



# Central Midlands Sub-Regional Economic Strategy

Prepared by RPS in collaboration with the Wheatbelt Development Commission  
Funded by Royalties for Regions, State Government of Western Australia



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***Valuable support and input to the project was provided by the Central Midlands local governments including:***

- Shire of Chittering
- Shire of Dalwallinu
- Shire of Moora
- Shire of Victoria Plains
- Shire of Wongan-Ballidu

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Version / Date: FINAL

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### Document Status

Version	Purpose of Document	Orig	Review	Review Date
WIP v1.0	WIP Report for client review	SS	MW	24.09.2013
DRAFT A	Draft report for client review	MW	TC	18.03.2014
FINAL	Final report for release	MW	TC	28.05.2014

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## Summary

In its current grouping The Central Midlands Sub-region is the Wheatbelt's most diverse economy. Home to 10,755 people in 2011, the Central Midlands economy is driven by agriculture, construction, tourism and manufacturing, with emerging opportunities in health and mining support services. The key findings of this Strategy, developed collaboratively by RPS and the Wheatbelt Development Commission and in consultation with the Central Midlands Shires, are illustrated below.

The diversity of geographical, economic and industry drivers of the Central Midlands, including its peri-urban and rural lifestyle and proximity to significant mining regions, present considerable opportunities for major growth in local economic activity and prosperity.



This Sub-Regional Economic Strategy for the Central Midlands 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 towns in the Sub-region.



# CENTRAL MIDLANDS SUB-REGIONAL ECONOMIC STRATEGY

## PERTH'S PLAYGROUND



### GLOBAL CENTRAL MIDLANDS

Central Midlands is a dynamic region with a diverse economic and a variety of different economic, population and industry drivers.

This diversity of activity means that the future economic development Central Midland will be influenced by a wide range of global socio-economic trends.



### FOOD DEMAND



### TOURISM



### PERI-URBAN & RURAL LIVING

### ECONOMIC PROFILE



#### POPULATION GROWTH

Central Midlands has the economic capacity to support 20,000 residents in 2031, growth of almost 100% in 20 years.



#### ECONOMIC ACTIVITY

The Central Midlands economy is highly diverse with mining, manufacturing and health care services building upon the Sub-region's agricultural foundations. Tourism continues to contribute significantly to local expenditure



#### BUSINESS & INVESTMENT

Business activity has been resilient in recent years, and is increasingly comprised of small local and large national businesses. Small business creation is strongest in Dalwallinu, Moora and Victoria Plains.



#### HEALTH & AGEING

Population of Central Midlands is ageing rapidly with almost all LGAs in 2011 having above average shares of residents aged 65+. This reflects a combination of retirement-based migration and older rural communities.

This is expected to drive demand for health and aged care services and facilities in the Sub-region. Such services are currently concentrated in Moora, which plays a Sub-regional servicing role.



#### HOUSING AFFORDABILITY

Housing in the Sub-region is generally affordable, though prices have now recovered to pre-GFC highs and are over 100% up on 2006 levels. Housing in Chittering is severely unaffordable, reflecting its peri-urban and lifestyle attractions.

Affordability pressures are likely being experienced most significantly by households in tourism, construction, retail and health sectors and those on fixed incomes (i.e. pensioners). Addressing and maintaining affordability relative to Perth is essential to reach a critical mass of residents.

### KEY ECONOMIC OPPORTUNITIES FOR THE CENTRAL MIDLANDS ECONOMY



#### AGRICULTURE, HORTICULTURE & LIVESTOCK

Leveraging strong water supplies, natural competitive advantages and favourable domestic and global market conditions to make Central Midlands a dynamic, diversified value adding food producer.



#### PERI-URBAN & RURAL LIVING

Embracing the Sub-region's role as a peri-urban and rural living destination of choice, by providing a diversity of affordable accommodation options and services for new residents.



#### MINING, MANUFACTURING & SUPPORT

Leveraging local and regional mining activity and proximity to major markets to develop and grow the manufacturing and industrial base of the Sub-region, with supporting services and supply chains.



#### HEALTH & AGEING

Respond to the growing needs of older residents, and an expanding population by providing improved access to high quality health care, including aged care, throughout the Sub-region.



#### TOURISM

Increase overall tourist visitation to the Sub-region by continuing to support daytrip visitors while growing domestic and international overnight visitor numbers, through activities, attractions and accommodation.

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## 1.0 Introduction

### 1.1 Background

The Central Midlands Sub-region is renowned for its diverse economic structure, drivers and a myriad of communities and townships. Extending from peri-urban locations to the north of Greater Perth to the Mid West Region of the State, the Sub-region is playing an important role in helping to diversify and decentralise Western Australia's projected population growth.

The Wheatbelt Development Commission sees merit in researching regional centres and their sub-regions in context to each other, highlighting how the Central Midlands 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 Midlands. It will provide regional context and strategic planning supporting 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 Midlands. This Strategy is to provide 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 towns in the Sub-region.

### 1.3 Central Midlands Sub-Region

The Central Midlands Sub-region includes the following Local Government Areas:

- Chittering;
- Dalwallinu;
- Moora;
- Victoria Plains; and
- Wongan-Ballidu.

This is illustrated in the following figure.





Figure 1 Sub-Regions and LGAs, Wheatbelt<sup>1</sup>

The Shires of Chittering and Moora have been analysed in both the Central Coast and Central Midlands Sub-Regional Economic Strategies. It was important to carry out the investigation this way as the statistical and economic analysis indicates that the Shire of Chittering is closely aligned to the profile of the Central Coast, and the Shire of Moora remains closely linked with the traditional Central Midlands boundaries. The additional analysis of the Shires of Chittering and Moora was required in the Central Coast Economic Strategy to enable an accurate statistical comparison, as the traditional boundaries of the Central Coast Sub-region only include two local government areas (LGAs).

#### 1.4 Strategy Structure

This Strategy comprises of the following key sections:

- **Globalising the Central Midlands**– an overview of key global and national macro-economic drivers relevant to the Central Midlands Sub-region;
- **Profile of the Central Midlands Economy** – detailed profile of the Central Midlands sub-regional

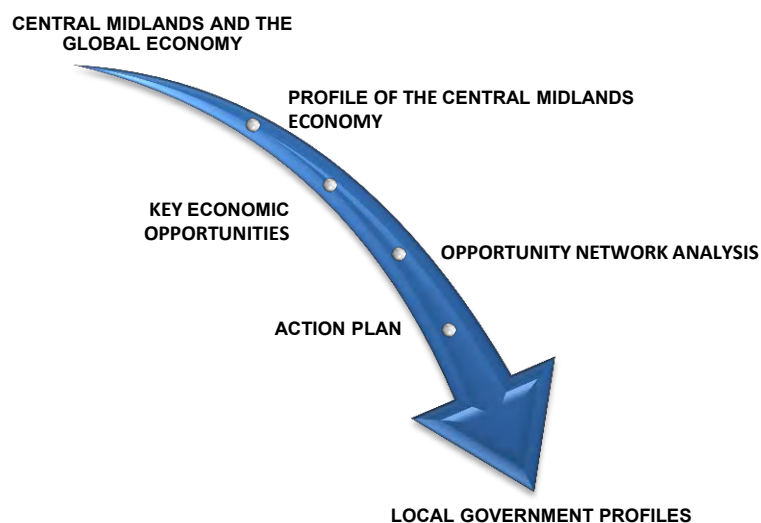
<sup>1</sup> WDC (2012), Provided by Wheatbelt Development Commission.

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-regional strategy 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 Midlands.

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
GFC	Global Financial Crisis
GRP	Gross Regional Product
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.
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 Global Central Midlands

The Central Midlands Sub-region of Western Australia was home to 10,755 people in 2011<sup>2</sup>, or some 2.1% of Western Australia's non-metropolitan population. It is a dynamic region with a diverse economy and a variety of different economic, population and industry drivers. This diversity of activity means that the future economic development of the Central Midlands economy will be influenced by a wide range of global socio-economic trends including but not limited to:

- Food Demand
- Peri-Urban and Rural Living
- Tourism

### 2.1 Food Demand

Agriculture and horticulture are central industries in the Central Midlands and the broader Wheatbelt. Despite the diversity of the local economy, agriculture continues to play a critical role in the Central Midlands economy. In 2012/13, over 770,000ha of agricultural land was sown with broadacre grains, yielding almost 1.1 million tonnes<sup>3</sup>.

Global food demand has increased in recent years in response to accelerating population growth and growing incomes in developing countries<sup>4</sup>. 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 increases<sup>5</sup>. This productive increase is evident in WA's wheat production (tonnes per hectare) illustrated in the following figure.

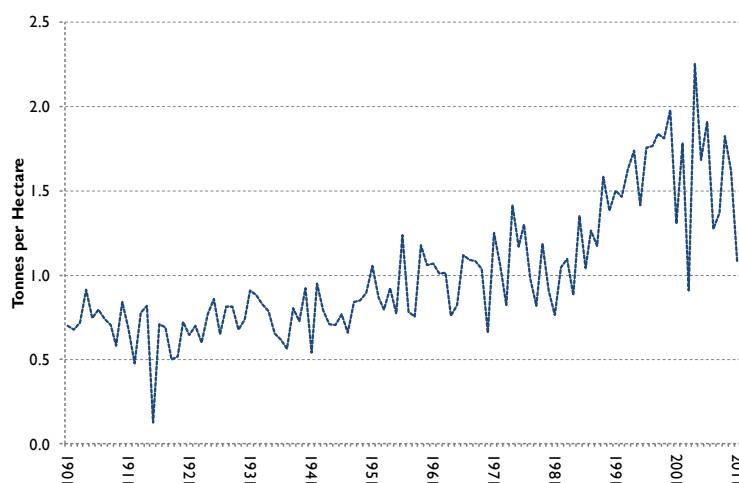


Figure 3 Production per Hectare, Wheat, WA <sup>6</sup>

<sup>2</sup>ABS (2012), Estimated Residential Population, Cat No 3218.0, Australian Bureau of Statistics, Canberra.

<sup>3</sup>CBH (2013) Unpublished Production Data, CBH, Perth

<sup>4</sup>ANZ (2013), Greener Pastures: The Global Soft Commodity Opportunity For Australia and New Zealand, Melbourne.

<sup>5</sup>FOA(2012), OECD – FAO Agricultural Outlook 2012-2021, Food and Agricultural Organisation, Rome.

<sup>6</sup>ABS (2012), Historical Selected Agricultural Commodities, Cat No 7124.0, Australian Bureau of Statistics, Canberra.



Wheat productivity in Western Australia has been highly volatile, reflecting the impact of weather events and dry seasons. However, since 1981, Wheat productivity has trended upwards, from 1.0 tonnes per hectare to more than 2.0 tonnes per hectare in some years. This reflects a combination of improved farming methods, greater use of technology and greater incorporation of strategic research and information into farm management.

Australia is the fifth largest exporter of wheat in the world<sup>7</sup> and Western Australia accounts for approximately 18% of national production<sup>8</sup>. Australia's competitive advantage in both broadacre crops, as well as intensive horticulture and livestock production positions sub-regions like the Central Midlands well to reap the reward of structural uplifts in global agriculture commodity prices.

## 2.2 Peri-Urban and Rural Living

The world's population continues to increase rapidly and Western Australia is a leading location for new residents within Australia and the Western World. Western Australia has had the highest population growth rate of all major states since 2006, averaging 2.8% per annum<sup>9</sup>. This growth has resulted from a combination of strong fertility rates and inward migration from interstate and overseas, such as the United States, United Kingdom, New Zealand and South East Asia. There are opportunities to cater to this expanding population while preserving the State's unique local environments and valued quality of life.

Regional Western Australia, in particular regions on the periphery of major cities, is expected to play an increasingly important role accommodating Western Australia's growing residential population. Peri-urban areas, which are generally within one to two hours drive from the metropolitan boundary, form belts of non-urban land that are often neither fully urban nor rural. Peri-urban regions often contain significant natural resources and amenities that underpin agriculture production and recreation activities and offer quality lifestyle options for residents and visitors alike.

Perth's peri-urban areas also contain ecosystems that are vital to the functioning of the State. They provide some of our most basic needs such as fresh air, clean water and fertile soils to produce food, fibre, timber and minerals. Over the last decade, Perth's peri-urban fringe has had the strongest population growth in Australia, with the annual average growth of "inner regional" (i.e. regions directly adjacent major cities) Western Australia (2.5%) increasing at a slightly faster rate than the State's major cities (2.4%). This is illustrated in the following figure.

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

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

<sup>9</sup> ABS (2013), Estimated Residential Population, Cat No. 3218.0, Australian Bureau of Statistics, Canberra.



**Figure 4 Annual Population Growth Rates, by Region, Western Australia and Australia, 2001-2012<sup>10</sup>**

This trend illustrates the popularity of Perth’s peri-urban areas. Together with the regional cities, these settlements create a network of communities, employment and production that interact locally, state-wide, nationally and internationally. People living in these areas have access to the benefits of both urban and rural economies, providing workers with access to both local economic activities as well as significant State-wide opportunities such as mining. This has recently underpinned strong Drive-In Drive-Out trends among residents of peri-urban Western Australia.

### 2.3 Tourism

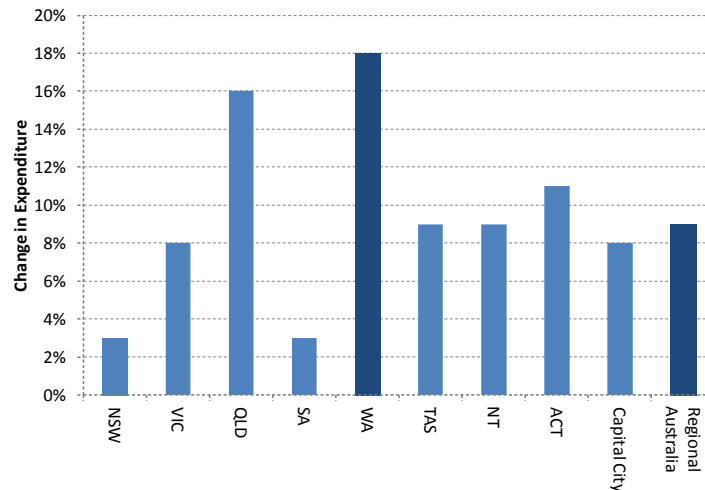
Central Midlands is Western Australia’s premier peri-urban tourist destination, offering visitors a diverse range of natural, lifestyle and amenity-based attractions and activities. It’s role as “Perth’s Playground” is reflected in strong day-trip tourist visitation and expenditure, leveraging the Sub-region’s rural lifestyle and proximity to Perth.

Australia’s tourism industry performed well during 2011–12 with an 8.0% growth in total visitor expenditure over the previous year. This follows a challenging decade with domestic overnight visitation depressed by increased attractiveness of outbound overseas travel (due to higher Australian Dollar and increased outbound flights) and recent domestic and global economic uncertainty and associated consumer caution<sup>11</sup>. Most of this recent growth was in the domestic market, though international tourism continues to be strong, particularly from Asia (and China specifically) which as offset falls from some of Australia’s more traditional markets in Europe.

Expenditure growth by tourists varies considerably across the Australian states and territories. In 2010-11, Western Australia recorded the strongest growth in visitor expenditure nationally, increasing by 18%, while regional Australia increased by 9%. This is illustrated in the following figure.

<sup>10</sup> ABS (2012), Regional Population Growth, Australian Bureau of Statistics, Cat No 3218.0, Canberra.

<sup>11</sup> Tourism Australia (2011) Tourism 2020 Strategy, Tourism Australia, Canberra



**Figure 5 Percentage Change in Expenditure of Tourist in 2010-11, by State/Territory/Region <sup>12</sup>**

This combination of strong expenditure and rebounding visitation will underpin improvements in the tourism sector in regional Western Australia and provide significant economic and community benefits, including:

- Providing employment opportunities, both skilled and unskilled, as a labour intensive industry;
- Increasing local income and creates increased gross national product;
- The development of new infrastructure that will also help to stimulate local commerce and industry;
- Creating new facilities that can be used by the local population also;
- Justifying environmental protection and improvement due to the rise of nature-based tourism.

Growing tourism activity in the Central Midlands Sub-region has the potential to contribute significantly to local economic growth and prosperity. Leveraging this established reputation as a tourist destination and market positioning to increase domestic and international overnight visitation will be critical to underpinning future growth of the sector.



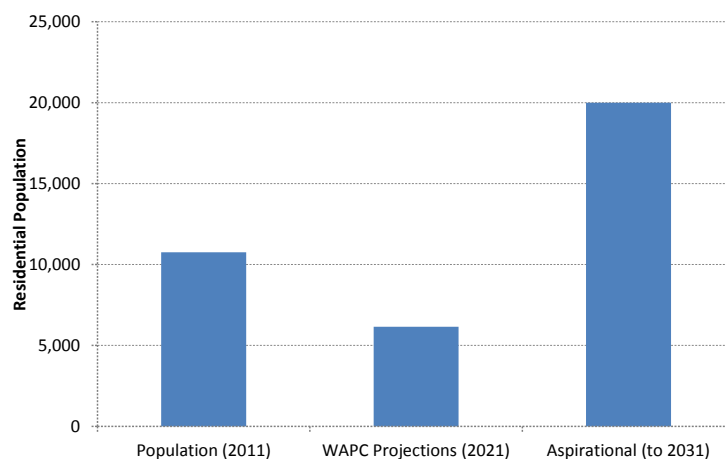
<sup>12</sup>TRA (2012), State of the Industry 2012 Full Report, Tourism Research Australia, Canberra.

## 3.0 Profile of the Central Midlands Economy

### 3.1 Population and Socio-Demographics

The Central Midlands Sub-region was home to 10,755 people in 2011. This population is primarily concentrated in the local governments of Chittering and Moora, which collectively account for almost two in every three Central Midlands residents.

The Sub-region has experienced a moderate population increase over the past decade, averaging 0.7% per annum compared to 2.2% for Western Australia as a whole. The WA Tomorrow Population Estimates from the Western Australian Planning Commission project that there will be another 1,510 residents who will move into the Central Midlands by 2021<sup>13</sup>. Due to a robust economic environment, the peri-urban and rural nature of the Sub-region and the development of several major initiatives underway, the area is expected to support accelerated growth of up to 20,000 by 2031. This is illustrated in the following figure.



**Figure 6 Current and Future Residential Population, Central Midlands**

The population of the Central Midlands Sub-region is expected to age rapidly over the next decade. This reflects the fact that the Sub-region and associated population centres already possess comparatively older population profiles. According to the results of the 2011 Census of Population and Housing, the residential populations of almost all LGAs in the Central Midlands have higher proportions of people aged 65+ than the State average (12.3%). LGAs such as Dalwallinu (14.5%) and Chittering (12.9%) have the highest share of their current populations aged 65 and over<sup>14</sup>.

Service and infrastructure demand in a region can be driven by more than the local residential population. Temporary and long-term non-residential visitors can account for large shares of the “service population” of a sub-region, influencing its economy through increased demand for goods and services. For example, residents entering under 457 Visas immigration arrangements account for almost 10% of the Shire of Dalwallinu’s service population with the majority of temporary residents from the Philippines<sup>15</sup>. As such,

<sup>13</sup> WAPC (2012), WA Tomorrow Population Estimates, Western Australian Planning Commission, Perth.

<sup>14</sup> ABS (2012), Census of Population and Housing, 2011, Australian Bureau of Statistics, Canberra.

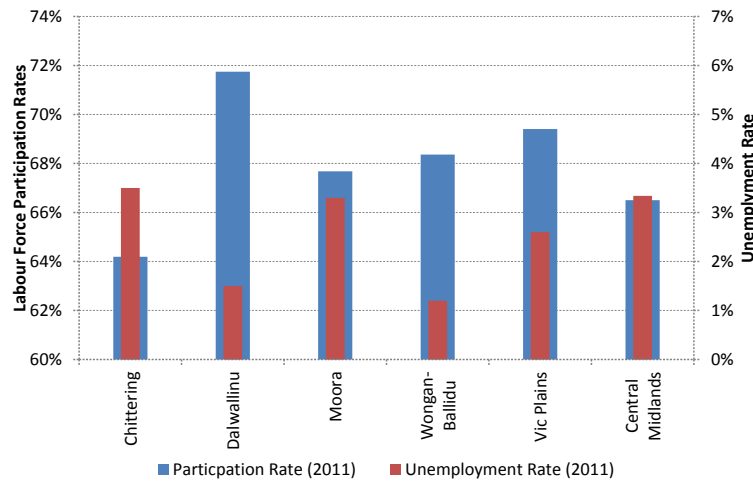
<sup>15</sup> Shire of Dalwallinu (2013) Regional Repopulation Pilot project database, Shire of Dalwallinu, Dalwallinu



historical and future population growth rate estimates are likely conservative, impacting service delivery planning and infrastructure capacity delivery.

### 3.2 Labour Force and Skills

A significant driver of current and future residential population growth in the Central Midlands will be the increasingly constrained nature of local labour markets. As at the 2011 Census, the Central Midlands unemployment rate was 3.3%, below the comparative State average of 4.7%<sup>16</sup>. This is illustrated in the following figure.



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

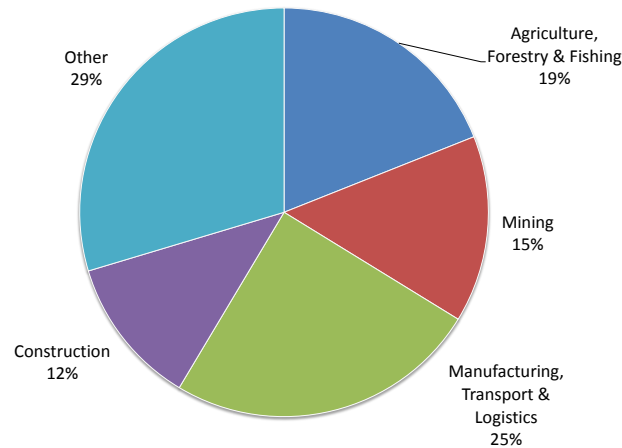
Unemployment rates have historically varied widely across the Sub-region, reflecting a diversity of local economic drivers and conditions. This makes the Central Midlands unique compared to other Wheatbelt Sub-regions.

Chittering has an older population that are semi-retired or transitioning from the workforce. This supports a lower labour force participation rate and more moderate unemployment. In contrast, Dalwallinu has a significantly more dynamic employment market, with very high labour force participation and low unemployment. This is further supported by an increasing trend of local industry in employing 457 Visa international workers. Moora’s labour force profile is characteristic of major service centres, with moderate unemployment reflecting the concentration of community and welfare services, but with it significant public sector employment opportunities. With a low unemployment rate and solid participation rate, any major employment growth in the Central Midlands Sub-region in the future will need to be accommodated by migration into the area.

<sup>16</sup> ABS (2012), Census of Population and Housing, 2011, Australian Bureau of Statistics, Canberra

### 3.3 Employment, Industry and Investment

The Central Midlands Sub-region had a Gross Regional Product<sup>17</sup> in 2012/13 of approximately \$545m<sup>18</sup>. The major drivers of this economic activity are agriculture, mining, construction and manufacturing, which accounted for almost 60% of the local economy. This is illustrated in the figure below.



**Figure 8 Share of Industry Value Add<sup>19</sup>, Central Midlands Sub-Region, 2012/13**

This economic activity has underpinned local employment and business activity. In 2011, there were 4,203 jobs in the Central Midlands Sub-region, representing an employment self-sufficiency rate (ESS - ratio of local jobs to local workers) of 79.3%<sup>20</sup>. Employment in the Central Midlands is highly concentrated with approximately 29% located in Chittering and a further 28% in Moora. This concentration of employment mirrors the distribution of population in the Sub-region; there are also significant trends in Drive In Drive Out (DIDO), particularly in Chittering.

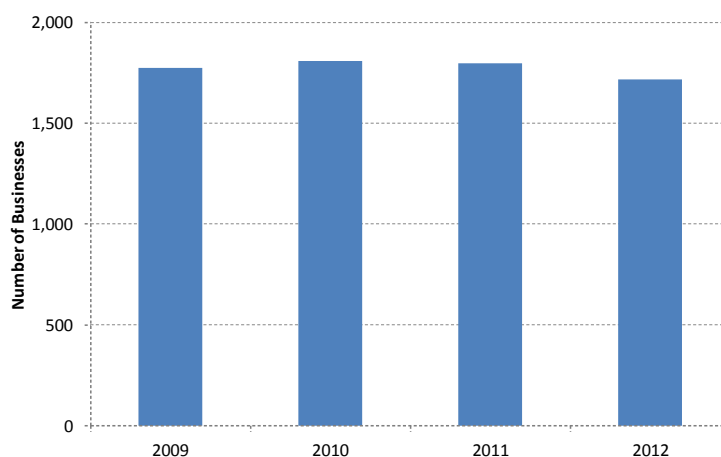
The number of business registrations has remained stable between 2009 and 2012 (marginally decreasing by -3.2%). Despite being a period of global economic downturn, most businesses in the Central Midlands remained resilient and continued to operate at pre GFC levels. This is illustrated in the following figure.

<sup>17</sup> 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.

<sup>18</sup> RPS (2013), RPS Economics Gross Regional Product Model, RPS, Gold Coast

<sup>19</sup> 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 Midlands economy.

<sup>20</sup> ABS (2012), Census of Population and Housing 2011, Australian Bureau of Statistics, Canberra



**Figure 9 Share of Locally Registered Businesses, Central Midlands Sub-Region LGAs, 2009-12**

Note that this data covers locally registered businesses only. Anecdotal evidence, suggests that larger nationally registered businesses are increasingly having a presence in the Central Midlands Sub-region, in particular Chittering. This increased diversity of small local and large national businesses is a sign of the economic and commercial maturity and potential of the Sub-region.

A review of small business numbers in the Central Midlands reveals a concentration of business creation in Chittering, with 540 small businesses in 2012. This is followed by Moora with 450. However, when adjusted for population size, Moora has the highest rate of small business formation, equal with Dalwallinu at 176 businesses per 1,000 residents. In contrast, Chittering has only 115 businesses. This is outlined in the table below.

**Table 1 Small Business Population and Rate, Central Midlands LGA<sup>21</sup>**

LGA	Small Business Population	Small Businesses per 1,000 Residents
Chittering	540	115
Dalwallinu	230	176
Moora	450	176
Victoria Plains	160	172
Wongan-Ballidu	250	167
<b>Central Midlands</b>	1630	148

### 3.4 Housing and Affordability

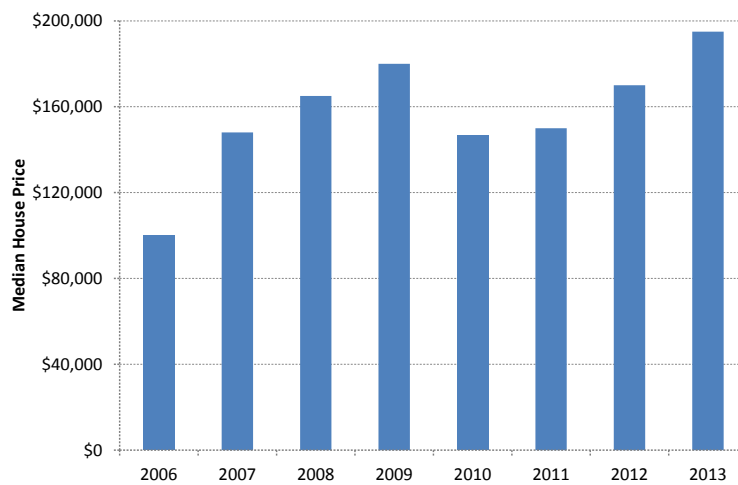
The Central Midlands sub-regional housing market is comprised of almost 4,730 dwellings, of which approximately 80% are occupied<sup>22</sup>. This indicates that there is a degree of capacity in the existing housing market to absorb increased residential population in the short-term. The current housing stock is predominantly comprised of detached housing, which accounted for 99.3% in 2011. However, anecdotal evidence suggest that due to the transient nature of fly in-fly out (FIFO) workers and 'weekenders', the

<sup>21</sup> ABS (2012), Census of Population and Housing, 2011, Australian Bureau of Statistics, Canberra and AIHW (2012), Hospital Statistics 2010/11, Australian Institute of Health and Welfare, Canberra

<sup>22</sup> ABS (2012), Census of Population and Housing 2011, Australian Bureau of Statistics, Canberra

occupancy rate in the Sub-region could be higher, providing opportunity for housing diversity in terms of design, quality and density.

Over the past five years, the Central Midlands Sub-region and the broader Western Australian housing market have experienced volatile conditions, with prices rising and falling during the period. This reflects the impact that the GFC and subsequent depressed level of consumer confidence has had on housing market activities and therefore prices. Despite this, the Central Midlands market experienced price growth over the period, with median house prices increasing from \$100,000 in 2006 to \$195,000 in 2013<sup>23</sup>. This represents growth of almost 100%. Prices have now fully recovered since the GFC and are now at historical highs. This is illustrated in the following figure.

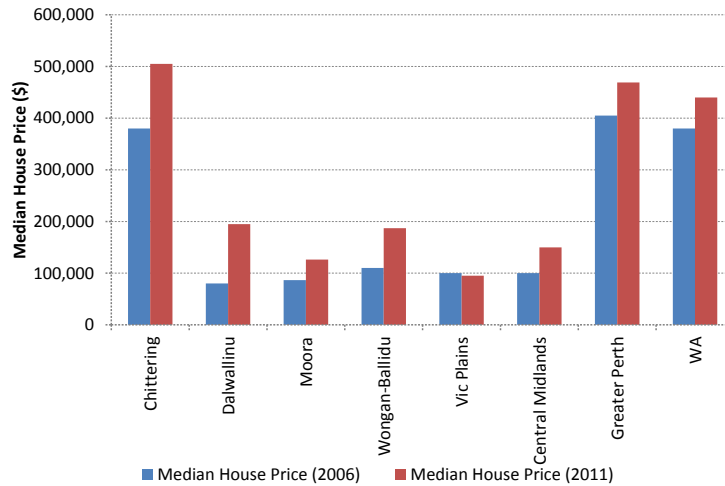


**Figure 10 Median House Prices, Central Midlands Sub-Region, 2006 to 2013**

Almost all towns experienced positive price growth in recent years, though the level of growth varies dramatically. Dalwallinu experienced more than doubling in prices between 2006 and 2011, while Victoria Plains experienced a small decline in growth. The standout in terms of median house price however, is Chittering, with prices in 2011 above Perth and WA averages. This differs from the rest of the Sub-region, suggesting the peri-urban nature of the town is driving demand for lifestyle-based housing, in contrast to more population and employment driven demand growth in more rural locations.

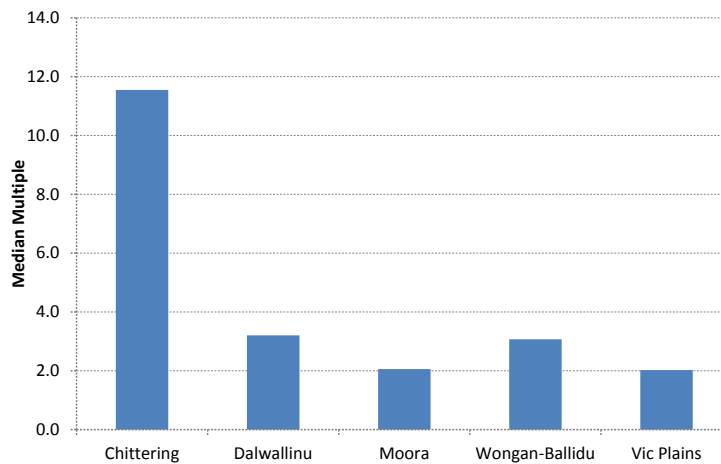
<sup>23</sup> RPData (2012), Online Data Subscription, RPData, Brisbane





**Figure 11 Median House Prices, Central Midlands Sub-Region, 2006 and 2011**

Price growth is generally regarded as positive as it contributes to the wealth and affluence of a region. However, for the Central Midlands Sub-region, 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 income<sup>24</sup>. In other words, the Median Multiple illustrates the number of years of household income required to equal current prices. This approach is effective in that it allows for differences in local income levels within a region – like the Central Midlands – to be considered, ensuring that variations in purchasing power and relative affordability are determined.



**Figure 12 Median Multiples, Central Midlands Sub-Region, 2011**

RPS calculated the Median Multiple for each LGA in the Central Midlands Sub-region and found that, all LGAs, except for Chittering have Median Multiples less than the WA average of 6.0. This reflects the fact that while local household incomes are comparatively low (though this could also include savings such as superannuation by self-funded retirees), house prices are also more favourable, meaning local buyers have relatively greater purchasing power in the market. Note that the current State average is regarded as

<sup>24</sup> Demographia (2013), International Affordable Housing Report 2013, Demgraphia, USA

seriously unaffordable by international standards, with the Reserve Bank of Australia considering a ratio of 4.0 to 4.5 affordable in Australia.

Chittering again stands apart from other local markets in the Sub-region and is regarded as severely unaffordable for local purchasers. This reflects the fact Chittering is an aspirational amenity-driven lifestyle housing market, similar to Gingin and Dandaragan Shires in the Central Coast. The ageing of the population in Perth, coupled with the attractiveness of peri-urban locations as retirement destinations, is expected to see demand for housing in Chittering grow strongly over the next two decades. This will place even further pressure on local prices and affordability.

### 3.5 Community Services and Facilities

The growth in the residential population in the Central Midlands 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 (CRCs) 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

Fertility rate data is an effective leading indicator of the level of demand for child care services. In 2010, all towns in the Central Midlands Sub-region had fertility rates above replacement levels (2.1 children) and were well above the average for Greater Perth (1.8<sup>25</sup>). Interestingly, the fertility rates of the various LGAs varied quite significantly, with Moora among the highest and Victoria Plains among the lowest for the Sub-region. This is illustrated in the following figure.



<sup>25</sup> ABS (2011), Births Australia, Cat No 3301.0, Australian Bureau of Statistics, Canberra

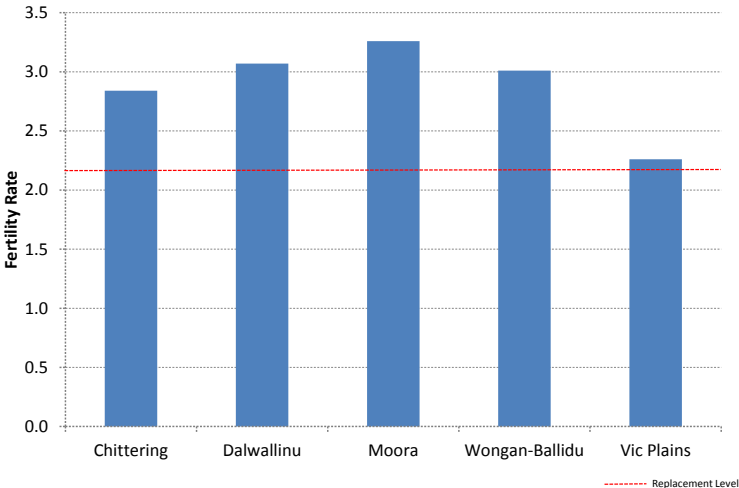


Figure 13 Fertility Rate, Central Midlands Sub-Region, 2011

This high fertility rate, coupled with low unemployment and strong labour force participation, will generate demand for child care services. There are currently 4 child care centres in the Sub-region; they are located in Moora, Wongan Hills, Dalwallinu and Chittering.

The provision of childcare is critical component of service delivery for the Central Midlands as it is essential to allow greater parent participation in the workforce as well as offer early learning opportunities for children, boosting human capital. A more engaged workforce leads to an overall boost in economic output; reduces long term unemployment and dependence on welfare as well as promoting social engagement and self esteem.

3.5.2 Primary, Secondary and Tertiary Education

Despite the ageing of the population in the Central Midlands, many towns in the Sub-region also have above average shares of residents aged 0-14. This reflects the long-term impact on the Central Midlands demographic profile of structurally high fertility rates and young families. A review of the results of the recent Census reveals that all towns in the Sub-region have 0-14 shares above the average for Greater Perth. In particular, Chittering presents an interesting dichotomy for service provision given the high percentage of 0-14 age cohort and high 65+ profile.

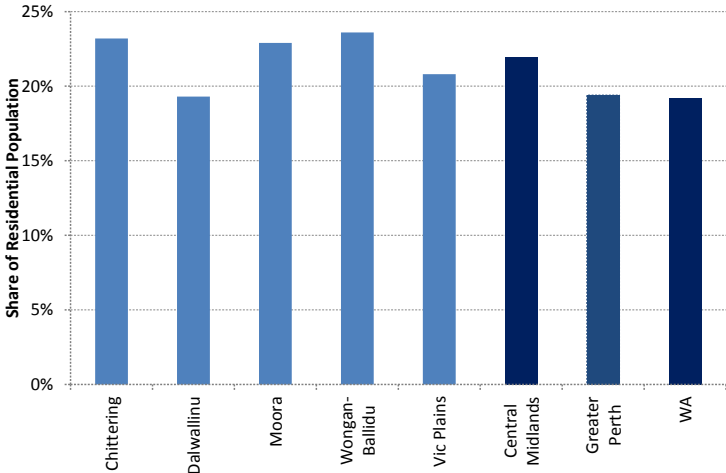


Figure 14 Share of Residential Population Aged 0-14, Central Midlands Sub-Region, 2011

There are currently 13 primary schools in the Central Midlands Sub-region (including 3 private schools). Primary school distribution is relatively dispersed, with all LGAs having a number of primary schools, with student numbers vary considerably (total of 425 primary school students in the Central Midlands Sub-region)<sup>26</sup>.

Secondary school distribution is more concentrated with district high schools located in Wongan Hills (240) and Dalwallinu (150), and a senior high school and residential college in Moora (183 students). There is one private secondary school in the Sub-region, being Catholic Agricultural College Bindoon (149 students). Students from towns within the Shire of Chittering are accessing high school education at public and private schools in the northern and eastern suburbs of Perth, commuting daily on privately chartered buses.

The provision of secondary schooling in the Central Midlands is critical to the attraction and retention of working age families necessary to support local economic development. Increased residential population will underpin demand for increased size and diversity of local secondary education. It is important to acknowledge that a large number of students from farming families attend high school at private boarding schools out of the region. As agricultural activity is not likely to be the driver for population growth in this area, it is likely that new residents to the sub-region will not have a generational culture of sending children to private school, therefore quality upper secondary and vocational options will be vital to attracting and retaining new residents with children between 15- 24 years of age.

The labour force in the Central Midlands Sub-region is characterised by an expected concentration of applied tertiary education qualifications (e.g. formal training and TAFE). This is reflected in both the mix of local employment and in the local provision of tertiary education facilities. The C.Y. O'Connor Institute is the primary tertiary education and training facility in the Central Midlands and the Wheatbelt with locations in Northam, Merredin, Moora, Narrogin and Muresk<sup>27</sup>. A wide range of practical courses are offered with a strong focus on administration, tourism, health, agriculture and manufacturing related qualifications. Opportunities exist to strategically diversify offerings into mining-related occupations to support increased cross-industry mobility of the Central Midlands 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 Midlands is more considerable with one library for every 1,195 residents<sup>28</sup>. There are a number of potential explanations for this apparent over-provision:

- The decentralised and distributed population of the Central Midlands has required a more dispersed library network than in metropolitan Perth;
- The number of libraries does not 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

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<sup>26</sup> Department of Education student numbers as at Semester 2 2013 accessed via <http://www.det.wa.edu.au/schoolsonline/> on 17 December 2013

<sup>27</sup> C.Y. O'Connor Institute accessed via [http:// www.cyoc.wa.edu.au](http://www.cyoc.wa.edu.au) on 25 June 2013

<sup>28</sup> SLWA (2012), List of Libraries in Western Australia, State Library WA, Perth

- Libraries are most often provided by local governments. Every LGA in Central Midlands is home to a library, including Victoria Plains which has 926 residents.

Growth in the Central Midlands population over the next decade will therefore not necessitate increased numbers of libraries. However, it will necessitate expansion in the size and diversity of service offering of existing libraries. This will include the increased utilisation of library and CRC facilities to anchor improvements in local technology and communication networks along with provision of support for local community groups and associations and small businesses. The towns of Wongan Hills and Moora are receiving optic fibre connection through the NBN and several fixed wireless towers. Fixed wireless towers will also be located in the Shires of Chittering and Victoria Plains. This will enable the Central Midlands to broaden opportunities as connection to Perth and beyond will become more seamless. This also presents opportunity for the Sub-region to evolve into a potential technology hub. Greater access to technology, together with lifestyle advantages, will act as an additional attractor to the Sub-region.

### 3.5.4 Aged Care, Hospitals and Health Services

The older age profile of the Central Midlands will underpin continued demand for aged care and retirement village offerings. Verso Consulting investigated aged care bed numbers in the Wheatbelt offered through either hospital MPSs or registered aged care facilities. In 2013 there was a total of 44 dedicated aged care (low and high care) and respite beds<sup>29</sup>. The distribution of these beds is concentrated in Moora, though Dalwallinu and Wongan-Ballidu also provide aged care services. Chittering offers aged care services in the home through Silver Chain but does not have a dedicated aged care facility. Victoria Plains is serviced in aged care by surrounding communities.

There appears to be some misalignment between the distribution of aged care facilities in the Central Midlands and the concentration of people aged 65+ in the Sub-region. Currently, Moora plays a greater role in aged care facility distribution than its local 65+ population would indicate. This is particularly the case in contrast with Chittering, which has the largest share of older residents but no local aged care facilities. This is illustrated in the following figure.

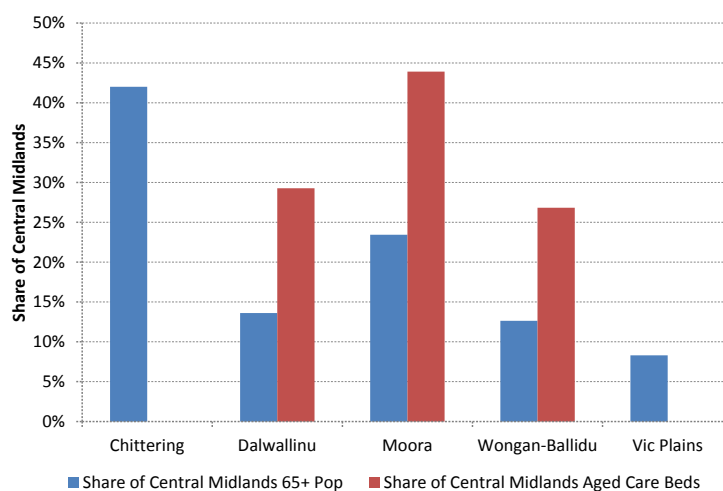


Figure 15 65+ Population and Aged Care Beds, LGA Share of Central Midlands, 2011/12

<sup>29</sup> Verso Consulting (2013) Needs Study CCCM Sub-Region



A possible explanation for this distribution of aged care capacity is the general desire to locate facilities near tertiary hospitals and health service providers. In 2012, there were 43 public hospital beds in the Central Midlands<sup>30</sup>, spread across Dalwallinu, Moora and Wongan-Ballidu. All hospital facilities in the Central Midlands are small, with Moora home to the largest facility with 22 beds<sup>31</sup>.

This distribution of health and medical facilities in the sub-region is influenced by the Moora/Dandaragan Multi-Purpose Services (MPS). Verso Consulting's investigation into aged care services in the Wheatbelt highlight that while the demographically driven demand for new residential and community aged care services has increased significantly (and it will grow at an increasing rate over the next five years), growth in funding from the Commonwealth to MPSs in WA has not. There is an increasing gap between funding and demand<sup>32</sup>. The bundled funding arrangements in the MPS model does rely on negotiations between WA Country Health Service and the Federal Department of Health and Ageing to accurately fix a number to the quantity and type of residential aged care beds being offered through the relevant MPS.

Additionally, there is a growing misalignment between the location of health facilities and the emergence of high demand population cohorts (i.e. population ageing), resulting in local under-supply of key services. Improving the governance model and funding inequity will be integral to addressing aged care service demand in the Central Midlands Sub-Region.

The concentration of health and medical services in Moora likely explains the current concentration of aged care services in the town and it's servicing of older populations in surrounding towns. However, current hospital bed distribution and accelerated population ageing may present opportunities for aged care bed capacity to be increased in locations such as Chittering and potentially, Dalwallinu.

Anecdotal evidence suggests that there is long term commitment by local government and community in Moora to develop aged care as a competitive advantage of the Moora economy.



<sup>30</sup> AIHW (2012), Australian Hospital Report, 2010/11, Australian Institute of Health and Welfare, Canberra

<sup>31</sup> WACHS (2013) Coastal Wheatbelt and Moora Service Plan, 2012-2022, Government of Western Australia, Perth

<sup>32</sup> Verso Consulting (2012) Central East Wheatbelt Aged Support and Care Regional Solution/s, pg. 19.

## 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 Midlands Sub-region. These themes represent areas where the Central Midlands 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 Midlands Sub-Regional Economic Strategy include:

- Agriculture, Horticulture & Livestock;
- Peri-Urban & Rural Living;
- Mining, Manufacturing, & Support Services;
- Health and Aged Care; and
- Tourism.

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

### 4.1 Agriculture, Horticulture & Livestock

#### 4.1.1 Rationale

Central Midlands, as part of the Wheatbelt, is one of the major agriculture producing areas in the country. Horticulture, broadacre agriculture and animal husbandry are likely to continue to underpin agricultural activity in the Central Midlands along with associated storage and processing activity.

#### 4.1.2 Drivers and Trends

The global market is projected to experience an increased demand for food, particularly from the developing countries where growing populations, higher incomes and urbanisation are driving greater per capita food consumptions<sup>33</sup>. Per capita consumption is projected to expand most rapidly in Eastern Europe and Central Asia and followed by Latin America and other Asia.

At the same time, global food production is projected to grow at only 1.5% per annum on average over the coming decade, due to a combination of limited expansion of agricultural land, rising production costs, growing resource constraints and increasing environmental pressures.

This rate of growth is insufficient to meet the 60% increase in food production over the next 40 years required to meet rising global demand for food (by 2050<sup>34</sup>). Bulk food commodity producers like Australia are therefore uniquely positioned (relative to other net food exporters) to service these markets, from both geographical proximity and quality/reputation perspectives. This is underpinning increased interest by overseas investors in productive agricultural land in Australia, including interest from Asian countries in the Central Midlands Sub-region.

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<sup>33</sup> OECD-FAO (2013), OECD-FAO Agricultural Outlook 2013-2022, Organisation for Economic Co-operation and Development, Paris and Food and Agriculture Organisation, Rome

<sup>34</sup> FAO (2009), FAO How to Feed the World in 2050, FAO High-Level Expert Forum, 12-13 October, Rome

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. Livestock production, 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. These findings highlight where management may be adjusted by different planting times, new fertiliser regimes, farming systems or alternative crops<sup>35</sup>. Therefore, enhanced farm management techniques (such as Yield Prophet WA, Innovation Forums and farm resilience practices) will allow farmers to adjust operational and input expenses to seasonal changes in predicted yields<sup>36</sup>. Research and development is recognised as fundamental to helping maintain growth in productivity of coarse grain production in the Wheatbelt in the medium term.

### 4.1.3 Sub-Regional Characteristics

The Central Midlands has a temperate climate with hot, dry summers and predominantly winter rainfall. This is reflected in an annual mean rainfall range from 350-650mm across the sub-region<sup>37</sup>.

Broadacre grains like wheat, barley, oats and canola represent the major source of agricultural production in the Central Midlands. Since 1999, the Central Midlands has had an average annual production of coarse grains of almost 1.1 million tonnes<sup>38</sup>. This production has been volatile however, reaching as high as almost 1.8 million tonnes in 2011/12 and as low as 610,000 tonnes in 2006/07. This is illustrated in the figure below.

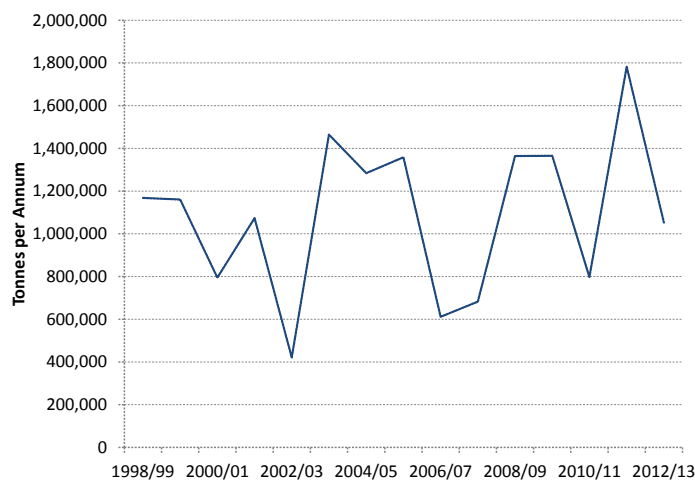
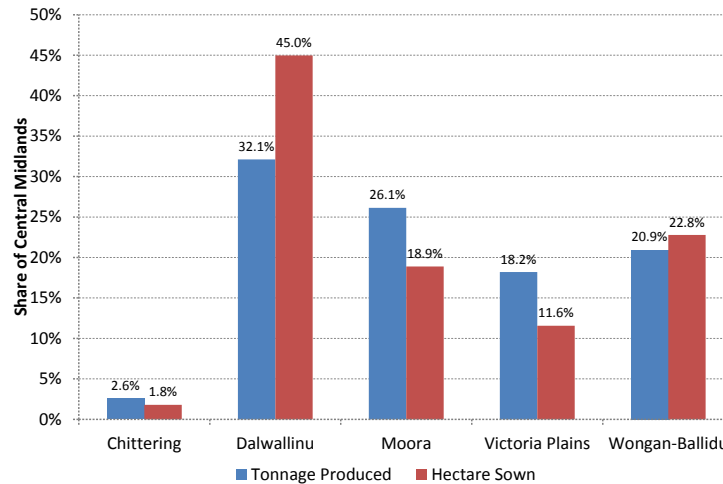


Figure 16 Annual Coarse Grain Production, Central Midlands.

Production is primarily concentrated in the Shire of Dalwallinu, accounting for almost one third of production (32.6%) in 2012/13. This is followed by one quarter in Moora (26.1%) and one fifth (20.9%) in Wongan-Ballidu. This reflects the geographical size of each of these local governments.

<sup>35</sup> DEC (2103), Climate Change Case Studies: Agriculture, Department of Environment and Conservation, Perth.  
<sup>36</sup> DAFWA(2012), A Year in Grains 2011, Department of Agriculture, Perth  
<sup>37</sup> BOM (2013), Climate Data, Bureau of Meteorology, Canberra.  
<sup>38</sup> CBH (2013) Unpublished Production Data, CBH, Perth



**Figure 17 Cereal Crop Production and Hectares Sown, LGA Share of Central Midlands, 2012/13<sup>39</sup>**

This distribution of production broadly aligns with the share of hectares sown, though yields vary considerably. Yield is lowest in Dalwallinu despite accounting for the largest share of production and hectares. In contrast Victoria Plains has the highest yield. Chittering is not regarded as a major cereal crop producing part of the Sub-region, instead focused on a diverse range of horticultural products.

The concentration of wheat production raises issues as to the diversity of agricultural activity in the sub-region. Opportunities to lever continued research and development (R&D) investments, to diversify crops mix could be investigated to help improve the sustainability of the agricultural production in the Sub-region. In addition, 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. The Dalwallinu based Liebe Group is very active in the north and eastern part of the sub-region. The group’s work is centred around agricultural research and development through cropping trials as well as education and training opportunities and strengthening communication between growers, the industry and community.

Livestock is the next largest food production sector in Central Midlands, with the Sub-region producing over \$50m in disposals and a further \$35m in animal products (namely wool) in 2010/11<sup>40</sup>. Horticulture is also an emerging sector of food production in Central Midlands, and is currently concentrated on fruit and citrus orchards in Chittering and minor citrus production in Moora. Greater rainfall stability than many other parts of the Wheatbelt along with outward movement of horticultural production from market garden locations in Greater Perth (e.g. Wanneroo) means that Central Midlands will become increasingly attractive for more intensive food production. Underground water available to horticulture in the Central Midlands is limited to western parts of the sub-region. Investigations are underway into a significant paleo- channel that expands across the Victoria Plains, however the extent of the opportunities for use of the water is not fully known at this stage.

<sup>39</sup> CBH (2013) Unpublished Production Data, CBH, Perth

<sup>40</sup> ABS (2013) Value of Agricultural Commodities, 2010/11 Cat No 7503.0, Australian Bureau of Statistics, Canberra

The following products, aside from grain, are particularly prominent in the Sub-region with high gross production values, supplying both the domestic and international market in 2010-2011<sup>41</sup>

- Hay - \$12.3 million;
- Wool- \$ 35.2 million;
- Nurseries and cut flowers \$3.3 million;
- Citrus \$3.2 million

The Western Australian Meat Industry Authority (WAMIA) livestock centre relocated to Muchea in 2011. The proximity to the major northern transport corridors (Great Northern Highway and Brand Highway) allows livestock from the northern agricultural and pastoral regions to be sold at this facility. It also supports the surrounding Wheatbelt and Mid West towns that do not access the other major sale yards in the south west of the State. There are also a number of livestock feed lots in the Lower Chittering area.

## 4.2 Peri-Urban and Rural Living

### 4.2.1 Rationale

Population growth in the peri-urban regions adjacent to Greater Perth has accelerated in recent years and the Central Midlands Sub-region will continue to take advantage of the opportunity to develop into a peri-urban fringe becoming a larger component of the Australian landscape. This includes leveraging the close proximity to Perth, rural amenity and the changing lifestyle patterns of people, particularly older Australians.

### 4.2.2 Drivers and Trends

Throughout the developed world, population growth has become spatially concentrated in the peri-urban regions surrounding major urban centres. It is expected that by 2050, world population will increase to almost 9.3 billion. This will create new national and global economic and social forces which will reshape national geographies in general, and the characteristics of cities in particular. The result will be a range of diverse social and spatial outcomes, including greater differentiation across, within and between cities.

Along with increases in global population levels, Australia's population is also expected to increase. In December 2012, Australia's population was 22.9 million, which has significantly increased by 3.3 million, or 16.8% over the last decade<sup>42</sup>. While part of this growth in population was through natural increases, which rose by 35.3% during this period, most of it was from net overseas migration, which increased by 113.5%, accounting for almost 60% of total increase in population. Further, based on 2050 projections, endogenous demand for new workers in Australia is likely to guarantee increases in the level of net overseas migration to be more than 100,000 per annum<sup>43</sup>.

This will see some people respond to rising prices by moving to the outer fringes of the city, thereby promoting urban sprawl. Additionally, people will move out of the cities finding them unaffordable, congested and/or unpleasant. Often though, they move to regions where they find an appealing natural environment, such as in the form of hobby farms and rural retreats, but where they are still able to maintain functional links

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<sup>41</sup> ABS (2013) Value of Agricultural Commodities, 2010/11 Cat No 7503.0, Australian Bureau of Statistics, Canberra

<sup>42</sup> ABS (2012), Australian Demographic Statistics Cat No 3101.0, Australian Bureau of Statistics, Canberra

<sup>43</sup> CEDA (2012), A Greater Australia: Population, Policies and Governance, Committee for Economic Development Australia, Melbourne.



to the city, commuting to jobs in the city or to outer suburbs. Access and use of information technology becomes important for people working part time from home and going to the city a few days per week.

In Western Australia, these trends have already started to emerge. Over the decade to 2012, growth in inner regional areas<sup>44</sup> (27.3%) has outpaced that of the major cities (26.3%) in Western Australia, albeit marginally. This increased demand for peri-urban growth and idyllic rural lifestyle has a distinctive population geography, which generally represents the combined effects of suburbanisation, counter-urbanisation and population retention.

### 4.2.3 Sub-Regional Characteristics

The Central Midlands Sub-region adjoins that of Perth with shires ranging in distance from the metropolitan area. The Shire of Chittering is only an hour's drive north of Perth and the Shire of Dalwallinu located under three hours drive from Perth. The urban centres of Midland and Joondalup have undergone considerable growth; the increased accessibility to retail and commercial activity as well as investment in population services has negated the need for those who reside within 2-3 hour drive time of the metropolitan area to access the Perth CBD for services.

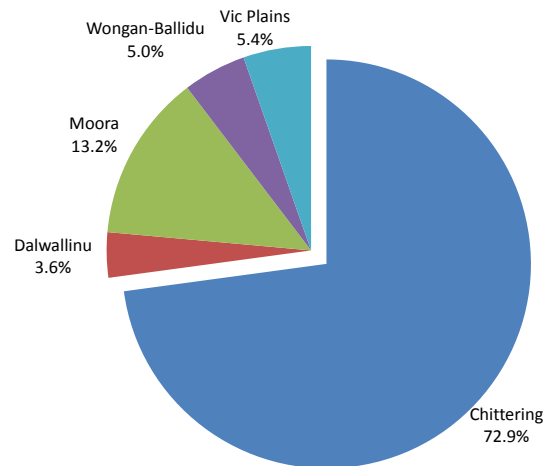
There are a range of economic opportunities available within the Sub-region that promote business growth. Together, these provide current and future residents with the advantages of country living, including clean air, lack of traffic and low crime rate, along with the benefits of services and industries.

For example, the Shire of Chittering, which neighbours Perth, is the Sub-region's preferred choice for peri-urban growth while shires such as Wongan-Ballidu and Victoria Plains offer rural lifestyle properties, coupled with affordable housing options and good community and social services (both public and private). Dalwallinu offers employment opportunities coupled with affordability. Moora has government services and banks, as well as the regional high school and hospital. The proximity of population centres, Dalwallinu, Moora and Wongan Hills to each other offers a variety of lifestyle and employment opportunities within 1 hour's drive of each other. The Sub-region also provides a unique landscape of large areas of untouched bushland, state forest, wetlands and industrial and commercial estates, providing a mix of lifestyle and employment opportunities for new residents and migrants alike.

This proximity to Perth and diversity of lifestyle options saw an increase in building approval rates between 2009/10 and 2011/12 for the Central Midlands Sub-region, with a large portion happening in the Shire of Chittering (72.9%). This is illustrated in the figure below.



<sup>44</sup> Generally within 150-200km of a major city or urban centre.



**Figure 18 Residential Building Approvals Between 2009/10 to 2011/12, Central Midlands Sub-Region<sup>45</sup>**

Employment self-sufficiency (ESS) is the ratio of local jobs to the local labour force and is a measure of local economic dynamism. Interestingly, the Shire of Chittering (57.2%) had the lowest employment self-sufficiency rate in the Central Midlands Sub-region, while the Shire of Dalwallinu had the highest (99.6%). Almost a quarter of Chittering residents (24.7%) work in surrounding areas of the City of Swan (14.8%), Wanneroo (5.0%) and Joondalup (4.8%), with 4.2% working in the City of Perth. The higher ESS for Dalwallinu suggests the comparative advantages for economic and industrial development, along with the potential clustering and support associated businesses. These business establishments will all require more workers, thereby generating greater employment opportunities.

However, with the comparatively higher, and growing, median prices for homes in the Shire of Chittering, along with the economic diversification and technological innovation taking place in surrounding Shires, opportunity exists for the boundaries of peri-urban growth to extend. Housing choices will mainly be driven by location and affordability factors, as more people choose to live in the peri-urban regions compared to the metropolitan Perth<sup>46</sup>.

## 4.3 Mining, Manufacturing, & Support Services

### 4.3.1 Rationale

The strategic location of the Central Midlands relative to metropolitan Perth, major mining regions and inter and intrastate transport infrastructure, positions the Sub-region as an ideal location for mining and supply chain related services. This can include leveraging the proximity of being on the Great Northern Highway and strategic location to the Mid West mining developments. The Great Northern Highway is a key competitive advantage to the Sub-region as it is the only High/Wide Heavy Haulage Route linking Perth with the northern parts of Western Australia and the Northern Territory.

The Highway carries a heavy traffic volume of 15,300 vehicles per weekday, with approximately 18% being heavy haulage vehicles when last measured in March 2010. The volume is expected to continue increasing

<sup>45</sup> ABS (2012), Building Approvals Cat No 8731.0, Australian Bureau of Statistics, Canberra.

<sup>46</sup> DoH (2013), The Housing We'd Choose: A Study for Perth and Peel, Department of Housing, Perth.

with the ongoing expansion of the mining industry in the north of the State<sup>47</sup>. This heavy traffic volume has led to businesses development and expansion along the Great Northern Highway in the Central Midlands that service the transport sector.

#### 4.3.2 Drivers and Trends

The shift in global economic growth to Asia and to other emerging economies, along with increases in world population levels and incomes in these nations, will certainly increase demand for resources and the industries which service the sector. Since 1991, world trade exports (in constant \$US) have increased from \$350b to \$1,000b value<sup>48</sup> in spite of recent economic volatility.

Infrastructure investments (particularly in road and rail transport) in Asia are increasing the connectedness of the region and reducing costs for the transport of goods across the region. The transport network in Asia is improving rapidly and expanding through South East Asia towards Australia.



Figure 19 Asian Rail and Road Networks

Additionally, the proximity of Western Australia to the developing economies of East Asia means comparative transport costs, relative to other major trading partners (e.g. Europe, US, South America), provide Western Australia with a comparative advantage. This is further enhanced by the fact that Western Australia shares a time zone with much of the region.

<sup>47</sup> Main Roads Western Australia (2013), Great Northern Highway, <https://www.mainroads.wa.gov.au/BuildingRoads/Projects/CompletedProjects/2011/Pages/gnh.aspx#.U1iEfmSwQg>

<sup>48</sup> WTO (2012), World Trade Statistics Online, World Trade Organisation, Geneva.



Figure 20 Australia – Trading With The World<sup>49</sup>

The global economy continues to strengthen, despite broader imbalances and underlying volatility, underpinning continued demand in commodities and related services. The transformation of the Asian region into the economic powerhouse of the world is now an established trend, with Australia benefitting from Asia's appetite for raw materials and energy<sup>50</sup>.

### 4.3.3 Sub-Regional Characteristics

The centrality of Central Midlands relative to major mineral resource and population regions (Pilbara, Mid West, Goldfields and South West), proximity to the metropolitan Perth region and access to major national and state transport infrastructure, will continue to underpin the Sub-region's role as a transport and logistics hub. This will be supported locally by increased and diversified agricultural production, along with structural macro and micro economic drivers of commodity demand.

These include opportunities in niche manufacturing and supply chains to support mining related activities in and around the Sub-region, particularly in those areas where there are limited economies of scale. Some of these include manufacturing located in Dalwallinu to cater for new mining developments in the Mid West, through to agricultural manufacturing in Wongan-Ballidu (e.g. steel manufacturing). The existence of these foundation industries and clients have allowed businesses in the region to develop a critical mass of production. This has enabled them to diversify both their client base and their region of focus.

Although the Central Midlands currently does not have a general industrial park, several shires within the Sub-region have zoned light industrial land and are investigating increasing their capacity. This is in response to increased business interest in the region to service key trade linkages between Perth, mine sites

<sup>49</sup> DFAT (2012), Trade Matters 2012, Department of Foreign Affairs and Trade, Canberra

<sup>50</sup> Australian Government (2012), Australia In The Asian Century, Canberra



and major transport hubs for exporting. The currently serviced available light industrial land is considered affordable with lot sizes that allow for a range of uses. Like industries are investing in clusters within the sub-region (e.g. manufacturing in Dalwallinu; processing agricultural bi-products in Wongan Hills) creating economies of scale and provision of complimentary services.

The State Government developed Muchea Employment Node, located in the Shire of Chittering will grow to be an important location of key employing industries in the sub-region. The location of the park at the intersection of the Brand and Great Northern Highway allows for high accessibility for businesses, particularly if they are mining or transport related. As businesses establish in the employment node, it will offer sub-regional employment opportunities, particularly for the Shire of Chittering. The employment node is suited to transport depots, agricultural related industry (complimentary to the WAMIA Saleyards), fabrication, warehousing and other general commercial uses.

Currently, Moora has sufficient industrial land for existing businesses, with BGC being a major employer and operating over a vast area to Carnarvon in the north, Kalannie to the east, Jurien Bay to the west and Bunbury in the south. Moora services a range of mineral transportation routes, such as:

- Major trucking cartage contract from the Boral/Simcoa Silica mine at Coomberdale, where 80,000 tonne of quartz is carted to Bunbury or Kwinana for processing;
- Cartage of 60,000 tonnes of fertiliser from Geraldton to growers;
- Lime sands cartage from Dongara to Buntine and Kalannie in the growing season;
- Cartage of 60,000 tonnes of gypsum from Lake Jibberding mine which makes gyprock and plasterboard in Perth;
- Cartage of fertiliser to growers from Summit, CSBP and SuperFert;
- Cartage of 20,000 tonnes of fertiliser from CSBP Dalwallinu; and
- Cartage from Carnarvon to Cook industries in Jandakot.

In contrast, Victoria Plains is currently using only some of its light industrial land but there is strong potential for growth as demand increases in the long term, especially north of Perth. There is also the potential for the emergence of mining as a significant industry from 2018-2020. Exploration is currently being carried out around the iron ore belt in the Calingiri/ Yerecoin area and Potash in the Gillingarra/ Mogumber area. The mining companies involved are Cliffs Natural Resources and Bauxite Alumina Joint Venture.

Wongan-Ballidu has an abundance of land available for light industrial development to capture potential opportunities for mining supply chain activities. The opportunity to develop manufacturing and mining support services is dependent on an improved freight connection to the Great Northern Highway. The proposed North Link project is likely to include the upgrade of the Ballidu- Pithara Road which will connect Wongan Hills to Dalwallinu and the Great Northern Highway. There are also several businesses in operation that are value-adding to farm bi- products such as Dsatco lupin mulch and Wellard Feeds pellet making.

Chittering has the potential to benefit from bauxite mining in the future with an individual tenement covering a large deposit of 15,000 ha throughout the South-West (including land in the Shire of Chittering). China has been identified as a significant market for bauxite into the future. Chittering has several businesses extracting building materials such as clay for bricks and sand for foundations. Major operators include Boral Bricks Austral Bricks, each extracting up to 100,000 tonnes of clay per annum. The Tronox run Chandala Mineral Sands processing facility supports mineral sands extraction from the Cooljarloo mine site.



# Major Resource Projects — June 2013

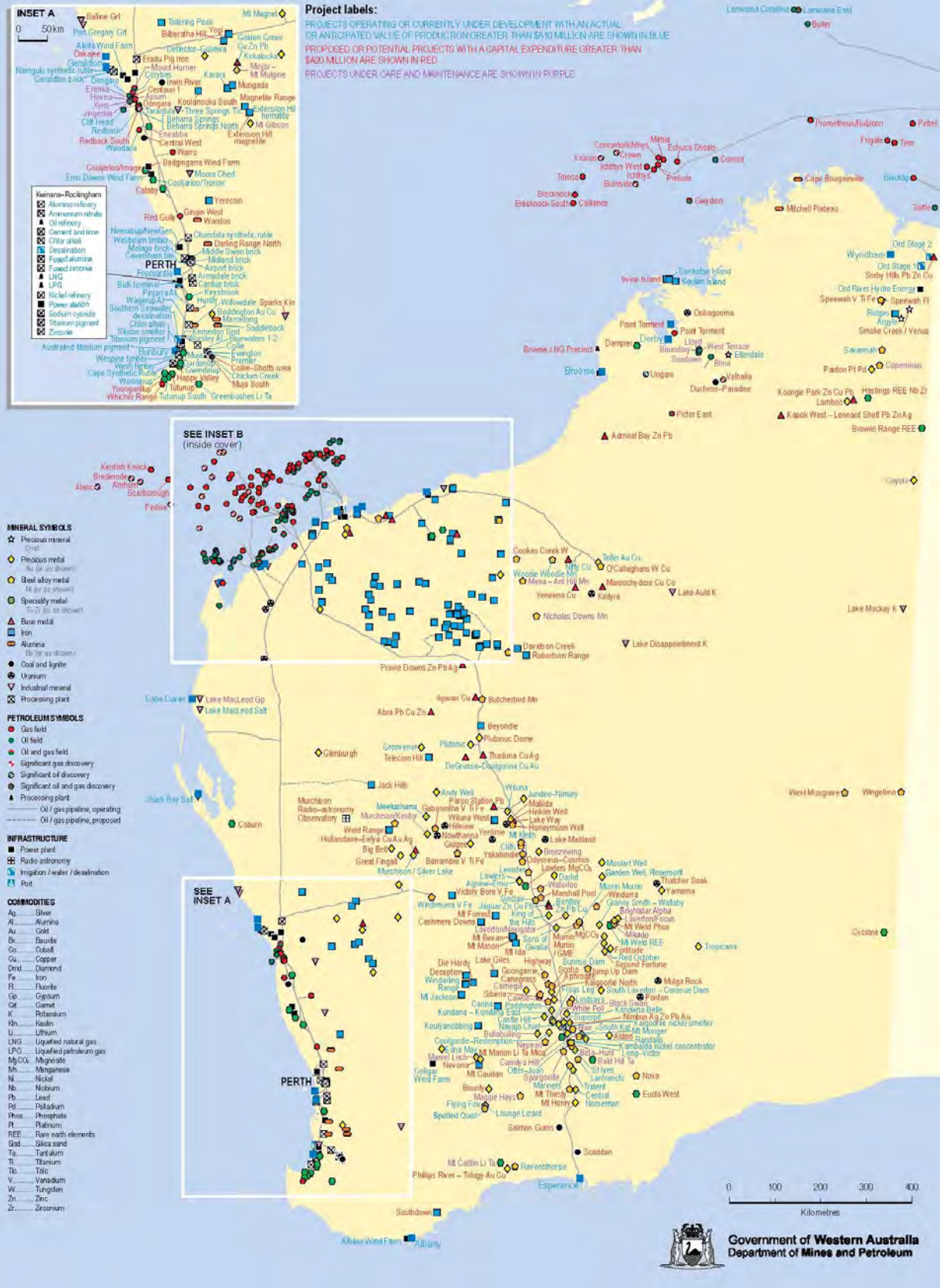


Figure 21 Major Resource Projects, Western Australia

Dalwallinu is expected to go through a period of business expansion both from existing industries and also from new businesses. Some of these initiatives and expansions by new businesses include:

- Transport and logistics companies, including Linfox locating a depot in Wubin;
- A heavy vehicle recovery business looking to locate in the industrial area; and
- CBH expanding on site accommodation capacity in McLevie

Currently, all industrial land is occupied with active businesses on them and plans are underway to alter the Local Planning Scheme for industrial land use, to ensure the ability of Dalwallinu to cater for further industrial expansion, particularly in relation to servicing the mining sector and related supply chains. Moreover, LandCorp, through its Regional Development Assistance Program has been developing additional light industrial lots in Dalwallinu to meet increased demand. Several manufacturing businesses are large enough to employ 25 plus people.

The increased demand also includes the contribution of the members of the Brethren community who make up approximately 14% of Dalwallinu's population and 24% of Kalannie's population<sup>51</sup>. Further, anecdotal evidence suggests that members of the Brethren community tend to contribute more to the trades and manufacturing and there is an opportunity for local businesses to provide support in the area of professional services, such as accounting.

Of all the shires within the Central Midlands Sub-region, the Shire of Moora has shown significant increase in mining activity over the last 5 years. This is mainly the result of progress in industry initiatives and major projects, such as:

- Simcoa Operations Pty Ltd increasing its production from the Moora Quartzite mine; and
- Moora Talc Belt Project and the potential potash targets in the Moora Basin.

## 4.4 Health & Aged Care

### 4.4.1 Rationale

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 2040<sup>52</sup>. This will present Australia with several 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 the following figure.

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<sup>51</sup> ABS (2012), Census of Population and Housing 2011, Australian Bureau of Statistics, Canberra

<sup>52</sup> Treasury (2010), Intergenerational Report 2010, Commonwealth Government, Canberra

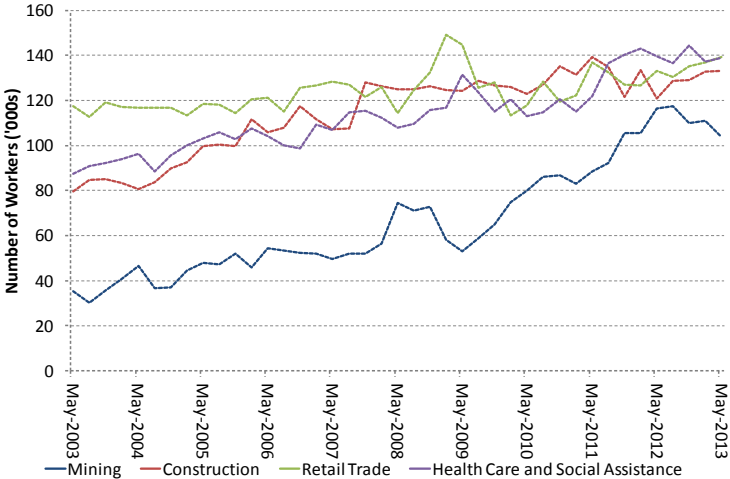


Figure 22 Employment by Industry, Western Australia, 2003-2013<sup>53</sup>

4.4.2 Drivers and Trends

The Central Midlands currently has an older population, with 12.9% of the residential population aged 65+, which is above the State average of 12.3%. However, not all towns have uniformly aged populations with Shires such as Dalwallinu (14.5%) having the highest in the Sub-region, and Wongan-Ballidu (11.9%) having the lowest<sup>54</sup>.

There exists a strong correlation between population ageing and health services demand. For example, in 2010/11 there was an average hospital separation<sup>55</sup> rate in Western Australia of 431 per 1,000 residents. However, the hospitalisation rate of people aged 65-74 is almost 250% that of the average, while people aged 75-84 have a hospitalisation rate 350% of the average. This is illustrated in the following table.

<sup>53</sup> ABS (2013), Labour Force, Australia, Detailed, Quarterly, Cat No 6291.0.55.003, Australian Bureau of Statistics, Canberra

<sup>54</sup> ABS (2011), Census of Population and Housing, 2011, Australian Bureau of Statistics, Canberra

<sup>55</sup> A separation is 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).

**Table 2 Hospital Separations and Population, Western Australia, 2010/11<sup>56</sup>**

Age	Separations	Population	Separations per 1,000 Pop
0-4	38,315	151,262	253
5-14	27,918	288,810	97
15-24	66,318	307,219	216
25-34	94,056	324,098	290
35-44	107,573	328,257	328
45-54	130,301	310,224	420
55-64	164,159	254,423	645
65-74	157,804	152,541	1,035
75-84	129,606	88,115	1,471
85+	49,982	34,221	1,461
<b>Total</b>	<b>966,032</b>	<b>2,239,170</b>	<b>431</b>

In addition to general and acute hospitalisation, population ageing also increases the intensity of local demand for pharmacy, radiation oncology, cardiology, pathology and other primary and ancillary support services, including residential aged care services.

#### 4.4.3 Sub-Regional Characteristics

Currently, hospital and aged care bed capacity is concentrated in Moora with the Moora Regional Hospital, though there are District Hospitals in Wongan Hills and Dalwallinu. The distribution of hospital and aged care facilities are highly aligned, reflecting the interrelationship between the different levels of health care provision in the Sub-region. This distribution does appear to align with those towns with above average 65+ populations, though total population size within a town's broader catchment appears to be the major driver of facility location. Chattering accesses facilities outside of the Sub-region.

Over the next decade, the growth of the population in the Central Midlands Sub-region will support increased health care provision. This will be coupled by a rapidly ageing population, which will increase the demand for more diverse health care services, including expanded dementia care facilities. Since the sub-region does not have any Health and Emergency Services Precinct to fulfil the primary role in health care provision in the Central Midlands, it will be crucial to plan facilities and services across Moora, Wongan-Ballidu and Dalwallinu to best service these areas. Taking into consideration the Moora District Hospital and that communities aged care facilities, a sub-regional model should be developed using this as a base from which to service the area. The provision of such a centrally planned health care delivery model will enable local facilities to be tailored to the needs of the surrounding shires.

The combination of housing affordability and an ageing demographic will also increase demand for retirement housing. Therefore, the provision of quality and affordable lifestyle villages within the Sub-region, particularly in centres with strong health care provision and strong natural amenity, will be required. The strategic targeting of niche village type models and aged friendly communities, which compliment existing

<sup>56</sup> ABS (2012), Census of Population and Housing, 2011, Australian Bureau of Statistics, Canberra and AIHW (2012), Hospital Statistics 2010/11, Australian Institute of Health and Welfare, Canberra

comparative advantages of the Sub-region, will establish a point of difference and a competitive edge for the Central Midlands.

Verso Consulting has identified population projections for Chittering which show very high growth in the 55+ demographic over the next 15 years compared to the rest of the sub-region, with an over 55 population of 2,537 expected in 2027<sup>57</sup>. This expected increase can be associated with the peri-urban growth trends experienced by Chittering. This projection identifies a need to monitor the demand for suitable retirement living infrastructure and the associated service delivery requirements.

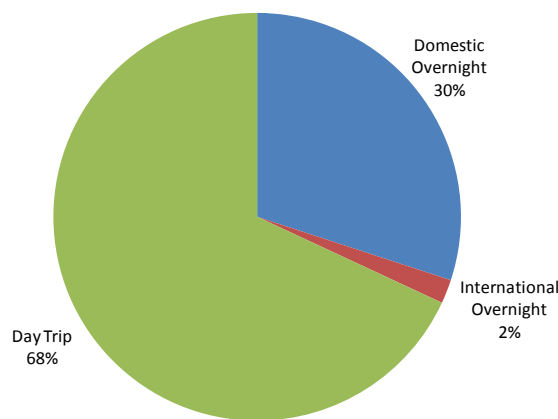
## 4.5 Tourism

### 4.5.1 Rationale

The picturesque landscape of the Central Midlands together with its close proximity to Perth and the Central Coast provides enormous potential for the Sub-region’s tourism sectors. The expenditure associated by visiting tourists also provides economic benefits to local communities by leveraging on existing infrastructure and amenity and subsidising a higher quality of retail, accommodation and public infrastructure, which local residential expenditure alone would not be able to support.

### 4.5.2 Drivers and Trends

Between 2008 and 2012, the Central Midlands region attracted 268,288 tourists/short-term visitors per year<sup>58</sup> representing an average 25 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. This reflects the fact that tourism in the Central Midlands is characterised predominantly by day trip visitors. Between 2008 and 2012, approximately 68% of visitors to the Central Midlands were day trip visitors, with the domestic overnight visitors accounting for 30%. This is illustrated in the figure below.



**Figure 23 Breakdown of Visitors to Central Midlands Sub-Region, by Type, 2008 to 2012**

The proximity of the Central Midlands to metropolitan Perth, its primary domestic market, means the predominance of day trip visitation is likely to continue in the future. However, maximising the Sub-region’s

<sup>57</sup> Verso Consulting (2013), Shire of Chittering Needs Study, pg 7

<sup>58</sup> TRA (2013), Online Data Sets NVS and IVS, Tourism Research Australia, Canberra



exposure to overnight and multi-day visitation is critical to increasing the economic value of tourism in the local market.

The older populations, referred to as “Grey Nomads” represent a growing demand for tourism related activities and the Central Midlands quiet and picturesque surrounds provide popular rural retreats for this market segment. Also, there will be an increase in demand from international tourists, as visitation numbers are expected to rise 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. The Central Midlands can also appeal to this market by packaging itself as a “self-drive” area with interesting stops for those wanting an alternative route to the coastal attractions and Geraldton. This will require investigation of the opportunity that quality tourism product development (e.g. restaurants, industry tours, boutique accommodation) may play in attracting people inland from Brand Highway and Indian Ocean Drive. There are already several wildflower related self drive routes that are proving successful in attracting visitors in the August- October season. These include, ‘Discover Golden Horizons’ and ‘Wildflower Way’. Several events, such as the ‘Taste of Chittering’, occur in conjunction with the wildflower season in the Central Midlands, many with a focus on wildflowers or on the produce of the region.

#### 4.5.3 Sub-Regional Characteristics

The Central Midlands Sub-region already possesses a diverse offering of tourism attractions and activities, including but not limited to:

- Taste of Chittering ;
- Chittering Wildflower Festival;
- Bindoon Brockman Centre and Heritage Museum;
- Bi – annual Wongan Arts Show;
- Reynoldson Reserve Wildflower Show;
- Westways Wildflowers;
- Western Wildflower Farm (includes international export of product);
- Carnaby Cockatoo Interpretative Walk Trail;
- Watheroo National Park And Jingemias Cave;
- Monastic town of New Norcia (only privately owned Monastic town in Australia);
- Historical Wyening Mission Buildings;
- Bi- annual Dalwallinu Arts Festival; and
- Dalwallinu Wattle Week.

The Central Midlands was one of the earliest settled regions of Western Australia, with early migrants taking advantage of the area’s high agricultural fertility to produce export crops for the British market. The pioneering history of the Sub-region is reflected in heritage buildings and local architecture, attractions and a number of historical and agricultural museums.

The varied agricultural production of the Sub-region provides tourism attractions, particularly relating to wine and wildflowers throughout most of the area. Farm Stays are also popular and a range of shows and festivals are held throughout the year celebrating the history and heritage of the Central Midlands.

New Norcia is a nationally significant tourist attraction that attracts tens of thousands of domestic and international visitors to the Central Midlands annually. New Norcia is the only Monastic town in Australia and is privately owned and run. The town offers a range of experiences from mass in the Abbey Church, Spanish architecture, an impressive art collection through to aboriginal culture and heritage experiences.

There are several accommodation options available from hotel rooms to camping. A 2013 visitor survey indicated that approximately 69% of participants stayed overnight indicating the importance as an overnight and day trip destination.

Generally, there is limited tourism accommodation, restaurants, pubs and cafe's in the Sub-region. Additionally, accommodation mix and quality are limited, with convenience-level accommodation (e.g. motels, caravan parks) the most common with the exception of the Wheatland Motel in Dalwallinu which is utilised by coach operators. The proximity of the Central Midlands Sub-region to metropolitan Perth generally, incentivises high levels of daytrip travel which reduces overall demand for overnight visitation. Nonetheless, it is highly likely that a lack of diversity of accommodation in the Central Midlands is constraining the capture and/or conversion of travellers into overnight visitors, with associated increases in local expenditure and economic impacts.



## 5.0 Opportunity Network Analysis

### 5.1 Outline

The Central Midlands 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 Economics 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, Moora has competitive advantages in most economic opportunities identified, reflecting its central role in the broader Central Midlands sub-regional economy. However, other Shires such as Chittering and Dalwallinu also exhibit a strong diversity of current and potential economic drivers, leveraging similar whole-of-sub-region drivers to that of Moora.

In contrast, the Shire of Wongan-Ballidu has more specialised competitive advantages, with broadacre agriculture and rural lifestyle forming the base of local economic activity. However, the small size of residential populations in the community, coupled with very low unemployment rates, means that greater economic diversification will require significant increases in migration into its community. Victoria Plains is also comparatively unique in the region and has the potential to benefit largely from future mining activity within the area.



RPS	AGRICULTURE, HORTICULTURE & LIVESTOCK	PERI URBAN & RURAL LIVING	MINING, MANUFACTURING & SUPPORT	HEALTH & AGED CARE	TOURISM
Chittering					
Dalwallinu					
Moora					
Victoria Plains					
Wongan-Ballidu					

Figure 24 Opportunity Network Matrix, Central Midlands 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 Midlands Sub-region. This approach allows the relative distribution and concentration of economic opportunities to be identified.

#### 5.3.1 Agriculture, Horticulture & Livestock

As expected, agriculture, horticulture and livestock represents the most distributed economic opportunity in the Central Midlands and is likely to remain the foundation industry of the Sub-region in the medium and long-term.

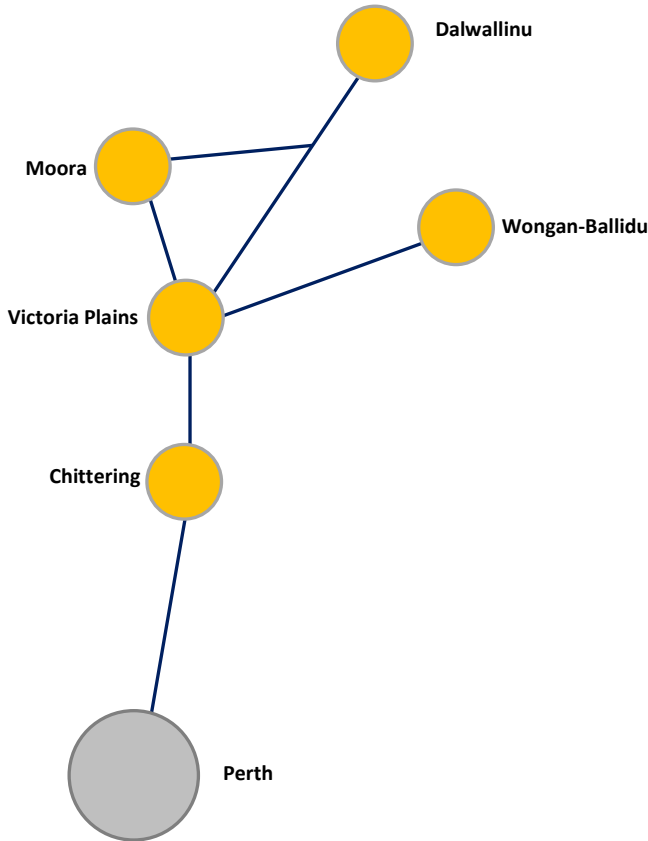


Figure 25 Spatial Distribution, Agricultural, Central Midlands Sub-Region



5.3.2 Peri-Urban & Rural Living

The Sub-region is well positioned to capture a growing share of Perth’s residents, including new migrants to reside in the Central Midlands. An example is the extra population in Dalwallinu of some 161 residents (which have justified an increase in teaching staff at the school) which is unable to be recorded as they are 457 visa related and not on the electoral role. The sub-region provides affordable housing options with some shires being close to Perth.

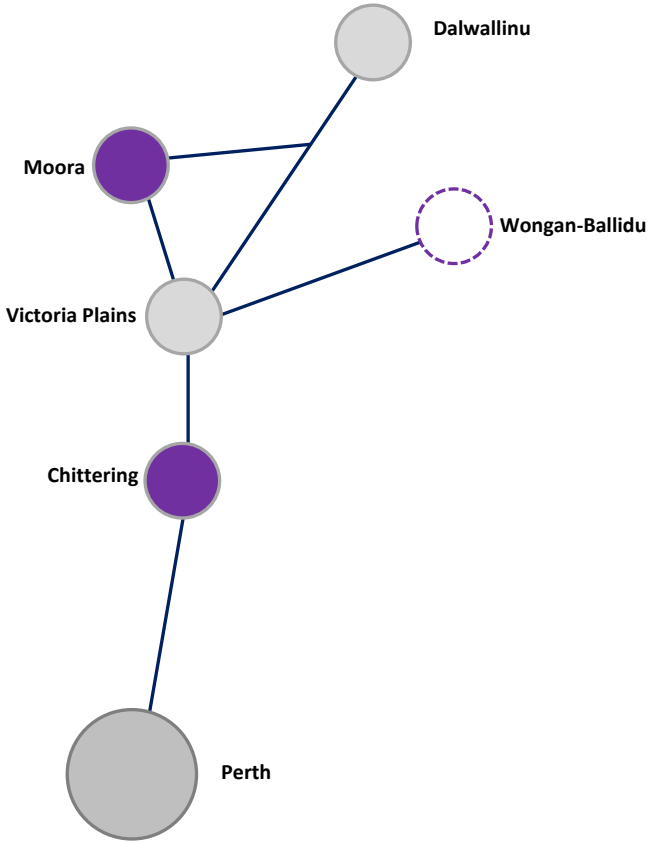
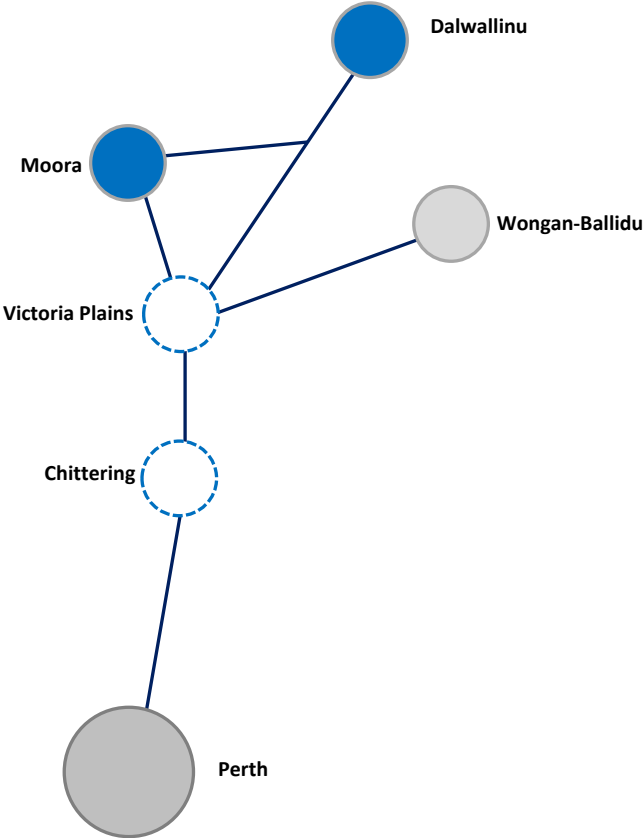


Figure 26 Spatial Distribution, Peri-Urban & Rural Living, Central Midlands Sub-Region

**5.3.3 Mining, Manufacturing & Support Services**

There are strong drivers supporting mining related services and associated light industry (including manufacturing) requirements in the Central Midlands Sub-region, particularly around Moora and Dalwallinu. There is also significant mining potential in Chittering and Victoria Plains in the future. This will most certainly increase demand for workers and light (and heavy) industrial land within the Sub-region. Further, several initiatives are underway to revitalise the Central Midlands, including a pilot regional repopulation plan in Dalwallinu to increase the workforce. This program aims to permanently attract new residents with a range of skill levels on ‘primary settlement’ placements with industry to fill recently identified labour shortages to facilitate economically sustainable population growth.



**Figure 27 Spatial Distribution, Mining, Manufacturing & Support Services, Central Midlands Sub-Region**

Wongan-Ballidu is not identified as having an above average competitive advantage, either now or in the next decade. However, an opportunity will exist when a heavy haulage route to Great Northern Highway is established to build its light manufacturing sector.

5.3.4 Health & Aged Care

The distribution of economic opportunities in health and aged care is primarily determined by a combination of current and short-term population ageing, and the distribution of existing health facilities. There are opportunities to expand and improve the existing health networks to provide convenient and flexible health services to all age cohorts, but particularly older residents in other locations. This will include specialised health services such as dementia care.

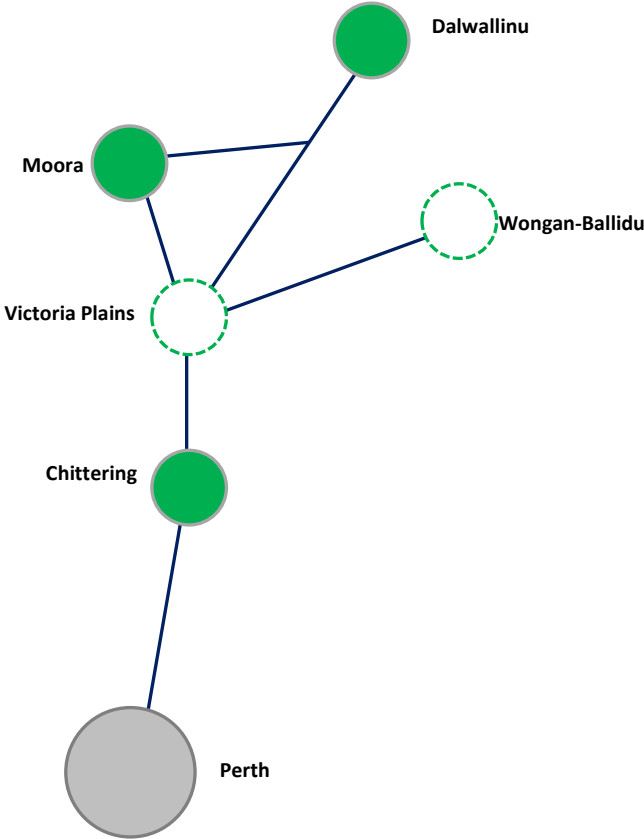


Figure 28 Spatial Distribution, Health and Aged Care, Central Midlands Sub-Region

5.3.5 Tourism

There is a strong spatial relationship between retail and tourism opportunities, reflecting the role that lifestyle and amenity drivers and proximity to Perth play in the distribution of this economic activity. While it is expected that the daytrip market will continue to dominate local tourism activity, the Sub-region possesses a strong current and potential exposure to “Grey Nomad” based domestic tourism. This will underpin opportunities, particularly in Chittering, but also in other shires. The whole Central Midlands possesses a diverse range of tourism offerings that collectively provide considerable choice for local visitors and should therefore be managed and promoted in a single cohesive fashion. These include the Sub-region’s unique attractors (New Norcia, wildflowers and wine) and services (Moora’s accommodation and retail) of tourism.

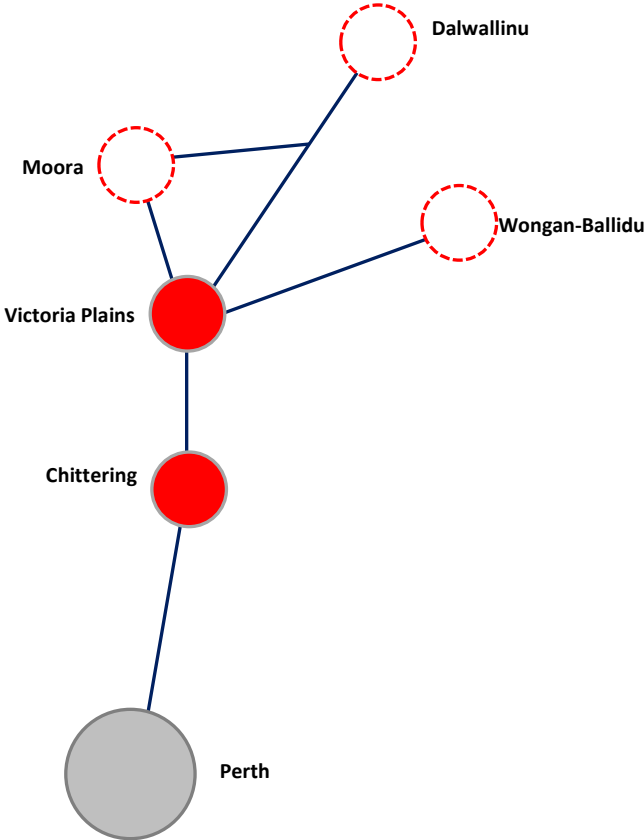


Figure 29 Spatial Distribution, Tourism, Central Midlands Sub-Region

The opportunity is for Dallwallinu, Moora and Wongan Ballidu to develop tourism strategies to maximise the potential of being located between New Norcia, Perth and the coast.

## 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 Midlands Sub-region 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 Midlands economy generally.





**Table 3 Economic Development Actions**

Local Government Area	Agriculture, Horticulture & Livestock	Peri-Urban & Rural Living	Mining, Manufacturing & Support Services	Health & Aged Care	Tourism	Other
Chittering	<ul style="list-style-type: none"> <li>The Shire of Chittering, Water Corporation and Department of Water to develop water infrastructure investment plans.</li> </ul>	<ul style="list-style-type: none"> <li>Establish a sustainable water supply to support future development</li> <li>Upgrade of the Bindoon main street to create a central and compact space to act as a 'town centre'.</li> <li>Planning of a Civic Precinct in Lower Chittering</li> </ul>	<ul style="list-style-type: none"> <li>Develop light industrial lots in Bindoon to address current lack of supply. The development of these lots will address a number of current land use conflicts arising from light industrial activity occurring in residential areas.</li> <li>Continue to support of development at the Muchea Employment Node. Planning has been completed in conjunction with the Department of Planning and Western Australian Planning Commission to produce the Chittering-Muchea Employment Node Structure Plan which outlines short, medium and long term staged developments which require funding plans to develop the site.</li> <li>Construction of a bypass road in Bindoon to redirect Great Northern Highway heavy haulage traffic and alignment with the Perth-Darwin Highway upgrade</li> </ul>	<ul style="list-style-type: none"> <li>Construction of the Shire of Chittering multi-purpose Medical Centre in Bindoon to accommodate a range of health services for the Shire into a single area.</li> </ul>	<ul style="list-style-type: none"> <li>Development of a Local Tourism and Events Strategy</li> </ul>	<ul style="list-style-type: none"> <li>Continue to support and facilitate private and public sector investment in renewable energy production and supporting infrastructure, particularly wind power. Leverage this investment to build the sub-region's national and international profile and "green" credentials.</li> <li>Development of a Chittering Economic Development Strategy</li> </ul>
Dalwallinu	<ul style="list-style-type: none"> <li>Continue to support R&amp;D in agriculture through avenues such as the Liebe Group</li> </ul>	<ul style="list-style-type: none"> <li>Housing development through Innovation Central Midlands WA Inc.</li> </ul>	<ul style="list-style-type: none"> <li>Upgrades along Great Northern Highway to improve road safety (high numbers of heavy vehicles associated with mining and agriculture), assist in medical emergency transport to and from Perth hospitals, and capitalise on transport and logistics industry growth and movement of product.</li> <li>Construction of a multi-purpose business space</li> <li>Development of more light-medium industrial land</li> <li>Construction of factory units on industrial land as an incentive for new business start-up</li> </ul>	<ul style="list-style-type: none"> <li>Medical centre expansion – increased number of practice rooms to accommodate more GP's and visiting allied health delivery</li> </ul>		<ul style="list-style-type: none"> <li>Implementation of the Regional Repopulation Plan – this document focuses on labour force attraction and retention as well as increasing and diversifying the housing available in Dalwallinu to cater for a diverse workforce</li> <li>Improvement in telecommunications infrastructure inside and outside the Dalwallinu townsite boundary</li> <li>Completion of a Growth Plan to ensure a strategic approach to development</li> </ul>
Moora	<ul style="list-style-type: none"> <li>Completion of water capability assessment in terms of aquifers in the shire/sub-region that could facilitate the expansion of intensive horticulture initiatives</li> <li>Investigate the possibilities of development of food processing activities in Moora, linking in with the existing intensive horticulture industry occurring in the surrounding area</li> </ul>	<ul style="list-style-type: none"> <li>Identification of residential precincts outside of the flood zone within the main part of Moora. The West End land owned by the Shire should be considered in this planning</li> <li>Facilitate infill development where cost effective when in the flood plain</li> <li>Housing development through Innovation Central Midlands WA Inc. Housing Development Trust</li> </ul>	<ul style="list-style-type: none"> <li>Investigation into ring road to the east of the Moora townsite to act as a heavy traffic diversion and flood levy</li> <li>Planning for expansion of industrial land to the north, south and south east of the Moora townsite out of the flood zone</li> <li>Potential for occasional utilisation of water as a result of de-watering from Silicon mine operation between Moora and Coomberdale</li> </ul>	<ul style="list-style-type: none"> <li>Development of aged care housing to address local and sub-regional demand for high and low care residential</li> <li>Addition of a hydrotherapy pool to aged care expansion</li> <li>Expand and increase the sustainability of childcare in Moora in order to attract and retain working families</li> </ul>	<ul style="list-style-type: none"> <li>Shire to expand of the Moora Caravan Park to include more Chalets and space for RV's</li> <li>Development of Administration Community/Cultural/ Commercial and Visitors Precinct in Moora</li> </ul>	<ul style="list-style-type: none"> <li>Potential acquisition and development of the Moora Airfield into a regional emergency service asset</li> <li>Continued enhancement of the Great Northern Highway</li> <li>Completion of a Growth Plan to ensure a strategic approach to development</li> </ul>
Victoria Plains		<ul style="list-style-type: none"> <li>Engagement with LandCorp for</li> </ul>	<ul style="list-style-type: none"> <li>Investigate development of more</li> </ul>	<ul style="list-style-type: none"> <li>2 aged care units in Calingiri and</li> </ul>	<ul style="list-style-type: none"> <li>Continue association with Avon</li> </ul>	

Local Government Area	Agriculture, Horticulture & Livestock	Peri-Urban & Rural Living	Mining, Manufacturing & Support Services	Health & Aged Care	Tourism	Other
		<p>the development of 16 residential lots in Calingiri</p> <ul style="list-style-type: none"> <li>Stage 2 of LandCorp residential land development in Bolgart</li> </ul>	<p>industrial land in Yerecoin and/or Calingiri depending on requirements of mining companies</p> <ul style="list-style-type: none"> <li>New Norcia alternate heavy vehicle route</li> </ul>	<p>2 aged care units in Bolgart in partnership with Goomalling and Toodyay (as part of the Avon Regional Organisation of Councils)</p>	<p>Valley Tourism and the Central Midlands Voluntary Regional Organisation of Councils' Discover Golden Horizons for the promotion of Victoria Plains tourism</p> <ul style="list-style-type: none"> <li>Investigate creating a visitor servicing space through the Visitor Centre Association</li> </ul>	
Wongan-Ballidu	<ul style="list-style-type: none"> <li>Monitor demand (or promote opportunities) for agricultural processing, by-product use and machinery production.</li> </ul>	<ul style="list-style-type: none"> <li>Implement development plan for residential, cottage lots and light industrial land within the Wongan Hills townsite</li> <li>Housing development through Innovation Central Midlands WA Inc. Housing Development Trust</li> </ul>	<ul style="list-style-type: none"> <li>Construction of the Economic and Community Development Precinct</li> <li>Continued advocacy for the upgrade of the Ballidu-Pithara Road</li> </ul>	<ul style="list-style-type: none"> <li>Establishment of the Macordy Centre in partnership with the Anglican Diocese for social service delivery</li> <li>Development of palliative/dementia care services at the hospital</li> </ul>	<ul style="list-style-type: none"> <li>Plan for development of short stay/motel accommodation in the town centre. This is in line with the greater vision to provide accommodation options along the main road opposite the Community Resource Centre and within walking distance to amenities.</li> <li>Expand heritage trails and create a timber top tree walk</li> </ul>	<ul style="list-style-type: none"> <li>Investigate (with NBN consultant) outcomes that can be achieved for community with the implementation of NBN and explore the role of telecommunications to create 'technology hub' in Wongan Hills</li> <li>Investigate the development of land surrounding the airstrip for an Airpark (residential and hangar space; aviation related business)</li> <li>Completion of a Growth Plan to ensure a strategic approach to development</li> </ul>

## Appendix A – Local Government Profiles

### Shire of Chittering

#### Context

The Shire of Chittering covers an area of approximately 1,220 km<sup>2</sup> and has a population of 4,509 people (42% of the Central Midlands population). The Shire contains the towns and localities of Bindoon, Lower Chittering, Mooliabeenee, Muchea and Wannamal. The administrative centre of the Shire is the town of Bindoon, which is located approximately 90 km north of Perth. Historically, agriculture has been the primary land use within the Shire of Chittering.

The Shire of Chittering sees its advantage in the Sub-region as its proximity to Perth and the provision of rural residential lifestyle lots for those seeking a 'tree change'. The Shire of Chittering's success with residential developments has stemmed from new residents being able to have the 'best of both worlds' where the rural lifestyle of the area is linked with the availability of high quality goods and services close by in Perth.

Long term growth potential of the Shire of Chittering is recognised through renewed focus on the New Town future urban area and the Muchea Employment Node contained in the newly released Draft Local Planning Strategy. New Town will allow the Shire to provide housing choice to the future workforce in the nearby Muchea Employment Node and cater for spill over growth from Perth. New Town could provide around 16,000 lots accommodating over 41,000 residents when fully developed without losing its rural ambience.

The Shire views the Muchea Employment Node currently in development as a significant contributor to the local economy. The proposed Muchea Employment Node is located along major transport routes, and is currently being developed for service-based uses such as transport, livestock, fabrication, and warehousing, wholesaling and general commercial use<sup>59</sup>. A further large scale industrial lot subdivision is planned to increase the development of light industry within the Muchea Employment Node.

#### Characteristics

The Shire of Chittering LGA has the following characteristics:

- An estimated residential population of 4,509 persons in 2011 – 53.6% higher than the estimated 2,936 residents in 2001. The WA Planning Commission forecasts this trend to accelerate over the next decade, growing a further 53% to 6,909 people in 2021 (rebased). This is substantially greater than the predicted growth for the State as a whole for the same period (21%).
- A significant proportion of the population (22%) is aged 14 years or younger – greater than the Perth Metropolitan Region (19.2%) and the WA (19.7%) average. However, 12.9% of Chittering's population is aged over 65 years, which is not dissimilar to that of the WA average (12.3%). Chittering had a fertility rate of 2.27 children in 2011 – slightly above the WA average of 1.93.
- Average personal income levels for Chittering (\$51,465) are significantly greater than the sub-regional

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<sup>59</sup> WAPC, 2011, Muchea Employment Node Structure Plan

average (\$41,745), and in line with Perth (\$53,864) and WA (\$53,227) averages.

- Median house price has grown from \$380,000 in 2006 to \$522,000 in 2012. This was a total growth of 37% between 2006 and 2012; well above the state growth of 18%. When income levels are compared with median house prices, the Shire of Chittering's local housing market is highly unaffordable with a median multiple of 7.1 (5.1 is considered unaffordable by national standards; WA average is 5.98). As discussed in the report, this is likely to be influenced by high numbers of holiday and second home ownership and also interest in this area from self-funded retirees.
- Agriculture is the Shire of Chittering's primary economic contributor, accounting for some 74,519 ha of land. This, however, makes up only 4% of the total area of agricultural land holdings in the Sub-region. The Shire had a total gross value of agricultural production of \$29.5 million for 2010-11, which is a small percentage of the Sub-region's total but a high production value per hectare comparative to the other local government areas in the Central Midlands.
- Chittering's economy is also underlined by an employment self sufficiency rate of 57% (in 2011). This, coupled with a low unemployment rate of 1.3% indicates that there are fewer jobs in the LGA than employed persons, highlighting a drive-in/drive-out interconnectedness with neighbouring coastal communities and Perth.
- The Shire of Chittering has two primary schools (264 students) and a Catholic agricultural college (149 students) in Bindoon.

## **Economic Opportunities**

The following economic opportunities have been identified:

### ***Agriculture, Horticulture & Livestock***

Food related industries make up a large proportion of the Shire of Chittering's local economy and as such is likely to remain one of the primary economic drivers. For the Shire of Chittering, horticulture is an already established industry, however there is potential for significant expansion of production and food processing given climate, soil quality, proximity to the large food production in the Shire of Gingin, domestic markets and export terminals. The major inhibitor to growth in this sector is the lack of groundwater security and capacity of current reticulated potable water infrastructure. This issue affects not only the expansion of heavy water use industries but also the development of smaller residential lots. The latter has resulted in many new rural residential lots not being connected to reticulated potable water services. While this is allowable due to the rural residential zoning, the developments are often unnecessarily larger in size and inefficient for local government servicing. Access to water also should be addressed as water allocations are held by private stakeholders.

The Western Australian Meat Industry Authority (WAMIA) sale yards relocated to Muchea in 2011. The proximity to the major northern transport corridors (Great Northern Highway and Brand Highway) allows livestock from the northern agricultural and pastoral regions to be sold at this facility. It also supports the surrounding Wheatbelt and Mid West towns that do not access the other major sale yards in the south west of the State. There is scope for like industry to take up long term leases on the land surrounding the facility. There are also a number of cattle feed lots in the Lower Chittering area. The scale and scope of these operations are currently limited by global cattle price fluctuations and trade relations and are usually operated to supplement other farm operations such as intensive horticulture.

### ***Peri Urban and Rural Living***

The Shire of Chittering fits into the lifestyle category of a 'peri-urban' settlement and is attracting permanent residents seeking a high amenity rural but highly accessible residential area. There are currently 16

residential estates in the town of Bindoon and Lower Chittering, with a number of these subdivisions still being developed and others in the intermediate to advanced land release stages. One such residential estate is the Maryville Heights Estate in Lower Chittering, which consists of 2 hectare lots and is underway with stage 11 and 12 land releases. This estate is one of the more expensive estates in the shire with lot prices starting at \$265,000.

Growth potential of the Shire of Chittering is recognised through renewed focus on the New Town future urban area and the Muchea Employment Node contained in the newly released draft Local Planning Strategy. New Town will allow the Shire to provide housing choice to the future workforce of the nearby Muchea Employment Node and cater for spill over growth from Perth. New Town could provide around 16,000 lots accommodating over 41,000 residents when fully developed. The provision and access to services (e.g. health, education, public transport) will be important in shaping how this area develops.

### ***Health and Aged Care***

Provision of quality health services has been identified by the Chittering community as a priority. There are opportunities for residential development to include retiree lifestyle villages given the existing age profile, in-migration trend, prevalence of a number of large residential establishments and the close proximity to Perth for specialist health services. In order to provide a more diverse and attractive housing to this target market, the Shire of Chittering is undertaking a residential development for the elderly, with plans to construct a health precinct. The development includes Independent Living Units, Respite Centre and a multipurpose medical centre. A Local Health Plan will also be prepared to identify and support further health initiatives.

### ***Mining, Manufacturing and Support Services***

The planned development of industrial subdivisions at the Muchea Employment Node combined with the location of Muchea at the intersection of Brand Highway and Great Northern Highway affords the node the opportunity to establish a highly accessible industrial park to service multi-sectors including agriculture and mining. Detailed staging plans and infrastructure requirements can be found in the Muchea Employment Node Structure Plan<sup>60</sup>.

The emerging industries in the area include transport (often supporting the livestock industry) as well as earth moving and small scale construction (e.g. sheds and transportable buildings). With the rising cost of industrial land in the metropolitan area, Muchea presents a great option for these operations. To facilitate further investment at the Muchea Employment Node, improved utility services to the industrial land is required.

The Tronox run Chandala Mineral Sands processing plant is located in Muchea. This is a processing plant for the Cooljarloo Mineral Sands mine located in Cataby. The plant located in the area due to the proximity to Perth ports as the majority of the product is exported overseas. The extractive industry is also well developed with several quarries in operation in the shire as mentioned in the strategy.

A strong extractive industry of clay, gravel and sand has also developed in the Shire of Chittering. This in part is due to State Planning Policy 2.4 – Basic Raw Materials which identifies high priority resources. The policy acknowledges that the availability of basic raw material resources close to Perth is declining as the city

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<sup>60</sup> Available at: <http://www.planning.wa.gov.au/publications/6684.asp>



expands. These sites have been identified and mapped and prevent development on the land until the resources have been extracted. Major operators include Boral Bricks and Austral Bricks.

### ***Tourism***

The Shire of Chittering has potential to expand its tourism sector, which currently consists predominately of day trips to the area. To capitalise on this day trip tourism market, a focus on further development of events and attractions could enhance tourists' experience. There is also the potential identified for increased tourist activities based around fresh food and capitalising on the horticulture and viticulture in the area and linked with operations in neighbouring Gingin and Victoria Plains LGAs (e.g. wine and olive drives/tours, New Norcia). There is a maturing bed and breakfast and farm stay style accommodation market in the Shire of Chittering, however, there is still an opportunity for further diversity in accommodation options.

### **Actions**

A series of actions require implementation for the Shire of Chittering to effectively leverage the economic opportunities identified above. Through economic analysis of the Central Coast, Chittering has been found to have an economic profile closely aligned to that Sub-region. The priority projects and actions are listed in the Central Coast Sub-Regional Economic Planning Strategy.

- The Shire of Chittering, Water Corporation and Department of Water to develop water infrastructure investment plans.
- Establish water trading arrangements with local traders
- Develop light industrial lots in Bindoon to address current lack of supply. The development of these lots will address a number of current land use conflicts arising from light industrial activity occurring in residential areas.
- Securing of funding for the initial stages of development at the Muchea Employment Node. Planning has been completed in conjunction with the Department of Planning and Western Australian Planning Commission to produce the Chittering-Muchea Employment Node Structure Plan which outlines short, medium and long term staged developments which require funding plans to develop the site.
- Upgrade of the Bindoon main street to create a central and compact space to act as a 'town centre'.
- Construction of a bypass road in Bindoon to redirect Great Northern Highway heavy haulage traffic and alignment with the Perth-Darwin Highway upgrades
- Construction of the Shire of Chittering multi-purpose Medical Centre in Bindoon to accommodate a range of health services for the Shire into a single area.
- Development of a Chittering Economic Development Strategy

## Shire of Dalwallinu

### Context

The Shire of Dalwallinu covers an area of approximately 7,187 km<sup>2</sup> and has a population of people 1303 (18% of the Central Midlands sub-region population). The Shire includes the towns and localities of Dalwallinu, Kalannie, Wubin, Buntine and Pithara. The administrative centre of the Shire is the town of Dalwallinu, which is located approximately 250 km north of Perth on the Great Northern Highway. The majority of the Shire's population and economic activity occurs in the town of Dalwallinu.

The Shire of Dalwallinu is primarily an agricultural area. However the towns of Dalwallinu and Kalannie have a strong agricultural and mining manufacturing industry and growth is expected especially in Dalwallinu. The location of the town of Dalwallinu on the Great Northern Highway and relative proximity to the Mid West are key strengths in developing these industries.

The Shire of Dalwallinu's vision for the future is to be an economic and socially stable shire that promotes and attracts business growth and acceptance and opportunity for all people.

### Characteristics

The Shire of Dalwallinu LGA has the following characteristics:

- An estimated residential population of 1,303 persons in 2011 – this is a 30.8% decrease in population relative to the estimated 1,882 residents in 2001. The WA Planning Commission forecasts this trend to continue over the next decade, with a 28% decrease to 933 people in 2021 (rebased). These population figures for the Shire of Dalwallinu do not include the large numbers of non permanent / non Australian Citizens (457 visa holders and their dependents) or reflect the high level of economic growth associated with the Brethren community.
- The Dalwallinu LGA has a high number of non permanent / non Australian Citizens (457 visa holders and their dependents) who are not counted in state and national population statistics. In April 2014 the Shire of Dalwallinu recorded an additional 161 new residents living in the local government area. The high representation of 457 visa workers is due to skilled labour shortages experienced by the strong manufacturing sector in Dalwallinu.
- 19.4% of the population is aged 14 years or younger – this is very similar to the Perth Metropolitan Region (19.2%) and the WA (19.7%) average. 14.5% of The Shire of Dalwallinu's population is aged over 65 years, which is significantly greater than that of the WA average (12.3%). The Shire of Dalwallinu had a fertility rate of 3.07 children in 2010 – above WA levels (1.93) and the sub-regional average (2.77).
- Average personal income levels for the Shire of Dalwallinu (\$39,740) are similar to the sub-regional average (\$41,745), but below the Greater Perth Region (\$53,864) and WA (\$53,227) averages.
- The Shire of Dalwallinu has 73.8% dwellings occupied within the shire at the time of the Census collection this is slightly lower than the sub-regional dwelling occupation rate of 80%.
- Median house price has grown from \$80,000 in 2006 to \$155,000 in 2012. This is a total growth of 94%, by far the biggest growth throughout the Sub-region and well above the state growth of 18% and sub-regional average of 70%. The Shire of Dalwallinu experienced significant increases in income levels, and when combined with median house prices, this still resulted in an affordable local housing market (Median multiple of 3.2, WA average of 5.98).
- Broadacre Agriculture is Dalwallinu's primary economic contributor, accounting for \$105.3 million gross value of agricultural production (2010-11) and some 820,373 ha of land (representing 42% of the Central Midlands total area of agricultural holdings and the highest contributor to sub-region production value at

27%).

- Health and Social Assistance, Retail and Accommodation and Food services are other industries with an employment share of 6.1%, 6% and 4.2% respectively. Manufacturing, Transport and Logistics are significant employing industries, however, as discussed above, this does not include 457 visa holders in these sectors.
- The Shire of Dalwallinu's economy is also underlined by an employment self sufficiency rate of 99.6% (in 2011) indicative of a large proportion of people that live and work locally. Indeed the Shire of Dalwallinu has the lowest unemployment rate in the Central Midlands Sub-region at 1.5% (State unemployment rate is 4.7%).

## **Economic Opportunities**

The following economic opportunities have been identified:

### ***Agriculture, Horticulture & Livestock***

There is a well-established broadacre cropping and livestock production industry along with agricultural support services in the Shire of Dalwallinu (e.g. there are two machinery dealers as well as agricultural equipment manufacturing industries in Dalwallinu). Due to Dalwallinu's location on the Great Northern Highway and proximity to the north Eastern and Mid West Agricultural regions it is an important grain storage and transport point. The area, however, remains volatile to climatic conditions and fluctuation markets for products. Opportunities to leverage continued R&D investments to diversify crops mix need to be investigated to help improve the sustainability of agricultural production in the Sub-region

### ***Mining, Manufacturing and Support Services***

Dalwallinu's location along the Great Northern Highway and proximity to both Perth and the Mid West places it well for opportunities to service the mining sector, particularly iron ore operations in the Mid West. There are currently several businesses involved in manufacturing machinery and equipment for mining use. Growth is expected in this area, particularly in the town of Dalwallinu which has driven the release for more industrial land (through LandCorp's Regional Development Assistance Program) for varying purposes from manufacturing to transport and logistics. Wubin, which is located 20kms from Dalwallinu, is a key stop over for heavy vehicles as it is the change over point for double to triple trailers. The Main Roads Road Train Assembly area located in Wubin is operating at capacity. A number of freight and transport companies are investigating locating depots in Wubin to improve coordination and safety of vehicles at that point. There is no industrial land zoned in the town, however, the shire has reserve land which could potentially be developed for this purpose. As noted in the Strategy, light industries in Dalwallinu are using capacity gained through access to the mining industry to expand their operations and supply manufactured goods to Perth and the South West.

### ***Health and Aged Care***

An above average proportion of the Shire of Dalwallinu's population is over the age of 65 years, indicating that there is current and future demand to service an ageing population. Dalwallinu is currently serviced by a hospital which includes a four bed dementia unit as well as visiting allied health services. The Shire has indicated that it will continue to provide for healthy ageing and ageing in place through the development of more independent living units. There is land available for the expansion of Pioneer Place where the current independent living units are located. The Dalwallinu Regional Hospital is strategically placed for accident and emergency as it is the last hospital on the Great Northern Highway until Meekatharra. The hospital and emergency services also play an important role in medical emergency attendance for the Mt Gibson mine

(Shire of Perenjori). The Shire will also negotiate with those involved in the proposed Asia Iron (80km north east of Wubin) project in regards to their medical and emergency needs.

### ***Tourism***

The Shire of Dalwallinu is well known amongst wildflower enthusiasts for its wildflower displays throughout spring. This puts high demand on accommodation within the shire (hotel, motel, convent and caravan park) during this season. The Wheatland Motel located in Dalwallinu is one of the few motels in the Sub-region that is suitable to accommodate large tour groups it is also popular with drive in drive out workers.

### **Actions**

A series of actions require implementation for the Shire of Dalwallinu to effectively leverage the economic opportunities identified above. The actions listed below are related to increasing the areas attractiveness to new permanent residents, commercial, manufacturing and light industrial businesses

- Construction of a multi- purpose business space;
- Continue to support R&D in agriculture though avenues such as the Liebe Group
- Implementation of the Regional Repopulation Plan – this document focuses on labour force attraction and retention as well as increasing and diversification the housing available in Dalwallinu to cater for a diverse workforce
- Housing development through Innovation Central Midlands WA Inc. Housing Development Trust
- Development of more light- medium industrial land
- Construction of factory units on industrial land as an incentive for new business start-up
- Development of independent living units to address the needs of the ageing population
- Medical centre expansion – increased number of practice rooms to accommodate more GP's and visiting allied health delivery
- Upgrades along Great Northern Highway to improve road safety (high numbers of heavy vehicles associated with mining and agriculture), assist in medical emergency transport to and from Perth hospitals, and capitalise on transport and logistics industry growth and movement of product
- Improvement in telecommunications infrastructure inside and outside the Dalwallinu townsite boundary
- Completion of a Growth Plan to ensure a strategic approach to development

## Shire of Moora

### Context

The Shire of Moora covers an area of approximately 3767 km<sup>2</sup> and has a population of 2,550 people (24% of the Central Midlands population). The Shire contains the towns of Moora, Miling and Watheroo, as well as the localities of Bindi Bindi, Coomberdale, Koojan, Round Hill and Walebing. The administrative centre of the Shire is the town of Moora, which is located approximately 177km north of Perth.

Moora is historically a broadacre farming area and has maintained its reliance on this industry. Approximately 6000 people within a radius of 100km visit the town regularly to utilise the services offered in Moora. These services include health, social, education, recreation, banking and agricultural services.

Moora's vision for the future is to provide a regional service role for its surrounding population of 6000. It has aspirations for its local economy to grow with the advent of fibre connection which will allow for greater information service based businesses to operate in the town.

### Characteristics

The Shire of Moora LGA has the following characteristics:

- An estimated residential population of 2,550 persons in 2011 – this is a 5.3% decrease in population relative to the estimated 2,694 residents in 2001. The WA Planning Commission forecasts this trend to continue over the next decade, declining a further 8% to 2,350 people in 2021 (rebased).
- A significant proportion of the population (22.3%) is aged 14 years or younger – higher than the Perth Metropolitan Region (19.2%) and the WA (19.7%) average. 12.7% of Moora's population is aged over 65 years, which is not dissimilar than that of the WA average (12.3%). Moora had a fertility rate of 3.26 children in 2011 – above WA levels (1.93) and the sub-regional average (2.77).
- The average personal income level for Moora (\$39,715) is marginally below the sub-regional average (\$41,745) and lower than the Perth (\$53,864) and WA (\$53,277) averages.
- The Shire of Moora experienced 68% growth in median house price between 2006 and 2012. This growth is similar to the sub-regional growth (70%) and well above the State growth (18%). When combined with median house prices, this resulted in a very affordable local housing market (Median multiple of 2.06, WA average of 5.98)
- Agriculture is Moora's primary economic contributor, accounting for \$101.2 million in total gross value of agricultural production and some 489,098 ha of land (representing 25% of the Central Midlands' total area of agricultural holdings and 26% of the Sub-region's total agricultural gross value).
- Retail, Health and Social Assistance as well as Construction are other industries having a share of employment of 10.2%, 7.2% and 4.7% respectively.
- Moora's economy is underlined by an employment self sufficiency rate of 92.3% (in 2011), indicative of a large proportion of people who live and work within the Moora Shire.
- As the traditional sub-regional centre for the Central Midlands, the Moora hospital, three primary schools (349 students), Central Midlands Senior High School (183 students) and CY O'Connor College of TAFE provide important health and educational services for local and sub-regional residents.
- Aboriginal people make up 12.3% of the Shire of Moora's population, which is a significantly higher proportion of the population than that of Western Australia, which has a 3.1% Aboriginal population.



## **Economic Opportunities**

The following economic opportunities have been identified:

### ***Agriculture, Horticulture & Livestock***

Agriculture is currently the major industry within the Shire. Agricultural production is very well supported in the town of Moora by agricultural related businesses ranging from finance and accounting to machinery sales. CBH have invested in and developed a rapid rail loading system in 2012 allowing for increased grain handling capacity. Changes in grain freight in the area, particularly potential rail closures, is to be closely observed as there will be an increase of heavy vehicles on roads including the Great Northern Highway. The area is climatically reliable but the industry is still volatile, due to poor seasons and global price fluctuations. Opportunities to lever continued R&D investments to diversify crops mix need to be investigated to help improve the sustainability of agricultural production in the Sub-Region.

Intensive horticulture is an emerging industry in the area surrounding Moora and is predicted to be a significant employer. There are two well established citrus orchards and one stone fruit orchard located within 30km of the Moora townsite. These businesses have been able to overcome limitations posed by insufficient rainfall levels for this type of production by supplementing orchards with water from the Leederville-Parmelia Aquifer. There is significant scope for the intensive horticulture industry to further expand if access to these underground water supplies is secured. The sustainable use of the aquifers should be planned with availability for food production being considered as important as providing security for Perth metropolitan growth.

Labour for this industry is often seasonally required and is currently sourced from local communities, transient workers and backpackers. The addition of backpacker accommodation is allowing the town to better accommodate this seasonal workforce.

### ***Peri Urban and Rural Living***

Moora has the opportunity for significant housing development, with a deep sewerage system allowing for higher density, and large areas of land within close proximity to the town for possible expansion of the urban centre of the Shire.

There is capacity for the development of residential blocks within the shire, although the costs of development of the lots are an obstacle. The 'West End' planned development on Shire owned land would provide a rural residential precinct. Significant head works and servicing costs, flood mitigation restrictions and cost of servicing have prevented further development of residential land and infill in the Moora townsite. It is important that Moora plan for a new area for land releases in the future to mitigate development costs in the flood plain.

The general and business community acknowledge that the increased provision of childcare services is an important factor to attract and retain young working families. The Shire of Moora currently provides a long day childcare service and plans to offer more places and improve the infrastructure whilst maintaining affordability.

### **Health and Aged Care**

The Moora Multi-Purpose Service, delivered from the Moora Hospital, provides a wide range of health services to the Shire of Moora and the larger Central Midlands Sub-region. The Shire of Moora is currently developing a master plan for a lifestyle village aged care facility, with a 30-40 bed capacity and additional health care services. This will allow for local aging populations to be retained and potential for increased retiree in-migration. There are currently a number of housing options for over 55's (retirees) with the Moora Lifestyle Village as well as privately developed units.

### **Mining, Manufacturing and Support Services**

Large scale projects in the mining sector include the Warro gas project (construction of a gas pipeline) and expansion of the Simcoa Company's quartz mining operations. The Simcoa quarry in Moora has been identified as having the potential to produce two million tonnes of quartzite (rock from which silicon is derived), and over four million tonnes of quartzite in the 'indicated and inferred resources'<sup>61</sup> category. The Simcoa mining company's operations are therefore anticipated to continue to provide economic stimulus in the form of local employment in the area in the medium-term future. As mentioned in their 1999 strategy, the transport arm of Western Australian company BGC saw an opportunity to take advantage of the Simcoa quartz mine and subsequently established a base in Moora.

The Warro Gas field, located 200 km north of Perth and 31 km east of both the Dampier-Bunbury Natural Gas Pipeline and the Dongara-Perth Parmelia Pipeline could also stimulate some activity however extraction is dependent on gas prices and environmental and government approvals. There is potential for industrial expansion outside of the agricultural industry, with a number of serviced industrial lots available, and with an extension of Moora's light industrial land currently underway. These lots may be of use to businesses seeking to capitalise on spin-off ventures stimulated by the Warro and Simcoa developments.

### **Tourism**

Moora plays an important role in providing accommodation and amenities for tourists passing through from the inland to the coast. Moora offers a range of accommodation from the recently upgraded caravan park, hotel/ motel rooms and Bed and Breakfast accommodation. There is potential for Moora to increase the quality of the accommodation available and improve services and amenities aimed at attracting an increased number of travellers who are not self-sufficient. The Western Wildflower Farm and Interpretive Centre attract up to 120 visitors a day during the wildflower season and export wildflowers to 11 countries as well as offering a youth education program. Opportunities exist for increased development of tourist attractions in industrial tourism (e.g. Western Wildflower), heritage, natural amenity (wildflowers) and Aboriginal heritage and culture. The Moora airfield offers an opportunity to cater for recreational aviators as Perth's airspace becomes more congested.

### **Actions**

A series of actions require implementation for the Shire of Moora LGA to effectively lever the economic opportunities identified above. The actions listed below are related to increasing Moora's attractiveness to attracting population and business to the Shire:

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<sup>61</sup> Simcoa Company website, accessed 26 March 2013, available from: <http://www.simcoa.com.au/company-2.html>

- Investigation into a ring road to the east of the Moora townsite to act a heavy traffic diversion and flood levy
- Planning for the expansion of industrial land to the north, south and south east of the Moora townsite out of the flood zone
- Potential for occasional utilisation of water as a result of de-watering from Silicon mine operation between Moora and Coomberdale
- Continued enhancement of the Great Northern Highway
- Development of Administration Community/Cultural/ Commercial and Visitors Precinct in Moora
- Investigate the expansion of the Moora Caravan Park to include more chalets and space for RV's
- Acquisition and development of the Moora Airfield into a regional emergency service asset and recreational aviation hub away from the Pearce airspace.
- Completion of water capability assessment in terms of aquifers in the Shire/Sub-region that could facilitate the expansion of intensive horticulture initiatives
- Investigate the possibilities in the development the food processing activities in Moora, linking in with the existing intensive horticulture industry occurring surrounding area.
- Plan for development for a residential precinct outside of the flood zone within the main part of Moora. The West End land owned by the Shire of Moora should be considered in this planning.
- Facilitate infill development where cost effective in the flood plain
- Development of aged care housing to address local and sub-regional demand for high and low care residential
- Inclusion of a hydrotherapy pool to the Moora Lodge aged care facility
- Housing development through Innovation Central Midlands WA Inc. Housing Development Trust
- Expand and increase the sustainability of childcare in Moora in order to attract and retain working families

## Shire of Victoria Plains

### Context

The Shire of Victoria Plains covers an area of approximately 2,570 km<sup>2</sup> and has a population of 926 people (12.8% of the Central Midlands' population). The Shire contains the town and localities of Bolgart, Calingiri, Gillingarra, Mogumber, New Norcia, Piawaning and Yerecoin. The administrative centre of the Shire is located in Calingiri, located 143km from Perth.

The Shire of Victoria Plains has a strong broadacre agriculture industry. The area is known for sustainable and high productivity of cereal crops and livestock. The shire also boasts Australia's only private owned Monastic town, New Norcia, which attracts high numbers of international and domestic visitors annually.

The Shire sees its future economy remaining reliant on agricultural production, however, realises that there is potential for growth in other industries due to peri-urban growth from Perth and potential mining operations with exploration occurring throughout the Shire. Established townsites close to the Avon and Perth present cost effective opportunities for rural lifestyle development.

### Characteristics

The Shire of Victoria Plains LGA has the following characteristics:

- An estimated residential population of 926 persons (8.6% of the sub-regional total) in 2011. This is 4.5% lower than the estimated 970 residents in 2001. The WA Planning Commission forecasts this trend to continue over the next decade, declining 13% to 806 people in 2021 (rebased).
- A significant proportion of the population (22.8%) is aged 14 years or younger, which is greater than the Greater Perth Region (19.2 %) and WA (19.7%) average. 12.4% of the Shire's population is aged over 65 years, which is comparative to the WA average (12.3%). The Shire of Victoria Plains had a fertility rate of 2.26 children in 2010, which is above the WA level (1.93) but marginally below the sub-regional average (2.77).
- The average personal income level for the Shire of Victoria Plains (\$39,754) is similar to the sub-regional average (\$41,745), but lower than the State and Greater Perth averages that are both over \$53,000.
- Median house price growth has risen from \$100,000 to \$158,000 between 2006 and 2012. The Shire of Victoria Plains remains one of the most affordable in terms of housing in the Central Midlands Sub-region with a median multiple of 2.03 (WA is 5.98).
- The Shire of Victoria Plains had a housing stock occupation rate of 73% at the time of the 2011 Census.
- Agriculture is the Shire of Victoria Plains' primary economic contributor, accounting for \$74.2 million in total gross value of agricultural production and some 231,576 ha of land. While the Shire has smaller shares of total sub-regional agricultural value and landholdings, it has the second highest gross agricultural production per hectare after the Shire of Chittering.
- Accommodation and Food and Retail, are other industries in the Shire of Victoria Plains accounting for 8.4% and 3.4% of employment share respectively. This is predominately linked to tourism and heritage activities at New Norcia.
- The Shire of Victoria Plains' economy is also underlined by an employment self-sufficiency rate of 91.6 in 2011 and a low unemployment rate of 2.6%
- There are three primary schools in the shire located in Calingiri, Yerecoin and Bolgart, which provide important educational opportunities for 122 students. Secondary education is provided in Wongan Hills, Toodyay, Northam, Moora, Bindoon or Perth (boarding schools).

## **Economic Opportunities**

### ***Agriculture, Horticulture & Livestock***

Broadacre cropping and livestock is the mainstay industry for the Shire of Victoria Plains. There are two hay processing plants in the shire; Mackie Hay and Hay Australia that supports a wide catchment area for the export of fodder, both employ over 20 people with most employees residing locally.

An underground paelo-channel has been identified that is thought to extend from Calingiri to Gillingarra in the west of the shire. At this early stage there is little known about the quality and capacity of the source however there could be opportunities to enhance current production methods. The Shire of Victoria Plains relies on surrounding towns Wongan Hills and Moora for agricultural services as locally based services are limited.

Opportunities to leverage continued R&D investments to diversify crops mix and value-add to market supply chain need to be investigated to help improve the sustainability of agricultural production in the region.

### ***Mining, Manufacturing and Support Services***

An iron ore belt has been discovered in the Calingiri and Yerecoin areas on farming land. While there has been exploration activity, no major operations are expected in the next 5-10 years. This does, however, provide the opportunity for mining to be a potential industry that will grow in the Shire of Victoria Plains creating future employment opportunities. There are also deposits of other minerals in the west and south east of the Shire. Currently, exploration company Cliffs Mining occupies a block of industrial land in Calingiri. There is potential for more activity surrounding mining if exploration increases or if extractions commence.

Although there is little in terms of manufacturing activity currently occurring within the shire, there will be land available when demand increases associated with the cost of operation becoming too high in the metropolitan area.

### ***Tourism***

The main attraction in the Shire of Victoria Plains is New Norcia which is an international heritage and religious site of significance. New Norcia provides employment in hospitality and heritage tourism. New Norcia is also the primary provider of accommodation in the Shire with Bolgart and Calingiri each having basic caravan park facilities. According to visitor surveys, 69% of visitors stay overnight in accommodation in New Norcia which indicates that it is a destination rather than a stop-off attraction. The other towns in the Shire largely experience drive through tourism activity only. There are also niche adventure tourism activities occurring in the west of the Shire with regular motor cross and rodeo events in and around Mogumber.

## **Actions**

A series of actions require implementation for the Shire of Victoria Plains LGA to effectively leverage the economic opportunities identified above. The actions listed below are related to increasing the attractiveness to tourists visiting the area, retirees and the elderly, and removing constraints to population expansion:

- 2 aged care units in Calingiri and 2 aged care units in Bolgart in partnership with Goomalling and Toodyay (as part of the Avon Regional Organisation of Councils)
- Engagement with LandCorp for the development of 16 residential lots in Calingiri
- Investigations into development of more industrial land in Yerecoin and/or Calingiri depending on requirements of mining companies



- Continue association with Avon Valley Tourism and the Central Midlands Voluntary Regional Organisation of Councils' Discover Golden Horizons for the promotion of Victoria Plains tourism
- Stage 2 of LandCorp residential land development in Bolgart
- Investigate creating a Visitor Servicing space through the Visitor Centre Association
- New Norcia alternate heavy vehicle route

## Shire of Wongan-Ballidu

### Context

The Shire of Wongan-Ballidu covers an area of 3,368 km<sup>2</sup> and has a population 1,467 (14% of the Central Midlands population). The Shire contains the towns and localities of Wongan Hills, Ballidu, Cadoux, Kondut and Burakin. The administrative centre of the Shire is Wongan Hills located 182 km north of Perth.

The development of the towns within the shire has been historically based upon broadacre agriculture and related manufacturing. The town of Wongan Hills is an important service centre for the surrounding small towns, providing access to retail, health care, education and agricultural services.

The Shire of Wongan-Ballidu sees its future as a community driving the sustainability of agriculture whilst using its location as an advantage (proximity to Perth and mining operations in the Mid West) to developing its other industries and community services. Wongan Ballidu has put extensive effort into lifestyle development with community involvement in housing provision and health care services as well as complete upgrade of its airfield. It has a vibrant retail offering and a modern health centre.

### Characteristics

The Shire of Wongan-Ballidu LGA has the following characteristics:

- An estimated residential population of 1,467 persons in 2011. This is only slightly lower than the population of 1,593 in 2001. The WA Planning Commission forecasts the population to decrease by 14% by 2021 to 1,267 (rebased).
- A significant proportion of the population (23.9%) is aged 14 years or younger, which is greater than the Greater Perth Region (19.2%) and WA (19.7%) averages. The population over 65 years in the Shire of Wongan-Ballidu (11.9%) is slightly lower than Greater Perth (12.5%) and WA (12.3%).
- The average personal income level for Shire of Wongan-Ballidu has increased from \$33,531 to \$38,053 from 2006 to 2010. The average personal income remains lower than the sub-regional average of \$41,745 and state average of \$53,227.
- 76% of housing is occupied in the Shire of Wongan-Ballidu at the time of the 2011 Census.
- Median house price growth (% 2006 to 2012) levels for the Shire of Wongan-Ballidu was 52% over the 6 year period from \$110,000 in 2006 to \$167, 500 in 2012. This is below the sub-regional growth of 70%. When income levels are compared with median house prices, the shire has a median multiple of 3.07 which is slightly above the sub-region median multiple of 2.49 but still well below the state's 5.98.
- Agriculture is the Shire of Wongan-Ballidu's primary economic contributor, accounting for \$86.5 million in total gross value of agricultural production (2010-11) and some 355,092 ha of land (representing 18% of the Central Midlands' total area of agricultural holdings).
- Retail, Health and Social Assistance as well as Construction are other industries in the Shire of Wongan-Ballidu with a share of employment of 8.5%, 7% and 4.4% respectively.
- The Shire of Wongan-Ballidu had an unemployment rate of 5.2% in 2011 which was the highest in the sub-region (3.3%) and higher than the State average (4.7%). It has, however, an employment self sufficiency rate of 97% (in 2011).
- The shire has a District High School in Wongan Hills (240 students) and primary schools in Ballidu and Cadoux (totalling 39 students).

## **Economic Opportunities**

The following economic opportunities have been identified:

### ***Agriculture, Horticulture & Livestock***

The Shire of Wongan-Ballidu strongly relies economically on broadacre cropping and livestock production. The Department of Food and Agriculture WA have a research station located 5kms east of Wongan Hills which is focused on R&D particularly in crop breeding. There are potential opportunities in value adding to agricultural products (straw, feed grade grain, manure etc.) with some businesses already active. The Shire of Wongan-Ballidu will continue to serve a primary agricultural production role given its relative distance from Perth and quality soils and rainfall.

Opportunities to leverage continued R&D investments to diversify crops mix need to be investigated to help improve the sustainability of agricultural production in the region.

The Shire serves as a commercial centre and key businesses include Wongan Steel, a small engineering firm, two fuel distributors as well as agricultural support services for the surrounding farming local governments (including machinery dealerships, transport companies, rural merchandising and farm advisory branches). DSATCO Mulch and Wellard Feeds are also located in Wongan Hills, these businesses value add to grain and agricultural bi product from the surrounding area. As commercial activity is expected to increase with time, it is therefore crucial, that Wongan-Ballidu is well positioned to leverage on new opportunities by ensuring the timely delivery of development ready land for major companies<sup>62</sup>.

### ***Peri Urban and Rural Living***

Wongan Hills has the ability to attract people who are seeking a rural setting to reside while staying within proximity to Perth and having access to services locally. The Wongan Ballidu Development Group has been active in generating funding and investment in the town's infrastructure, including housing. This group has built a diverse range of housing including units for workers and seniors in a joint venture with the Department of Housing.

A residential aviation park is a priority for the Shire when planning to develop the available land surrounding the sealed airstrip.

The community's involvement in health, aged care and community services continues to improve the area's attractiveness as a lifestyle destination. The Shire has expressed an interest in taking action to increase the community's access to, and use of, information technology. One of the Wongan- Ballidu Development Groups initial projects was to attract a mobile phone tower to the area. A new community centre will soon be completed offering opportunities for greater access and use of information technology and delivery of community services.

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<sup>62</sup> DoP and WAPC (2012), Economic and Employment Lands Strategy: Non-Heavy Industrial, Department of Planning and Western Australia Planning Commission, Perth

### **Health and Aged Care**

The Shire of Wongan-Ballidu is serviced by a district hospital with an accident and emergency facility as well as a Medical Centre for General Practitioners and Allied Health services. The hospital also provides dementia and respite beds for local and surrounding communities. Similar to housing, the Wongan-Ballidu Development group have played an important role in providing health and aged care facilities throughout the town. This group was, recently involved in the construction of the new medical and allied health centre and as discussed, have built several independent living and joint venture houses.

The Shire of Wongan-Ballidu in partnership with the Anglican Diocese has plans to construct the Mocardy Centre that will provide non-government social services such as financial counselling and mental health assistance. The Wongan-Ballidu Economic Development and Community Resource Centre (new building currently under construction) will play an important role in delivering community services .

### **Tourism**

The Shire of Wongan-Ballidu is a well-known wildflower destination with the visitor centre recording up to 10,000 visitors annually. There are several walk trails including Mt Matilda and Christmas Rock as well as the Reynoldson Reserve where a wildflower show is held annually. Once operational, the Economic Development Centre will have an additional component of visitor servicing. There are also several heritage walks and trails throughout the area, which the shire plans to expand on.

### **Actions**

- Construction of the Economic and Community Development Precinct
- Investigate (with NBN consultant) outcomes that can be achieved for community with the implementation of NBN and explore the role of telecommunications to create a 'technology hub' in Wongan Hills
- Establishment of the Macordy Centre in partnership with the Anglican Diocese for social service delivery
- Investigate the development of land surrounding the airstrip for an Airpark (residential and hangar space; aviation related business)
- Implement a development plan for residential, cottage lots and light industrial land within the Wongan Hills townsite
- Plan for development of short stay/motel accommodation in the town centre. This is in line with the greater vision to provide accommodation options along the main road opposite the Community Resource Centre and within walking distance to amenities.
- Expand heritage trails and create a timber top tree walk
- Development of palliative/dementia care services at the hospital
- Continued advocacy for the upgrade of the Ballidu- Pithara Road
- Housing development through Innovation Central Midlands WA Inc. Housing Development Trust
- Completion of a Growth Plan to ensure a strategic approach to development

## Appendix B – Industry Value Add

**Table 4 Industry Value Added, Central Midlands, 2010/11 to 2012/13**

Central Midlands	2010/11	2011/12	2012/13
Agriculture, forestry & fishing	\$117,960,442	\$167,355,005	\$93,691,454
Mining	\$57,962,989	\$66,104,589	\$73,039,662
Manufacturing	\$40,283,553	\$45,618,188	\$46,046,704
Electricity, gas, water & waste services	\$12,622,214	\$14,398,052	\$14,009,134
Construction	\$47,860,705	\$58,883,315	\$58,205,490
Wholesale trade	\$33,087,790	\$37,885,163	\$39,681,740
Retail trade	\$16,642,350	\$18,708,440	\$19,798,828
Accommodation & food services	\$6,137,922	\$7,222,618	\$7,295,997
Transport, postal & warehousing	\$32,960,624	\$35,929,597	\$36,752,171
Information media & telecommunications	\$3,653,460	\$3,737,004	\$3,519,832
Financial & insurance services	\$12,978,391	\$13,884,960	\$14,107,774
Rental, hiring & real estate services	\$372,387	\$439,063	\$478,974
Professional, scientific & technical services	\$8,758,915	\$9,614,765	\$10,139,107
Administrative & support services	\$7,320,388	\$7,549,495	\$8,190,076
Public administration & safety	\$17,236,115	\$18,620,317	\$18,845,981
Education & training	\$21,138,344	\$22,704,175	\$23,116,643
Health care & social assistance	\$13,116,442	\$14,263,987	\$15,205,559
Arts & recreation services	\$2,023,560	\$2,205,910	\$2,226,805
Other services	\$8,473,120	\$9,830,614	\$9,391,704
<b>Industry Value Added</b>	<b>\$460,589,708</b>	<b>\$554,955,257</b>	<b>\$493,743,636</b>
Ownership of Dwellings	\$30,530,640	\$36,785,753	\$32,728,281
<b>Gross Value Added</b>	<b>\$491,120,348</b>	<b>\$591,741,010</b>	<b>\$526,471,917</b>
Taxes Less Subsidies	\$17,387,425	\$20,949,758	\$18,638,998
Statistical Discrepancy	\$148,393	\$178,795	\$159,074
<b>Gross Regional Product</b>	<b>\$508,656,166</b>	<b>\$612,869,564</b>	<b>\$545,269,989</b>



## Appendix C – Socio-Economic Indicators Matrix

Theme	Indicator	Source	Chittering	Dalwallinu	Moora	Victoria Plains	Wongan-Ballidu	Central Midlands
Population	Population (2001)	ABS3218.0	2,936	1,882	2,694	970	1,593	10,075
	Population (2011)	ABS3218.0	4,509	1,303	2,550	926	1,467	10,755
	Share of Sub-Region Population	Calc	41.9%	12.1%	23.7%	8.6%	13.6%	100.0%
	Population (2011 Census)	ABS Census 2011	4,428	1,266	2,476	895	1,434	10,499
	Population Growth (No. 2001 to 2011)	Calc	1,573	-579	-144	-44	-126	680
	Population Growth Rate (% 2001 to 2011)	Calc	53.6%	-30.8%	-5.3%	-4.5%	-7.9%	6.7%
	Annual Population Growth Rate (% 2001 to 2011)	Calc	4.4%	-3.6%	-0.5%	-0.5%	-0.8%	0.7%
	WAPC Projections (2021)	WAPC	6,909	933	2,350	806	1,267	12,265
	Population Growth (No. 2011 to 2021)	Calc	2,400	-370	-200	-120	-200	1,510
	Population Growth Rate (% 2011 to 2021)	Calc	53%	-28%	-8%	-13%	-14%	14%
	Annual Population Growth Rate (% 2011 to 2021)	Calc	4.4%	-3.3%	-0.8%	-1.4%	-1.5%	1.3%
Demographics and Socio-Economics	Share of Population Aged 0-14 (% 2011 Census)	ABS Census 2011	22.0%	19.4%	22.3%	22.8%	23.9%	22.1%
	Share of Population Aged 0-14 (% 2011)	ABS3235.0	21.6%	19.3%	22.9%	20.8%	23.6%	21.6%
	Share of population aged 65+ (% 2011 Census)	ABS Census 2011	12.9%	14.5%	12.7%	12.4%	11.9%	12.9%
	Male Share of Population (% 2011)	ABS3235.0	50.3%	53.5%	49.8%	53.8%	51.1%	51.7%
	Fertility Rate (2011)	ABS3301.0	2.84	3.07	3.26	2.26	3.01	2.89
	Baby Bonus Receipt (2010)	ABS National Regional Profile	17	24	36	7	30	114
	Average Individual Wage and Salary Income (2006)	ABS6524.0	41056	31195	34153	31447	33531	34276.4
	Average Individual Wage and Salary Income (2010)	ABS6524.0	51465	39740	39715	39754	38053	41745.4
	Median Personal Income (weekly)	ABS Census 2011	565	681	590	537	645	603.6
	Median Household Income (weekly)	ABS Census 2011	1368	1171	1180	902	1172	1158.6
	Number of Newstart Allowance Receipts (2010)	ABS National Regional Profile	22	nd	73	nd	36	131
Housing and Dwellings	Occupied Dwelling Stock (2011)	ABS Census (2011)	1506	473	894	347	561	3781
	Unoccupied Dwelling Stock (2011)	ABS Census (2011)	321	168	154	127	178	948
	Total Dwelling Stock (2011)	Calc	1827	641	1048	474	739	4729
	Dwelling Occupancy Rate (2011)	Calc	82.4%	73.8%	85.3%	73.2%	75.9%	80.0%
	Attached Housing Share of Occupied Dwelling Stock (No) 2006	ABS Census (2006)	9	0	7	0	6	22
	Attached Housing Share of Occupied Dwelling Stock (No) 2011	ABS Census (2011)	12	0	12	0	9	33
	Attached Housing Share of Occupied Dwelling Stock (%) 2011	Calc	0.66%	0.00%	1.15%	0.00%	1.22%	0.70%
	Residential Building Approvals (No 2009/10 to 2011/12)	ABS8731.0	204	10	37	15	14	280
	Annual Average Residential Building Approvals (No 2009/10 to 2011/12)	Calc	68.0	3.3	12.3	5.0	4.7	93.3
	Median House Price (2006)	RPData	\$380,000	\$80,000	\$86,500	\$100,000	\$110,000	\$100,000
	Median House Price (2011)	RPData	\$505,000	\$195,000	\$126,250	\$95,000	\$187,000	\$150,000
	Median House Price (2012)	RPData	\$522,000	\$155,000	\$145,000	\$158,000	\$167,500	\$170,000
	Differential to Perth Metro Median House Price (2012)	Calc	\$43,000	-\$324,000	-\$334,000	-\$321,000	-\$311,500	-\$309,000
	Median House Price Growth (\$ 2006 to 2012)	Calc	\$142,000	\$75,000	\$58,500	\$58,000	\$57,500	\$70,000
	Median House Price Growth (% 2006 to 2012)	Calc	37%	94%	68%	58%	52%	70%
	Average Household Size (2011)	ABS Census (2011)	2.3	2.5	2.5	2.4	2.4	2.42
	Households (2011)	ABS Census (2011)	391	471	896	349	563	2670
Median Multiple (Median House Price as ratio to Median Household Income) (2011)	Calc	7.10	3.20	2.06	2.03	3.07	2.49	
Labour Force and Skills	Working Age Population - 15+ (% 2011)	ABS3235.0	61%	68%	64%	66%	65%	65%
	Working Age Population - 15+ (% 2011)	ABS Census (2011)	59%	66%	65%	65%	64%	64%
	Labour Force Size (Census 2006)	ABS Census 2006	1698	747	1271	482	780	4978
	Labour Force Size (Census 2011)	ABS Census 2011	2183	733	1292	492	749	5449
	Participation Rate (2011)	Calc	63.2%	71.9%	67.2%	71.2%	68.7%	66.6%
	Persons Employed (2006)	ABS Census 2006	1647	728	1226	472	761	4834
	Persons Employed (2011)	ABS Census 2011	2106	722	1250	479	740	5297
	Unemployment Rate (2006)	ABS Census 2006	3.0%	2.5%	3.5%	2.1%	2.4%	2.9%
	Unemployment Rate (2011)	ABS Census 2011	3.5%	1.5%	3.3%	2.6%	1.2%	2.8%
	Bachelor and Post-Graduate Level Post School Educational Attainment	ABS Census (2011)	58.0	79.0	195.0	81.0	90.0	503.0
	Bachelor and Post-Graduate Share of Working Age Population	Calc	2.2%	9.4%	12.1%	14.0%	9.8%	7.5%
	Certificate and Diploma Level Post-School Educational Attainment	ABS Census (2011)	171.0	205.0	445.0	157.0	314.0	1292.0
	Certificate and Diploma Level Share of Working Age Population	Calc	6.5%	24.5%	27.7%	27.1%	34.1%	19.3%
	Employment by Place of Residence (2011)	ABS Census (2011)	2105	720	1254	478	706	5263
	White Collar Occupation Share of Employed Labour Force	ABS Census (2011)	10.36%	47.1%	36.9%	46.9%	43.3%	36.0%
Blue Collar Occupation Share of Employed Labour Force	ABS Census (2011)	4.04%	21.4%	23.2%	19.5%	22.9%	25.0%	
Employment, Industry, Business and Investment	Employment by Place of Work (2011)	ABS Census (2011)	1205	717	1158	438	685	4203
	Retail Employment (2011)	ABS Census (2011)	77	43	118	15	58	311
	Retail Share of Employment (2011)	ABS Census (2011)	6.4%	6.0%	10.2%	3.4%	8.5%	7.4%
	Health Care and Social Assistance Employment (2011)	ABS Census (2011)	21	44	83	0	48	196
	Health Care and Social Assistance Share of Employment (2011)	ABS Census (2011)	1.7%	6.1%	7.2%	0.0%	7.0%	4.7%
	Construction Employment (2011)	ABS Census (2011)	121	26	55	10	30	242
	Construction Share of Employment (2011)	ABS Census (2011)	10.0%	3.6%	4.7%	2.3%	4.4%	5.8%
	Accommodation And Food Services Employment (2011)	ABS Census (2011)	42	30	45	37	22	176
	Accommodation And Food Services Share of Employment (2011)	ABS Census (2011)	3.5%	4.2%	3.9%	8.4%	3.2%	4.2%
	Employment Self-Sufficiency 2011	Calc	57.2%	99.6%	92.3%	91.6%	97.0%	79.9%
	Count of Businesses (2009)	ABS8165.0	533	264	407	259	203	1,666
	Value of Non-Residential Building Approvals (2009/10 to 2011/12)	ABS8731.0	\$1,516,000	\$3,682,800	\$7,286,100	\$3,435,200	\$1,798,000	\$17,718,100
	Average Value of Non-Residential Building Approvals (Annual)	Calc	\$505,333	\$1,227,600	\$2,428,700	\$1,145,067	\$599,333	\$5,906,033
	Light Commercial Vehicles (2011)	ABS9301.0	369	366	354	179	361	1629
	Light Commercial Vehicles per Resident	Calc	0.082	0.081	0.079	0.040	0.080	0.361
Trucks	ABS9301.0	242,000	305,000	157,000	229,000	169,000	1102,000	
Trucks per Resident	Calc	0.054	0.068	0.035	0.051	0.037	0.244	
Economy	Area of Agricultural Land Holdings (ha), 2010-11	ABS7125.0	74,519	820,373	489,098	231,576	355,092	1,970,658
	Agricultural Land Share of Sub-Region	Calc	4%	42%	25%	12%	18%	
	Total Gross Value of Agricultural Production (\$M), 2005-06	ABS7125.0	58.9	93.8	79.8	95.9	135.9	464.3
	Total Gross Value of Agricultural Production Share of Sub-Region	Calc	13%	20%	17%	21%	29%	
	Gross Agricultural Production Value per ha (\$)	Calc	790	114	163	414	383	
Community Services and Facilities	Dedicated Aged Care Beds	Primary	0	12	18	0	11	41
	Aged Care Beds Share of Sub-Region	Calc	0.0%	29.3%	43.9%	0.0%	26.8%	100.0%
	Aged Care Establishment	Primary	0	1	1	0	1	3
	Number of F/T Eligible Year 12 Students	School Curriculum and Standards Authority	0	0	32	0	6	38
	Number of Private Primary Schools	Schools Online	0	1	1	0	0	2
	Number of Public Primary Schools	Schools Online	1	2	2	3	2	10
	Number of Public Primary School Students	Schools Online	189	171	173	120	224	877
	Number of Public Secondary Schools	Schools Online	0	0	1	0	0	1
	Number of District High Schools	Schools Online	0	1	0	0	1	2
	Number of Public Secondary School Students	Schools Online	0	29	186	0	57	272
	Number of Private Secondary Schools	Primary	1	0	0	0	0	1
	Number of Hospital Beds (Public)	AIHW	0	10	12	0	10	32
	Hospital Beds (Public) Share of Sub-Region	Calc	0%	31%	38%	0%	31%	100%
	Number of Libraries	Primary	1	1	2	3	2	9
	Number of CRCs	Primary	0	2	1	0	1	4
Number of Child Care Centres	Primary	1	1	1	0	1	4	