

CENTRAL COAST EMPLOYMENT STRATEGY 2011

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EXECUTIVE SUMMARY

The objective of this employment strategy is to provide an analysis of the industry and employment opportunities in the Central Coast subregion of the Wheatbelt. The development of the Central Coast Employment Strategy is a response to the greater awareness of and accessibility to this stretch of Western Australia's coast line for visitors, potential residents, and investors. It is important for local communities, industry bodies, and the government sector to understand subregional economic and labour force dynamics to strategically plan for and capitalise on new economic and employment opportunities. Key findings are summarised below.

2 – MOVEMENT OF PEOPLE

- Population and visitor growth experienced in most coastal towns in the subregion creates demand for new services and job opportunities
- This growth is driven by northern urban expansion and amenity migration attracting high percentages of retirees, holiday homeowners and lifestyle seekers
- The over representation of older age cohorts and under representation of people aged 15-34 years can contribute to low labour force participation rates

3 – MOVEMENT OF INDUSTRY

- A relatively even distribution of employment across sectors in the coastal locations, as opposed to the local governments as a whole, reflects a degree of diversification in those economies
- High percentage of employment in the construction sector can be indicative of current and future population growth and building/infrastructure investment

4 – INDUSTRIES IN FOCUS

- The restructure of the Western Rock Lobster Fishery is likely to result in decrease local employment in the sector and negative multipliers for local businesses
- The growing horticulture and viticulture development is making significant economic contributions both from value of product and through the development of associated support ventures
- The availability and affordability of residential, commercial and industrial land will play a key role in enabling population growth and industry development and expansion
- The slow conversion of sold lots to dwellings can result in economic involution and land being “locked away” for investment purposes with little impact on population and economic stimulus
- There is a lack of strategic land use planning in a number of coastal communities
- There are positive economic and social multipliers associated with growth in the tourism and recreation sector with room to consolidate and market *Turquoise Coast* as a regional brand and quality “stop over” and activities-based destination
- Attracting private capital and securing financial loans for tourism investment and small businesses can prove difficult

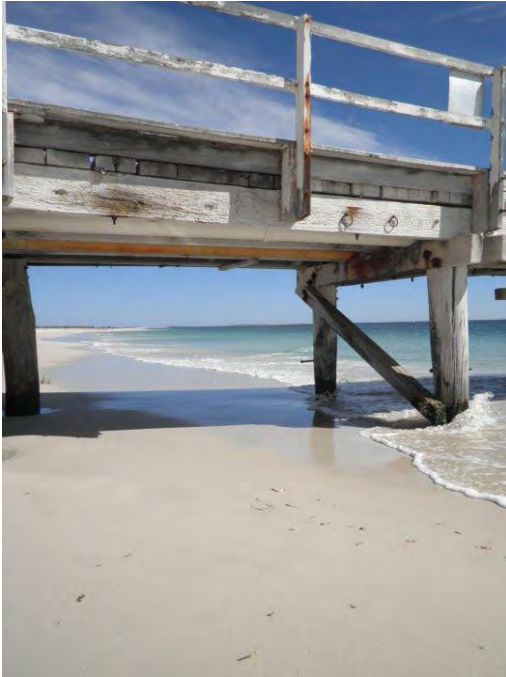
- There is a strong perception that the government planning system for land release and development approval is confusing, slow and off-putting for developers and small business owners
- Mining in the area is volatile in terms of commodity prices, mineral quality and mine lifespan which has resulted in a number of recent mine closures and downgrading

5 – THE PROSPECT OF GROWTH

- Reaching a certain population threshold will provide opportunities for “population driven” jobs, growth for existing local businesses, and securing better social infrastructure
- A larger catchment area for a commuter labour force exists with the decrease in drive times provided by the Indian Ocean Drive
- Fluctuations and seasonal changes in demand can be difficult for small businesses to manage particularly in terms of staffing and offering consistency of product
- There are great opportunities to attract knowledge-based initiatives alongside consumption based enterprises
- There is a risk that new investors, developers, and government will take a reactive rather than proactive approach to forecasted population increase which will not translate in immediate regional economic growth
- Headworks costs can be a disincentive for private developers, investors and local governments
- Increased education, training, and health facilities to what is deemed to be a growth area will not only meet demand but will foster a growing area of employment
- Upgrades to key development infrastructure, such as telecommunications, water and power are needed for industry attraction and expansion
- The subregion is well positioned for creative solutions for key infrastructure development (e.g. water supply and reuse facilities and alternative energy enterprises)

6 – RECOMMENDATIONS

- Secure industry and business investment
- Better utilise subregional population and labour force dynamics
- Facilitate property development
- Secure government services and infrastructure development



1 – INTRODUCTION

1.1 Project Background

‘Economic and social change at the national levels is spatially distributing benefits in a selective way across the large cities and towns of rural and regional Australia’ therefore knowledge of that selectivity should be an important component of any strategic thinking on the allocation of resources and assistance to non-metropolitan Australia’ (Stimson, Baum & O’Connor 2003, p. 143).

The Central Coast subregion of the Wheatbelt is in a unique position to benefit greatly from increased accessibility and greater awareness of the attributes the area has to offer. The subregion is increasingly recognised as a popular tourist, recreation and retirement destination and demand for services and facilities is only likely to grow with an expanding metropolitan area. More than this, the Central Coast subregion is facing significant changes in key industries which have historically shaped the coastal settlements, namely in the fishing and mining sectors.

Such forces have significant bearing on investment and employment opportunities.

On a national scale, coastal development has presented itself as something of a paradox. O’Connor’s (2004) research highlights that while the appetite for land development has delivered large amounts of new housing, sudden gains in population in small communities, and land and house price increases, these communities can also have low incomes, high welfare dependence, small shares of commercial investment, and high unemployment rates. Housing and population growth do not constitute development. Indeed a greater understanding is needed in recognising ‘the difference between the

forces that shape the distribution of population and housing and those that shape the distribution of jobs' (O'Connor 2004, p. 2).

Capturing industry and business opportunities, directing government investment, and preparing coastal communities for anticipated economic and social change is vital for the subregion's development. With this in mind, the Wheatbelt Development Commission (WDC), Shire of Dandaragan, Shire of Gingin, LandCorp and Ardross Group of Companies commissioned The University of Western Australia to prepare an employment strategy for the Central Coast subregion.

1.2 Scope and Project Objectives

The Central Coast Employment Strategy will provide analysis of the industry and employment opportunities to demonstrate the unique position of the study area. The specific objectives are:

- Define the study area and study timescales
- Conduct analysis of subregional employment and industry structures and demographics
- Delineate employment and industry catchments
- Develop subregional analysis in relation to employment and industry generation
- Make recommendations for strategic actions for employment and industry development

1.3 Study Area

Defined by the Western Australian Department of Planning, the boundary of the Central Coast region formally includes all land west of the Brand Highway and all areas between the townships of Dongara to the north and Guilderton to the south. This region extends nearly 300 kilometres north to south and was recognised as a formal planning region in the early 1990s. This report focuses on five coastal towns in this region (see Table 1.1).

Table 1.1 Locations included in the study area

Local Government	Town
Shire of Coorow	Leeman
	Green Head
Shire of Dandaragan	Jurien Bay
	Cervantes
Shire of Gingin	Lancelin

Dongara and Guilderton were excluded from the study area due to their proximity to the regional centre of Geraldton and the metropolitan area respectively. The five coastal towns selected in the study face different industry attraction and employment growth concerns due to their relative isolation when compared to Dongara and Guilderton.

There are minimal east-west linkages between the towns in the shires of Coorow, Dandaragan and Gingin aside from the tradition of some farming families having coastal holiday homes. Interviews in the area revealed a degree of competition within local governments between their coastal and inland areas,

particularly in terms of location of the shire office and the concentration of services. North-south linkages exist mainly in the form of the smaller towns using Jurien Bay as a commercial hub.

Unlike the nearby inland Wheatbelt towns, which were established at the turn off the 20th century on the back of the agricultural industry, these five coastal towns existed predominately as temporary fishing villages due to poor and unreliable water supply. They were not surveyed and gazetted until the 1950s and 1960s. Accessibility to this area, in the past, has been difficult due to the configuration of local roads. For many years the towns along the coast were not connected in a north-south alignment and visitors travelling along Brand Highway generally bypassed the region. There has been interest in the region for constructing a road between Dongara and Lancelin since the early 1980s. The negotiations around the alignment of this road were complex and protracted due to the national parks and the Commonwealth Defence Training Area (Pracsys 2003). The “missing link” between Lancelin and Cervantes was opened in September 2010 resulting in a sealed road linking Perth’s northern suburbs, coastal towns and tourist destinations up to Cliff Head, just south of Dongara. The Indian Ocean Drive (IOD) will play an important part in increasing the accessibility of the region and advancing development.

1.4 Research Methods

The study recognised that residents, business owners, and government representatives in the Central Coast subregion were well placed to describe industry and employment opportunities and priority development concerns in the subregion. Thus a significant number of community consultations and interviews were conducted as part of this research. Other supporting information sources included statistical data, management documents and research reports. Please see Appendix 1 for a full overview of the research methods used in this project.



2 – MOVEMENT OF PEOPLE

2.1 Introduction

This chapter considers the movement of people to the Central Coast subregion; people permanently residing in the subregion, people who visit the subregion, and people who work in the subregion. The Central Coast subregion as a destination is gaining momentum with increased accessibility and branding. Understanding this movement of people is vital to understanding what is shaping the coastal communities in terms of service provision, industry attraction, and business development. This chapter will review broad demographic trends as well as outline key migration and labour mobility characteristics of the subregion.

2.2 Regional Population Dynamics

2.2.1 POPULATION CHANGE

Table 2.1 and Figure 2.1 provide an overview of the population change in the coastal subregion between 1996 and 2006. It shows data for urban centres and localities (UCL) (essentially 'townsites') and statistical local areas (SLA).

Between 1996 and 2006, population growth for the five coastal towns combined was 17%, higher than Western Australia's percentage increase of 15% in that same period. This is keeping with the trend of population growth in many peri- and non-metropolitan coastal areas of Australia, particularly those located within a three hour drive of a capital city (Gurran, Blakely & Squires 2007). The Australian Bureau of Statistics' (ABS) research into sea change migration found that the majority of those moving to high-growth coastal areas come from large regional centres (42%) and country areas (27%), rather

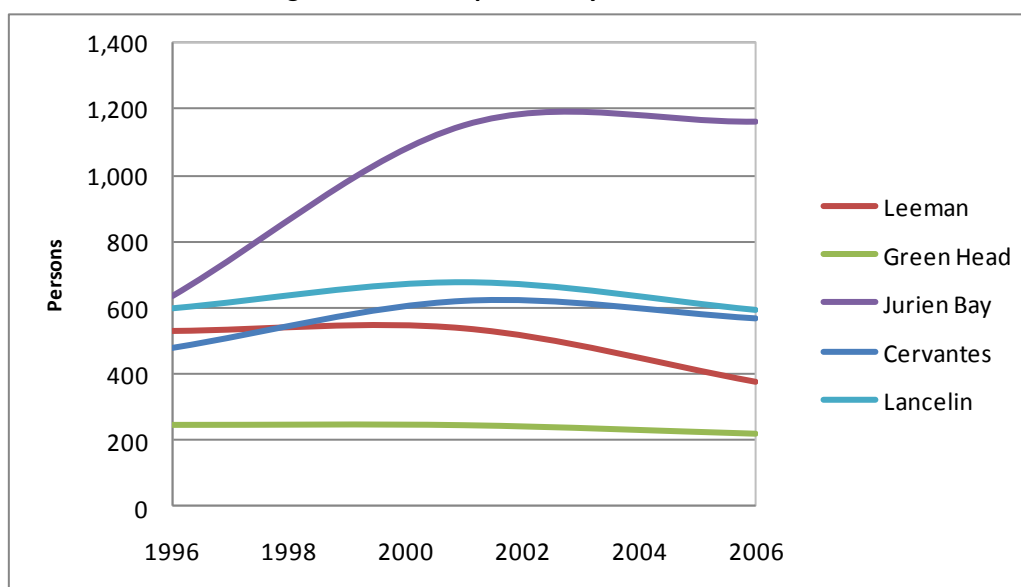
than major metropolitan centres. Migration from a capital city only made up one third despite 'the popular perception of coastal migration as a move away from capital cities' (ABS 2004).

Table 2.1 Total Population Change by UCL and SLA, 1996-2006

		Total Population			Population Change 1996 and 2006	
		1996	2001	2006	Actual	%
UCL	Leeman	531	539	374	-157	-29.6
	Green Head	245	244	217	-28	-11.4
	Jurien Bay	636	1,153	1,164	528	83.0
	Cervantes	480	622	569	89	18.5
	Lancelin	597	678	592	-5	-0.8
	Total for UCLs	2,489	3,236	2,916	427	17.2
SLA	Coorow	1,395	1,341	1,129	-266	-19.1
	Dandaragan	2,607	3,078	3,156	549	21.1
	Gingin	3,189	3,848	4,151	962	30.2
	Total for SLAs	7,191	8,267	8,436	1,245	17.3
State	Western Australia	1,726,095	1,851,252	1,986,247	260,152	15.1

Source: Australian Bureau of Statistics, 1996, 2001a and 2006a

Figure 2.1 Total Population by UCL, 1996-2006



Source: Australian Bureau of Statistics, 1996, 2001a and 2006a

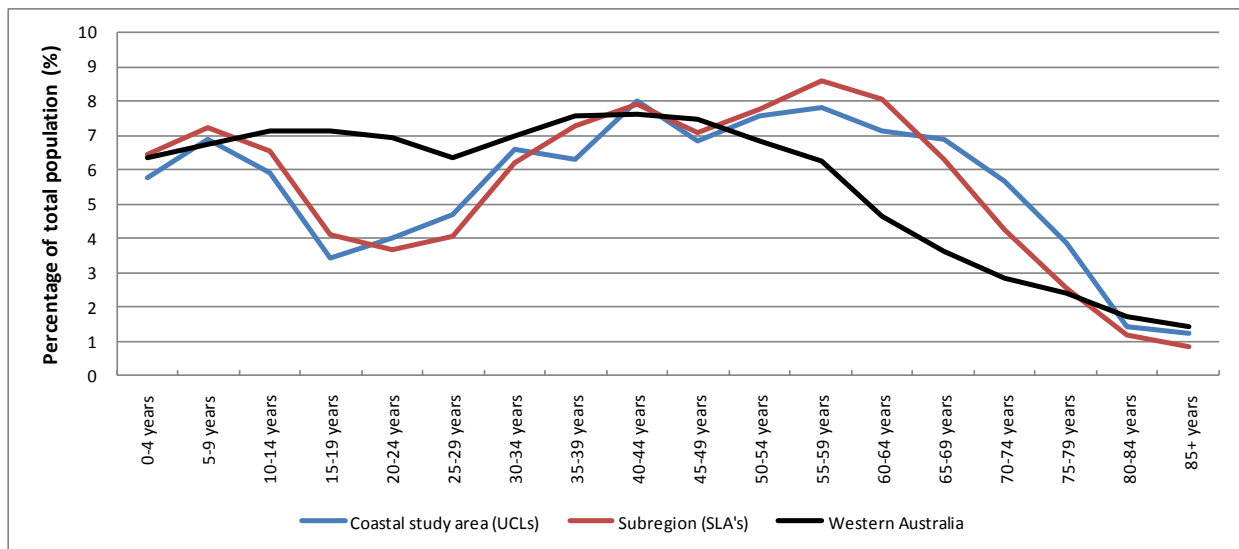
Jurien Bay, as the largest subregional town, has experienced the greatest population increase in the subregion, rising from a population of 636 in 1996 to 1,164 in 2006, an increase of 83%. As evident in Figure 2.1 this growth predominately occurred between the 1996 and 2001 Census dates. This corresponds with the release of residential land by the Ardross Group of Companies, the dominate property developer in the town. Figure 2.1 also indicates that all five coastal towns have experienced

either a stabilising or slight decline in population between 2001 and 2006. Interviews in the subregion suggest that this could be attributed to the lack of employment opportunities and the perhaps slower pace of investment associated with the delay of construction of the IOD. Leeman shows the greatest decline in population between 1996 and 2006, which likely relates to the restructuring of the Western Rock Lobster industry and the closure of nearby mineral sand mines. This will be discussed further in chapter 4 of the report.

2.2.2 AGE STRUCTURE OF POPULATION

Figure 2.2 shows the age structure of the population of the five coastal towns in the study area (UCLs) compared to that of their associated local governments (SLAs) and Western Australia's age profile as a whole.

Figure 2.2 Age Structure, 2006¹



Source: Australian Bureau of Statistics 2006a

The nature of employment opportunities will impact a region's age profile. Compared to Western Australia, the coastal subregion has an under representation of people aged 15-34 years. The outmigration of young people from rural areas in Australia seeking other education and employment opportunities is well documented (Davies & Tonts 2007). Figure 2.2 also illustrates the over representation of the older age cohorts, 50-79 years, in the subregion. The coastal towns in particular have a higher representation of people aged 65-79 years compared to Western Australia and the SLAs as a whole. This is especially highlighted in Cervantes and Green Head, both being popular retirement locations.

Alternatively, with the presence of a younger workforce associated with the fishing and mining sectors, the town of Leeman has a profile more aligned with that of Western Australia's. A number of interviewees forecast that Jurien Bay's aged population will decrease as a percentage of the total population as the role of the town as a subregional centre expands its employment base. For example

¹ For tables accompanying all figures please refer to Appendix 2.

increasing enrolment numbers at Jurien Bay District High School since 2006 indicates a growth in the number of young families in the town (see Table 2.2).

Table 2.2 Student Enrolment Figures for Coastal Government Schools in the Study Subregion (semester 1)

School	Education District	2006 enrolments	2007 enrolments	2008 enrolments	2009 enrolments	2010 enrolments
Leeman Primary School	Mid West	58	64	52	47	55
Jurien Bay District High School	Mid West	269	278	292	279	288
Cervantes Primary School	Mid West	43	43	49	48	43
Lancelin Primary School	West Coast	127	128	130	129	126

Source: Department of Education 2010

2.2.3 VISITOR NUMBERS

Exact annualised visitor numbers to the subregion are difficult to obtain as the five coastal towns fall into two Tourism WA regions, 'Australia's Coral Coast' and 'Experience Perth'. Tourism WA also publishes their statistics as one figure for combined years and do not usually report on day trips. It is widely accepted, however, that tourism numbers are on the increase for the coastal locations driven predominately by domestic visitors (see Table 2.3). The shires of Dandaragan and Gingin have significantly larger visitor numbers compared to the Shire of Coorow. This is not surprising given the increased proximity to Perth and the attraction of the Pinnacles in Cervantes and quality windsurfing conditions in Lancelin.

Table 2.3 Annual Average Holiday/Leisure Overnight Visitors 2001-2008

Local Government	Intrastate	Interstate	International	Total
Shire of Coorow	11,000	1,300	600	12,900
Shire of Dandaragan	58,800	10,100	15,800	84,700
Shire of Gingin	78,400	3,100	4,300	85,800
Total	148,200	14,500	20,700	183,400

Source: Tourism Western Australia 2010a & Tourism Western Australia 2010b

There is significant tourism seasonality with the period between Boxing Day and Australia Day considered peak season. After Australia Day the population in the five coastal towns remains inflated through to the Easter weekend.

While visitor numbers for day trips is difficult to capture, this figure is expected to increase substantially with the opening of the IOD and the decrease in drive time to the subregion from Perth. Currently, Nambung National Park and the Pinnacles attract the greatest number of day visits in the subregion, with this figure reportedly around 225,000 visitors each year (MacroPlan 2008). A visitor survey conducted by Colmar Brunton (2002) reported that 53% of visitors were on day trips from Perth. 24% of visitors surveyed in Nambung National Park arrived on a stop while travelling around Western Australia or around Australia.

These figures illustrate that visitor numbers far outweigh permanent population figures. It is important to acknowledge that the federal grant allocation to local governments is linked to Census population figures. The collection night for Census data occurs during the low season in August and thus there is a

degree of disparity between the recorded population and the number of people that the coastal local governments are servicing during peak seasons. Capturing the number of second home owners is also difficult through Census counts.

2.2.4 POPULATION PROJECTIONS

Western Australia Tomorrow 2005 population projections listed in Table 2.4 are considerably adjusted from those projected in 2000. The 2000 publication forecasts the Shire of Dandaragan to have reached a population of 4,800 by 2011 and 7,000 persons by 2016. It also suggests that the Shire of Gingin will have a population of 5,900 by 2011 and 7,000 persons by 2016 (Western Australian Planning Commission, 2000). The high level of population growth expected with an earlier opening of the IOD was not realised and thus more conservative forecasting was used in the 2005 publication. It is also important to note that the smaller the population the more problematic the projections are, as relatively minor local changes can significantly impact results.

Table 2.4 Western Australia Tomorrow 2005 Population Projections

		2004	2006	2011	2016	2021	% Change 2004-2021
LGA	Coorow	1,400	1,400	1,400	1,400	1,300	-7
	Dandaragan	3,000	3,200	3,600	4,100	4,500	50
	Gingin	4,500	4,600	5,000	5,500	5,900	31
State	Western Australia	1,984,600	2,048,500	2,210,400	2,376,400	2,534,600	28

Source: Western Australian Planning Commission 2005

The bifurcated nature of these three local government areas, with growing coastal zones and declining or stable agricultural zones, is not well captured in the geographical scale of these projections. The Western Australian Planning Commission (2005) forecasts stable-slow decline for the Shire of Coorow, typical growth in the Shire of Dandaragan, and slight growth in the Shire of Gingin. Both the shires of Dandaragan and Gingin are expected to have higher growth rates than Western Australia as a whole. This growth is likely to be driven by:

- Ongoing construction stimuli
- Availability of residential land
- Improved access to Perth
- Attractive coastal lifestyle
- Improved regional transport links

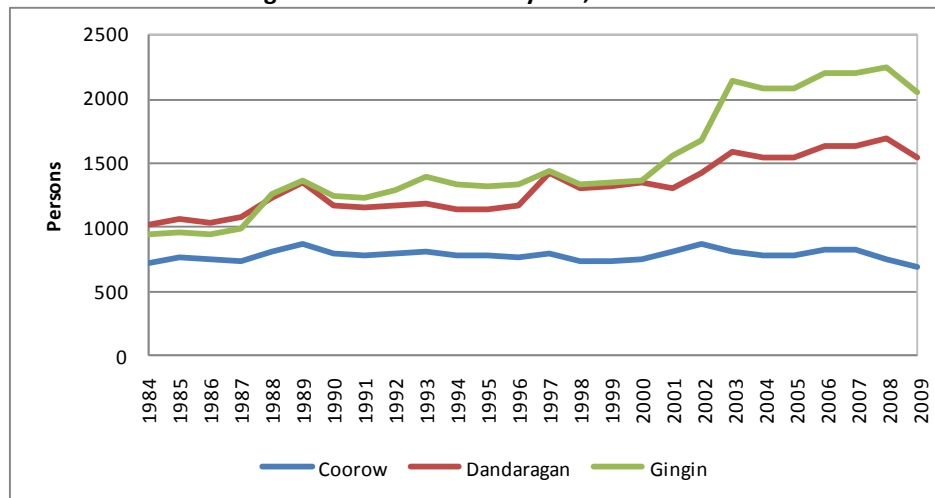
Benefits of population growth for the local economy include construction stimulus, direct household expenditure on goods and services, and ongoing demand for social infrastructure and services.

2.3 Labour Force Size and Participation

Figure 2.3 shows the annualised labour force size for the shires of Coorow, Dandaragan, and Gingin for 1984-2009. This includes both employed and unemployed persons. The size of the labour force for the local governments in the study area has increased by nearly 60% between 1984 and 2009 with the Shire

of Gingin experiencing the greatest growth, increasing 116% since 1984. Population growth and the emergence of new enterprises in agriculture, tourism, mining, manufacturing and the service sectors in these areas have all contributed to foster employment growth. The Shire of Coorow's labour force, however, decreased by 5% between 1984 and 2009. This has likely been influenced by a decreasing population and reduction in demand for labour in agriculture and related services.

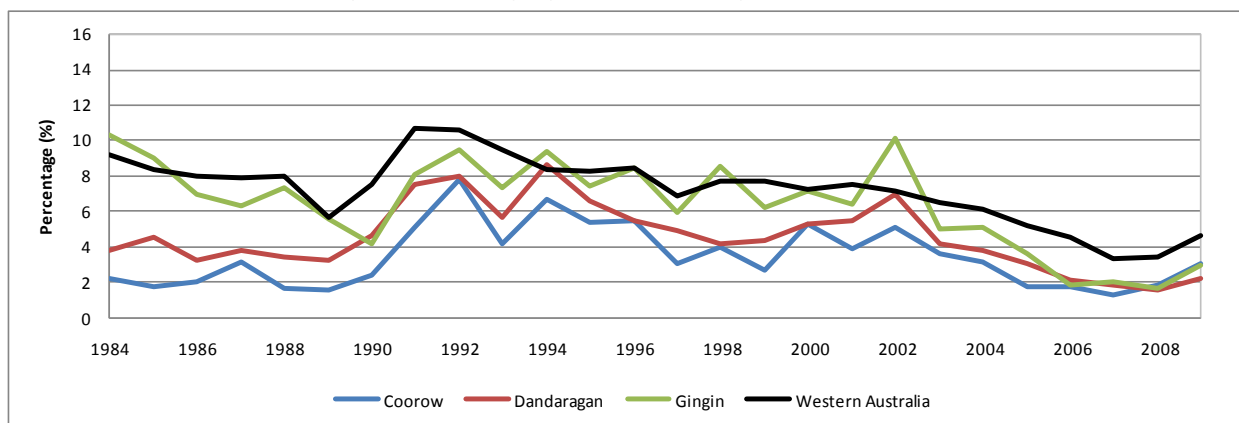
Figure 2.3 Labour Force by SLA, 1984-2009



Source: Economic, Labour Market and Evaluation Analysis Branch, Research Analysis and Evaluation Group 2009

The unemployment rate of the Central Coast subregion generally is below that of Western Australia's, but mirrored similar macro-economic cycles (see Figure 2.4). Consistent with national employment trends, areas dependent on agriculture, such as the Shire of Coorow, tend to record lower rates of unemployment. Between 2001 and 2007 both Western Australia and the Central Coast subregion experienced significant decline in unemployment rates and increase labour force size, largely as a result of the strong growth in the resources sector and associated increased mobility of labour over the same period. The latest increase in unemployment rates and decrease in labour force figures, as indicated in Figures 2.3 and 2.4, may be related to the affect of the Global Financial Crisis (GFC). On a local level, the three local governments would have also started to feel the effects of the restructuring of the Western Rock Lobster fishery, a number of mine closures, and a lull in the property market.

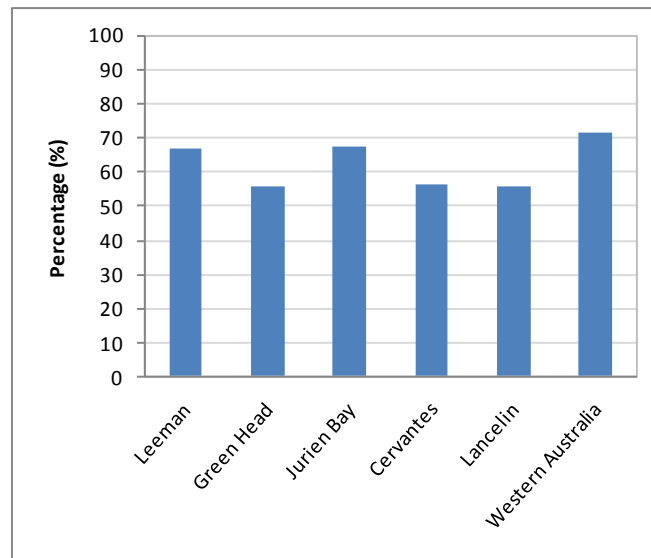
Figure 2.4 Unemployment Rate (%) by SLA, 1984-2009



Source: Economic, Labour Market and Evaluation Analysis Branch, Research Analysis and Evaluation Group 2009

Participation rates in the labour force for the population aged between 15 and 65 years in the Central Coast subregion have remained stable between 2001 and 2006 (see Figure 2.5). These rates are lower than Western Australia's 2006 average of 72%, with Green Head, Cervantes, and Lancelin all having labour force participation rates as low as 56%. This suggests some potential for engaging more of the available local labour force. Research does indicate, however, that participation rates are often lower in areas popular with retirees or lifestyle seekers (Davies et al., 2008).

Figure 2.5 Participation Rate as per population 15 – 65 years by UCL, 2006



Source: Australian Bureau of Statistics 2006a

2.4 Amenity Migration and Population Growth

People move to a new region for many different reasons. The motivation can come from combination of “push and pull factors” which are those that encourage people to leave a region, and those that attract people to a region. ABS (2004) describes some of the factors that motivate people to move include:

- Employment conditions
- Finding more affordable housing
- Looking for work or retiring from work
- Leaving the congestion of city living
- Wanting a more pleasant environment
- Wanting to be near family and friends and social amenity

The Central Coast subregion offers two major draw cards with its natural environment (beaches, nature reserves and national parks) and its proximity to Perth. Interviewees were questioned on the influence of lifestyle/amenity migration on population growth and industry development in the Central Coast subregion verses identifying niche market opportunities for business establishment. While there were definitely a number of business owners that stated that they saw a gap in the market when relocating or establishing, the majority of interviewees identified that the attractiveness of the rural coastal lifestyle

has been a significant motivating factor. One interviewee reported that people will forego other opportunities, such as higher income or promotion, for the amenity and lifestyle that the subregion offers. It is therefore important to recognise that labour market reasons are not necessarily the primary motivating factor for migration.

The ability of rural regions to convey the amenity of the local physical, social and economic environment is recognised among academics, regional development organisations and many community leaders as an important factor in attracting future growth and development. Four overlapping hypotheses have featured in counter-urbanisation research in Australia. The hypotheses are: expanding urban fields; job-led; behavioural; and welfare-led migration motivations. These four are not mutually exclusive and amenity considerations can potentially feature in three. Argent, Smailes & Griffin (2007) treat *amenity* as a quality relating to the attractiveness or otherwise of the general environment in which it is set, and the qualities or facilities of the locale itself. This research also describes *amenity* as a cumulative concept in that more elements come into consideration and the relative importance of different elements change over time. So at short time-scales immediate site factors play a determining role for amenity while broader locational factors increasingly come into play as the time-scale is extended (Argent, Smailes & Griffin 2007). Some elements that are commonly associated with coastal amenity locations include high natural and rural scenery values, recreational facilities, mild climate, and relatively affordable residential land.

Distance from metropolitan centres and population size affect the scale and nature of coastal growth in Australia. Gurran, Blakely, and Squires (2007) have constructed a typology of Australian coastal communities affected by amenity migration. This is summarised in Table 2.5.

Table 2.5 Australian Coastal Community Typology

Typology	Description
Coastal Commuters	<ul style="list-style-type: none"> • Suburbanised satellite communities in peri-metropolitan locations • Settlement pattern: often linear coastline development • High rates of growth associated with urban “spillover” • Attraction of being near the coast but still in commuting distance to the city for work or family
Coastal Getaways	<ul style="list-style-type: none"> • Local government areas comprising small to medium towns in 3 hours drive of a capital city • Attractive locations for domestic tourism, including day trips and weekend “escapes” • Historically many of these communities were low key family holiday destinations or small fishing villages • Settlement pattern: small or medium sized centre and a cluster of small towns • Attracting retirees, “telecommuters” and those whose work does not need them to be permanently based in the city • Tend to have a higher median age than Australia overall
Coastal Cities	<ul style="list-style-type: none"> • Substantial urban locales beyond the State capitals • Working towards a predominately tourism and lifestyle-based economy • Settlement pattern: defined urban core surrounded by suburban development stretching along the coastline
Coastal Lifestyle Destinations	<ul style="list-style-type: none"> • Found more than 3 hours drive from capital cities • Attract new residents for their lifestyle, leisure, and tourism appeal • Often contain significant natural and rural landscapes • Settlement pattern: characterised by a regional centre and a cluster of smaller

	towns and settlements along the coast and rural hinterlands
Coastal Hamlets	<ul style="list-style-type: none"> • Remote local government areas (more than 3 hours from a capital city) with populations of less than 15,000 • Isolation of these places has meant that they have escaped major development pressure to date • Many surrounded by conservation areas that act as a growth boundary • Attracting sea changers and tourists seeking alternatives to more populated and developed locations • Settlement pattern: small town surrounded by a rural and/or protected natural hinterland

Source: adapted from Gurran, Blakely, & Squires 2007.

To a degree the towns in the Central Coast subregion are in transition from *Coastal Hamlets* and *Coastal Getaways* due to increase accessibility with the IOD. As Green Head and Leeman will remain beyond that three hour drive they may remain in the *Coastal Hamlets* profile.

High amenity areas have been found to have a strong and positive correlation with recent in-migration, total population growth, industrial diversity and ageing of the populations. High amenity has been negatively correlated with younger age structures and the agricultural sector's proportional share of the local workforce (Argent, Smailes & Griffin 2007; Smailes, Griffin & Argent 2005). This is consistent with many of the findings in the above sections (see also Chapter 3). The multiplier effects of population growth will have a significant impact in the Central Coast subregion, particularly in the subregional centre of Jurien Bay. As new residents create demand for new services and thus job opportunities, a flow-on growth is generated. An important group to capture associated with amenity migration are the "footloose" businesses which are characterised by people who 'choose where they want to live first and establish a business later' (Rasker, Johnson, & York 1998, p. 33). Jurien Bay has had a number of businesses establish from such migration. While not always contributing to the labour force, retirees moving to an area can represent a certain amount of economic stability. As Rasker, Johnson and York (1998, p. 69) describe 'they buy homes, shop, and often bank their retirement income locally'. Retirees can also offer significant skills and commitment to community. An understanding of migration demographics to an area is critical for strategic planning in coastal areas.

While main employment centres and capital cities will continue to draw people for labour market reasons, lifestyle and amenity migration is causing significant social and environmental changes along Australia's coast. The Central Coast subregion is no exception. Population growth, however, does not guarantee high economic performance as the transition from productive sectors to consumption-based industries, such as those associated with tourism, is not always smooth. This can be characterised by low wages, low-skill requirements and seasonal employment. This will be discussed further in section 4.5.

2.5 Increased Accessibility

An important benefit of the IOD is that the road has decreased the travel time from Perth to the five coastal towns in the subregion. For example, the distance by road between Jurien Bay and Joondalup is estimated to have been reduced from 250 kilometres to 170 kilometres. The travel distance from Cervantes to Joondalup is estimated to have decreased from 230 kilometres to 150 kilometres; approximately only a one and a half hour drive. Leeman, the most northern coastal town in the subregion has gone from being approximately three hours away from the metropolitan area to only two

and a half hours. The deduction in travel time and publicity surrounding the opening of the IOD is expected to change perceptions of the accessibility of the Central Coast subregion.

Studies have been completed looking at the potential impact of the opening of the IOD, notably *The Indian Ocean Drive Economic and Social Impact Study* (Pracsys 2003); *The Impact of the Indian Ocean Drive on the Shire of Gingin* (Hayfield, Johns & Miller 2006); and *Destination Management Strategic Plan for the Indian Ocean Drive* (Roche, Lee & Weston 2006). While these reports are now a few years old they do highlight the expected growth in the tourism industry and the potential for some of the coastal communities to reach a “critical mass of population”. Many residents who were interviewed as part of this study deemed that reaching this critical population threshold was necessary to attract and maintain an increased number of local businesses and services. The construction phase of the IOD has already benefited coastal towns, particularly Jurien Bay, in hosting construction workers and using a number of local contractors.

The reports undertaken on the impact of the IOD also indicated that the coastal communities are generally positive about the expected impact and have a proactive approach to the potential for the introduction of new industries, employment opportunities and the development of better amenities for residents (Hayfield, Johns & Miller 2006; Pracsys 2003). Business owners that were interviewed as part of these studies were however, unclear on the quantifiable impacts for their businesses. The opening of the IOD is expected to offer better freight transport possibilities, increased access to metropolitan services, and particular opportunities to develop accommodation and tourism oriented services, such as tours and charters. As discussed in section 2.2.3, predicting the increase in visitor numbers can be problematic. The Pracsys report (2003) uses the Coast Road Traffic Study from 2000 which provides a prediction of the traffic volumes and composition expected on the new coast road between Lancelin and Cervantes for 2002, 2006, 2011, and 2021. This study predicts that 38% of all through traffic in the coastal region is expected to divert from Brand Highway to the IOD. The estimated annual average daily traffic along the Lancelin to Cervantes link of the Coast Road is listed in Table 2.6.

Table 2.6 Estimated annual average daily traffic counts on the Lancelin to Cervantes link of the IOD

Scenario	2002	2006	2011	2021
Low growth	1,450	1,750	1,900	2,200
High growth	1,450	2,050	2,600	3,950

Source: adapted from Pracsys 2003

The maps and data in Appendix 3 indicate a significant increase in traffic on the IOD immediately after the opening of the Ocean Farm to Cervantes portion. The road between Cervantes and Jurien Bay, in particular, saw an increase of 240% in average daily traffic volume (average of 480 daily counts immediately before opening; rising to 1,630 daily counts immediately after).

It is difficult to draw conclusions from these estimates about the number of people that will stop and use services in the coastal towns but the ability to tap into the Perth “day trippers” and “weekenders” market is likely to be enhanced with the decrease in drive time now that the IOD is open. The *Central Coast Tourism Strategy* (MacroPlan 2008), while encompassing a larger study area including Guilderton and Port Denison/Dongara and inland communities, forecasts that international overnight visitors is expected to reach 79,268 per year in 2023². This same report predicts that the Central Coast region will

² Please note that the forecasts exclude the day visitors who visit the region with specific reference to the Pinnacles and Lancelin.

reach 317,854 domestic visitors per year in 2023 in the base scenario. With improvements to current infrastructure the region could achieve as many as 435,328 annual domestic visitors (MacroPlan 2008).

It is likely that of the three shires in the Central Coast subregion, the shires of Gingin and Dandaragan will attract the largest proportion of the total visitor market due to their proximity to Perth and being home to some more widely recognised attractions such as the Pinnacles. Interviewees and information in existing reports suggest that growth in tourism numbers and local population as a result of the IOD opening will be experienced in the medium to longer term. For Central Coast residents, the IOD will increase accessibility to metropolitan services. In particular the travel distance to the Joondalup Health Campus will be decreased for residents and ambulance services.

2.6 Summary

The natural environment of the Central Coast subregion underpins the tourism market as well as being a community resource. Lifestyle, especially marine-based leisure, is the region's main competitive advantage. While there are some geographical variances within the subregion, as a whole the Central Coast is expected to experience future population growth and visitor numbers. Isolation and smallness of community are points of attraction for some but most interviewees recognised the importance of attracting a larger population base to support local businesses and encourage the development of better social infrastructure.



3 – MOVEMENT OF INDUSTRY

3.1 Introduction

Observation in the study area reveals that to a certain degree the Central Coast subregion is in a transition phase with a *re-ordering* of rural space. Research by Holmes (2006, p. 142) describes that such a multifunctional transition can be characterised as ‘a shift from the formally dominant *production* goals towards a more complex, contested, variable mix of *production*, *consumption* and *protection* goals’. This is clearly evident in the Central Coast subregion with the emergence of market-driven amenity uses and increased awareness of preservation goals. This changing industry mix directly shapes the demand for labour. For example, key industries, such as farming and fishing, are experiencing increased efficiency and policy restructuring, which in turn has reduced labour demand and the need for support industries to be based locally.

A region’s capacity to grow is contingent upon its ability to draw new income from outside. It is also important to reduce “leakages” of income, which occur through imports of goods and services and investment of local savings elsewhere. O’Connor (2004, p. 6) describes that ‘economic maturation occurs when a city or region can replace imports with its own products and services as its local market is large enough to support local suppliers’. The service sector and the emergence of larger and better quality retail facilities and professional services play an important role in reaching economic maturity as it reduces the need for consumers to travel to other towns for such services. The Australian Local Government Association (ALGA) report titled *Competitive Regions* (1999) identifies some key points to ensuring the relative competitiveness of a local economy, including:

- Cost of doing business

- Capacity for greater efficiency through technological and entrepreneurial innovation
- Availability of capital to support investment
- The ability to attract and support investment through the region's "hard" and "soft" infrastructure, workforce, and the institutional/governance framework

This chapter contains statistical information and general observation on the industry structure of the Central Coast subregion. It also looks at economic performance and concentration figures to gain an understanding of the movement and fluxes of key sectors shaping the local economy and labour market.

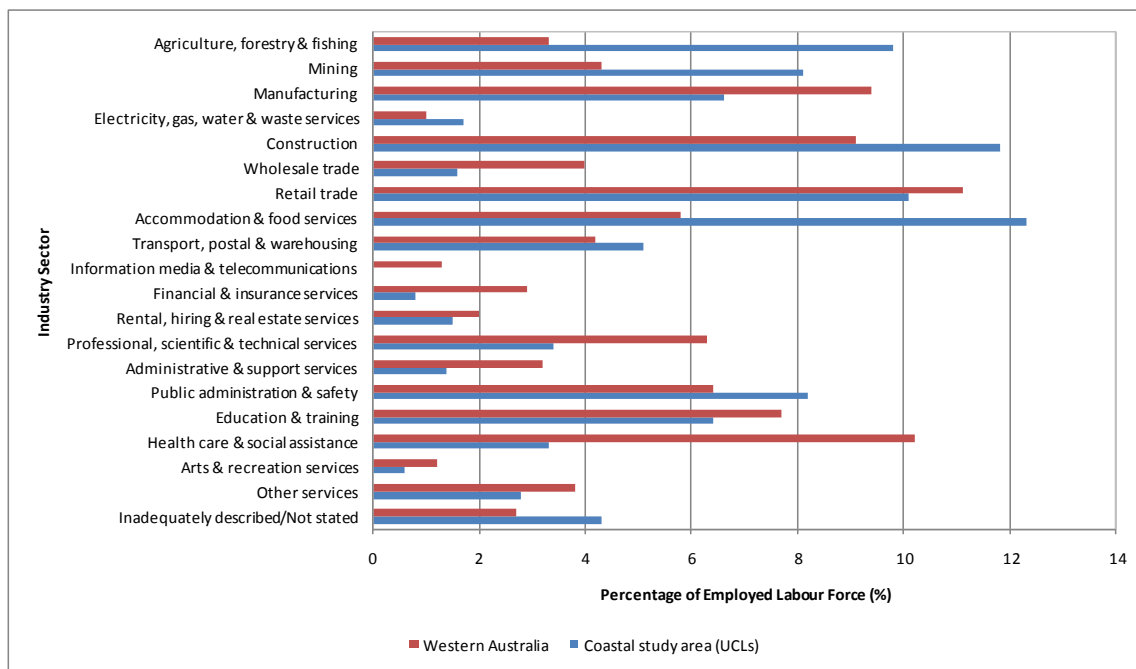
3.2 Labour Force Structure

3.2.1 LABOUR FORCE BY INDUSTRY SECTOR

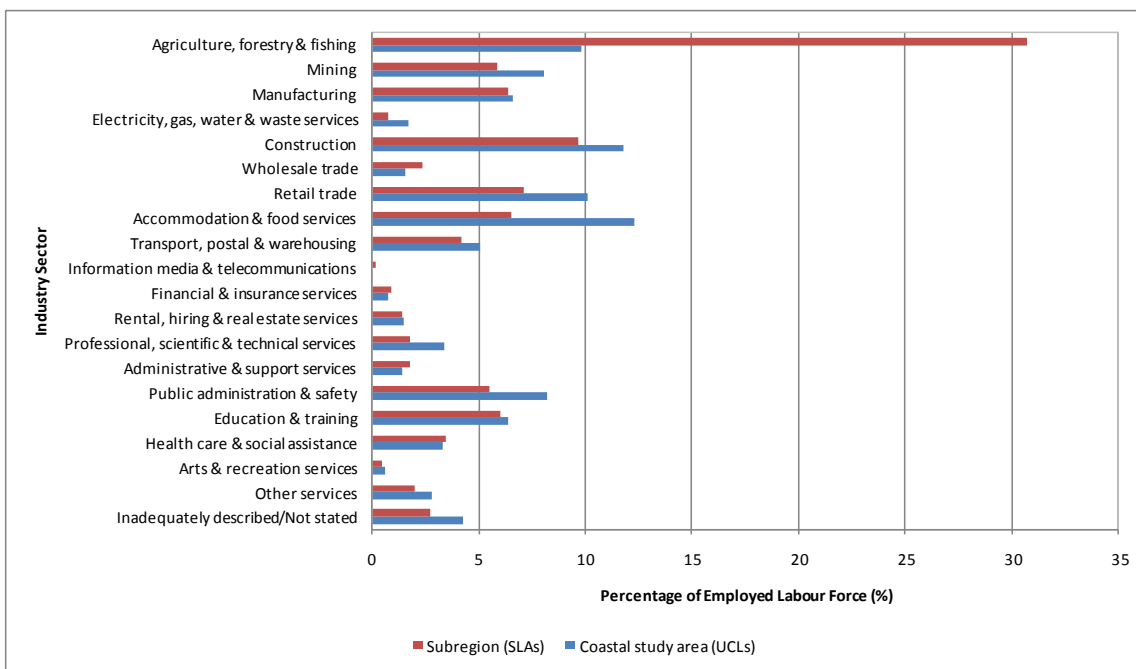
The importance of the tourism industry in the Central Coast subregion is clearly indicated in Figure 3.1. Accommodation and food services is the largest employing sector in the subregion, employing 12% of the labour force. This is particularly pronounced in the town of Cervantes where this sector employs 26% of the labour force. Employment in the retail trade accounts for a further 10% of employment in the Central Coast subregion.

The employment profile for the coastal towns differs from that of their local governments as a whole where agriculture, forestry, and fishing is the dominant employing sector accounting for 31% of the labour force (see Figure 3.2). Whereas Jurien Bay's major employing sectors are construction (13%), accommodation and food services (12%), public administration and safety (12%), and retail trade (11%), reflecting its growing subregional service centre role.

Employment in the construction sector has a significant presence in the coastal locations, employing 12%. This is indicative of current and future population growth and building/infrastructure investment. Government social services are also important employers in the central coast subregion with public administration and safety accounting for 8% employment, education 6%, and health 3%. The more even distribution of employment across sectors in the coastal locations, as opposed to the local governments as a whole, reflects a degree of diversification in those local economies.

Figure 3.1 Labour Force by Industry of Employment by UCL and WA, 2006

Source: Australian Bureau of Statistics 2006a

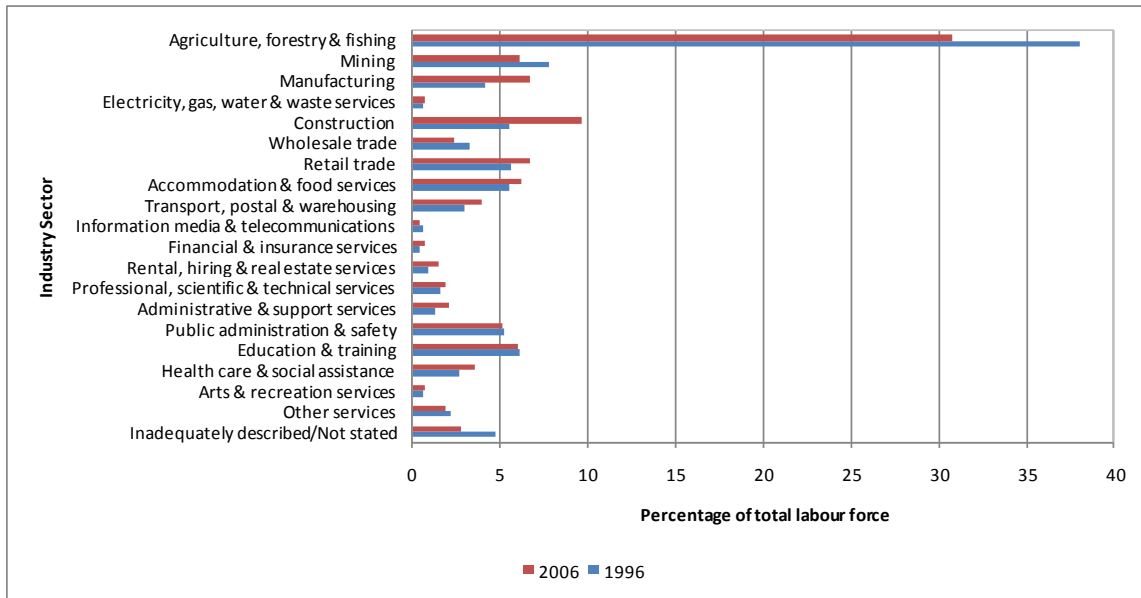
Figure 3.2 Labour Force by Industry of Employment UCL and SLA, 2006

Source: Australian Bureau of Statistics 2006a

Figure 3.3 compares employment by industry sector for the shires of Coorow, Dandaragan, and Gingin combined for the 1996 and 2006 Census years. Interestingly employment in the dominant sector of agriculture, forestry, and fishing decreased over the ten year period while the largest increase was in construction. This period also saw a gradual reduction of dependence on the mining sector for

employment in the subregion. The mining sector was the second highest employer in 1996 at 8% but dropped to sixth largest employer in 2006 employing 6% of the labour force. This figure could contract further with recent closures and downsizing of a number of local mining operations. Employment in the mining sector is particularly prominent in the towns of Leeman (26%) and Green Head (16%).

Figure 3.3 Labour Force by Industry of Employment for Coastal SLAs, 1996 & 2006

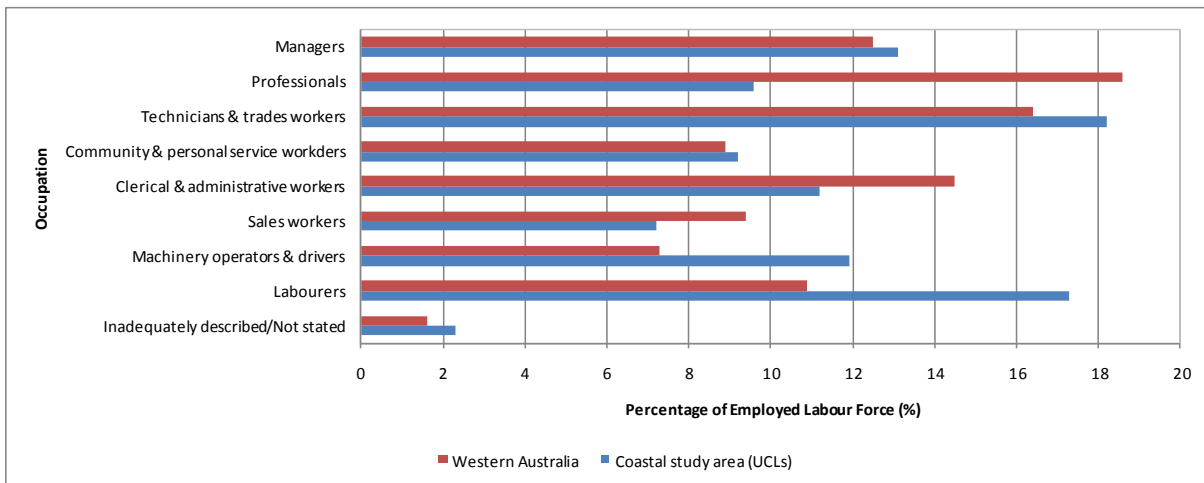


Source: Australian Bureau of Statistics 1996 and 2006a

3.2.2 LABOUR FORCE BY OCCUPATION

With agriculture, forestry and fishing, construction, and mining being prominent employing sectors in the central coast subregion, it is not surprising that technical and trades workers (18%), and labourers (17%) are the major occupations in the subregion (see Figure 3.4). Compared to Western Australia's occupation profile, the five central coast towns have a higher proportion of machinery operators and drivers (12%) and a lower proportion of professionals (10%).

Figure 3.4 Occupation Structure, 2006



Source: Australian Bureau of Statistics 2006a

3.3 Local Economic Dynamics

3.3.1 LOCAL ECONOMIC CONCENTRATION

Location Quotients (LQ) provide a ratio that compares local economic activity in a particular sector with that of a reference economy, in this case Western Australia³. This provides further insight into the economic drivers of the Central Coast subregion. A LQ greater than 1.0 suggests a concentration of employment in that sector in the region and a LQ of less than 1.0 suggests an industry is under-represented compared to the reference economy. Normally, a LQ of above about 1.2 indicates that a sector is an important local driver of economic growth. Table 3.1 lists the results of the LQ calculations.

Table 3.1 Location Quotients for the Central Coast Subregion, 2006

Industry Sector	UCL					SLA		
	Leeman	Green Head	Jurien Bay	Cervantes	Lancelin	Coorow	Dandaragan	Gingin
Agriculture, forestry & fishing	3.54	4.86	1.84	2.36	5.42	12.73	9.61	9.24
Mining	22.03	13.84	3.34	4.65	2.14	9.73	3.56	4.50
Manufacturing	0.16	1.08	0.77	0.17	0.88	0.22	0.58	0.77
Electricity, gas, water & waste services	-	-	2.88	1.85	1.28	-	1.18	0.83
Construction	1.55	2.40	1.70	0.93	1.23	0.95	1.06	1.48
Wholesale trade	0.40	0.86	0.15	-	0.86	0.64	0.39	0.65
Retail trade	0.51	1.32	1.00	0.96	0.77	0.72	0.70	0.54
Accommodation & food services	1.36	-	1.93	4.13	1.52	0.66	1.50	0.82
Transport, postal & warehousing	1.22	-	0.46	1.93	1.96	0.77	0.69	1.08
Information media & telecommunications	-	-	-	-	-	-	-	0.18
Financial & insurance services	-	-	0.51	-	-	0.14	0.18	0.32
Rental, hiring & real estate services	-	-	1.80	-	0.74	-	1.15	0.86
Professional, scientific & technical services	0.26	1.70	0.49	-	0.70	0.39	0.27	0.24
Administrative & support services	-	-	0.55	0.77	0.53	-	0.47	0.87
Public administration & safety	0.86	-	1.73	1.54	0.75	0.78	0.97	0.71
Education & training	0.90	0.65	0.94	0.95	0.60	0.84	0.89	0.69
Health care & social assistance	0.27	-	0.33	-	0.64	0.20	0.30	0.40
Arts & recreation services	-	-	-	1.73	0.90	-	0.44	0.42
Other services	1.86	-	0.76	0.49	0.34	0.65	0.48	0.55
Inadequately described/Not stated	1.33	1.44	1.85	2.33	1.13	0.67	1.34	0.92

Source: Australian Bureau of Statistics 2006a

LQs greater than 1.3 for each of the five coastal towns are listed below.

Leeman:

- Mining 22.03
- Agriculture, forestry and fishing 3.54
- Construction 1.55
- Accommodation and food services 1.36

Green Head:

- Mining 13.84
- Agriculture, forestry and fishing 4.86
- Construction 2.40
- Professional and technical services 1.70

³ See Appendix 1 for the LQ calculation method

- Retail trade 1.32

Jurien Bay:

- Mining 3.34
- Electricity, gas, water and waste services 2.88
- Agriculture, forestry and fishing 1.84
- Accommodation and food services 1.93
- Rental, hiring and real estate services 1.80
- Public administration and services 1.73
- Construction 1.70

Cervantes:

- Mining 4.65
- Accommodation and food services 4.13
- Agriculture, forestry and fishing 2.36
- Transport, postal and warehousing 1.93
- Electricity, gas, water and waste services 1.85
- Arts and recreational services 1.73
- Public administration and safety 1.54

Lancelin:

- Agriculture, forestry and fishing 5.42
- Mining 2.14
- Transport, postal and warehousing 1.96
- Accommodation and food services 1.52

Interestingly these LQ scores illustrate that economic activity in the central coast subregion is particularly concentrated around the mining sector. It is important to note, however, that these calculations are based on 2006 Census data and do not capture the impact of recent mine closures and downgrading in the subregion. The agriculture, forestry and fishing sector still plays an important role indicating a significant degree of dependence on primary industries and therefore global financial markets. This is especially highlighted in the LQ scores for the local governments with the only other sector with a score higher than 1.2 being construction. So while service and building industries do feature as high employing sectors, they are secondary drivers to most of the five coastal towns' local economies. How links to nonlocal markets are translated back into the community is a source of economic change but, as Hustedde, Shaffer and Pulver (2005) describe, equally important is how communities serve and use the local market to create jobs and income.

3.3.2 LOCAL ECONOMIC PERFORMANCE

Table 3.2 presents the results of a shift-share analysis of employment change between 1996 and 2006⁴. Shift-share analysis decomposes employment growth into the following components and uses data on a SLA level:

⁴ See Appendix 1 for shift-share calculation method.

- National Share (NS): the share of employment change that can be attributed to broader national trends;
- Industry Mix (IM): the share of employment change that can be attributed to the internal structure of the labour force/economy;
- Regional Share (RS): employment growth derived from local attributes/competitiveness
- Total Share (TS): this should be identical to the total change in employment

It is important to note that shift-share analysis does not explain what drivers of change are, but simply gives clues to the dynamics of change. In the context of this report, most important is the Regional Share component of change. In overall terms, the analysis shows that wider national and global processes have driven much of the Central Coast subregion's employment growth (i.e. much of the growth is captured in the National Share column).

However, as Table 3.2 shows, the subregion gained an additional 453 jobs between 1996 and 2006 as a result of local factors or regional advantage, independent of national growth share and industry mix. The driving sectors here are agriculture, forestry and fishing, manufacturing, and construction. The sector which the subregion lacks local competitiveness is in mining. Also noteworthy is the employment growth that occurred in construction and retail trade, stimulated because of the particular local concentration or mix of industries, independent of national forces.

Given the local amenity and accessibility advantages that have been outlined in Chapter 2, those sectors related to tourism are expected to show improvement, namely retail trade and accommodation and food services. Administrative and community support sectors (e.g. health and education) could also see growth given that the provision of services keeps pace with demand generated by population increase.

Table 3.2 Shift-Share Analysis for the Central Coast Subregion, 1996-2006

Industry Sector	Coastal Subregion						
	Employment 1996	Employment 2006	Change 96-06	NS	IM	RS	TS
Agriculture, forestry & fishing	1,103	1,097	-6	222	-370	142	-6
Mining	225	216	-9	45	9	-63	-9
Manufacturing	121	240	119	24	-21	115	119
Electricity, gas, water & waste services	18	25	7	4	2	2	7
Construction	160	346	186	32	49	105	186
Wholesale trade	96	86	-10	19	-25	-4	-10
Retail trade	161	237	76	32	20	23	76
Accommodation & food services	158	221	63	32	1	30	63
Transport, postal & warehousing	88	141	53	18	-1	36	53
Information media & telecommunications	18	14	-4	4	-5	-2	-4
Financial & insurance services	13	25	12	3	0	10	12
Rental, hiring & real estate services	25	52	27	5	2	20	27
Professional, scientific & technical services	46	66	20	9	4	7	20
Administrative & support services	38	75	37	8	6	24	37
Public administration & safety	153	185	32	31	16	-15	32
Education & training	178	215	37	36	8	-7	37
Health care & social assistance	79	127	48	16	11	22	48
Arts & recreation services	16	26	10	3	0	7	10
Other services	65	68	3	13	-12	2	3
Total	2,899	3,563	664	584	-308	453	729

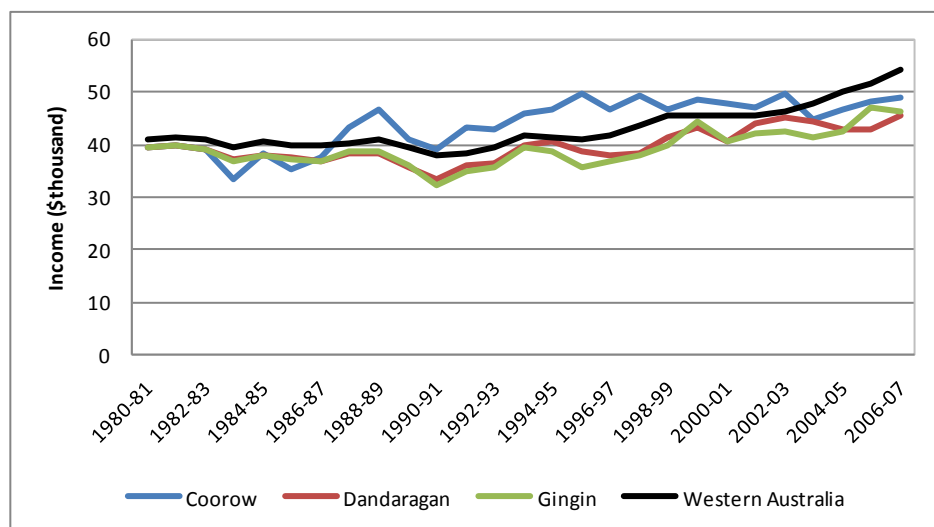
Source: Australian Bureau of Statistics 2006a

Figures 3.5 and 3.6 show annual taxation data for the three local governments in the Central Coast subregion for 1982/83 to 2006/07, adjusted to reflect the 2007/08 dollar. Real income per taxpayer is the aggregate real taxable income divided by the number of taxable individuals in a region and can be an indicator of individual economic wellbeing (see Figure 3.5). Aggregate real taxable income, in Figure 3.6, is the sum of individual taxable income recorded for all individuals that reside in a region and can provide insight into the levels of production in a region. It must be acknowledged, however, that whilst these figures reflect the returns to a region from the factors of production owned by the people of the region, it may not reflect the actual physical location of the production process. These figures also do not provide information on the spread of income internally, or how equitably income is distributed.

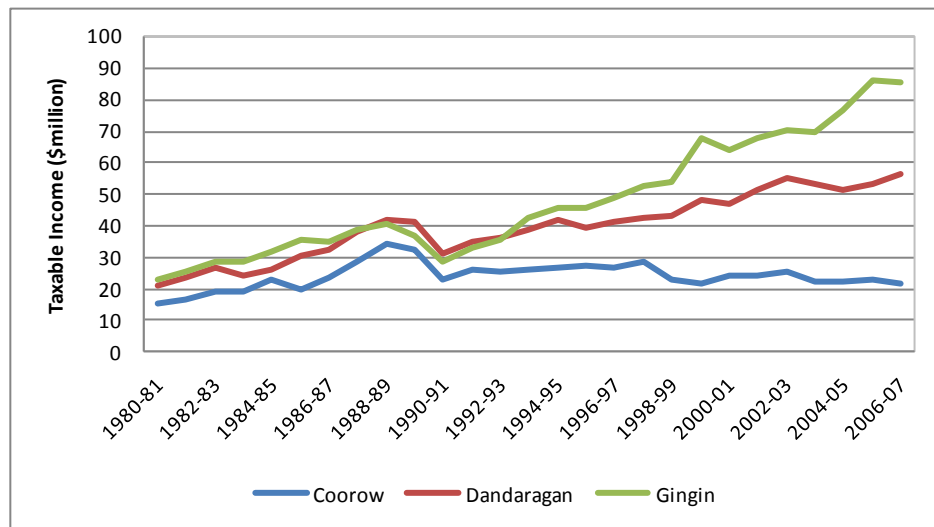
Interestingly, while the Shire of Coorow consistently has a lower aggregate taxable income compared to the shires of Dandaragan and Gingin, individuals in the Shire of Coorow predominately earn a greater income. Indeed as Figure 3.5 illustrates, the real income per tax payer in the Shire of Coorow was higher than the average figure recorded for Western Australia between the years 1987/88 and 2002/03. The shires of Gingin and Dandaragan have had a similar growth in individual incomes but as a region the Shire of Gingin's aggregate taxable income has grown at a much higher rate. This could be related to the economic and population growth association with urban fringe expansion. The intensification of agriculture and development of niche industries in the Shire of Gingin would have had considerable affect.

The increase in individual incomes for Western Australia experienced in the late 1990s and early 2000s would have been influenced by the resources boom, increased demand for labour, and associated increase in wages.

Figure 3.5 Real Income per Taxpayer (\$ 2007-08)



Source: Bureau of Infrastructure, Transport and Regional Economics 2009

Figure 3.6 Real Aggregate Taxable Income (\$ 2007-08)

Source: Bureau of Infrastructure, Transport and Regional Economics 2009

3.4 Summary

The statistical data presented in this chapter highlights key industry sectors which shape the local labour market and economy, namely the primary sectors of fishing, agriculture and mining, and population related sectors of construction, hospitality and retail. Within these industry areas there is scope for further investment and employment growth. The following chapter will explore this in further detail.



4 – INDUSTRIES IN FOCUS

4.1 Introduction

Transformations in national and State economies shape and re-shape Australia's non-metropolitan geography in selective ways. Stimson, Baum and O'Connor (2003, p. 139) argue that 'current patterns of changing population distribution are not necessarily likely to be a good guide to longer-term patterns of the economic performance of places'. It is important to acknowledge that population growth is not always an indication of economic prosperity and thus exploring the functional roles of places is necessary.

This chapter will focus on key industries in the Central Coast subregion that both provide significant employment and play a key role in the local subregional economy. The industries in focus are:

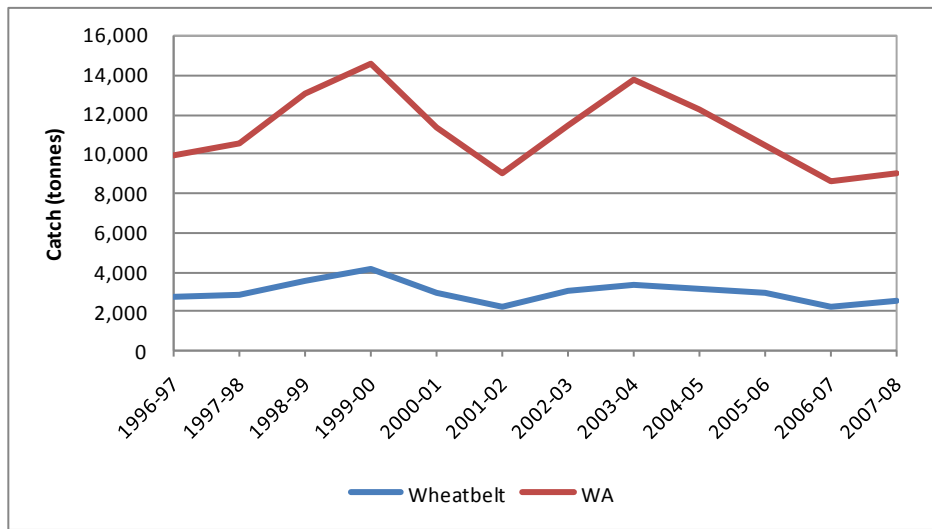
- The Western Rock Lobster Fishery and Aquaculture
- Agriculture
- Land development
- Tourism and recreation
- Mining

How these industries have shaped, and continue to shape, the five coastal towns particularly through periods of structural adjustment and changing economic and political conditions is important. This chapter will discuss the context of each industry as well as the major threats and opportunities to expansion or diversification.

4.2 The Western Rock Lobster Fishery and Aquaculture

The five coastal towns of the subregion grew as tertiary industry towns supporting the primary sectors of fishing and agriculture. The Western Rock Lobster industry, in particular, has played a significant part in shaping the local economy and its population structure. In addition to direct employment, the industry contributes to employment in ancillary activities, including processing, transport, boat-building and repair, and public services. The rock lobster industry is the highest value fishing industry in Western Australia. Generating \$61 million in 2007/08, the Wheatbelt is the second largest contributor to this fishery. Figures 4.1 and 4.2 provide an indication of catch trends and values of the rock lobster industry from 1996/97 to 2007/08. These figures are for the Wheatbelt region of Western Australia which includes the shires of Gingin and Dandaragan from this study area. They do not include figures from the Shire of Coorow as this local government falls under the Mid West region.

Figure 4.1 Estimated Rock Lobster Catch, 1996/97 – 2007/08



Source: Department of Fisheries 2008

Figure 4.2 Estimated Value of the Rock Lobster Industry, 1996/97 – 2007/08



Source: Department of Fisheries 2008

These figures show that the Wheatbelt has followed similar trends to that of the State as a whole with a spike in catch numbers and value for the 1999/2000 season and a general decline hereafter. The price of rock lobsters is very dependent on overseas markets, particularly China, and will fluctuate with the strength of the Australian dollar and international trade relations⁵.

The commercial rock lobster fishery was declared a limited-entry fishery in 1963 to restrict the number of boats and fishers that could operate. Huddleston and Tonts' (2007) research indicates that the fishery has experienced a substantial decline in operators with the tightening of regulations and limited licences and quotas, listing the following figures:

- 836 boats in the 1963/64 season
- 700 boats in the 1989/90 season
- 594 boats in the 2001/02 season
- 501 boats in the 2005/06 season

Anecdotally, on a local level in Leeman in the last five years there has been a decrease in boats from an estimated 60 in the 2004/05 season to 20 in the 2009/10 season. It was estimated that only eight or nine vessels will be operating from Leeman in the 2010/11 season. One rock lobster processing depot in Green Head has closed and the remaining one operates intermittently. Decreased vessel numbers were similarly reported in the other four subregional towns.

The number of people engaged in the fishery also declined from 1,811 persons in the 1989/90 season to 1,385 persons in the 2005/06 season (Huddleston & Tonts 2007). Not only this, as fishing vessels and gear have improved so too has the fleet's mobility. This means that fishers are less reliant on the smaller fishing communities and can base themselves in the larger, more established coastal towns. As Huddleston and Tonts (2007, p. iv) describe 'the outcome is that both the economic base and the social base of the industry are shifting in geographical terms'.

The 2009/10 season has been a particularly tumultuous period in terms of state-wide regulation adjustment with the introduction of a four day fishing week, pot restrictions, and zone catch limits and early closures. Whereas traditionally, skippers and deck hands based themselves and their families in coastal communities for the length of the eight month season, these changes saw an exodus from the Central Coast towns to the city for days-off, the relocation of fewer families, and early season closures. Zone C, which includes the towns of Jurien Bay, Cervantes, and Lancelin, closed in May, two months earlier than past seasons. Green Head and Leeman fall in Zone B, which reached its allocated 2009/10 quota a month early in June. As interviewees indicated, this has implications for not only the ancillary business, such as rock lobster processing factories, but also for local retail and hospitality sectors as the number of months of heightened local economic activity which many business have come to rely on is cut short.

The industry has now adopted a quota system for the 2010/11 season. A 5,500 tonne total allowable commercial catch has been allocated with quotas for individual operators based on entitlement to use

⁵ At the time of writing China announced limitations on importing Australian rock lobsters. It was expected that 60% of Western Australia's total allowable catch of 5,500 tonnes would be exported live to China. Consequently market prices have dropped significantly (Shine 2010).

pots held by those fishers and the relevant share of the total allowable catch set for the various zones⁶. Pot usage has been set at 0.5 per unit, which enables a fisher with 100 units of entitlement to use 50 pots (Department of Fisheries 2010b). This has generated a significant degree of uncertainty amongst local people based in the rock lobster industry. Such a system encourages people to purchase more pots from smaller operators to increase the amount of income possible in one season. Smaller operators will have to consider if their quota size still allows them to be competitive and financially viable. Similar to what has been experienced in the agriculture sector, there is a growing attitude of “get big or get out”. The system will also mean that fishers will be able to reach their quota in less time, which will affect the season length and where they fish from.

The industry as a whole remains profitable, however individual operators have experienced an ongoing cost-price squeeze. These trends extend to the Central Coast subregion where the fishery still has an important place but its role as a major employer is diminishing.

The potential to develop a considerable aquaculture industry in the Central Coast subregion has been identified by the coastal local governments, regional bodies and investors both national and international. There are few places in the southern hemisphere where sea cage farming of firm white fleshed finfish is undertaken in temperate waters, yet global demand for edible sea foods from aquaculture and mariculture is increasing (Everall 1998; O’Brien Planning Consultants 1996). The Central Coast subregion has a natural competitive advantage for marine farming and sea cage management in terms of water flow, water temperature, water quality, established commercial fishing industry and access to markets. Furthermore, planning documents for the Department of Fisheries and the Shire of Dandaragan have identified suitable sites and species for both land and sea based aquaculture operations (see Everall 1998 and O’Brien Planning Consultants 1996).

Jurien Fish Farmers Pty Ltd, which was established in 1993, played a significant role in the initial development of the industry establishing a snapper and black bream hatchery and experimental sea cage farming in Jurien Bay. Ventures that have been initiated in Jurien Bay over the past decade, however, have either lacked capital, appropriate business models or been affected by global financial market changes. In 2009, aquaculture company Western Kingfish was placed into voluntary administration after bacteria killed 70% of the company’s yellow tail kingfish stocks in its Jurien Bay fish farm (ABC News 2009).

While operations are currently stalled, the potential to cultivate a variety of species of fish and crustaceans in the subregion remains and is backed by considerable research. Developing an aquaculture industry also has the opportunity for the establishment of associated industries, particularly grains and processing units for the production of fishfeed alternatives.

4.3 Intensification of Agriculture

The intensification and diversification of agriculture is increasingly evident in the landscape of southern parts of the Central Coast subregion, particularly in the Shire of Gingin. While inland districts were founded on broad acre cropping and livestock grazing, suitable soil quality and adequate water supply

⁶ C Zone (Jurien Bay to Cape Leeuwin) has a total allowable catch of 2,687 tonnes for the 2010/11 season; B Zone (north of Jurien Bay to North West Cape) has 1,196 tonnes to March 14 and a further 672 tonnes for the remainder of the season; A Zone (Abrolhos Islands) has 945 tonnes allocated (Department of Fisheries 2010a).

have meant that particular areas are conducive to horticulture and viticulture development. There is also less conservation and crown land areas than in the western parts of the subregion. The subdivision of properties and diversification of land use in Gingin has increased with Perth's urban sprawl, pushing market gardens, feedlots, and abattoirs further north. Employment opportunities will also be associated with the new livestock saleyards which have been moved from Midland to Muchea in the neighbouring Shire of Chittering. The shires of Gingin and Dandaragan have also seen the establishment of tree farms, poultry, ostrich, goat, and marron farming, and piggeries to name a few. Such industries often require significant private capital investment and access to adequate power supplies⁷.

Indeed vegetable and fruit production in the Shire of Gingin account for the highest value in agricultural production in 2005/06 (see Table 4.1).

Table 4.1 Value of Agricultural Production in the Central Coast Subregion by LGA⁸

Commodity	LGA	2000-01 (\$)	2005-06 (\$)
Grain	Coorow	24,132,891	48,729,157
	Dandargan	14,629,322	25,169,377
	Gingin	1,021,489	821,104
Vegetables	Coorow	0	0
	Dandargan	65,422	0
	Gingin	34,778,515	24,202,366
Fruit	Coorow	0	0
	Dandargan	0	4,127,196
	Gingin	3,151,080	15,461,609
Milk Cattle	Coorow	0	0
	Dandargan	0	0
	Gingin	24,492	0
Meat Cattle	Coorow	1,560,694	4,968,321
	Dandargan	12,521,404	42,209,260
	Gingin	8,383,029	10,608,825
Wool Sheep/Lambs	Coorow	5,147,740	5,435,173
	Dandargan	13,516,520	14,742,564
	Gingin	2,250,018	1,760,884
Meat Sheep/Lambs	Coorow	3,118,050	5,700,374
	Dandargan	8,852,012	15,047,656
	Gingin	1,569,660	1,635,893

Source: Australian Bureau of Statistics 2001b and 2006b

As an example of the intensification of horticulture in the southern areas of the subregion, Table 4.2 provides a summary of orchard fruit production in the Shire of Gingin.

⁷ WR Carpenter Agriculture had approval to establish a new abattoir in the Shire of Dandaragan, however, recent financial difficulties have meant that investment in the subregion has halted.

⁸ Where units are too small to maintain confidentiality figures will be zeroed.

Table 4.2 Shire of Gingin Orchard Commodities for 2000-01 and 2005-06

Orchard Fruit Production (kg)		2000-01	2005-06	Actual Change
Oranges	Estimate	2,273,593	2,619,584	345,991
	Number of establishments	5	10	5
Apricots	Estimate	2,693	9,881	7,188
	Number of establishments	2	8	6
Nectarines	Estimate	53,327	372,648	319,321
	Number of establishments	7	11	4
Olives	Estimate	n/a	3,770,552	n/a
	Number of establishments	n/a	18	n/a
Peaches	Estimate	104,694	283,792	179,098
	Number of establishments	7	14	7
Plums and prunes	Estimate	6,482	2,342	-4,140
	Number of establishments	1	2	1
Avocados	Estimate	187,880	153,482	-34,398
	Number of establishments	1	10	9
Mangoes	Estimate	142,836	253,312	110,476
	Number of establishments	1	12	11

Source: Australian Bureau of Statistics 2001b and 2006b

This table illustrates that in the space of five years orchard production in the Shire of Gingin increased substantially, with only avocados, plums and prunes having recorded a decrease in estimated total kilograms produced. Seasonal conditions may be a contributing factor to recorded decreases in production. Interestingly, however, the number of establishments producing those commodities increased between 2000-01 and 2005-06 suggesting increased investment with new entrants in the sector.

The number of hectares used for cereal cropping in the Shire of Gingin has decreased over the same period (see Table 4.3).

Table 4.3 Snapshot of the Central Coast subregion's Broadacre Cropping

SLA	YEAR	Non-cereal broadacre crops - Legumes for grain - total area (ha)		Cereal crops - Cereals for all purposes - total area (ha)	
		Estimate	Number of establishments	Estimate	Number of establishments
Gingin	2000-01	611	7	5,112	44
	2005-06	1,865	6	2,693	20
Dandaragan	2000-01	12,669	55	37,881	108
	2005-06	16,010	62	46,698	87
Coorow	2000-01	23,885	58	65,690	73
	2005-06	26,839	60	99,267	92

Source: Australian Bureau of Statistics 2001b and 2006b

Tables 4.1 and 4.3 clearly indicate that broad acre cropping continues to have a large presence in the Shire of Coorow. Indeed there remains a strong culture in the shire councils of protecting broad acre farming as the traditional industry in the subregion. This can lead to difficulties in approving land rezoning applications and ensuring adequate infrastructure is in place to foster new agricultural

ventures. Scepticism amongst planners and local representatives also exists around the volatility of investor driven agriculture as there have been a number of unsuccessful managed investment scheme plantations in the Central Coast subregion.

It is important to recognise, however, that the diversification and intensification of agriculture is now making a significant economic contribution, predominately in the Shire of Gingin. Fruit, vegetables, nurseries, cut flowers and cultivated turf combined generated \$57 million in 2005-06 in the Shire of Gingin, 8% of the State's total value for these commodities (see Table A2.09 in Appendix 2). The extra labour required is also significant, although is quite often seasonal depending on harvest times. As one shire representative stated these industries have opportunities to develop support ventures involved in set up, processing, marketing, and ongoing management. This in itself has employment multipliers with varying levels of expertise required such as agronomists, reticulation specialists, and horticulturalists. In the Shire of Gingin alone there are approximately six olive processing plants with one of the larger operators looking to link operations with the tourism activities.

The intensification of agriculture is slowly encroaching northwards in the Central Coast subregion and while it will be concentrated in the eastern parts, the potential to capitalise on new industry development and diversification will benefit the entire subregion.

4.4 Land Development

The availability and development of land for residential, commercial and industrial purposes is key to an expanding local economy. More than providing a physical location to an emerging or expanding population and business base, land development is a significant industry in itself generating both employment and economic multipliers. As discussed in section 3.2.1 the construction industry is a significant employer in the Central Coast subregion. Indeed this sector has increased from employing 5.5% of the subregion's labour force in 1996 to 9.7% in 2006. This surpasses the Western Australian employment by industry sector 2006 profile, with 9.1% of the State's labour force being employed in the construction sector (see Table A2.06 in Appendix 2).

Factors that have influenced the release of land and levels of property sales in the Central Coast subregion include, but are not limited to, the following:

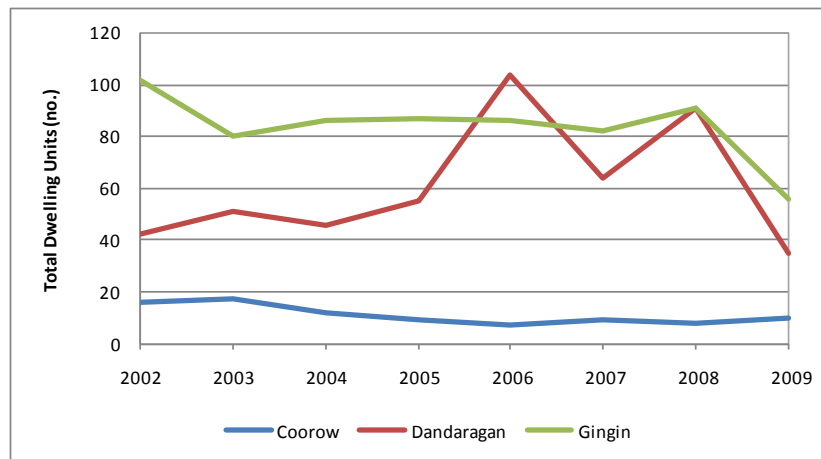
- "Pent-up demand" at the beginning of the 21st Century
- Delays in construction of the final stages of the IOD
- Western Australia's property boom
- Onset of the GFC
- Speculation of growth with the opening of the IOD
- Land tenure arrangements

Development in the subregion requires people/companies with significant financial backing to take the necessary investment risks associated with the geographic location, population size and industry composition of the area. LandCorp have not been required to have a large presence in either Jurien Bay or Lancelin as private property developers have shown interest in these larger, high-amenity communities.

Ardross is the major property developer in Jurien Bay and controls a significant portion of land to the south of the town centre⁹. Necessary planning and cooperation with the Shire of Dandaragan continues to ensure that subdivision is not ad hoc, the town does not become disjointed, and properties are able to be efficiently serviced. Interviews with Ardross representatives indicated that where possible the company supports local businesses and negotiates local development needs. For example, providing strategic land zoned for tourism and construction of Government Regional Officers' Housing (GROH). There is a risk associated with Ardross' capacity to dominate a significant portion of the market in terms of price setting or "drip feeding" lot release. It is generally accepted, however, that being a conservative property developer, Ardross will not take unnecessary risks in releasing land before demand has been identified but has the ability to react quickly to market changes.

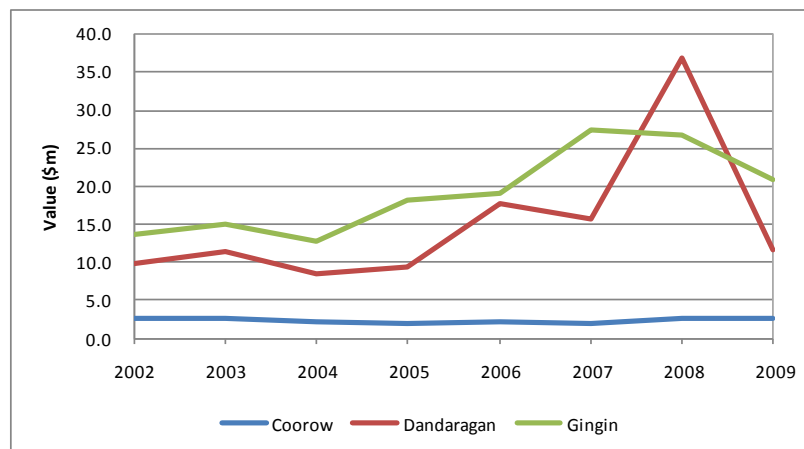
Ardross began subdivision in 1998 with the high sales of lots occurring between 2003 and 2006, timed with Western Australia's property boom. This is reflected in the Shire of Dandaragan's growth in the number of building approvals and value of total building from 2002-2006 (see figures 4.3 and 4.4).

Figure 4.3 Building Approvals by SLA, 2002-2009



Source: Australian Bureau of Statistics 2009

Figure 4.4 Value of Total Building by SLA, 2002-2009



Source: Australian Bureau of Statistics 2009

⁹ Please see Appendix 4 for a map of Ardross land holdings.

Tables 4.4 and 4.5 summarise development activity of two major property developers in the subregion; Ardross and LandCorp.

Table 4.4 Ardross Group of Companies Property Development in the Central Coast Subregion 1998 - 2010

Total lots sold	Lookout Bay (residential): <ul style="list-style-type: none"> 94 lots sold out of 95 lots Beachridge Estate (residential): <ul style="list-style-type: none"> 533 lots sold out of 626 lots
Conversion of available lots to sold lots (sales rate)	Estimates an average sales rate of 85%, however certain stages have had a sales rate of 100%
Conversion of total sold lots to dwellings	Lookout Bay (residential): <ul style="list-style-type: none"> 40 houses (43%) Beachridge Estate (residential): <ul style="list-style-type: none"> 120 plans approved (23%)
Proportion of dwellings occupied on a full time basis	This is estimated at 50-60%
Proposed dates and sizes of future releases	As per market demand Considering releasing lots for composite residential/light industrial use but will be dependent on headwork costs.

Table 4.5 LandCorp Property Development in the Central Coast Subregion 2005-2010

Total lots released	Leeman: <ul style="list-style-type: none"> 20 residential lots in 2008 Green Head: <ul style="list-style-type: none"> 40 residential lots in 2005 40 residential lots in 2007 9 light industrial lots in 2007 Cervantes: <ul style="list-style-type: none"> 19 residential lots in 2008 3 light industrial lots in 2008 LandCorp has not released any lots in Jurien Bay or Lancelin in the last 5 years
Total lots sold	Leeman: <ul style="list-style-type: none"> 0 residential lots Green Head: <ul style="list-style-type: none"> 69 residential lots 1 commercial lot Cervantes: <ul style="list-style-type: none"> 13 residential lots 0 light industrial lots
Conversion of available lots to sold lots (sales rate)	Leeman: <ul style="list-style-type: none"> 0% residential lots Green Head: <ul style="list-style-type: none"> 86% residential lots Cervantes: <ul style="list-style-type: none"> 68% residential lots 0% light industrial lots
Conversion of total sold lots to dwellings	All LandCorp lots are sold with a 36 month development condition recorded as a covenant on the title and if the purchaser does not comply, LandCorp has the option to re-purchase. The conversion rate to dwellings would therefore be 100%
Proposed dates and sizes of future releases	Jurien Bay <ul style="list-style-type: none"> Early stages of investigating into potential for an expansion

	<p>of the existing light industrial areas that could yield up to 46 lots</p> <ul style="list-style-type: none"> • Estimated date - 2012 <p>Lancelin</p> <ul style="list-style-type: none"> • Early stages of investigating into a land parcel capable of supporting up to 80 residential lots • Estimated date - 2012 <p>Cervantes</p> <ul style="list-style-type: none"> • 34 residential lots are under consideration to be constructed and released in 2011
Undeveloped LandCorp land	<p>Green Head:</p> <ul style="list-style-type: none"> • Approximately 40 residential lots • Approximately 10 light industrial lots <p>Cervantes:</p> <ul style="list-style-type: none"> • Approximately 47 residential lots

These tables show that increased activity in building and construction is geographically specific, with the Shire of Coorow showing little increase in this sector. While 69 residential lots, developed by LandCorp, have been sold in Green Head since 2005, none of the 20 residential lots released by the government agency in 2008 have sold. The lack of property investment in the Shire of Coorow, despite Western Australia's property boom, between 2002 and 2009 is reflected in a decreasing number of building approvals (see Figure 4.3). Importantly, however, property values have remained stable or slightly increased in the shire according to a number of interviewees. Release and sales of industrial land in the subregion since 2005 have been limited. Figures 4.3 and 4.4 also illustrate a steep decline in activity and value of building approvals in the shires of Dandaragan and Gingin in 2009. This could be influenced by the delays in construction of the IOD, GFC and the lull in the State's property market.

It is estimated that 15% of Ardross properties sold were to existing Jurien Bay residents who were upgrading; 50% to Perth residents (these have come from all over the metropolitan area excluding the Western suburbs who tend to still invest in the South West region of Western Australia); and 35% to persons from other Western Australian regional areas.

Interviews suggest that demand in the Jurien Bay market has been driven by institutional investors, second-home buyers, and retirees, many utilising their superfund for investment in a usable asset. This represents a change in superannuation philosophy where self-managed superannuation is becoming a popular option as opposed to managed superannuation funds. Thus properties have often been purchased for holiday homes or retirement with a lesser urgency to convert sold lots into dwellings. Incentives are in place by both LandCorp and Ardross to encourage building activity on sold lots. LandCorp have sold residential blocks on the proviso that they are developed within a 36 month period otherwise the organisation has the option to re-purchase. Ardross initially offered \$10,000 toward fencing and rainwater tanks on the condition that building starts within two and half years. This rebate increased with the onset of the GFC to \$30,000 for building activity to begin within two years. The money is withdrawn if the land owner fails to comply. Seven lots to date have signed to this incentive scheme and building has already started on three of those lots. Such schemes aim to avoid economic involution land being "locked away" for investment purposes plus serves to generate a growth atmosphere. Indeed there are also associated positive local economic multipliers for businesses and services with construction and population growth, particularly if dwellings are occupied on a full-time basis.

Housing and commercial properties are still relatively affordable compared to most metropolitan areas, though there is potential for increasing prices to become a disincentive if demand outweighs supply. Continued growth in land development requires effective and efficient planning processes to keep pace with demand and capture private investment opportunities when they arise. The majority of interviewees reported that the “system” for land release and development approval is confusing, slow and off-putting for developers and small business owners. Issues that were reported are summarised in Table 4.6.

Table 4.6 Summary of Issues Associated with Land Development in the Central Coast Subregion

Issue	Comments
Land rezoning: limited availability of freehold land zoned for residential, commercial and industrial purposes	<p>This particularly impacts residential development in Cervantes, industrial land development in Leeman, and commercial development in Lancelin. In Lancelin, for example, there is UCL in the centre of the commercial area. The process for rezoning and addressing native title has proven lengthy and convoluted and is restricting the much needed expansion of a number of businesses which have outgrown their premises.</p> <p>One third of the Shire of Dandaragan is National Park or UCL. While this percentage is high for Western Australian local governments, the quality of parkland is a draw card for tourists and new residences.</p>
Land rezoning: traditional agriculture vs. economic diversification	<p>A number of local government representatives reported that their Council members were hesitant in approving applications to rezone agricultural land for commercial and light industrial purposes. The rezoning of rural areas is also not encouraged under the current State Planning Policy. This conservative and risk adverse approach was viewed by a number of interviewees as hindering rural diversification and private investment.</p> <p>Careful local planning is vital to ensure ad hoc development does not create a servicing problem for local and State governments. The Shire of Dandaragan now assesses approvals on a circumstantial basis but is still limiting subdivision of rural blocks for selling. Some niche industries that have been given approval include a number of Bed and Breakfast operations, micro-brewery, flower industry, olive growing, and some small scale citrus and grape orchards.</p>
Lack of strategic land use planning	<p>This particularly applies to Leeman and the Shire of Coorow. To date there is a blanket residential zoning in Leeman and commercial zoning was granted ad hoc. There is therefore no dedicated commercial centre which does not make it easy to cater for or attract new businesses to the town. It is also restricting business expansion as many premises are bound by residential dwellings. The Shire of Coorow is developing a new land use strategy to meet Leeman’s planning needs but will not be actively seeking new industry until this is completed.</p>
Environmental constraints	<p>The need to protect environmentally sensitive and fragile areas will restrict the nature and extent of particular land and business developments.</p>
Economic constraints	<p>There are a number of proposed residential developments by private investors in the Central Coast subregion including developments south of Lancelin and north of Jurien Bay. Applications have been lodged with the Western Australian Planning Commission but are pending favourable market and economic conditions before significant financial commitment is allocated.</p>
Unregulated squatter shacks at Wedge and Grey	<p>The proposed removal of the shacks continues to be a contentious debate. It was argued by a number of tourist operators in the subregion that it will be difficult to promote the Central Coast effectively while the shacks exist in current condition. The sites do pose management difficulties for Department of Environment and Conservation (DEC) particularly in terms of waste management and fire safety. The recent decision to delay the removal of the remaining shacks was described by one tourist operator as “goal post</p>

	moving” by the government.
Lack of industrial land	<p>As Table 4.5 lists, there are a number of light industrial lots available throughout the five coastal towns with LandCorp looking to release further blocks in Jurien Bay. Ardross are also investigating the demand for mixed residential/light industrial blocks to be released in their next land parcels. It is unlikely that more light industrial lots will be released by LandCorp in the other towns while unsold properties remain on the market.</p> <p>There were, however, mixed responses from those interviewed regarding the affordability of the light industrial land in the subregion. Whilst a number of business owners interviewed believed lots are overpriced, they are competitive with metropolitan prices, which is important when attracting industry from outside the subregion. Accurately valuing land in Wheatbelt communities has been an ongoing issue with many holding onto a decline mentality which sees properties devalued, wrongly assuming that is the only way to boost demand.</p>
Lack of commercial and administrative premises	This particularly applies to Jurien Bay as the subregional centre to accommodate growing private and government sectors. It was reported that a number of government agencies require larger premises to cater for increased activity and to secure increased resources.
Lack of builders	Local building contractors are used where possible but in order to keep pace with construction demand builders are being sourced from Perth and Geraldton. Building costs in Western Australia are expensive and this is more pronounced in regional areas.

4.5 Tourism and Recreation

4.5.1 CURRENT

As one interviewee described, “*tourism is the big unknown in this region*”. In advanced economies such as Australia’s, there is a shift from places being focused on production to consumption. As such, places are themselves consumable products (Walmsley 2003). This consumption also includes the real dollar valuing of amenity; valuing, for example, views, parks, nature. On a national scale there are increasing disposable incomes, personal mobility and retirees with access to capital from accumulated superannuation. This undeniably provides opportunities for the development of leisure, recreation and tourism industries.

The role of tourism in rural areas has been the subject of much academic debate. It is tourism’s capacity to facilitate expansion of complementary businesses and employment in the hospitality, transport and entertainment service sector that has led many, including federal and State governments, to herald rural tourism as the solution to reducing negative impacts of insecure returns from traditional agricultural commodities and to stabilise regional economies (Tonts & Selwood 2003). As Frost (2001, p. 8) indicates however, such enthusiasm ‘needs to be tempered with business realities’. Beyond the obvious difficulties posed from distance from major metropolitan centres and lack of infrastructure, many tourism ventures in regional Australia have multiple competing objectives, lack of product, lack of community support and conflict between institutional and industry structures. This sector is also particularly market dependent and therefore has the capability of being quite volatile and difficult to quantify.

Interviewees associated with tourism and hospitality sectors in the subregion were confident that visitor numbers have gradually been increasing over the last five years. Indeed the Gingin Observatory

reported a 10% increase in numbers from an estimated 4,700 annual visitors in 2008/09 to over 5,000 visitors in 2009/10. The majority of tourists are self-drive and from the domestic market. The Pinnacles, however, is one location that does attract international visitors and has well-established tours operating frequently. Table 4.7 lists some important elements of the tourism and recreation industry that the Central Coast subregion can build upon.

Table 4.7 Tourism Opportunities in the Central Coast Subregion

Focus areas	Comments
Positive tourism multipliers	<ul style="list-style-type: none"> ○ The tourism sector can provide employment opportunities, both skilled and unskilled being a labour intensive industry. ○ The sector also increases local income and creates increased gross national product. ○ Growth in the tourism sector requires the development of infrastructure that will also help stimulate local commerce and industry. Indeed many tourist and recreational facilities can be used by the local population. ○ The rise of nature-based tourism in the subregion justifies environmental protection and improvement.
Important tourist trends (Hayfield, Johns & Miller 2006)	<ul style="list-style-type: none"> ○ Experience the environment ○ Meet local people ○ Understand local country ○ Enhance family life ○ Rest and relax in pleasant settings ○ Pursue special interests and skills ○ To be healthy and fit ○ Self: protection, safety, and reward
Activities based tourism and recreation	<ul style="list-style-type: none"> ○ The subregion has potential to expand and become a key area in some high yield niche adventure activities. Currently the subregion really only caters well to those who supply their own equipment. ○ Jurien Bay Skydiving established their business in Jurien Bay due to the potential of the IOD in increasing the accessibility and exposure of the region. They are now the only operators that offer beach landing in Western Australia. Currently averaging 15-20 drops per week. ○ Lancelin Windsurfing Classic already attracts over 8,000 tourists each year and the Lancelin Bike Festival had nearly 700 cyclists compete in 2010 ○ There is scope to expand 4WD, quad-bike tours, fishing, diving, surfing, kite surfing, and sand boarding activities in the subregion. Events associated with these activities are increasingly being pushed to the peri-urban areas of the city due to urban sprawl
Nature Based Tourism	<ul style="list-style-type: none"> ○ This is a growing sector with great potential in the subregion¹⁰ ○ Intensity of use and development of sites should be in accordance with the environmental sensitivity of each area
Expand existing services	<ul style="list-style-type: none"> ○ With the decrease in travel time associated with the IOD there is capacity to include additional regional activities on already well-established tours of the Pinnacles
Marketing	<ul style="list-style-type: none"> ○ Tourism WA's <i>Australia's Coral Coast</i> is a great attempt to create regional links and a regional image. There are ample opportunities for local tourist operators to link in with each other in terms of cross-promotion, offering coordinated packages and targeting new clientele. These links should be created geographically east-west as well as north-south. ○ Branding the region as a "stop over" destination to promote overnight accommodation, particularly capturing the grey nomads before they travel further north in the winter and the international and national "around Australia" travellers. For example, one business owner in Cervantes actively encourages sunset/sunrise tours of the Pinnacles which prompt at least one night's stay in the town. ○ There is room for increased targeting of international visitors.

¹⁰ Please refer to Priskin's (2003) thesis, *Regional Planning for Nature-Based Tourism in the Central Coast Region of Western Australia*, for more information.

One State government representative indicated that nearly ALL businesses in these coastal towns are in tourism, whether directly or indirectly. This includes tradesmen, for example, as much of their business comes from servicing accommodation and food establishments. Thus, providing after hours service and accommodating extra service during peak times is essential. Encouraging businesses to approach the tourism sector in this way is relevant for the entire subregion.

Stakeholder engagement identified a number of prominent issues that impact the development and expansion of the tourism and recreation sector in the Central Coast subregion. These are summarised in Table 4.8.

Table 4.8 Issues Associated with the Tourism and Recreation Sector in the Central Coast Subregion

Issue	Comments
Investment	<ul style="list-style-type: none"> ○ Predominately reliant on private capital ○ In terms of dealing with financial institutions, investing in tourism infrastructure is perceived as relatively high risk and therefore often attract restrictive loan agreements ○ The most common accommodation types in the subregion include caravan parks and self-contained holiday units. Interviewees identified the need for 3-4 star accommodation options. This means higher financial risk but potentially more profitable investment. ○ As Cassidy and Guilding (2010, p. 421) describe the main reason for growth in strata titled development is that it 'presents an opportunity to spread the risk originally assumed by the developer (and banking institution) amongst many investors (usually unsophisticated) and many institutions, who provide the capital for the development to proceed'¹¹. Issues, however, can arise with housing both resident owners and short-term renters in terms of: <ul style="list-style-type: none"> ▪ Some short-term tourists exhibiting limited consideration for long-term residents ▪ Resident owners not considering themselves involved in the tourism industry; indeed there is limited engagement in destination tourism management by the majority of stakeholders involved in strata titled tourism accommodation (Cassidy & Guilding 2010) ▪ Investor owners wishing to maximise economic return by maximising the unit's rental revenue and minimising costs associated with maintaining a unit.¹² ○ Local governments in the subregion struggle to economically justify subsidising attractions, services and amenities for non-rate paying tourists (e.g. car parks, public toilets, access to tourist facilities, information centres). ○ As Hayfield, Johns and Miller (2006) identified, market knowledge for the subregion is lacking in depth and precision.
Operators	<ul style="list-style-type: none"> ○ DEC manage significant parcels of land in the Central Coast subregion whether it be national parks, marine parks, conservation parks, or nature reserves. Key responsibilities of the department include conserving biodiversity and protecting, managing, regulating and assessing the State's natural resources. DEC manage Nambung National Park, the Pinnacles, and the Pinnacles Desert Discovery Centre. Questions were raised by a number of interviewees regarding the effectiveness of DEC functioning as a tourism promotion and marketing agency for these iconic attractions. Similarly, DEC are not supportive of increasing adventure activities on State managed properties due to budget limitations and the management capabilities associated with liability issues. This includes opening up caves for visitors or lakes for recreation use. ○ Perception of quality of service is essential for repeat clientele, which is an important ingredient for success in the tourist industry. ○ Small privately owned and operated tourism businesses in the subregion can be done so by people with 'strong non-commercial motives, such as the maximum enjoyment of their lifestyle or special interests' (Frost 2001, p. 2). This has a particular impact on business opening hours. Late night and weekend trading, often essential for catering for the tourist market, can prove

¹¹ Strata titled property is the 'subdivision of land and/or buildings into units, which can be owned separately, and common property, which is owned communally' (Ball 1984, in Cassidy & Guilding 2010, p. 421).

¹² For further discussion regarding the impact of combining tourist and permanent residential accommodation on tourist zoned land and the impact of strata titling of tourist accommodation please refer to Western Australia's Tourism Planning Taskforce Report (Department for Planning and Infrastructure 2006).

	<p>difficult for small operators. One interviewee acknowledged that high business turnover in the hospitality industry can be a result of burn out from the long hours required with little option to employ staff.</p> <ul style="list-style-type: none"> o Further conflict is evident in the subregion as businesses are faced with the “dilemma” of either cooperating or competing with other operators in their community and subregion to ensure that their position in the market is known to potential visitors.
Visitors	<ul style="list-style-type: none"> o Many tourists visiting the Central Coast subregion are self-drive and self-sufficient tourists and either do not stay for extended periods or spend little money in the local towns.
Rural realities	<ul style="list-style-type: none"> o Tensions can arise from risks posed by the interactions of rural industry with tourism and rural communities with tourists.¹³ Knowd (2001, p. 6) argues that there is often difficulty reaching a balance in meeting the ‘expectations of the city’ whilst acknowledging and validating the ‘realities of the country’. o Isolation can increase the expense of tourism related products and make it difficult to compete with other well established regions and even cheap travel options in South East Asia. o Interviewees identified that some of the smaller communities in the subregion, such as Leeman, currently lack the critical population and visitor mass to attract private investment to expand or develop new tourism businesses. o While the majority of those interviewed were keen to see an increase in tourist numbers in the subregion, some mentioned that not all community members were as enthusiastic. Particularly the longer term residents have concerns that visitors will change, both consciously and unconsciously, the style and feel of the community. Indeed a paradox exists whereby while tourism aims to ‘preserve rural culture and heritage’, it simultaneously ‘facilitates cultural exchange, transformation and social context’ (Knowd 2001, p. 20). As Tonts and Grieve (2002, p. 58) argue, while development based on the ‘consumption of idealised rural landscapes and cultures’ can contribute to the accumulation of capital in rural areas, it can also result in the destruction of those aspects which consumers find attractive’. o A number of operators interviewed voiced their frustration with the lengthy, convoluted and “short sighted” government approval processes both at the local and State level not keeping up with private industry needs to respond to market opportunities. One operator reported that if it was not for a couple of proactive and supportive individuals recognising the benefits of this new venture it would not have succeeded through the local government approval process. Rural communities can come to rely on select individuals with leadership abilities to enable change through establishing new patterns of action and belief (Davies 2005).
Nature of the tourism beast	<ul style="list-style-type: none"> o Service and consumption-based industries can be characterised by low wages, low skilled and seasonal/transient employment (Gurran, Blakely & Squires 2007). o Tourism in the subregion is multisectoral and spatially widespread. Indeed there are a large number of tourist operators that are not regionally-based but derive an income from bringing visitors to the region.

4.5.2 PLANS IN THE “PIPE WORKS”

This section briefly summarises tourism and recreation ventures (accommodation, eateries and events) that are at various stages of planning and development in the Central Coast subregion. This information was gathered from the stakeholder interviews conducted in the subregion and is not an exhaustive list.

Accommodation:

- There are plans in Jurien Bay for a resort style development by a private investor. Planning applications are soon to be at community consultation phase for comment on the proposal

¹³ Examples of the negative elements that are associated with rural tourism development are vandalism, bad behaviour, damage by vehicles to bush roads and tracks, the “tarting up” of places for tourists, and lack of respect for private land (Knowd 2001).

- There are plans currently going through the local government approval process to establish an aviation training component from the Jurien Bay airstrip. This business owner has also applied to build accommodation linked to recreational aircraft space to cater for this niche sector
- Adross are looking into resort development through strata titling in Jurien Bay
- Stage 2 of the Lancelin Lagoon development by Australian Development Consultants also offers resort style strata title tourist accommodation
- Humphrey Land Developments, a Mid West region property developer, has purchased the Leeman Caravan Park with plans to establish a resort on the grounds. Development has been stalled due to the GFC

Eateries:

- Investigation is underway to determine the commercial capacity of a restaurant/function centre and factory tours at the Indian Ocean Rock Lobster premises. The potential to link with Pinnacle tour operators is also being discussed
- Plans for a micro-brewery south of Jurien Bay have been approved by the Shire of Dandaragan. Investors are keen to see increased visitation to the region with the opening of the IOD before proceeding with the plans

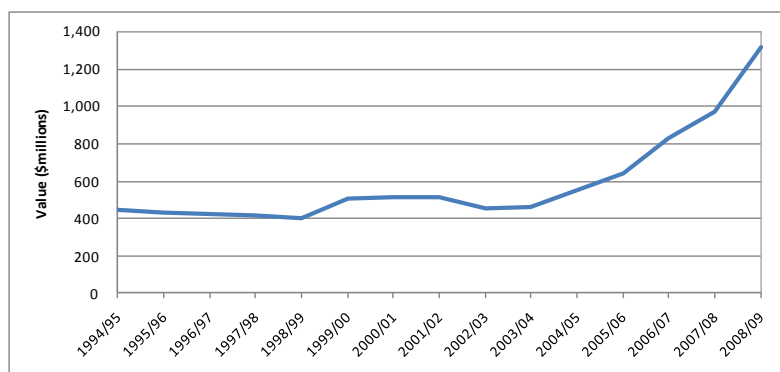
Events¹⁴:

- There are discussions by business owners in the subregion wishing to establish an events company to coordinate and host events at key locations, such as weddings at the Pinnacles

4.6 Mining

As evident in Figure 4.5, in 2008/09 the Wheatbelt generated over \$1.3 billion in minerals production. This is an increase of 35% from the 2007/08 value and an increase of nearly 200% and \$872 million from the 1994-95 value (Department of Mines and Petroleum 2009). The Central Coast subregion is a significant contributor to the State's value of gypsum and heavy mineral sands in particular. While figures in Table 4.9 include data from local governments outside of the study area, it does provide an indication of the value of mineral extraction in the Central Coast subregion.

¹⁴ Events often provide critical 'place marketing' opportunities. In Western Australia, established examples include Blues at Bridgetown, Fairbridge Festival of World and Folk Music, and Busselton Jetty Swim

Figure 4.5 Value of Mineral Production in the Wheatbelt 1994/95 – 2008/09

Source: Department of Mines and Petroleum 2009

Table 4.9 Value of Mineral and Petroleum Sales by LGA

Local Government Area	Value (\$)	
	2007-2008	2008-2009
Carnamah and Coorow	291,961,431	273,416,677
Dandaragan	226,792,881	207,515,709
Gingin and Wyalkatchem	1,138,137	1,683,212

Source: Department of Mines and Petroleum 2009

Mining in this area of Western Australia is quite volatile in terms of commodity prices, mineral quality, and mining lifespan. The decrease in values in Table 4.9 between 2007/08 and 2008/09 has been influenced by commodity prices and recent mine closures or downgrades including the closure of Iluka's operations at Gingin and idling of operations at Eneabba. Leeman, in particular, has seen many families recently leave the town as a result of the downsizing of Iluka's Eneabba mineral sands mine to 20 personnel.

With a number of quality sites along the coast line, lime extraction will have a place in the subregion's local economy. Sites include Green Head Sands, Aglime Jurien, Jurien Lime Sands, Aglime Cervantes, Aglime Lancelin, Dala Pit (Lancelin), Rules Limesand (Lancelin), Optima Lancelin, and Optima Gingin (Gazey & Gartner 2009). The presence of coal and gas in the Central Coast subregion also present potential sector opportunities but investment and development will depend on international market conditions.

4.7 Summary

It is important to understand what dynamics are at play and are affecting the key sectors which shape the subregional economy. It is evident from the information presented in this chapter that external market forces, policy restructuring, and economic conditions at both State and national levels are having considerable local influence on the Western Rock Lobster Fishery and aquaculture ventures, agriculture, land development, tourism and recreation, and mining sectors. Those industries that have historically fuelled economic growth and development in the subregion are, in a number of the coastal towns, now taking a secondary role or are in a period of readjustment to new market conditions. This includes the

fishing and agricultural sectors. Growth industries, such as tourism and land development, are now playing an important part in the economic diversification of the Central Coast subregion.

The opportunities and challenges that each of these sectors face will have considerable influence on, but will also be affected by, the nature of in-migration, labour force characteristics, business and industry profiles, community attitude, and delivery of government services. The way this manifests and shapes local communities within the Central Coast subregion and for the subregional economy as a whole will be discussed in chapter 5.



5 – THE PROSPECT OF GROWTH

5.1 Introduction

As discussed earlier in this report, the IOD is likely to increase the awareness of the Central Coast subregion to visitors and potential residents alike. It alleviates one of the greatest barriers to development along that coast to date, that being accessibility. It must be acknowledged however, that a “road in” is also a “road out”. Discussions have taken place within the Jurien Bay Chamber of Commerce to identify economic leakages; that is, areas where people are leaving the shire to conduct business. Leaks can occur when products and/or services are unavailable or too expensive locally. It is recognised that these leakages can easily expand when people are prompted to visit larger centres, such as Perth or Geraldton, they will conduct other business while there, therefore affecting more businesses other than the one which caused the original leak. Industry groups and local governments should not become complacent on this issue.

Interviews conducted in the subregion revealed a split in predicting whether the IOD will flatten out or intensify tourist seasonality by either seeing a steady number of visitors all year round or increased concentration in the high season. The rate in which change is likely to be experienced now that the IOD is open is also uncertain. There are concerns from businesses in some of the smaller towns situated more than five kilometres from the IOD that the economic multipliers will be minimal if they do not entice travellers to make that turn off. Significant resources have gone towards an attractive new entry statement for Leeman and similar ideas have been suggested for Cervantes. There has also been interest in building link roads and enticing “foot traffic” once in town to encourage people passing through to visit local businesses. Interviews amongst local business owners, particularly in the hospitality industry,

revealed a distinct feeling of anticipated growth and opportunity. However, a number of interviewees predicted a “wait and see” attitude from new investors, developers and government services which will not translate in immediate regional economic growth. Being reactive rather than proactive, in this sense sees future development dependent on a quantifiable increased capacity to warrant expansion and capital allocation.

This chapter will explore the above issues in the context of the in-migration demographics, industry and business profiles, community attitudes, and government service provision. Such factors play a considerable role in ensuring that the Central Coast subregion is best placed to benefit from the industry and labour force opportunities presented with the opening of the IOD.

5.2 Demographics of In-migration

There are number of issues associated with attracting a high proportion of retirees, holiday homeowners and lifestyle seekers, including:

- Low labour force participation and high average age of population
- Many may not be entrepreneurial. In the case of retirees, O’Connor (2004, p. 9) suggests that they ‘provide a demand for population-related services, but not a workforce for any new and emerging industry or service activity’
- Housing prices start to reflect metropolitan earnings and mortgage capacity, reducing affordability for local labour force
- Slow conversion rate of sold lots to houses built; particularly emphasised during the GFC
- Retaining a direct foothold in the metropolitan area reducing local consumption levels

Discussions in the subregion revealed the perception that many new people moving to the area either do not need to work or do not wish to work. Clearly lifestyle or retirement-led migration does not guarantee employment generation. Without employment opportunities it is difficult to attract 25-35 year olds and on the flipside, without this younger population it is difficult to attract employers. Finding work for partners and availability of child care facilities adds a further element to this dilemma.

In the case of Jurien Bay, the slow rate of conversion of residential lots sold to built houses in Beachridge Estate has financial implications for the Shire of Dandaragan. The shire invests in and services the developing estate, in terms of upkeep of parks and rubbish collection, with few people actually living there full time using the facilities. It is rateable but questions do arise as to whether it is efficient use of rates without having a critical population mass. Similarly representatives from the Shire of Coorow reported that while 30-40 new houses have been established in the last couple of years there has not been an accompanying population increase with many of these dwellings not occupied on a full-time basis.

In towns such as Leeman, the seasonal labour force and resident population is very pronounced. One interviewee described that during the off season there are only four houses occupied on the main street parallel to the coast. This has a significant impact on how local businesses can operate during such times of the year. More than this, high numbers of unoccupied dwellings has implications for the appearance of the town in terms of vibrancy and property maintenance. Many investment properties are used as

holiday rentals in the five coastal towns so care needs to be taken to avoid tension between short stay visitors and resident population living and holidaying next door to each other.

Allocation of local government grants are determined by ABS population figures. Accurately capturing that figure during census collection has proven a challenge given the number of absentee landowners and seasonal labour force. Servicing a population with a high proportion of retirees, holiday homeowners and lifestyle seekers can therefore prove difficult for local government. Conflicts can arise where these landowners expect the same service provision offered in metropolitan areas but do not regularly use those services. What is required during the high season, in terms of ranger services, waste disposal and public amenities for example, can be unfeasible to maintain through the low season.

In the past the Shire of Gingin has applied for special consideration from the Western Australian Local Government Grants Commission on the basis of a formula which considered the discrepancy between the recorded residential population at the time of the census and the number of residential dwellings. An indication of the temporary population was derived using the average national household population to account for the shire's growing tourism industry, transient workforce, and aged population that require particular services. Additional grants were awarded to the Shire of Gingin and allocated to infrastructure in public areas to further attract and sustain visitor numbers.

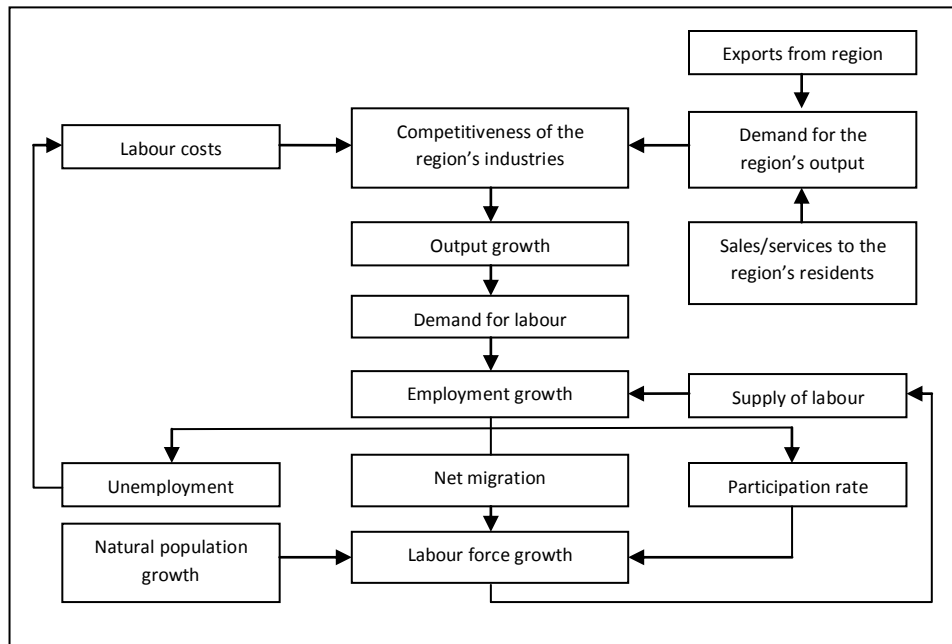
With the decreased drive time to either Perth or Geraldton airports, targeting fly-in/fly-out (FIFO) workers in the mining sector, given their above average incomes, has been identified as a potential group to invest in real estate in the subregion. Employment in the mining sector on a State level increased between 2001 and 2006 from 3.5% (28,486 people) to 4.3% (40,227 people) and FIFO continues to be an important employment arrangement (ABS 2006a). Jurien Bay is now approximately a two and a half hour drive to either Perth or Geraldton domestic airports and indeed the drive time between Lancelin and Perth's airport is only one and a half hours. Anecdotally, this is now considered a reasonable commute. While interviewees could list one or two FIFO families in their respective towns, given the isolation of some of these communities, to-date there has not been a significant in-migration of this subgroup to the Central Coast area. One property developer has made attempts to tap into this market by running a Turquoise Coast promotional campaign in the Pilbara, however it is understood that "word of mouth" and the subsequent snowballing effect is the most effective tool amongst the FIFO group to encourage consideration of the subregion as an attractive place to invest and live. Once numbers reach a feasible level, there is scope for mining companies to consider sponsoring shuttle arrangements from the subregion to either major airports or direct to site.

5.3 Labour Force Characteristics

As the *Competitive Regions* (ALGA 1999, p. 6) report states 'regions need to be able to provide a skilled labour pool as the skills and knowledge of a workforce are critical inputs to production and service delivery'. Figure 5.1 is a useful illustration of labour market dynamics, indicating that employment growth depends on the growth of a region's output, which is itself determined by the competitiveness of its producers and the demand for regional products¹⁵.

¹⁵ Please refer to Appendix 5 for further discussion on issues associated with skilled labour attraction and retention in regional Australia.

Figure 5.1 Model of Labour Market Dynamics



Source: adapted from Armstrong and Taylor 1993

It is important to acknowledge that there are considerable variations in the geographical structure of labour markets due to spatial differences in terms of:

- The main industries and employers
- The productivity of industries
- The wages and salaries offered by local employers
- Levels of capital investment
- The use of technology
- The availability of natural resources
- Accessibility and strategic locational advantages (e.g. access to markets, proximity to transport)
- The quality of infrastructure
- The quality of services, housing and other amenities
- The age structure of the population
- The educational characteristics of the population
- Governance arrangements

The Western Australian Workforce Development Plan (Department of Training and Workforce Development, forthcoming) forecasts that between 218,000 and 240,000 new jobs will be created in Western Australia by 2017 with the expansion of the State's economy. The report estimates that mining and construction jobs will account for 16.7% and 44% will be created in the retail; manufacturing; health care; education and training; and professional, scientific and technical services industries (Department of Training and Workforce Development, forthcoming, pp. 13-14). While major resource and infrastructure projects will provide the catalyst for this job growth, peri-urban and high-amenity areas will have a significant role in accommodating new workers.

Some important trends on a State wide scale recorded for the November 2010 quarter include (ABS 2010):

- The number of employed persons in Western Australia increased by 7,400 (0.6%)
- Industries recording the largest quarterly employment growth were construction (up 9,400 persons, 7%); administrative and support services (up 8,300 persons, 23%); agriculture, forestry and fishing (up 6,800 persons, 17%) and health care and social assistance (up 5,100 persons, 4.4%)
- Industries which recorded the largest quarterly employment losses were transport, postal and warehousing (down 9,500 persons, 15%); retail trade (down 9,100 persons, 7%) and public administration and safety (down 5,700 persons, 8%)
- In annual terms, employment in the mining industry experienced strong growth, with 21,800 (34%) more employed persons in the November quarter 2010 than in the corresponding quarter of 2009
- Strong annual growth was also recorded in construction (up 10,500 persons, 8%); agriculture, forestry and fishing (up 9,000 persons, 23%) and professional, scientific and technical services (up 8,200 persons, 10%)
- Manufacturing recorded the largest fall over the year to November 2010, down 12,500 persons (13%)
- Other areas to record a decline in annual terms were retail trade (down 7,800 persons, 6%) and transport, postal and warehousing (down 6,200 persons, 11%)

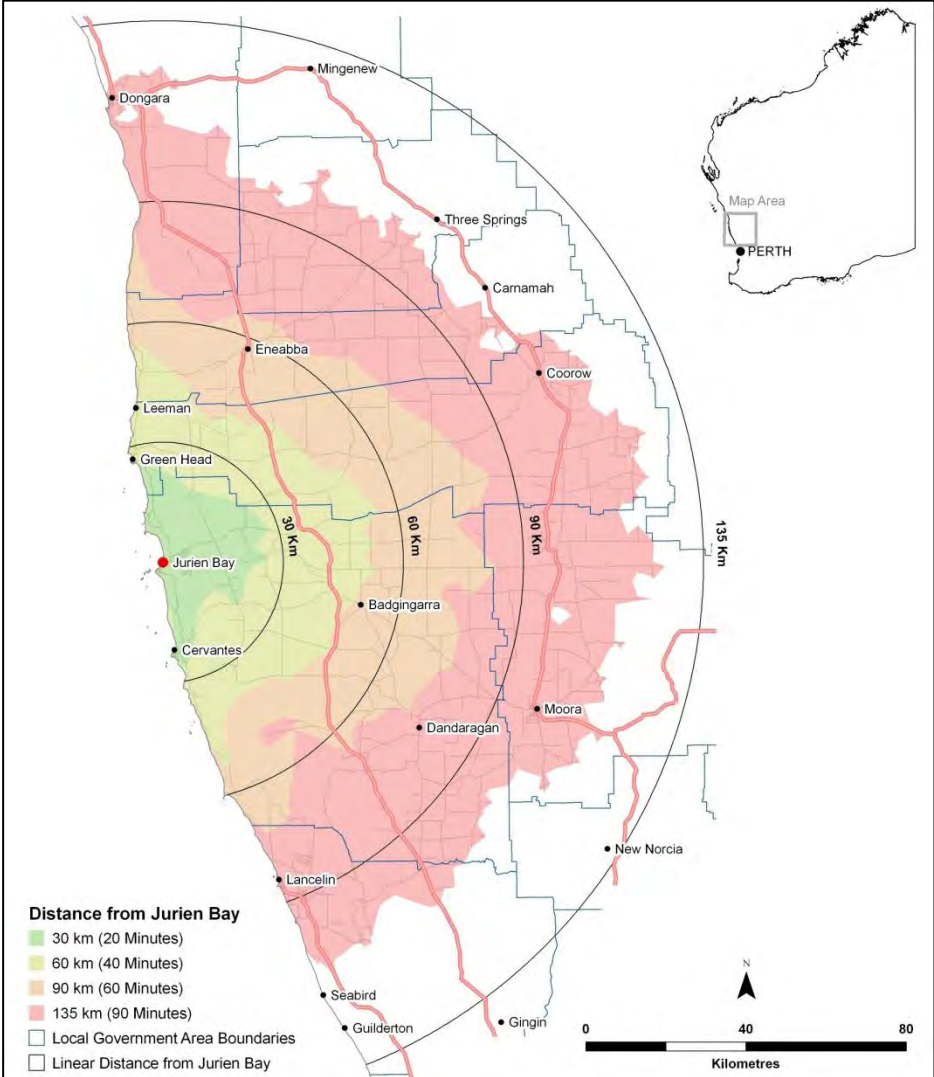
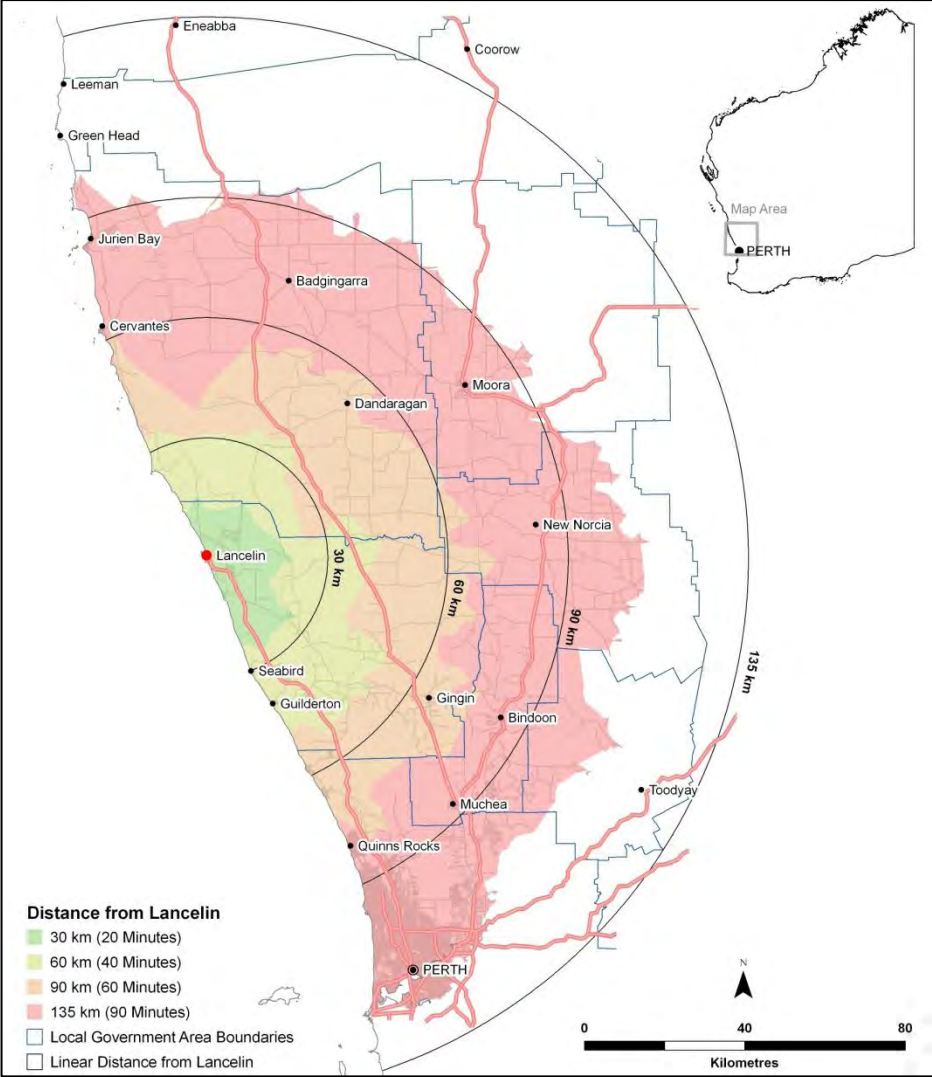
Interviews with a number of tourist and hospitality operators and retail businesses indicated that casual staff can usually be sourced locally. Employees in these areas, however, are often transient in nature as a response to seasonal fluctuations in demand. While it is difficult to compete with the high salaries offered in the mining industry, most of these businesses try to offer flexible working conditions to be an attractive employer. Where possible, government grants are accessed to establish trainee or apprenticeship positions, however, opinions varied on the ease of ability to access such programs and the amount of support and money available. As discussed in section 2.2.2 a significant percentage of youth in the subregion will leave the area for increased employment and training opportunities, this is more pronounced in the smaller towns of Leeman, Green Head, Cervantes, and Lancelin. For the very seasonal low-skilled labour requirements, for example orchard harvesting and rock lobster processing, backpackers are heavily relied upon.

Skilled positions, particularly government positions, are often externally sourced from the Central Coast subregion. It was reported that most government agencies do not find it difficult to attract personnel for available positions and many are indeed seeking further funding from central offices to increase capacity. Filling positions for short term contracts can be difficult as relocation without permanency, especially for families, becomes less of a viable option. This was reported to be the case for a number of one year contract positions available at DEC.

As listed in Table 4.6 there is a shortage of qualified building contractors in the subregion. With the growth in property development, local builders and many tradesmen are working at capacity. While preference is often given to local contractors, external tradesmen have had to be sourced for a number of recent contracts.

To gain an understanding of labour mobility and labour catchment areas for employment in the coastal subregion and neighbouring areas, a series of commuter zones from Jurien Bay and Lancelin were created using a Geographic Information System (GIS). According to local industry representatives and other interviewees consulted as part of this project, up to 60 minutes by car (one way) was regarded as the maximum commuting distance for most employees based in the coastal subregion. However, it was noted that the most realistic commute for employees was in the order of 30 minutes. Figure 5.2 illustrate the commuter zones using the existing road network based on an average travel speed of 90 km per hour.

Figure 5.2 Driving distances for the Coastal Subregion



Anecdotally, there is a larger commuter population in the areas closer to Perth. Representatives from the Shire of Gingin reported that this commuting flows in both directions with similar proportions of people who live in the shire commuting to Perth for work and alternatively people who live in Perth who commute to the shire. The majority of the permanent labour force in the central and northern areas of the subregion either work and reside locally or travel within the Central Coast subregion. It is estimated that travel times do not often exceed one hour. With the decrease in drive times provided by the IOD, businesses in the subregion have greater access to labour market pools in the metropolitan areas but similarly the subregion's labour force has greater access to employment options in the metropolitan area. Numbers commuting to other regions on a FIFO basis are currently small.

It is important to acknowledge that high regional labour mobility means that local training providers are training for other labour markets, as much as providers elsewhere are training for the Central Coast subregion's labour market. Opportunities to train locally play a very important role in meeting local labour force needs, however, it does not guarantee all vacancies will be filled. Further increases in population and visitor numbers will certainly place considerable pressure on most services in the Central Coast subregion as many currently operate at capacity during peak seasons. Employers will rely on the mobility of the State's labour force to respond to increases in demand.

Occupational mobility within the subregion is considered to be relatively limited in most occupations.

5.4 Industry and Business Profiles

Attracting new businesses is important for enhanced long term economic growth, diversification and increased employment opportunities, enhanced critical mass, and injection of new ideas and skills into the community (ALGA 1999). O'Connor (2004, p. 4) argues that 'lifestyle attractions might be a relevant factor in residential re-location and house purchase decisions but it is probably less relevant to the business and commercial development associated with coastal change'. Factors that influence how the Central Coast subregion can react, respond, and indeed foster future employment growth and industry development include:

- Expansion and capacity limits
- Deteriorating or improving economic performance
- Technology
- Capacity to pay for labour
- Demographic structure

Many interviewees listed hospitality and population services as the areas expected to have the greatest growth opportunities in the subregion, particularly with growing domestic and international recognition. Comments on existing hospitality and accommodation businesses in the five coastal towns indicated that there is mixed quality, consistency, and cooperation between operators. Many believed, however, that as competition grows a standard will be set, particularly in terms quality of service, opening hours and prices.

Interviewees also identified challenges to expanding and developing small businesses in the current subregional context. These included:

- Difficulty financing small business with increasing risk capital, particularly in the GFC economic climate
- Perceived high costs of commercial properties and rentals
- Current population numbers and immediate demand has often meant that multiple businesses offering similar products or services find it difficult to all remain viable. It can therefore be difficult to establish a new business without one closing down
- Fluctuations and seasonal changes in demand can be difficult for small businesses to manage particularly in terms of staffing and offering consistency of product
- Difficulty but also at times complacency for small businesses to invest in training, up-skilling and staff development
- Establishing businesses under financed with limited knowledge of the market and seasonal fluctuations has resulted in a high turnover of many operations in the subregion
- Businesses competing rather than cooperating or complementing each other. This occurs both on a local and region scale

It is worth drawing attention to the final point as it was highlighted quite strongly in the interviews conducted with local business owners and local government authorities. Many are said to be operating with the attitude “every business for themselves” rather than working together to provide a quality and coordinated local and regional product. Due to this fear of competition, new businesses are not always openly welcomed by existing commercial operators. Often businesses located in the smaller Central Coast towns feel threatened by businesses in Jurien Bay and, on a larger spatial scale, Jurien Bay businesses consider that they are fighting to compete with Perth and Geraldton businesses. Membership and participation in local Chamber of Commerce and Industry (CCI) groups is increasing slowly but still has a long way to go. For example, the Jurien Bay CCI has 20 members although it is estimated that there is between 65-70 local businesses. Becoming possessive of the market and taking a survival attitude limits cross marketing and cooperative packages between enterprises. Rather than promoting and effectively selling the town and subregion, marketing is individualised.

Emphasis on reaching a certain population threshold to generate “population driven” jobs was discussed by a number of interviewees in the subregion. Certainly a population increase is likely to influence sectors such as banking, retail, tourism, construction and entertainment. It is important to acknowledge that this will not be spatially uniform across the subregion. For example, Jurien Bay, as the subregional service centre, has an established greater functional complexity and concentration of functions relative to its population. Typically however, employment in these industries, in relative terms, have low economic wealth, job insecurity (e.g. short-term contracts, part-time and casual work) and uncertain career prospects. The ALGA (1999) recognise that population driven industry tends to *circulate* wealth in an economy, differing from knowledge based jobs which *generate* wealth and income. Therefore, ‘those regions that are able to develop wealth creating initiatives (driven by exports), while complementing this with consumption led growth (driven by population growth) will perform best in economic terms in the foreseeable future’ (ALGA 1999, p. 2).

Expansion and development of new businesses and industries can at times rely on external entrepreneurs. While this can be difficult for local governments and community leaders to source and plan for, ensuring that the subregion is attractive and ready for private investment is often within local community and government control.

5.5 Community Attitude

The overall attitude of a community, in terms of its willingness for development and change, does make a significant difference to fostering business improvement and industry attraction. Over the past forty years the coastal towns in the subregion have experienced significant changes. This is particularly highlighted in Jurien Bay, which has been transformed from a small “fishing community” to a growing subregional centre. However, as many interviewees pointed out, there will always be a divide between past and future; a divide between those who want to retain a community’s past ideal and those who want to experience growth and change.

For some there is a fear of changing the low-key character of their town with high-density residential, tourism, and commercial developments and a fear that the “smallness” of community, a point of attraction, would be lost. Whilst those community members can be vocal in their disapproval for new developments and businesses moving to the area, interviews also revealed an acceptance that attracting a larger population base is vital to supporting existing local businesses and securing better social infrastructure.

As one new business operator commented it is often the fear of the unknown that prompts some community members to be initially sceptical about new businesses and developments. In the case of Skydive Jurien Bay, the Shire of Dandaragan received letters of concern during the Council approval process in terms of fear of noise pollution and disruption caused by the town beach landings. Now in operation, the business owners have received nothing but positive feedback and community interest. They have particularly good relationships with local Jurien Bay businesses, especially with the pubs and cafes, as the skydiving business attracts many new visitors into town who will use other local facilities.

The role of entrepreneurs and community leaders with creative and enterprising foresight are vital in bridging the gap between those overly cautious community members and potential industries. An innovative, welcoming, and accommodating community approach is an attractive attribute for business owners looking to relocate or establish operations in a new location.

5.6 Government Services and Infrastructure

There is a distinction between how governments aim to bolster “people prosperity” and “place prosperity” (see Table 5.1).

Table 5.1 People Prosperity verses Place Prosperity

People Prosperity	Place Prosperity
<ul style="list-style-type: none"> • Actions directed at people irrespective of where they live • Targeting, for example, education, taxation, housing financial assistance • Allows individuals to make location decisions in light of market opportunities to achieve their personal or family objectives • Economic rationalisation is linked to this perspective 	<ul style="list-style-type: none"> • Actions targeted at places, recognising that economic activity is geographically specific • Targeting, for example, infrastructure, community facilities • Allocating funds is often based on population measures (e.g. unemployment rates, population distribution) • Helping places based on present populations can bear little relation to the geographies of opportunity or vulnerability

Source: Stimson, Baum & O'Connor 2003

Provision of government services in the Central Coast subregion is not only vital for the wellbeing of a growing number of residents but as indicated in section 3.2.1 is a prominent employing sector. The role that the availability and perceived quality of government services plays in the attraction and retention of both skilled and non-skilled labour force is significant and is an important consideration for new industries exploring establishment in a different area. More than this, service and development infrastructure is fundamental to an efficient and effective economy.

The town of Jurien Bay's prominence as the subregional centre has seen a concentration of government investment in services directed to that locality. There is a risk however, that existing physical infrastructure and service sectors are used to meet new demand and development on the coast with just marginal increments in their capacity. This is particularly the case for government office space in Jurien Bay. O'Connor's (2004) research indicates that this often occurs where there is strong seasonal element associated with a growing coastal community. Seasonal demand is not always viewed by government as justification for new services, infrastructure or community facilities. Further to this, new subdivisions in the smaller towns along the Central Coast have not seen accompanying provision of services beyond basic service delivery. In a climate of economic rationalism this is unlikely to soon change, however, it has resulted in a number of smaller communities resenting the concentration of services in particular towns and municipalities. As one local government representative stated, community perception can sometimes be insular and what certain local groups view as inadequate is not always shared by regional or central government offices. Local debate over what constitutes a "satisfactory" level of service provision is often quite subjective and this came through in the interviews.

Three areas of government service provision in the Central Coast subregion will be explored in further detail below. This includes education and training, health, and key development infrastructure.

5.6.1 EDUCATION AND TRAINING

While Jurien Bay District High School (JBDHS) has experienced an increase in student enrolments between 2006 and 2010, enrolment numbers in the other coastal towns located in the subregion have remained relatively stable over the past five years despite predicted overall population growth (see Table 2.2). This is not surprising given the nature of this growth being dominated by older age cohorts and land developers also reporting high numbers of existing residents or second home owners purchasing land and new housing stocks. To establish a new primary school, the Western Australian Department of Education (DoE) requires 1,500 new residential lots of approximately R20 zoning in a new development. Four to five primary schools in one area are needed before DoE considers establishing a new secondary school. Beyond this, DoE is rarely required to consider population growth/forecasting for their strategic planning. The upgrading or recoding of public schools and teacher allocation is determined by student enrolment numbers alone.

The education of year 11 and 12 students in the region is one issue that has received recent significant attention. Many district high schools, including JBDHS, have offered select year 11 and 12 courses since the school leaving age was raised to eighteen. This provides the option for students to complete their high school education in the subregion without having to board in Geraldton, Moora or Perth.

In 2010 DoE announced that senior school allocation funding for year 11 and 12 courses at district high schools would be removed. DoE deemed that increased options for students were available at less cost to the department at existing senior high schools. Due to many complaints state-wide regarding this decision, its broader implications, and the limited public consultation that DoE undertook, an inquiry

from the Standing Committee on Estimates and Financial Operations took place.¹⁶ This inquiry has resulted in limited reinstatement of funding for select schools. JBDHS has not had total funding for year 11 and 12 reinstated but in November 2010 the Minister for Education did announce that targeted funding to support Vocational Education and Training programs for year 11 and 12 will be allocated to 19 district high schools, including JBDHS (Standing Committee on Estimates and Financial Operations 2010).

Whilst viewing DoE's decision as short sighted, interviews in the subregion revealed significant local concern regarding the State's seemingly limited commitment to delivering adequate education services to what is deemed to be a growth area. Provision of a quality regional education service not only improves education levels of the regional population, it can increase the region's attractiveness to potential residents, encourage retention of skilled and gifted youth, and attract and retain an increasing number of teachers and education professionals to the region (Fabiansson 2006). This in turn has positive multiplier effects on the economic and social wellbeing of communities. Sending children away for education can place financial and emotional strain on families and interviews revealed families will leave the coastal towns when their children reach high school age. More than the economic impacts of having a percentage of the population leave the subregion, the associated social issues, such as decline in sporting and social organisations, deserve consideration.

With the scaling down of Jurien Bay's TAFE facilities, it is often considered easier to move to the metropolitan area to seek post-compulsory education than to stay in the subregion. It is unreasonable to expect that everything would be available in the region that is available in Perth, however, education and training courses that will help provide the skills critical to the subregion's economy do need to be accessible. As the ALGA (1999, p. 6) highlight, the 'requirement for a skilled labour force and a competitive industry base necessitates a quality education and training system'. It is critical that this system is capable of educating, training and re-training people throughout their working lives. The Shire of Dandaragan has flagged land adjacent to JBDHS as an ideal site for a larger TAFE facility. JBDHS is also attempting to tailor its vocational courses at the school for a coastal industry base. Whereas before links with C.Y. O'Connor Institute focused on agricultural qualifications, JBDHS now offers five new courses including:

- Certificate I Industry Studies
- Certificate II General Construction
- Certificate I and II Business Administration
- Certificate II Information Technology
- Certificate I and II Aquaculture – Seafood Operations

Opportunities exist to consolidate education and training funding and extend relevant courses to a wide demographic to ensure that the Central Coast subregion is in the best position to meet its industry and labour force needs.

¹⁶ Please refer to *The Removal of Senior School Allocation Funding for Year 11 and 12 Courses at 21 District High School* (Standing Committee on Estimates and Financial Operations 2010) for more information.

5.6.2 HEALTH

Government health services delivered in the Central Coast subregion fall partly under the management of the Wheatbelt Health Service and partly under the Mid West Health Service. The key health facilities in the subregion include Jurien Bay Health Centre, Cervantes Nursing Post, and Lancelin Health Centre.

The two major challenges facing health service delivery in the Central Coast subregion include:

- Availability of a coordinated range of quality health services across the dispersed population
- Attracting and retaining health workers, particularly doctors, nurses and allied health workers

Many local governments are resorting to funding incentives to ensure continued operation of the local health care service and retention of health care professionals. This can include providing “top-up” salaries to medical practitioners, subsidising premises, and/or providing residential accommodation, all of which places considerable financial and administrative pressure on those local governments. While having subsidised the doctors’ surgery in Jurien Bay for some time, the Shire of Dandaragan are now in the process of handing management to the resident doctors.

A number of interviewees identified the need to plan for hospital care to be located in Jurien Bay as the subregional centre. The nearest major hospitals are Joondalup Health Campus, Swan Districts Hospital, Moora Hospital, and Geraldton Hospital. Table 5.2 summarises the priority health needs for the coastal district as identified in community consultations undertaken in 2009.¹⁷

Table 5.2 Priority Health Needs in the Wheatbelt Coastal District

Hospital, emergency and medical	<ul style="list-style-type: none"> • Hospital care with observation beds in Jurien Bay to be used after minor illnesses or day surgery; x-ray facilities and visiting specialists • Access to medical services 24/7 with back up relief and more support for general practitioners (GPs) in Jurien Bay • Access to a female GP in Jurien Bay • Two permanent GPs in Jurien Bay with relief locum • Access to emergency medical care in Lancelin • Ensure access to emergency transport • Large medical facility in the Shire of Chittering • Ensure modern equipment and technology • Silver Chain Clinic in Gingin – not just homecare but a nursing centre that could be the first port of call in an emergency and cover weekend hours • Day surgery in Lancelin
Health Centres	<ul style="list-style-type: none"> • 24/7 emergency clinic with two GPs and allied health in Gingin • A medical centre with GP and allied health in the Lower Coast or alternatively a mobile team that regularly visits towns
Older people and carers	<ul style="list-style-type: none"> • Increased home and community care for older people and people with a disability, including in-home equipment • Affordable independent living units for older people in Jurien bay • A day centre in Gingin • A retirement village in Bindoon and Gingin • High and low residential aged care locally • Dementia care in Jurien Bay • Respite centre with 24/7 support in Jurien Bay • Silver Chain to coordinate services to retirees in Gingin

¹⁷ For the purpose of the *Wheatbelt Health Planning Initiative* (MMT Consultancy Services 2009) the coastal district comprises of the shires of Chittering, Dandaragan, and Gingin.

Palliative Care	<ul style="list-style-type: none"> • In-home palliative care • A palliative care hospice in Jurien Bay
Mental health and drug and alcohol	<ul style="list-style-type: none"> • Drug and alcohol awareness and intervention in Jurien Bay, particularly for schools, the fishing industry, parents and when there is an increase in tourist numbers during holiday periods • Mental health services, particularly psychology
Dental	<ul style="list-style-type: none"> • Dental care, particularly for adults and older people
Young people	<ul style="list-style-type: none"> • More programs for young people providing support and stimulation (e.g. "Rock and Water" Program across the Shire of Dandaragan)
Transport	<ul style="list-style-type: none"> • Need a complete overhaul of Patient Assistance Transport Scheme (PATs) e.g. choice of destination and specialist for the subsidy • Increase funding for travel to specialist medical care • Non-emergency transport to take the pressure off the ambulance volunteers • Need transport to health services in the metropolitan area
Nursing and allied health	<ul style="list-style-type: none"> • Local Silver Chain nurses on call in Gingin • Diabetes education/services in Gingin and Lancelin • Home nursing, e.g. community nurses or Silver Chain, in Gingin, Bindoon, Lancelin and the Lower Coast • Increased allied health • Increased visiting health workers in women's and men's health • Nurse practitioner services • Alternative therapists
Children	<ul style="list-style-type: none"> • More education for children in diet and exercise: perhaps in schools • Increased mental health services • Day care for babies and school age children, including children with special needs, such as Autism across the Shire of Dandaragan • Increased awareness of child health issues
Health education, promotion and prevention	<ul style="list-style-type: none"> • Increase the community's and GPs' knowledge of available services • Exercise groups for all ages • Increased preventative health focus and services e.g. increased mobile education and screening in areas such as cancer screening, drug and alcohol services and mental health services • Health programs through the Telecentre • Health education for all ages • More community support networks and groups e.g. seniors groups and playgroups) to be visited by allied health workers

Source: MMT Consultancy Services 2009

It is important that health service delivery keeps pace with the growing population catchment area of the Central Coast subregion. As the *Wheatbelt Health Planning Initiative* (MMT Consultancy Services 2009, p. i) identifies, on a national scale 'the modes of health service delivery are constantly changing with the introduction of new technologies, medicines and new health professional groups'. Rural communities should acknowledge that many services, traditionally provided in hospitals, can now be provided in a nursing clinic or even at home. Indeed the *Wheatbelt Health Planning Initiative* (MMT Consultancy Services 2009) found that there is a reduction of activity in local hospitals in the acute/sub-acute beds and a reduction in the length of stay of patients in the Wheatbelt, including in the Central Coast subregion. This report, and similarly the interviews, identified that there has been an increase in the use of hospital beds for older people requiring long term aged care and an increased demand for in-home aged care. The importance of improving emergency transfer services, both by air and road, should also not be understated.

Aged care is indeed emerging as both a significant employment generator and viable industry in the Central Coast subregion. The five coastal communities, and particularly Jurien Bay with the greater

concentration of services, are popular locations for retirement given the proximity to Perth, lack of crime, and natural amenity. The proposed development by R.S.L for 98 aged care units and a Community Centre in Jurien Bay will create both direct and indirect employment in construction and operation. Joint resident and wider community access facilities are included in the plans for this development. Local government is responsible for managing aged care homes in the smaller coastal towns. For example the Shire of Coorow manages four homes in Leeman but has identified demand for more to come on stream.

Similar to the provision of education and training, expanding health care services relevant to the subregion's demographics will not only serve to meet demand but will foster a growing area of employment, particularly for skilled positions. As one local government representative discussed, residents in the Central Coast subregion expect to see a migration of health services to coast with a growing population. Addressing the time lag between immediate demand and government investment and provision will be fundamental.

5.6.3 KEY DEVELOPMENT INFRASTRUCTURE

Development opportunity in the Central Coast subregion is dependent on government provision of telecommunications, water, and power. Adequate supply of such infrastructure is vital for industry and population growth. Increased investment in infrastructure and development projects will create employment and also provide economic stimulus.

Quality telecommunications, including phone coverage and internet broadband, is essential to promote industry innovation, generate new commercial opportunities and promote participation in the knowledge economy. Such infrastructure is also beneficial for distance education, e-health, staff retention and attraction, and the innovation of business processes. Table 5.3 lists the current telecommunication services to localities in the shires of Dandaragan and Gingin. This information was collected from a recent telecommunications survey conducted by the WDC¹⁸. The next phase of the survey will be to determine what new infrastructure needs will be required. This research will be conducted in 2011. Not surprisingly greater services exist in areas closest to Perth and those with higher populations.

¹⁸ The Shire of Coorow is not within the WDC boundaries and was therefore not included in that particular survey.

Table 5.3 Telecommunication Services for the Shires of Dandaragan and Gingin 2010

SHIRE	TOWNSHIPS	ADSL	ADSL2	BROADBAND WIRELESS	FIBRE TO THE NODE	FIBRE TO THE PREMISE	MOBILE PHONE BASE STATIONS	OTHER COMMUNICATIONS TOWERS (eg Police, FESA, mining company assets, LGA microwave systems)	KNOWN MOBILE PHONE BLACK SPOTS	DO YOU HAVE A DIGITAL TV TOWER IN THIS AREA?	DO YOU CURRENTLY HAVE DIGITAL TV RECEPTION IN THIS AREA?
DANDARAGAN	Badgingarra	no	no	poor	no	no	yes	no	yes	no	no
	Cervantes	yes	no	yes	no	no	yes	no	no	no	no
	Dandaragan	no	no	poor	no	no	yes	no	yes	no	no
	Jurien Bay	yes	no	yes	very small section	very small section of town	yes	no	no	no	no
GINGIN	Gingin	yes	no	yes	no	no	yes	no	no	no	yes
	Guilderton	no	no	yes	no	no	no	no	yes	no	no
	Lancelin	yes	no	yes	no	no	yes	no	no	no	no
	Ledge Point	yes	no	yes	no	no	no	no	yes	no	no
	Seabird	no	no	yes	no	no	no	no	yes	no	no

Source: WDC 2010

Local government representatives and property developers reported that negotiating with the Water Corporation to deliver adequate water supply to new land developments in the Central Coast subregion continues to be a challenge. While existing population centres are serviced by the State government's corporatised body, a number of new developments, such as the Lancelin Coastal Village and North Head development in Jurien Bay, fall outside the current licence areas. This requires developers to make an application to the Office of Water Regulation to extend the exclusive operating licence area (Pracsys 2003). As Pracsys (2003) identifies, these applications are treated on commercial basis and funding arrangements for new infrastructure or upgrades are negotiated with developers often on a full cost recovery basis.

Interviews in the subregion indicated that options for water supply upgrades are underway in the Shire of Dandaragan for Jurien Bay, however, the smaller towns, Leeman in particular, are struggling to raise any interest from the Water Corporation to address their supply issues. This also extends to addressing upgrades required for sewerage works. Without the provision of infill sewerage, higher density development is restricted. With the State government deferral of all new infill projects in June 2009, the Central Coast subregion is unlikely to receive funding for sewerage upgrades in the near future. Affordability for developers is an issue and the lack of critical mass in the subregion means that integrated sewerage schemes are less of an option. Given the coastal locality, soil types, and existing limestone ridges surrounding the towns, sewerage infrastructure upgrades will require the Water Corporation to be receptive to exploring alternative and creative options.

Power upgrades were listed by interviewees as a requirement to foster future development in many of the coastal towns in the subregion and is particularly important for industry attraction. While current electricity supply is sufficient for basic workshops and offices, meeting requirements for larger manufacturing industries will be difficult. In Leeman and Green Head, for example, intermittent power outages were frequent while the Eneabba mine site was in operation. Upgrades to the transmission line between Pinjar and Eneabba by Western Power, scheduled for 2011, will be important in addressing these infrastructure issues.

There is great potential for the Central Coast subregion to become a key area for alternative energy projects, particularly for wind turbines. The Emu Downs Wind Farm, located thirty kilometres east of Cervantes, has been in operation since 2006 and has 48 turbines with a capacity of 80 megawatt. This cooperative project between Griffin Energy and Stanwell Corporation can power 50,000 homes a year. In the three local government areas in the study region, there are a number of proposed power generation projects. These include, but are not limited to:

- Badgingarra Wind Farm (Griffin Energy/Stanwell Corporation Limited) – Shire of Dandaragan
- Joanna Plains Wind Peaker Project (Griffin Energy) – Shire of Dandaragan
- Dandaragan Wind Farm (Wind Prospect) – Shire of Dandaragan
- Oceans Farm Wind Farm (Energy Pacific) – Shire of Gingin
- Coolimba Coal and Power Project (Aviva) – Shire of Coorow

The listed projects are either going through local government or State approval or in the public consultation process. Recent research into potential areas to generate concentrated solar power identifies a number of sites along the Wheatbelt's coastline as being highly suitable given their proximity to transmission and transportation infrastructure, limited agricultural production potential, and high levels of incoming solar radiation (Clifton & Boruff 2010). Development of these projects has potential to generate significant employment during construction phase but also brings technical expertise to the subregion. Securing investment in the above projects, however, depends on Western Power prioritising the Central Coast subregion and upgrading existing infrastructure to manage additional power being supplied to the grid.

One local government representative described that State government often operate under a “come and then we’ll build” attitude. Being reactive rather than proactive can result in significant infrastructure lags. Headworks costs can be a disincentive for private developers and investors in the subregion and it is financially difficult for local government to fund infrastructure upgrades themselves. While the Royalties for Regions Country Local Government Fund can be used to attempt to leverage State money and interest, the Central Coast subregion is competing with larger infrastructure projects in other regions which Western Australia's infrastructure authorities tend to prioritise.

While construction of the IOD has only recently been completed, local governments in the subregion have identified areas that will still require government investment to ensure road safety and ease of transport. This includes upgrading the northern corridor out of Perth to cater for increased use, particularly caravans. The potential of rezoning Marmion Avenue to form a direct western coastal link has also been explored but given the alignment of conservation zones between Two Rocks and Guilderton, it is unlikely that this would receive prompt government attention. Having only one road in/one road out to a number of coastal communities, such as Lancelin and Cervantes, was identified by interviewees as an issue in terms of fire safety.

5.7 Summary

It was very clear from the interviews conducted with community and business members in the Central Coast subregion that significant confusion exists around understanding government processes for planning and allocation of resources. Further to this, local governments in the area all reported that they

have little cooperation or communication from central government agencies regarding strategic planning, particularly for education and health services.

Most State departments carry out their forward planning in isolation and as discussed above have a reactive approach to community demand as opposed to a proactive planning system. In terms of planning for growth anticipated to be associated with the opening of the IOD, local governments have gauged a “wait and see” attitude from most government agencies and private investors. One representative acknowledged, however, that this is to be understood to a degree as the expected growth or pace of growth is not guaranteed or understood. This does result in a degree of uncertainty amongst community and business operators in terms of the government’s commitment to fostering development in the Central Coast subregion but also forward planning for their own ventures.

Employment growth and industry development and expansion in the Central Coast subregion face a number of challenges around the nature of in-migration, labour force characteristics, industry and business profiles, community attitudes and the provision of services. As an area poised for expected population growth, however, this section has also identified areas of opportunity for communities, government and private investors to capture. This includes understanding what different population demographics can offer to the social and economic fabric of each coastal town, harnessing and taking advantage of an increasingly mobile labour force, encouraging creative niche industries, and building upon population driven services. The following section will expand on this further.



6 – RECOMMENDATIONS

6.1 Introduction

‘Influencing the private sector’s motivation to accumulate wealth involves setting the conditions for rewarding opportunities to be created and exploited. Creating a competitive economic environment, providing strategic infrastructure and a capable workforce are influencing factors in this scenario’ (ALGA 1999, p. 3).

Research undertaken for this report highlights that there is no “silver bullet” industry that can simply be targeted to secure economic and employment growth in the subregion. Injection of new capital in a diversifying market will be a key driver of economic expansion and job creation. Opportunities exist to expand existing businesses, increase entrepreneurial prospects, and bring outside industries to town. At a general level, Hustedde, Shaffer and Pulver (2005) describe that communities should be pursuing the following strategies for economic growth:

- Attracting new basic or export employers
- Capturing existing markets
- Encouraging the start-up of new firms
- Helping existing firms become more efficient
- Using aids and programs from broader levels of government

As economic benefits are not guaranteed simply through population increases, steps need to be taken to ensure that communities in the Central Coast subregion are best placed to manage growth, secure investment, and generate employment opportunities. This will require partnerships and coordination between all levels of government, the private sector, and community.

This chapter will summarise key issues and opportunities addressed in this report and will also recommend strategies and actions required for employment and industry development for the Central Coast subregion. While many of the social and economic factors are linked to global and national processes, a considerable proportion of the specific barriers to employment and industry development have the potential to be tackled at a local or regional level. Local communities are often best placed to generate creative and practical approaches. It is important to note, however, that they often will still require support and guidance in implementing these solutions. This section will focus on strategies that are, or can be, implemented at the local or regional level.

6.2 SWOT Summary

Table 6.1 is a SWOT summary with a chapter breakdown for easy reference of the subregion's strengths, weaknesses, opportunities, and threats.

Table 6.1 SWOT – Central Coast Subregion Employment and Industry Development

Strengths	Weaknesses
<p>Chapter 2</p> <ul style="list-style-type: none"> Population and visitor growth experienced in most coastal towns in the subregion creates demand for new services and job opportunities Growth resulting from northern urban expansion and amenity migration attracting high percentages of retirees, holiday homeowners and lifestyle seekers <p>Chapter 3</p> <ul style="list-style-type: none"> Relative even distribution of employment across sectors in the coastal locations, as opposed to the local governments as a whole, reflects a degree of diversification in those economies High percentage of employment in the construction sector is often indicative of current and future population growth and building/infrastructure investment <p>Chapter 4</p> <ul style="list-style-type: none"> Growing horticulture and viticulture development making a significant economic contribution both from value of product and associated support ventures Availability and affordability of residential, commercial and industrial land Private property developers have considerable interest in the larger coastal towns in the subregion Positive economic and social multipliers associated with growth in tourism and recreation sector Well established tour companies connected to the international tourism market operating in the subregion Niche industries establishing in the subregion Presence of mineral resources in the subregion Select individuals with leadership abilities enabling 	<p>Chapter 2</p> <ul style="list-style-type: none"> Under representation of people aged 15-34 years Over representation of older age cohorts which can contribute to low labour force participation rates The Shire of Coorow has not experienced the same level of population, visitor, and employment growth or emergence of new enterprises <p>Chapter 3</p> <ul style="list-style-type: none"> Degree of local income “leaking” to outside economies <p>Chapter 4</p> <ul style="list-style-type: none"> Unsuccessful aquaculture ventures Smaller communities struggle to attract private property developers Slow conversion of sold lots to dwellings can result in land being “locked away” for investment purposes with little impact on population and economic stimulus Perception that the government planning system for land release and development approval is confusing, slow and off-putting for developers and small business owners Limited freehold land available to rezone for development Unresolved decision regarding the removal of unregulated squatter shacks at Wedge and Grey Lack of strategic land use planning in a number of coastal communities in the subregion Lack of builders Self-drive and self-sufficient tourists either not staying for extended periods or spending little money in towns A number of mines in the subregion have recently been closed or downgraded

<p>change through establishing new patterns of action and belief</p> <p>Chapter 5</p> <ul style="list-style-type: none"> Increased accessibility and awareness of the subregion with the opening of the IOD Concentration of government services in Jurien Bay as the subregional centre 	<ul style="list-style-type: none"> Difficulty attracting private capital and securing financial loans for tourism investment and small businesses <p>Chapter 5</p> <ul style="list-style-type: none"> High number of unoccupied dwellings has implications for the appearance of towns in terms of vibrancy and property maintenance Difficulty accurately capturing the percentage of population that are transient workers or absentee landowners Fluctuations and seasonal changes in demand can be difficult for small businesses to manage particularly in terms of staffing and offering consistency of product Businesses competing rather than cooperating with each other Headworks costs can be a disincentive for private developers, investors and local governments Upgrades to key development infrastructure, such as telecommunications, water and power are needed for industry attraction and expansion
Opportunities	Threats
<p>Chapter 2</p> <ul style="list-style-type: none"> Attract young people to the subregion with employment opportunities Attract increased visitor numbers with the opening of the IOD and an opportunity for seasonality to “flatten” Capture “footloose” businesses <p>Chapter 3</p> <ul style="list-style-type: none"> Reduce “leakages” of income from the local economy by providing quality and competitive goods and services and encouraging local investment <p>Chapter 4</p> <ul style="list-style-type: none"> Potential to develop a considerable aquaculture industry Further promote intensification and diversification of agriculture, particularly around the horticulture and viticulture industries Provide further incentives to encourage timely building activity on sold lots to create a growth atmosphere and positive economic multipliers for the local construction industry Foster employment generation and new business ventures in the growth industries, e.g. construction and tourism Develop a high profile activities-based tourism and recreation industry Expand nature-based tourism ventures Consolidate and market <i>Turquoise Coast</i> as a regional brand and quality “stop over” destination 	<p>Chapter 2</p> <ul style="list-style-type: none"> Limited employment opportunities will discourage population growth Minimal increase in visitor numbers despite opening of the IOD Consumption-based industries (i.e. tourism and hospitality) can be characterised by low wages, low-skill requirements, and seasonal employment <p>Chapter 4</p> <ul style="list-style-type: none"> Restructure of the Western Rock Lobster Fishery is likely to result in decrease local employment in the sector and negative multipliers for local businesses Lull in the State’s property market Increasing property prices and/or cost of building could become disincentives if demand outweighs supply Communities wrongly assuming that the only way to boost demand is to devalue properties Dependent on overseas markets for key industries including fishing, agriculture, mining, and tourism Lack of understanding and difficulty quantifying opportunities in the tourism and recreation sector and benefits associated with the opening of the IOD Tension between rural industry with tourism and rural communities with tourists Mining in the area is volatile in terms of commodity prices, mineral quality and mining lifespan <p>Chapter 5</p> <ul style="list-style-type: none"> New investors, developers, and government taking reactive rather than proactive approach to forecasted population increase which will not translate to immediate regional economic growth

<p>Chapter 5</p> <ul style="list-style-type: none"> • Attract FIFO workers as a potential group to invest in real estate in the subregion • Larger catchment area for commuter labour force with the decrease in drive times provided by the IOD • Entice “foot traffic” in towns to encourage people to visit local businesses • Increased competition amongst businesses is likely to improve quality and consistency of local goods and services • Business clustering can foster a quality and coordinated local and regional product • Reaching a certain population threshold will provide opportunities for “population driven” jobs, growth for existing local businesses, and securing better social infrastructure • Attract knowledge-based initiatives alongside consumption based enterprises • Increase education, training, and health facilities to what is deemed to be a growth area to not only meet demand but foster a growing area of employment • Subregion is well positioned for creative solutions for key infrastructure development (e.g. water supply and reuse facilities and alternative energy enterprises) 	<ul style="list-style-type: none"> • Conflicts can arise where retirees, holiday homeowners and lifestyle seekers expect the same service provision offered in metropolitan areas but do not regularly use those services • Establishing businesses under financed with limited knowledge of the market and seasonal fluctuations can result in high turnover of operations in the subregion • Seasonal demand is not always viewed by government as justification for new infrastructure or population facilities
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6.3 Actions

The action items recommended below have not been limited or refined to specific sectors. When reading, however, the growth potential of the following industries in the subregion should be acknowledged:

- Tourism, hospitality, and recreation (particularly activities/adventure-based and nature-based ventures, accommodation facilities, recreational aviation and niche industries)
- Alternative energy initiatives (e.g. wind and concentrated solar power generation)
- Diversification and intensification of agriculture (e.g. alternative livestock and horticulture operations and associated processing and management services)
- Aquaculture ventures
- Population driven services (e.g. immediate demand for aged care services)
- “Footloose” ventures where people relocate first for lifestyle choices and establish business later
- Construction and land development sector

It is recommended that a Central Coast Economic Alliance is established to coordinate infrastructure investment and project delivery. It will be important for such a group to have a subregional focus and encourage local industry and community groups to act collaboratively, avoiding local fragmentation. The Central Coast Economic Alliance will be responsible for prioritising and overseeing activity generated from the actions listed below.

Membership should include representatives from:

- Wheatbelt Development Commission
- Mid West Development Commission
- Shire of Dandaragan
- Shire of Gingin
- Shire of Coorow
- Ardross Group of Companies
- LandCorp
- Chamber of Commerce and Industry Western Australia
- Industry bodies (e.g. Professional Fishermen's Association, Tourism WA)
- Other State government department representatives sought on a project basis

6.3.1 SECURE INDUSTRY AND BUSINESS INVESTMENT

Action items	Responsibility/Involvement
Effective marketing of investment opportunities to national and select international industry groups: <ul style="list-style-type: none"> • Understand and communicate market opportunities • Producing quality, coordinated marketing material • Industry stakeholder engagement • "Word of mouth" promotion from existing local businesses and industry groups 	Shire of Coorow, Shire of Dandaragan, Shire of Gingin, subregional CCLs, WDC, Small Businesses Development Corporation (SBDC)/Business Enterprise Centres (BEC), local businesses
Streamline State and local government planning processes: <ul style="list-style-type: none"> • Investment is not unnecessarily impeded • Provide leadership, guidance and support to new ventures on procedures, timelines, and government contacts • Regular liaison between local governments and Department of Planning 	Shire of Coorow, Shire of Dandaragan, Shire of Gingin, Department of Planning (DoP)
Wider provision of business support services <ul style="list-style-type: none"> • Advice on accessing capital • Up-skilling and training opportunities with creative/flexible delivery (e.g. in-house, remote access) • Distribution of information on markets and financial incentives 	SBDC/BEC, C.Y. O'Connor Institute, external training providers
Tourism and hospitality sector specific: <ul style="list-style-type: none"> • Refer to Appendix 6 for recommendations identified in the <i>Central Coast Strategic Tourism Planning Study</i> (MacroPlan 2008) 	

6.3.2 BETTER UTILISE SUBREGIONAL POPULATION AND LABOUR FORCE DYNAMICS

Action items	Responsibility/Involvement
Offer employment flexibility: <ul style="list-style-type: none"> • Address push/pull factors (see Appendix 5 for discussion) • Work hours • Competitive wages and/or flexible remuneration (particularly relevant to engaging retirees and lifestyle seekers) 	Private and government employing sector

<ul style="list-style-type: none"> • Transport (particularly relevant to the mining and resource sector where sponsored transport could be established to nearby sites or airports) • Housing incentives 	
<p>Effective marketing for the subregion targeting FIFO investment:</p> <ul style="list-style-type: none"> • Understand and communicate development opportunities • Producing quality, coordinated marketing material • Industry stakeholder engagement • Complement existing promotion of the IOD 	Ardross, LandCorp, Shire of Coorow, Shire of Dandaragan, Shire of Gingin, WDC, Mid West Development Commission
<p>Enhance linkages with VET and school-based apprenticeships:</p> <ul style="list-style-type: none"> • Account for current and predicted skills needed • Promote clear pathways between schooling and careers 	DoE, C.Y. O'Connor Institute, Department of Training and Workforce Development (DTWD)
<p>Enhance linkages with metropolitan tertiary education and training providers and regional apprenticeships, traineeships and career pathways to attract younger age cohorts to work in the subregion:</p> <ul style="list-style-type: none"> • Distribution of quality marketing material • Encouraging post-secondary education and training field excursions to the subregion 	WA TAFE colleges, WA universities, Shire of Coorow, Shire of Dandaragan, Shire of Gingin, subregional CCIs
<p>Advocate for greater TAFE services in the subregion offering courses tailored for local industry needs:</p> <ul style="list-style-type: none"> • Flexible delivery • Built facilities • Quality teaching staff 	C.Y. O'Connor Institute, DTWD, Shire of Coorow, Shire of Dandaragan, Shire of Gingin, WDC, private sector
<p>Take advantage of high labour mobility and the wider labour force catchment area provided with increased accessibility from IOD (particularly relevant to areas adjacent to the northern metropolitan suburbs):</p> <ul style="list-style-type: none"> • North-south linkages • East-west linkages 	Private sector
<p>Adjust local government grant funding model to accurately capture population dynamics (e.g. full time residents, part-time residents, visitors, and transient labour force)</p>	WA Local Government Grants Commission, Department of Local Government, Western Australian Local Government Association, Shire of Coorow, Shire of Dandaragan, Shire of Gingin

6.3.3 FACILITATE PROPERTY DEVELOPMENT

Action items	Responsibility/Involvement
<p>Negotiate with developers, LandCorp, DoP, and Regional Development and Lands (RDL) to keep pace with demand:</p> <ul style="list-style-type: none"> • Availability and appropriately priced land for residential, commercial, and industrial purposes • Ensure Town Planning Schemes are focussed on maximising development potential (particularly relevant to Lancelin and Leeman) • Address rezoning issues for UCL 	Shire of Coorow, Shire of Dandaragan, Shire of Gingin, WDC, LandCorp, existing private developers (e.g. Ardross), DoP, RDL
<p>Maintain, and where appropriate expand, incentive programs to encourage high conversion of sold lots to built infrastructure:</p> <ul style="list-style-type: none"> • Relevant to both residential and commercial properties • Increase emphasis on high amenity locations 	LandCorp, private land developers, investors

Encourage innovative housing development with a diversity of design and density, such as smaller apartments and residential units	Shire of Coorow, Shire of Dandaragan, Shire of Gingin, property developers
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6.3.4 SECURE GOVERNMENT SERVICES AND INFRASTRUCTURE DEVELOPMENT

Action items	Responsibility/Involvement
Advocate for construction of new cross-sector government agency building to address lack of office space for growing capacity (particularly relevant to DEC)	Shire of Dandaragan, WDC, State service providers
Resource investment in tourist infrastructure (e.g. car parks, foot paths, public toilets, access to underutilised potential tourist attractions such as Stockyard Gully caves, information centres particularly in Lancelin and Jurien Bay, signposting ¹⁹)	Shire of Coorow, Shire of Dandaragan, Shire of Gingin, DEC, Main Roads WA, Tourism WA
Promote adoption of alternative service delivery models tailored to the service needs specific to the subregion (e.g. ability to study externally, increased health and aged care services delivered external from a hospital)	Shire of Coorow, Shire of Dandaragan, Shire of Gingin, WDC, State service providers
State service providers to adjust methods of strategic planning and resource allocation: <ul style="list-style-type: none"> Consult external sources (e.g. DoE to research beyond enrolment numbers) Seasonal demand needs to be a considered factor Increased service requirements are addressed in a timely fashion Securing an increased training presence in the region will be vital (e.g. new TAFE facility in Jurien Bay) 	State service providers, WDC, Shire of Coorow, Shire of Dandaragan, Shire of Gingin
Advocate for supply upgrades of telecommunications, water, sewerage and power: <ul style="list-style-type: none"> Required to not only meet population demands but to foster industry and commercial expansion (e.g. manufacturing, tourist/retail and alternative energy generation) Peak government corporate bodies to be receptive to exploring alternative and creative supply and reuse options 	Shire of Coorow, Shire of Dandaragan, Shire of Gingin, WDC, WaterCorp, Western Power, Telstra, alternative providers
Advocate for increased capacity of aviation infrastructure in the subregion (particular emphasis at Jurien Bay as the subregional centre): <ul style="list-style-type: none"> Capacity to service labour requirements of WA's mining sector Position the subregion to take advantage of a growing aviation recreation sector Capacity to land water-bombing aircraft for improved fire emergency services 	Shire of Dandaragan, Department of Transport, DoP, private sector

¹⁹ For more information on signposting requirements for the Central Coast subregion please refer to *Increasing Length of Stay and Visitor Dispersal in Australia's Coral Coast Western Australia: An integrated visitor information strategy* (Fenech 2010).

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Appendix 1 – Methods

A1.1 Introduction

This appendix provides an overview of the research methods used in this project. The appendix is organised into two main sections: i) data collection techniques; and ii) analytical techniques.

A1.2 Data Collection Techniques

A1.2.1 Secondary Statistical Data

Statistical data were collected from the following sources:

- Census of Population and Housing, ABS
- Agricultural Commodities, ABS
- National Regional Profile, ABS
- Regional Economic Growth, BITRE
- Small Area Labour Markets, Department of Education, Employment and Workplace Relations
- Population Reports, WA Planning Commission
- Department of Fisheries, WA
- Department of Education, WA
- Department of Mines and Petroleum, WA
- Tourism WA

Depending on availability data was collected at either Urban Centre/Locality (UCL), Statistical Local Area (SLA) or Local Government Area (LGA) level for the towns of Leeman, Green Head, Jurien Bay, Cervantes, and Lancelin and the shires of Coorow, Dandaragan, and Gingin.

A1.2.2 Case Study Interviews

Interviews were held with representatives from local governments, Chambers of Commerce and Industry, progress associations, Central Coast Small Business Centre, property developers, and a number of business operators. The purpose of this activity was to identify impediments and opportunities for industry and employment growth. Information was gathered on the following key topics:

- Current and potential industry profiles for the region
- Opportunities and constraints to industry growth/development
- Labour force requirements
- Residential/commercial land release and property development
- Social services and infrastructure provision
- Strategic planning

Interviews were conducted in person or over the telephone.

A1.3 Analytical Techniques

A1.3.1 Location Quotient Analysis

Location quotients are a simple means of assessing local structures or changes against those of a wider reference area. In this study it was used as a measure of industry concentration and an indication of the importance of a sector and the level of dependence on it.

As an example, the location quotient formula for assessing industry concentration is expressed as:

$$LQ_{ir} = (E_{ir} / E_r) / (E_{in} / E_N)$$

Where: E_{ir} = employment in sector i in region r ; E_r = total employment in region r ; E_{in} = employment in sector i in the national economy; E_N = employment in the national reference economy.

Interpreting location quotients is relatively straightforward, with values of more than 1.0 indicating that there is a concentration of a given industry in a given area, while less than 1.0 indicates an under representation.

A1.3.2 Shift-share Analysis

Shift-share analysis is a widely used method in regional analysis to determine the nature of employment growth or decline. In the standard framework, shift-share analysis decomposes a region's sectoral growth into three effects: national share, industry-mix, and regional competitive effects. The shift-share analysis is as follows:

Let g denote the regional employment growth, i.e., $g = (e^t + 1 - e^t) / e^t$ where e is regional employment and the superscript t denotes time. Further, let G denote the national counterpart, i.e., $G = (E^{t+1} - E^t) / E^t$ where E is national employment. The appearance of subscript i will denote a reference to a specific sector i , and the absence of a subscript indicates whole sector. Therefore, g is the growth rate of regional employment of all sectors, while g_i signifies the growth rate of regional employment in sector i . A similar distinction applies to G and G_i . A point of departure for the shift-share analysis is the following equation:

$$\Delta e_i = (growth)e_i$$

The shift-share decomposes the *growth* into several components:

$$\Delta e_i = [G + (G_i - G) + (g_i - G_i)]e_i$$

The national effect is shown by Ge_i , i.e., the number of additional employment had the regional employment in sector i followed the national all-sector growth rate. The industry-mix is shown by $(G_i - G)e_i$, i.e., the number of additional employment that is due to national growth in sector i . This effect will be positive if the national sector i grows faster than the average growth of total employment in the country. Finally, the regional competitive effect is shown by $(g_i - G_i)e_i$. This is the number of additional regional employment that results from the region specialising in sector i .

To reiterate, *national share* (NS), is the local growth (or decline) that can be attributed to national growth (or decline). *Industry mix* (IM), which is local growth (or decline) stimulated because of the

particular local concentration or mix of industries. Finally, *regional competitive effect* (CE) is local growth (or decline) that is attributable to particular regional advantage or competitiveness (or lack thereof).

A1.3.3 Qualitative Data Analysis

The data gathered through the interviews was thematically analysed, and spatial and sectoral commonalities and differences were identified.

Appendix 2 – Related Statistical Data

Table A2.01 Age Structure as percentage of Total Population by UCL and SLA, 2006

	UCL						SLA				STATE
Age Cohort	Leeman	Green Head	Jurien Bay	Cervantes	Lancelin	UCL Total	Coorow	Dandaragan	Gingin	SLA Total	Western Australia
0-4 years	6.0	2.4	6.0	7.8	4.8	5.7	6.9	7.0	5.9	6.4	6.4
5-9 years	6.3	4.8	8.3	6.2	6.0	6.9	6.8	8.3	6.7	7.2	6.7
10-14 years	7.3	5.6	6.0	6.4	4.8	5.9	7.2	6.5	6.4	6.5	7.1
15-19 years	6.0	3.6	2.9	0.8	4.8	3.4	4.0	3.0	4.8	4.1	7.1
20-24 years	4.8	1.2	4.9	2.0	4.6	4.0	3.7	4.0	3.5	3.7	6.9
25-29 years	7.5	2.4	4.7	3.0	5.1	4.7	5.0	3.9	3.9	4.1	6.4
30-34 years	6.0	4.0	6.9	5.6	8.1	6.6	6.7	7.2	5.4	6.2	7.0
35-39 years	6.0	4.8	6.6	7.2	5.8	6.3	7.0	7.3	7.3	7.3	7.5
40-44 years	10.3	7.2	7.9	8.2	7.0	8.0	8.2	8.2	7.6	7.9	7.6
45-49 years	10.3	7.2	6.4	5.2	6.7	6.9	9.7	7.0	6.4	7.1	7.4
50-54 years	8.3	8.8	6.5	9.6	7.0	7.6	6.8	7.3	8.3	7.8	6.8
55-59 years	8.0	8.8	6.0	11.4	7.9	7.8	8.5	7.6	9.3	8.6	6.3
60-64 years	3.0	12.4	5.6	10.0	8.2	7.2	7.2	7.2	8.9	8.1	4.6
65-69 years	4.0	11.6	7.4	5.8	6.7	6.9	5.2	5.7	7.0	6.3	3.6
70-74 years	1.8	9.2	5.9	6.6	5.5	5.6	3.4	4.5	4.3	4.3	2.9
75-79 years	4.5	2.0	4.0	3.4	4.2	3.8	2.2	2.7	2.5	2.5	2.4
80-84 years	0.0	0.0	2.3	1.2	1.5	1.4	0.5	1.6	1.1	1.2	1.7
85+ years	0.0	3.6	1.7	0.0	1.0	1.2	1.1	1.1	0.6	0.8	1.4

Source: Australian Bureau of Statistics 2006a

Table A2.02 Labour Force Characteristics by SLA, 1984-2009

Year	Total Labour Force (persons)				Total Unemployment (persons)				Unemployment rate (%)			
	Coorow	Dandaragan	Gingin	WA	Coorow	Dandaragan	Gingin	WA	Coorow	Dandaragan	Gingin	WA
1984	727	1,026	951	661,507	16	39	98	60,854	2.2	3.8	10.3	9.2
1985	765	1,067	967	676,529	13	48	87	56,582	1.7	4.5	9.0	8.4
1986	750	1,031	943	705,046	15	33	66	56,010	2.0	3.2	7.0	7.9
1987	742	1,079	984	717,481	23	41	62	56,811	3.1	3.8	6.3	7.9
1988	813	1,235	1,260	765,605	13	42	92	60,995	1.6	3.4	7.3	8.0
1989	867	1,344	1,357	791,739	13	43	76	44,696	1.5	3.2	5.6	5.6
1990	793	1,164	1,248	823,937	19	54	52	62,283	2.4	4.6	4.2	7.6
1991	784	1,150	1,233	843,207	40	86	100	89,858	5.1	7.5	8.1	10.7
1992	800	1,166	1,288	853,595	62	93	123	90,487	7.8	8.0	9.5	10.6
1993	811	1,191	1,391	839,858	34	68	102	79,252	4.2	5.7	7.3	9.4
1994	778	1,144	1,335	859,571	52	98	126	72,239	6.7	8.6	9.4	8.4
1995	773	1,136	1,326	888,576	42	75	98	73,434	5.4	6.6	7.4	8.3
1996	759	1,166	1,341	901,250	42	64	114	76,539	5.5	5.5	8.5	8.5
1997	794	1,417	1,441	896,646	24	70	85	61,821	3.0	4.9	5.9	6.9
1998	735	1,312	1,334	938,722	29	55	114	72,520	3.9	4.2	8.5	7.7
1999	741	1,322	1,345	962,124	20	58	83	74,535	2.7	4.4	6.2	7.7
2000	753	1,344	1,367	992,439	40	71	98	71,606	5.3	5.3	7.2	7.2
2001	805	1,312	1,552	1,012,927	31	72	100	75,819	3.9	5.5	6.4	7.5
2002	870	1,417	1,677	994,480	44	99	169	70,835	5.1	7.0	10.1	7.1
2003	805	1,589	2,139	1,025,560	29	66	106	66,343	3.6	4.2	5.0	6.5
2004	783	1,545	2,079	1,035,221	24	58	106	63,293	3.1	3.8	5.1	6.1
2005	784	1,547	2,081	1,077,790	13	47	74	56,221	1.7	3.0	3.6	5.2
2006	827	1,632	2,196	1,109,449	14	34	40	50,506	1.7	2.1	1.8	4.6
2007	830	1,638	2,204	1,125,743	11	30	43	37,454	1.3	1.8	2.0	3.3
2008	757	1,689	2,241	1,179,100	14	26	35	40,500	1.8	1.5	1.6	3.4
2009	692	1,546	2,051	1,217,600	21	34	60	56,200	3.0	2.2	2.9	4.6

Source: Economic, Labour Market and Evaluation Analysis Branch, Research Analysis and Evaluation Group 2009

Table A2.03 Participation Rate as per population 15 – 65 years by UCL and SLA, 2006

		Population (15-64 yrs)	Total Labour Force	Participation Rate (%)
UCL	Leeman	280	188	67.1
	Green Head	161	90	55.9
	Jurien Bay	688	465	67.6
	Cervantes	324	183	56.5
	Lancelin	435	242	55.6
SLA	Coorow	799	574	71.8
	Dandaragan	1,805	1,283	71.1
	Gingin	2,830	1,702	60.1
REGIONAL	Western Australia	1,327,099	951,228	71.7
	Total for UCLs	1,888	1,168	61.9
	Total for SLAs	5,434	3,559	65.5

Source: Australian Bureau of Statistics 2006a

Table A2.04 Labour Force Structure: Occupation (percentage of total employed labour force) by UCL and SLA, 2006

Occupation	UCL					SLA			REGIONAL		
	Leeman	Green Head	Jurien Bay	Cervantes	Lancelin	Coorow	Dandaragan	Gingin	UCL Total	SLA Total	WA
Managers	10.2	11.4	12.0	18.3	14.6	36.7	28.7	25.1	13.1	28.3	12.5
Professionals	8.0	11.4	10.7	7.3	9.6	7.4	8.7	7.5	9.6	7.9	18.6
Technicians & trades workers	20.5	24.1	20.5	14.0	13.3	13.1	14.2	14.8	18.2	14.3	16.4
Community & personal service workers	6.8	6.3	9.4	11.0	10.4	3.5	5.8	5.9	9.2	5.5	8.9
Clerical & administrative workers	8.0	15.2	12.0	10.4	11.3	7.6	9.0	10.1	11.2	9.3	14.5
Sales workers	5.1	5.1	8.7	4.9	7.9	3.8	5.7	4.5	7.2	4.8	9.4
Machinery operators & drivers	21.0	11.4	9.4	10.4	11.3	12.6	10.0	11.3	11.9	11.1	7.3
Labourers	13.6	15.2	15.5	23.8	19.6	13.1	16.3	19.0	17.3	17.1	10.9
Inadequately described/Not stated	6.8	0.0	2.0	0.0	2.1	2.1	1.6	1.7	2.3	1.8	1.6

Source: Australian Bureau of Statistics 2006a

Table A2.05 Labour Force Structure: Industry of Employment (percentage of total employed labour force) by UCL and SLA, 2006

Industry Sector	UCL					SLA			REGIONAL		
	Leeman	Green Head	Jurien Bay	Cervantes	Lancelin	Coorow	Dandaragan	Gingin	UCL Total	SLA Total	WA
Agriculture, forestry & fishing	10.9	15.0	5.7	7.3	16.7	39.3	29.7	28.5	9.8	30.7	3.3
Mining	25.9	16.3	3.9	5.5	2.5	11.4	4.2	5.3	8.1	5.9	4.3
Manufacturing	1.7	11.3	8.1	1.8	9.2	2.2	6.0	8.1	6.6	6.4	9.4
Electricity, gas, water & waste services	0.0	0.0	2.8	1.8	1.3	0.0	1.2	0.8	1.7	0.8	1.0
Construction	12.1	18.8	13.3	7.3	9.6	7.4	8.3	11.6	11.8	9.7	9.1
Wholesale trade	1.7	3.8	0.7	0.0	3.8	2.8	1.7	2.8	1.6	2.4	4.0
Retail trade	5.7	15.0	11.3	10.9	8.8	8.1	8.0	6.2	10.1	7.1	11.1
Accommodation & food services	8.6	0.0	12.2	26.1	9.6	4.2	9.5	5.2	12.3	6.5	5.8
Transport, postal & warehousing	5.7	0.0	2.2	9.1	9.2	3.6	3.3	5.1	5.1	4.2	4.2
Information media & telecommunications	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.2	1.3
Financial & insurance services	0.0	0.0	2.0	0.0	0.0	0.5	0.7	1.2	0.8	0.9	2.9
Rental, hiring & real estate services	0.0	0.0	3.1	0.0	1.3	0.0	1.9	1.5	1.5	1.4	2.0
Professional, scientific & technical services	1.7	11.3	3.3	0.0	4.6	2.6	1.8	1.6	3.4	1.8	6.3
Administrative & support services	0.0	0.0	1.7	2.4	1.7	0.0	1.5	2.7	1.4	1.8	3.2
Public administration & safety	5.7	0.0	11.5	10.3	5.0	5.2	6.5	4.8	8.2	5.5	6.4
Education & training	6.9	5.0	7.2	7.3	4.6	6.4	6.8	5.3	6.4	6.0	7.7
Health care & social assistance	2.9	0.0	3.5	0.0	6.7	2.1	3.2	4.2	3.3	3.5	10.2
Arts & recreation services	0.0	0.0	0.0	2.4	1.3	0.0	0.6	0.6	0.6	0.5	1.2
Other services	6.9	0.0	2.8	1.8	1.3	2.4	1.8	2.0	2.8	2.0	3.8
Inadequately described/Not stated	3.4	3.8	4.8	6.1	2.9	1.7	3.5	2.4	4.3	2.7	2.7

Source: Australian Bureau of Statistics 2006a

Table A2.06 Labour Force Structure: Industry of Employment (percentage of total employed labour force) by SLA, 1996 and 2006

Industry Sector	SLA						REGIONAL			
	Coorow		Dandaragan		Gingin		Total SLA		Total WA	
	1996	2006	1996	2006	1996	2006	1996	2006	1996	2006
Agriculture, forestry & fishing	42.1	19.9	39.2	28.2	34.5	29.8	38.0	30.8	4.9	3.3
Mining	19.2	6.2	5.6	5.8	3.4	4.1	7.8	6.1	3.7	4.3
Manufacturing	0.6	0.7	4.5	7.5	5.9	7.9	4.2	6.7	9.5	9.4
Electricity, gas, water & waste services	0.0	0.0	1.0	1.1	0.6	0.6	0.6	0.7	1.0	1.0
Construction	3.3	4.0	5.7	8.8	6.6	11.1	5.5	9.7	7.0	9.1
Wholesale trade	4.0	0.8	2.7	1.8	3.5	3.2	3.3	2.4	5.4	4.0
Retail trade	4.6	3.8	5.8	7.0	5.8	5.9	5.6	6.7	10.1	11.1
Accommodation & food services	4.8	1.8	5.6	8.6	5.6	5.0	5.5	6.2	5.9	5.8
Transport, postal & warehousing	1.7	1.6	2.6	3.1	4.3	5.0	3.0	4.0	4.3	4.2
Information media & telecommunications	0.0	0.3	1.0	0.4	0.6	0.3	0.6	0.4	1.9	1.3
Financial & insurance services	0.0	0.0	0.8	0.5	0.4	1.1	0.4	0.7	3.3	2.9
Rental, hiring & real estate services	0.9	0.0	0.3	2.0	1.4	1.5	0.9	1.5	1.9	2.0
Professional, scientific & technical services	1.1	0.9	1.7	2.2	1.8	1.6	1.6	1.9	5.9	6.3
Administrative & support services	0.9	0.7	1.3	1.8	1.5	2.6	1.3	2.1	3.0	3.2
Public administration & safety	4.5	2.5	5.4	6.0	5.6	4.6	5.3	5.2	5.5	6.4
Education & training	6.0	3.4	5.9	6.2	6.4	5.6	6.1	6.0	7.6	7.7
Health care & social assistance	1.2	1.3	3.2	3.0	3.1	4.4	2.7	3.6	9.2	10.2
Arts & recreation services	0.0	0.0	0.9	0.7	0.5	1.0	0.6	0.7	1.4	1.2
Other services	1.4	1.3	1.7	1.6	3.3	1.9	2.2	1.9	4.6	3.8
Inadequately described/Not stated	3.6	0.5	5.2	3.7	5.0	2.7	4.8	2.8	3.9	2.7

Source: Australian Bureau of Statistics 1996 and 2006a

Table A2.07 Regional Taxation Data by SLA, 1980-2007

Year	Number of Taxable Individuals			Aggregate Real Taxable Income \$(2007-08)			Real Income per Tax Payer \$(2007-08)			
	Coorow	Dandaragan	Gingin	Coorow	Dandaragan	Gingin	Coorow	Dandaragan	Gingin	WA
1980-81	384	533	577	15,190,531	21,102,390	22,835,013	39,576	39,576	39,576	41,100
1981-82	421	586	635	16,813,908	23,406,104	25,362,824	39,940	39,940	39,940	41,347
1982-83	486	675	731	19,017,788	26,419,141	28,588,299	39,122	39,122	39,122	41,048
1983-84	561	645	786	18,761,659	24,089,013	28,851,080	33,469	37,322	36,705	39,726
1984-85	589	688	842	22,692,837	26,056,832	31,959,152	38,558	37,855	37,970	40,790
1985-86	559	802	952	19,860,267	30,209,000	35,587,114	35,524	37,673	37,375	39,865
1986-87	621	868	947	23,282,508	32,084,667	35,060,294	37,480	36,974	37,033	39,763
1987-88	665	982	991	28,727,258	37,765,428	38,511,713	43,204	38,468	38,871	40,382
1988-89	737	1,098	1,041	34,371,481	42,164,161	40,466,466	46,652	38,395	38,868	41,145
1989-90	788	1,142	1,025	32,278,192	40,921,247	36,900,261	40,958	35,837	35,989	39,406
1990-91	589	933	889	22,973,578	31,100,768	28,628,076	39,004	33,334	32,214	38,059
1991-92	595	964	944	25,740,241	35,002,137	33,115,664	43,261	36,309	35,096	38,509
1992-93	585	985	1,001	25,120,125	35,863,547	35,693,012	42,940	36,410	35,664	39,734
1993-94	566	965	1,075	26,005,882	38,633,644	42,424,745	45,947	40,035	39,483	41,749
1994-95	566	1,020	1,181	26,410,984	41,655,057	45,789,633	46,663	40,838	38,764	41,365
1995-96	549	1,010	1,277	27,411,353	39,068,169	45,442,452	49,930	38,681	35,585	41,106
1996-97	575	1,085	1,318	26,878,301	41,317,400	48,680,705	46,745	38,081	36,935	41,734
1997-98	578	1,110	1,387	28,615,314	42,535,043	52,707,246	49,507	38,320	38,001	43,917
1998-99	494	1,039	1,352	23,092,725	43,011,527	54,120,196	46,746	41,397	40,030	45,501
1999-00	448	1,114	1,520	21,819,160	48,124,910	67,574,014	48,703	43,200	44,457	45,762
2000-01	504	1,149	1,577	24,161,420	46,712,206	63,967,797	47,939	40,655	40,563	45,541
2001-02	511	1,163	1,607	24,002,164	51,288,871	67,622,039	46,971	44,100	42,091	45,487
2002-03	509	1,214	1,657	25,324,844	55,077,285	70,591,459	49,754	45,368	42,611	46,260
2003-04	495	1,195	1,677	22,211,184	53,207,032	69,569,683	44,871	44,525	41,489	48,078
2004-05	475	1,195	1,796	22,243,819	51,490,604	76,506,416	46,829	43,088	42,607	50,115
2005-06	475	1,240	1,835	23,018,020	53,462,248	86,223,840	48,459	43,115	46,988	51,794
2006-07	445	1,230	1,850	21,905,912	56,188,004	85,593,153	49,227	45,681	46,267	54,491

Source: Bureau of Infrastructure, Transport and Regional Economics 2009

Table A2.08 Catch and Value of Rock Lobsters, 1996-2008

Year	Estimated Catch (tonnes)		Estimated Value Fishing Catch (\$ '000)	
	Wheatbelt	WA	Wheatbelt	WA
1996-97	2,793	9,977	71,230	254,554
1997-98	2,866	10,580	57,311	212,197
1998-99	3,604	13,090	72,078	261,943
1999-00	4,194	14,608	110,724	385,669
2000-01	2,977	11,353	79,635	304,058
2001-02	2,236	9,053	75,455	305,356
2002-03	3,003	11,477	73,425	281,023
2003-04	3,343	13,744	63,511	261,434
2004-05	3,124	12,303	67,157	264,659
2005-06	2,991	10,441	83,759	292,242
2006-07	2,241	8,667	63,874	246,839
2007-08	2,525	8,989	61,110	217,595

Source: Department of Fisheries 2008

Table A2.09 Value of Agricultural Commodities Produced 2005-06

Commodity	SLA	2005-06 (\$)	Percentage of WA
Agriculture Total	Coorow	80,703,484	1.4
	Dandargan	113,128,091	2.0
	Gingin	114,633,839	2.0
	WA	5,793,283,205	100
Crops Total	Coorow	64,514,388	1.6
	Dandargan	41,014,404	1.0
	Gingin	59,830,230	1.5
	WA	3,930,320,942	100
Pastures, cereal and other crops cut for hay	Coorow	770,054	0.5
	Dandargan	3,494,078	2.2
	Gingin	1,338,455	0.8
	WA	162,294,080	100
Crops (excluding hay)	Coorow	63,744,334	1.7
	Dandargan	37,520,326	1.0
	Gingin	58,491,775	1.6
	WA	3,768,026,862	100
Nurseries, cut flowers and cultivated turf	Coorow	2,262,680	1.2
	Dandargan	356,172	0.2
	Gingin	13,802,524	7.2
	WA	190,988,933	100
Vegetables	Coorow	0	0
	Dandargan	0	0
	Gingin	24,202,366	8.3
	WA	292,398,834	100
Fruit	Coorow	3,826	0
	Dandargan	4,396,977	1.7
	Gingin	19,087,175	7.3
	WA	261,650,155	100
Livestock slaughterings	Coorow	10,750,611	0.9
	Dandargan	57,371,124	4.7
	Gingin	40,429,799	3.3
	WA	1,213,352,135	100
Livestock products	Coorow	5,438,485	0.8
	Dandargan	14,742,564	2.3
	Gingin	14,373,810	2.2
	WA	649,610,127	100

Source: Australian Bureau of Statistics 2006b

Table A2.10 Building Approvals by SLA, 2002-2009 (year ended 30 June)

		Total Dwelling Units (no.)										Value of total building (\$m)									
										Change 2002-2009										Change 2002-2009	
		2002	2003	2004	2005	2006	2007	2008	2009	Actual	%	2002	2003	2004	2005	2006	2007	2008	2009	Actual	%
SLA	Coorow	16	17	12	9	7	9	8	10	- 6	-37.5	2.6	2.6	2.1	2.0	2.2	2.0	2.7	2.6	0.0	0.0
	Dandaragan	42	51	46	55	104	64	91	35	- 7	-16.7	9.8	11.5	8.5	9.3	17.6	15.6	36.9	11.6	1.8	18.4
	Gingin	102	80	86	87	86	82	91	56	- 46	-45.1	13.7	15.1	12.7	18.2	19.1	27.4	26.8	20.8	7.1	51.8
REGIONAL	SLA Total	160	148	144	151	197	155	190	101	- 59	-36.9	26.1	29.2	23.3	29.5	38.9	45.0	66.4	35.0	8.9	34.1
	WA	20,387	21,808	23,834	24,232	26,170	25,087	23,641	19,386	-1,001	-5	3,868.7	4,874.0	5,424.5	6,449.1	7,955.5	9,220.7	12,668.1	8,478.7	4,610.0	119.2

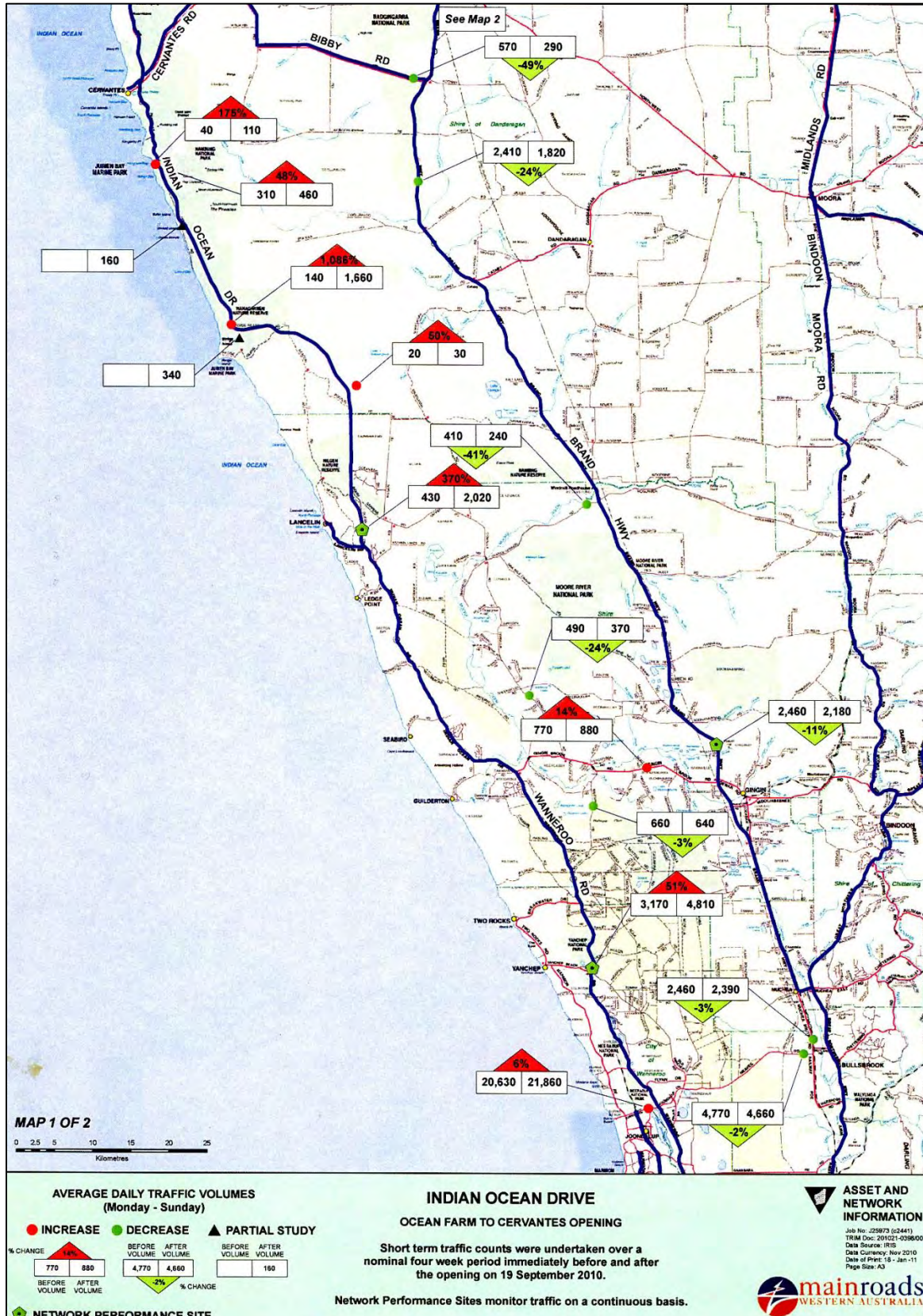
Source: Australian Bureau of Statistics 2009

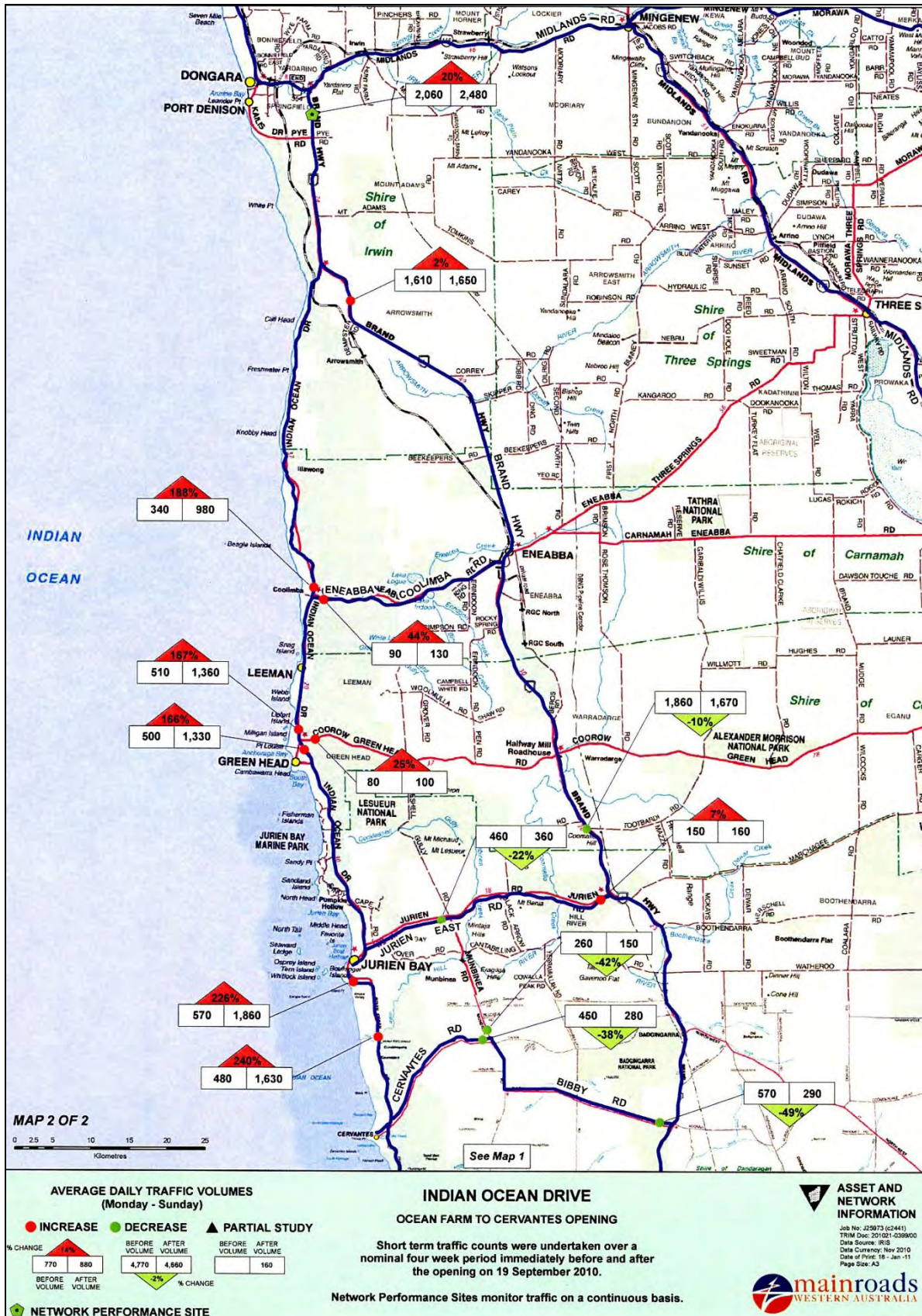
Table A2.11 Value of Minerals Production in Western Australia (\$ million), 1994-2009

Year	Wheatbelt	Gascoyne	Goldfields-Esperance	Great Southern	Kimberley	Mid West	Peel	Pilbara	South West	Regional WA	Western Australia
1994/95	443.1	44.0	2,362.8	0.0	543.1	1,168.8	1,227.4	3,166.9	940.3	9,896.3	13,914.7
1995/96	434.3	32.7	2,699.9	4.7	606.2	1,402.1	1,330.5	3,302.5	1,018.8	10,831.8	15,389.6
1996/97	424.8	44.4	2,872.0	2.8	617.9	1,422.7	1,400.2	3,033.6	1,097.0	10,915.4	16,460.7
1997/98	415.3	56.1	3,044.2	0.8	629.7	1,443.4	1,469.8	4,240.0	1,175.2	12,474.5	17,935.1
1998/99	402.4	68.4	2,652.5	2.0	739.9	1,260.8	1,495.8	4,285.1	1,131.3	12,038.1	16,655.6
1999/00	508.3	70.8	3,113.6	2.9	739.9	1,619.8	1,831.8	4,097.5	1,168.2	13,152.8	21,345.7
2000/01	515.4	91.4	3,798.6	4.5	909.0	2,031.5	1,941.1	5,499.7	1,549.8	16,340.7	27,549.1
2001/02	515.4	91.4	3,798.6	4.5	665.1	1,858.3	1,941.1	5,419.2	1,854.6	16,148.1	26,699.4
2002/03	452.2	64.3	4,288.3	4.3	948.5	2,018.2	1,849.3	5,454.2	1,690.0	16,769.3	27,857.2
2003/04	461.8	64.5	4,512.2	4.6	588.9	2,243.7	1,630.4	5,474.0	1,587.3	16,567.5	26,417.3
2004/05	554.0	67.0	4,618.1	4.0	793.3	2,392.2	1,853.5	8,367.9	1,695.3	20,345.4	33,405.3
2005/06	642.0	73.4	5,718.9	5.3	926.0	2,241.9	2,181.1	12,881.2	2,719.6	27,389.3	42,845.8
2006/07	831.6	72.8	10,188.9	3.5	1,164.8	2,953.9	2,599.0	16,508.3	2,165.6	36,488.4	53,702.8
2007/08	974.7	57.5	8,009.2	5.6	1,577.3	2,144.4	2,501.1	22,566.2	1,973.1	39,809.0	60,072.8
2008/09	1,315.1	110.3	6,312.2	2.8	729.1	2,192.4	2,518.5	34,099.0	1,964.6	49,243.8	71,310.5

Source: Department of Mines and Petroleum 2009

Appendix 3 – Indian Ocean Drive Traffic Counts





Source: Main Roads 2011

Appendix 4 – Ardross Group of Companies Land Holdings in the Central Coast



Source: MacroPlan 2008

Appendix 5 – Skilled Labour Force Attraction and Retention – A Review²⁰

A5.1 Introduction

Regional and local labour markets are shaped by a range of factors, including the global and national economic trends, technological change, demographic trends, education and training, and public policy. These trends are rarely geographically uniform, with considerable variation usually evident within and between regions and localities. This section examines the drivers of labour supply and demand focusing on some factors that shape a regional employment market, and is particularly relevant to one such as the Wheatbelt's and indeed the Central Coast subregion.

A5.2 The Dynamics of Labour Markets

At the regional and local scales, labour markets are intimately linked to export sectors and the activity that these generate. Employment growth depends on the growth of a region's output, which is itself determined by the competitiveness of its producers and the demand for regional products. However, problems arise when constraints are imposed on a region's output growth. One of the most significant constraints is the inability to access the required inputs. If labour markets hit supply constraints, the excess demand generally leads to lower rates of regional and local economic growth.

The normal response to an increase in demand for labour is for recruits to be taken from a pool of unemployed workers. Of course, this can only work if a region or sector is not already operating at full employment. A further source of labour is an increase in the participation rate (by including people not currently in the workforce, such as early retirees). Over the longer term, workers can be obtained from other regions (or countries) through labour migration. The supply of skilled labour can also be improved through education and training programmes. However, it should be noted that one of the key differences between labour markets and other markets (e.g. the market for goods) is that there are often significant time lags in matching demand with supply.

A5.3 The Dynamics of Labour Demand

The dynamics of labour demand in a region are affected by processes operating at the global, national and regional/local scales. In reality, however, these are often interlinked and difficult to separate. The factors affecting labour demand include:

- Global macroeconomic trends such as world economic growth, trade patterns, commodity prices, energy prices, exchange rates, interest rates and demand;
- International politics and policies, such as industry protection, development policy, and geopolitical instability;
- National macroeconomic conditions, including economic growth and consumption patterns;
- Domestic politics and policies, including taxation, industry protection, environmental policy, industry assistance and development;
- Technological change, particularly the adoption of new technologies that increase efficiency, reduce labour requirements and/or require new skills.

²⁰ This review is adapted from *Industrial Skilled Labour Force Attraction in the Avon Valley* (Pelusey, Hatch & Tonts 2010)

A5.3.1 The Global Economy

The performance of a regional economy is, in large part, determined by wider international economic trends. As an export oriented region, the Wheatbelt is integrated into the wider global economy through trade, international financial markets and capital flows. Of particular importance is the economic growth rate of those nations that import commodities from the region, such as China, Japan, South Korea, India, Middle Eastern countries, and the countries of South East Asia. Over the past three decades, the growth of these economies has impacted directly on the region through rising demand for commodities such as wheat and livestock. However, there are also more indirect links to the global economy. In the case of the Wheatbelt, for example, a number of the businesses are expanding on the back of a strong resources economy which is, in turn, driven by wider global trends.

A5.3.2 Regional Economic Trends

While broader economic trends are important to the region, so too are more local trends. The Wheatbelt region, and in particular the Central Coast subregion, has experienced steady economic and population growth, largely as a result of the expansion of Perth's urban field. Relatively low property and housing prices, improving transport links with the city, and a high amenity natural environment have helped contribute to a process of net in-migration. The regional economy has therefore expanded and, consequently, so has demand for labour.

A5.3.3 Technological Change

A major driver of labour markets is technological change. In industries such as the mineral resources sector and agriculture, major advances in technology have reduced the overall need for labour per unit of output. Similar changes have also affected manufacturing and some of the service industries, where new technologies have superseded many labour intensive activities.

However, technological change should not be seen as a simple means of reducing labour. From an employment planning perspective it is important to understand the nature of technological change and the implication this will have on the requirements of enterprises and other organisations. New technologies often demand employees with particular types of skills that have not been demanded in the past. Thus, technological change tends to reshape labour markets and patterns of demand and supply therein.

In a number of sectors, improvements in technology have made manufacturing, construction and other related activities more viable in regional areas than had previously been the case. Across many parts of the Wheatbelt region industries such as food processing, light manufacturing, and construction activities have proven to be highly successful in recent years. While many of these businesses are relatively small, they have been able to use local resources, knowledge and skills to maximise their comparative advantage.

A5.4 The Dynamics of Labour Supply

In growing regional economies, one of the most important strategic issues is securing a labour supply. An inadequate supply of labour has the potential to undermine the capacity of public and private sector organisations to operate effectively, constrain economic growth and business performance, and reduce the quality of service provision. Importantly, labour supply is not just about how much labour, but

ensuring that the workforce is suitably matched to the economic and service needs of the region or locality. In Western Australia, as in other developed economies, a combination of strong economic growth, demographic change and shifting trends in education and training have seen many regions struggle to ensure an adequate supply of suitably trained labour. Public policy in this regard needs to be flexible enough to take into account the dynamic nature of the labour market, and changing supply circumstances.

A5.4.1 Population Change and Demographics

There are two dimensions of population change that influence rural labour markets: i) population change within the region and the wider labour catchment area; ii) the age structure of the workforce.

In rural areas, patterns of population growth and decline are both a reflection of the state of the underlying economy and labour market and, at the same time, a driver of change. Decline or economic contraction in a given industry and region contributes to outmigration and population decline. This, in turn, contributes to further economic contraction, and yet more population decline (Sorensen 1993). By contrast, economic growth tends to fuel in-migration, jobs growth, and further population growth. With increasing labour mobility, economic growth in neighbouring regions, such as that associated with resource extraction in Western Australia's north, can generate significant intra- and inter- regional competition for labour.

These processes of growth and decline are also shaped by the general structure of the population, particularly in terms of age. In terms of supply, labour shortages emerge, in part, from an increasing proportion of the population reaching retirement age and leaving the workforce. In recent years, this has been compounded by the trend towards early retirement. For some rural areas, supply has been further constrained by a tendency for young people to leave in favour of cities and large regional towns (Argent & Walmsley 2008).

A5.4.2 Labour Force Participation

In addition to the population size and composition of a particular region or labour market catchment area, the proportion of the population that participates in the workforce is another dimension of supply²¹. There are three main groups at different phases of their lifecycle for which participation is an important dimension of labour supply:

- Young people in their school/education to work transition;
- Women in a household to labour market transition;
- Older workers in their work to retirement transition.

These transitions are important in dealing with labour shortages in that persons in schools/education institutions, in households, and in retirement can be an important source of potential labour supply to fill market gaps. An additional avenue for increasing participation is amongst Aboriginal peoples, where rates of involvement in the labour force are often relatively low. The ability of schools/educational institutions, household activities, retirement, and Aboriginal peoples to act as a 'reservoir' to provide a workforce in times of shortage differs across occupational groups and industry sectors. Therefore, it is

²¹ The participation rate is the percentage of the population aged between fifteen years and 65 years who are in the labour force.

essential to develop programmes aimed at increasing participation and carefully match the characteristics, skills and capacities of these reservoirs with appropriate segments of the labour market.

In many regional areas, one of the important issues related to participation is underemployment. Underemployment refers to one of two conditions:

- Where individuals are engaged in the labour force but either: i) are only working on a part time or casual basis; ii) are engaged in occupations that do not maximise their skills, qualifications and/or experience.
- Where the people are not engaged in the labour force at all, but have the capacity to be employed.

Underemployment tends to arise for a number of reasons, including (and certainly not limited to):

- Difficulties in making the transition from education to employment, particularly amongst young people;
- Difficulties in making the transition from home to work, particularly amongst women re-entering the labour market;
- Exclusion of minority groups and vulnerable individuals, normally as a result of 'structural barriers'. Examples include the low participation rates often found amongst Aboriginal people; ethnic groups, particularly from non-English speaking backgrounds; and people with disabilities;
- Career changes by individuals, resulting in skill sets and experience not necessarily being utilised;
- A failure of some employers and national regulatory agencies to recognise skills and qualifications earned in other countries.

One of the priorities of national and State governments over recent years has been to investigate means of increasing participation by tackling underemployment. However, one of the major challenges facing generic programmes aimed at addressing this issue is that underemployment is a diverse and complex problem that is often 'context specific'. In response, tailored programmes have been developed to address the problem amongst particular groups and for particular industries. Examples include: strategies to encourage qualified nurses and teachers not currently practicing to return to these professions; Aboriginal employment programmes aimed at increasing levels of workforce participation; programmes that aim to increase the recognition of qualifications gained in other countries.

A5.4.3 Labour Force Intensity

Often labour supply is considered in terms of quantity – population, participation, migration etc. However, there is also an intensity dimension. In effect, this relates to the pace of work and hours worked by existing employees. For example, in some cases the pace of work can be increased through the adoption of new technologies or changes in workplace arrangements. Another option is to increase the length of time that existing staff work by extending shifts or the working day.

While these can be viable mechanisms for augmenting effective labour supply in the short term, the strategy can have longer term consequences that have to be considered. It can contribute to work related stress, health and safety issues, and worker dissatisfaction. If such a strategy is seen as eroding workplace conditions, it can also make particular employers or sectors unattractive. This, at a time when labour is in short supply, can worsen recruitment problems.

It is important to note that increasing labour force intensity is not always seen as problematic. Increasing levels of intensity can increase opportunities for workers in a number of ways, including higher earnings and increasing experience as a result of a broadening of responsibilities.

A5.4.4 Internal Migration and Labour Mobility

Processes of internal migration and the movement of labour between places is a particularly important component of labour supply. This is especially true in regions dependent on the resource sector, where rates of in- and out-migration are generally higher than the national average. In general terms, the migration of workers from one place to another can be thought of as the interaction of 'push' and 'pull' factors. For workers, 'push' factors that encourage them to leave a particular place can include:

- Low wages
- Poor workplace conditions
- Limited career opportunities
- Cost of day to day living
- Cost and limited quality of housing (both rental and for purchase)
- Low levels of environmental amenity
- Low levels of social amenity

Of course, the 'pull' factors (or those that attract migrants) are normally the opposite of these. While this is clearly an oversimplification of the migration process, it does highlight the range of factors at work and the way in which regional or local attributes are important.

A5.4.5 International Migration

International migration can be a valuable supplement to internal migration as a component of labour supply. Altering the number of immigrants can be a means of turning the 'tap on' when there are shortages, and the 'tap off' when there are surpluses. While there are lags in the system that can complicate this procedure, the lags are generally not as great as those in the education and training system. Australia's migration policy specifically targets the admission of skilled migrants and attempts to channel them to areas requiring skilled labour and economic benefit (Iredale 1999). Increasingly, this targeting is also geographical, focussing on the skills needs of particular regions.

There are now a large number of State Specific and Regional Migration (SSRM) strategies in place to tackle skills shortages in particular areas. These include:

- Skilled – Regional Sponsored (Provisional) visa (Subclass 475);
- Skilled – Sponsored (Migrant) visa (Subclass 176);
- Temporary Business (Long Stay) - Standard Business Sponsorship (Subclass 457);
- Regional Sponsored Migration Scheme (Subclass 119/857).

Arguably, the most important of these for the Wheatbelt region is the Temporary Business (Long Stay) visa (Subclass 457), and the Regional Sponsored Migration Scheme (Subclass 119/857), and the Skilled – Sponsored (Migrant) visa (Subclass 176), since these target migration into those regional areas in the most need of skilled labour. Business migrants are encouraged to migrate to the regions and there are various visas available for such migrants. Some business migrants may apply for a Business Talent Visa to

obtain direct permanent residence if they have high level business attributes and are sponsored by a State or Territory government agency.

The Temporary 457 allows highly skilled personnel to come to Australia to work for an approved employer for up to four years. The prospective employer must first apply to become a standard business sponsor, which will permit them to sponsor an agreed number of overseas employees over a two-year period. The position nominated to be filled by the overseas employee must meet minimum skill and salary levels.

Employers tend to use the use the Temporary 457 visa as it takes up to three months to process, and then consider RSMs as a permanent residency option at a later point in time. While this is arguably most common in the Wheatbelt region, other migration options are also used - each is dependent on the circumstance, if the potential employee is in Australia or outside of Australia, and depending on their skill set.

While international migration presents a partial solution to labour shortages, it is not without its challenges. These include:

- Maintaining new migrants in the region beyond the requirements of their visa;
- Matching the skills needs of Wheatbelt industries and establishments with those of skilled migrants;
- Competition from other regions in Australia (and overseas) to attract skilled migrants;
- Providing services to an increasingly diverse population, including some who may have families that have limited English. This has implications for education and health services, social and welfare services, and a more general engagement in community life.

A5.4.6 Education and Training

One of the central components of labour supply is the education and training system. Indeed, much of the education and training system is geared towards meeting the needs of the labour market. There are, however, significant challenges in ensuring that education and training systems are able to maintain a supply of appropriately trained labour:

- The education and training mix across Australia has shifted, with an increase in the number of school leavers opting to study at university during the 1980s and 1990s, rather than take up apprenticeships or other forms of skills training. This resulted in a considerable reduction in the number of people receiving trades qualifications. In response, major reforms have been undertaken to reinvigorate the vocational education and training sector, including decreasing the length of many apprenticeships and assisting small and medium businesses to take on apprentices and trainees.
- A reduction in direct government funding for the TAFE and university sectors caused many institutions difficulties in securing staff and resources and led to programmes being cut. This has limited the ability of the education and training system to keep up with industry demands/needs.

- Growth cycles in sectors such as oil and gas, food processing and hospitality have meant that student education and training choices have not necessarily been attuned to economic trends. There are also considerable time lag effects in student choices.
- There are also often considerable time lag effects between changes in policy and focus in education and training and the graduation of skilled workers.

There is a geographical dimension that is of particular relevance to rural areas – rarely is education undertaken in the same region as where people ultimately work. Education and training based strategies to address rural labour shortages need to consider this important point.

A5.5 Attraction and Retention

Attracting and retaining employees is one of the major challenges for rural industries and communities. This section provides a general overview of the main attraction and retention issues facing regional Australia.

A5.5.1 Perceptions of Rural Employment and Lifestyle Opportunities

As outlined earlier, perceptions of rural livelihoods and lifestyles have a considerable influence on the ability of employers and regions to attract labour. Negative perceptions about the economic viability of rural industries, particularly manufacturing and agriculture, and limited information regarding clear career pathways and promotion opportunities are important barriers to attracting workers to rural areas. In addition, the view that rural areas have limited services, infrastructure and social opportunities is often held as a barrier to attraction. These negative perceptions often dominate potential workers' understandings of rural employment and lifestyle opportunities.

A5.5.2 Housing

Housing is often regarded as one of the main barriers to both attracting and retaining staff in rural communities (Jones & Tonts 2003). There are three interrelated dimensions to this:

- The availability and diversity of housing for rent and purchase. In many rural towns housing availability for purchase and rent is extremely low. Low rates of land release, together with the inability of the construction and building industry to keep pace with demand, has meant that workers often find securing accommodation extremely difficult. This is a major barrier to the attraction of professionals and experienced workers, particularly those with families. The diversity of housing in terms of size and density is often limited. Accommodation for single workers, such as those looking for higher density, low maintenance properties, is often limited in rural towns.
- The quality of housing. While there are numerous high quality houses in rural towns, there is also evidence to suggest that the quality of some housing is extremely poor (Tonts *et al.* 2001). This is particularly true of declining regions, where disinvestment in housing has gradually led to a deterioration in quality, with little prospect of significant reinvestment.

- The cost of housing. The limited availability of quality housing and land has contributed to a surge in housing rents and purchase prices in some rural towns over recent years. This has been further fuelled by a more general rise in the land economy in Australia over the past five years. There are two important issues associated with this: i) increased expenditure on housing costs reduces disposable income and thereby deflates earnings once housing is taken into account; ii) lower income earners can be excluded from the housing market, making it more difficult to attract low wage earners. This has a direct impact on the unskilled segment of the labour market. Moreover, those employees on fixed award wages (e.g. public servants, teachers, nurses etc.) can be financially disadvantaged as a result of the cost of housing. This has significant impacts on the recruitment of staff, but also the retention of existing residents. Resource dependent towns are often the most significantly affected by high housing costs.

A5.5.3 Salaries and Wages

There are a number of salary issues affecting the attraction and retention of staff, including:

- Major income disparities between regions and individual localities. Within rural Australia high incomes tend to be restricted to particular sectors and occupations. These disparities can contribute to considerable 'churning' in the labour market, where employees move from job to job in search of higher incomes. This is particularly the case in the resources sector and allied industries. Furthermore, flows of people from occupations with low incomes to high incomes can leave significant shortages of staff in lower paid jobs such as cleaners, food preparation assistants, and sales assistants.
- Small and medium enterprise is often in competition with larger employers for staff. Rising wages paid by larger firms contribute to difficulties for smaller businesses, since they often need to erode narrow profit margins to retain staff. The alternative for some firms has been to further downsize upon losing staff, thereby restricting overall capacity within some sectors.

A5.5.4 Social Services and Child Care

It is broadly perceived that social services and child care facilities in rural Australia are limited. In particular this is an issue for small and remote towns, where health, education and welfare services are often not provided to the same level as in the more populous parts of the country (see Cocklin & Dibden 2005). With regards to child care, given the low number of providers, costs tend to be relatively high when compared to metropolitan counterparts. The high costs of child care add to the cost of living in rural areas. Furthermore, in those places that lack adequate child care, the capacity of the primary care giver (often young women) to actively participate in the workforce is restricted.

A5.5.5 Education and Training Facilities

One of the major determinants of residential location for both families and young people is the availability and perceived quality of education and training facilities. Particular issues that face some rural communities are:

- Limited local education options after year 10 (requiring students to travel to other towns)
- More limited Year 11 and 12 course options than in metropolitan schools

- A perception that young people studying in rural areas are more likely to receive lower scores on university entrance exams than if studying in a metropolitan school
- Limited options for tertiary study
- High rates of teacher turnover, and less experienced teachers in rural areas

Whether these perceptions are accurate or not, it is clear that education and training is an important issue with regards to labour force attraction and retention. There is a clear pattern of mobility around various stages in the education cycle, with families often leaving rural areas as children make the transition to either high school or tertiary study.

A5.5.6 Career Pathways

As previously indicated, one of the barriers to attraction and retention of labour relates to perceptions about opportunities for career progression. Negative perceptions of careers in rural industries stemming from ongoing economic restructuring have resulted in potential workers having limited knowledge about career progression opportunities. Employment in rural areas is often regarded as a 'stepping stone' in the employment ladder, rather than as a place in which to build a career. This is particularly the case for those working in the education, health and government service provision areas.

A5.5.7 The Life Cycle

Attraction and retention issues are, in part, linked to the stage of an individual or family in the life cycle. The most mobile parts of the labour force in rural areas tend to be between the ages of about 20 and 35. There is a significant outflow of 15-19 year olds and an inflow of workers in their 20s and early 30s. Outmigration becomes increasingly dominant in the older age groups. The exception is in high amenity 'lifestyle' areas, which attract high rates of retiree and lifestyle migration.

A5.6 Implications of Labour Market Imbalances

In cases where labour demand outstrips supply, the outcome is what might be regarded as an imbalanced market²². These can have significant impacts on individual firms and organisations, communities, and regions, including:

- Delays in the completion of projects, with associated price increases and possible quality compromises;
- Bottlenecks that inhibit the employment of complementary employees;
- Reductions in productivity and profitability;
- Declining levels of service provision;
- Inflationary wage increases in the areas of shortages, that can then have ripple effects within a locality or region;
- High rates of employee turnover;
- Negative effects on investment and the general job creation associated with that investment;
- Labour poaching between firms in the same or related sectors;
- Relocation of firms to labour markets with the required skills or pool of workers; and
- Difficulty in acquiring local upstream or downstream components of the production chain.

²² Of course, a situation can also exist where supply outstrips demand, contributing to unemployment, rather than shortage.

Attracting and retaining skilled labour is of major concern to many rural businesses and communities alike. Regional and local labour markets are shaped by a range of economic, social and political factors that affect demand and supply. While demand for labour does tend to move in line with broader economic cycles, there is some more capacity to deal with issues associated with supply. Supply side strategies generally involve tackling participation rates, education and training systems, workplace conditions and migration. Indirectly, supply can also be influenced by dealing with issues such as housing, services and other amenities, thereby addressing the some of the 'pull factors' needed to attract labour.

Appendix 6 – Central Coast Strategic Tourism Planning Study Recommendations

A6.1 Introduction

The *Central Coast Strategic Tourism Planning Study* (MacroPlan 2008) was developed to create a tourism planning strategy to identify and promote tourism investment within the Central Coast region. While the study area for MacroPlan's (2008) report extends beyond the boundaries of what has been explored in this current document, useful outcomes and recommendations are identified to guide future planning and are outlined below.

Definitions of time frames to commence are:

- Immediate < 12 months
- Short 2009 – 2012
- Medium 2012 – 2018
- Long 2019 – 2023

Abbreviations used:

- CCRT0 Coral Coast Regional Tourism Organisation
- CCSC Coorow and Carnamah Shire Councils
- DEC Department of Environment and Conservation
- DOD Department of Defence
- DOH Department of Health
- DPI Department for Planning and Infrastructure (now Department of Planning)
- DSC Dandaragan Shire Council
- EPRT0 Experience Perth Regional Tourism Organisation
- GSC Gingin Shire Council
- ISC Irwin Shire Council
- MRWA Main Roads Western Australia
- TWA Tourism WA
- TWC The Water Corporation
- VIC Visitor Information Centre

Those agencies with a lead responsibility for implementing the strategies and actions are in bold.

A6.2 Objective 1: Development of world class attractions and products phase

Strategy	Action items	Timing	Responsibility/ Involvement
Development of the IOD as a tourism product as well as a transport corridor	Initiate discussions with MRWA, DEC and DOD with a view of positioning the remaining section as a "coastal wilderness drive" and develop a brand associated with this, e.g. Great Ocean Road.	Immediate	TWA
	Investigate the development of short bushwalks, interpretive nodes, spur roads and lookouts.	Short	DEC, MRWA, DOD, TWA

	Develop public toilets and picnic areas using sustainable design principles.	Short	DEC, MRWA
	Develop marketing collateral, websites and unique signage associated with this tourist drive.	Short	EPRTD , TWA, GSC
Development of the Pinnacles as a world class attraction	Promote and support the Interpretive Centre at Pinnacles.	Immediate	DEC, TWA , DSC, CCRTD
	Review design of Interpretive Centre to allow the provision of quality catering at the Pinnacles.	Immediate	DEC , DSC
	Seek funding to install personalised audio interpretation of the Pinnacle experience.	Short	DEC , TWA
	Seek funding to install a sound and light show at the Pinnacles or an evening program at the Nambung National Park.	Medium	DEC, TWA
Development of Marine Eco Tours – Jurien Bay Marine Park	Identify the unique selling proposition for the Marine Park from user's perspective.	Immediate	DEC , TWA, Tour operators
	Encourage accredited eco tours which enable visitors to engage sensitively with marine life of the Park.	Short	DEC , Eco operators
	Develop a Marine Discovery Centre at Jurien Bay to educate and increase awareness of the values of the marine park	Short	DEC, DSC , TWA
Jurien Bay Foreshore Development	Redevelopment of the Jurien Bay Foreshore area as a well designed mixed use area with a marina, quality retail, food and beverage, commercial and residential development similar to Mandurah Ocean Marina.	Short to medium	DSC , DPI, Private sector
Lobster Attraction at Lancelin or Dongara	Development of a contemporary Lobster attraction to leverage the reputation of the Central Coast as the largest lobster supply region in WA. The attraction needs to guarantee that lobsters would be on the menu all year round.	Short	Private sector, TWA , and GSC/ISC
Gingin Discovery Centre	Promotion of 40 metre Leaning Tower of Gingin and repackaging/reposting of existing attraction for new and higher yield market segments.	Immediate	Gingin Observatory Group , EPRTD, TWA
Development of Regional Food and Wine Showcase	Development of new attraction focused on Olives and related products and other foods/wine produced in the region, with easy access from the highway.	Short	Community group , GSC, TWA, Tour operators
Lesueur National Park, Wildflower Drive	Promotion and packaging of wildflowers drive developed in Lesueur National Park, encouraging overnight stays at Jurien Bay.	Immediate	DEC , DSC, TWA
Restrict heavy haulage use of IOD	Develop a policy to limit heavy haulage vehicles on the IOD.	Medium	MRWA

A6.3 Objective 2: Attract accommodation investments which meet market demand at identified strategic nodes

Strategy	Action items	Timing	Responsibility/ Involvement
Approval of Strategic Nodes for Tourism Accommodation	The recommended hierarchy of strategic nodes for new tourist accommodation be endorsed by stakeholders: <ul style="list-style-type: none"> • Lancelin • Jurien Bay • Dongara • Gingin 	Immediate	TWA , DPI, GSC, DSC, ISC
	<ul style="list-style-type: none"> • North Head 	Medium	

	<ul style="list-style-type: none"> • Pinnacles 		Long
	<ul style="list-style-type: none"> • Green Head • Leeman 		
Undertake market demand and land use capability analysis to establish feasibility of accommodation mix needed at each location	Indicative demand at Lancelin – apartment resort with conference facilities.	Short	GSC
	Indicative demand at Jurien Bay – apartment resort.	Short	DSC
	Indicative demand at Dongara apartment resort, holiday parks with conference facilities.	Immediate	ISC
	Indicative demand at Gingin B&B and farm stays.	Short	GSC
	Indicative demand at North Head – Integrated Eco Resort.	Medium	DSC, DPI, TWA
	Indicative demand at Pinnacles/Nambung National Park – Eco Resort.	Medium	DEC, DSC, TWA
	Indicative demand at Cervantes/Green Head – holiday parks, holiday apartments.	Long	CCSC, DPI, LandCorp

A6.4 Objective 3: Increase visitation to primary destinations in the region

Strategy	Action items	Timing	Responsibility/ Involvement
Prepare tourism plans for each Shire within the framework of the CCSTPS	<p>Audit all tourism products, experiences and determine if they are small business, market or export ready.</p> <ul style="list-style-type: none"> • Determine visitation levels, visitor types in shire • Match product types and experiences with market segments. • Identify gaps in product, experiences and services. • Identify opportunities to value add to existing products and new products. • Evaluate standard of visitor servicing in shire. • Identify investment incentives for new developments. • Establish Council/industry partnership structures. • Review tourism plans every 5 years 	Immediate to short term	GSC, DSC, CCSC, ISC, TWA, EPRT, CCRT
Prepare destination marketing plans for each Shire within the framework of the CCSTPS	<ul style="list-style-type: none"> • Identify source markets for current visitors and potential markets. • Undertake market perception studies of destinations. • Identify destination strengths and weakness from a consumer's perspective. • Determine destination brands and positioning statements. • Review existing distribution systems and channels used by operators. • Identify innovative systems to take products to market and vice versa. • Review existing arrangements with relevant Regional Tourism Organisation for marketing destinations. • Identify co-op marketing opportunities. • Develop marketing and advertising tactics, 	Immediate to short term	GSC, DSC, CCSC, ISC, TWA, EPRT, CCRT

	budget and implementation plan for a 3 year period.		
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A6.5 Objective 4: Ensure that the visitor experience delivered within the region is world class

Strategy	Action items	Timing	Responsibility/ Involvement
Establish a integrated network of accredited Visitor Information Centres in the region	With assistance of local governments, establish accredited visitor information centres at the following towns – Gingin, Lancelin, and Jurien Bay. VICs should be encouraged to be commercial in approach rather than brochure distributors.	Short	GSC, DSC, TWA
	Seek Regional Tourism Organisation's facilitation to establish regular network meetings and information exchange between Perth VIC and Dongara VIC and the new VICs.	Short	EPRT0, CCRT0, GSC, DSC, ISC, TWA
	Seek Regional Tourism Organisation's facilitation to establish accommodation booking systems.	Short	EPRT0, CCRT0, GSC, DSC, ISC, TWA
Establish a Gateway Visitor Centre near Lancelin	Seek the cooperation of the MRWA to establish a gateway visitor centre at the start of the IOD.	Immediate	TWA, MRWA, GSC, DEC, DOD
	IOD Gateway Visitor Centre to service the overall regional needs as well as Lancelin.	Short	EPRT0, CCRT0, TWA, GSC
Improve the quality and standard of customer service in the region	With assistance of Regional Tourism Organisations and the local chamber of commerce, undertake Aussie Host programs to improve customer service standards.	Short	EPRT0, CCRT0, GSC, DSC, ISC, TWA
	Encourage councils to establish shire and regional industry awards in recognition of excellence in service to visitors and local customers.	Short	GSC, DSC, ISC
Communication of contribution of tourism	Regional Tourism Organisations need to play a proactive role on the value of tourism to the local economy.	Immediate	EPRT0, CCRT0

A6.6 Objective 5: Integrate and coordinate the delivery of social and physical infrastructure across local government boundaries

Strategy	Action items	Timing	Responsibility/ Involvement
Effective signposting	Encourage all regional councils to provide effective signposting of all tourism facilities, attractions and VICs.	Short	GSC, DSC, ISC, DEC, MRWA
	Seek funding from federal government to establish a consistent signage scheme for the IOD.	Short	GSC, DSC, ISC, TWA
Encourage installation of innovative infrastructure for basic services	DOH and TWC to collaborate with shire councils to encourage innovative technology in the provision of water and sewage treatment systems for resorts outside town boundaries.	Immediate	TWC, GSC, DSC, CCSC, ISC, DPI, TWA
Visitor Experience along Brand Highway	In conjunction with the owners of petrol stations along the Brand Highway from Gingin to Dongara improve the quality of visitor experience with improved landscaping, visitor amenity and ambience of these popular stopover points.	Short	TWA, MRWA, GSC, DSC
Labour market training	Encourage TAFE to provide structured hospitality training for youth in the region.	Short	TWA, GSC, DSC, ISC

A6.7 Objective 6: A facilitation strategic and statutory planning framework to protect significant sites and encourage tourism development

Strategy	Action items	Timing	Responsibility/ Involvement
Update the Central Coast Planning Strategy	Seek input from relevant stakeholders to review the existing Central Coast Planning Strategy with a view of providing a contemporary planning approach to facilitate sustainable development in this region.	Immediate	DPI, GSC, DSC, CCSC, ISC
Encourage the development of a sense of place in the region	For the strategic nodes of Lancelin, Jurien Bay and Dongara, prepare design guidelines on streetscape, building scales, public amenity etc to establish unique character for each destination.	Short	GSC, DSC, CCSC, ISC
Facilitate the development of critical mass within strategic nodes	Prepare planning policies and urban design guidelines which facilitate the creation of destinations which have sufficient critical mass of residential, economic and tourism components which are able to support sustainable community services.	Short to medium	GSC, DSC, CCSS, ISC
Review town planning schemes	Review shire planning schemes to eliminate substandard tourism proposals as means to fund residential developments.	Short to medium	GCS, DSC, CCSC, ISC