a median multiple of 2.52 (sub-regional average 2.61, WA average 5.98).
- Agriculture is Bruce Rock's primary economic contributor, accounting for a total gross value of \$58.9m in the 2005-06 financial year (10% of the sub-region gross value of production) and \$39.7m in the 2010-11 financial year (14% of the sub-region gross value of production). These returns occur from an agricultural land area of 261,712 ha which represents 7% of the sub-regions agricultural land holdings.
- Bruce Rock's economy is underlined by an employment self-sufficiency rate of 86% (in 2011). This, coupled with a low unemployment rate of 5.2% indicates that the majority of residents work and reside in the Shire.
- The Shire has one District High School located in Bruce Rock with 143 students and a Primary School with 20 students in Babakin.

Economic Opportunities

The following economic opportunities have been identified:

Broadacre Agriculture

Broadacre agriculture (grains, oilseed, legumes & livestock) will remain as a key economic driver for the Shire of Bruce Rock. As the sector is well developed, future growth will be dependent on increased research and development (R&D) and the uptake of agricultural innovation in technology. Investigations into agro forestry development within the Shire have been undertaken by farmers, however this has yet to reach a commercial scale and is instead utilised to mitigate environmental issues. This forms part of the drive towards sustainable agriculture within the Shire.

Mining & Support Services

The agricultural services sector has the potential to expand into mining support servicing operations. Local engineering and transport companies such as Bruce Rock Engineering and Colemans Transport are examples of this. The emerging freight and logistics industry surrounding these strategic links are taking advantage of Bruce Rock's geographic location midway between Perth and Kalgoorlie and transportation networks. However constraints need to be overcome in order to provide opportunities for growth. Access to electricity and water networks is limiting industrial development and costs of connection are prohibitive for businesses. Investigation of alternative methods of servicing has the potential to prove beneficial for land and business development in Bruce Rock.

Population Services

Bruce Rock maintains a number of population services, including health, education and community amenities. Traineeships and apprenticeship training is undertaken by businesses locally, as well as being provided by C.Y. O'Connor Institute in Merredin. Industry is driving growth; however infrastructure issues and the lack of available housing is an impediment to growing the town's population and population services (including staff attraction and retention). A planned residential subdivision will help to mitigate the lack of available housing in the medium-longer term.

Bruce Rock, a member of the 11 LGA's that make up CEACA has undertaken additional well-aged housing analysis as a result of the Central East Aged Care & Support Solutions Report recommendations. This will allow residents to age in place and will complement Bruce Rock's ambitions to provide home care services while supporting existing health service access in the region.

Tourism is a potential economic value-adding opportunity for the Shire, with the wildflower season, granite outcrops and breakaways, cultural events and sites of heritage significance providing a range of attractions. The Vietnam Veterans Reunion Weekend is a nationally renowned attraction, with 1500-3000 people visiting the town during November. Bruce Rock is considered a gateway from the Central East to Wave Rock (Shire of Kondinin). Current tourism servicing is provided by the local caravan park, hotel and roadhouse providing food & accommodation services to visitors. Extending these provisions will encourage visitors to stay overnight or as a travel base to further experience the Wheatbelt region.

Actions

- Investigate the potential for short term workers accommodation to attract professionals.
- Investigate the capacity of the electricity network for Bruce Rock town site to determine a cost effective solution to reduce the frequency of brown-outs and allow for potential investment in both industrial and residential land.

- Investigate solutions to water pressure and water availability issues to meet Building Code of Australia (BCA) requirements for fire fighting equipment in the industrial area. There is the potential for shared water service systems to provide a cost effective structure for future businesses to be able to afford initial setup costs.
- Identify the availability of large industrial blocks to support growth in the freight & logistics industry.
- Completion of a 25 lot residential sub-division
- Completion of 5 industrial lots that are currently under development
- Investigate potential off grid power solutions to mitigate the extent of power capacity issues in the townsite for development.
- The development of additional independent living units (ILU's) to support aged care requirements.
- Foster the retention and/or relocation of doctors and allied health professionals to Bruce Rock to continue the enhancement of health service delivery in Bruce Rock.
- Consult with Main Roads WA and the Public Transport Authority to resolve right of access issues for road/rail crossings within the townsite boundary.
- Install infill sewerage to allow residential development at increased density.
- Continue to support and implement the project endeavours of the Central East Aged Care Alliance and its Aged Care Support/Solutions Report recommendations.

Shire of Kellerberrin

Context

The Shire of Kellerberrin covers an area of 1,915.6km² and has an estimated population of 1,210 people (11.7% of the Central East population). The Shire contains the localities of Baandee, Doodlakine, Kellerberrin and North Baandee. The administrative centre of the Shire is the town of Kellerberrin, which is located approximately 203 km East of Perth.

The Shire of Kellerberrin is primarily focused on broadacre agricultural production as the key economic driver through farming and agricultural services. Kellerberrin is well serviced by freight and public transport, located on Great Eastern Highway and serviced by the Prospector train which connects Kellerberrin to the stations between Perth and Kalgoorlie. The Shire's vision is to attract people to move to the region to live and work. Achieving this vision involves identifying key economic development opportunities and competitive advantages including agricultural services, mining support and lifestyle choices.

Characteristics

The Shire of Kellerberrin (Kellerberrin) has the following characteristics:

- An estimated residential population of 1,210 persons in 2011 – a decline of 0.5% relative to the estimated 1,216 residents in 2001. The WA Planning Commission forecasts the population to remain stable over the next decade to 2021 (rebased).
- A significant proportion of the population (22.5%) is under 14 years of age – greater than the Perth Metropolitan Region (19.2%) and the WA (19.7%) averages. 20.7% of Kellerberrin's population is aged over 65 years, which is significantly greater than that of the Perth Metropolitan Region (12.5%) and the WA average (12.3%). Kellerberrin had a fertility rate of 2.82 children in 2011 – above replacement levels (2.1).
- Kellerberrin has the sub-regions lowest median personal income levels at \$36,665. This is well below the sub-regional average (\$41,490), and the Perth Metropolitan Region (\$53,864) and WA (\$53,227) averages.
- At 80.3% (440 of 548 dwellings) Kellerberrin's dwelling occupancy rate is the highest in the subregion and well above the sub-regional average (73.8%). While the dwelling occupancy rate would suggest that there is additional housing capacity available, there is likely a lack of housing or lack of appropriate types of housing in the main centre, with available dwellings located in more isolated settlements in terms of access to employment and essential services. This is possibly the reason for the appreciation in the Shires median house price, increasing from \$84,000 to \$149,500 over the 6 year period (2006 to 2012) a 78% increase.
- When income levels are compared with median house prices Kellerberrin had the highest median multiple of the sub-region of 3.13 (sub-regional average 2.61, WA average 5.98) indicating that while it is less affordable than other towns in the sub-region it is still considered very affordable by WA standards.
- Agriculture is Kellerberrin's primary economic contributor, accounting for a total gross value of \$39.4m in the 2005-06 financial year (7% of the sub-region gross value of production) and \$23.7m in the 2010-11 financial year (8% of the sub-region gross value of production). These returns occur from an agricultural land area of 176,274 ha which represents 4% of the agricultural land holdings in the sub-region.
- Kellerberrin's economy is underlined by an employment self-sufficiency rate of 87% (in 2011). This combined with an unemployment rate of 4.2% indicates that the majority of residents work and reside within the Shire.
- The Shire has one District High School (K-10) located in Kellerberrin with 201 students.

Economic Opportunities

The following economic opportunities have been identified:

Broadacre Agriculture

Broadacre agriculture (grains, oilseed, legumes & livestock) is likely to remain the key economic driver for the Shire of Kellerberrin. As the sector is well developed, future growth in yields will become increasingly dependent on research and development (R&D). This includes the uptake of agricultural innovation and precision farming technologies. Kellerberrin has one of Cooperative Bulk Handling's (CBH) three sub-regional strategic grain receival sites. The CBH facility is strategically located on the East West standard gauge railway, providing direct access to the Kwinana port Grain Terminal. CBH has undertaken significant expansion to the facility, purchasing additional land to support capacity upgrades in freight movement and storage. Agricultural services such as Moylan Silo's and Eastern Districts Seed Cleaning Operators (EDSCO) are also located in Kellerberrin and continue to service regional needs.

Mining & Support Services

Local agricultural service businesses can potentially expand their service base to include the mining industry as clients. This opportunity complements Kellerberrin's central location within the region and access to and between Perth-Kalgoorlie via the Great Eastern Highway. The availability of large and affordable industrial lots could attract heavy machinery, transport/logistics and mining based companies. Links to the mining industry are also apparent through community structure, with several fly in fly out and drive in drive out residents residing within the town. Many of these residents have relocated from metropolitan centres, highlighting the attraction of a rural lifestyle with the added proximity to the Goldfields and Perth Airport.

Population Services

Kellerberrin has a variety of services, ranging from health, education and community amenities. The regionally recognised and accessed aged care facility Dryandra Lodge is located in the town, and is supported by the hospital and medical centre. In respect to education, the District High School (K-10) and a small C.Y. O'Connor Institute campus provide various courses, in addition to traineeships and apprenticeships which are often taken up by businesses locally or supported through the C.Y. O'Connor Institute Merredin Campus. Merredin College also provides an extended educational opportunity for secondary students, with a daily school bus service to and from Merredin to Kellerberrin.

Kellerberrin, a member of the 11 LGA's that make up CEACA has undertaken additional well-aged housing analysis as a result of the Central East Aged Care & Support Solutions Report recommendations. The Dryandra Residential & Community Care provides residential aged care for both local and surrounding residents. Expansion of the facility is underway to increase to 47 beds, including 13 dementia beds. A recommendation from the CEACA Aged Care Solution/s report is that Dryandra Residential & Community Care be a key provider for Home and Community Care Packages. In addition to the Hostels' expansion, the development of independent living units will continue to support the Shire in addressing the communities aged care requirements. Kellerberrin is a regional base for the Activ Foundation, which supports disabled people through employment, training programs, accommodation provision and recreational activities within the community. The establishment of health support services reinforces the potential value in cross-sector training and employment opportunities (in disabled & aged care servicing) to provide a sustainable and skilled health workforce.

Tourism is also a potential economic value add opportunity industry for the Shire. The wildflower season, granite outcrops and breakaways, numerous cultural events and sites of heritage significance provide a range of attractions. Current tourism servicing is undertaken from the local caravan park, hotels and motels,

which provide both food & accommodation services to visitors. Building on the current infrastructure will encourage visitors to stay overnight and use the town as a base to further experience the Wheatbelt region.

Actions

- Continue support for the expansion of Dryandra Residential & Community Care (currently a 26 bed facility) to 47 beds including 13 dementia care beds.
- Continue to support and implement the project endeavours of the Central East Aged Care Alliance and its Aged Care Support/Solutions Report recommendations.
- Plan for the expansion of Milligan independent living units to develop additional units.
- Investigate methods to reduce the cost of utility connections and headwork fees to increase business attraction and relocation to Kellerberrin.
- Investigate developing health support services to benefit from Kellerberrin's economic advantage in aged care and disability care.
- Continued installation of deep sewer in Kellerberrin to allow infill residential development as well as the up-coding of residential areas.
- The development of universally designed accommodation for young professionals, apprentices, disabled, and the aged
- Construction of new dams (1 of 4 proposed) to increase the townsite's capacity to capture runoff from Kellerberrin Hill through 2 existing drainage channels. This will enable industry expansion and ensure that parks and gardens continue to be irrigated in a sustainable manner.
- Investigate solar power generation within the Kellerberrin Shire, taking advantage of existing network connections and capacity.

Shire of Koorda

Context

The Shire of Koorda covers an area of 2,832.4km² and has an estimated population of 445 people (4.3% of the Central East population). The Shire contains the localities of Dukin, Koorda, Kulja, Mollerin and Narkal. The administrative centre of the Shire is the town of Koorda, which is located approximately 237 km North East of Perth.

The Shire of Koorda is primarily focused on broadacre agricultural production as the key economic driver. The Shire's vision is to expand its population base. The Shire is keen to attract new businesses to the town and is investigating light industrial land development for agriculture or transport related industries.

Characteristics

The Shire of Koorda LGA (Koorda) has the following characteristics:

- An estimated residential population of 445 persons in 2011 – a decline of 8.8% relative to the estimated 488 residents in 2001. The WA Planning Commission forecasts the population to grow over the next decade by 12% to 500 (rebased).
- A significant proportion of the population (24.1%) is aged 14 years or younger – greater than the Perth Metropolitan Region (19.2%) and the WA (19.7%) average. Also, 16.5% of Koorda's population is aged over 65 years, which is significantly greater than that of the Perth Metropolitan Region (12.5%) and the WA average (12.3%). Koorda had a fertility rate of 6.06 children in 2011 – above replacement levels (2.1). This is the highest within the Wheatbelt and significantly greater than the State average.
- Median personal income levels for Koorda (\$38,055) are below the sub-regional average (\$41,490), and well below the Perth Metropolitan Region (\$53,864) and WA (\$53,227) averages.
- Koorda's dwelling occupancy rate is 67.3% (86 of 177 dwellings); this is below the sub-regional average (73.8%).
- The median house price for Koorda increased from \$60,000 to \$94,000 over the 6 year period (\$ 2006 to 2012). This totalled a 56.7% increase.
- Koorda had a below average median multiple (1.72) compared to State and sub-regional affordability levels (sub-regional average 2.61, WA average 5.98).
- Agriculture is Koorda's primary economic contributor, accounting for a total gross value of \$36.6m in the 2005-06 financial year (6% of the sub-region gross value of production) and \$12.7m in the 2010-11 financial year (4% of the sub-region gross value of production). These returns occur from an agricultural land area of 250,065 ha which represents 6% of the agricultural land holdings in the subregion.
- Koorda's economy is underlined by an employment self-sufficiency rate of 85% (in 2011). This combined with an unemployment rate of 5.9% indicates that the majority of residents work and reside in the Shire.
- The Shire has one primary school with 49 students.

Economic Opportunities

The following economic opportunities have been identified:

Broadacre Agriculture

Broadacre agriculture (grains, oilseed, legumes & livestock) will continue to be a major economic driver for the Shire of Koorda. Future growth will be dependent on increased research and development (R&D) and high uptake of agricultural innovation and technology. There are limited agricultural services in Koorda, as the majority of services operate out of Merredin, Wyalkatchem and Wongan Hills.

Mining & Support Services

Koorda has the ability to develop an economic opportunity in mining and support services, due to its distance to the core mining activity occurring in the sub-region and links with the Mid-West and Goldfields region. As such, Koorda is well positioned to take advantage of the transport links in its geographical context as well as light industry servicing.

Population Services

Koorda has a limited level of population servicing. It is supported through services from Merredin and Wyalkatchem. Koorda, a member of the 11 LGA's that make up CEACA has undertaken additional well-aged housing analysis as a result of the Central East Aged Care & Support Solutions Report recommendations. This will ensure that people have the ability to age in their community. Therefore the health and aged care sector is seen by the Shire as an integral aspect of retaining its population base.

Actions

- Industrial land in Koorda needs to be adequately serviced to allow for industrial development and industry investment.
- Initiatives to promote population migration to increase the size of the local labour force and the skill base.
- Investigate methods to reduce the cost of connection to utilities and the impact on attractiveness for businesses to relocate to Koorda.
- Investigate a State funded, developed and maintained (State Route) Northern Heavy Haulage linkage extending from Southern Cross through Koorda and across to the Great Northern Highway (bypasses Perth freight bottleneck for freight needing to move North).
- Investigate a lime/stockpile depot to provide agricultural products to the Central East, Central Midlands and the Avon.
- Develop a collaborative marketing group (Shires of Koorda, Mount Marshall, Mukinbudin, Nungarin and Trayning).
- Continue to support and implement the project endeavours of the Central East Aged Care Alliance and its Aged Care Support/Solutions Report recommendations.
- The development of additional independent living units (ILU's) to support aged care requirements.

Shire of Merredin

Context

The Shire of Merredin covers an area of 3,294.4km² and has an estimated population of 3,353 people (32.4% of the Central East population). The Shire contains the localities of Burracoppin, Goomarin, Hines Hill, Korbel, Merredin, Muntadgin, Nangeenan, Nokanning, Norpa, Nukarni and Tangedin. The administrative centre of the Shire is the town of Merredin, which is located approximately 260 km East of Perth.

The Shire of Merredin's primary economic driver is broadacre agriculture. The town centre of Merredin serves as the regional base for a range of government agencies and services. Merredin is well located, being situated directly on the Great Eastern Highway and interstate rail line which presents excellent freight linkages and industrial opportunities. Merredin is also a major stop for the Prospector passenger train services. Three facilities unique to the Central East which are located in the Shire of Merredin are the China Southern Western Australian Flying College (CSWAFC), the Collgar Wind farm and Merredin Energy. Flight training and aviation facilities at the Merredin Aerodrome provide civil aviation training for the private sector. The Collgar Wind Farm contains 111 Vestas turbines with a potential productive capacity of 206MW. There is potential for further renewable energy development, particularly wind and solar generation in the Shire. The Shire's vision is to continue to develop its strong position of goods and services provision and to develop the town and the Shire into a strategically important regional centre.

Characteristics

The Shire of Merredin (Merredin) has the following characteristics:

- An estimated residential population of 3,353 persons in 2011 – a decline of 11% relative to the estimated 3,768 residents in 2001. The WA Planning Commission forecasts this trend to continue over the next decade, declining a further 9% to 3,053 people in 2021 (rebased).
- A significant proportion of the population (21.5%) is aged 14 years or younger – not dissimilar to the Perth Metropolitan Region (19.2%) and the WA (19.7%) average. 12.9% of Merredin's population is aged over 65 years, which is similar to the Perth Metropolitan Region (12.5%) and the WA average (12.3%). Merredin had a fertility rate of 2.49 children in 2011 – above replacement levels (2.1).
- Median personal income levels for Merredin (\$41,537) are comparable to the sub-regional average (\$41,490); however they are below the Perth Metropolitan Region (\$53,864) and WA (\$53,227) averages.
- At 79.9% (1,215 of 1,520 dwellings) Merredin's dwelling occupancy rate is well above the sub-regional average (73.8%). While the dwelling occupancy rate would suggest that there is additional housing capacity available, there is likely a lack of housing or lack of appropriate types of housing in the main centre, with available dwellings located in more isolated settlements in terms of access to employment and essential services. Demand within the Merredin townsite has likely resulted in the growth of the median house price for the Shire, increasing from \$111,500 to \$175,000 over the 6 year period (2006 to 2012) a 57% increase.
- When income levels are compared with median house prices, Merredin's local housing market was found to be very affordable, with a median multiple of 2.72 (sub-regional average 2.61, WA average 5.98).
- Agriculture is Merredin's primary economic contributor, accounting for a total gross value of \$65.8m in the 2005-06 financial year (11% of the sub-region gross value of production) and \$51.0m in the 2010-11 financial year (17% of the sub-region gross value of production). These returns occur from an agricultural land area of 327,829 ha which represents 8% of the agricultural land holdings in the subregion.
- Merredin's economy is also underlined by an employment self-sufficiency rate of 96% (in 2011). This, coupled with a low unemployment rate of 4.2%, indicates that the majority of residents work and reside in the Shire. The proximity to a 100% self-sufficiency rate indicates that there is potentially workforce

attraction from surrounding Shires such as Nungarin, Bruce Rock and Kellerberrin.

- The Shire has one K-12 College (with residential college) with 563 students and a Private Primary School with 182 students; both are located in Merredin. Tertiary education is provided through Merredin C.Y. O'Connor Institute and China Southern West Australian Flying College provides private flying education and training.

Economic Opportunities

The following economic opportunities have been identified:

Broadacre Agriculture

Broadacre agriculture (grains, oilseed, legumes & livestock) will remain a major economic driver for the Shire. Merredin provides a pivotal role in agricultural R&D through the Department of Agriculture and Food's Merredin Offices and its nearby Merredin Research Station. Merredin's strategic location in relation to freight networks including the East-West standard gauge railway have afforded it with one of the three Cooperative Bulk Handling (CBH) strategic sub-regional grain receipt sites.

This strategically central location is attractive to agricultural, engineering and freight and logistics companies. A number of engineering and freight logistics companies located in Merredin service a large geographical area (Transplus, Merredin Freight Lines, Marley's Transport, Karni Engineering). This presents an opportunity for an agglomeration of these businesses that require similar ancillary services. For similar reasons, Merredin is the regional base for the majority of agricultural servicing businesses including farm machinery dealerships, fabricators, agribusiness and consultants. These include companies such as Ag Implements Merredin, Hutton & Northey, Farmpower, Elders and Landmark. Hence, Merredin will be able to further develop its strategic position as an agricultural engineering and freight & logistics servicing centre and hub for the surrounding districts.

Mining & Support Services

Merredin is already providing mining support services to the sub-region, with a prime example being Karni Engineering. Similarly, local machinery dealers such as Hutton & Northey provide mining support services. This economic opportunity is currently being investigated, however further development, especially in regards to heavy and light industry development is yet to occur. Large affordable industrial lots provide the potential for securing heavy machinery, transport and logistics and mining based companies. In relation to the availability of these lots, the C.Y. O'Connor Pipeline, Collgar Windfarm (including three existing transmission lines – 66Kv 132Kv & 220Kv) and proximity to both interstate road and rail links give Merredin an advantage in regards to mining support services development.

Merredin is in close proximity to the Evolution Mining operations in Westonia (Edna May Gold Mine). Population services are attractive to workers in Merredin and hence there are drive-in, drive-out miners (DIDO) that work in Westonia yet live in Merredin. Expansion of the mining industry in the Central East provides the opportunity for both mining and mining support service growth and changes to labour requirements. This will be supported through C.Y. O'Connor Institute's continued provision of apprenticeship and traineeship courses through the agricultural service industry as well as heavy automotive and commerce sector. There is an obvious crossover in skills between agriculture and mining and as such cross sector training programs to fill labour gaps and maintain a skilled workforce to take advantage of mining related economic opportunities in the sub-region are vital.

Population Services

Merredin serves as the regional centre for the majority of health, education, government services, retail and high quality public amenities. The Merredin Hospital & Ancillary/Auxiliary Services, Merredin District Court, Merredin College (K-12 school with boarding facilities), Merredin C.Y. O'Connor Institute (TAFE/VET) and various Government Offices are located in Merredin but service the broader sub-region. Government services provide a major source of employment in Merredin, and their expansion will be required to support the growing sub-regional population. Recreational facilities are of high standard and the community is serviced by a number of civic and social services.

Education is a key driver for Merredin, with C.Y. O'Connor Institute, Merredin College (K-12 public school with boarding facilities) and St Marys Primary School (K-7 private school). The move of Year 7's to secondary schooling coupled with changing economic circumstances of families living in the sub-region presents a potential shift back to local schooling in contrast to the trend of sending children to Perth for their secondary education. This growth scenario presents significant demand, which cannot be catered for without expansion to the facilities due to current waiting lists at the Merredin Residential College. Merredin C.Y. O'Connor Institute provides apprentice/traineeship courses that strengthen the local skill base and will be increasingly important for ensuring local skilled workforce development. Childcare within Merredin is heavily utilised through the single family day care and long day care facilities, with children on waiting lists to get into childcare. The China Southern West Australian Flying College, who provide private training for pilots, is an important private educational and training institute for Merredin.

Merredin services nearby localities (Burracoppin, Muntadgin) as part of its own HACC services, and the Merredin Hospital and its ancillary services are utilised by the sub-region. Merredin, a member of the 11 LGA's that make up CEACA has undertaken additional well-aged housing analysis as a result of the Central East Aged Care & Support Solutions Report recommendations. Investigations have identified the strategic importance of Merredin's regionally significant health services; and as part of the CEACA findings high care and dementia care is seen as needing expansion. High care and transitional care units are located at Berringa & Moorditj Mia (Merredin Hospital). Future expansion of independent living units will be required to reduce the overflow into the hospital as well as provide high care services (dementia and mental health). This will strengthen Merredin's role in the provision of health and aged care services to both Merredin and the sub-region as well as to enable residents to age in place.

The Merredin Visitor Centre provides a central avenue of information and services for visitors and tourists. A number of hotels, motels and a caravan park provide accommodation, however these are consistently booked out during weekdays by business/corporate interests. The expansion of tourism services will provide greater population servicing capabilities, as well as ensuring that tourism industry development continues to value add to local businesses.

Actions

- Merredin Residential College (stage two) new works: \$3.9 million for new single bedrooms to increase student boarding capacity from 48 to 72 places (Funded).
- Investigate methods to diversify housing stock to meet demand from professionals, aged, families and singles.
- Continue to support and implement the project endeavours of the Central East Aged Care Alliance and its Aged Care Support/Solutions Report recommendations.
- The development of additional independent living units (ILU's) to support aged care requirements.
- Investigate programs to intensify apprenticeships and traineeships and reduce the cost burden for business to undertake on-site training of students.

-
- Continue to support and implement the project endeavours of the Central East Aged Care Alliance and its Aged Care Support/Solutions Report recommendations.
 - Investigate potential methods to reduce the cost of connection to utilities and its impact on attractiveness for businesses to relocate to Merredin.
 - Investigate solutions for issues pertaining to power infrastructure capacity in existing lines and water pressure for industrial areas
 - Investigate the potential utilisation of ground de-watering project for desalination purposes for Shire, business and industry utilisation.

Shire of Mount Marshall

Context

The Shire of Mount Marshall covers an area of 10,185.9km² and has an estimated population of 483 people (4.7% of the Central East population). The Shire contains the localities of Beacon, Bencubbin, Cleary, Gabbin, Mandiga, Welbungin and Wialki. The administrative centre of the Shire is the town of Bencubbin, which is located approximately 273 km North-East of Perth.

The Shire is primarily focused on broadacre agricultural production as its key economic driver. Bencubbin and Beacon offer basic services and community facilities. The vision of Mount Marshall is to continue to provide unique tourism experiences and develop Shire service sharing arrangements. In particular, their aim is to retain the existing population base and to help facilitate growth through local commerce and industry.

Characteristics

The Shire of Mount Marshall (Mount Marshall) has the following characteristics:

- An estimated residential population of 483 persons in 2011 – a decline of 28.2% relative to the estimated 673 residents in 2001. The WA Planning Commission forecasts this trend to reverse over the next decade, with an estimated increase of 10% to 533 people in 2021 (rebased).
- A significant proportion of the population (24.1%, the highest percentage in the subregion) is aged 14 years or younger – higher than that of the Perth Metropolitan Region (19.2%) and the WA (19.7%) average. 10.7% of Mount Marshall's population is aged over 65 years, which is lower than the Perth Metropolitan Region (12.5%) and the WA average (12.3%). This would indicate a lack of aged care services means that residents relocate out of the Shire as they age.
- Median personal income levels for Mount Marshall (\$42,362, the highest in the sub-region) are above the sub-regional average (\$41,490); however they are below the Perth Metropolitan Region (\$53,864) and WA (\$53,227) averages.
- Mount Marshall's dwelling occupancy rate is the lowest in the subregion at 55.6% (188 of 338 dwellings), well below the sub-regional average (73.8%). This is likely the result of structural change in the local economy and demand for housing occurring in the Shire's main townsites rather than small agricultural settlements. Likely due to this factor, the growth in the median house price has been limited compared to other Shires, with Mount Marshall increasing from \$27,000 to \$50,000 over the 6 year period (2006 to 2012) an 85% increase. This has resulted in the Central East's most affordable local housing market, with a median multiple (median incomes compared to median house prices) of 1.19 (sub-regional average 2.61, WA average 5.98).
- Agriculture is Mount Marshall's primary economic contributor, accounting for a total gross value of \$72.5m in the 2005-06 financial year (12% of the sub-region gross value of production) and \$27.6m in the 2010-11 financial year (9% of the sub-region gross value of production). These returns occur from an agricultural land area of 645,229 ha which represents 16% of the agricultural land holdings in the subregion.
- Mount Marshall's economy is underlined by an employment self-sufficiency rate of 90% in 2011. This coupled with a low unemployment rate of 2.2% indicates that the majority of residents work and reside within the Shire.
- The Shire has two Primary Schools located in Bencubbin and Beacon with 73 students overall.

Economic Opportunities

The following economic opportunities have been identified:

Broadacre Agriculture

Broadacre agriculture (grains, oilseed, legumes & livestock) is a major economic driver for the Shire of Mount Marshall. Future growth will be dependent on increased research and development (R&D) and high uptake of agricultural innovation.

Corporate farms have developed in the Shire; with the most recent being Singaporean based interests. Agro-forestry has been investigated, with small scale planting of sandalwood in the Shire. Studies into the further development of value adding and commercialisation within this industry could present additional economic opportunities. These agricultural industries form part of the drive towards sustainable agriculture within the Shire. The continued leveraging of investment into R&D in agriculture and development of farm grower groups will ensure the sustainability of agriculture in the Shire into the long term.

Population Services

Mount Marshall maintains a level of population services to service the local population, with core services including health and education. Traineeships and apprenticeships are undertaken by businesses locally, as well as being provided through C.Y. O'Connor Institute in Merredin, reinforcing Mount Marshall's local skill base. Recreational facilities and civic services adequately service the local population; however there is an identified need to expand social support services in the Shire.

Mount Marshall, a member of the 11 LGA's that make up CEACA has undertaken additional well-aged housing analysis as a result of the Central East Aged Care & Support Solutions Report recommendations. They are looking to continue to provide housing to allow residents to age in place. This will provide synergies with Silver Chain in Bencubbin and Beacon and existing regional health services and access within the sub-region (via Kununoppin Hospital, Merredin Hospital).

Tourism is also a potential economic value add opportunity industry for the Shire. The Wheatbelt Way has increased tourism visitation within the Shire to attractions including the wildflower season, granite outcrops and breakaways and sites of heritage significance. Current tourism servicing is limited, however building on current infrastructure will encourage visitors to stay overnight and use the towns as a base to further experience the Wheatbelt region.

Actions

- Continue to support Notre Dame in financing the Regional Health Outcomes (Kununoppin Hospital – General Practice) Medical Scholarship program (\$25,000p/a for three years) in association with the Shire's of Trayning, Mukinbudin, Nungarin and Mount Marshall to attract and retain a medical practitioner.
- Support the upgrading of the Wyalkatchem airstrip to provide emergency service access and service the Northern Wheatbelt.
- Identify demand for rural residential/lifestyle blocks and facilitate the release of such land if there is adequate demand.
- Investigate how agro-forestry can be used to diversify agricultural operations and provide environmental benefit to marginal agricultural lands.
- Continue working with NEWROC to promote the Shire within a regional collaborative partnership.
- In conjunction with the Wheatbelt Way, development a marketing program to leverage opportunities to attract businesses and residents.

- Continue to support and implement the project endeavours of the Central East Aged Care Alliance and its Aged Care Support/Solutions Report recommendations.
- The development of additional independent living units (ILU's) to support aged care requirements.
- Develop a collaborative marketing group (Shires of Koorda, Mount Marshall, Mukinbudin, Nungarin and Trayning).

Shire of Mukinbudin

Context

The Shire of Mukinbudin covers an area of 3,435km² and has an estimated population of 503 people (4.9% of the Central East population). The Shire contains the localities of Barbalin, Bonnie Rock, Mukinbudin, Lake Brown and Wattoning. The administrative centre of the Shire is the town of Mukinbudin, which is located approximately 293km East of Perth.

The Shire is primarily focused on broadacre agricultural production as its key economic driver. The tourism industry has seen expansion, due to the local and regional attractions based upon both natural and historically significant structures/features. The current infrastructure available within the Shire of Mukinbudin can allow for future population growth and economic expansion. The Shire's vision is to continue to support local businesses and industry and build resilience to the unforeseen impacts of future economic and social structural changes.

Characteristics

The Shire of Mukinbudin (Mukinbudin) has the following characteristics:

- An estimated residential population of 503 persons in 2011 – a decline of 28.3% relative to the estimated 702 residents in 2001. The WA Planning Commission forecasts this trend to continue over the next decade, declining a further 22% to 393 people in 2021 (rebased).
- A significant proportion of the population (19.8%) is aged under 14 years – comparable to the Perth Metropolitan Region (19.2%) and the WA (19.7%) average. 18.4% of Mukinbudin's population is aged over 65 years, which is significantly greater than the Perth Metropolitan Region (12.5%) and the WA average (12.3%). Mukinbudin had a fertility rate of 3.52 children in 2011 – above replacement levels (2.1).
- Median personal income levels for Mukinbudin (\$42,217) are comparable to the sub-regional average (\$41,490); however they are below the Perth Metropolitan Region (\$53,864) and WA (\$53,227) averages.
- With 72.5% of the Shire's dwellings occupied (208 of 287 dwellings) Mukinbudin has a moderate level of occupation of its housing stock, compared to the sub-regional average (73.8%).
- The median house price for Mukinbudin increased from \$72,500 to \$130,000 over the 6 year period (2006 to 2012) a 79% increase.
- When income levels are compared with median house prices, Mukinbudin's housing market was found to be very affordable, with a median multiple of 1.91 (sub-regional average 2.61, WA average 5.98).
- Agriculture is Mukinbudin's primary economic contributor, accounting for a total gross value of \$57.9m in the 2005-06 financial year (10% of the sub-region gross value of production) and \$17.1m in the 2010-11 financial year (6% of the sub-region gross value of production). These returns occur from an agricultural land area of 323,702 ha which represents 8% of the agricultural land holdings in the subregion.
- Mukinbudin's economy is underlined by an employment self-sufficiency rate of 96% (in 2011). This coupled with the sub-regions lowest unemployment rate (1.4%) indicates the majority of residents work and reside within the Shire. An employment sufficiency rate approaching 100% indicates the attraction of workers from outside the Shire.
- The Shire has one District High School (K-10) located in Mukinbudin with 84 students.

Economic Opportunities

The following economic opportunities have been identified:

Broadacre Agriculture

Broadacre agriculture (grains, oilseed, legumes & livestock) is a major economic driver for the Shire of Mukinbudin. Future growth will be dependent on increased research and development (R&D) and high uptake of agricultural innovation. Mukinbudin has a number of agricultural servicing businesses that operate as regional branches of larger business such as Ag Implements and Hutton and Northey Sales. Agro-forestry has been identified as a potential industry, particularly brushwood and sandalwood plantations. Overall, the continued leveraging of investment into R&D in agriculture will ensure the sustainability of agriculture in the Shire into the long term.

Mining & Support Services

Mukinbudin has some ability to take advantage of mining and mining support services due to its proximity and road linkages to the Yilgarn mining province and active mineral exploration. A local feldspar quarry (BGC) provides small scale mining and transport industry support.

Population Services

Mukinbudin maintains a level of population services suitable for the basic needs of the local population. While there is a local nursing post, the majority of health services are accessed by visiting specialists or through Merredin. Traineeships and apprenticeships are undertaken by businesses locally, as well as being provided through C.Y. O'Connor Institute in Northam and Merredin. This ensures that a skilled workforce is developed and retained. Recreational facilities adequately service the local population; however Government services access is seen as needing improvement.

Mukinbudin, a member of the 11 LGA's that make up CEACA has undertaken additional well-aged housing analysis as a result of the Central East Aged Care & Support Solutions Report recommendations. Mukinbudin is supporting its retiree population by building additional independent living units to meet demand. Kununoppin Hospital's resident doctor was sponsored by the Shire's of Mount Marshall, Mukinbudin, Nungarin and Trayning as a program to encourage health services to be delivered on a permanent-full time basis. There is the need to continue to support the development of health services (via Kununoppin Hospital, Merredin Hospital and Mukinbudin Nursing Post) and health service access within the northern part of the Central East Sub-Region.

The recently completed 'Wheatbelt Way' has increased tourism activity in Mukinbudin. Recent upgrades to the Mukinbudin caravan park and adjacent swimming pool will potentially increase visitation further. Tourism can provide opportunities to extend existing services and retail trade.

Actions

- Marketing of the recently developed serviced residential land available in Mukinbudin.
- Continue to support Notre Dame in financing the Regional Health Outcomes (Kununoppin Hospital – General Practice) Medical Scholarship program (\$25,000p/a for three years) in association with the Shire's of Trayning, Mukinbudin, Nungarin and Mount Marshall to attract and retain a medical practitioner.
- Continue to support and implement the project endeavours of the Central East Aged Care Alliance and its Aged Care Support/Solutions Report recommendations.
- The development of additional independent living units (ILU's) to support aged care requirements.

- Investigate and advocate for the upgrade of the existing nursing post.
- Continued leveraging of investment into the District High School (K-10) and its SIDE programs to provide a K-12 institution to alleviate pressure for students to relocate elsewhere.
- Redevelop the caravan park and address drainage and water utilities to provide additional capacity
- Develop a collaborative marketing group (Shires of Koorda, Mount Marshall, Mukinbudin, Nungarin and Trayning).

Shire of Narembeen

Context

The Shire of Narembeen covers an area of 3,833.3km² and has an estimated population of 834 people (8.1% of the Central East population). The Shire contains the localities of Cramphorne, Emu Hill, Mount Walker, Narembeen, South Kummin, Wadderin, West Holleton, Wogarl and Woolocutty. The administrative centre of the Shire is the town of Narembeen, which is located approximately 281 km East of Perth.

The Shire is primarily focused on broadacre agricultural production as its key economic driver, and therefore the majority of businesses have evolved to support the industry. The vision of the Shire of Narembeen is to continue to develop community services and infrastructure, as well as to adequately provide for the community values of education, health and community wellbeing. An integral component to ensuring community development occurs is to strengthen the availability and opportunities that tourism brings through the value adding potential to local business and industry as well as to the local community and the greater regional economy.

Characteristics

The Shire of Narembeen (Narembeen) has the following characteristics:

- An estimated residential population of 834 persons in 2011 – a decline of 13.0% relative to the estimated 959 residents in 2001. The WA Planning Commission forecasts this trend to continue over the next decade, declining a further 28% to 604 people in 2021 (rebased).
- A significant proportion of the population (18.6%) is under 14 years of age – lower than the Perth Metropolitan Region (19.2%) and the WA (19.7%) average. However, 11.1% of Narembeen's population is aged over 65 years, which is lower than the Perth Metropolitan Region (12.5%) and the WA average (12.3%). Narembeen had a fertility rate of 2.22 children in 2011 – above replacement levels (2.1).
- Median personal income levels for Narembeen (\$41,554) are comparable to that of the sub-regional average (\$41,490); however they are below the Perth Metropolitan Region (\$53,864) and WA (\$53,227) averages.
- With 76.6% of the Shire's dwellings occupied (324 of 423 dwellings) Narembeen housing occupation levels are comparable to the sub-regional average (73.8%).
- The median house price for Narembeen decreased from \$78,000 to \$77,000 over the 6 year period (2006 to 2012), a 1% decrease.
- Narembeen experienced significant increases in income levels, which when combined with median house prices results in a very affordable median multiple of 2.00 (sub-regional average 2.61, WA average 5.98).
- Agriculture is Narembeen's primary economic contributor, accounting for a total gross value of \$78.9m in the 2005-06 financial year (13% of the sub-region gross value of production) and \$49.0m in the 2010-11 financial year (17% of the sub-region gross value of production). These returns occur from an agricultural land area of 363,357 ha which represents 9% of the agricultural land holdings in the subregion.
- Narembeen's economy is underlined by an employment self-sufficiency rate of 95% (in 2011). This combined with an unemployment rate of 2.5% indicates that the majority of residents work and reside within the Shire.
- The Shire has one District High School (K-10) located in Narembeen with 118 students.

Economic Opportunities

The following economic opportunities have been identified:

Broadacre Agriculture

Broadacre agriculture (grains, oilseed, legumes & livestock) is a major economic driver for the Shire of Narembeen. A number of agricultural service companies are located in Narembeen. These are mostly branches of regional businesses that are based in Merredin. Future growth will be dependent on research and development (R&D) and high uptake of agricultural innovation and precision farming technology. There has been interest in the development of agro-forestry within the Shire on lands where broadacre agriculture currently has limited viability. Santaleuca Sandalwood is a company which operates in this industry and produces value added products from the production of sandalwood. This forms part of the drive towards sustainable agriculture within the Shire. The continued leveraging of investment into R&D will ensure the sustainability of agriculture in the Shire into the long term.

Mining & Support Services

While there are opportunities to develop mining & mining support services, Narembeen is best suited to take advantage of the broadacre agricultural industry. Mineral exploration has identified a gold and iron ore belt within the Shire which may present a new industry focus for the Shire in the medium-long term. The potential exists for cross sector training, developing a regional skill base suitable to cross between both agriculture and mining. This requires the delivery of apprenticeship and traineeship programs, both locally and regionally, that ensure that skill requirements align to each industry Apprenticeship and traineeships are currently delivered by employers locally and through Merredin C.Y. O'Connor Institute.

Population Services

Narembeen maintains a moderate level of population servicing. Narembeen District High School (K-10) provides primary and secondary education. Traineeships and apprenticeships are undertaken by businesses locally, as well as being provided by C.Y. O'Connor Institute in Merredin. This helps to strengthen the skill base of Narembeen.

Tourism is seen as a growing industry for Narembeen, with natural, cultural and historic sites to visit as well as being along the route to Wave Rock. Tourism can potentially be a growth industry for the Shire's. Industry is driving growth; however infrastructure issues and the availability of housing, electricity and water network constraints are impediments to economic growth and population services.

Narembeen is investigating the potential to expand its number of independent living units. This is due to the level of growth occurring within the sector and an ageing population. Health & health services in the Shire are being modelled around the demographic profile, and as such expansion opportunities are identified when growth in the sector is required. Merredin is likely to continue to provide advanced health services which will support health service delivery in Narembeen. The aged care sector is seen by the Shire as a potentially important future employment generator and important for community wellbeing.

Actions

- Investigate methods to reduce the cost of connection to utilities and the impact on attractiveness for businesses to relocate to Narembeen.
- Development of accommodation for young professionals and apprentices for businesses to fill existing skill shortages.
- Ensure that Roe Tourism Marketing Plans take into account trip generation targets and infrastructure

assembly.

- Completion of the Narembeen Recreation Centre redevelopment (expected completion date early 2015)
- Investigate the expansion of the Community Service Centre (CRC and Health Centre)
- Upgrade and underground the potable water pipe from Narembeen to Wadderin.

Shire of Nungarin

Context

The Shire of Nungarin covers an area of 1,163km² and has an estimated population of 233 people (2.3% of the Central East population). The Shire contains the localities of Chandler, Elabbin and Nungarin. The administrative centre of the Shire is the town of Nungarin, which is located approximately 268 km East of Perth.

The Shire of Nungarin is primarily focused on broadacre agriculture as the key economic driver. Tourism is also emerging as a secondary industry for Nungarin with the Shire and community hosting events as well as visitors being attracted by natural landscapes and the Mangowine Homestead. The vision of the Shire of Nungarin is to continue to develop its infrastructure and services for residents and tourists. Nungarin has the potential to act as a satellite town for Merredin, providing lifestyle opportunities for residents who work in Merredin.

Characteristics

The Shire of Nungarin (Nungarin) has the following characteristics:

- An estimated residential population of 233 persons in 2011 – a decline of 15.3% relative to the estimated 275 residents in 2001. The WA Planning Commission forecasts this trend to continue over the next decade, declining a further 9% to 213 people in 2021 (rebased).
- A significant proportion of the population (22.2%) is aged 14 years or younger – greater than that of the Perth Metropolitan Region (19.2%) and the WA (19.7%) average. 14.3% of Nungarin's population is aged over 65 years, which is slightly higher than the Perth Metropolitan Region (12.5%) and the WA average (12.3%).
- Median personal income levels for Nungarin (\$42,204) are comparable to that of the sub-regional average (\$41,490); however they are below the Perth Metropolitan Region (\$53,864) and WA (\$53,227) averages.
- At 72% (85 of 118 dwellings) Nungarin's dwelling occupancy rate is comparable to the sub-regional average (73.8%). Nungarin like surrounding towns are part of a large commuter belt, resulting in a number of residents living locally yet working within the broader sub-region.
- Agriculture is Nungarin's primary economic contributor, accounting for a total gross value of \$15.0m in the 2005-06 financial year (2% of the sub-region gross value of production) and \$8.9m in the 2010-11 financial year (3% of the sub-region gross value of production). These returns occur from an agricultural land area of 85,961 ha which represents 2% of the agricultural land holdings in the subregion.
- Nungarin's economy is also underlined by an employment self-sufficiency rate of 79% (in 2011). This coupled with an unemployment rate of 7.5% indicates that there is at least some level of drive in-drive out interconnectedness with surrounding Shire's.
- The Shire has one Primary School located in Nungarin with 24 students.

Economic Opportunities

The following economic opportunities have been identified:

Broadacre Agriculture

Broadacre agriculture (grains, oilseed, legumes & livestock) is an important economic driver for the Shire of Nungarin. Future growth will be dependent on increased research and development (R&D) and high uptake

of agricultural innovation. The continued leveraging of investment into R&D will ensure the sustainability of agriculture in the Shire into the long term.

Mining & Support Services

The mining industry of the sub-region is supported by servicing businesses in Merredin and Southern Cross. Nungarin is best placed to serve growth in the sector as a satellite town of Merredin providing residential & lifestyle lots in proximity to the regional centre and mining activity of the subregion.

Population Services

Nungarin has limited population servicing due to the centres proximity to Merredin. Recreation and civic facilities are provided locally, and support tourism. Merredin serves as the major retail and commercial hub of the sub-region and for Nungarin. In regards to tertiary education, Merredin C.Y. O'Connor Institute provides essential apprentice/traineeship courses to strengthen Nungarin's skill base.

Nungarin, a member of the 11 LGA's that make up CEACA has undertaken additional well-aged housing analysis as a result of the Central East Aged Care & Support Solutions Report recommendations. Nungarin is looking at expanding the number of independent living units available to allow the community to age in place. Merredin and Kununoppin will continue to provide health and aged care services to the Shire.

Nungarin has developed a strong tourism base. The Nungarin Military Museum represents a unique and important historical site, while events such as Mangowine Festival and Wheatbelt Markets attract tourists through the unique cultural amenity they present. Recent upgrades to the caravan park and Woolshed Hotel will build upon this. The Shire of Nungarin is keen to expand on its tourism base to increase the number and quality of tourism related services.

Actions

- Investigate methods to reduce the cost of connection to utilities.
- Continue to support and implement the project endeavours of the Central East Aged Care Alliance and its Aged Care Support/Solutions Report recommendations.
- The development of additional independent living units (ILU's) to support aged care requirements.
- Investigate the development of young professional's accommodation to service local businesses and Merredin.
- Develop rural lifestyle blocks to meet demand locally and from Merredin.
- Continue to support the development of tourism related events and supporting infrastructure to increase trip generation and utilisation of local services.
- Continue to support Notre Dame in financing the Regional Health Outcomes (Kununoppin Hospital – General Practice) Medical Scholarship program (\$25,000p/a for three years) in association with the Shire's of Trayning, Mukinbudin, Nungarin and Mount Marshall to attract and retain a medical practitioner.
- Investigate alternative methods for fuel supplies in Nungarin.
- Upgrade tourism facilities in the Shire to support the Wheatbelt Way.
- Support the Department of Agricultural and Food Western Australia (DAFWA) in its local research and development program. This is also facilitated through the Local Agricultural Action Committee (Trayning, Merredin, Nungarin, Mount Marshall, Mukinbudin and Westonia) and its links to Grains Committees.
- Develop a collaborative marketing group (Shires of Koorda, Mount Marshall, Mukinbudin, Nungarin and Trayning).

Shire of Trayning

Context

The Shire of Trayning covers an area of 1,650.9km² and has an estimated population of 351 people (3.4% of the Central East population). The Shire contains the localities of Kununoppin, Trayning and Yelbeni. The administrative centre of the Shire is the town of Trayning, which is located approximately 236 km East of Perth.

The Shire of Trayning is primarily focused on broadacre agriculture as the key economic driver. The residents of the Shire of Trayning are dependent on its surrounding service centres, Wyalkatchem and Merredin, both less than an hour away for the majority of services and facilities. The Kununoppin hospital is located in the Shire of Trayning and provides essential health services to the North of the sub-region. Trayning's vision is to broaden the existing tourism base and to diversify agricultural production to enhance the sustainability of the sector.

Characteristics

The Shire of Trayning (Trayning) has the following characteristics:

- An estimated residential population of 351 persons in 2011 – a decline of 10.5% relative to the estimated 392 residents in 2001. The WA Planning Commission forecasts this trend to continue over the next decade, declining a further 9% to 321 people in 2021 (rebased).
- A significant proportion of the population (19.0%) is aged 14 years or younger – not dissimilar to the Perth Metropolitan Region (19.2%) and the WA (19.7%) average. 22.7% of Trayning's population is aged over 65 years, which is the highest percentage in the subregion and much greater than the Perth Metropolitan Region (12.5%) and the WA average (12.3%). In contrast, Trayning has the second-highest fertility rate of the sub-region, with a fertility rate of 4.47 children in 2011 which is well above replacement levels (2.1).
- Median personal income levels for Trayning (\$42,221) are comparable to that of the sub-regional average (\$41,490); however they are below the Perth Metropolitan Region (\$53,864) and WA (\$53,227) averages.
- At 63.8% (141 of 221 dwellings) Trayning's dwelling occupancy rate is lower than the sub-regional average (73.8%).
- Agriculture is Trayning's primary economic contributor, accounting for a total gross value of \$37.2m in the 2005-06 financial year (6% of the sub-region gross value of production) and \$14.7m in the 2010-11 financial year (5% of the sub-region gross value of production). These returns occur from an agricultural land area of 156,440 ha which represents 4% of the agricultural land holdings in the subregion.
- Trayning's economy is also underlined by an employment self-sufficiency rate of 99% in 2011. This, coupled with an unemployment rate of 6%, indicates that there are some drive in-drive out workers coming into the Shire which is likely due to Kununoppin Hospital.
- Trayning has one Primary School located in Trayning with 46 students.

Economic Opportunities

The following economic opportunities have been identified:

Broadacre Agriculture

Broadacre agriculture (grains, oilseed, legumes & livestock) is a major economic driver for the Shire of Trayning. Future growth will be dependent on increased research and development (R&D) and high uptake of agricultural innovation. A number of agricultural service companies are located in Trayning. These are

mostly branches of regional businesses that are based in Merredin. As such, Trayning is best positioned to take advantage of broadacre agricultural productivity and enhanced diversification of the sector. The continued leveraging of investment into R&D in agriculture will help to enhance the viability of the agricultural industry in the Shire into the long term.

Mining & Support Services

Trayning has limited potential for mining support services due to its distance from the mining activity occurring in the sub-region. Based on economic analysis, it is best positioned to take advantage of its economic opportunities in the agricultural and population services sector.

Population Services

Trayning has a limited number of services due to its proximity to Wyalkatchem, Kellerberrin and Merredin. Important to both the Shire and the North of the sub-region is the Kununoppin Hospital, while supported through Merredin services, it is staffed with a resident doctor.

Primary education is provided locally with secondary education services accessible through Merredin and Wyalkatchem. Traineeships and apprenticeships are delivered through C.Y. O'Connor Institute in Merredin. This helps to strengthen the skill base of Trayning as well as facilitating broader education and training ties within the sub-region. Recreational facilities and civic services adequately service the local population; however there is an identified need to expand social support services within the Shire and surrounding sub-region.

Trayning, a member of the 11 LGA's that make up CEACA has undertaken additional well-aged housing analysis as a result of the Central East Aged Care & Support Solutions Report recommendations. The Shire is investigating the potential of developing further aged care accommodation to meet demand. This is also the case for the Kununoppin Hospital aged care wing. Future expansion of both of these sites will strengthen Trayning's role as a health service provider for the North of the sub-region. This will enable people to age in place within their community. Therefore the health and aged care sector is seen by the Shire as an integral aspect of retaining its population base.

Actions

- Develop light industrial blocks to attract businesses to Trayning.
- Development of accommodation for young professionals and apprentices to provide a developable skill base for businesses to utilise to fill skill shortages.
- Diversify and expand the industry base in order to attract new goods and services to town.
- Identify potential for agro-forestry to provide agricultural industry development and environmental benefit to salinity affected agricultural land.
- Develop a collaborative marketing group (Shires of Koorda, Mount Marshall, Mukinbudin, Nungarin and Trayning).
- Continue to support Notre Dame in financing the Regional Health Outcomes (Kununoppin Hospital – General Practice) Medical Scholarship program (\$25,000p/a for three years) in association with the Shire's of Trayning, Mukinbudin, Nungarin and Mount Marshall to attract and retain a medical practitioner.
- Continue to support and implement the project endeavours of the Central East Aged Care Alliance and its Aged Care Support/Solutions Report recommendations.
- The development of additional independent living units (ILU's) to support aged care requirements.

Shire of Westonia

Context

The Shire of Westonia covers an area of 3,314km² and has an estimated population of 279 people (2.7% of the Central East population). The Shire contains the localities of Boodarockin, Carrabin, Warrachuppin, Walgoolan, Warralakin and Westonia. The administrative centre of the Shire is the town of Westonia, which is located approximately 311km East of Perth.

The Shire of Westonia's primary economic contributor is broadacre agriculture. In 2010 however, the Edna May Gold Mine was reopened by Evolution Mining and has boosted and diversified the local economy. The mine presents unique opportunities with regards to agriculture, industry in the future as well as recreational pursuits and lifestyle residential development.

Characteristics

The Shire of Westonia (Westonia) has the following characteristics:

- An estimated residential population of 279 persons in 2011 – an increase of 12.5% relative to the estimated 248 residents in 2001. The WA Planning Commission forecasts this trend to reverse over the next decade, declining by 4% to 269 people in 2021 (rebased).
- A significant proportion of the population (18.4%, the lowest percentage in the subregion) is aged 14 years or younger – not dissimilar to the Perth Metropolitan Region (19.2%) and the WA (19.7%) average. 11.9% of Westonia's population is aged over 65 years, which is lower than the Perth Metropolitan Region (12.5%) and the WA average (12.3%). The population bell curve of Westonia is interesting, noting that it is normalised in comparison to Perth in contrast to other Local Governments in the Central East.
- Median personal income levels for Westonia (\$42,283) are comparable to that of the sub-regional average (\$41,490); however they are below the Perth Metropolitan Region (\$53,864) and WA (\$53,227) averages. Due to the way in which the ABS measures FIFO/DIDO workers, it should be understood that the mining workforce and their incomes are not captured unless their place of residence is based within the Shire, reflecting lower median personal incomes than would be expected.
- At 62.8% (98 of 156 dwellings) Westonia's dwelling occupancy rate is lower than the sub-regional average (73.5%).
- Agriculture is an important economic contributor for Westonia, accounting for a total gross value of \$38.6m in the 2005-06 financial year (6% of the sub-region gross value of production) and \$11.4m in the 2010-11 financial year (4% of the sub-region gross value of production). These returns occur from an agricultural land area of 241,195 ha which represents 6% of the agricultural land holdings in the subregion.
- Westonia's economy is underlined by an employment self-sufficiency rate of 139% (in 2011) and an unemployment rate of 4.1%. This indicates that there are more jobs than people and therefore a drive in/drive out lifestyle is evident for a portion of the workforce which is due to the presence of the Edna May Gold Mine in Westonia.
- Westonia students access the Merredin College for education from K-12.

Broadacre Agriculture

Broadacre agriculture (grains, oilseed, legumes & livestock) is a significant economic driver for the Shire of Westonia. Agricultural support services are accessed from Merredin and Southern Cross. The completion of the State Barrier Fence in the Shire of Yilgarn will support increased stocking densities within Westonia. Future growth will be dependent on increased research and development (R&D) and high uptake of

agricultural innovation. Therefore Westonia will be able to potentially further develop this economic opportunity through the large scale adoption of farm innovation and R&D.

Mining & Support Services

A significant economic driver for the Shire of Westonia is the Edna May Gold Mine. Employing over 150-200 employees (locals, drive in-drive out (DIDO) the mine has a life expectancy of 10-12 years and is 4 years into operation. As the mine's viability is determined by gold prices, there is the potential for the life expectancy to change, with more positive projections outlining a potential expansion within the vein, extending operations to 20-22 years. Since the opening of the mine some local businesses have broadened their client base to service the mine however the majority of the mining support services are accessed from Merredin, Southern Cross and the metropolitan area. Westonia is best positioned to take advantage of mining within the Shire while maintaining a sustainable agricultural base.

Population Services

Due to Westonia's proximity to Merredin, the majority of population services are located in Merredin. Westonia maintains a limited variety of population services, being either serviced from Merredin or being undertaken by the Community Resource Centre. Westonia is best positioned to take advantage of its economic opportunities in agriculture and mining, as the relative distance to Merredin impacts any development potential of population services in Westonia. Education is not an economic opportunity for Westonia due to the presence of well developed educational services in the Shire of Merredin. Merredin serves as the major retail and commercial hub of the sub-region, however small scale retail and commerce is located here.

Westonia, a member of the 11 LGA's that make up CEACA has undertaken additional well-aged housing analysis as a result of the Central East Aged Care & Support Solutions Report recommendations. The expansion of independent living and low care homes will allow the population to age in place as well as support the utilisation of Merredin's major health and ancillary health services.

The recently opened Westonia Hood-Penn Museum is a unique tourist attraction in the Central East. This complements tourism attraction potential related to mining. The Edna May mine look out is only one of two in the State, the Kalgoorlie Super Pit being the other. The end life of the mine is seen by the community as an opportunity to develop tourism based activities and recreation lifestyle based development (including low level aged care). There are several granite rocks and outcrops in the shire that attract self drive tourists, visitor numbers to the shire have been boosted by the increased use of the Koorda- Bullfinch road due to recent upgrades.

Actions

- Develop tourism activity in Westonia linked to the legacy fund of Evolution Mining for the mine site (potential tourism/lifestyle uses once the mine life has ended).
- Investigate the expansion of the Westonia caravan park including the development of a camper kitchen.
- Investigate requirements for Westonia to act as a satellite town or commuter belt for Merredin.
- Continue to support and implement the project endeavours of the Central East Aged Care Alliance and its Aged Care Support/Solutions Report recommendations.
- The development of additional independent living units (ILU's) to support aged care requirements.
- Investigate the development of the school site as a seniors centre/recreation area.
- Marketing of the Shire's natural amenity, Hood Penn Museum and Edna May Gold Mine lookout.
- Investigate the potential expansion of accommodation options to cater to bus tourism operators.

Shire of Yilgarn

Context

The Shire of Yilgarn covers an area of 30,376.3km² and has an estimated population of 1,658 people (16.0% of the Central East population). The Shire contains the localities of Baladjie, Bodallin, Bullfinch, Burbridge, Colreavy, Corinthia, Ghooli, Mount Jackson, Koolyanobbing, Marvel Loch, Moorine Rock, Mount Palmer, Noongar, Parker Range, Southern Cross and Yellowdine. The administrative centre of the Shire is the town of Southern Cross, which is located approximately 370km East of Perth.

The Shire of Yilgarn has been developed upon two strong economic sectors, mining and agriculture. Businesses have developed to cater to both of these industries and as a result, the local economy has been insulated from downturns in either industry. Underpinning the success of communities within the Shire of Yilgarn will be the need to continue to support the long term industry, agriculture. There is the need to, in the medium term, ensure that the opportunities brought by mining are effectively utilised to grow communities, businesses and essential infrastructure. Transport and logistics companies should be investigated as potential industry development to support the Shire's vision.

Characteristics

The Shire of Yilgarn (Yilgarn) has the following characteristics:

- An estimated residential population of 1,658 persons in 2011 – a decline of 9.2% relative to the estimated 1,825 residents in 2001. The WA Planning Commission forecasts this trend to continue over the next decade, declining a further 21% to 1,318 people in 2021 (rebased).
- A significant proportion of the population (18.5%) is aged 14 years or younger – lower than the Perth Metropolitan Region (19.2%) and the WA (19.7%) average. 9% of Yilgarn's population is aged over 65 years. This is the lowest percentage in the sub-region and is significantly lower than the Perth Metropolitan Region (12.5%) and the WA average (12.3%). Yilgarn had a fertility rate of 2.15 children in 2010. This is the lowest rate in the sub-region. Due to the reduced proportions of those aged 0-14 and 65+, this identifies that the majority of the Shire's population is of working age which is in contrast to other Shires in the region.
- Median personal income levels for Yilgarn (\$42,293) are comparable to that of the sub-regional average (\$41,490); however they are below the Perth Metropolitan Region (\$53,864) and WA (\$53,227) averages. Due to the way in which the ABS measures FIFO/DIDO workers, it should be understood that the mining workforce and their incomes are not captured unless their place of residence is based within the Shire, reflecting lower median personal incomes. Impacts arising from the mining industry are evident, with the median house price for Yilgarn increasing from \$66,000 to \$185,000 over the 6 year period (\$ 2006 to 2012); a 180% increase. This is still seen as affordable, with a median multiple of 2.92 being higher than the subregional average of 2.61, which is lower than the WA average of 5.98. Housing occupancy rates within the Shire are 65.1%, compared to the sub-regional average of 73.8% (478 of 734 dwellings). Demand for housing in the Shire is focused in proximity to Southern Cross or mining camps, rather than small agricultural towns in the district.
- Agriculture is an important economic contributor for Yilgarn, accounting for a total gross value of \$105.0m in the 2005-06 financial year (17% of the sub-region gross value of production) and \$37.3m in the 2010-11 financial year (13% of the sub-region gross value of production). These returns occur from an agricultural land area of 1,120,226 ha which represents 28% of the agricultural land holdings in the subregion.
- Yilgarn's economy is underlined by an employment self-sufficiency rate of 158% (in 2011) and an unemployment rate of 2.8%. This indicates that there are more jobs than people and therefore a drive in/drive out and fly in/fly out lifestyle is evident for a portion of the workforce which is due to the presence

of multiple mining operations within the Shire.

- Yilgarn has two Primary Schools (Moorine Rock – 32 students and St Joseph's Southern Cross – 31 students) with 63 students' altogether as well as one District High School (K-10) with 81 students in Southern Cross. Overall there are 144 students in the Shire of Yilgarn.

Economic Opportunities

The following economic opportunities have been identified:

Broadacre Agriculture

Broadacre agriculture (grains, oilseed, legumes & livestock) is an important economic driver for the Shire of Yilgarn. Future growth will be dependent on increased research and development (R&D) and high uptake of agricultural innovation. This is crucial for agricultural areas that don't have the same per hectare productivity when compared with agricultural areas closer to the coast. While there are some small scale agricultural services in Southern Cross, the majority are located in Merredin. The Shire of Yilgarn has access to strategic agricultural infrastructure with Southern Cross being both a major CBH grain receival site and located on the East West standard gauge railway providing direct port access to the Kwinana Grain Terminal.

Mining & Support Services

Mining is a major industry in the Shire of Yilgarn, with Cazaly Resources (Parker Range), Hanking Gold (Marvel Loch), Cliffs Mining (Koolyanobbing), WA Salt (Koolyanobbing) and Mineral Resources Ltd (previously Polaris Metals, operating North of Koolyanobbing) operating in the Shire as well as other companies undertaking further mineral exploration. Southern Cross is already exploiting the economic opportunities in mining and mining and support services; however there is potential for further growth in this sector. Large, affordable industrial lots provide the prospective development of heavy machinery, transport and logistics and mining based companies. The geographic position of Southern Cross presents an opportunity to provide an affordable option for industrial activity due to its proximity to both to Perth and Kalgoorlie.

A constraint to growth in both population services and mining and mining support services is the availability of labour. Yilgarn has the highest employment self-sufficiency at 158% (more jobs than residents) and an unemployment rate of 2.8% (2011). The availability of unemployed, skilled labour is therefore a major issue for businesses and prospective businesses in the Shire. The Shire of Yilgarn should be proactive in attracting future residents to expand the local community to fill skill gaps, increase the population service base and allow for economic growth.

Population Services

Southern Cross maintains a high level of population servicing, with high quality health and leisure services. This is supported through employment opportunities driven by the mining sector. Primary and secondary education will continue to be an economic driver for Yilgarn, as its isolation to Merredin requires that primary and secondary services remain within the Shire. Merredin C.Y. O'Connor Institute and the local Community Resource Centre provide tertiary training to the Shire and its labour force, which helps to support cross sector training in both the mining and agricultural industry. With regards to retail and commerce, Merredin serves as the major retail and commercial hub of the sub-region, and serves Yilgarn when goods and services cannot be purchased locally.

Yilgarn, a member of the 11 LGA's that make up CEACA has undertaken additional well-aged housing analysis as a result of the Central East Aged Care & Support Solutions Report recommendations. The expansion in the number of independent living units will allow the population to age in place and support the

utilisation of the 6 high care beds at the Southern Cross Hospital. The increasing presence of retirees in the Shire highlights the economic opportunity of providing health and aged care training to take advantage of the growth in this industry. In order to leverage this economic opportunity, the expansion of professionals housing is required to provide a base for visiting medical services and related health officers, as the mines place pressure on the availability of local accommodation.

Tourism is increasing in the Shire, supported by the Shire through the establishment of a visitor centre with signage located on Great Eastern Highway. This will capture tourists from the Highway and draw them into the main street. Natural, cultural and historic sites of significance provide tourism development opportunities as do the many sites of previous and current mining activity. The local airstrip is a unique tourist attraction which the Beverley Soaring Society utilises due to favourable gliding conditions.

Actions

- Completion of the State Barrier Fence to increase the agricultural security of livestock operations.
- Strengthen the development of industry ties of mining companies within the sub-region. This will help identify economic opportunities which local businesses can potentially build upon to service the mining sector.
- Support the further development and enhancement of educational services at Merredin College and support the expansion of Merredin College's boarding facilities to provide regional access to high quality education.
- Liaise with education and training partners and mining companies to develop appropriate cross sector training courses that meet demand in both mining and agriculture.
- The construction of additional units to be utilised by young professionals and apprentices/ trainees.
- Development of a visitor centre and co-located services/facilities to expand the tourist capture in Southern Cross
- The staged redevelopment of the Southern Cross Caravan Park to encourage overnight visitors/tourists.
- Development of visitor centre and co-located services/facilities to expand the tourist capture in Southern Cross for the Shire of Yilgarn. This will enhance the development of tourism around mining, aviation and other unique attractions in the region.
- Continue to support and implement the project endeavours of the Central East Aged Care Alliance and its Aged Care Support/Solutions Report recommendations.
- The development of additional independent living units (ILU's) to support aged care requirements.
- Support the Far Eastern Agricultural Research Group (FEARG) (previously Bodallin Catchment Group) in its dryland agricultural research/trials.

APPENDIX B – INDUSTRY VALUE ADD

Industry	2010/11	2011/12	2012/13
Agriculture, forestry & fishing	\$101,117,955	\$142,963,903	\$79,659,131
Mining	\$571,211,579	\$649,192,725	\$713,918,576
Manufacturing	\$17,199,426	\$19,409,754	\$19,499,723
Electricity, gas, water & waste services	\$23,652,855	\$26,887,322	\$26,037,723
Construction	\$105,480,560	\$129,324,673	\$127,233,356
Wholesale trade	\$17,466,508	\$19,929,816	\$20,776,517
Retail trade	\$19,075,587	\$21,369,613	\$22,508,495
Accommodation & food services	\$7,408,853	\$8,688,005	\$8,734,901
Transport, postal & warehousing	\$48,002,764	\$52,145,757	\$53,088,142
Information media & telecommunications	\$3,303,914	\$3,367,780	\$3,157,112
Financial & insurance services	\$12,440,559	\$13,263,541	\$13,412,855
Rental, hiring & real estate services	\$4,417,780	\$5,190,777	\$5,635,933
Professional, scientific & technical services	\$7,619,286	\$8,334,863	\$8,747,972
Administrative & support services	\$8,067,593	\$8,291,318	\$8,952,441
Public administration & safety	\$24,410,967	\$26,280,189	\$26,473,298
Education & training	\$22,992,657	\$24,610,460	\$24,939,438
Health care & social assistance	\$22,421,252	\$24,298,561	\$25,780,417
Arts & recreation services	\$658,660	\$715,531	\$718,904
Other services	\$10,211,847	\$11,806,941	\$11,226,620
Industry Value Added	\$1,027,160,603	\$1,196,071,530	\$1,200,501,554
Ownership of Dwellings	\$68,086,348	\$79,282,774	\$79,576,423
Gross Value Added	\$1,095,246,951	\$1,275,354,304	\$1,280,077,977
Taxes Less Subsidies	\$38,775,678	\$45,152,126	\$45,319,361
Statistical Discrepancy	\$330,930	\$385,350	\$386,777
Gross Regional Product	\$1,134,353,560	\$1,320,891,779	\$1,325,784,115

APPENDIX C – SOCIO-ECONOMIC INDICATORS MATRIX

Theme	Indicator	Source	Bruce Rock	Kellerberrin	Koorda	Merredin	Mount Marshall	Mukinbudin	Narembeen	Nungarin	Trayning	Westonia	Yilgarn	Sub-Region
Population	Population (2001)	ABS3218.0	1,127	1,216	488	3,768	673	702	959	275	392	248	1,825	11,673
	Population (2011)	ABS3218.0	996	1,210	445	3,353	483	503	834	233	351	279	1,658	10,345
	Share of Central East Population	Calc	9.6%	11.7%	4.3%	32.4%	4.7%	4.9%	8.1%	2.3%	3.4%	2.7%	16.0%	100.0%
	Population (2011 Census)	ABS Census 2011	974	1,181	437	3,282	486	490	812	230	348	277	1,636	10,153
	Population Growth (No. 2001 to 2011)	Calc	-131	-6	-43	-415	-190	-199	-125	-42	-41	31	-167	-1,328
	Population Growth Rate (% 2001 to 2011)	Calc	-11.6%	-0.5%	-8.8%	-11.0%	-28.2%	-28.3%	-13.0%	-15.3%	-10.5%	12.5%	-9.2%	-11.4%
	Annual Population Growth Rate (% 2001 to 2011)	Calc	-1.2%	0.0%	-0.9%	-1.2%	-3.3%	-3.3%	-1.4%	-1.6%	-1.1%	1.2%	-1.0%	-1.2%
	WAPC Projections (2021)	WAPC	806	1,210	500	3,053	533	393	604	213	321	269	1,318	9,220
	Population Growth (No. 2011 to 2021)	Calc	-190	0	55	-300	50	-110	-230	-20	-30	-10	-340	-1,125
	Population Growth Rate (% 2011 to 2021)	Calc	-1.9%	0%	12%	-9%	10%	-22%	-28%	-9%	-9%	-4%	-21%	-11%
Annual Population Growth Rate (% 2011 to 2021)	Calc	-2.1%	0.0%	1.2%	-0.9%	1.0%	-2.4%	-0.9%	-0.9%	-0.9%	-0.4%	-2.3%	-1.1%	
Demographics and Socio-Economics	Share of Population Aged 0-14 (% 2011 Census)	ABS Census 2011	23.8%	22.5%	24.1%	21.5%	24.1%	19.8%	18.6%	22.2%	19.0%	18.4%	18.5%	20.8%
	Share of Population Aged 0-14 (% 2011)	ABS3235.0	23.2%	21.2%	24.9%	21.6%	21.1%	19.5%	18.5%	19.7%	18.5%	15.4%	17.6%	19.6%
	Share of population aged 65+ (% 2011 Census)	ABS Census 2011	17.0%	20.7%	16.5%	12.9%	10.7%	18.4%	11.1%	14.3%	22.7%	11.9%	9.0%	14.9%
	Male Share of Population (% 2010)	ABS3235.0	50.8%	49.8%	54.4%	52.3%	54.0%	53.3%	50.2%	57.94%	56.98%	57.71%	61.10%	54.4%
	Fertility Rate (2011)	ABS3301.0	2.84	2.82	6.06	2.49	-	3.52	2.22	-	4.47	-	2.15	-
	Baby Bonus Recipient (2010)	ABS National Regional Profile	17	22	9	43	5	8	5	-	-	-	14	123
	Average Individual Wage and Salary Income (2006)	ABS6524.0	\$28,477	\$31,450	\$30,696	\$36,992	\$27,604	\$25,994	\$26,308	\$29,317	\$30,995	\$30,602	\$41,848	\$30,959
	Average Individual Wage and Salary Income (2010)	ABS6524.0	\$41,568	\$36,665	\$38,055	\$41,537	\$42,362	\$42,217	\$41,554	\$42,204	\$42,221	\$42,283	\$42,293	\$41,490
	Median Personal Income (weekly)	ABS Census 2011	\$495	\$391	\$502	\$599	\$613	\$550	\$538	\$433	\$511	\$774	\$945	\$585
	Median Household Income (weekly)	ABS Census 2011	\$841	\$824	\$865	\$1,099	\$970	\$1,055	\$961	\$818	\$807	\$1,458	\$1,118	\$995
Number of Newstart Allowance Recipients (2010)	ABS National Regional Profile	22	39	-	95	-	-	-	-	-	-	-	30	186
Housing and Dwellings	Occupied Dwelling Stock (2011)	ABS Census (2011)	392	440	177	1215	188	208	324	85	141	98	478	3746
	Unoccupied Dwelling Stock (2011)	ABS Census (2011)	98	108	86	305	150	79	99	33	80	58	256	1352
	Total Dwelling Stock (2011)	Calc	490	548	263	1520	338	287	423	118	221	156	734	5098
	Dwelling Occupancy Rate (2011)	Calc	80.0%	80.3%	67.3%	79.9%	55.6%	72.5%	76.6%	72.0%	63.8%	62.8%	65.1%	73.8%
	Attached Housing Share of Occupied Dwelling Stock (No) 2006	ABS Census (2006)	4	208	0	11	0	6	3	0	0	0	0	232
	Attached Housing Share of Occupied Dwelling Stock (No) 2011	ABS Census (2011)	3	9	0	23	0	3	10	0	3	0	8	59
	Attached Housing Share of Occupied Dwelling Stock (%) 2011	Calc	0.61%	1.64%	0.00%	1.51%	0.00%	1.05%	2.36%	0.00%	1.36%	0.00%	1.09%	1.22%
	Residential Building Approvals (No 2009/10 to 2011/12)	ABS8731.0	5	0	2	36	4	1	10	1	1	4	8	72
	Annual Average Residential Building Approvals (No 2009/10 to 2011/12)	Calc	2	0	1	12	1	0	3	0	0	1	3	23
	Median House Price (2006)	RPData	\$65,000	\$84,000	\$60,000	\$111,500	\$27,000	\$72,500	\$78,000	\$0	\$0	\$0	\$66,000	\$86,000
Median House Price (2011)	RPData	\$110,000	\$134,000	\$75,000	\$155,500	\$60,000	\$105,000	\$100,000	\$0	\$0	\$0	\$170,000	\$135,250	
Median House Price (2012)	RPData	\$150,000	\$149,500	\$94,000	\$175,000	\$50,000	\$130,000	\$77,000	\$0	\$70,000	\$0	\$185,000	\$150,000	
Differential to Perth Metro Median House Price (2012)	Calc	\$322,000	\$322,500	\$378,000	\$297,000	\$422,000	\$342,000	\$395,000	\$472,000	\$402,000	\$472,000	\$287,000	\$322,000	
Median House Price Growth (\$ 2006 to 2012)	Calc	\$85,000	\$65,500	\$34,000	\$63,500	\$23,000	\$57,500	-\$1,000	\$0	\$70,000	\$0	\$119,000	\$65,000	
Median House Price Growth (% 2006 to 2012)	Calc	131%	78%	56.7%	57%	85%	79%	-1%	NA	NA	NA	180%	76%	
Average Household Size (2011)	ABS Census (2011)	2.3	2.5	2.5	2.4	2.5	2.3	2.3	2.3	2.3	2.3	2.40	2.36	
Households (2011)	ABS Census (2011)	391	435	175	1216	189	208	322	88	141	99	476	356.50	
Median Multiple (Median House Price as ratio to Median Household Income) (2011)	Calc	2.52	3.13	1.72	2.72	1.19	1.91	2.00	NA	NA	NA	2.92	2.61	
Labour Force and Skills	Working Age Population - 15+ (% 2011)	ABS3235.0	61%	53%	55%	66%	68%	64%	60%	66%	60%	71%	73%	64%
	Working Age Population - 15+ (% 2011)	ABS Census (2011)	59%	57%	59%	66%	65%	62%	60%	63%	58%	70%	72%	63%
	Labour Force Size (Census 2006)	ABS Census 2006	454	510	205	1635	341	330	479	124	184	115	769	5146
	Labour Force Size (Census 2011)	ABS Census 2011	460	479	202	1639	274	282	432	107	167	172	939	5153
	Participation Rate (2011)	Calc	79.9%	71.4%	78.0%	76.1%	86.4%	93.1%	89.1%	73.3%	82.3%	89.1%	79.2%	80.3%
	Persons Employed (2006)	ABS Census 2006	433	482	205	1578	335	323	466	121	178	115	749	4985
	Persons Employed (2011)	ABS Census 2011	436	459	190	1570	268	278	421	99	157	165	913	4956
	Unemployment Rate (2006)	ABS Census 2006	4.6%	5.5%	2.4%	3.5%	1.8%	2.1%	2.7%	2.4%	3.3%	0.0%	2.6%	3.3%
	Unemployment Rate (2011)	ABS Census 2011	5.2%	4.2%	5.9%	4.2%	2.2%	1.4%	2.5%	7.5%	6.0%	4.1%	2.8%	3.7%
	Bachelor and Post-Graduate Level Post School Educational Attainment	ABS Census (2011)	58.00	57.00	18.00	241.00	42.00	24.00	47.00	16.00	21.00	30.00	91.00	645.00
Bachelor and Post Graduate Share of Working Age Population	Calc	10.1%	8.5%	6.9%	11.2%	13.2%	7.9%	9.7%	11.0%	10.3%	15.5%	7.7%	10.0%	
Certificate and Diploma Level Post-School Educational Attainment	ABS Census (2011)	171.0	200.0	70.0	617.0	86.0	86.0	108.0	44.0	60.0	108.0	351.0	1853.00	
Certificate and Diploma Level Share of Working Age Population	Calc	29.7%	29.8%	27.0%	28.6%	27.1%	28.4%	22.3%	30.1%	29.6%	31.1%	29.6%	28.9%	
Employment by Place of Residence (2011)	ABS Census (2011)	438	460	199	1568	275	275	419	104	156	162	912	4968	
White Collar Occupation Share of Employed Labour Force	ABS Census (2011)	49.77%	33.7%	54.8%	37.5%	62.2%	55.6%	52.3%	50.0%	51.3%	42.6%	18.0%	45.3%	
Blue Collar Occupation Share of Employed Labour Force	ABS Census (2011)	19.41%	23.5%	33.2%	28.1%	16.4%	15.6%	17.7%	23.1%	19.2%	27.2%	44.7%	27.3%	
Employment, Industry, Business and Investment	Employment by Place of Work (2011)	ABS Census (2011)	377	400	169	1504	248	263	399	82	154	225	1438	5259
	Retail Employment (2011)	ABS Census (2011)	15	49	11	175	4	13	12	6	6	3	60	354
	Retail Share of Employment (2011)	ABS Census (2011)	4.0%	12.3%	6.5%	11.6%	1.6%	4.9%	3.0%	7.3%	3.9%	1.3%	4.2%	6.7%
	Health Care and Social Assistance Employment (2011)	ABS Census (2011)	36	65	3	120	6	14	33	0	24	3	30	331
	Health Care and Social Assistance Share of Employment (2011)	ABS Census (2011)	9.5%	16.3%	1.8%	8.0%	2.4%	5.3%	8.3%	0.0%	15.6%	1.3%	2.1%	6.5%
	Construction Employment (2011)	ABS Census (2011)	22	12	3	93	9	3	15	3	9	9	343	521
	Construction Share of Employment (2011)	ABS Census (2011)	5.8%	3.0%	1.8%	6.2%	3.6%	1.1%	3.8%	3.7%	5.8%	4.0%	23.9%	10.2%
	Accommodation And Food Services Employment (2011)	ABS Census (2011)	9	16	3	77	3	3	8	3	0	8	74	201
	Accommodation And Food Services Share of Employment (2011)	ABS Census (2011)	2.4%	4.0%	1.8%	5.1%	1.2%	1.1%	2.0%	3.7%	0.0%	3.6%	5.1%	3.9%
	Employment Self-Sufficiency 2011	Calc	86%	87%	85%	96%	90%	96%	95%	79%	99%	139%	158%	107%
Count of Businesses (2009)	ABS8165.0	149	138	80	361	136	85	174	30	61	42	187	1443	
Value of Non-Residential Building Approvals (2009/10 to 2011/12)	ABS8731.0	\$1,516,000	\$1,181,700	\$435,500	\$37,778,100	\$3,638,500	\$348,500	\$63,000	\$350,000	\$0	\$2,347,400	\$4,030,000	\$51,688,700	
Average Value of Non-Residential Building Approvals (Annual)	Calc	\$505,333	\$393,900	\$145,167	\$12,592,700	\$1,212,833	\$116,167	\$21,000	\$116,666.67	\$0	\$782,467	\$1,343,333	\$17,084,400	
Light Commercial Vehicles (2011)	ABS9301.0	369	171	260	447	375	470	375	470	74	406	241	3375	
Light Commercial Vehicles per Resident	Calc	0.370	0.183	0.384	0.261	0.382	0.449	0.377	0.472	0.074	0.408	0.242	0.332	
Trucks	ABS9301.0	242	113	94	145	322	341	459	362	318	294	202	2892	
Trucks per Resident	Calc	0.243	0.113	0.211	0.146	0.323	0.342	0.461	0.363	0.319	0.295	0.203	0.285	
Economy	Area of Agricultural Land Holdings (ha)	ABS7125.0	261,712	176,274	250,065	327,829	645,229	323,702	363,357	85,961	156,440	241,195	1,120,226	3951989
	Agricultural Land Share of Sub-Region	Calc	7%	4%	6%	8%	16%	8%	9%	2%	4%	6%	28%	100%
	Total Gross Value of Agricultural Production (\$M)	ABS7125.0	58.9	39.4	36.6	65.8	72.5	57.9	78.9	15.0	37.2	38.6	105.0	605.8
	Total Gross Value of Agricultural Production Share of Sub-Region	Calc	10%	7%	6%	11%	12%	10%	13%	2%	6%	6%	17%	100%
	Gross Agricultural Production Value per ha (\$)	Calc	\$225.1	\$223.5	\$146.4	\$200.7	\$112.4	\$178.9	\$217.1	\$174.5	\$237.8	\$160.0	\$93.7	\$153.3
Community Services and Facilities	Dedicated Aged Care Beds	Primary	12	32	0	20	0	0	13	0	7	0	10	94
	Aged Care Beds Share of Sub-Region	Calc	12.8%	34.0%	0.0%	21.3%	0.0%	0.0%	13.8%	0.0%	7.4%	0.0%	10.6%	100.0%
	Aged Care Establishment	Primary	1	1	0	2	0	0	1	0	0	0	1	6
	Number of F/T Eligible Year 12 Students	School Curriculum and Standards Authority	0	0	0	62	0	0	1	0	0	0	0	63
	Number of Private Primary Schools	Schools Online	0	0	0	1	0</							