



Far West Region Growth & Investment Strategy

Final Report

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Executive Summary

Strategic Overview

The Far West Region's economic prosperity has traditionally relied on the success of the local mining and resources sector. A weakening of this sector over the past 30-35 years has seen the region's population decline by more than 30%. However, in more recent times, the rate of population decline has stabilised and there is now the prospect of many major developments increasing population and economic growth. Given this situation, the Far West Region requires a strategy to determine the likely growth implications of current and proposed projects, understand how best to manage the impact of future projects and the attraction of support industry by these developments, and appropriately plan for changes to infrastructure, service provision and private investment in the region.

The objective of the *Far West Region Growth and Investment Strategy* is to analyse the current economic and demographic carrying capacities of the region's community and to identify additional capacities and enhancements required to adequately service any projected changes in employment and population occurring from the economic impacts of major projects proposed for the region. The Strategy investigates the following issues:

- Quantify the economic, social and industry impacts of the proposed projects;
- Assess potential increased demand on infrastructure versus regional capacity; and
- Identify infrastructure, resource and skills enhancements to service projected growth.

The Strategy has been developed through a mix of consultation, surveys, desktop research, economic modelling and strategy preparation. The stakeholder consultation process involved direct data collection from major project companies along with discussions with the Outback Development Forum, government, regional economic development stakeholders, political stakeholders, infrastructure providers, lands commissioner, real estate agents, tourism representatives and community groups. The business survey collected additional information and views from the business community regarding its characteristics, business trends and performance, anticipated growth and influencing factors, labour, skills and training issues and challenges and future strategic planning for the region. The stakeholder consultation and business survey processes provided background information used in the development of the Strategy, specifically in terms of identifying key issues and measuring business confidence and sentiment.

Based on direct data collection from the major project companies, the projects planned and/or committed in the Far West Region in the next three years (by 2010) amount to total investment of \$856 million, of which an estimated \$369 million will be spent directly in the region. Some of the projects have operational lives of less than 10 years, including some of the larger projects close to Broken Hill. Therefore, the most critical planning horizon to quantify and assess the economic impacts and subsequently manage growth and change are considered to be the next 5 years. However, the impact analysis of the major projects also clearly demonstrates the strength of the medium-term (5-10 years) prospects for the region. Further, there are indications of increasing exploration activity by the region's mining sector to extend mining reserves and timelines to deliver long-term sustainability. Mining participants in the region indicate resources in the Murray Basin could continue for 50 years on the basis of current production rates and exploration activities. Any other new mining and resource projects and their investment will assist in maintaining growth and return on investment in new infrastructure over the longer-term.

The economic impact of planned and/or committed projects on the regional economy will be significant in the next 5 years. The impact on Gross Regional Product (GRP) is projected to range between \$109 and \$236 million by 2010, equating to a 9%-20% increase on the currently estimated GRP of \$1.195 billion. The impact on employment is projected at between 1,055 FTEs (by 2008) and 1,933 FTEs (by 2010), equating to a 10%-19% increase on the existing regional employment base of 10,000 persons. As a result of new employment, the region's population is projected to increase to a maximum of 27,000 persons in the next 2-3 years. The economic, social and growth impacts will be almost wholly experienced in Broken Hill where the projects are located and based.

The facilitation and retention of this additional economic activity in the Far West Region is reliant on a number of critical factors and enablers, most of which must be immediately addressed within the next 12 months as the major projects gear up. The main external risk to the projects is negative movement in global commodity prices and its affect on the mining industry and its development intentions. The strong commodity prices presently being experienced are driving much of the renewed interest in the local resources sector. The internal risks relate to the local carrying capacity of the Far West Region in terms of provision and development of infrastructure and services, land tenure and access, resource availability, and attraction and retention of skilled workers. While Broken Hill previously housed 35,000 persons and supported four operating mines, the nature of current infrastructure and skills need requires new investment and strategic approaches. The most pressing issues for the region are implementing a successful labour attraction strategy to source new employees and families to the region and providing land and housing to cater for these new employees/families.

Based on the analysis and findings presented in this Strategy, the following factors are identified as being critical to maximising economic and social benefits from the current and future development of the region's resources sector and any other projects with an outcome of delivering increased socio-economic prosperity to the region:

- Knowledge development and dissemination;
- Industry and community engagement;
- Build community capacity;
- Support and assist existing business;
- Attract and encourage new businesses;
- Promote economic development and diversification;
- Infrastructure provision and development;
- Land use efficiency and resource protection;
- Attract and retain skilled labour; and
- Investment attraction and financing.

Development Scenarios

There are 14 major projects planned or committed for the Far West Region by 2010 (see **Table E.1**). The projects are mainly located in and around Broken Hill. The majority of the projects are mining projects. Some projects are located in South Australia but the companies developing these projects indicate a base support role for Broken Hill.

			Construction Phase				Operation Phase				
Company	Project	Assumed Probability	Year start	Total \$m	Region \$m	Jobs	Year start	Life yrs	Total \$m	Region \$m	Jobs
Perilya	Potosi	High	2007	\$25	\$9	25 ^(a)	2008	7	\$24 ^(a)	\$15 ^(a)	40
Perilya	North Mine Deeps	Medium	2010	\$125	\$44	125 ^(a)	2011	7	\$86 ^(a)	\$51 ^(a)	140
CBH	Rasp Mine	High	2007	\$45	\$21	30	2008	10	\$69 ^(a)	\$41 ^(a)	100
CBH	Processing Plant	Low	2009	\$65	\$23	65 ^(a)	2010	8	\$12 ^(a)	\$7 ^(a)	41 ^(a)
Bemax	Snapper	High	2008	\$105	\$32	150	2009	15	N/d	N/d	16
Bemax	Mineral Separation	High	2008	\$45	\$14	100	2009	15	N/d	N/d	36
Havilah	Portia	Medium	2008	\$10	\$5	40	2009	20	\$18 ^(a)	\$11 ^(a)	30
Havilah	Kalkaroo	Low	2009	\$200	\$100	200	2011	11	\$123 ^(a)	\$74 ^(a)	200
Havilah	Mutooroo	Low	2008	\$25	\$10	60	2009	11	\$33 ^(a)	\$20 ^(a)	60
Exco Resources	White Dam	High	2007	\$12	\$5	60	2008	3	\$20	\$12	50
Uranium One	Honeymoon	High	2006	\$55	\$19	50	2008	7	\$20	\$12	50
Broken Hill Pty Ltd/ Leasecorp Projects	Shopping Centre	Medium	2008	\$18 ^(a)	\$12 ^(a)	83	2009	40+	\$20 ^(a)	\$7 ^(a)	121
Macdonald Group of Companies	Retirement Village	High	2008	\$5	\$4	10 ^(b)	2009	40+	\$1	\$0	5
MBS	Golf Club Redev.	Low	2010	\$122	\$73	209 ^(b)	2011	40+	\$22	\$16	220

(a) Estimated using input-output model and industry benchmarking; N/d – not disclosed.

Source: Direct company surveys and research, AECgroup

Each planned or committed project has been categorised by a probability rating based on an assessment of its respective stage of development (i.e. advanced/committed vs preliminary/concept) and basic assessment of risk factors. Based on these probabilities, three future development scenarios are formulated to consider how many of the projects go ahead in the region over the next 10 years. These scenarios therefore describe the range of potential outcomes for the region. In practice, it is not expected that either the low or the high scenario will be recorded. Rather, development is expected to result in a scenario that falls somewhere between these two outer limits.

The three development scenarios and probabilities fit together in the following way:

- Low scenario (or the worst-case outcome) – includes only the 7 projects considered to have a high probability of going ahead;
- Medium scenario – includes the 10 projects considered to have a medium or high probability of going ahead; and
- High scenario (or best-case outcome) – includes all 14 projects, including those considered to have only a low probability of going ahead.

Table E.2 summarises the key statistics for each scenario if the projects are added together irrespective of timing. In total, if all projects are included as per the high scenario, total construction investment in the region is estimated at \$369 million (creating an additional 1,208 jobs during construction), with annual operational expenses of \$283 million (sustaining 1,080 additional jobs per annum during operations).

Table E.2: Summary of Direct Impact by Scenario (Total Aggregation), Far West Region

Scenario	Construction			Operational		
	Total \$m	Regional \$m	Jobs	Total \$m	Regional \$m	Jobs
Low	\$292	\$103	425	\$172	\$97	297
Medium	\$445	\$164	674	\$295	\$166	588
High	\$856	\$369	1,208	\$484	\$283	1,080

Note: Figures are aggregates only irrespective of timing of the projects.

Source: AECgroup

Economic and Social Impacts

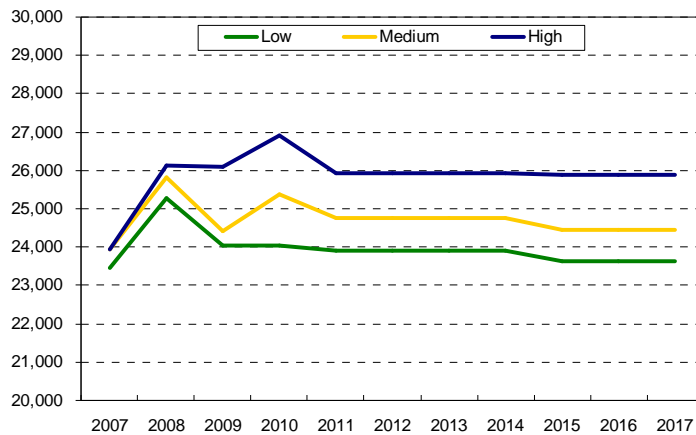
Economic impact analysis traces the flows of spending associated with specific activities/economic shocks in a region to identify changes in key economic measures. The economic impact analysis presented in this study has been undertaken using an input-output modelling approach. These models identify industrial structures and linkages in a regional economy and are used to assess the likely consequences if there is some change in production, earnings or employment in these firms.

The proposed investment in the region is expected to increase GRP by up to \$109 million in 2008 under the low scenario and \$236 million between 2010 and 2014 under the high scenario, equating to a 9%-20% increase in GRP. The expected flow-on value added would result in growth across a number of industry sectors in the Far West Region, particularly downstream industries providing support services to the mining and construction sectors. In employment terms, the low and high development scenarios indicate total additional employment is expected to range between approximately 1,055 FTE positions in 2008 (low scenario) and 1,933 FTE positions in 2010 (high scenario).

The factors that will impact the extent of population growth associated with the development scenarios include the skills and capacity of the unemployed persons in the local labour force, the ability to attract and retain skilled labour in the region and the proportion of mining employment that is permanent, contract or FIFO. Current indications are each mining company is targeting a permanent residential workforce. Assuming a neutral baseline population as per recent organic population growth trends, the region's

population is expected to range between 25,000 people by 2008 (low scenario) and 27,000 people by 2010 (high scenario) (see **Figure E.1**).

Figure E.1: Population Projections, Far West Region (Neutral Baseline) – Scenario Comparison



Source: AECgroup

In terms of demographics, the Far West Region's population profile is "ageing" at a relatively fast rate and is expected to continue doing so. This situation reflects broader social trends including lower fertility rates, lower mortality rates, increased life expectancy, lower marriage rates, people marrying later in life, higher divorce rates, people staying in education longer and migrants generally older in age. In 2022, the ABS projects 27% of the Far West Region's population will be aged over 65 years, an increase from 13% in 2006. When considering the additional population impact from the major projects, the ageing of the population is expected to continue, but the rate at which it does will reduce due to the anticipated attraction of younger families with children.

Economic Development

Economic development in the Far West Region has traditionally relied on the development of infrastructure, population and services around the use of natural resources and assets, mainly in the mining and agricultural sectors. This is again largely the case in the present planning period. Where these natural resources are, or are close to full exploitation or development, without a specific development impetus, additional economic development can only be achieved through organic growth and expansion. This has in fact been the situation for the Far West Region, particularly over the past 30-40 years, with the decline of the local mining and resources sector. Therefore, there are also other strategic economic development opportunities that should be considered to build regional capacity, diversify the economy and better ensure long-term sustainability should there be any downturn in the local mining and resources sector.

To maximise opportunities for local business to expand and diversify, the *Far West NSW Economic Development Plan* includes a range of strategy approaches:

- Encourage small business to diversify or value add;
- Identify local products with export potential;
- Scope for local product/service niche;
- Develop business confidence and entrepreneurial culture; and
- Encourage business partnerships and cooperation.

Based on competitive analysis, the key regional sectors with export potential relate to the mining, agriculture, tourism and cultural sectors. The other sectors largely service local markets and the region's isolation, local demand and critical mass make it difficult to export. An example of a regional industry initiative meeting is the Alliance Engineering Group, which involves a regional industry alliance involving five major engineering firms to increase critical mass and capacity to compete for major projects. Economic

development opportunities relate to the tourism, agricultural, cultural and aged care industries, education and training enablers, manufacturing, building and construction capacity and indigenous and ageing communities.

Regional stakeholders understand the relationship between the projects and commodity prices and see any decline in prices as a risk to the development of the planned projects. Therefore, another challenge for the region's long-term economic growth is to achieve and enhance the positive factors, including identifying specific economic development opportunities that enhance economic diversification and long-term sustainability. The overwhelming factor expected to positively impact the regional economy is the major investment in the region's mining and resources sector. The economic impact assessment demonstrates the significance of these projects to the future economic prosperity of the region. The factors related to the investment in this sector are strong resource demand and prices and forward-looking estimates based on exploration activity in the region.

In terms of potential negative influences on the regional economy, the regional community has experienced a downturn over a 30-year period following mining closures and short-lived new investment. Other factors considered likely to negatively impact growth in the next 5 years included severe skills shortages across almost all industry sectors, limited and insecure supply of water and continuing drought, lack of support from Councils including land releases and development approvals, shortage of housing reducing ability to accommodate new residents/employees, remote location of the region affecting transport costs and business investment and ability to access finance, capital and funding to support new projects. The primary challenge therefore is to implement strategies to mitigate against these negative factors and threats.

Infrastructure and Services

The projected infrastructure needs for the far West Region to deliver the planned major projects relative to regional capacity are outlined below:

- Residential: There is already early signs of pressure in the regional housing market, evidenced by shortages in available housing and land stocks, significant property price and rental growth, increased reinvestment and development proposals from new property developers. There is projected demand for 1,000-1,400 additional dwellings by 2008 and 2010, respectively. The demand is likely to be for larger and higher quality housing which will require new development and land release;
- Retail: There are presently two shopping centre proposals in Broken Hill that aim to arrest escape expenditure to Mildura and Adelaide and meet the projected spending growth of the region. Retail market analysis suggests there could be demand for up to 11,900sqm of retail floorspace in the next 5 years, spread across a range of retail categories. The development of new facilities will need to ensure it is focussed in service gaps and does not overly impact the existing retail sector which is presently trading in difficult circumstances, evidenced by vacancies and high business turnover;
- Commercial: Broken Hill is the administrative and commercial centre of the Far West Region. Existing businesses report a shortage of suitable and available office space. The anticipated business and employment growth in the region is expected to drive demand for up to 7,960sqm of additional commercial office and professional services space in Broken Hill through the development of purpose-built office space;
- Health: The vastness of the region and demographic characteristics provide a challenge for health service delivery. A regional health plan is being developed by the Centre for Remote Health (regional alliance of health providers) to forecast the future health needs of the region in both the acute and chronic health care areas from an increased working population, families, children and older persons. The adequate delivery of services will require the permanent location of specialists in the region. The Broken Hill Hospital, while relatively new, is likely to require expansion to meet additional need. There are dedicated health services for the growing indigenous community which will also require expansion over time;

- **Aged care:** The ageing of the region's population will create increased demand for retirement village units, hostels and nursing home beds. There are an estimated 214 nursing home beds and 40 independent living units (ILUs) at retirement villages in the region. Demand is projected to increase to 290 beds and 164 units, respectively, creating a shortage of 76 beds and 124 units by 2017. There is a proposed 78-unit village to be constructed at Excelsior Oval which will partially meet this shortage;
- **Child care:** There are 14 child care centres in the region providing approximately 345 child care places. Participation in child care in the region is below state benchmarks, suggesting undersupply of around 150 places, reflected by latent demand and waiting lists. This shortage is projected to increase to a maximum of 161 places in the next few years, requiring 3-4 new child care centres. There are some concerns regarding the viability of existing community centres which will need to be addressed;
- **Education:** There is a projected increase of around 300 students in the region in the next few years, which will require reinvestment in existing facilities rather than investment in new facilities. There is likely to be demand/need for a private secondary school to attract/retain families. There is the possibility to develop a new university campus, mining training school, an expanded TAFE facility, teaching hospital and training facility for unemployed persons;
- **Utilities:** There is planning underway to accommodate the industry and domestic needs for water and energy in the region. Water supply is a major focus with many solutions proposed but dependent on financing and cost recovery. Water quality issues are being addressed through a new water treatment plant. Electricity supply is assured but will require some reconfigurations depending on settlement patterns; and
- **Transport:** Roads are the most heavily used transport infrastructure and there are upgrade projects underway. Rail infrastructure is adequate for visitors and freight. There is consideration for the expansion of the airport to accommodate larger aircraft and facilitate further development of the region's tourism sector.

Land and Natural Resources

Land tenure is identified as a significant impediment to the expansion of the urban footprint of Broken Hill, the development of the local mining and resources sector, the expansion of the agricultural and rural sector, the expansion and development of the tourism industry into more remote locations and the development of the smaller population centres across the Far West Region. The issues relate to both Crown Land and Native Title, both of which can be lengthy and costly issues to overcome.

The land use demand analysis highlights the need for further land to be made available for residential subdivision, with this need based on economic and community grounds. The process for this land release would involve revoking existing Crown Land status, extinguishing any Native Title, and extension of any regeneration areas as required. The need for this land will be inside the next 12 months but these processes commonly take in excess of 12 months. The ability to make this land available represents a key enabler to local investment and ensuring the impacts of the mining projects are retained in the region. This requires a fast tracking process between Council, the NSW Department of Lands and other Indigenous stakeholders and organisations as required.

The land planning challenge is significant for Broken Hill and requires the accommodation of up to 1,000 additional dwellings by 2008 and 1,400 additional dwellings by 2010, emphasising significant short-term housing need. There were more than 1,300 unoccupied private dwellings in 2001 (which is reported to have decreased since this time), although reinvestment in these premises has been low and would require landowner cooperation. There are 415 vacant residential lots in Broken Hill, although only 6% are connected to all services and 47% are constrained for other reasons, including tenure. There is the option to consolidate titles in existing areas and undertake new residential subdivision, although these opportunities would only yield small numbers of lots and again would require landowner cooperation. There are opportunities to rezone underutilised non-residential land for residential use, including open space and parks,

such as the Excelsior Oval example. Based on the above, it is clear the development of up to 1,400 additional dwellings at an increased standard in the next 1-3 years will require large-scale land release and subdivision, although tenure issues would need to be addressed immediately with the NSW Department of Lands.

In terms of industrial land, major mining developments typically have a positive impact on a range of businesses that are generally accommodated on industrial land, particularly the manufacturing and transport and storage sectors. While most mining companies expect the flow-on impacts for these service types and industries to be recorded in the broader economy, there are some mining companies that are likely to provide these supply services internally as part of their projects. This will have the effect of reducing the business-to-business impacts of some projects. The projected demand is for an additional 5-25 ha of industrial land over the next 3 years. This demand could be met by the existing vacant industrial zoned land of around 18 ha, Council's recent subdivision of 12 ha (which is predominantly vacant), the opportunity for redevelopment and increased land use efficiency outcomes and the possibility of less external contracting by some of the mining operations. It is not considered necessary to acquire Crown Land, although Council could consider the potential of industrial land at the Airport.

Broken Hill has not traditionally developed with a structured planning approach for commercial zones. The strategy has been employed to encourage new investment and provide the flexibility to meet investor and business needs. In planning terms, this development has been encouraged in City Core 2 zones. Council is proposing to develop a new Local Environmental Plan (LEP) in 2007-2008 to provide a more structured planning approach based on the new NSW standard LEP template. A retail node is recommended around Centro Westside, with the CBD taking on a more tourism, administrative and commercial role.

This strategy also recommends adopting building and character standards to enhance and protect values, and the development of a natural resource management strategy to maintain and enhance the region's natural resource assets, not only for their sustainable use in agriculture, mining, recreation and tourism, but also to maintain their ecosystem services and other values.

Labour, Skills and Training

The delivery of the major projects planned for the Far West Region is requisite on the ability to attract and retain labour. Projected employment need/demand will depend on a combination of factors, including the skills and capacity of the unemployed persons in the local labour force, the ability to attract and retain skilled labour in the region and the proportion of mining employment that will be permanent, contract and FIFO.

Current indications are each mining company is targeting a permanent residential workforce. There is currently an estimated 906 unemployed persons in the Far West Region. Based on an indicative assessment of skills requirements of the additional jobs created, capabilities and motivations of the unemployed persons from consultation and surveys, it is estimated 10%-15% of the existing unemployed persons in the region would be suitable for direct and indirect construction and operational phase employment. The remaining employment would need to be sourced from outside the region and represent population growth. The projections indicate 56%-91% (or 290-1,752 persons) of the future employment will need to be met by people not living in the region, emphasising the importance of labour attraction strategies.

The expected direct and flow-on employment impacts would result in growth across a number of industry sectors in the Far West Region. The mining sector is expected to record the most significant employment growth (474 direct jobs), followed by the downstream industries manufacturing, property & business services, construction, retail trade and finance & insurance. The mining companies in the Far West Region have identified key skill needs as business administrators, mining engineers, mine managers, geologists, metallurgists, jumbo operators, loader / truck operators, production drillers, service crews / charges and tradesmen.

According to the business survey, specific job requirements reported by the businesses responding to the survey varied considerably in line with their operations. Tradesmen were needed by 38% of surveyed businesses with training and qualifications involving carpentry, building and construction, metal fabrication, welding, joining and boilermaking, motor mechanics, plumbing and electrical. Other skills and qualifications required by surveyed businesses also included computing and information technology, hospitality experience, business and finance, engineering and surveying and administration and clerical.

In the 2007 business survey undertaken for this project, approximately 65% of businesses surveyed indicated they currently have recruitment problems, with the most common level of difficulty being for skilled employees (42%), followed by semi-skilled employees (32%), clearly suggesting a skills shortage. Recruitment difficulties for unskilled employees (19%) also indicate a labour shortage in the region. In terms of benchmarking, the NSW BRE reported 47% of firms had recruitment difficulties, with the main area of difficulty being skilled staff. Therefore, the region has an increasing and higher than average skills shortage, highlighting the future skills challenge for the region.

Overall, the key labour force challenges and social factors relevant to the Far West Region are competition for skilled staff, competitive wages, ageing workforce, transient workers, exit of school leavers, sourcing staff, succession planning, training availability, dependence of welfare support, engaging Indigenous workers, private sector investment in training, attitudes of prospective employees and skills and literacy levels.

The supply of skilled labour to the Far West Region is a complex combination of the actual availability of labour, attraction of the job opportunities relative to other competing regions, the effectiveness of the training system to provide appropriately skilled labour, the amount of training undertaken by the private sector, indigenous employment and the skills strategies developed and implemented by government and industry. Regional skills shortages are prevalent across much of Australia. This suggests the need for intervention to ensure training is effectively targeted, relative to future labour requirements in the region and ensuring implementation of broader policy instruments.

Strategy Development

Based on the analysis and findings presented in this study, the following factors are identified as being critical to maximise economic and social benefits from the development of the region's resources sector and other development projects with an outcome of delivering increased socio-economic prosperity:

- Knowledge development and dissemination:
 - Identify information requirements for government, business and investors
 - Identify information/knowledge gaps
 - Consult and involve stakeholders in data/information collection
 - Collaborate with partner organisations to collate/prepare required data
 - Collaborate with partner organisations to disseminate information;
- Industry and community engagement:
 - Inform, involve and collaborate with key stakeholders;
- Build community capacity:
 - Assess community capacity in terms of skills gaps
 - Facilitate community workshops and seminars;
- Support and assist existing business:
 - Consult with local business owners regarding opportunities and issues
 - Develop strategies to capitalise on opportunities and mitigate threats
 - Build linkages and networks between local businesses;
- Attract and encourage new businesses:
 - Profile current business base and identify target businesses and needs
 - Identify and set aside specific requirements for target businesses

- Market to target sectors
 - Facilitate relocation activities;
- Promote economic development and diversification:
 - Identify specific economic development initiatives
 - Engage with relevant stakeholders
 - Review regional economic plan;
- Infrastructure provision and development:
 - Identify critical infrastructure gaps
 - Work with partners to develop strategies for infrastructure development
 - Develop and implement mitigation/development strategies;
- Land use efficiency and resource protection:
 - Identify potential land needs
 - Engage with the NSW Department of Lands regarding tenure
 - Develop Draft LEP for Broken Hill City;
- Attract and retain skilled labour:
 - Increase the availability of labour
 - Attraction of skilled persons to the region
 - Consider overseas recruitment options
 - Improve the effectiveness of the local training system
 - Increase training investment by the private sector
 - Increase indigenous participation in the workforce
 - Support skills strategies from other levels of government; and
- Investment attraction and financing:
 - Establish a working group to identify strategic investment opportunities
 - Develop website for investment promotion and conduct developer tours
 - Provide the required management support for the project.

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1 Introduction

1.1 Project Background

The Far West Region's economic growth and prosperity has traditionally relied on the success of the local mining and resources sector. A weakening of this sector over the past 30-35 years has seen the region's population decline by more than 30%. However, in more recent times, the rate of population decline has stabilised and there is now the prospect of many major developments expected to positively boost population and economic growth. Given this situation, the Far West Region requires a growth and investment strategy to determine the likely growth implications of current and proposed projects, understand how best to manage the impact of future projects and the attraction of support industry by these developments, and appropriately plan for changes to infrastructure, service provision and private investment in the region.

1.2 Project Objectives

The objective of the *Far West Region Growth and Investment Strategy* is to analyse the current economic and demographic carrying capacities of the region's community and to identify additional capacities and enhancements required to adequately service any projected changes in employment and population occurring from the economic impacts of major projects proposed for the region. The Strategy investigates the following issues:

- Quantify the economic, social and industry impacts of the proposed projects;
- Assess potential increased demand on infrastructure versus regional capacity; and
- Identify infrastructure, resource and skills enhancements to service projected growth.

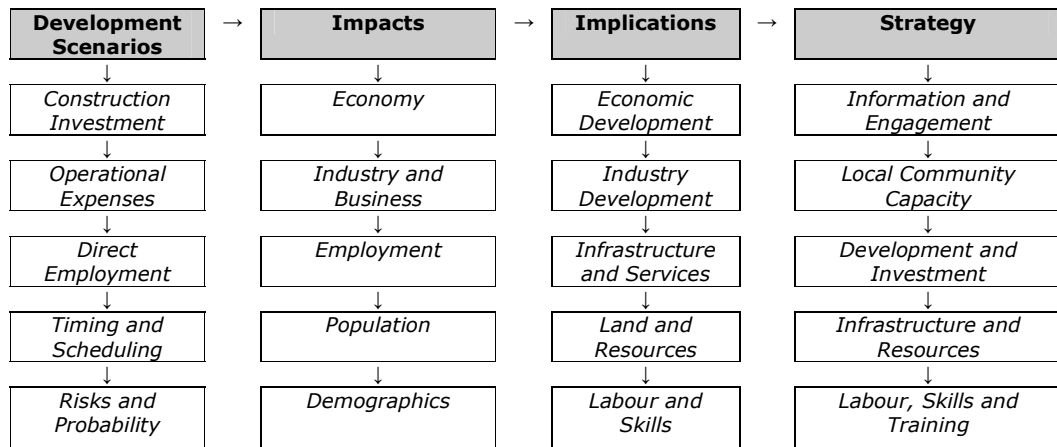
1.3 Project Approach and Process

The Strategy has been developed through a mix of consultation, surveys, desktop research, economic modelling and strategy preparation. The stakeholder consultation process involved direct data collection from major project companies along with discussions with the Outback Development Forum, government, regional economic development stakeholders, political stakeholders, infrastructure providers, lands commissioner, real estate agents, tourism representatives and community groups. The business survey collected additional information and views from the business community regarding its characteristics, business trends and performance, anticipated growth and influencing factors, labour, skills and training issues and challenges and future strategic planning for the region. The stakeholder consultation and business survey processes provided background information used in the development of the Strategy, specifically in terms of identifying key issues and measuring business confidence and sentiment.

Stage	Objective	Process
1.Start-Up	Discuss project scope, approach and administration arrangements.	<ul style="list-style-type: none"> • Meet with Outback Development Forum • Review all available literature and data • Prepare project communication strategy
↓		
2.Consultation	Engage industry and the community to better issues and project context and collect major project data.	<ul style="list-style-type: none"> • Identify all relevant stakeholders • Interview all stakeholders discussing planning • Survey major companies for project data • Verify data with project companies
↓		
3.Survey	Gather on-the-ground data, information and views from the local business sector.	<ul style="list-style-type: none"> • Prepare business survey instrument • Distribute mail-out survey to 520 businesses • Analyse survey results from 68 responses • Identify key business issues and confidence
↓		
4.Research	Research all relevant issues, including economic impacts and implications.	<ul style="list-style-type: none"> • Review consultation and survey results • Undertake economic/social impact modelling • Assess implications for investigation areas
↓		

5.Strategy	Prepare strategies to improve socio-economic prosperity in the region.	<ul style="list-style-type: none"> Consider implications/opportunities/issues Develop strategies to further opportunities Develop strategies to address issues
↓		
6.Reporting	Prepare documentation, workshop with the Forum and present to community.	<ul style="list-style-type: none"> Preparation of draft and final reports Workshopping of draft report with the Forum Presentation of final report to community

The following logic was applied to the impact assessment of major projects in the Far West Region. Firstly, development scenarios were defined based on an assessment of each current and proposed project in the region. All project data was collected and verified directly with each of the relevant companies. The economic and social impact assessment was then completed for each development scenario to produce future growth parameters for the region. Following this, the implications of each growth scenario were then analysed from the economic and industry development, infrastructure and services, land and natural resources, and labour, skills and training perspectives. The strategy was then developed aimed at increasing socio-economic prosperity in the Far West Region.



1.4 Report Structure

This document forms the final document of two separate, yet interlinked, documents:

- Volume I – Business Survey Report:** Documents the findings of the business survey undertaken as part of the Far West Region Growth and Investment Strategy project. The purpose of the survey was to collect data and views from businesses regarding their operational characteristics and key strategic planning issues.
- Volume II – Growth and Investment Strategy:** Documents the growth and investment strategy based on an assessment of projects, their economic and social impacts and implications for economic development, infrastructure, land and labour. The strategy outlines a framework to increase the region's socio-economic prosperity.

The structure of this report (Volume II) is as follows:

1: Introduction	Overview of the context of the study, including context, rationale, objectives and methodology.
2: Regional Overview	Summary analysis of the study region, social and economic trends and performance, existing infrastructure and resources, drivers and inhibitors and the policy context.
3: Projects and Scenarios	Description of key economic enablers and the current and proposed major projects, followed by risk analysis and future development scenarios.

4: Impacts and Growth	Assessment of the economic and social impacts for each development scenario, including quantified industry, business, employment, population and demographic impacts and future growth outcomes.
5: Economic Development and Investment	Assessment of the implication of the economic impacts on the economy and industry, including key economic development and investment opportunities.
6: Infrastructure and Services	Assessment of the implication of the impacts on economic and social infrastructure and utilities, including gaps and additional investment needs.
7: Land and Natural Resources	Assessment of the implications of the impacts on land and natural resources, including urban and rural land, and mineral and agricultural resources.
8: Labour, Skills and Training	Assessment of the implications of the impacts on labour, skills and training, including labour attraction and training and skills strategies.
9: Strategy Development	Development of the growth and investment strategy, summarising all outcomes and providing actions to build capacity and improve prosperity.
Appendix A: Case Studies	Studies of mining and outback regions that have faced similar growth and planning issues.

1.5 Disclaimer

Whilst all care and diligence have been exercised in the preparation of this report, the AEC Group Limited does not warrant the accuracy of the information contained within and accepts no liability for any loss or damage that may be suffered as a result of reliance on this information, whether or not there has been any error, omission or negligence on the part of the AEC Group Limited or their employees. Any forecasts or projections used in the analysis can be affected by a number of unforeseen variables, and as such no warranty is given that a particular set of results will in fact be achieved.

2 Regional Overview

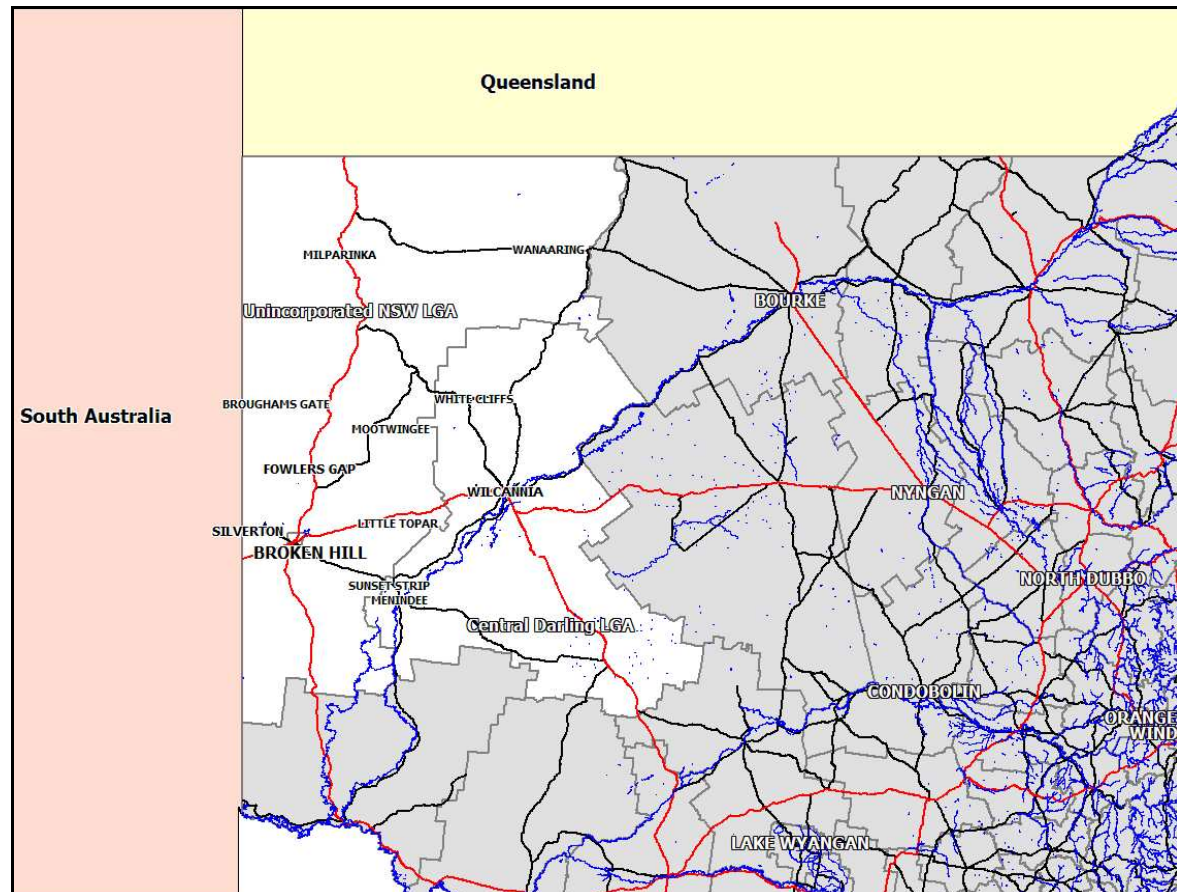
2.1 Study Area

The Far West Region is defined as the Far West New South Wales (NSW) Statistical Division (SD), as per Australian Bureau of Statistics (ABS) geographical classifications (2001). The region covers the very western and northern sections of NSW and is bordered by the states of Queensland and South Australia (see **Figure 2.1**). The region comprises the Local Government Areas (LGAs) of Broken Hill City and Central Darling Shire, along with the Unincorporated section of NSW. The region covers a geographical area of 147,142 km². Broken Hill, located 1,160km west of Sydney, is the regional centre accounting for 86% of the population and the majority of administrative, commercial and community services.

The region was first explored in the 1820s and settled in the 1840s. Broken Hill was founded in 1883 when silver and lead deposits were discovered. The region was quickly identified as having one of the largest and richest deposits in the world. Broken Hill Proprietary Company (BHP) was formed in the area to mine the deposits though ceased work in the region in 1940. Since the 1970s, Broken Hill has experienced a downturn following mine closures, resulting in the population declining to 20,000 persons.

The climate of the Far West Region has played a central role in its historical growth and development, and most importantly, its suitability for certain types of agriculture. Broken Hill records a relatively hotter and drier climate than the rest of Australia. Minimum daily temperatures average as low as 5 degrees Celsius in winter with maximums of over 30 degrees Celsius in summer. On average, the area records 253.3mm of rainfall each year.

Figure 2.1: Far West Region of New South Wales



Source: CData 2001, AECgroup

2.2 Socio-Economic Profile

2.2.1 Population

According to the most recent estimates of population for Australia's regions, there were an estimated 23,449 people living in the Far West Region in 2006 (see **Table 2.1**). The region has the smallest population of all major regions in NSW, representing just 0.03% of the state's population in 2006. Broken Hill recorded an estimated population of 20,223 persons in 2006, equating to 86% of the region's total population.

Table 2.1: Population Trends

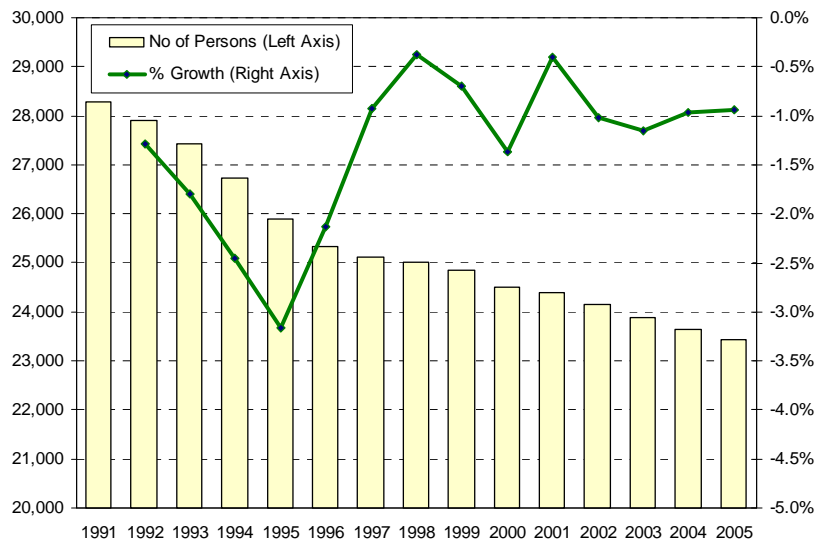
Year	2001	2005 ^(r)	2006 ^(p)	% change 2005-2006	Avg % change 2001-2006
Broken Hill	21,098	20,287	20,223	-0.3%	-0.8%
Central Darling	2,451	2,426	2,412	-0.6%	-0.3%
Unincorporated Area	854	818	814	-0.5%	-1.0%
Far West Region	24,403	23,531	23,449	-0.3%	-0.8%
New South Wales	6,575,217	6,768,941	6,827,694	0.9%	0.8%
Australia	19,413,240	20,339,759	20,605,488	1.3%	1.2%

Note: (p) preliminary, (r) revised

Source: ABS 3218.0 Regional Population Growth, ABS 3101.0 Australian Demographic Statistics

Between 1991 and 2006, the population of the Far West Region declined on a consistent basis with negative growth recorded in each and every year, due mainly to negative net migration of residents out of the region (see **Figure 2.2**). However, after periods of large population decreases, the rate of population decline has reduced over the past 7-8 years. The upsurge in the mining industry and a strong birth rate is expected to result in further stabilisation and potential increases to population over the next 5-10 years.

Figure 2.2: Population Trends, Far West Region



Source: ABS 3218.0, AECgroup

In terms of official population projections, the ABS and NSW Department of Infrastructure, Planning and Natural Resources both project the Broken Hill and Central Darling populations will decline at an average rate of approximately 1.2% over the next 10 years, reducing the region's population toward 20,000 persons. This is despite the many projects planned for the region and the likely employment and population impacts.

2.2.2 Demographics

The Far West Region is classified as a relatively low socio-economic area, evidenced by low index ratings across a number of socio-economic indexes (see **Table 2.2**), a relatively older population, low labour force participation, higher rates of part-time employment, significantly higher unemployment, significantly lower household income, low attainment of qualifications and a high ratio of blue-collar workers.

Table 2.2: Comparison of Socio-Economic Indices for Areas

	Index of Disadvantage	Index of Advantage / Disadvantage	Index of Economic Resources	Index of Education and Occupation
Broken Hill	929.5	909.6	899.0	925.4
Central Darling	864.7	890.6	891.7	905.3
Unincorporated Area	942.9	937.0	950.9	915.6
Far West Region	923.2	908.7	900.5	922.8
New South Wales	1,000.5	1,015.3	1,030.5	1,009.7
Australia	1,002.2	1,004.9	1,009.3	1,001.2

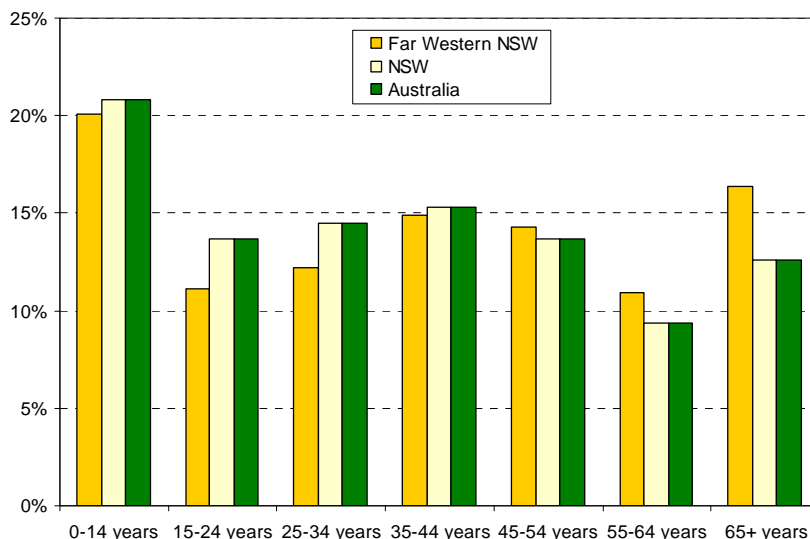
Source: ABS 2039.0, AECgroup

The Far West Region has experienced a number of major changes in the last 30 years that have impacted the demographic characteristics of the population, including:

- A very significant decline in the population from a peak of 35,000 in the 1970s;
- The indigenous population increased by more than 40% between 1991 and 2001;
- The population is considerably older than it was in 1971;
- Family and household sizes have become smaller;
- There is less full-time employment and more part-time employment;
- Females have a higher labour force participation now than in 1971;
- Traditional industries such as mining and manufacturing employ less people; and
- Individual and household incomes are generally lower than they were in 1971.

The age profile of the Far West Region is slightly older than State and National benchmarks, with a much higher proportion of persons aged over 55 years (27.3%) and less persons generally in the younger age brackets (see **Figure 2.3**). Overall, the average age of the region's population of 39.9 years in 2001 was above state and national benchmarks of 36 years.

Figure 2.3: Comparison of Age Profiles, 2001 Census



Source: CDATA 2001, AECgroup

2.2.3 Economy

The size of the Far West Region economy, as measured by Gross Regional Product (GRP), was estimated at \$1,195 million in 2005-06, accounting for 0.4% of the New South Wales Gross State Product (GSP) of \$319.5 billion (see **Table 2.3**). Regional economic growth in 2005-06 was estimated at 14.7%, more than three times the rate of growth recorded by NSW (4.5%). The dominance of the capital-intensive mining industry means GRP per capita in the Far West Region of \$50,978 is above the State average of \$46,801.

Table 2.3: Size of the Regional Economy, 2005-06

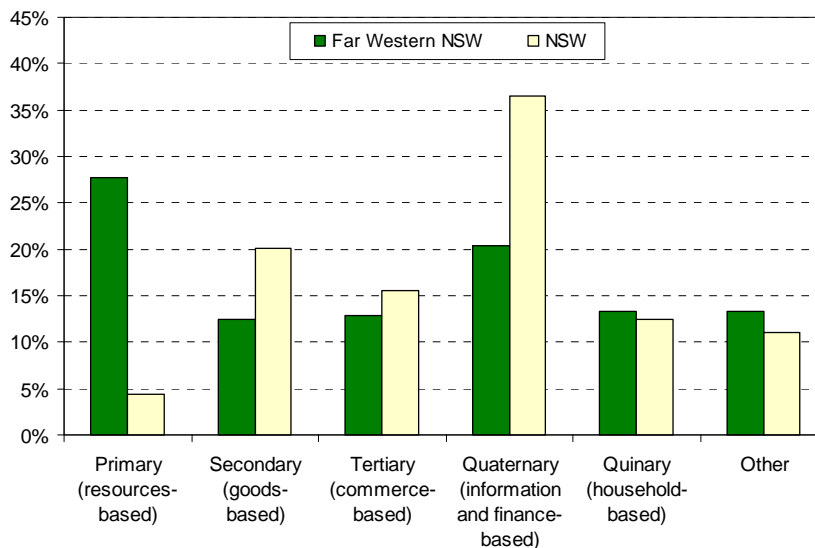
Indicator	Far West Region			New South Wales	
	Total (\$m)	% change	% of NSW	Total (\$m)	% change
Total Factor Income	\$1,055	14.7%	0.4%	\$282,101	4.5%
GRP/GSP	\$1,195	14.7%	0.4%	\$319,541	4.5%
GRP/GSP per capita	\$50,978	15.1%		\$46,801	3.6%

Note: Factor income is GRP/GSP less net taxes.

Source: ABS 5220.0, AECgroup

Reflecting its origins, including vast natural resources, the regional economy records a significantly higher proportion of its economy, relative to the State, in the primary sector, particularly in the area of mining (see **Figure 2.4**). Mining is estimated to account for 23.6% of the total economy, almost ten times the State average of 2.5%. Agriculture is estimated to contribute 4.0% to the economy, twice the State average. The Quinary sector in the region is also slightly larger in relative terms, mainly in the area of health and community services. The region records relatively less economic activity in the quaternary and secondary sectors compared with NSW averages, particularly in the areas of manufacturing (which suggests exports of raw production from mining) and finance. Overall, the analysis confirms the Far West Region is largely driven by the resources sector (forestry, agriculture, fishing, mining and extractive industries).

Figure 2.4: % Contribution to Total Factor Income by Industry Grouping, 2005-06



Source: AECgroup

The Far West Region's economic performance has traditionally been closely tied to the mining/resources sector. However, the decline of this industry over the past 30 years has increased the focus on other economic sectors, including agriculture and tourism. In recent times, the region has recorded positive tourism demand relative to state and national benchmarks. The region's grazing and cropping industries, however, have suffered recently due to drought and a lack of water supply in the Darling River system.

2.2.4 Labour

The labour market in the Far West Region has undergone significant change in recent years. Major changes have been caused by the restructuring of the economy due to the decline in the mining industry and the subsequent fall in the population. National trends, including the increase in part time employment, have also been experienced in the region. Although population has declined and there is an older demographic relative to benchmarks, the region's labour force has been increasing, leading to the participation rate increasing towards state and national benchmarks.

The trend unemployment rate in the Far West Region in the September Quarter 2006 was estimated at 8.3%, well above the New South Wales (5.4%) and Australian (5.0%) averages (see **Table 2.4**). There were an estimated 914 unemployed persons in the Far West Region in September 2006. Trend analysis suggests the number of unemployed persons has increased at a slower rate than the labour force, which has resulted in the unemployment rate falling marginally from 8.5% in September 2005. Unemployment in Central Darling and the Unincorporated Area remained relatively unchanged over the past year, while Broken Hill recorded a decline from 8.5% to 8.3%.

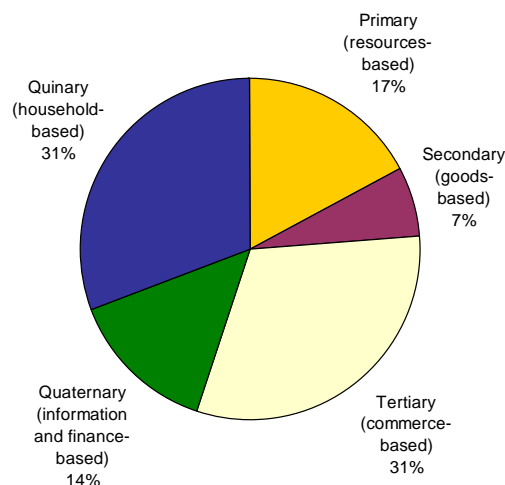
Table 2.4: Recent Trends in Unemployed Persons and the Unemployment Rate (Smoothed Series)

	Unemployed Persons					Unemployment Rate (%)				
	Sep 05	Dec 05	Mar 06	Jun 06	Sep 06	Sep 05	Dec 05	Mar 06	Jun 06	Sep 06
Broken Hill	743	757	749	747	761	8.5%	8.5%	8.2%	8.1%	8.3%
Central Darling	113	112	106	107	114	10.0%	9.7%	9.0%	9.0%	9.6%
Unincorporated Area	38	39	39	38	39	6.7%	6.8%	6.7%	6.4%	6.6%
Far West Region	894	908	894	892	914	8.5%	8.5%	8.2%	8.1%	8.3%
New South Wales	176,300	178,600	179,400	182,600	186,300	5.2%	5.2%	5.2%	5.3%	5.4%
Australia	535,600	536,700	540,700	539,500	535,300	5.1%	5.1%	5.1%	5.1%	5.0%

Source: DEWRSB Small Area Labour Markets, September Quarter 2006

The Far West Region's occupation profile has changed over the past two Census periods, with an increasing share of employment in the professionals, associate professionals and intermediate clerical, sales & service worker categories. In terms of industry, the Far West Region recorded the largest share of its employment in the Quinary (household-based) sector in 2001 (26.4%), followed by the tertiary (commerce-based) sector at 23.3%, both ratios having increased over the past 10 years (see **Figure 2.5**). Compared with state benchmarks, the region records more resource and household-based employment but less information & finance and goods-based sector employment.

Figure 2.5: Distribution of Employment by Industry, Far West Region (2001)



Source: CDATA 2001, AECgroup

2.2.5 Investment

There were a total of 35 new dwelling approvals in 2005-06 in the Far West Region, a decrease from 54 in 2004-05 but higher than the 22 recorded in 2003-04 (see **Table 2.5**). There have been fluctuating levels of residential building approvals over the past four years. Houses have contributed almost all of new dwelling approvals in recent years with only 3 units given approval in 2003-04. The total value of new residential building approvals in 2005-06 was \$4.65 million, down from \$7.64 million in 2004-05. The value of new house approvals has been the major contributor of residential investment, accounting for over 95% of the total in the past four years. Broken Hill City is the major location of residential approvals accounting for over 85% of the value in 2005-06.

Table 2.5: Number and Value of New Residential Building Approvals, Far West Region

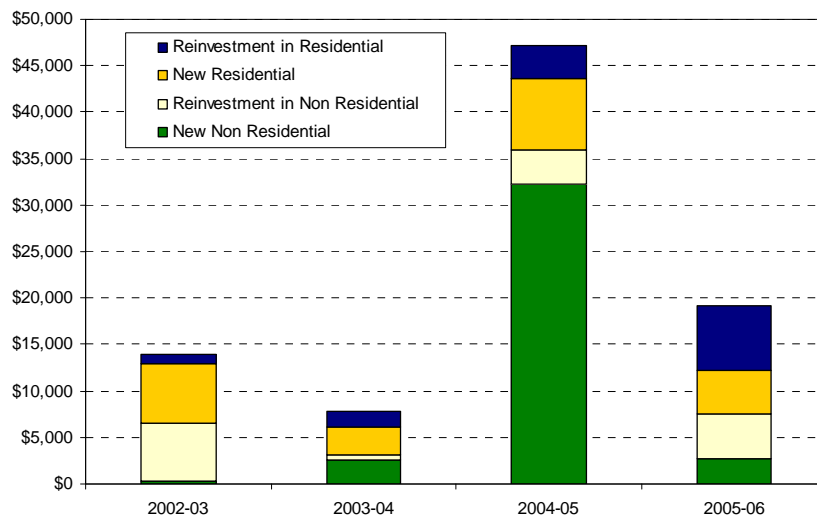
Year	No. of Dwellings			Value of Dwellings (\$000)			Avg. Value of Dwellings (\$)		
	Houses	Units	Total	Houses	Units	Total	Houses	Units	Total
2002-03	36	-	36	\$6,410	-	\$6,410	\$178,056	N/a	\$178,056
2003-04	19	3	22	\$2,449	\$485	\$2,934	\$128,895	\$161,667	\$133,364
2004-05	54	-	54	\$7,642	-	\$7,642	\$141,519	N/a	\$141,519
2005-06	34	-	34	\$4,651	-	\$4,651	\$136,794	N/a	\$136,794

Source: ABS 8731.0

In addition to new residential dwelling investment, there has been increasing investment in alterations and additions to dwellings, believed to be the result of the increasing equity in homes following the recent property price boom and continued price growth. There was a record high \$36.0 million in non-residential building approvals in the Far West Region in 2004-05. During 2005-06 the value of non-residential building approvals fell to \$7.5 million, representing almost an 80% fall, but reflecting the lumpy nature of this type of investment. Alterations and additions accounted for \$4.8 million in 2005-06.

Overall, there was around \$20 million of residential and non-residential building investment approved in the Far West Region in 2005-06, below the peak of \$47 million in 2004-05, which was led by a significant increase in non-residential investment (see **Figure 2.6**). Attracting private and public investment to regional areas like Far West Region has generally been a constraint to regional economic growth. The availability of capital and financing, and the ability for investment return to be commensurate with investment risk, have generally been the main factors contributing to this situation.

Figure 2.6: Total Value of Residential and Non-Residential Building Approvals (\$000)



Source: ABS 8731.0

2.2.6 Property

During the June Quarter 2006 the average house sale price in the Far West Region was \$77,000, around 25% of the State average of \$369,000 (see **Table 2.6**). The growth in housing prices was however significantly higher at 22.0% during the year, and since 2001 there has been effectively a doubling of prices from \$38,000. Price growth has been consistent since the September Quarter 2001.

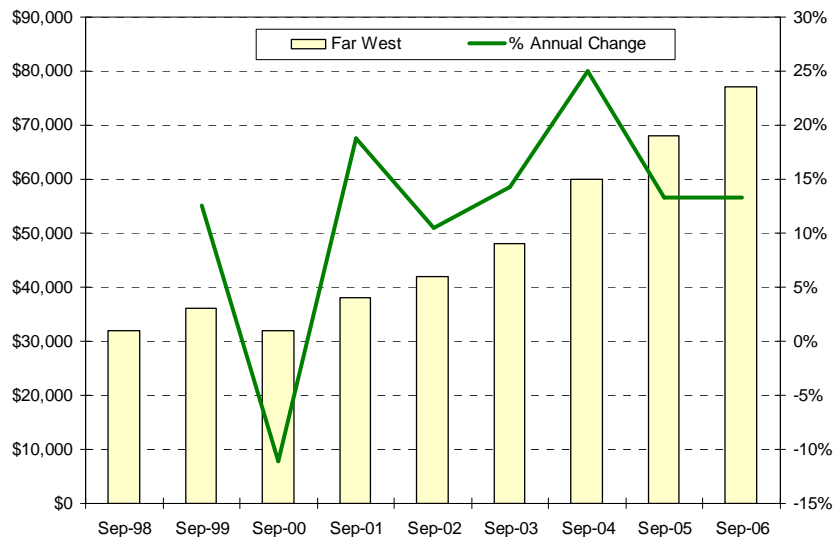
Discussions with real estate agents indicate all sectors of the market are increasing, including the lower end product. Both local and outside investors, on the basis of the future growth of the region and land shortages, are fuelling the pricing boom. There are few examples of house and land packages being sold off the plan in Broken Hill.

Table 2.6: Housing Prices, June Quarter 2006

Area	Sep Q 2001	Sep Q 2005	Sep Q 2006	% Change (Sep 05-Sep 06)	Avg. % Change (Sep 05-Sep 06)
Far West Region	\$38,000	\$68,000	\$77,000	13.2%	15.2%
Non Metropolitan NSW	\$141,000	\$250,000	\$259,000	3.6%	9.2%
New South Wales	\$238,000	\$355,000	\$369,000	3.9%	12.9%

Source: NSW Department of Housing

Figure 2.7: Housing Prices in the Far West Region



Source: NSW Department of Housing

Weekly rent in the Far West Region recorded a median of \$150 for a 3-bedroom house during the December Quarter 2006, below the NSW median of \$270 during the same period (see **Table 2.7**). Average growth in rents of 4.0% since 1998, slightly lower than the 4.5% average throughout NSW. Coupled with the house price growth, this means rental returns have reduced in the region.

Table 2.7: Weekly Rent, December Quarter 2006

Area	Houses		Flats/Units	
	2 bedrooms	3 bedrooms	1 bedroom	2 bedrooms
Far West Region	N/a	\$150	\$150	N/a
New South Wales	\$260	\$270	\$265	\$350

Source: NSW Department of Housing

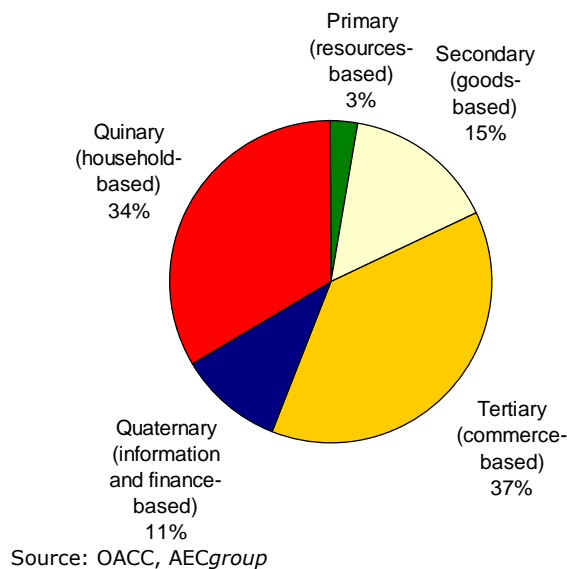
2.2.7 Business

There are more than 1,000 businesses and organisations registered in the Far West Region according to databases maintained by the Outback NSW Area Consultative Committee (OACC). A breakdown of these businesses is presented in **Figure 2.8** and identifies the commerce-based sector as the most prominent, which includes retail, wholesale and transport businesses. The household-based sector is identified as the next largest, represented by accommodation, health, cultural and personal services.

In terms of business structure, there was significant representation from companies compared with the NSW BRE averages for regional NSW, with less representation from partnerships. In terms of size, the majority of businesses (80%) were small businesses, although the survey suggested fewer small businesses compared with regional NSW averages. In terms of length of time in the region, more than half of all businesses responding to the survey had been operating in the region for more than 20 years, significantly higher than regional NSW averages. Around 40% of businesses recorded turnover exceeding \$1 million in 2005-06.

The business survey sought to collect data regarding business markets, materials and performance. The Far West Region (85%) was the main market for products and services supplied from the region. However, areas outside the Far West Region accounted for 67% of raw materials, with South Australia a major source of imports. In terms of performance, around half of all businesses reported increases to sales in the past 12 months, but a large part of this increase was due to price growth, which meant a lower one-third of businesses actually reported increases to profitability.

Figure 2.8: Breakdown of Businesses in the Far West Region

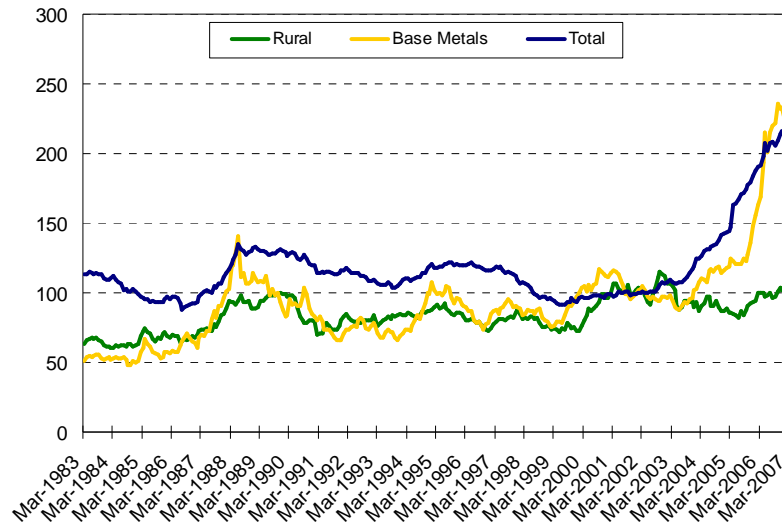


3 Projects and Scenarios

3.1 Development Enablers and Risks

There are critical factors that represent enablers and risks to the development of major projects in the region. The majority of the projects are mining and resource projects. In the current climate, global commodity prices are the primary driver of the renewed interest and boom in the Australian mining sector, with these prices in turn dependent on global market supply and demand conditions. At the same time, a collapse in these prices represents a risk to current and future development in the Far West Region. The RBA's index of commodity prices demonstrates the recent upward trend (see **Figure 3.1**).

Figure 3.1: RBA Index of Commodity Prices (A\$)



Note: 2001-02 = 100

Source: RBA Index of Commodity Prices

The other risk factors (or enablers) that need to be considered for the delivery and viable operation of new mining projects in the region (both to 2010 and beyond) are:

- Land and tenure;
- Timing and staging;
- Available resource reserves;
- Accuracy and results of drilling and tests;
- Planning approvals and environmental impacts;
- Financing and capital raising;
- Costs including transport, wages and equipment;
- Supporting infrastructure including water, utilities and transport; and
- Competition for and attraction and retention of labour.

In particular, the competition for labour is acute amongst the resource areas in Australia, representing a major risk to development. Labour attraction relates to the following:

- Recruitment techniques;
- Competitive wages;
- Career path development;
- Education and training opportunities;
- Housing supply;
- Health services;
- Lifestyle perceptions; and
- Community infrastructure.

3.2 Major Projects in the Mining and Resources Sector

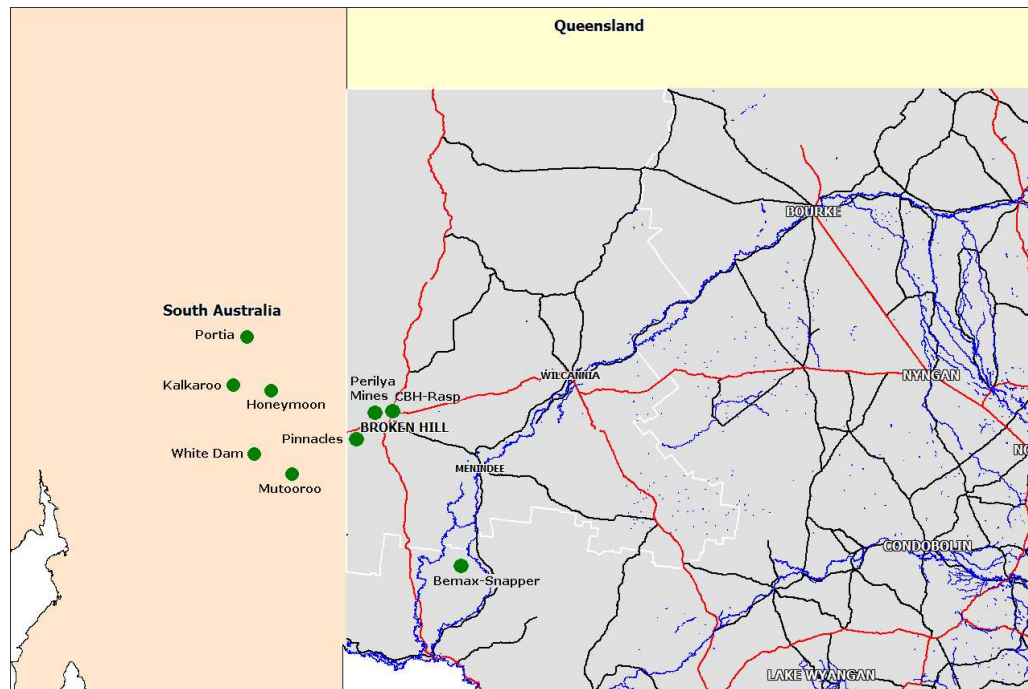
The mining industry has played a central role in both the expansion and decline of the region. There are many new mining projects either planned or committed impacting the Far West Region which are expected to revitalise the regional economy. There are 11 projects in the region that are either under development/construction or in the advanced stages of planning/feasibility (see **Table 3.1**). Six of the projects are located in the Far West Region (see **Figure 3.2**), with the remaining five located less than 100km west of Broken Hill in South Australia. The companies developing these projects have indicated a major supporting role for Broken Hill in their construction and operations, including accommodating the workforce and infrastructure and services support.

The development of all of these projects is planned before 2010. Some of the projects have project lives of less than 10 years, including some of the larger projects close to Broken Hill. There are indications of increasing exploration activity by these companies and others to extend mining reserves and timelines in the region to deliver long-term sustainability (see Section 3.2). Mining participants in the region indicate resources in the Murray Basin could continue for 50 years on the basis of current production rates and exploration activities. It is expected mining investment will be maintained in the region beyond 2010, which is also dependent on infrastructure, labour and commodity prices.

The active mining companies include Perilya, Bemax Resources, CBH Resources, Havilah Resources, Exco Resources and Uranium One. The largest projects in terms of capital investment are Havilah's Kalkaroo Mine (\$200 million), Perilya's North Mine Deeps project (\$125 million) and Bemax's Snapper Mine (\$105 million). The projects considered most likely to be delivered based on their stage of development are the Perilya Potosi Mine (\$25 million), CBH's Rasp Mine (\$45 million), Bemax's Snapper Mine and Mineral Separation Plant (\$45 million), Exco Resources' White Dam project (\$12 million) and Uranium One's Honeymoon project (\$55 million).

All data and information regarding the mining projects has been directly sourced from and verified with each mining company. Where there have been data gaps, estimates have been prepared based on benchmarking and input-output economic analysis.

Figure 3.2: Planned/Committed Mining and Resource Projects, Far West Region



Source: AECgroup

Table 3.1: Description of Planned/Committed Mining and Resource Projects, Far West Region

Company	Project	Location	Resource	Assumed Probability	Construction Phase				Operation Phase				
					Year start	Total \$m	Region \$m	Jobs	Year start	Life yrs	Total \$m	Region \$m	Jobs
Perilya	Potosi	Broken Hill	Silver-Lead-Zinc	High	2007	\$25	\$9	25 ^(a)	2008	7	\$24 ^(a)	\$15 ^(a)	40
Perilya	North Mine Deeps	Broken Hill	Silver-Lead-Zinc	Medium	2010	\$125	\$44	125 ^(a)	2011	7	\$86 ^(a)	\$51 ^(a)	140
CBH	Rasp Mine	Broken Hill	Silver-Lead-Zinc	High	2007	\$45	\$21	30	2008	10	\$69 ^(a)	\$41 ^(a)	100
CBH	Processing Plant	Broken Hill	Silver-Lead-Zinc	Low	2009	\$65	\$23	65 ^(a)	2010	8	\$12 ^(a)	\$7 ^(a)	41 ^(a)
Bemax	Snapper	Pooncarie	Zircon	High	2008	\$105	\$32	150	2009	15	N/d	N/d	16
Bemax	Mineral Separation Plant	Kanandah	Zircon	High	2008	\$45	\$14	100	2009	15	N/d	N/d	36
Havilah	Portia	South Aust	Gold	Medium	2008	\$10	\$5	40	2009	20	\$18 ^(a)	\$11 ^(a)	30
Havilah	Kalkaroo	South Aust	Copper-Gold	Low	2009	\$200	\$100	200	2011	11	\$123 ^(a)	\$74 ^(a)	200
Havilah	Mutooroo	South Aust	Copper-Cobalt	Low	2008	\$25	\$10	60	2009	11	\$33 ^(a)	\$20 ^(a)	60
Exco Resources	White Dam	South Aust	Gold	High	2007	\$12	\$5	60	2008	3	\$20	\$12	50
Uranium One	Honeymoon	South Aust	Uranium	High	2006	\$55	\$19	50	2008	7	\$20	\$12	50

(a) Estimated using input-output model and industry benchmarking; N/d – not disclosed.

Source: Direct company surveys and research, AECgroup

3.2.1 Perilya

Perilya is an Australian mining company and is publicly listed on the Australian Stock Exchange with a market capitalisation of almost \$A1 billion in the third quarter of 2006. The company currently operates mines in Broken Hill and is developing, evaluating and exploring more than 10 other resources/projects across Australia, including South Australia, Western Australia and Queensland. The company's focus has been to capitalise on record high zinc and lead prices and diversify its minerals production.

Perilya presently mines silver, lead and zinc at its South and North Mine operations in Broken Hill. Perilya acquired the mines from Pasminco in May 2002. There are approximately 600 local residents and 180 contractors employed at the two mines. In total, Perilya manages 1,042 sq km of terrain which includes the leases for the Southern and North Mines, the Potosi Trend and the Little Broken Hill and Pinnacles areas.

Perilya's current policy is for its employees to reside permanently in Broken Hill. Perilya maintains a portfolio of houses in Broken Hill for its staff, however, these residences are presently at full occupancy. The continuation of a residential workforce policy will be reliant on the supply of new housing in Broken Hill and the ability to attract workers to live permanently in the region. The alternative is a Fly-In-Fly-Out (FIFO) policy.

Presently, Perilya has 6 years of reserves in its existing mines and is looking to extend this timeframe through the development of the Potosi Mine and extending the North Mine, referred to as the North Mine Deeps project. These two projects would add a further 10 years to Perilya's reserves. Perilya is also actively exploring further resources. A summary description of these two projects is provided below:

- **Perilya Potosi Mine:** The Potosi Mine is located 2km north of Broken Hill. The mine is currently under construction with the decline beginning in December 2006 and the first delivery of ore expected in late 2007. The mine is expected to produce at least 4 Mt of silver, lead and zinc. The total construction costs for the project are estimated at \$25 million, with an estimated \$9 million to be spent in the region. The mine life is presently estimated at 6-8 years. The mine is expected to create 40 direct jobs.
- **Perilya North Mine Deeps:** Perilya has been operating the North Mine in Broken Hill since May 2002. Perilya is exploring the possibility of extending operations in the North Mine to beneath the existing 26 levels. The pre-feasibility study is to be completed by May 2007 with the feasibility study scheduled for completion late 2007. It is anticipated the extension could be operational by 2010. The total construction costs for the project are estimated at \$125 million, with an estimated \$44 million to be spent in the region. The mine life is anticipated to be 7+ years. The extension to the mine is expected to create 140 direct jobs.

3.2.2 CBH Resources

CBH Resources is an Australian mining company and is publicly listed on the Australian Stock Exchange with a market capitalisation of more than \$A300 million in May 2007. The company operates the Endeavour zinc-lead-silver-copper mine at Cobar and is developing new opportunities with a zinc-copper project in North West Western Australia, and a silver-lead-zinc project in Broken Hill, referred to as the Rasp Mine. CBH Resources is also undertaking a scoping study to build a new processing plant capable of treating 750,000 tonnes of ore per year in Broken Hill onsite at the Rasp Mine. Site works for the decline at the Rasp Mine commenced in January 2007 with access to the ore body scheduled for August 2008. A feasibility study will then be put to the board before approval is given to the final stage of the project. The total construction costs for the Rasp Mine project are estimated at \$45 million (in addition to \$65 million for the processing plant), with an estimated \$21 million to be spent in the region, creating 30 jobs. The mine life is anticipated to be over 10 years. During stage 1 and 2 of the project there will be an estimated 30 employees working on the construction of the mine. This will include 8 people directly employed by CBH with an additional 22 contractors. Once the mine begins production, there will be approximately 100 direct employees.

3.2.3 Bemax Resources Ltd

Bemax Resources Ltd is an Australian mining company and is publicly listed on the Australian Stock Exchange with a market capitalisation of more than \$A350 million in May 2006. The company is a significant producer of mineral sands with three operating sand mines, two operating mineral separation plants and further mining development is progress.

Bemax Resources Ltd's major development in the Far West Region has been the Pooncarie Project, located 200 km south-east of Broken Hill. The project includes the operation of the Ginkgo Mine (opened in December 2005) and the Broken Hill Mineral Separation Plant (BHMSPP) (opened in February 2006). The heavy metal concentrates from the mines is trucked to Broken Hill for separation into products at the BHMSPP.

Currently there are 64 people employed at the Ginkgo Mine with 47 employees at the BHMSPP and an additional 94 maintenance and earthmoving workers. Bemax has constructed a camp at Pooncarie to accommodate employees of the Ginkgo Mine. It is likely this camp will be expanded for the Snapper Mine. Presently, around 20% of the Ginkgo Mine workforce lives in the Far West Region, including Broken Hill and Menindee. Employees at the BHMSPP are accommodated in Broken Hill. Bemax uses a 5 on/5 off roster with employees staying at Pooncarie while working.

The Pooncarie Project's next stage is the development of the new Snapper Mine and redevelopment of the BHMSPP. A description of these projects is provided below:

- **Bemax Snapper Mine:** Bemax is developing the Snapper Mine and completed drilling to confirm deposits of approximately 563,000 tonnes of zircon. The mine is expected to be operational by late 2008. The total construction costs for the project are estimated at \$105 million, with an estimated \$30 million to be spent in the region, creating 150 jobs during the construction phase. The mine life is presently estimated at 16 years. The mine is expected to create around 80 direct jobs when operational with 20% living in the Far West Region.
- **Bemax Redeveloped BHMSPP:** Bemax is planning to redevelop the BHMSPP. The new Rutile and Zircon plant will be able to separate non-magnetic minerals without the need to ship to Bunbury and is expected to be operational by early 2009. The total construction costs for the project are estimated at \$45 million. The project life is estimated at 16 years. The project is expected to create 36 additional direct jobs when operational with 60% of operating expenses to be spent in the region.

3.2.4 Havilah Resources

Havilah Resources is a South Australian mining company and is publicly listed on the Australian Stock Exchange with a market capitalisation of more than \$A160 million in May 2007. The company has three projects entering the feasibility study stage located in close proximity to Broken Hill but in South Australia. Havilah Resources is considering basing its workforce for these projects in Broken Hill.

A summary description of these projects is provided below:

- **Havilah Portia Mine** – Havilah has been exploring the Portia prospect area 125km northwest of Broken Hill in South Australia and identified gold deposits. A trial open pit mine is planned to be operational by the end of the year. The total construction costs for the project are estimated at \$10 million, with an estimated \$5 million to be spent in the region, creating 40 jobs during the construction phase. If the trial mine is successful, a mining operation could continue for more than 10 years. The mine is expected to create 30 direct jobs when operational.
- **Havilah Kalkaroo Mine** – Kalkaroo is a large copper and gold deposit located 100km west of Broken Hill in South Australia. The project is in the early feasibility stage for a large-scale open pit mine. The total construction costs for the project are estimated to be at least \$200 million, with an estimated \$100 million to be spent in the region,

creating 200 jobs during the construction phase. The mine life is estimated at a minimum 11 years. The mine is expected to create 200 direct jobs when operational.

- Havilah Mutooroo Mine – The site, first worked for copper between 1887 and 1914, is located 60 km west of Broken Hill in South Australia and 16 km south of the main east-west railway line to Port Pirie. Havilah Resources has signed a Memorandum of Understanding to form a joint venture with Heilongjiang Resources Limited to carry out a feasibility study and develop the Mutooroo project to mine copper and cobalt. The total construction costs for the project are estimated at \$25 million, with an estimated \$10 million to be spent in the region, creating 60 jobs during the construction phase. The mine life is estimated to be at least 11 years. The mine is expected to create 60 direct jobs when operational.

3.2.5 Exco Resources

Exco Resources is an Australian mining company and is publicly listed on the Australian Stock Exchange with a market capitalisation of approximately \$A48 million in December 2006. The company's current portfolio includes the White Dam Gold Project in South Australia and the Cloncurry Copper Project in North-West Queensland.

The White Dam Gold Project is located adjacent to the Barrier Highway near Olary, 80 km west of Broken Hill. Exco Resources plans to process 4.5m tonnes of ore from an open pit mine to produce approximately 50,000 ounces of gold per annum. A Native Title settlement was agreed in July 2006 and government approvals are currently being progressed. The start of production is expected in late 2007/early 2008. Further drilling and pit optimisations will be carried out over the adjacent Vertigo and White Dam North deposits with a view to adding more ore to the production schedule.

The total construction costs for the project are estimated at \$12 million, with an estimated \$5 million to be spent in the region, creating 60 jobs during the construction phase. The mine life is estimated at between 2 ½ and 4 years. The mine is expected to create 50 direct jobs when operational with annual expenses of \$20 million, with an estimated \$12 million to be spent in the region. The company will most likely build an accommodation camp near the White Dam site for employees and where possible will endeavor source its workforce locally.

3.2.6 SXR Uranium One

Uranium One is the second largest global miner of uranium, with a market capitalisation exceeding \$US5 billion. The company has operations throughout the world. In Australia, its main project is the Honeymoon Project, located 75km west of Broken Hill in South Australia. Operations will involve acid in-situ leaching to remove the uranium from the ground before it is processed into yellowcake, packaged into drums and transported.

Construction of the mine began in late 2006 with an expected construction period of approximately 18 months. Production is expected to begin in early 2008 with the company having a 20-year mining license over the site. The total construction costs for the project are estimated at \$55 million, with an estimated \$19 million to be spent in the region, creating 50 jobs during the construction phase. The mine is expected to create 50 direct jobs when operational with annual expenses of \$20 million, with an estimated \$12 million to be spent in the region. The roster for the project is likely to be 4 on/4 off with workers residing in Broken Hill, though this may be adapted to also include Port Augusta.

The mine life is estimated at between 6-8 years. Exploration is being undertaken at the nearby Gould's Dam site with the intention of continuing operations within the region after Honeymoon has been exhausted. Drilling has produced promising results for more uranium in the area though the project is still in the very early stages of development.

3.3 Exploration in the Mining and Resources Sector

Rising commodity prices and strong demand in the resources sector has meant increasing exploration activity in the Far West Region, nearby in South Australia and Australia more generally. Some of the major exploration activities are listed below. Supporting exploration in the region with a view to securing the long-term economic prosperity of Broken Hill and Port Pirie is the Broken Hill Exploration Initiative (BHEI) being carried out jointly by Geoscience Australia, the New South Wales Department of Mineral Resources (NSWDMR) and Primary Industries and Resources, South Australia (PIRSA).

- Black Range Minerals Limited – The Grasmere deposit is located north west of Wilcannia with copper, zinc, silver and gold identified. The company recently raised \$5.3 million to advance exploration at the deposit;
- CBH Resources – CBH is currently undertaking the Rasp Project in Broken Hill. The company has 850 sq km of land for exploration in the Far West Region and is exploring for new lead-zinc-silver deposits that could be developed;
- Golden Cross Resources – Exploration is being undertaken on a 405 sq km site north-east of Broken Hill. The company has signed an agreement with Inco Australia Limited that could lead to \$2.4 million of exploration before May 2010. Reserves of platinum, palladium, copper and nickel have been found at Mulga Springs though there is currently no intention to develop a mine;
- Minotaur – A drilling program funded by the Japan Oil, Gas and Metals National Corporation is being undertaken near Broken Hill on the state border with South Australia. The project involves seven zinc-lead-silver exploration targets;
- Perilya – Perilya, the operator of the North and South Mines in Broken Hill, manages 1,042 sq km of prospective terrain around Broken Hill and recently defined and ranked 41 specific exploration targets in the area;
- Pinnacles Mine – Further drilling at the Edwards Pit, which is presently under development 15km south west of Broken Hill, has identified a further gold and copper deposit, known as Perseverance. Additional drilling was completed in February 2007. Pinnacles Mine has identified a further four deposits, including a zinc resource previously identified as the Lady Bevis deposit;
- Proto Resources – Exploration activities are occurring near Tibooburra with the intention of reopening the Albert Gold Field. The gold field was mined heavily during the late part of the 1900s. Proto Resources have spent over \$250,000 on drilling, soil surveys and management of the 700 sq km project. Results from the series of drilling and MMI sampling are expected in mid 2007;
- Red Metal Limited – The exploration company is exploring copper and lead-zinc-silver deposits to the north-east of Broken Hill. The company is also exploring north-east South Australia for uranium deposits;
- Stellar Resources – Commenced the first of two diamond drill holes at the Goldfinger Zinc prospect, 20 km south of Broken Hill. Drilling of both holes was completed in mid March 2007; and
- SXR Uranium One – Drilling has been completed at Gould's Dam, 140km north west of Broken Hill, for further uranium reserves. SXR Uranium One is seeking a new site after reserves at Honeymoon are depleted. A very early timeframe discussed by the company is for a pre-feasibility and feasibility study to be completed within three years with the possibility of operations beginning in five years.

3.4 Mining and Resources Projects Excluded from the Assessment

There are some other large mining and resource projects that have been excluded from the analysis due to lack of data availability and/or inconclusive evidence of any direct or indirect impact on the Far West Region economy.

3.4.1 Pinnacles Mine

The project assessment does not include Pinnacles Mine Pty Ltd's development of the Edwards Pit Project due to lack of available information at the present time. Pinnacles Mine Pty Ltd is a private Australian mining company. The company is developing a new zinc-lead-silver mine as part of the Edwards Pit Project, 15km south west of Broken Hill. The total project is expected to yield 60 Mt of ore. The mine is expected to employ 500 persons with investment of \$A400 million. The first stage of the Edwards Pit commenced production in January 2007. The company negotiated a Native Title Agreement in early 2007. Production of zinc and lead concentrate is scheduled for early 2008. Beyond 2009, it is proposed to extend mine production through the development of additional adjoining deposits as resources are established. To add further value to the project, the company proposes on-site zinc, silver, gold and copper metal production with a final decision scheduled for next year.

3.4.2 BHP Billiton

BHP Billiton's Olympic Dam Mine project has also not been considered in the economic impact assessment project. The project has not been included in the assessment as the impact on the Far West Region is, at this stage, considered negligible based on research and consultation. Roxby Downs is planned to absorb the majority of new investment with a Masterplan being developed to expand infrastructure. Adelaide also appears to be the likely option for any FIFO base. As an overview, Olympic Dam is the largest underground mine in Australia, located 500km west of Broken Hill. The mine is the fourth largest copper deposit and largest uranium deposit in the world in addition to significant gold and silver reserves. A major expansion of the mine is currently being planned to convert the operations to an open pit mine and increase production by 250%. If the project goes ahead it could involve over US\$5 billion in investment. The mine is located 16km from the town of Roxby Downs where the majority of employees live.

3.5 Major Projects in Other Industries and Sectors

In addition to the mining/resource projects and exploration activity, there are a number of other projects mooted in the Far West Region. Some have their origins in the flow on impacts from the mining investment and associated population growth such as new shopping centres, others relate to changing social trends such as aged care projects, others relate to industry development such as tourism and accommodation projects, others relate to capacity building such as education and training projects, while others relate to essential infrastructure services such as power and electricity upgrades. The latter two will be discussed in the infrastructure and services assessment chapter.

3.5.1 Shopping Centres

There are two current retail shopping centre proposals in Broken Hill:

- Leasecorp Projects Pty Ltd proposes the construction of a 10,010sqm (Gross Lettable Area – GLA) shopping centre opposite Centro Westside on the corner of Galena Street and Talc Street. The proposed shopping centre would be anchored by a Target Discount Department Store (DDS), Coles supermarket, a mini major and 14 other specialty shops. If approved, the project would create 348 jobs with 98 full-time equivalents in the one-year period of construction of the project. The project has an estimated total development cost of \$40m.

- Broken Hill Project Pty Ltd proposes the construction of a 9,000sqm GLA shopping centre south of Centro Westside on a site bounded by Blende Street to the northwest, Gossan Street to the northeast, South Road to the southeast and the partially formed Galena Street to the southwest. The proposed shopping centre would be anchored by a Target Discount Department Store (DDS), Coles supermarket and 2,000sqm of specialty shops. If approved, the new shopping centre would create 250 new jobs with a total project development cost of about \$40m.

The development proposals are premised on a combination of new population growth and a reduction in escape spending from the region. Only the reduction in escape spending component (approximately 44%) has been considered in the economic impact assessment, as this is a tangible impact separate from the population growth component addressed by the flow-on impacts of the mining projects on the retail trade sector. The development of a new shopping centre is considered to have a medium probability of delivery in the future development scenarios given Council is yet to consider whether development at the proposed scale is sustainable in Broken Hill.

3.5.2 Aged Care and Retirement Villages

A 78-unit retirement village is to be developed at Excelsior Oval in Broken Hill. The 3.885 ha site is located in Brookfield Avenue and was previously used as a sporting oval. Broken Hill City Council called for expressions of interest to develop a retirement village at the site in August 2005. A development application is currently before Council. The proponent is the South Australian-based Macdonald Group of Companies. Village Life would be the operator of the village. The total construction costs for the project are estimated at \$5 million, with an estimated \$3.5 million to be spent in the region. The retirement village is expected to create 5 direct jobs when operational with annual expenses of \$0.5 million, with an estimated \$0.4 million to be spent in the region. The site provides long-term expansion potential with the planned development only covering one-quarter of the entire site (Stage 1). There are plans for the development of different styles of development over the next 5 years on the remainder of the site. The project is considered to have a high probability of delivery in the future development scenarios.

3.5.3 Tourism and Accommodation

The major mooted tourism development in the region is the redevelopment of the Broken Hill Golf Course into a major resort complex. Queensland Company MSB has been investigating the potential and preparing planning documents for the development over the past four years. The project is to include a 280 room 5-star hotel resort, 150 room motel, retirement village and respite centre, 150-300 condominiums overlooking the golf course, sports medical centre with accommodation for 150 students and professional suites, with a casino as stage 2 of the development.

The total construction costs for the project are estimated at \$122 million, with an estimated \$73 million to be spent in the region. The development is expected to create 220 direct jobs when operational with annual expenses of \$22.0 million, with an estimated \$16.3 million to be spent in the region. Possible investment in the Stage 2 casino could add a further \$100 million to the total project costs. The project is considered to have a low probability of delivery in the future development scenarios.

Table 3.2: Description of Planned/Committed of Other Industry Projects, Far West Region

				Construction Phase				Operation Phase				
Company	Project	Location	Assumed Probability	Year start	Total \$m	Region \$m	Jobs	Year start	Life yrs	Total \$m	Region \$m	Jobs
Broken Hill Pty Ltd/Leasecorp Projects	Shopping Centre	Broken Hill	Medium	2008	\$18 ^(a)	\$12 ^(a)	83	2009	40+	\$20 ^(a)	\$7 ^(a)	121
Macdonald Group of Companies	Retirement Village	Broken Hill	High	2008	\$5	\$4	10 ^(b)	2009	40+	\$1	\$0	5
MBS	Golf Club Redevelopment	Broken Hill	Low	2010	\$122	\$73	209 ^(b)	2011	40+	\$22	\$16	220

Note: (a) Estimated % of total associated with escape spending capture (b) Estimated using input-output model and industry benchmarking analysis

Source: Direct company surveys and research, AECgroup

3.6 Development Scenarios

Each planned or committed project has been categorised by a probability rating (see Tables 3.1 and 3.2) based on an assessment of their respective stages of development (i.e. advanced/committed vs preliminary/concept) and basic assessment of risk factors. Based on these probabilities, three future development scenarios are formulated to consider how many of the projects go ahead in the region over the next 10 years. They therefore describe the range of potential outcomes for the region. In practice, it is not expected that either the low or the high scenario will be recorded. Rather, development is expected to result in a scenario that falls somewhere between these two outer limits.

The three development scenarios and probabilities fit together in the following way:

- Low scenario (or the worst-case outcome) – includes only the 7 projects considered to have a high probability of going ahead;
- Medium scenario – includes the 10 projects considered to have a medium or high probability of going ahead; and
- High scenario (or best-case outcome) – includes all 14 projects, including those considered to have only a low probability of going ahead.

Table 3.3 summarises the key statistics for each scenario if the projects are added together irrespective of timing. In total, if all projects are included as per the high scenario, total construction investment in the region is estimated at \$369 million (creating an additional 1,208 jobs during construction), with annual operational expenses of \$283 million (sustaining 1,080 additional jobs per annum during operations).

Table 3.3: Summary of Direct Impact by Scenario (Total Aggregation), Far West Region

Scenario	Construction			Operational		
	Total \$m	Regional \$m	Jobs	Total \$m	Regional \$m	Jobs
Low	\$292	\$103	425	\$172	\$97	297
Medium	\$445	\$164	674	\$295	\$166	588
High	\$856	\$369	1,208	\$484	\$283	1,080

Note: Figures are aggregates only irrespective of timing of the projects.

Source: AECgroup

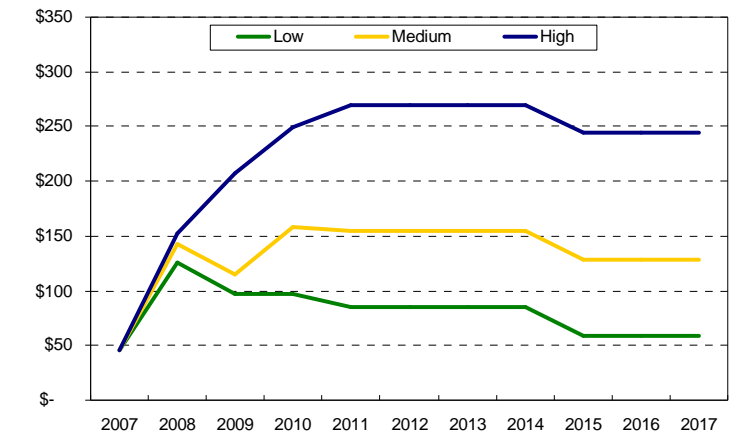
A time series representation of the scenarios is presented in **Figure 3.3**. All of the projects planned or committed for the region are due to be constructed and operational by 2010, with the exception of the MBS Golf Club redevelopment where construction is assumed to be staged over 5 years commencing 2010. The most critical planning horizons to assess the economic impacts and manage growth and change are considered to be 1 year (2008), 3 years (2010) and 5 years (2012). It is these periods that the most pressure will be placed on regional capacity.

The analysis also clearly demonstrates the strength of the medium-term (5-10 years) prospects for the region. As noted earlier, there are indications of increasing exploration activity by the mining sector to extend mining reserves and timelines in the region to deliver long-term sustainability. Mining participants in the region indicate resources in the Murray Basin could last for 50 years on the basis of current production rates and exploration activities. Any other new projects and their investment will assist in maintaining growth and return on investment in new infrastructure.

The majority of the estimated economic and associated employment/population impacts from these projects will be experienced in the regional centre of Broken Hill where the projects are largely located or based. There is expected to be some small flow-on residential/population impact for Menindee due to Bemax's nearby Snapper Mine.



Figure 3.3: Summary of Direct Output by Scenario (\$m), Far West Region



Source: AECgroup

4 Impacts and Growth

4.1 Economic Impact Assessment

4.1.1 Methodology

Economic impact analysis traces the flows of spending associated with specific activities/economic shocks in a region to identify changes in key economic measures. The economic impact analysis presented in this study has been undertaken using an input-output modelling approach. These models identify industrial structures and linkages in a regional economy and are used to assess the likely consequences if there is some change in production, earnings or employment in these firms. This chapter investigates the economic impacts of the planned major projects in the Far West Region to be delivered by 2010 as described by three development scenarios on the regional economy.

Input-output models produce estimates of the following economic measures:

- Output – Dollar volume of goods and services produced or sold, also referred to as gross output or sales;
- Income – Employee compensation including payroll costs, wages and salary payments, sales commissions and any other non-cash compensation;
- Value added – Change in consumption, investment and government expenditure, plus exports of goods and services, minus imports of goods and services; and
- Employment – Full-time equivalent positions (FTEs).

Value added is closely analogous to Gross Regional Product and is the preferred statistic for measuring productivity, income and wealth produced in a region.

The approach used in this study provides separate estimates of the direct and indirect impact of the economic shock, as measured by the investment in the region only. This distinction is used in economic impact analysis to separate the first round effects supported by an activity from its secondary effects. Direct effects refer to the operational characteristics of the projects being studied directly. Indirect effects measure the value of additional economic demands that the direct projects place on supplying industries.

The term multiplier or multiplier effect is often used when referring to economic impacts. The most commonly used multiplier is a ratio of the total economic impacts divided by the direct impacts. The multiplier indicates how much the overall economy changes per unit change in the direct impacts. Multipliers can be instructive for anticipating economic growth in, or potential change to, an economy attributable to a change in direct activity.

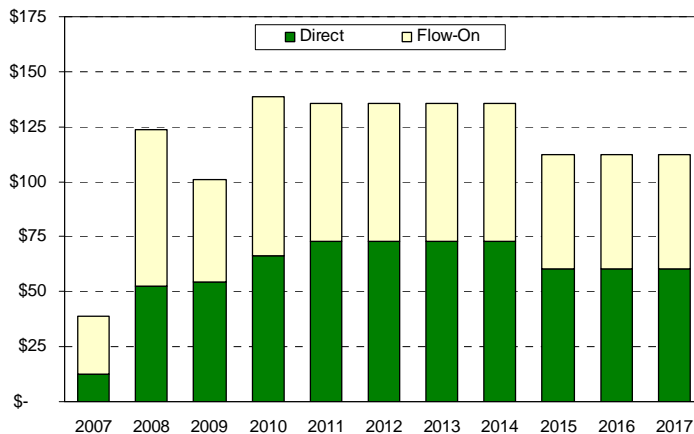
Limitations or qualifiers applying to input-output analysis include:

- Each commodity (or group of commodities) is supplied by a single industry or sector of production. This implies that there is only one method used to produce each commodity and that each sector has only a single primary output;
- The total effect of carrying on several types of production is the sum of the separate effects. This rules out external economies and diseconomies and is known simply as the additivity assumption. This generally does not reflect real world operations; and
- The input-output model is an optimisation model that allocates resources between sectors to their most efficient use. This is not expected to happen all of the time in the “real world” and as such results from the input output analysis may overestimate the actual impact delivered on ground. For this reason, induced economic effects (or household effects) have not been included in the analysis through previous study.

4.1.2 Regional Economic Impacts

As shown in **Figure 4.1**, based on the medium development scenario, additional value added is projected to reach \$139 million in 2010, of which an estimated \$76 million is expected to come from direct impacts and \$81 million generated from flow-on impacts. To place this into perspective, the medium development scenario would increase GRP by up to 11.6% (in 2010) compared with the 2005-06 estimate (not including any increases occurring in addition to the economic shocks considered in the scenario).

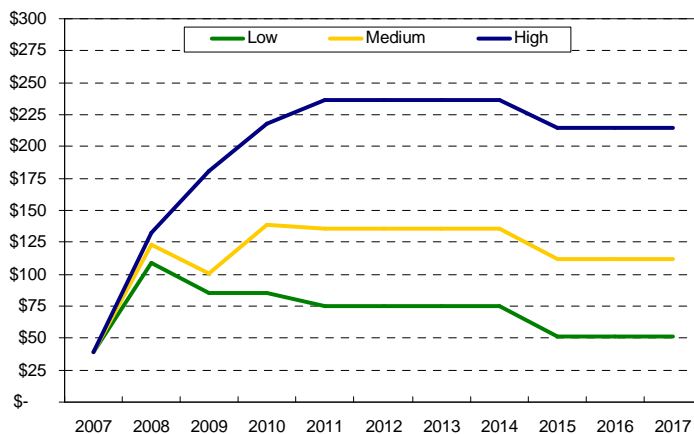
Figure 4.1: Additional GRP (\$m), Far West Region – Medium Scenario



Source: AECgroup

Comparison of the medium scenario against the low and high scenarios indicates that total additional GRP in the next 10 years is expected to increase by up to \$109 million in 2008 under the low scenario and \$236 million between 2010 and 2014 under the high scenario (see **Figure 4.2**), resulting in an 9%-20% increase in GRP.

Figure 4.2: Additional GRP (\$m), Far West Region – Scenario Comparison



Source: AECgroup

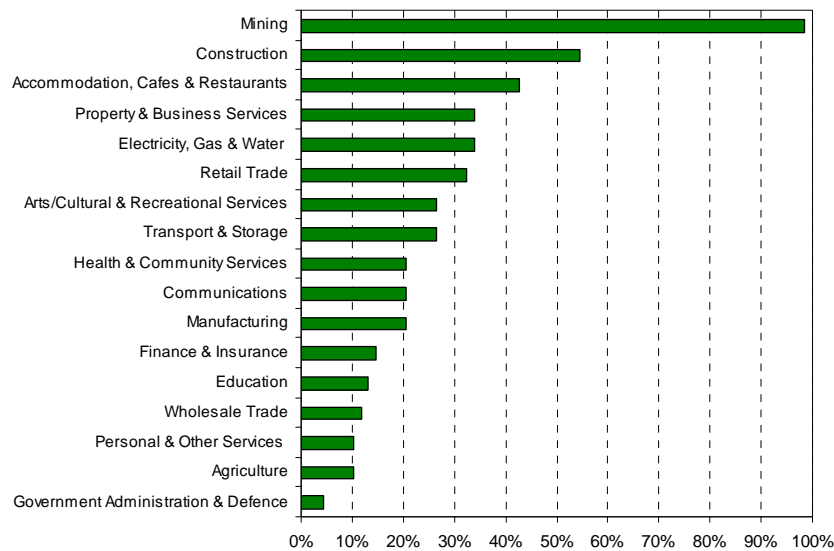
The expected flow-on value added would result in growth across a number of industry sectors in the Far West Region, particularly downstream industries and those providing support services to the mining and resources sector (see **Table 4.1**). Outside of the direct impacts to mining and construction, the industries expected to record the strongest percentage growth to 2012 are manufacturing, property & business services, finance & insurance, communication services and cultural, arts & recreational facilities.

Table 4.1: Additional GRP Impacts by Industry (\$m), Far West Region – Medium Scenario

Sector	Base	Additional GRP			Avg. Annual % Impact (5 yrs)
	GRP	2008	2010	2012	
Agriculture, forestry & fishing	\$42.7	\$1.5	\$1.5	\$1.2	3.0%
Mining	\$249.5	\$36.3	\$56.8	\$76.9	24.3%
Manufacturing	\$41.3	\$12.1	\$13.2	\$12.6	29.0%
Electricity, Gas and Water Supply	\$51.6	\$2.3	\$2.5	\$2.5	4.5%
Construction	\$38.5	\$27.1	\$16.9	\$2.1	25.8%
Wholesale Trade	\$38.6	\$3.8	\$4.2	\$4.1	10.0%
Retail Trade	\$65.4	\$4.4	\$7.7	\$7.2	10.0%
Accommodation, Cafes and Restaurants	\$29.5	\$1.7	\$1.8	\$1.7	5.5%
Transport and Storage	\$31.7	\$3.3	\$3.4	\$2.9	9.2%
Communication Services	\$15.4	\$2.3	\$2.3	\$2.0	13.2%
Finance and Insurance	\$33.9	\$6.0	\$5.8	\$4.7	14.7%
Property and Business Services	\$69.8	\$12.9	\$12.7	\$10.2	15.4%
Government Administration and Defence	\$51.1	\$0.4	\$0.4	\$0.3	0.7%
Education	\$44.8	\$1.2	\$1.1	\$0.8	2.0%
Health and Community Services	\$80.7	\$1.2	\$1.4	\$1.1	1.4%
Cultural, Arts and Recreational Services	\$8.5	\$1.0	\$1.2	\$1.2	12.8%
Personal and Other Services	\$21.5	\$0.9	\$0.9	\$0.7	3.4%
Ownership of Dwellings	\$96.1	\$5.2	\$4.7	\$3.4	4.0%
Total	\$1,195.0	\$123.8	\$138.7	\$135.5	10.6%

Source: AECgroup

Anticipated industry impacts were also gauged from a business perspective through the business survey. There is an overwhelming belief from local businesses that the mining industry will be the strongest growing sector of the Far West Regional economy over the next 3-5 years (see **Figure 4.3**). The sectors expected to experience the most significant flow-on impacts are considered to be construction, accommodation, cafes & restaurants, electricity, gas & water, property & business services, retail trade, transport & storage and arts/cultural & recreational services. Almost all industry sectors recorded some proportion of businesses indicating expected growth in the next 3-5 years.

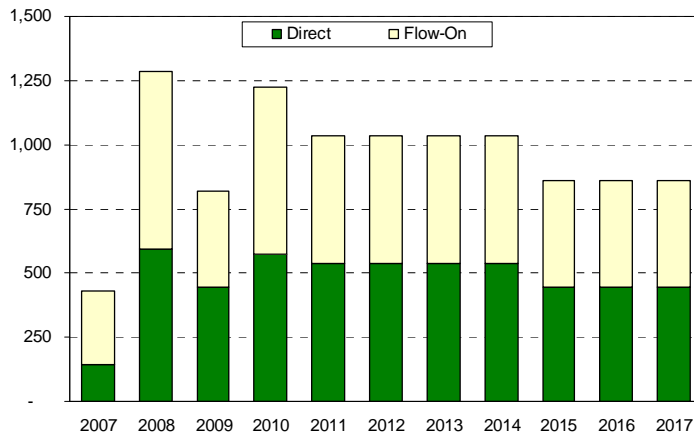
Figure 4.3: Industries Expected to Record the Strongest Growth in the Next 3-5 years

Source: AECgroup Business Survey (2007)

4.1.3 Regional Employment Impacts

Based on the medium development scenario, employment in the Far West Region is projected to increase by up to 1,285 FTE positions in 2008, of which 594 would be direct jobs and 681 flow-on jobs (see **Figure 4.4**). This does not include increases occurring in addition to the economic shocks considered in the scenario. Far West Region employment was estimated at approximately 10,000 persons (both full- and part-time) in 2006. Therefore, investment in the region as described by the medium development scenario would increase employment by at least 12.9% relative to 2006 levels. The employment impacts are estimated to be greatest in 2008 and 2010 timed with construction phases.

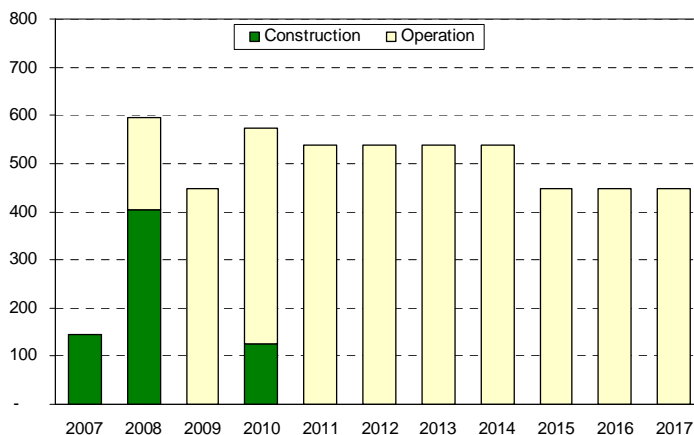
Figure 4.4: Additional Employment (FTE), Far West Region – Medium Scenario



Source: AECgroup

Construction employment impacts are expected to occur mainly in the 2007-2010 period (see **Figure 4.5**). It is expected a large proportion of construction labour will come from outside the region, with most of these workers not remaining once the developments are completed due to the transient nature of this work. By comparison, direct employment positions generated from operational phases are likely to be filled by either people already residing within the region or by people moving to the region permanently. These issues are discussed in more detail in Chapter 8.

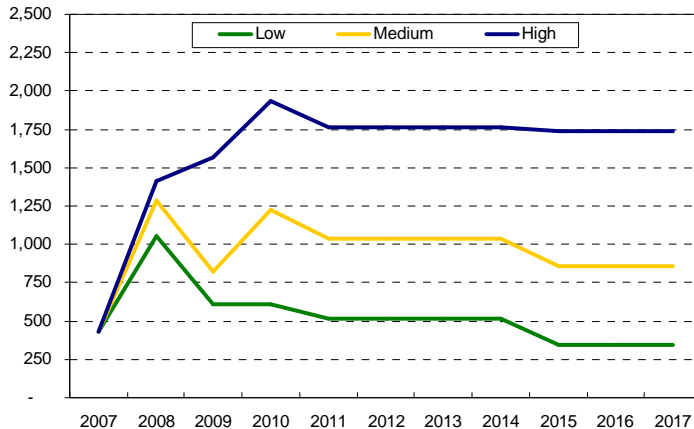
Figure 4.5: Direct Additional Employment (FTE), Far West Region – Medium Scenario



Source: AECgroup

Comparison of the medium scenario against the low and high scenarios indicates that total additional employment is expected to range between approximately 1,055 FTE positions in 2008 (low scenario) and 1,933 FTE positions in 2010 (high scenario) (see **Figure 4.6**). There are presently around 10,000 persons employed in the region, meaning that major project investment is expected to result in an approximate 11%-19% increase in employment, not including increases occurring in addition to the economic shocks considered in the scenarios.

Figure 4.6: Additional Employment (FTE), Far West Region – Scenario Comparison



Source: AECgroup

The expected direct and flow-on employment impacts would result in growth across a number of industry sectors in the Far West Region (see **Table 4.2**). The mining sector is expected to record the most significant employment growth (474 direct jobs by 2012), followed by the construction, manufacturing and finance & insurance sectors.

Table 4.2: Additional Employment Impacts by Industry (FTE), Far West Region – Medium Scenario

Sector	Base	Additional Employment			Avg. Annual % Impact (5 yrs)
	Emp.	2008	2010	2012	
Agriculture, forestry & fishing	716	17	15	10	1.6%
Mining	645	220	369	474	59.0%
Manufacturing	388	120	119	99	26.4%
Electricity, Gas and Water Supply	199	13	17	19	8.3%
Construction	494	502	191	16	29.9%
Wholesale Trade	343	35	37	32	9.4%
Retail Trade	1,706	75	179	151	8.2%
Accommodation, Cafes and Restaurants	640	24	21	13	2.5%
Transport and Storage	384	31	30	23	6.5%
Communication Services	123	17	18	16	12.8%
Finance and Insurance	167	39	41	37	21.9%
Property and Business Services	625	117	109	81	14.4%
Government Administration and Defence	629	5	4	3	0.5%
Education	752	15	12	6	1.2%
Health and Community Services	1,332	15	17	11	1.0%
Cultural, Arts and Recreational Services	151	13	12	9	6.8%
Personal and Other Services	500	16	12	5	1.7%
Ownership of Dwellings	232	11	20	27	9.2%
Total	10,027	1,285	1,224	1,034	10.8%

Source: AECgroup

4.1.4 National Economic Impacts

The major projects underway and planned for the Far West Region will also result in a significant economic impact on the broader economies of New South Wales, South Australia and Australia. The business survey confirmed a large proportion (around 70%) of the inputs to production in the Far West Region are sourced from outside the region, particularly South Australia given Adelaide is the closest capital city. The inputs to the mining projects, particularly the equipment and technology for the construction phase, are also largely sourced from outside the region, and in some cases from international suppliers. Cost benchmarks for the mining industry have been carefully studied for the assessment of how much expenditure is retained in the region.

Table 4.3 summarises the key statistics for each scenario if added together irrespective of timing. In total, if all projects are included as per the high scenario, total construction investment in Australia is estimated at \$701 million, with annual operational expenses of \$440 million. This equates to a direct national impact outside of the Far West Region of \$332 million for construction and \$157 million for operations, respectively.

Table 4.3: Summary of Direct Impact by Scenario (Total Aggregation), Australia

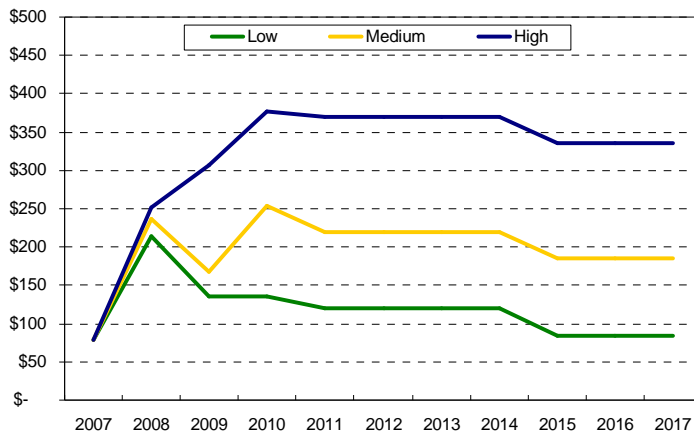
Scenario	Construction			Operational		
	Total \$m	AUS \$m	Regional \$m	Total \$m	AUS \$m	Regional \$m
Low	\$292	\$236	\$103	\$172	\$155	\$97
Medium	\$445	\$362	\$164	\$295	\$268	\$166
High	\$856	\$701	\$369	\$484	\$440	\$283

Note: Figures are aggregates only irrespective of timing of the projects.

Source: AECgroup

Figure 4.7 describes the projected additional value added impact on the national economy over the next 10 years as a result of the projects in the Far West Region. The assessment indicates the projects could contribute up to an additional \$400 million annually to GDP under the high scenario. In summary, the economic impact assessment of the current and planned projects indicates there will be an almost equal impact internal to the Far West Region as external in the rest of Australia.

Figure 4.7: Additional GDP (\$m), Australia – Scenario Comparison



Source: AECgroup

4.2 Social Impact Assessment

4.2.1 Population Impacts

As a result of the new investment and associated employment impacts in the Far West Region, population growth is expected to increase. The extent of this population growth is related to the proportion and demographics of additional employment sourced from outside the region. Local residents could be expected to meet some proportion of the additional employment growth, including those presently in the labour force but unemployed and those out of the labour force but not at this time seeking employment.

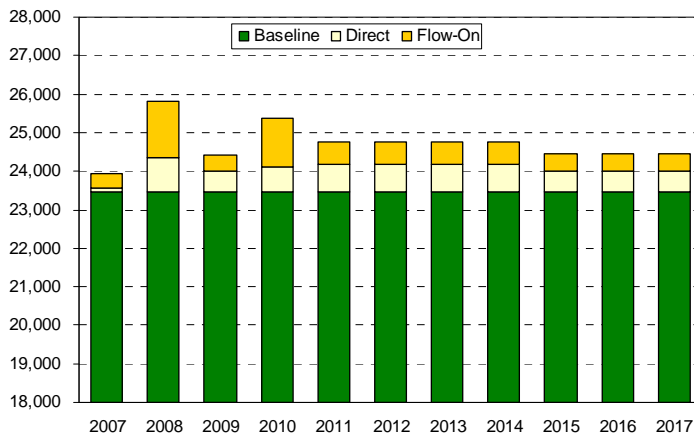
There was an average of 906 unemployed persons in the Far West Region in 2006. Based on an indicative assessment of requirements of the additional jobs created relative to the skills, capabilities and motivations of unemployed persons, it is estimated 10%-15% of the unemployed persons in the region would be suitable for direct and indirect construction and operational phase employment. The remaining employment would need to be sourced from outside the region, thereby constituting population growth.

Based on an assessment of the household structures of mining employees (which is also considered indicative of those moving to a regional area in general for employment), the average household size is assumed at 2.6 persons i.e. each additional employee sourced from outside the region brings with them 1.6 persons. It is also estimated 80% of new employees will bring a spouse of working age. It is estimated 7.5% of all construction employees and 37.3% of operational employees bring a spouse of working age who is then subsequently employed in the same construction or operational phase.

In summary, the factors that will impact the extent of population growth associated with the development scenarios include the skills and capacity of the unemployed persons in the local labour force, the ability to attract and retain skilled labour in the region and the proportion of mining employment that is permanent, contract and FIFO. Current indications are each mining company is targeting a permanent residential workforce.

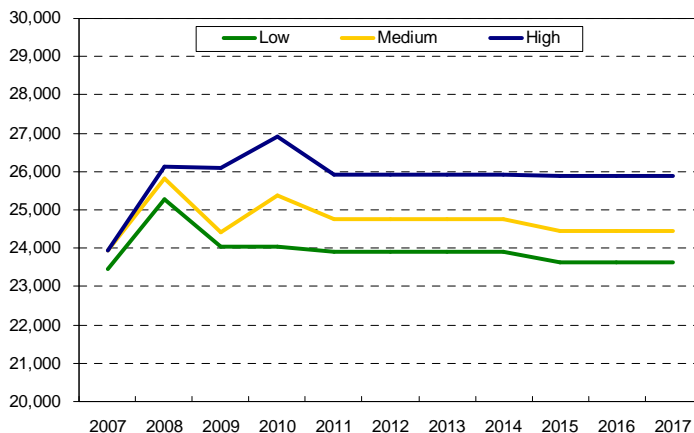
The next consideration for the population projections and impacts is the baseline population growth assumption. Official projections published by the New South Wales Department of Infrastructure, Planning and Natural Resources project 1.2% average rate of decline per annum over the next 10 years, reducing the region's population to almost 20,000 persons. Under this assumption, the medium development scenario results in negative population growth of 0.6% per annum when accounting for the impact of new employees and their families to the region. Even under the high development scenario, a significant portion of the population impacts from the new projects would be cancelled out by the negative baseline growth projection.

A neutral unchanged baseline population assumption is considered appropriate in light of recent trends that indicate population levels in the region have almost stabilised without the positive impact of economic shocks. Recent population growth trends in the region have been well above those projected by the State Government. Under the neutral baseline population scenario, the population would peak at almost 26,000 persons in 2008, or a net addition of 2,378 persons from current estimates (see **Figure 4.7**).

Figure 4.7: Population Impacts, Far West Region (Neutral Baseline) – Medium Scenario

Source: AECgroup

Assuming a neutral baseline, comparison of the medium scenario against the low and high scenarios indicates that the total population in the Far West Region over the next 10 years is expected to increase by up to almost 3,500 persons by 2010 under the high scenario (see **Figure 4.8**). The low scenario projects a population increase of

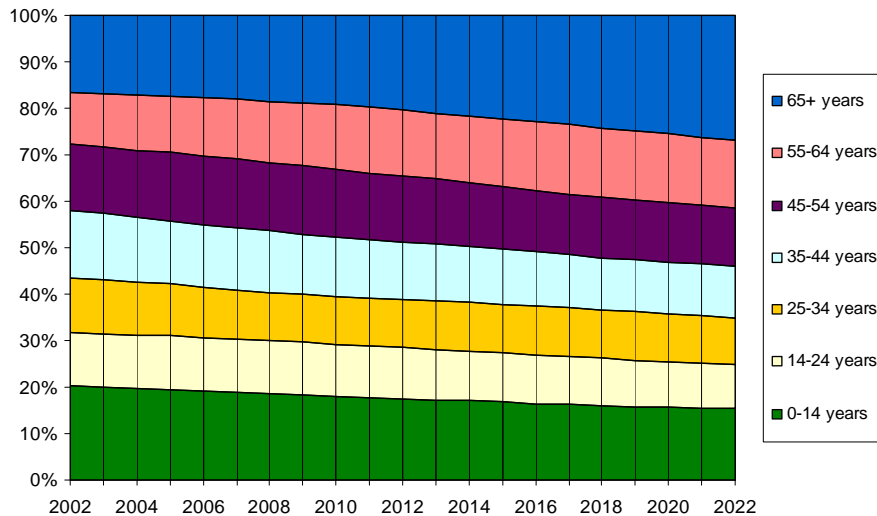
Figure 4.8: Population Impacts, Far West Region (Neutral Baseline) – Scenario Comparison

Source: AECgroup

The majority of the population and economic impacts in the region will be experienced in the regional centre of Broken Hill. This is where the majority of projects are either located or will be based from a workforce and inputs perspective. The Bemax Snapper Mine will possibly generate some small population increase in nearby Menindee. Outside of the estimated impacts of the major projects, organic population growth in the outlying centres of Menindee and Wilcannia is expected to be negative as per recent trends.

4.2.2 Demographic and Socio-Economic Impacts

Most Australian regions are undergoing a period of dramatic demographic change on the back of a number of social trends. The Far West Region's population profile is "ageing" at a relatively fast rate and is expected to continue doing so with the contributing social trends including lower fertility rates, lower mortality rates, increased life expectancy, lower marriage rates, people marrying later in life, higher divorce rates, people staying in education longer and migrants generally older in age. In 2022, the ABS projects 27% of the Far West Region's population will be aged over 65 years, an increase from 13% in 2006 (see **Figure 4.9**).

Figure 4.9: Projected Age Distribution (Baseline), Far West Region

Source: ABS Population Projections (2003)

Major mining companies recruiting employees to the region indicate the demographics of these workers are likely to mirror their existing workforce, with around 70%-80% having families in the region. Research shows the mining workforce is described as mostly male (88%), having partners with children (50%) and higher wages (62% higher than average) (see **Table 4.3**). The migration of a number of skilled workers to the region is expected to result in an increased socio-economic profile and spending capacity.

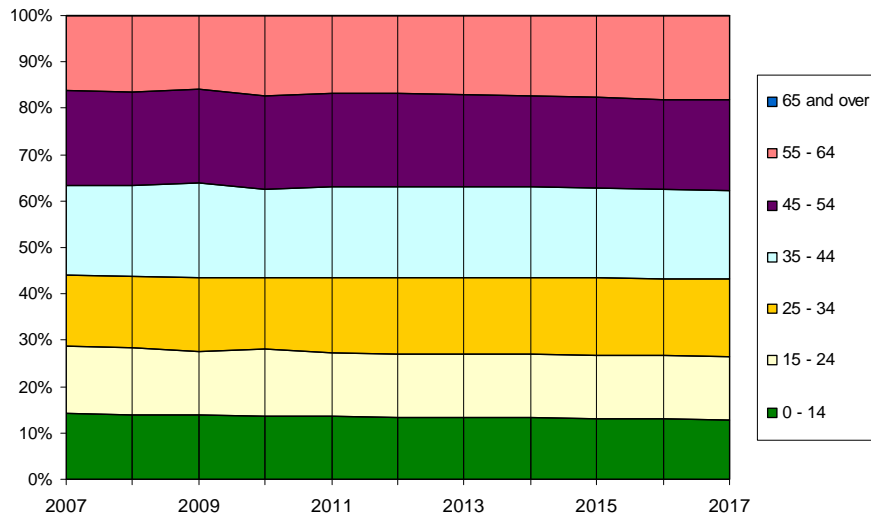
Table 4.3: Demographics of Mining Workforce, Australia

Characteristic	Mining Industry	All Industries
Gender		
Males (%)	87.5%	55.0%
Females (%)	12.5%	45.0%
Age		
Average Age of Workers (years)	40.3	40.0
Family Status		
Partner, with children	50.2%	N/a
Partnered, no children	29.7%	N/a
Single, no children	19.2%	N/a
Single, with children	0.8%	N/a
Income		
Average Weekly Earnings Full Time (\$)	\$1,714	\$1,059

Source: ABS Labour Force Survey Nov 06, AECgroup

An age projections model has been developed to project the likely age distribution of new employees and families to the Far West Region based on analysis of the age demographics of mining and their household structures. The projected breakdown of new residents to the region is outlined in **Figure 4.10**.

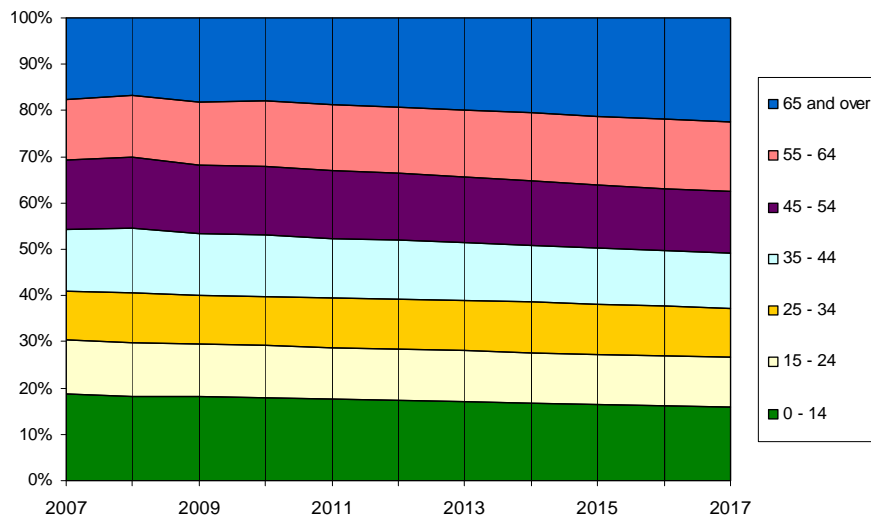
Figure 4.10: Projected Age Distribution (Additional Population Impact), Far West Region



Source: AECgroup

Combining the projected age distribution of the baseline population with the projected age distribution of the additional population impact indicates that while the ageing of the region's population is expected to continue, the rate at which it does so will slow due to more families with children moving to the region (see **Figure 4.11**).

Figure 4.11: Projected Age Distribution (Total Population), Far West Region – Neutral Baseline



Source: AECgroup

5 Economic Development and Investment

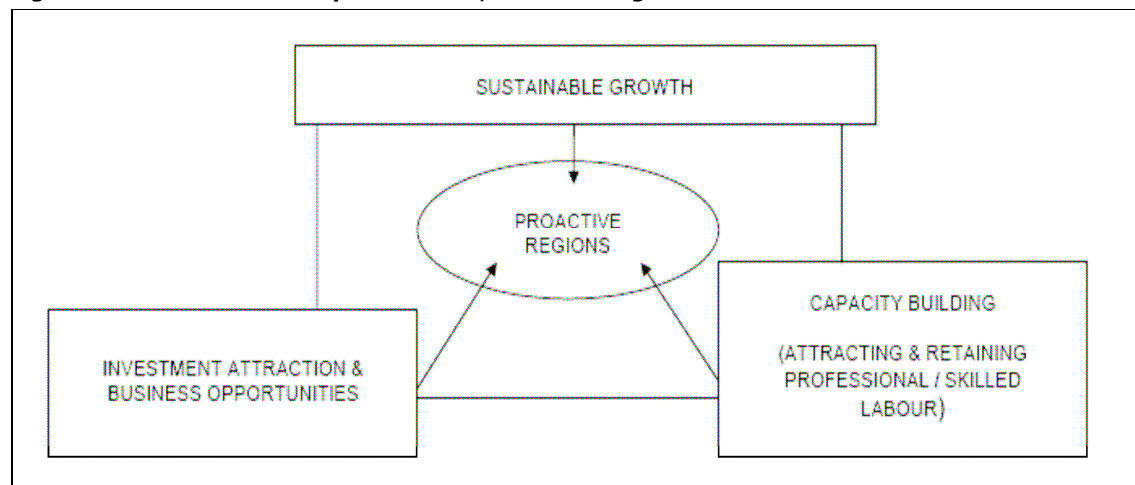
5.1 Economic Development Strategy

The *Far West NSW Economic Development Plan* (2006) was developed collaboratively between economic development organisations in the region, including Broken Hill City Council, Far West Regional Economic Development Board, Outback NSW Area Consultative Committee, Broken Hill Indigenous Community Working Party and Central Darling Shire Council.

The Plan identifies the importance of attracting investment (particularly reinvestment) and business opportunities (including the growth and diversification of existing business and the attraction of new business) as central to the implementation of the Plan, along with the attracting and retaining of professionals and skilled people to live and work in the region. The Plan comments that Broken Hill and the region needs to aggressively market and win business for the region, embrace change, capitalise on strengths, encourage innovation and develop strategic partnerships. These opportunities extend to the smaller outlying areas in their areas of advantage such as agriculture and tourism.

This study, the *Far West Region Growth & Investment Strategy*, is an integral part of the Economic Development Plan (see **Figure 5.1**). As part of the investment attraction and business opportunities and capacity building components, this strategy assesses the economic impacts of new projects in the region, identifies strategic development opportunities and approaches to maximise opportunities relating to economic development, infrastructure, land and skills capacity to meet future growth scenarios.

Figure 5.1: Economic Development Model, Far West Region



Source: Far West NSW Economic Development Plan (2006)

The Economic Development Plan focuses on the following key themes and strategies:

- Collaborative economic development;
- Attracting investment and business opportunities;
- Attracting and retaining professional skilled labour;
- Developing links and partnerships with the Indigenous community;
- Development of the tourism industry;
- Development of tertiary education;
- Heritage include the Line of Lode;
- Arid arts capital;
- Towards zero waste; and
- Land tenure.

These issues are considered and addressed to varying degrees throughout the remainder of this report. Key issues, values, strategies, risks and imperatives have already been developed for many of these issues through previous regional research projects.

5.2 Future Economic Development Influences and Challenges

There are many factors expected to positively affect the regional economy over the next 5 years. The overwhelming factor is the major investment in the region's mining and resources sector. The economic impact assessment demonstrates the significance of these projects to the future economic prosperity of the region. The factors related to the investment in this sector are strong resource demand and prices and forward-looking estimates based on exploration activity in the region. The first challenge for the region's economic growth is to position the region to maximise the industry and business opportunities created from the proposed projects (discussed in sections 5.3 and 5.4).

Other factors considered likely to positively impact growth in the next 3-5 years include:

- Development and expansion of the tourism sector;
- Positive news regarding the supply of water;
- Growth in regional population and consumer demand;
- Improved performance of local and state government; and
- New building and retail projects.

There is also a range of negative factors that could affect the economy, including a potential downturn in the mining industry. The region's general public and business communities have experienced a downturn over a 30-year period following mining closures and short-lived new investment. Regional stakeholders understand the relationship between the projects and commodity prices and see any decline in prices as a risk to the development of the planned projects. Therefore, another challenge for the region's long-term economic growth is to achieve and enhance the positive factors, including identifying specific economic development opportunities that enhance economic diversification and long-term sustainability (discussed in section 5.4).

Other factors considered likely to negative impact growth in the next 3-5 years included:

- Land tenure and access;
- Severe skills shortages across almost all industry sectors;
- Limited and insecure supply of water and continuing drought;
- Lack of support from Councils including land releases and development approvals;
- Shortage of housing reducing ability to accommodate new residents/employees;
- Remote location of the region affecting transport costs and business investment; and
- Ability to access finance, capital and funding to support new projects.

A further challenge therefore is to implement strategies to mitigate against these negative factors and threats (discussed in chapters 6, 7 and 8).

5.3 Downstream Business Opportunities and Confidence

The economic impact assessment demonstrates a range of flow-on opportunities for downstream industry sectors. The expected flow-on value added would result in growth across a number of industry sectors in the Far West Region, particularly downstream industries and those providing support services to the mining and resources sector. Every industry sector is expected to record some proportion of growth above organic rates in the next 3-5 years.

To maximise opportunities for local business to expand and diversify, the *Far West NSW Economic Development Plan* includes a range of strategy approaches:

- Encourage small business to diversify or value add;
- Identify local products with export potential;
- Scope for local product/service niche;
- Develop business confidence and entrepreneurial culture; and

- Encourage business partnerships and cooperation.

Based on competitive analysis, the key regional sectors with export potential relate to the mining, agriculture, tourism and cultural sectors. The other sectors largely service local markets and the region's isolation, local demand and critical mass make it difficult to export. An example of an initiative meeting the final three strategies is the Alliance Engineering Group, with support from the Enterprise Centre, which involves a regional industry alliance between five major engineering firms to increase critical mass and capacity to compete for regional, state and nationally significant projects. Other obvious opportunities for similar partnerships to boost capacity include improved cooperation between the tourism and cultural sectors (in further economic diversification and long-term sustainability) and the building and construction sectors (to meet anticipated building and construction demand into the future).

The terms of developing business confidence and an entrepreneurial culture, the business survey clearly indicates a willingness and intention for existing local businesses across all sectors to expand to capitalise on the growth opportunities offered by the major projects in the region. Medium term business expectations in the region for the next 3-5 years are positive, particularly for sales and prices (see **Table 5.1**). Almost half of all businesses expect to increase profitability and capital expenditure. However, only one-third of businesses anticipate increases to employment. These percentages are broadly consistent with the Outback NSW Area Consultative Committee's survey results from 2005 which reported around 35% of businesses would increase employment in the next 5 years.

Table 5.1: Anticipated Trends in Business Performance Indicators in the Next 3-5 Years

Indicator	Decrease	Stay the Same	Increase	Total	Net Balance
Sales	5%	25%	71%	100%	+66%
Employees	9%	49%	42%	100%	+33%
Prices	0%	27%	73%	100%	+73%
Profitability	8%	35%	57%	100%	+49%
Capital Expenditure	8%	40%	52%	100%	+44%

Source: AECgroup Business Survey (2007)

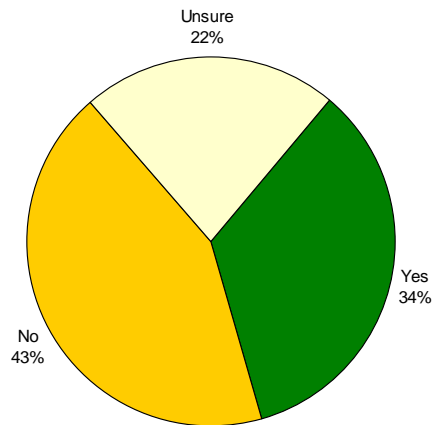
Taking a regional perspective, local businesses are optimistic about the future economic performance of the Far West Region, with around 75% of businesses generally expecting some form of growth, with around 45% expecting moderate growth or higher (see **Table 5.2**). This is particularly the case for economic growth, investment and employment.

Table 5.2: Anticipated Trends in Regional Economic Indicators in the Next 3-5 Years

Indicator	Decline	Unchanged	Steady Growth	Moderate Growth	Fast Growth	Total	Weighted Average
Score	1	2	3	4	5		
Economic Growth	6%	13%	37%	28%	15%	100%	3.4
Investment	2%	19%	33%	30%	16%	100%	3.4
Employment	6%	12%	38%	29%	15%	100%	3.4
Population	9%	16%	38%	29%	7%	100%	3.1

Source: AECgroup Business Survey (2007)

Just under 35% of surveyed businesses expect to expand in the next 3-5 years, reflecting business confidence in the future of the region (see **Figure 5.2**). The expansion of these businesses should be encouraged. The Economic Development Plan identifies small business as the economic heart of rural and regional communities and in rural areas the sustainability of the local community will be highly dependent on the degree to which existing businesses are retained and expanded. The Plan also notes local ownership of businesses has the benefit of reducing leakage from the local economy, businesses are more responsive to community needs, and there is more control over local resources.

Figure 5.2: Consideration for Business Expansion in the Next 3-5 Years

Source: AECgroup Business Survey (2007)

5.4 Strategic Economic Development Opportunities

Economic development in the Far West Region has traditionally relied on the development of infrastructure, population and services around the use or exploitation of specific resources and natural assets. This is again largely the case in the 3-5 year planning period. Where these natural resources are at, or are close to full exploitation or development, without a specific development impetus, additional economic development can only be achieved through organic growth and expansion. This has in fact been the situation for the Far West Region, particularly over the past 30-40 years with the decline of the local mining and resources sector. Therefore, there are also other strategic economic development opportunities that should be considered in the Far West Region to build local capacity, diversify the economy and better ensure long-term sustainability should there be any downturn in the local mining and resources sector.

The *Far West NSW Economic Development Plan* identifies some specific initiatives such as developing links and partnerships with the Indigenous community, development of the tourism industry, development of tertiary education, heritage include the Line of Lode, arid arts capital, towards zero waste and land tenure. The business survey identified further economic opportunities that could be pursued to grow the regional economy, including the development of the tourism industry, development of the mining industry and support industries, expansion of the building and construction industry associated with mining projects, residential and other construction projects and expanding education and training services with a specialist mining college, expanded TAFE and potential university campus. Other economic opportunities identified by a small number of respondents included the development of art and film facilities, increases in aged care facilities to target retirees, agricultural projects, attracting manufacturing opportunities and new retail developments. A brief analysis is provided below for a selection of these economic development opportunities.

5.4.1 Tourism

Tourism has been one of the key growth industries and economic diversification strategies for the Far West Region in recent years, particularly during a period when traditional industry sectors such as agriculture and mining have weakened. The *Far West NSW Economic Development Plan* notes the importance of the tourism sector. The Plan identified key issues as the stagnation of ideas, lack of coordination between tourism bodies and other gateway regions, falling demand and lack of community awareness as to the value of tourism. The key strategies to improve the efficiency and growth of the industry included forging stronger links with Desert Knowledge Australia, endorsing the Darling to Diamantina Alliance and introducing a coordinated approach to all functions.

In terms of measuring recent performance, Tourism NSW divides the State into several tourism regions for reporting. Outback NSW includes the Far West Region as well as an area to the south and northeast. According to Tourism NSW, there were an estimated 436,500 visitors staying overnight in the Outback in the year to June 2006, which was a fall from 444,100 visitors in the year to June 2005 (see **Table 5.3**). NSW and most regions recorded a drop in visitor numbers during 2005-06 so the movement in the Far West Region was relative. During 2005-06 it was estimated that visitors spent \$203m in the Outback region. This was down 8.6% from 2004-05 and the reduced visitor nights spent in the region meant that the average amount spent by visitors in the region was down 24.1% to \$272. Broken City Council estimated the value of tourism to the economy at \$68 million in 2006 with 658 people directly employed in the industry. Council forecasts the industry to grow by 2% per annum in the coming years driven by investment growth of 5% per year and accommodation growth of 1.3% per year.

Table 5.3: Visitor Statistics to Outback NSW

Year	2000-01	2004-05	2005-06	% change (04-05 to 05-06)	Avg % change (00-01 to 05-06)
Visitors					
Domestic Daytrippers '000	204	175	309	76.6%	8.7%
Domestic Overnight '000	548	429	420	-2.1%	-5.2%
International '000	16	15.1	16.5	9.3%	0.6%
Total	768	619.1	745.5	20.4%	-0.6%
Visitor Nights					
Total '000	1,559	2,602	1,429	-45.1%	-1.7%
Average Stay	2.8	6.1	3.4	-43.9%	3.6%
Expenditure					
Total (\$m)	N/a	\$222	\$203	-8.6%	N/a
Per Night (\$)	N/a	\$85.3	\$142.1	66.5%	N/a
Per Visitor (\$)	N/a	\$358.6	\$272.3	-24.1%	N/a

Source: Tourism New South Wales, June 2006

A brief tourism development strategy is outlined below based on market research and consultation with industry leaders and representatives and previous planning:

- **Product:**

Tourist attractions in the region are mainly related to the mining history of Broken Hill, including museums and tours of decommissioned mines, along with art galleries and indigenous culture, and historical buildings. There is a strong emphasis on mining, cultural and indigenous tourism, though the latter is still emerging. Nature-based experiences and the outback environment is also a key tourist attraction for the area, including several National Parks. There is an overwhelming belief amongst industry participants that the visitor tourism experience needs to be more sophisticated in the region with more top end market product suited to the luxury traveler.

Consultation suggests a lack of indigenous tourism and nature-based travel experiences in the region, citing examples in Alice Springs, requiring tours, sites, access and exposure to traditional Indigenous cultural experiences. There has been substantial study and consideration for ecotourism and educational excursion packages in the region, including the development of an Arid Zone Study Area and associated ranges of curriculum packages. There is also a noted gap in the tourism mix with the closure of the Delprat's Mine in Broken Hill. There have been previous recommendations to the region to initiate discussions with local mining companies and the Department of Mineral Resources to determine the potential for current and future decommissioned mine assets to be applied to alternative uses for regional economic and social benefit. There is also fragmentation of the galleries sector that requires coordination. Additionally, there needs to be an improved range of hospitality businesses to cater for all segments of the market. This includes consistent opening hours and weekend trade.

The drought has also impacted natural tourist attractions such as the Darling River and Menindee Lakes, which has resulted in less self-drive and caravan travel in the region. Work is presently being undertaken by Central Darling Council to remediate the River where possible, retain the Lakes system along with new development such as a boardwalk and increased niche marketing (such as for bird watching), and generally improve tourism product and services, including improving the branding of Wilcannia and restoring the post office with a café/coffee shop and enhancement of mainstream tourism activities in White Cliffs and Menindee. This approach is based on the principle of geo-tourism which is tourism that sustains and enhances the geographical character of a place including its environment, aesthetics, heritage and well-being of residents.

- **Accommodation:**

The supply of tourism accommodation in the region is described in **Table 5.4** and indicates there is a sizeable supply of motels and hotels in the region, the majority of which are located in Broken Hill. There are also a number of bed & breakfast and self-catered operators, along with camping grounds. Occupancy rates of 50% at larger establishments suggest underutilised capacity.

Table 5.4: Tourism Accommodation Establishments, Far West Region

Location	Self-Catered	Resort	Hotel & Motel	Bed & Breakfast	Hostel	Caravan/Camping
Broken Hill	11	0	41	4	2	4
Wilcannia	0	0	3	0	0	0
Menindee	0	0	3	0	0	3
White Cliffs	0	0	3	2	0	1
Tibooburra	0	0	4	0	0	1

Source: AECgroup

Consultation suggests a key gap in the accommodation sector is an up market, branded hotel to cater for the upper ends of the leisure and corporate visitor markets. There is a preliminary proposal for a 5 star hotel as part of the Golf Club redevelopment project. There are also considered to be opportunities for eco-tourism type accommodation for nature-based travelers. Further investment may also be possible in the rural and farm stays sector which continue to increase in popularity. There was a feasibility study completed for an 80 room, 4-star hotel in Broken Hill in 2001. While there has been private interest in the project, issues regarding air access constitute an impediment.

- **Transport:**

Access to the region is generally difficult for visitors due to the remote locations in relation to capital cities with rail and air options into Broken Hill and roads throughout the region. Around 90% of arrivals are by private car with only 11% with operators. Business travel underwrites air travel to the region presently. There has been the recent introduction of direct flights to Sydney improving access. The tourism region is strategically located on the Darling to Diamantina run and requires the ongoing maintenance of this road infrastructure. Other transport issues relevant to the region's tourism sector are discussed in section 6.4. In terms of air access, previous study in the region has indicated that unless Broken Hill was able to improve accessibility from the capital cities at competitive rates compared with other tourist destinations, it would not be viable for any new tourism accommodation development (and possibly other product).

- **Skills:**

Customer service has been raised as an issue affecting the tourism sector, while it is broadly commented there are difficulties to attract and retain casual but skilled staff. Many young people in the region do not see tourism as a career opportunity. There is limited TAFE training facility providing hospitality courses in the region though the responsiveness of these courses to the needs of employers has been questioned.

- **Marketing/selling:**

Tourism marketing is difficult in the region given the small base and lack of funding. Opportunities exist for centralised booking processes, packaging deals between different operators, improved awareness and perception amongst the community, increased cross selling (reduce intra-regional competition), monetary contributions by operators towards marketing and coordination across the tourism product. There are also opportunities for increased tourism operators to the region. The country Victorian market remains one of the most significant drive markets should remain an important target market.

- **Investment:**

Many of the same key investment challenges common to regional tourism markets are experienced in Broken Hill, including capital raising, return on investment, rates, seasonality, skills shortages and tenure. There have been a number of tourism initiatives in the region that have not been implemented due to funding issues including the Regional Bush Tucker Industry and redevelopment of the Silverton Tramway Line. Projects that have been partially completed due to reduced funding include the development of the living desert sanctuary, line of lode project and minerals and mining museum (geocentre).

One of the key challenges for new investment in the region's tourism industry is combating the "chicken and egg" scenario that exists between transport and accommodation infrastructure and tourism product i.e. which of these precedes the other and how are they to be managed together. These issues need to be addressed through regional coordination and a destination management plan.

- **Administration:**

There is a noted lack of coordination amongst the industry presently on all levels. The industry is highly fragmented with three tourism organisations and little funding. Economies of scale and improved direction could be achieved by rationalisation.

5.4.2 Education and Training

The key education and training infrastructure in the region is described in detail in section 6.4, while specific on-the-ground strategies to improve education and training development in the region are discussed in section 8.4.

There are three key education and training development opportunities:

- **Expand the TAFE campus:**

The Western Institute of TAFE covers half of New South Wales is the primary provider of accredited training and vocational education in the Far West Region. The Institute has 24 campuses with approximately 32,000 enrolled students. There are approximately 2,000 persons enrolled at the TAFE, equating to roughly 10% of the region's population. There are three campuses in the Far West Region: Broken Hill which is the main campus in the region with a diverse range of courses including business, hospitality, trades, art, natural resources and information technology; Menindee which is a small campus concentrating on Indigenous art and computing; and Wilcannia which is a small campus concentrating on Indigenous art and business. There is the potential to expand TAFE in the region. The capacity of the campus is 3,500 students and there is capacity for expansion from a site capacity perspective. Such an expansion would play a key role in providing additional training opportunities and providing/extending courses in areas not presently provided.

- **Development of a mining training school:**

The development of a dedicated mining school in the region is seen as a clear attractor for the region to support the mining sector and attract, retain and skill workers for this important industry. There has been suggestion for a sizeable training facility that would play a national mining training role, covering all tertiary and vocational education spheres

related to the industry. There have also been suggestions Robinson's College could be extended to include mining training courses.

- **Development of a university campus:**

While there is access to tertiary education opportunities in the region, including Robinson College and the Sydney University's Department of Rural Health, there has been a strong push in the region for an established university campus providing a boarder range of on-site courses. A feasibility study conducted in 2005 recommended that a Combined University Access Centre (BH,CUAC) be developed in Broken Hill. The report recommends a collaborative multi-partner model to bring together senior high school, VET, TAFE and higher education organisations. The development of the BH,CUAC would give younger people more educational opportunities within the region and reduce the need for them to go elsewhere for university. Nursing, teaching, business, social work, mining and engineering have been identified as courses to focus on.

In addition to this infrastructure, there have been suggestions for a teaching hospital similar to the James Cook University model in Townsville and a training facility specifically for the unemployed to provide them with basic job skills. The Royal Flying Doctor Service (RFDS) has recently invested \$2.5 million in an extension to its base for the training of 20-30 medical students during their practical and fellowship stages.

5.4.3 Aged Care

There is the potential for the Far West Region to develop an expanded aged care sector to position Broken Hill as a retirement centre, similar to Palm Springs in California. There was a study commissioned in 1995 for an active retirement centre in Broken Hill with associated recreational and social amenities, though the study was not completed.

The region is considered suitable given its sense of community, social and health infrastructure, a slowing in the sea and tree change movements due to house and land prices, affordable retirement alternatives, a trend that sees many former residents of the region return in retirement and the possibility many younger mining families to the region may bring their older family members with them.

There are no notable inland regions positioning in this way, although there are many coastal regions, particularly the mid north coast of New South Wales and the coastal areas of Queensland. The opportunity is requisite on a detailed demand analysis and the ability to identify development sites for larger-scale development. The opportunity would need to be supported by increased investment in health infrastructure.

5.4.4 Culture and Arts

The cultural and arts sector in the Far West Region is an important component of the region's economic, tourism and social development. Broken Hill is promoted as the "City of the Arts" and there are many resident artists and a range of renowned galleries.

The *Far West NSW Economic Development Plan* identified the possibility of creating a Desert Hollywood at Broken Hill. The Plan notes the prevailing image of art in Broken Hill is limited to landscape and painting and does not include other areas of art such as music and dance. There is also a lack of coordination between artists. The importance of art is not generally recognised by the local community, possibly stemming from a lack of education and facilities. The situation also sees artists leaving the region. The Plan notes the need for arts events to be integrated into the community with the possibility to establish an International Artists Residency. The strategy would involve Broken Hill positioning as the "must see capital of art in Australia". Indigenous art would be established as a separate brand to other Indigenous art in Australia.

A recent study completed in the region, *Quality of Light, Quality of Life*, provided additional research on the cultural and arts sector and indicated visitors to the region account for 30% of purchases in this sector. The research formulated recommendations for further research, information management and retaining community knowledge, information sharing, marketing, business development, digital information management,

freight and transporting, exhibitions and trade fairs, funding and attracting artists. There have been successful initiatives such as artist in residence programs across the region which are providing local employment opportunities and tourism development. There are added opportunities for training and links with the region's schools.

5.4.5 Manufacturing, Building and Construction

The manufacturing, building and construction sectors are three of the key industries expected to benefit most from the planned mining and resource projects in the region. There is presently capacity and cost issues in the building and construction sector which will require either the import of skills through contractors to the region, or the growth of the local building industry to meet additional development needs, possibly through the establishment of new developers and firms in the region. Discussions with stakeholders in outlying areas of the region indicate importing of construction labour and product from outside of the region, rather than the nearest regional centre of Broken Hill.

One key strategy to increasing critical mass in a small and fragmented industry is to implement a more collaborative and coordinated approach. The prime example in the Far West Region is the Alliance Engineering Group, which consists of five separate engineering companies in the region. The grouping has increased capacity and capability and therefore ability to undertake larger scale projects which will be required in the region over the next 5-10 years to meet project and infrastructure needs. The Alliance is presently providing up to 80% of its services to the local mining industry and the remainder to the local construction sector.

5.4.6 Road Transport Facility/Truck Stop/Roadhouse

The establishment of a regional transport depot has received attention in Broken Hill in recent years and anecdotal evidence suggests there have been a number of potential developers, with the project currently impacted by land tenure issues. The premise for the development is Broken Hill's position on the transcontinental road system.

A road transport hub consists of a group of businesses located in the one precinct offering transport and related services, such as storage, logistics and mechanical services. There could be the possibility of creating an intermodal transport hub by also considering synergies with rail freight in the region.

There could be potential for a diverse range of road freight services, including specialized livestock services, transport and forwarding agents, refrigerated transport services and other general transport services. The anticipated economic and population growth of the region will increase the size of the local catchment in terms of transit demand. Mining-related freight will also increase through significant increased to resource production and export quantities.

5.4.7 Agriculture

Agriculture is a significant and traditional industry in the Far West Region. An abundance of land in the region makes pastoral activities an attractive option with the Darling River system leading to quality land in the surrounding areas for grazing and crops. During 2001 there was an estimated 972 people employed in the agriculture industry comprising 11.9% of the labour force. During 2005-06 it was estimated that the agricultural industry contributed \$43m to GRP equating to 4.0%. This is well below the historical contributions of up to 20% of the value of all exports from the region.

Prolonged drought has had a profound impact on the state of the rural sector. Current emergency relief programs in the region are due to expire in March 2008 and represent a key risk to this industry in the region if rainfall is not recorded. There are many cases of significant debt levels at an average of \$700,000-\$800,000 for farmers in the region. However, indications of stronger demand and prices in global markets for the commodities produced by the region are expected to positively boost production. There has been recent consolidation in the sector with major pastoralists buying many farms.

Pastoral activities have been traditionally solely based around activities such as wool production. Sheep still comprise the major part of agricultural operations with an estimated 1.4m sheep in 2004-05 equating to 4.1% of the State total (see **Table 5.5**).

Table 5.5: Agricultural Statistics for Far West Region, 2004-05

Product	Output	% of NSW
Farms		
Number of farms ^(a)	325	0.8%
Crop Output		
Apples (tonnes)	100	0.2%
Barley (tonnes)	2,400	0.1%
Wheat (tonnes)	4,200	0.1%
Grapes (tonnes)	6,200	1.2%
Livestock Numbers		
Meat Cattle	40,900	0.8%
Sheep	1,410,100	4.1%
Pigs	100	0.0%

Notes: (a) Number of farms with an Estimated Value of Agricultural Operations of over \$5,000

Source: ABS 7123.1.55.001, AECgroup

Significant growth in irrigation in recent years has seen the sector develop cotton, malting grains, grapes and stone fruit operations. Based on extensive research and pilot studies, there has also been diversification into other horticulture sectors such as mandarins and cut flowers (such as roses). Menindee is a leading producer of table grapes and horticulture and has a competitive advantage due to the early timing of its season. This same competitive advantage extends to mandarins in Wilcannia.

Strategies to ensure the long-term sustainability of agriculture in the region are continuously required, including sustainable farming practices and diversification techniques. In non-irrigation areas, pastoralists are increasingly diversifying into organic farming including lamb, goat, beef, wool and other fibres to improve yield. Markets have been developed in Asia and the US. The region is considered one of the best in the world for organic farming. To further develop the fast growing organic farming sector, a key opportunity to value add in the region is to establish an export certified abattoir locally in Broken Hill. This would assist in developing a global organic farming brand in the region. The facility would create local jobs and reduce transport freight costs of live animals.

A further opportunity to provide a guaranteed income for farmers are enterprise based conservation funds and other stewardship programs in the region.

Along with drought, issues that threaten the agricultural industry include road upgrades such as the Menindee-Pooncarrie Road. Recent economic analysis concluded this upgrade would provide economic benefits and an expansion of the region's horticulture industry. Other issues relate generally to land tenure and water supply issues. The Government's proposal to purchase water licenses along the Murray-Darling is generally supported. There has also been pressure on skills and labour from the higher paying mining sector. There are also few local school and training courses for the agricultural sector.

5.5 Other Economic Development Considerations

5.5.1 Indigenous Community

The Broken Hill indigenous community is amongst the fastest growing in Australia. There has been an increasing migration of indigenous persons from outlying areas of the Far West Region to Broken Hill, placing pressure on infrastructure. Presently the indigenous community accounts for around 6% of the total population, but this significance is expected to increase over the next 5-10 years. In the outlying areas of Wilcannia and

Menindee, a very high proportion of the population is Indigenous with a decreasing proportion of non-Indigenous persons.

The *Far West NSW Economic Development Plan* highlights this growing significance, evidenced by a growing number of non-government Indigenous organisations to the region, and identifies the need for more Indigenous people to be employed in regional private enterprise along with viable Indigenous businesses. Some of the strategies recommended include close partnership and strong linkages with the Murdi Paaki Regional Enterprise Corporation, introduce effective full-time employment programs, support community working parties and endorse the Wilcannia Works model as a benchmark for business and employment.

The Murdi Paaki Region was one of eight sites chosen as a COAG Trial site. Communities in the Murdi Paaki Region established local Community Working Parties as the focal point for the identification of local community priorities. There are community working parties in Broken Hill, Wilcannia and Menindee.

The *Broken Hill Community Working Party Plan 2005* was developed with the aim of guiding the future of the indigenous community in Broken Hill. The plan was prepared for the Broken Hill Indigenous Community Working Party (CWP), a community based advocate for Indigenous people. Indigenous persons living in Broken Hill has progressively increased over the last 15 years. This has led to new challenges and the CWP has seen the need to set the direction for the community, government and service providers. Education and employment are considered to be the priority focus areas.

The *Community Working Party Plan* sets target outcomes and strategies as follows:

- Corporate relationships/community infrastructure: The key aim of the Community Plan is to implement a process whereby all levels of Government work together with service providers and the community to ensure an improved Indigenous community;
- Education: Continuing to improve the attainment of all levels of education for Indigenous people. Ensuring a strong representation of Indigenous culture in the education system is also a key aim of the plan;
- Economic development and employment: Improving the economic well being of the Indigenous community through business and employment programs. Furthering economic development can be achieved through creating job opportunities with increased training and reducing welfare dependence. Creating joint ventures through increased investment is seen as an important step with all major projects required to address Indigenous employment;
- Land and culture: The plan outlines the right of Indigenous people to have access to their traditional land. This includes the resolving of all Native Title issues in the region, joint management of national parks and the protection of significant Indigenous sites from development. Indigenous culture is also an issue requiring addressing with artists and assets needing protection;
- Health: Improving the health of the Indigenous community is seen as a key priority. Strategies include supporting the Maari Ma Health Indigenous Corporation and increasing the access to health services such as drug rehabilitation facilities and annual health check ups;
- Supporting families: Building stronger families as a basis for a better community. This can be achieved through programs to reduce domestic violence, family counseling and support to neglected women and children;
- Justice: The plan identifies the need to improve the equality and equity of Indigenous people before the law. Key strategies include increasing Indigenous police officers and community liaison officers, as well developing the Indigenous Legal Service. Reducing the number of Indigenous people with custodial sentences is also a key goal; and

- Housing: Guaranteeing the sufficient and affordable supply of housing for all Indigenous people in Broke Hill. This includes increasing the opportunities for Indigenous people to own and rent their own housing. There are three Indigenous non-government housing providers in the region presently.

Mobilising the indigenous community offers significant potential across the region, particularly in the key centres of Broken Hill, Menindee and Wilcannia. There are examples of successful training programs and new business enterprises, including the leasing of the Wilcannia Caravan Park to the Murdi Paaki community.

5.5.2 Ageing Population

Broken Hill City Council has in place a *Social Plan 2005/2010* that provides strategies for various social groups and segments of the community. With specific regard to the expected ageing of the population, the following opportunities and challenges in the Far West Region will require a local planning response:

- Attitudes: positive attitudes to ageing and older people are essential in promoting inclusiveness and integration within the community;
- Aged care services: the provision of high quality, affordable and accessible aged care services will be critical in caring for the growing number of older people;
- Cultural diversity: the proportion of older people from non-English speaking backgrounds is expected to rise and needs to be considered in planning;
- Disabilities: the ageing population will include a high proportion of people with disabilities who, due to skilled care and improved technologies, will live much longer than previous generations;
- Economic development: the changing needs of older people and the changing locations of ageing will have a major effect, not only on investment but also on local economies and the consumer demand for services;
- Finance: an ageing population is expected to have a major impact on local government revenue and expenditure, creating increased fiscal pressure;
- Housing: the availability of affordable, accessible and suitable housing options is particularly important for older people and will be a priority as the population ages;
- Health promotion: health promotion is vital to encouraging health ageing, and not only improves the health and wellbeing of the community, but also has the potential to reduce the health and care costs of older people;
- Indigenous: Indigenous Australians, which are growing in number in Burnie City, are considerably younger than the non-Indigenous population;
- Information and communication technology: developments in information and communication technology will provide the opportunity for increased participation by older people in the community;
- Lifelong learning: lifelong learning is a key enabler for increased participation in the community;
- Participation: older people embody valuable skills, knowledge, experience and wisdom that can benefit the community by adding value to local services;
- Planning and development: planning and development of a wide range of facilities can have a significant impact on the quality of life of older people and influence the way older people enjoy and participate in their local community;
- Regional diversity: Population ageing is occurring more strongly in regional areas, as many regions attract retirees and experience an out-migration of young adults;

- Tourism, recreation and leisure: Recreation and leisure activities are an important way for older people to remain active, mix socially, and engage in the community;
- Transport: Access to public, private and community-based transport is essential for older people; and
- Women: women have differing lifestyle circumstances to men which impact upon them in older age.

5.6 Investment Attraction and Financing

An inability to secure adequate funding is a common impediment to project development and implementation in the Far West Region. The impacts of inadequate funding have been significant in the recent past, with the collapse of a number of economic development initiatives and major projects in the region. Funding impediments do not only exist in relation to capital and start-up costs, but in some instances projects have not reached potential because they were unable to attract the required operational funding to support the project from its initial stages.

Previous literature review and research has indicated innovative funding options need to be explored and developed, with a role for the private sector. One of the potential options is to acquire a pool of funds for distribution to local development projects or, alternatively, to attract investment to specific local initiatives.

The ability to access funding, finance and capital can relate to the following:

- Planning approvals processes and requirements;
- Land tenure issues including Crown Lands and Native Title;
- Local presence of financiers and major banks and remoteness;
- Willingness of financiers to release funds;
- Legislation relating to foreign investment;
- Return on investment relative to inherent project risk;
- Availability of labour and skills shortages;
- Accounting issues including tax and depreciation; and
- Information and preparedness of feasibility studies and business cases.

Local business financing needs indicates potential opportunities within the finance and professional business services sectors in the Far West Region.

The *Far West NSW Economic Development Plan* provides significant focus on the issue of attracting external investment to the region. These strategies relate to ensuring investment readiness, marketing and building key relationships and actively seeking investment and business attraction.

Many of the infrastructure deficits identified in Chapter 6 are funded through Department budgets. In terms of health, education, roads and utilities, the economic impact assessment demonstrates the extent of future population impacts on top of the state government's present population projections. There is the real risk that budget allocations calculated from the existing population projections will result in a severe shortfall in infrastructure funding for the Far West Region.

Other economic development initiatives and community infrastructure projects proposed or required for the region are suitable for funding from various state and Commonwealth government funding programs. There are a number of programs provided by the Commonwealth Department of Transport and Regional Services and NSW Government departments that can be pursued. There should be strong consideration for increased state government grants for infrastructure projects in the region.

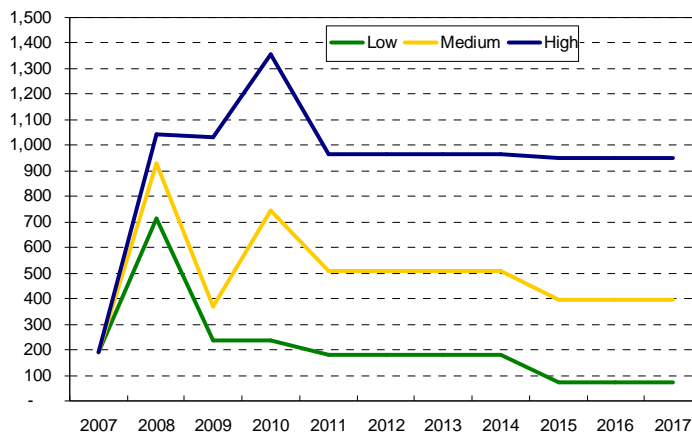
6 Infrastructure and Services

6.1 Economic Infrastructure

6.1.1 Residential

Residential building investment is projected to increase as a result of the anticipated population growth in the Far West Region. There are already early signs of pressure in the regional housing market, with shortages in available housing and land stocks, significant property price and rental growth, increased reinvestment in residential property and development proposals and interest from property developers. Assuming a permanent residential mining workforce is promoted, there is projected demand for up to 1,000 and 1,400 additional dwellings by 2008 and 2010, respectively, to accommodate expected growth in households, requiring rapid development in the short-term (see **Figure 6.1**). The entirety of the demand will be recorded in Broken Hill where the projects are located and where the flow-on impacts will be experienced most.

Figure 6.1: Projected Additional Demand for Residential Dwellings, Far West Region



Source: AECgroup

Providing appropriate and affordable housing will be an important ingredient in attracting new employees to the region. While there is a significant quantum of residential product available (reflected by an historic population of more than 30,000 persons), there are concerns regarding the quality of this product and its ability to meet the changing needs of prospective residents both in Broken Hill and outlying areas. The adequacy of existing housing stock is reflected by a 14% vacancy rate in 2001 along with little reinvestment in older stock. The main housing supply gap presently is in the upper end for executive property. It is expected there will be increased expectations in regard to the standard and size (3-4 bedrooms) of housing being sought from new people moving to the region. Additionally, there will be demand for unit rentals to meet the needs of single workers and couples to the region. If FIFO occurs, then motel/unit style development will be demanded. Additional student training accommodation needs have also been highlighted.

There are no major local residential property developers, nor have there been house and land package subdivisions, nor has there been a history of unit development. The mining companies are not engaged as property developers like other mining regions. Therefore, there will need to be the identification of residential development opportunities and the attraction of new developers to Broken Hill. Some have already expressed interest but are unable to find development opportunities due to land constraints (see chapter 7). In terms of affordable housing, the New South Wales Department of Housing is implementing two housing strategies aimed at managing the long-term housing needs in the region: (1) to create a single housing provider to manage Department of Housing funded community and public housing; and (2) to address the level of vacant houses in South Broken Hill through improvements to physical and social presentation.

6.1.2 Retail

Average weekly household retail expenditure in the Far West Region was estimated at \$381 in 2007, approximately 3% below the NSW average of \$391 (see **Table 6.1**). This is due to the relatively lower socio-economic status of the region's demographic, reflected by lower income, higher unemployment and an older population, which in turn means a reduced propensity to expend on retail goods and services.

Table 6.1: Average Weekly Household Retail Expenditure, 2007

Retail Type	Far West Region	New South Wales
Groceries & Specialty Food	\$160	\$160
Food & Liquor Catering	\$52	\$54
Clothing & Accessories	\$36	\$41
Furniture, Houseware & Appliances	\$44	\$49
Recreation & Entertainment Equipment	\$40	\$40
Garden & Hardware Goods	\$14	\$13
Other Goods & Personal Services	\$34	\$35
Total	\$381	\$391

Source: ABS 2003-04 Household Expenditure Survey, AECgroup Retail Model

Overall, based on average household expenditure and the estimated number of households, the total household retail expenditure in the region is estimated at \$197.5 million in 2007 (see **Table 6.2**). Of this total, it is estimated 77% (or \$151.9 million) is spent at retailers operating in the Far West Region. The remaining 23% (or \$46.2 million) is expended outside the region, predominantly Mildura and Adelaide, with escape highest in the discretionary expenditure categories like clothing, furniture and entertainment.

Table 6.2: Total Annual Household Retail Expenditure, Far West Region, 2007 (\$m)

Retail Type	Total Available	Location of Expenditure		Escape Expenditure (%)
		Inside Region	Outside Region	
Groceries & Specialty Food	\$82.1	\$69.8	\$12.3	15.0%
Food & Liquor Catering	\$27.2	\$23.1	\$4.1	15.0%
Clothing & Accessories	\$19.6	\$12.7	\$6.9	35.0%
Furniture, Houseware & Appliances	\$22.7	\$13.6	\$9.1	40.0%
Recreation & Entertainment Equipment	\$21.5	\$12.9	\$8.6	40.0%
Garden & Hardware Goods	\$7.3	\$4.7	\$2.6	35.0%
Other Goods & Personal Services	\$17.6	\$15.0	\$2.6	15.0%
Total	\$198.1	\$151.9	\$46.2	23.3%

Source: AECgroup Retail Model

Retailers in the Far West Region also record expenditure from visitors to the region, estimated at \$23.0 million in 2007. Total retail turnover is estimated at \$174.9 million in the Far West Region in 2007 (see **Table 6.3**).

Table 6.3: Total Annual Retail Turnover, Far West Region, 2007 (\$m)

Retail Type	Households	Visitors	Total
Groceries & Specialty Food	\$69.8	\$1.6	\$71.4
Food & Liquor Catering	\$23.1	\$19.1	\$42.2
Clothing & Accessories	\$12.7	\$1.0	\$13.7
Furniture, Houseware & Appliances	\$13.6	\$0.1	\$13.7
Recreation & Entertainment Equipment	\$12.9	\$0.0	\$13.0
Garden & Hardware Goods	\$4.7	\$0.2	\$5.0
Other Goods & Personal Services	\$15.0	\$0.9	\$15.9
Total	\$151.9	\$23.0	\$174.9

Source: AECgroup Retail Model

There is approximately 30,000-50,000sqm of retail floorspace in the Broken Hill retail market, which dominates the region's retail sector, reflecting its regional centre status. The CBD and Centre Westside are the main retail centres in Broken Hill. However, retail generally represents a minority activity in the ten city blocks that constitute the CBD and there is no clear retail anchor tenant. There is fairly concentrated ownership in the CBD with limited reinvestment. Centro Westside is the largest retail centre in terms of floorspace and profile, with 13,830sqm and anchor tenants Woolworths, Big W and Target Country, along with a number of specialty chain stores. There are also small retail clusters in Oxide Street, William/McCulloch Street, Railway Town and South Broken Hill.

There are two current retail shopping centre proposals in Broken Hill. These proposals aim to introduce further major national retailers to the market to reduce escape spending to Mildura and Adelaide and meet additional demand as a result of the projected population increases associated with the major mining projects. Both proposals are for around 10,000sqm with Coles and Target as the anchor tenants. The locations for the centres are opposite Centro Westside on the corner of Galena Street and Talc Street south of Centro Westside on a site bounded by Blende Street to the northwest, Gossan Street to the northeast, South Road to the southeast and the partially formed Galena Street to the southwest. The proposals would essentially further increase the role of retail in the Centro Westside area and reduce the significance of the CBD as a retail core.

With the development proposals planned for the region, it is important they represent sustainable retail development i.e. they do not overly impact the existing retail centre by lowering turnover to an unreasonable extent and driving up vacancy rates. New retail development in the region in the areas where escape expenditure is greatest will increase available turnover to retailers and grow the market. This will also be the case with new households to the region and associated increased retail spending. Any development of a new supermarket and department store supported by specialty stores would need to retain a level of expenditure in the region and achieve a market share of additional new spending that meets their turnover requirements. Otherwise, with current market conditions which are described as difficult, evidenced by vacancies, high turnover, lack of interest for franchises, unsustainable impacts would be recorded by the retail sector.

It is estimated average escape expenditure could potentially be reduced to around 10% in total on the basis of improved supply and the isolated nature of the region. However, it is noted there will always be an element of escape expenditure due to the day trip mentality that exists in the region as a motivation for trips to Mildura and Adelaide. **Table 6.4** projects the demand for additional retail floorspace over the next 3, 5 and 10 years on the basis of anticipated population growth, increases to visitor expenditure and increased market share (i.e. reduction in escape expenditure). The analysis suggests maximum development of 12,500sqm in the next 3 years under the high development scenario. Indicative breakdowns are provided between different retail types and indicate a 2,500-3,000sqm supermarket could be accommodated, additional clothing and specialty stores, retail bulky goods stores and garden & hardware stores.

An assessment of the demand for additional retail floorspace in a region must also give due consideration to the net public benefits likely to be derived from floorspace additions. The following needs arguments support additional retail development in Broken Hill:

- Maintenance and reinforcement of regional role;
- Catering for the spending growth from households and visitors;
- Improving the quality of retail facilities and services;
- Increasing product choice;
- Greater convenience and comfort;
- Lack of public amenity and space at retail facilities;
- Market entry and competitive pricing; and
- Provide necessary service and choice for tourists.

There are also strategies to improve the performance of retailers and the market in general, including encourage landlord reinvestment, coordinated trading hours and Sunday trading, signage policy, marketing, streetscape improvement projects, refurbishment of historic buildings and verandas and parking and access.

Table 6.4: Projected Additional Retail Turnover and Retail Development, Far West Region

Retail Type	Projected Additional Retail Turnover (\$m)									Projected Extra Floorspace (sqm)		
	Household Expenditure Growth			Escape Expenditure Capture			Visitor Expenditure Growth			2010	2012	2017
	2010	2012	2017	2010	2012	2017	2010	2012	2017			
Low												
Groceries & Specialty Food	\$2.9	\$4.1	\$7.5	\$4.3	\$4.3	\$4.5	\$0.3	\$0.4	\$0.7	1,000	1,200	1,700
Food & Liquor Catering	\$1.0	\$1.4	\$2.5	\$1.4	\$1.4	\$1.5	\$4.0	\$5.4	\$7.4	1,200	1,500	2,100
Clothing & Accessories	\$0.7	\$1.0	\$1.8	\$3.0	\$3.1	\$3.2	\$0.2	\$0.3	\$0.4	1,000	1,100	1,300
Furniture, Houseware & Appliances	\$0.8	\$1.1	\$2.1	\$4.7	\$4.8	\$5.0	\$0.0	\$0.0	\$0.0	1,800	2,000	2,400
Recreation & Entertainment Equipment	\$0.8	\$1.1	\$2.0	\$4.5	\$4.5	\$4.7	\$0.0	\$0.0	\$0.0	1,300	1,400	1,700
Garden & Hardware Goods	\$0.3	\$0.4	\$0.7	\$1.1	\$1.2	\$1.2	\$0.1	\$0.1	\$0.1	600	600	800
Other Goods & Personal Services	\$0.6	\$0.9	\$1.6	\$0.9	\$0.9	\$1.0	\$0.2	\$0.3	\$0.3	300	300	400
Total	\$7.0	\$9.9	\$18.1	\$19.9	\$20.2	\$21.0	\$4.8	\$6.4	\$9.0	7,200	8,100	10,400
Medium												
Groceries & Specialty Food	\$7.3	\$7.0	\$10.5	\$4.5	\$4.5	\$4.6	\$0.3	\$0.4	\$0.7	1,600	1,600	2,100
Food & Liquor Catering	\$2.4	\$2.3	\$3.5	\$1.5	\$1.5	\$1.5	\$4.0	\$5.4	\$7.4	1,400	1,700	2,300
Clothing & Accessories	\$1.8	\$1.7	\$2.5	\$3.2	\$3.2	\$3.3	\$0.2	\$0.3	\$0.4	1,300	1,300	1,600
Furniture, Houseware & Appliances	\$2.0	\$1.9	\$2.9	\$4.9	\$4.9	\$5.1	\$0.0	\$0.0	\$0.0	2,300	2,300	2,700
Recreation & Entertainment Equipment	\$1.9	\$1.8	\$2.8	\$4.7	\$4.7	\$4.9	\$0.0	\$0.0	\$0.0	1,700	1,600	1,900
Garden & Hardware Goods	\$0.7	\$0.6	\$0.9	\$1.2	\$1.2	\$1.2	\$0.1	\$0.1	\$0.1	800	800	900
Other Goods & Personal Services	\$1.6	\$1.5	\$2.3	\$1.0	\$1.0	\$1.0	\$0.2	\$0.3	\$0.3	400	400	600
Total	\$17.7	\$16.9	\$25.4	\$20.9	\$20.9	\$21.7	\$4.8	\$6.4	\$9.0	9,500	9,700	12,100
High												
Groceries & Specialty Food	\$12.7	\$11.1	\$15.7	\$4.7	\$4.7	\$4.9	\$0.3	\$0.4	\$0.7	2,400	2,200	2,800
Food & Liquor Catering	\$4.2	\$3.7	\$5.2	\$1.6	\$1.5	\$1.6	\$4.0	\$5.4	\$7.4	1,800	1,900	2,600
Clothing & Accessories	\$3.0	\$2.6	\$3.7	\$3.4	\$3.3	\$3.5	\$0.2	\$0.3	\$0.4	1,700	1,600	1,900
Furniture, Houseware & Appliances	\$3.5	\$3.1	\$4.3	\$5.2	\$5.1	\$5.4	\$0.0	\$0.0	\$0.0	2,900	2,700	3,300
Recreation & Entertainment Equipment	\$3.3	\$2.9	\$4.1	\$5.0	\$4.9	\$5.1	\$0.0	\$0.0	\$0.0	2,100	2,000	2,300
Garden & Hardware Goods	\$1.1	\$1.0	\$1.4	\$1.3	\$1.2	\$1.3	\$0.1	\$0.1	\$0.1	1,000	900	1,100
Other Goods & Personal Services	\$2.7	\$2.4	\$3.4	\$1.0	\$1.0	\$1.0	\$0.2	\$0.3	\$0.3	600	600	700
Total	\$30.5	\$26.7	\$37.8	\$22.2	\$21.8	\$22.9	\$4.8	\$6.4	\$9.0	12,500	11,900	14,700

Source: AECgroup Retail Model

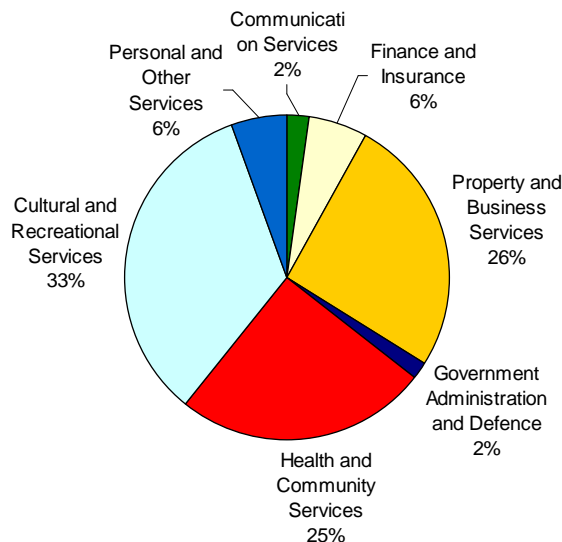
6.1.3 Commercial

Broken Hill is the administrative and commercial centre of the Far West Region and records the majority of government, commercial and professional services. These businesses are predominantly concentrated in the Broken Hill CBD in both ground floor and above ground premises, although the ground floor premises with street frontage and exposure are the most popular, reflected by higher rents and low vacancies. The most prominent office buildings in Broken Hill are the Council administration and State Government office buildings which are both multistorey buildings.

Almost all office buildings are described as older style multi storey office buildings of C grade quality according to Property Council of Australia office definitions. There has been limited refurbishment and improvement to office buildings. In particular, the redevelopment of multistorey premises has been limited with access to upper floor space poor (i.e. no lift access). It is suggested the upper levels are not fully utilised for workspace and are primarily used for storage or are vacant.

The office sector in the Far West Region is dominated by health and community services, property and business services and cultural and recreational services (see **Figure 6.1**). There is a relatively small proportion of finance and insurance firms. Most major banks are represented in the region, and there is a relatively large representation from state government departments in the region given its isolation and spread.

Figure 6.1: Breakdown of Commercial and Professional Services Businesses, Far West Region



Source: OACC Business Database, AECgroup

With the anticipated population and economic growth in the region, there are expected to be positive benefits for the commercial and professional services sector. This will require consideration for additional office development. Based on projected employees and 20sqm of office space per employee, the following floorspace demand is projected:

- Low 199 employees by 2008 3,980sqm
- Medium 237 employees by 2008 4,740sqm
- High 398 employees by 2010 7,960sqm

There is likely to be demand from existing businesses to expand, in addition to the demand for new commercial and professional services businesses. Existing businesses report a lack of suitable and available office space, confirming the need for additional supply. This requirement will need to be met through the development of new purpose-built office space to cluster these uses and provide higher standard space, along with increased occupancy of and reinvestment in existing premises.

6.2 Social Infrastructure

6.2.1 Health

Due to the isolation of the region, its vast geographic area, ageing population and increasing indigenous representation, there are a large number of health organisations, services and facilities in the Far West Region. The Centre for Remote Health has been established as the regional health alliance with representatives from the Greater Western Area Health Service (GWAHS), Maari Ma Health, Sydney University Department of Rural Health and the RFDS. The alliance studies and responds to a number of community health issues in the region through a joint resources approach.

The Broken Hill Base Hospital is the largest health facility in the Far West Region. The Hospital is relatively new (opened in 2002) and includes 80 multifunctional acute beds utilised for medical, surgical, obstetrics, coronary and intensive care, pediatrics, palliative care and mental health. Other facilities in the hospital include an 8-space day procedures unit, integrated operating suite with two general and one procedures room and rehabilitation facilities. There is potential for the hospital to be expanded on its current site. In addition to the regional base hospital, there are small community hospitals in Wilcannia, Ivanhoe, Menindee, White Cliffs and Tibooburra. These hospitals are considered sufficient for local needs and some have received recent refurbishment.

GWAHS operates the public health care facilities in the region listed above. The RFDS, based in Broken Hill, services the majority of Western New South Wales, treating patients in outback areas and flying them to hospitals in Broken Hill or Adelaide/Sydney as required. The RFDS recently invested \$2.5 million to expand its base in Broken Hill and provide additional training facilities for 20-30 medical students. In terms of indigenous health, the Maari Ma Health Corporation is an Indigenous community controlled health organisation providing specialised health services to Indigenous residents. The Sydney University Department of Rural Health also works actively in the region and consults with various health groups. The University also provides Indigenous health training programs to provide local employment opportunities for these people.

As a result of the projected population growth according to the development scenarios, and the resulting changes to the demographic, it is expected there will be increased demand for acute services (short-term care) to deal with the increased working population, families and indigenous persons, including key service areas such as adolescent health and mental health. Demand for chronic services (prolonged illness and care) will also increase and will require additional space requirements. The ageing of the population will also generate increased demand for older person specialists such as obstetrics, gynaecologists, surgeons, orthopaedic, paediatricians etc. The system currently has no local specialists and relies on FIFO mechanisms. There will also need to be improved outreach health services into the regional areas although there are presently well catered for by the current service delivery model. Additional efforts will need to be made regarding preventative health in the community through education.

Health infrastructure in the Far West Region is funded based on a combination of population size and specific health care needs. The lower socio-economic status, high welfare dependence and increasing indigenous community means there is relatively high demand for health care in the region relative to population. The region has generally achieved satisfactory funding from the State Government due to its regional isolation and higher health care needs. GWAHS, in cooperation with other members of the Centre for Remote Health, is developing a regional health plan which forecasts health care needs, additional infrastructure and investment requirements, and skills and training needs. Not duplicating services through cooperative service delivery will remain important. The regional health alliance also provides the opportunity to collectively attract new workers to the region to fill skills gaps, including specialists.

In terms of other community and social trends, there has been a decline in volunteers in recent times. The population growth and likely increases in anti-social behaviour will increase demand for volunteers in the region and place pressure on not-for-profit and community services such as Lifeline, HACC and Meals on Wheels.

6.2.2 Aged Care

There are five aged care facilities in Broken Hill operated by Southern Cross Care, Maraga Uniting Care and Broken Hill City Council, including:

- St Annes (121 beds high care);
- Aruma Lodge and the War Vet Hostel (85 beds low care);
- Shorty O'Neil Retirement Village (40 ILUs and 6-8 legacy self care beds); and
- Maraga Uniting Care supporting the indigenous community.

In total, there are an estimated maximum of 214 nursing home/hostel beds and 40 retirement village units/ILUs at these facilities. Consultation with industry representatives indicates 100% occupancy of these facilities with waiting lists. This strong demand reflects the older population of the region.

The view from industry representatives is that aged care supply is roughly aligned with planning benchmarks, although the balance between low and high care may be slightly skewed. The ageing of the population moving forward will increase need for aged care supply across the aged care spectrum. The following provides a general guide as to the demand for aged care facilities across Australia and New South Wales:

- Australia:
 - Retirement villages 3.7% persons aged over 65 years
 - Nursing home/hostel 5.9% persons aged over 65 years
- New South Wales:
 - Retirement villages 4.5% persons aged over 65 years
 - Nursing home/hostel 5.3% persons aged over 65 years

On the basis of 100% occupancy and the current number of units, it is estimated the participation rate in retirement village units is 1.4% in the Far West Region, while participation for nursing home/hostel beds is around 5.1%. This suggests that in the retirement village sector in particular there are shortages in supply, while nursing home supply is roughly equivalent with planning benchmarks for NSW.

Based on the projected increase in the population of persons aged over 65 years of more than 20% over the next 10 years in the Far West Region, the shortage of retirement village ILUs is projected to increase to 124 units and nursing home facilities to 76 beds (see **Table 6.6**). The Federal Government's ageing in place strategies will also increase the demand for home based care services such as HACC and meals on wheels. Low volunteer participation throughout the region is presently jeopardizing these services.

This supply deficit will be met to some extent by the planned 78-unit development at Excelsior Oval, Broken Hill, by the Macdonald Group of Companies. The development is planned to provide further supply over 5 years. There is also a retirement village planned for the mooted golf club redevelopment. The existing aged care facilities have limited expansion capacity, while access to finance also represents a challenge. There could be investigation for partnership opportunities between private providers and government.

Table 6.6: Projected Aged Care Demand (Medium Scenario), Far West Region (2007-2017)

Facility Type	Change	Total
Retirement Village Units		
Population, 0-65 years	1,264	5,502
Units Demand, 0-65 years	38	164
Units Surplus/Deficit		(124)
Nursing Home/Hostels Units		
Population, 0-65 years	1,264	5,502
Units Demand, 0-65 years	67	290
Units Surplus/Deficit		(76)

Source: AECgroup

6.2.3 Child Care

There are 14 child care services/centres in the Far West Region:

- Long day care/preschools:
 - Happy Day Pre School in Broken Hill (aged 2-6)
 - Lilliput Child Care Centre in Broken Hill (ages 2-6)
 - Rainbow Pre School in Broken Hill (ages 3-6)
 - Playtime Preschool (ages 2-6)
 - Menindee Children's Centre (ages 0-6)
 - Silverlea Early Childhood Services (ages 3-6)
 - Wilcannia Early Childhood Centre (ages 3-6);
- Family day care:
 - Broken Hill Family Day Care (ages 0-12);
- Outside of hours school (OOSH)/vacation care:
 - Broken Hill Occasional Day Care Centre
 - Broken Hill Toy and Resource Centre (ages 0-6)
 - Broken Hill Vacation Care
 - Sacred Heart OOSH Care (ages 5-12)
 - Thankakali Holiday Program; and
- Other:
 - Outback Mobile Resource Unit – Broken Hill (ages 2-6).

It is estimated the long day care centres, pre-schools and family day care centres provide approximately 345 child care places across the region. The largest facility is the Broken Hill Family Day Care with 100 places. Anecdotal evidence suggests there are capacity pressures (above 90% occupancy) and waiting lists at existing centres. However, a recent review of community based child care services in the region indicated significant competition, marginal financial sustainability and long-term viability challenges.

The future demand for child care places is determined by the projected population size of the 0-4 (child care) and 5-12 age (outside of school hours care) cohorts and the participation of children in formal child care. In New South Wales, the ABS *Child Care Survey* indicates the following child care participation rates: 0-2 years (25.8%), 3-4 years (46.0%) and 5-12 years (11.3%). The Far West Region's child care participation rate is estimated at 25.0% in the 0-4 years age group compared with the state average of 33.9%, suggesting an element of latent demand.

There is presently an estimated shortage of around 150 child care places across the region and this situation is expected to be exacerbated when additional growth occurs, with shortages increasing to 161 places under the high scenario by 2008 (see **Table 6.7**). A key planning challenge will be identifying suitable sites for the centres that are exposed to major road arterials, close to schools and amenities. However, action is required to address existing management concerns and viability issues in the sector.

Table 6.7: Projected Child Care Demand by Scenario, Far West Region (2007-2008)

Age Group	Low		Medium		High	
	Change	Total	Change	Total	Change	Total
Population						
0-2 years	23	841	36	855	44	862
3-4 years	17	627	27	637	33	643
5-12 years	68	2,535	110	2,577	132	2,599
Child Care Demand						
0-2 years	6	217	9	221	11	223
3-4 years	8	288	12	293	15	296
5-12 years	8	285	12	290	15	293
Child Care Places (Surplus/Deficit)						
0-4 years		(149)		(157)		(161)

Source: AECgroup

6.2.4 Education and Training

In terms of schooling, Broken Hill High School and Willyama High School are the two government high schools in the Far West Region. There have been discussions regarding the amalgamation of these two schools. There are seven government primary schools in Broken Hill as well as smaller central schools in the other townships in the region. The Sacred Heart College in Broken Hill is a Catholic School for primary students and the only private school in the region. Many students attend private boarding schools outside the region during their high school years. Schools specifically catering for long distance education also operate in the region, including the School of the Air.

There is latent capacity at these existing schools reflecting the previous significant population in the region exceeding 30,000 persons. Over the long-term (5-10 years), there is projected to be a decline in the number of school-age children. However, in the interim period (next 5 years) when the majority of the employment impact is likely to be experienced, there is projected to be an increase of around 300 school-age persons whom will require schooling places (approximately 110 primary, 110 secondary and 70 senior secondary).

This will require utilisation of spare capacity and possible refurbishment of some facilities. It is likely the nature of the people moving to the region with increased disposable income may have an increased demand for private schooling, including private secondary schooling options. The absence of this option in the region could potentially threaten labour attraction to the region. While schooling facilities are considered largely sufficient to meet future needs, there are schooling issues in the outlying areas with low participation and attendance, contributing to resourcing issues.

In terms of training and vocational education, the Western Institute of TAFE covers half of New South Wales. The Institute has 24 campuses with approximately 32,000 enrolled students. There are three campuses in the Far West Region: Broken Hill which is the main campus in the region with a diverse range of courses including business, hospitality, trades, art, natural resources and information technology; Menindee which is a small campus concentrating on Indigenous art and computing; and Wilcannia which is a small campus concentrating on Indigenous art and business.

In addition to these institutions, the following training specialists operate in the region: Australian Business Limited has an office in Broken Hill that helps businesses with many areas including hiring and training staff and apprentices; Broken Hill Skills Centre attempts to help train people who are unemployed and help them find work; Department of Education and Training has a New Apprenticeships Centre in Broken Hill and provides services to help get new apprenticeships in the region; West State Training; and Sureway Employment services.

Robinson College is an adult education centre that offers a wide range of learning opportunities, including both accredited and non-accredited courses. It shares a building with the Charles Sturt University Office and offers courses including literacy, numeracy, business and hobbies. The Charles Sturt University is the major university in Far West New South Wales. The University has campuses in Dubbo, Orange, Bathurst, Wagga Wagga and Albury-Wodonga. The Robinson Centre is a base for students who are doing long distance education at the University and has videoconferencing facilities as well as communication technology linking the Centre to other Campuses. The Centre is relatively small with no student accommodation provided.

The RFDS provides training facilities for medical students in the region in their practical and fellowship years. The Sydney University Department of Rural Health provides Indigenous health training programs to provide local employment opportunities for these people. There is an artist residency program at the University of New South Wales' Fowlers Gap Research Station through the College of Fine Arts.

6.2.5 Cultural and Arts

The Far West Region has a strong history and art culture reflected by many galleries and studios. There are over 30 galleries and studios showcasing local artists across the region, with the largest being the Broken Hill Regional Art Gallery. The Gallery is one of Australia's oldest regional galleries (1904) with over 1,300 works in the collection. Several museums are located in the Far West Region present the rich history and natural environment of the area, including Railway Mineral and Train Museum, Albert Kersten GeoCentre, Silverton Gaol Museum and Whites Mineral Art Gallery and Mining Museum. There are some indications that the proliferation of small galleries has fragmented the market and weakened the tourist potential for the region. Broken Hill City Council has in place a *Cultural Plan 2005/2010* that provides strategies for various cultural functions, including space, diversity, education, heritage, events, the economy and connections.

A recent study completed in the region, *Quality of Light, Quality of Life*, provided additional research on the cultural and arts sector and indicated visitors to the region account for 30% of purchases in this sector. The research formulated recommendations for further research, information management and retaining community knowledge, information sharing, marketing, business development, digital information management, freight and transporting, exhibitions and trade fairs, funding and attracting artists. There have been successful initiatives such as artists in residence programs across the region which are providing local employment opportunities and tourism development. There are added opportunities for training and links with the region's schools.

The Broken Hill Entertainment Centre is the regional venue for conferences and large musical and theatrical shows. The centre is owned and operated by Broken Hill City Council with reduced rates offered to community groups with a capacity of over 600. Other conference and function facilities in the region include the Broken Hill Golf Course as well as smaller facilities at motels and hotels. An expansion of the Broken Hill Racecourse is also being considered which could lead to a facility capable of accommodating 1,200 people. Funding for the upgraded pavilion is currently being sought through funding submissions.

The New South Wales Department of Community Services has in place a planning benchmark of one community centre for every 10,000 persons. There are presently four community centres are located in Broken Hill, Wilcannia, Ivanhoe and Menindee, exceeding the State Government's planning benchmarks. The Commonwealth Department of Housing and Regional Development has a planning benchmark of a major regional community centre for every 30,000 persons. The Broken Hill Entertainment Centre meets this planning need with additional capacity and efficiency opportunities.

OACC's regional planning has identified the need for a multipurpose centre in Menindee. However, the current facilities are considered underutilized, possibly indicating some caution in terms of the sustainability of additional investment. There are also concerns in regards to the resourcing for such facilities in terms of labour and operational financing.

6.2.6 Recreation

The Far West Region has an extensive range of sporting facilities that belies its relatively small population. Major facilities are centred in Broken Hill though the smaller townships of Wilcannia, Menindee and Ivanhoe also have their own facilities. Key facilities include:

- North Bowling Club;
- Zinc Bowling Club;
- Wilcannia Bowling Club;
- RSL Bowling Club;
- Broken Hill Golf and Country Club;
- South Broken Hill Golf Club;
- Wilcannia Golf Club;
- Menindee Golf Club;
- Ivanhoe Golf Club;
- Indoor Cricket Centre;

- South Boys Club;
- Broken Hill Speedway;
- Greyhound track;
- Broken Hill Racecourse;
- North Family Play Centre;
- Half Pipe Skate Ramp;
- Squash Centre;
- White Cliffs Indoor Sports Centre;
- Ivanhoe Indoor Sports centre;
- Wilcannia Tennis Club;
- O'Neil Tennis Courts; and
- Rifle Range.

Broken Hill City Council and Central Darling Council maintain a number of sporting ovals throughout the region. The ovals are used for cricket, AFL, rugby league, football and general recreational use and comprise:

- Memorial Oval;
- Excelsior Sportsground (soon to be developed as a retirement village);
- Jubilee Oval;
- O'Neil Park;
- Menindee Recreation Oval;
- Bill O'Reilly Oval; and
- Wilcannia Oval.

On the whole, the sporting facilities presently provided in the region are considered adequate to meet projected demand. There is surplus capacity in terms of usage. The upkeep of these facilities and promotion of local sport and recreation will be important to creating an attractive lifestyle for new individuals and families to the Far West Region. The major gap in the recreational facilities of the Far West Region is a 50m swimming pool. Broken Hill City Council is currently planning for the development of a \$3.3 million new aquatic facility including an 8-lane outdoor, solar heated pool. Planning benchmarks generally set a swimming centre for between 15,000 and 30,000 persons. This need has been identified through community consultation and Council is undertaking the design stage with a possible completion date of 2008.

6.2.7 Entertainment

Providing sufficient, ranging and attractive entertainment options in the region will be central to attracting new individuals and families to the region to meet the additional labour needs. Entertainment facilities typically include cafes, restaurants, clubs, cinemas, hotels and gaming.

There are many cafes and restaurants located across the region, with utilisation shared between residents and tourists. There are gaps in the upper end of the market for corporate and leisure travellers. The retail demand analysis suggests there could be demand for an additional 2,700sqm of take-away food outlets, cafes and restaurants in the region over the next 10 years under the high development scenario.

Several registered clubs are located in Broken Hill with restaurant, gaming, music and entertainment facilities. These major clubs include the Musicians Club Broken Hill, Legion Club, Broken Hill Sturt Club, Barrier Social Democratic Club and Silver City Workingmen's Club. These clubs have a strong reputation in the region and have played key community roles in the development of Broken Hill.

There are currently over 20 pubs/hotels located in Broken Hill, with some situated in other major towns in the region. This reflects a significant supply that is presently meeting demand in the region. There is evidence of this oversupply situation with reports of 1-2 closures each year. Under-utilisation of existing facilities has also been observed and could meet additional growth. There has been limited reinvestment in hotels to improve amenity, standards and meet new regulations. Most pubs are considered land locked and have limited expansion potential to meet increased demand.

The other entertainment facilities in Broken Hill include the Village Silver City Cinema and Theatre 44. The Golf Course has traditionally been considered a key entertainment and recreation feature of the region. The drought affecting the Darling River and Menindee Lakes is affecting day trips across the region by residents. The Sunset Strip is considered a short-holiday destination in the region for local residents. Mildura and Adelaide remain key tourist destinations for the region's residents. There are currently projects underway to improve the YMCA in Broken Hill for young people.

6.3 Utilities and Services

6.3.1 Water

Securing a reliable water supply for the Far West Region has been identified as a key planning challenge for the region and its development, particularly during extensive periods of drought and lack of storage supply. The situation is prompting Country Water, the entity responsible for domestic, commercial and industrial water services in the Far West Region, to initiate extensive new infrastructure development in the region.

Country Water presently has a licence to extract 10 GL of water per year from the Menindee Lakes Scheme on the Darling River. During 2005-06, Country Water pumped 6,700ML of water to almost 11,000 residential and non-residential connections in the Far West Region. Country Water's storage infrastructure comprises 11 water service tanks, Stephen's Creek with capacity of 18,000 ML, Umberumberka with capacity of 9,000 ML and Imperial Lake (emergency water supply) with capacity of 900 ML. A 130km pipeline carries water from the Menindee Lakes to Broken Hill. Pumping and treatment infrastructure includes 7 water pumping stations, 3 water treatment plants, 577 km of water and sewer mains, 2 sewerage treatment plants and 11 sewerage pumping stations. Independent of securing supply, this infrastructure is considered sufficient to serve the needs of a population of 50,000-60,000 persons.

Water is presently in very short supply in the region with rainfall required within the next 14 months so as to not jeopardise supply. Declining water levels in the Menindee Lakes has led to increased water salinity leading to the construction of a reverse osmosis plant to treat water. Supply concerns have led to proposed structural works at the Menindee Lakes storage scheme, including construction of new pump stations, water regulators and channels in the lake. The works would increase the efficiency of the storage scheme by allowing more control over the movement of water and therefore minimising evaporation.

There are other major infrastructure options to secure water supply to the region:

- Extend the Anabranh Pipeline to Broken Hill at a cost of \$15 million, with annual operational costs of \$2 million;
- Construct a pipeline from Murray South would cost between \$200 and \$600 million, with \$3-\$4 million in annual operational expenses;
- Pump underground water from Menindee Lakes. Drilling indicates some underground supplies but further study is required. This would be the least cost approach;
- Cart water to the region by rail from South Australia (approximately 450km). Drop off stations and loading docks would cost around \$2 million and trains would need to be leased. The capital costs could be \$3 million, plus \$3 million a month in operational expenses. There is also a lack of water supply in South Australia;
- Pipe water from Bathurst (1,200-1,500km) at triple the cost of other options; and/or
- Recycle 1 GL per year in the region. Some of the major mining operations in the region are developing programs with Country Water to treat their own water on site for recycled effluent use. The Golf Club is also set up to do this. There are some agricultural farming enterprises moving in this direction. A study to further explore potential customers for recycled effluent would cost \$12 million.

The funding of this infrastructure and price impacts for full cost recovery are the main inhibitors to some of the options above.

In terms of committed infrastructure investment, Country Water is planning for a \$36 million infrastructure upgrade program over the next 5 years with a total of \$100m over the next 30 years. Infrastructure upgrades scheduled for the next 5 years include:

- South main upgrade;
- Mica Street Water Treatment Plant replacement over 3 years;
- Increase in ground water supply;
- Design for replacement of the Wills Street Waste Water Treatment Plant;
- Upgrade of the Umberumberka pipeline;
- Initiating the water main replacement program;
- Upgrading the Warren Street Sewer Pumping Station (Northern Earthmovers);
- Replacing 2.3km of the Stephens Creek Rocla pipeline; and
- Disposal of the Reverse Osmosis Plant Brine.

There is also water saving initiatives in place in the region to encourage improved efficiency of water use, including outlying areas. Residents presently account for approximately 60% of water use. The major mining operations in the region, current and planned, are working with Country Water to promote efficient water usage and recycled effluent where possible. There are opportunities for more efficient storage processes by using covers to reduce evaporation. The older water infrastructure in the region, which has received little capital reinvestment, is also creating leakages/seapages. There is a \$1 million/km capital replacement cost for the existing pipeline to the Menindee Lakes.

In terms of the quality and hardness of water, which has previously been raised as an issue in Broken Hill, Country Water describes the quality as variable. There is a 9-month concept plan for a new water treatment plant and there are test filters in place. There are salinity issues in Menindee which affect quality. A desalination plan at Menindee would involve \$3 million in disposal costs. There is no potable water supply in White Cliffs although Central Darling Council is working with Country Water to address the issue. Country Water is partnering with Council in new projects across the outlying areas.

As an ecologically and economically important resource, protection of the Murray-Darling Basin is a critical policy issue. Strategies and policies are in place to restrict developments that will exacerbate issues relating to rising salinity and water accessibility and flow in the Murray-Darling Basin. As such, future mining operations will be required to ensure the development will not negatively impact on the sustainability of the Murray-Darling Basin. The Commonwealth Government has recently announced a plan to take over the management of the Murray-Darling Basin, a direction supported by the region. Previous studies have indicated water access issues as impediments to sustainability or growth in smaller population centres.

The *National Action Plan for Salinity and Water Quality* and Natural Heritage Trust programs are designed to protect environmental assets threatened by issues such as rising salinity and declining water quality and availability, including the Murray-Darling Basin. With this in mind, all proposed developments would need to demonstrate that they would not further exacerbate these issues. The *National Water Initiative* requires new developments in the Far West Region to demonstrate that any water requirements would not significantly impact on the equitable distribution and supply of water to the community, the quality of water supplies, or the sustainability of water supplies.

6.3.2 Electricity

Country Energy is responsible for electricity and power infrastructure in the Far West Region. Electricity in the region is generated from the grid with back-up diesel generators. The major electricity infrastructure in the region includes 33,000 Volt substations in Broken Hill, Ivanhoe, Wilcannia, Menindee and Sunset Strip, 8,000 km of powerlines, 50,000 power poles, 3,100 distribution substations and 3,300 streetlights.

Consultation with Country Energy indicates electricity infrastructure in the region is considered capable of meeting future demands and needs, as evidenced by previously

supporting a population of 35,000 persons and 4 operating mines 30-40 years ago. Therefore, as a whole, the capacity is considered adequate across the network. However, there will need to be reconfigurations of the network based on new residential and commercial developments in Broken Hill. There will need to be new extensions to the local network where new residential/industrial subdivision occurs in Broken Hill. While capacity is considered reasonable across the entire regional network, the vast area covered by the Far West Region makes the provision of electricity a difficult proposition, particularly to remote and isolated locations, including the agricultural sector.

There are a number of projects occurring in the region to increase electricity capacity. There was \$10.5 million in projected spending on network improvements in 2005-06, with a further \$10.0 million projected for 2006-07. Within the Far West Region, the improvements in the northern sector are being driven by refurbishment and mining growth, while urban, agricultural and mining is driving the southern sector projects.

The outlying regional areas have indicated a desire and opportunity to increase solar power generation and become a regional leader in this area. Discussions are underway with the CSIRO regarding new prototypes for converting methane into solar gas, linking with an opportunity for landfill in the region to provide the methane. This methane would also offer new energy opportunities for cars and improve energy self-sufficiency.

6.3.3 Telecommunications

Telstra provides telecommunications infrastructure and services in the Far West Region of NSW. Telstra indicates that its exchanges in the region have the capacity to service a significantly large population growth in the future. Any expansion of the urban footprint in Broken Hill to accommodate future residential growth will require an extension of Telstra's access network infrastructure. Telstra will provide infrastructure to meet its Universal Service Obligation to supply standard fixed telephone services. These arrangements are typically completed in consultation with the developer. Should a developer want to have guaranteed broadband, pay television and mobile coverage in a particular development, Telstra may consider such development appropriate for its "Telstra Smart Community" initiative. A commercial arrangement is entered into between Telstra and the developer, whereby Telstra establishes all required infrastructure for the estate to ensure that the appropriate services are available to every lot, and assists in marketing the estate as a "Telstra Smart Community".

ADSL broadband technology is available in the exchanges of major centres in the Far West Region including Broken Hill, Wilcannia, Ivanhoe and Menindee. Should Telstra be successful with its \$600M Broadband Connect bid, smaller exchanges in the Far West such as White Cliffs, Tibooburra and Yunta would also be enabled with ADSL broadband. If Telstra's bid for funding under this Federal Government initiative is not successful, it is unlikely that these exchanges would be enabled, as it is not economic to do so. Telstra is continuing to explore opportunities to expand ADSL availability within existing enabled exchanges as ADSL blocking technology solutions are developed and regulatory issues are resolved.

Mobile coverage has traditionally been supplied to the Far West via Telstra's CDMA mobile network. In October 2006 Telstra commissioned its Next G mobile network in the Far West. This network will match existing CDMA coverage and also provides wireless broadband and video call capability wherever there is Next G mobile coverage. Customers who have their home telephone service supplied via Wireless Local Loop on the CDMA network will be migrated onto Next G Wireless Link prior to February 2008. Telstra intends to close the CDMA network on 28 January 2008. The Next G network coverage in the Far West will continue to improve as each Wireless Local Loop repeater is converted into a Next G network base station and with the completion of a new Next G mobile tower to service the Pooncarrie community.

There are opportunities in the outlying areas for establishment of free wireless broadband which is seen as a significant economic enabler in terms of information provision. This would have benefits for the health and education of indigenous communities, along with improving tourism potential and competitiveness in the region.

6.4 Transport

6.4.1 Road

Road infrastructure is the most heavily used transport infrastructure type in the Far West Region. Increasing residential, tourism, industry and freight growth will place increasing pressure on the regional road network. The responsibility for the provision of road infrastructure is related to the hierarchy of roads with the Commonwealth Department of Transport and Regional Services responsible for roads of national significance, the New South Wales Roads and Traffic Authority responsible for state and local roads.

The major highways in the Far West Region are the:

- Silver City Highway- the western most highway in NSW running north/south for 681 km. Over half of the highway is sealed in areas that get the highest use;
- Barrier Highway – forms part of the inland route between Adelaide and Sydney through outback NSW. The highway services Broken Hill and Wilcannia, and
- Cobb Highway – Runs north/south and is the major road servicing Ivanhoe and Wilcannia in the Central Darling Shire.

The RTA indicates the north-south road is an important priority with just 50% of the road to Tibooburra sealed. The Pooncarrie Mine has upgraded access, with the new Snapper Mine using existing infrastructure. The Honeymoon Project will also use the east-west road. The east-west road is fully sealed. Access for tourists is adequate and consistent with an outback experience. The Darling River Run is the most used tourist route.

To maintain service levels, an increasing amount of investment will be required for road infrastructure. Whilst the alignment of the State road network is substantially mature, freight and general road use continues to grow, leading to the need to improve roads that are currently unsealed. Upgrading the road network in the Far West Region could have significant economic benefits to the region. For example, the *Economic Impact of Sealing the Menindee-Pooncarrie Road* was estimated by the Western Research Institute and found that the resulting growth in the tourism and agricultural industries would almost totally cover the capital costs.

6.4.2 Rail

Broken Hill is connected to the transcontinental rail line that connects Perth and Sydney providing rail access throughout Australia. Both passenger and freight services operate in the region. Passenger rail services operating to the Far West Region include:

- The Indian Pacific stopping at Broken Hill twice weekly in each direction between Sydney and Perth. The capacity of the Indian Pacific is 348 per journey meaning 1,392 passengers per week can arrive in Broken Hill;
- Countrylink service once weekly in each direction between Broken Hill and Sydney stopping at Menindee and Ivanhoe in the Far West Region; and
- A coach that operates daily in each direction between Dubbo and Broken Hill, stopping at Wilcannia. The coach connects with the daily Countrylink rail service between Sydney and Dubbo.

Rail freight has traditionally been the major method of transporting mining exports from the region. A direct rail line connects Broken Hill with Port Pirie in South Australia. Pacific National also operates a freight service 3 times per week between the Bemax Separation Plant in Kanandah and Port Adelaide.

6.4.3 Air

Broken Hill Airport is located 6km from the City and is the major airport in the Far West Region. The airport is owned and operated by Broken Hill Council and is also a major base for the Royal Flying Doctor Service. The main runway is constructed of asphalt and is 2.5km long and 30m wide.

Regional Express is the only airline to operate regular passenger routes into and out of the Broken Hill Airport using the Saab 340 aircraft with capacity for 34 passengers. Weekly aviation services operated by Regional Express include:

- 12 services direct between Broken Hill and Sydney;
- 14 services between Broken Hill and Sydney via Dubbo; and
- 30 services direct between Adelaide and Broken Hill.

The capacity of Regional Express services through Broken Hill Airport has doubled with the introduction of direct daily services to Sydney. During 2006 there were 13,756 air passengers travelling between Broken Hill and Sydney. Broken Hill City Council has recently entered a partnership arrangement with Regional Express to increase services. The partnership involves increased services with reduced head taxes for any passengers above 35,000.

There has been recent interest from Broken Hill City Council to upgrade and expand of the Broken Hill Airport to provide capacity to service larger aircraft. A study has been completed as to the feasibility of the expansion and the funding requirements. Private sector interest has been gauged in the project along with applications for Sustainable Regions funding. Further development of the tourism industry, along with improving the attractiveness to new residents, is contingent on air access. The commencement of new routes from Broken Hill to Mildura and Melbourne could be possibilities to expand services. Example management arrangements are identified as Longreach and Mount Isa.

6.4.4 Sea

The Far West Region's mining and resources sector relies on export infrastructure outside the region connected to the region's mines by a rail line. Port Pirie is located on the Spencer Gulf and is home to Zinifex, one of the largest zinc and lead smelters in the world. The majority of mineral resources are transported to Port Pirie where they are smelted and/or exported by sea. The port facilities reserved for mining exports are capable of dealing with ships 180m long with a depth of 8.2 m. Port Pirie is currently not capable of accommodating the largest ships which could prove to be a future constraint. Port Adelaide is located just north of Adelaide and is the main port of South Australia. Rail access goes directly to the port and Bemax currently uses the port to ship mineral sands. Capacity at Port Adelaide is considerably larger than Port Pirie and is able to accommodate significantly larger vessels.

7 Land and Natural Resources

7.1 Land Use Planning

7.1.1 Residential Land

The future demand for residential property in the region will be influenced by population growth, changes in average household size and structure, comparative housing affordability, employment opportunities and quality of residential product. In addition to this, macroeconomic factors such as interest rates, wage levels and equity markets also influence the state of a residential property market.

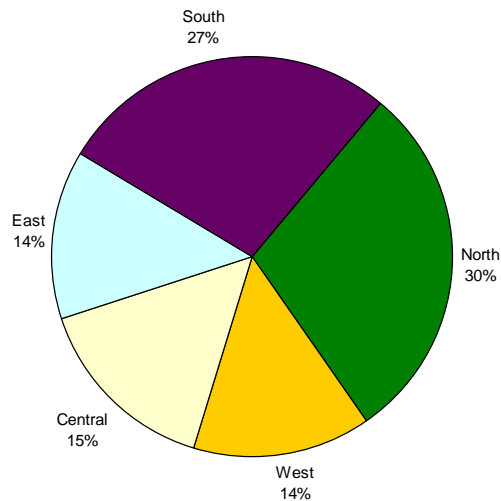
Residential building investment is projected to increase in the next 5 years as a result of the anticipated population growth in the Far West Region. There are already early signs of pressure in the local housing market. Assuming a permanent residential mining workforce is achieved, there is projected demand for up to 1,100 additional dwellings by 2008 and 1,500 additional dwellings by 2010, requiring rapid development in the short-term. Almost the entirety of the demand will be recorded in Broken Hill where the projects are located and based.

Future residential property requirements could be met in the following ways:

1. Occupation/redevelopment of vacant housing;
2. Development of vacant residential land parcels;
3. Consolidation of sites, demolition and residential subdivision (infill);
4. Rezoning of other non-residential underutilised land for residential subdivision;
5. Greenfield land releases for residential subdivision; and
6. Grazing land purchases for rural residential subdivision.

The first option relates to occupation and/or redevelopment of existing vacant housing stock. There were 1,304 unoccupied private dwellings in Broken Hill according to the 2001 Census, equating to a vacancy rate of 13.4%. This is an increase from 814 a decade earlier in 1991. The majority of the housing is unsuitable for occupation, evidenced by their vacant status. Despite the improved market conditions, capital gains and rental returns, there has not been a strong response from these landowners in terms of reinvesting in their premises to improve their potential. A strategy to improve the occupancy levels of existing housing has the advantages of a better utilisation of existing housing stock and land. However, it requires the financial capability and cooperation of landowners. These houses and sites could also be considered in the third option.

Secondly, in terms of the vacant land potential in Broken Hill, a recent vacant land survey undertaken by Broken Hill City Council identified a total of 415 vacant residential lots in the city's perimeter. However, the majority are not connected to infrastructure services. Only 23 (or 6%) of parcels are connected to water, sewerage and power, while 286 (or 69%) are connected to power only. The remaining 105 (or 25%) are not connected to any essential services. In addition to these issues, 194 lots (or 47%) are constrained for reasons such as tenure (Crown Land, reserves, Native Title), development potential, slope and access, drainage, lead contamination and size. Therefore, the development of vacant land parcels will require infrastructure improvements and the addressing of a number of constraints across most land parcels, including tenure. The survey confirms the lack of available land for development and an exhausted market situation. The locational distribution of the vacant lots is described in **Figure 7.1**. 73% of the vacant lots are located in North Broken Hill, mainly toward the northern city boundary. South Broken Hill accounted for 27% of the total.

Figure 7.1: Location of Vacant Land Parcels, Broken Hill

Source: Broken Hill City Council, AECgroup

The third option involves consolidation of sites, demolition and residential subdivision (i.e. infill development). The Department of Housing is moving in this direction in South Broken Hill and is aiming to use the strategy to improve available residential options and their amenity through improved site consolidation and presentation. The advantages of this approach are there is a fair amount of vacant housing and underutilised land in the existing urban footprint that could be better used, perhaps involving increased densities (units) and ranging accommodation styles. However, the disadvantages relate to the ability to plan for the redevelopment, including the acquisition and consolidation of lots into a critical mass for development, the housing and sentiment of existing residents, the timing and ease of process and observations that many opportunities may yield few lots.

The fourth option involves identifying other land, not necessarily zoned for residential, that may offer potential for residential uses. This could include open space that is presently underutilised or disused. Council is employing this approach in the case of Excelsior Oval where the site was advertised for a retirement village development. Subsequent to this process, the Macdonald Group of Companies has a development application before Council for the Stage 1 development of a 78-unit village. The advantages of this approach are that land can be more efficiently utilised, the urban footprint remains compact and maintenance/holding costs for underutilised land can be saved/reduced. On the other hand, the disadvantages relate to a reduction in the amount of open/green space, amenity and possible community reaction.

The fifth option involves extending the urban footprint and releasing Greenfield land for residential subdivision. Land release has been limited in recent times though there has been interest from property developers. This approach would provide for large-scale development, positive timing to meet needs quickly by 2008, ability to create quality residential product with the required amenity, attract major new property developers to the region and possibly ease affordability concerns by supplying greater amounts of land. The disadvantage is the approach needs to overcome Crown Land and Native Title issues which are relevant in all areas bordering Broken Hill. It also requires the extension of infrastructure services and increased transport usage since it expands the City. Releasing more land could also impact the viability of existing housing and land, particularly that which is vacant. There are sites identified on the City's perimeter to allow for residential subdivision requiring infrastructure services.

The sixth option involves the purchase of grazing lands for residential rural-subdivision. The same issues as the fifth option apply.

The following summarises the residential land planning challenge for Broken Hill:

- There is projected demand for up to 1,000 additional dwellings by 2008 and 1,400 by 2010, emphasising significant short-term housing and land need;
- There are more than 1,300 unoccupied private dwellings according to the 2001 Census (recent indications are this supply has declined), although reinvestment in these premises has been low and would require landowner cooperation;
- There are 415 vacant residential lots in Broken Hill, although 94% are not connected to essential services and 47% are constrained for other reasons, including tenure;
- There is the option to consolidate sites in existing areas and undertake new residential subdivision, although these opportunities would only yield small numbers of lots, and would require landowner cooperation and capital;
- There are opportunities to rezone underutilised non-residential land for residential use, including open space and parks, such as the Excelsior Oval example; and
- The development of up to 1,400 additional dwellings at the standard required in the next 1-3 years will require large-scale land release and subdivision, although tenure issues would need to be addressed immediately with the Department of Lands.

In conclusion, without adequate housing, the region runs the risk of losing the permanent residential workforce being promoted by the mining companies and the associated local economic and social benefits. To meet demands in the next 12 months, new land release is required to allow property developers to enter the market and develop the large-scale supply required at the necessary nature and standard.

7.1.2 Industrial Land

Major mining developments typically have a positive impact on a range of businesses that are mainly accommodated on industrial land, particularly the manufacturing and transport and storage sectors. Consultation with major mining companies planning projects in the Far West Region indicates expected demand for support services such as maintenance contractors, freight services, engineers and mining suppliers. While most mining companies expect the flow-on impacts for these service types and industries to be recorded in the broader economy, there are some mining companies that are likely to contract these services internally as part of their projects. This will have the effect of reducing the flow-on business-to-business impacts of some projects. The significance of the relationship between mining and the industrial sector is demonstrated in **Table 7.1**. Under the medium scenario, the industrial sector is estimated to account for 16%-17% of value-added with 104-351 extra FTEs.

Table 7.1: Estimated Economic Impacts on Industrial Land Sector, Far West Region (2010)

Industry	Low		Medium		High	
	Value Add \$m	Jobs	Value Add \$m	Jobs	Value Add \$m	Jobs
Manufacturing	\$8.6	67	\$14.9	132	\$24.1	226
Transport & Storage Services	\$2.0	15	\$3.7	33	\$6.3	58
Wholesale Trade	\$2.8	22	\$4.8	41	\$7.7	68
Industrial Sub-total	\$13.4	104	\$23.4	206	\$38.1	351
Industrial % of Total	14.4%	16.9%	15.0%	15.5%	15.2%	16.6%

Source: AECgroup

Land use and economic planning methodologies tend to forecast land supply requirements, rather than demand, for business and industry activities. These supply requirements are in terms of hectares (ha) per 1,000 persons. For instance, 3 ha per 1,000 persons are a common forecasting measure in Queensland. On this basis, the Far West Region should presently record around 70 hectares (ha) of industrial land. However, a review of existing industrial land in Broken Hill indicates current land supply of approximately 22 ha, of which only around 4 ha is actually occupied by an industrial use.

This land is concentrated on the western edge of Broken Hill around Kananda Road and Pinnacles Place. The land is occupied mainly by freight and manufacturing businesses. There are an estimated 80 industrial businesses in the Far West Region presently, with around 10-12 heavy industry operators. In 2005, Broken Hill City Council subdivided and released an additional 20 industrial land parcels (12 ha) at Pinnacles Plane and has sold 11 of the parcels although most are not occupied and have been purchased on speculation of an increase in demand as a result of the planned mining projects in the region. Industrial land prices are low at less than \$10/sqm on average.

To estimate the indicative future demand for additional industrial land, the Queensland Government's industrial land demand forecasting methodology has been adopted, which is based on projecting employment in the industrial sector, assuming a benchmark ratio of 20 employees per ha on average and an allowance of 30% for roads, utilities, open space and buffers. Based on the development scenarios, demand is projected for an additional 5-25 ha over the next 3 years (see **Table 7.2**).

Table 7.2: Projected Demand for Industrial Land, Far West Region (2010)

Scenario	Ha
Low	5
Medium	15
High	25

Source: AECgroup

Council is presently considering whether additional land needs to be developed to meet future growth, including acquisition of Crown Land near the existing estate or new lands at/near the Airport. The market supply and demand trends analysis suggests it is not necessary. The projected demand could be met by the existing vacant industrial zoned land of around 18 ha, Council's recent subdivision of 12 ha (which is predominantly vacant), the opportunity for redevelopment and increased land use efficiency outcomes and the possibility of less external sourcing by some of the mining operations.

7.1.3 Commercial Land

Broken Hill has not traditionally developed using a structured planning approach for commercial zones. The strategy has been employed to encourage new investment and provide the flexibility to meet investor and business needs. Council is proposing to develop a new Local Environmental Plan (LEP) in 2007-2008 to provide a more structured planning approach based on the new NSW standard LEP template.

The CBD is the commercial core and comprises a footprint of around 220,000sqm. The major land uses are commercial (offices, warehouses, visitor accommodation, building supply yards), government and municipal institutions, community facilities and surface car parking. The CBD is included in the Heritage Conservation Zone. Additional expansion potential of the CBD is limited, although there are redevelopment opportunities of certain buildings to increase densities and improve land use efficiency.

A commercial centre is also emerging around Centro Westside on the basis of recent development proposals. The development of a new shopping centre should, where possible, be located close to existing facilities to cluster activities and reduce the impacts on existing retailers that may result from any fragmentation of the market. There is the opportunity to focus retail development in this area and promote a stronger tourist, office, administration, cultural and recreational role for the CBD. The South Broken Hill retail centre requires refurbishment and the continuation of an anchor supermarket.

There are reports of a lack of available sites for other forms of commercial development, including expansion of health and community facilities and development of child care centres. Where possible, these uses should be located within or adjacent to existing commercial centres, thereby clustering development, reducing travel times and increasing convenience and amenity. If there is an expanded urban footprint in Broken Hill, it is not recommended that there be any new commercial centres developed, apart from small local convenience centres.

7.2 Land Tenure

Land tenure is identified as a significant impediment to the expansion of the urban footprint of Broken Hill, the development of the local mining and resources sector, the expansion of the agricultural and rural sector, the expansion and development of the tourism industry into more remote locations and the development of the smaller population centres across the Far West Region. The issues relate to both Crown Land and Native Title, both of which can be lengthy and costly issues to overcome.

The land use demand analysis highlights the need for further land to be made available for residential subdivision, with this need based on economic and community grounds. The process for this land release would involve revoking existing Crown Land status, extinguishing any Native Title, and extension of any regeneration areas as required. The need for this land will be inside the next 12 months but these processes commonly take in excess of 12 months. The ability to make this land available represents a key enabler to local investment and ensuring the impacts of the mining projects are retained in the region. This requires a fast tracking process between Council, the NSW Department of Lands and other Indigenous stakeholders and organisations as required. There also needs to be improved information on rights and responsibilities on Indigenous land and a clear negotiation process for its lease or freehold land acquisition to all regional stakeholders.

7.2.1 Crown Lands

The NSW Department of Lands is responsible for the management of Crown Lands in the state through a variety of methods such as licensing, leasing, sale and disposal of surplus Crown and other State-owned lands. The Crown Lands division is now implementing the findings of the 2005 Independent Pricing and Review Tribunal Review of Crown Land management. The purpose of the reforms is to streamline land administration, simplifying processes, and to achieve a fair and reasonable return on the Crown land assets of the state. These reforms provide an opportunity for perpetual leases and Crown roads to be converted to freehold title if they are no longer required for a public purpose.

The Department of Lands has developed specific business rules for commercial leasing of Crown land to reflect the government's commitment to National Competition Policy (NCP). This policy provides the framework for public competition ensuring commercial leasing is a fair, open, impartial and transparent process. NCP generally identifies that public advertising is required both legislatively and to identify the extent of any competing interests. The Crown Lands Business Directives support the competitive leasing process, and clarify the requirements for any dealing outside of a competitive process, which may be considered where substantial public benefit is to be derived from dealing on a direct basis. Assessment of the appropriateness for a direct dealing includes: a public interest test, essential criteria relating to the proponent and assessment of a proposal's viability, plus social, economic and environmental benefits and impacts.

7.2.2 Native Title

Following the introduction of the *Commonwealth Native Title Act 1993*, resulting from the High Court Mabo judgement, Indigenous people are now able to seek recognition of their Native Title to land. Native Title is the name Australian law gives to the traditional ownership of land and waters that have always belonged to Indigenous people according to their traditions, laws and customs. These rights are different to and separate from the statutory right of Indigenous Land Councils to make claims for land under the *NSW Indigenous Land Rights Act 1983*. Through the NSW Act, vacant Crown land not required for an essential purpose or for residential land, is returned to Indigenous people. Overturning native title requires the native claim to the land to be extinguished. If there has been previous legitimate occupancy then the claim can be extinguished, and this is the case with many of the former mining/industrial sites across Broken Hill for example.

7.3 Building Character and Design

The Far West Region's various settlements have developed a distinct character reflecting their historical development, reflected by a large range of historic and heritage style buildings that represent key character statements for the region and points of difference, particularly for the tourism sector.

It is important in any future planning that the essential elements of these values and character be captured and understood so that new development will be sympathetic to it. Making character and design guidance available to developers and decision-makers will result in higher quality development responsive to the region's climate, natural features, landscape and scenic values.

As the region continues to grow, it will be necessary for the character of the area to evolve to reflect other demands such as the need for jobs, better services and need to provide a range of housing types appropriate for the region.

The following planning principles could be considered to guide future settlement character and design in the Far West Region:

- A range of land uses to provide the right mix of houses, jobs, open space, recreational space and green space;
- Land use and transport planning should be integrated to minimise the need to travel, and to encourage energy and resource efficiency;
- Conservation lands in and around development sites should be provided for to help protect biodiversity and provide open space for recreation;
- New development should be designed to reflect and enhance the natural, cultural, visual and built character and values of the local and regional landscape;
- New and changing urban areas should provide access to natural features, consistent with maintaining ecological values;
- New development should include a range of well-designed housing choices and an urban form based on 'neighbourhood planning principles', which maximise pedestrian access across the settlement areas, and provide access to services and facilities;
- New and changing settlement areas should incorporate open space accessible to the public which provides opportunities for recreation, nature conservation, social interaction, and visual enhancement and amenity;
- Include provisions in development control plans to ensure new development enhances the desired character and is based on the planning principles;
- Future built form is to reflect the existing positive design aspects of character, streetscape and landscape;
- New buildings should be designed to maximise accessibility for changing demographic trends and alternative future uses;
- New development should be designed to respond to the climate of the region through best practice energy efficient design, landscaping and materials; and
- Conservation of the environmental heritage of the region should be promoted, including historic streetscapes and places of heritage significance.

7.4 Natural Resources

A natural resource asset is defined as a natural resource or landscape feature that has economic, social or environmental values. The following assets are often identified:

- Land (soil, minerals, geo-heritage);
- Water (surface water, groundwater, freshwater ecosystems);
- Biodiversity (terrestrial ecosystems, vegetation, fauna);
- Atmosphere (air, climate); and
- Cultural heritage (Indigenous, European and landscape heritage).

In overarching terms, the key guiding principle for natural resource management is to recognise the importance of the region's natural environment and natural resources to its economy, character, scenery and cultural values. Future planning should protect these areas from future urban and rural residential development.

It is recommended the region develops a natural resource management strategy to maintain and enhance the region's natural resource assets, not only for their sustainable use in agriculture, mining, recreation and tourism, but also to maintain their ecosystem services and other values.

The following suggestions are provided:

- Agriculture is the primary use of non-urban (or rural) land in the Far Western Region. The intention for rural development should be to provide land for agricultural purposes and in doing so ensure that areas compatible with these uses be preserved as economically viable units. Sustainable technology and land use practices should be adopted across all properties and land and the region's soils should be handed to future generations in good condition;
- Mineral resources are central to the future economic development of the Far West Region. The region has many varied landforms, soils and rocks with abundant high-grade mineral deposits. Sustainable technology and land use practices should be adopted across all mineral deposits;
- Water supply systems should be recognised and protected through appropriate planning provisions. The quality and quantity of water collected and held within the region's primary reservoirs is largely dependent upon the nature and management of the activities conducted on lands forming the catchment area. Successful catchment management requires specific land use planning controls, appropriate environmental and health protection measures, regular compliance and condition inspections, and land and resource improvement programs, in addition to the maintenance and management of assets directly associated with the collection, storage and treatment of water for distribution into the urban water supply system;
- The region has a high biodiversity requiring habitat to be managed, restored and, where appropriate protected to provide security and viability for all indigenous terrestrial and flora and fauna species. There should be no biodiversity impacts from existing pests, weeds, diseases and pollution, and new incursions are mitigated;
- While air pollution has an impact mostly at the local level, greenhouse gases operate at a global scale, with all parts of the world contributing to and being affected by them. Priority issues are ambient air quality decline and greenhouse emissions. Energy efficiency should be a key focus of all planning in the region; and
- Urban growth and development in the region has the potential to impact on existing as well as yet to be identified cultural heritage values. The identification, recording and protection of cultural heritage are important for current and future generations. It contributes to community identity, wellbeing and sense of history. Heritage items and areas can also reinforce the economic base for tourism. Cultural and historical assets are to be protected and maintained. Cultural heritage values of towns can be the focus of urban renewal projects with the aim of promoting cultural heritage.

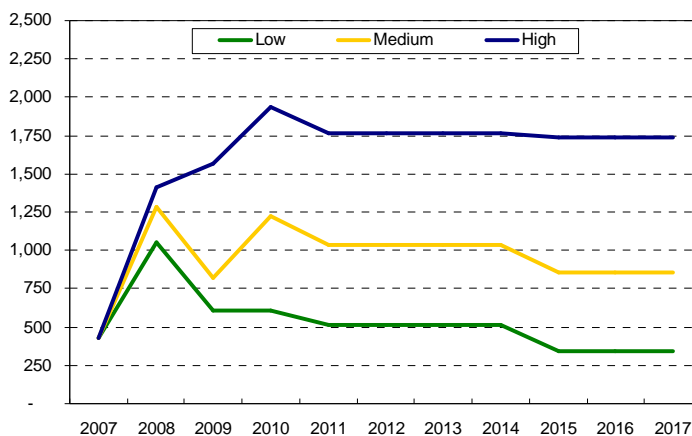
8 Labour, Skills and Training

8.1 Projected Labour Requirements

8.1.1 Employment Increases

The delivery of the major projects planned for the Far West Region will provide a significant positive employment impact on the region. Total additional employment is expected to range between approximately 1,055 FTE positions in 2008 (low scenario) and 1,933 FTE positions in 2010 (high scenario) (see **Figure 8.1**). There are presently around 10,000 persons employed in the region, meaning that major project investment is expected to result in an approximate 11%-19% increase in employment, not including increases occurring in addition to the economic shocks considered in the scenarios.

Figure 8.1: Additional Employment (FTE), Far West Region – Scenario Comparison



Source: AECgroup

8.1.2 Internal vs External Sourcing

Projected employment need/demand will depend on a combination of factors, including the skills and capacity of the local labour force, the ability to attract and retain skilled labour in the region and the proportion of mining employment that will be permanent, contract and FIFO. Current indications are each mining company is targeting a permanent residential workforce in Broken Hill. There were an estimated 906 unemployed persons in the Far West Region, on average, in 2006. Based on an indicative assessment of skills requirements of the additional jobs created, and the capabilities and motivations of the unemployed persons from consultation and surveys (with many stakeholders commenting the region is at full employment), it is estimated 10%-15% of the existing unemployed persons in the region would be suitable for the direct and flow-on construction and operational phases. The remaining employment would need to be sourced from outside the region. The projections presented in **Table 8.1** indicate 56%-91% (or 290-1,752 persons) of the future employment will need to be met by people not living in the region, emphasising the importance of labour attraction strategies.

Table 8.1: Projected Employment Growth, Far West Region

Indicator	Low			Medium			High		
	2008	2010	2012	2008	2010	2012	2008	2010	2012
Projected Additional Employment Need	1,055	605	517	1,285	1,224	1,034	1,409	1,933	1,760
Positions Filled from Inside the Region	181	227	227	181	181	227	181	181	268
Positions Sourced from Outside Region	874	378	290	1,104	1,042	808	1,228	1,752	1,491
% Sourced from Outside the Region	83%	63%	56%	86%	85%	78%	87%	91%	85%

Source: AECgroup

8.1.3 Skills and Occupation

The expected direct and flow-on employment impacts would result in growth across a number of industry sectors in the Far West Region. The mining sector is expected to record the most significant employment growth (538 direct jobs), followed by the downstream industries manufacturing, property & business services, construction, retail trade and finance & insurance.

The mining companies in the Far West Region have identified key skills and occupations that they will require to successfully deliver their projects, specifically:

- Business administrators;
- Mining engineers;
- Mine managers;
- Geologists;
- Metallurgists;
- Jumbo operators;
- Loader / truck operators;
- Production drillers;
- Service crews / charges; and
- Tradesmen.

According to the business survey, specific job requirements reported by the businesses responding to the survey varied considerably in line with their operations. Tradesmen were needed by 38% of surveyed businesses with training and qualifications, including:

- Carpentry;
- Building and construction;
- Metal fabrication, welding, joining and boilermaking;
- Motor mechanics;
- Plumbing; and
- Electrical.

Other skills and qualifications required by surveyed businesses also included:

- Computing and information technology;
- Hospitality experience;
- Business and finance;
- Engineering and surveying; and
- Administration and clerical.

These skills shortages apply throughout Broken Hill and outlying areas of the region.

Industry consultation identified the following specific skill requirements:

- Utilities:
 - Civil and mechanical engineering
 - Design
 - Installation
 - Construction
 - Project management
 - Surveying
 - Trades trainees
 - Electrical engineers
 - Specialist electrical skills
 - Management;
- Health:
 - Obstetrics specialists
 - Gynaecologists
 - Surgeons
 - Orthopaedics

- Paediatricians;
- Aged Care:
 - Registered nurses;
- Tourism:
 - Management experience
 - Tour guides
 - Chefs/cooks
 - Front-of-house;
- Retail:
 - Casuals/part-time;
- Knowledge-based workers (office):
 - Management experience
 - Finance and accounting professionals; and
- Building/construction/manufacturing:
 - Trades (as described above).

8.2 Existing Labour Force Deficits

8.2.1 Skills Shortages and Recruitment Difficulties

There are different meanings attached to the term skills shortages. A distinction is made between the concepts of skills shortages, skills gaps and recruitment difficulties. The Department of Employment & Workplace Relations (DEWR) defines skill shortages as occurring when employers are unable to fill or have considerable difficulty in filling vacancies for an occupation or specialised skill needs within that occupation, at prevailing levels of remuneration and conditions of employment, and reasonably accessible location. By comparison, a skills gap refers to the situation when employers are hiring workers whom they consider under-skilled or that their existing workforce is under-skilled relative to some desired level. Recruitment difficulties exist when employers cannot fill vacancies in spite of an adequate supply of workers. The reason for this may be varied. They could include such things as relatively low remuneration being offered, poor working conditions or image of the industry, unsatisfactory working hours, commuting difficulties, ineffective recruitment effort by the firm or skills needs that are very specific to the firm.

The Far West region present records skills shortages, skills gaps and recruitment difficulties. There are chronic shortages of skilled workers within all industries across regional NSW. This reflects a lack of training and opportunities for skills development within these regions, as well as the continuing problem of recruiting and retaining skilled professionals. The shortages impact upon business productivity, community resilience, retention of rural youth and the long-term viability of regional areas.

Skills shortages can occur for a variety of reasons, including:

- Growth of new industries with few ready-skilled tradespeople available;
- Relocation of new industries into different regions with a different skills base;
- Lack of interest in particular industries among potential job seekers;
- Location of industry, or project based work, in regional areas with small skills base;
- Technology changes within an industry resulting in new methods and skills needs;
- Changes in underpinning skills needs to successfully undertake trade training; and
- Employees need to “train” staff for some low skilled areas.

The OACC undertook the study *Broken Hill Businesses Perceived Employee Skills Shortages* (2005) to validate the perception of skills shortages and examine the breadth of the perceived skills shortages. According to this study, 39% of businesses indicated that they had previously had difficulties in attracting job applicants with the appropriate skills. The three most frequently mentioned occupations and skill types were:

- Tradespersons & related workers:
 - Qualified fitters/boilermakers
 - Electricians and mechanics
 - Panel beaters/spray painters
- Intermediate clerical, sales & service workers:
 - Work experience
 - Ability to use accounting software
 - General administration skills
- Elementary clerical, sales & service workers:
 - Customer service skills
 - Work ethic
 - Communication skills.

In the 2007 business survey undertaken for this project, approximately 65% of businesses surveyed indicated they currently have recruitment problems, with the most common level of difficulty being for skilled employees (42%), followed by semi-skilled employees (32%), clearly suggesting a skills shortage. Recruitment difficulties for unskilled employees (19%) also indicate a labour shortage in the region. In terms of benchmarking, the NSW BRE reported 47% of firms had recruitment difficulties, with the main area of difficulty being skilled staff. Therefore, the region has an increasing and higher than average skills shortage, highlighting the future skills challenge for the region.

Of those businesses indicating recruitment difficulties, there were several reasons provided to explain the recruitment issues, led by poor work attitude (55%), high wage rates (34%), attracting employees to the region (34%), high competition (32%), high training costs (32%), low skill levels (27%) and low literacy levels (21%). Compared with the NSW BRE results, most issues were of greater significance in the Far West Region.

The main reasons regarding changing employment levels within the region's businesses included the performance of the business, followed by strong competition for skilled employees and an inability to attract skilled workers from the region. The main competitive labour factors are spread between competition locally from the same types of businesses, businesses in other industries such as mining, and from areas outside the region when attracting new employees.

With regard to the resources industry, skills shortages are prevalent across Australia and are expected to continue into the future. Hays Recruitment, a leading recruitment firm in the industry, believes demand for skilled workers will continue in Queensland and Western Australia. Major obstacles to recruitment currently include managing FIFO schedules and providing suitable accommodation to attract people to regional areas. South Australia is also identified as moving into a growth phase leading to high demand for managers and professionals.

8.2.2 Labour Market Issues and Challenges

Key labour force challenges and social factors relevant to the Far West Region are:

- Competition for skilled staff: Given the finite pool of labour presently available in the region, with indications the region is already at full employment, there is intense competition between business and industry for skilled staff. It is commonly the higher paying industries such as mining that are recruiting workers from other positions;
- Competitive wage levels: In the mining industry specifically, the region pays lower wages compared with mining regions in Western Australia and Queensland. However, the point of difference is the permanent residential opportunities as opposed to FIFO;
- Ageing workforce: This effectively reduces the pool of labour in the region with a higher amount of people above working age. There are Commonwealth Government policies in place to increase workforce participation in the older age groups and re-engage mature age workers in the workforce;

- **Transient workers:** Many of the employees in the region are transient workers due either to personal circumstance of the nature of their jobs and projects. This makes it difficult to retain workers and invest in their training and skills development;
- **Exit of school leavers:** It is estimated 5%-10% of school leavers from the region attend university outside the region, 15%-25% attend the local TAFE and the remainder move into jobs or welfare. Of those moving into jobs, a large proportion leaves the region. This effectively translates to a net export of skills;
- **Attracting and retaining skilled staff:** The region has not been overly successful in its labour attraction strategies. This is discussed below in terms of existing strategies and examples from other regions and literature research. There is a major need in the future for improved attraction and retention of skilled staff to meet labour needs;
- **Succession planning:** The region's ageing workforce and export of young skills has created a succession planning problem for many businesses. Most small businesses are family-owned and do not have succession plans. Major business including government departments are also struggling to attract the right people to succeed current management;
- **Training access:** Many of the training needs of the region cannot be met locally. Only 19% of businesses were able to access their formal training needs fully in the region, with 49% being able to partially access their training needs;
- **High welfare support:** The region records a high welfare support ratio compared with state benchmarks. The challenge for the region is to reduce this reliance and re-engage the population in the workforce to build local capacity. The Commonwealth Government has many welfare to work policies and strategies;
- **Indigenous workers:** While there has been progress made including successful employment programs along with agreements with mining companies, further opportunity exists for increased Indigenous participation in the workforce, both in Broken Hill and the outlying areas of the region;
- **Investment in training:** There still remains weak private sector investment in formal training which can be a catalyst for attracting and retaining skilled staff. Consultations suggest this stems from a low appreciation of formal training and its perceived return on investment relative to on-the-job training;
- **Attitude of workers:** Consultation and the survey confirm poor attitudes and work ethic amongst many job seekers in the region, which negatively impacts on their ability to find work and for the region to maximise skills. This issue is relevant to both Broken Hill and the outlying areas of the region; and
- **Skills gaps:** Many consultation and survey respondents highlight low literacy and general skill levels as an issue for recruitment, suggesting a role for training bodies.

8.3 Labour Force Development Strategies

The supply of skilled labour to the Far West Region is a complex combination of the actual availability of labour, attraction of the job opportunities relative to other competing regions, the effectiveness of the training system to provide appropriately skilled labour, the amount of training undertaken by the private sector, and the skills strategies developed and implemented by government and industry. Strategies to combat these components in the Far West Region are outlined and discussed in the sections below. Regional skills shortages are prevalent across much of Australia. This suggests the need for some form of government intervention to ensure training is effectively targeted, relative to future labour requirements, as well as considering appropriate incentives to attract skilled staff, and ensuring effective implementation of broader policy instruments.

8.3.1 Increasing the Availability of Labour in the Region

The first step in building local capacity is to increase the pool of labour. Distinct from a skills shortage, there is a labour shortage in the Far West Region. This means there are simply not enough people actively participating in the workforce in either employed or unemployed status, evidenced by the recruitment difficulties for unskilled staff. The labour force participation rate in the Far West Region was 52.8% in 2001 compared with the New South Wales average of 63.0%. Part of the explanation for this lower participation rate relates to an older demographic, although the region only records an additional 3.8% of population aged over 65 years, or outside the general working age compared with NSW. This also reflects the higher levels of social welfare in the region.

This regional deficit provides opportunity to increase the pool of labour. From that point, recognition of prior learning, training opportunities and skills strategies could be implemented to ensure this pool of labour best meets the employment needs of the region. There are a number of incentives and strategies that could be employed to re-engage local residents in the workforce to increase the pool of available labour, including the Commonwealth Government's welfare to work policies targeting:

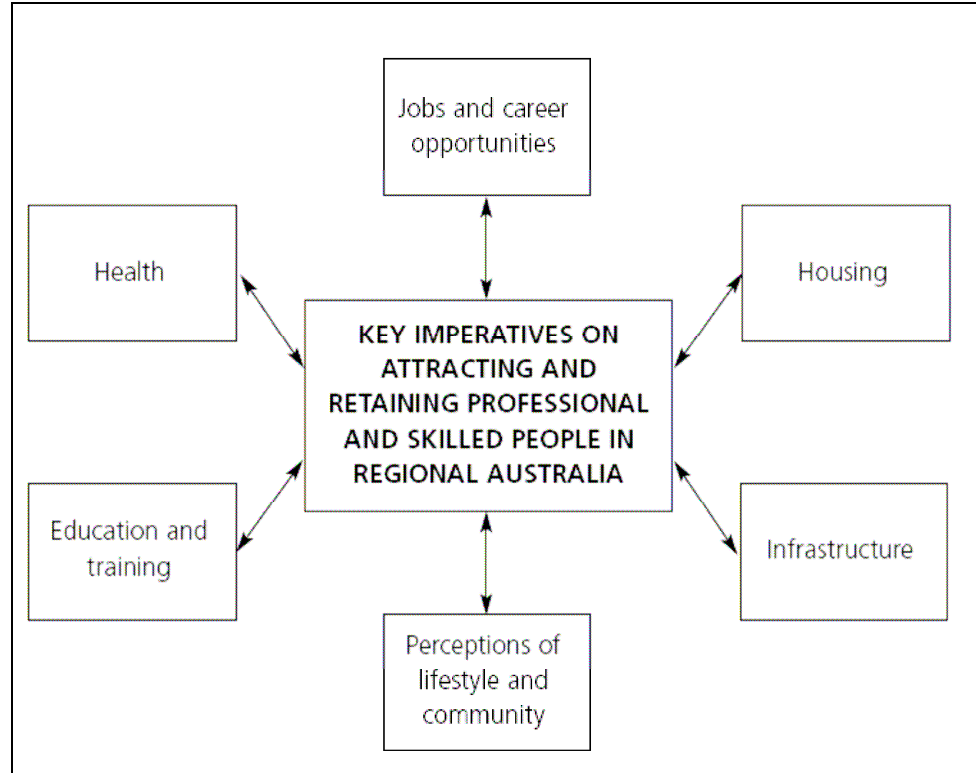
- Mature age workers;
- Sole parents;
- Long-term unemployed;
- People with a disability; and
- Indigenous Australians.

The other strategy to increase the size of the local labour pool is to reduce the leakage of young people from the region. Anecdotal evidence suggests there is a high leakage rate presently amongst school leavers, and there is also a low return rate of young people post training elsewhere. Improved engagement of school leavers in the training system and study incentives for their return could be options to improve this retention. The employment analysis in this strategy has also considered the possibilities to engage spouses of new workers to the region to participate in the workforce.

8.3.2 Attraction of Skilled Persons to the Region

The analysis presented above indicates the importance of attracting skilled workers to ensure the delivery of the planned projects and maximising the economic potential of the region. The *Far West NSW Economic Development Plan* notes attracting and retaining professional and skilled people to live and work within regional communities is one of the major challenges in building sustainable regions. A community that can offer the services supplied by professional and skilled workers supports the people who are living in regional communities and the businesses operating there, providing the foundation for attracting new residents and businesses. The Plan notes a coordinated approach has greater potential to achieve the desired outcomes and endorses a variety of federal and state initiatives regarding attraction and retention, including the skilled migration plan.

Literature review and case study analysis indicates there is no specific formula for attracting skilled people to regional Australia. However, research indicates there are a number of common key success factors (see **Figure 8.1**). It is a combination of these factors that can achieve the desired outcome of increased attraction and retention. Each of these factors has been discussed in this study. One of the key factors raised in consultation is the perception of the social quality of life and the ability to attract young workers and families. These issues have been identified in the Economic Plan which notes Broken Hill suffers from an image problem.

Figure 8.1: Imperatives to Attracting and Retaining Skilled People in Regional Australia

Source: Attracting and Retaining People in Regional Australia: A Practitioner's Guide

Mining companies present one clear example of how the private sector is attempting to attract skilled workers to remote locations and regions. Recruitment difficulties across the industry are leading to mining companies taking different approaches, including:

- Targeting labour from other industries compatible with the mining industry. People with experience in construction and agriculture are being lured to the mining industry through the offer of considerably higher wages and formal training programs;
- Additional remuneration packages are being used to attract mining professionals on top of high base salaries. Mining companies are incorporating share options, stronger superannuation and bonuses;
- Offering more flexible working arrangements to prospective employees who do not want to move their family to the region. Companies like Bemax offer more flexible rosters of 5 days on/5 days off in order to attract more labour;
- Mining companies have graduate programs where they employ young people immediately after they have completed their university degree. Formal programs are devised in which new recruits experience on the job training;
- Mining companies are also actively undertaking overseas recruitment through the Government's skilled migration programs. This strategy is proving to be successful given the global nature of the mining industry; and
- Mining companies are increasingly recruiting Indigenous workers and there are examples in the Far West Region of this occurring. There are occasions where these agreements are settled as part of the Native Title process. There are examples of successful partnerships that provide model case studies.

There are other industry examples across the Far West Region where innovative methods of attracting and retaining skilled labour in the region are occurring:

- **Health:** Presently GWAHS and the Centre for Remote Health engage specialists on a FIFO basis. The future increase to and ageing of the population is expected to place further pressure on the demand for all health services. The regional health alliance has not banded together to collectively attract and recruit staff to the region, selling in particularly the diversification of the role and unique opportunities to work amongst a range of service providers and situations. Effectively, the strategy aims to create a pool of health professionals for the region. The RFDS is complementing this objective with its base expansion to provide training for medical students; and
- **Water and Power:** Country Water and Country Energy are undertaking targeted recruitment and advertising to attract skilled workers to the region. The nature of their State organisations means they can leverage on other arms of the organisation to source skilled staff on either a temporary or permanent basis. Country Energy is also engaging a remote area placement specialist.

The business survey suggested the use of incentives to attract skilled workers to the region. The region, along with other regional areas of Australia, could undertake further lobbying of the Commonwealth Government for tax incentives for, or indexed awards applying to, employees working in regional areas.

8.3.3 Considering Overseas Recruitment Strategies and Options

Migration-based recruitment is used by a number of employers in the region to meet current skills shortages. A number of state-specific and regional migration (SSRM) initiatives have been introduced, in consultation with State and Territory governments and regional authorities. The people targeted under these initiatives are skilled and generally under 45 years of age with developed English skills. Australian businesses may be eligible to sponsor skilled workers, for positions which cannot be filled by the local labour market, under a number of temporary and permanent skilled migration programs.

The three initiatives that are particularly relevant to employers are the:

- **Regional Sponsored Migration Scheme:** Under the Regional Sponsored Migration Scheme (RSMS) employers may nominate people from overseas, or temporary residents already in Australia, to fill skilled vacancies that are full-time and available for a minimum of two years. Successful nominees are able to migrate permanently to Australia. The RSMS covers all areas of Australia except Brisbane, the Gold Coast, Newcastle, Sydney, Wollongong, Melbourne and Perth;
- **Skill Matching Database:** A supporting initiative is the Skill Matching Database (SMD). This database contains the occupational, educational and personal details of over 7,000 potential migrants whose qualifications meet Australian standards. Employers can use the SMD to locate potential employees to sponsor under RSMS. Updated each month, the SMD is distributed to all State and Territory governments and to a network of regional development authorities; and
- **Business (Long Stay) Visa:** Employers may also be able to recruit workers from overseas under the Sponsored Business (Long Stay) Visa on a temporary basis for up to four years. Examples of successful skilled migration are given in the Migration Chain case study from Tasmania; the Registered Nurse, Royal Darwin Hospital from the Northern Territory, the Nhill Employment Opportunities and the Panda Ranch Stone Fruit Farm from Victoria.

8.3.4 Improving the Effectiveness of the Training System

The formal training system in the Far West Region is generally considered to be effective within the training areas it operates. There has been the establishment of close dialogue between industry and the training providers in most instances, leading to responsive training courses that meet local employer needs and deliver job opportunities.

However, there are still issues with the training system that need to be addressed. One performance benchmark for the training system is its ability to engage local school leavers and reduce the export of young people from the region. Anecdotal evidence suggests there is a high leakage of school leavers from the region. This suggests the need for increased school-based apprenticeships, the need for group training companies, the role for job placement agencies and the need for skilled work programs. There are presently around 35 apprenticeships and 400-500 traineeships in the region.

In terms of the breadth of training provided, only 19% of businesses were able to access their formal training needs fully in the region, with 49% being able to partially access their training needs, with 22% forced to access training from outside the region. This suggests the need to expand the course offering in the region. Consultation has highlighted many specific training gaps, including the need for local nurse training.

Education and training represents a key means of overcoming the skills shortages being experienced in the Far West Region. Recruiting local labour is an attractive option to mining companies highlighting the importance of training programs to develop the skills base. Education and training programs that have been developed include:

- Increasing the number of apprentices is a major component of education and training. Perilya, Bemax and CBH Resources all have apprenticeship programs that aim to attract tradesmen including electricians, mechanical fitters and fabricators. A major target of these programs is to attract young people from the local region to build up the skills base. The size of some of the region's mining companies has led to the establishment of Registered Training Organisations on site;
- Traineeships are being used to attract labour to the mining industry. Employees in local mining companies are undertaking training in areas such as business administration, extractive industries and laboratory operations to expand skills; and
- Most major mines are also implementing the National Training Framework so that training will be competency based and will lead to nationally accredited certification. The program aims to increase the productivity of workers as well as creating nationally recognised qualifications.

In terms of other regional training examples, Country Water is undertaking a knowledge pilot as a first stage of workforce succession planning and management, increasing apprenticeships and traineeships, team leader development, competency development and career path planning, and cadet programs.

In terms of training delivery strategies, the following could be considered:

- Encourage the undertaking of detailed training demand and needs assessments on a local level, to be prepared by local reference groups to include representatives from the VET sector, industry and regional organisations;
- Identify instances where training providers work effectively with the tourism industry, and develop a system for promoting these as best practice models;
- Encourage VET providers to customise courses to industry needs and make use of the flexibility built into the Training Package to ensure training meets industry's needs;
- Encourage VET providers to engage with industry to understand their training requirements and develop innovative solutions together;
- Raise awareness of the various training products and services available and the flexibility of the delivery and willingness of the training provider to work with businesses, small and large, to meet their needs;
- Identify and encourage partnerships between industry and training organisations. These partnerships have the ability to ensure that training is meeting industry needs;

- Develop stronger relationships between school, community, industry and VET on a regional level to share resources such as teaching and align VET in Schools with the national training package and career pathways;
- Promotion of the benefits of engaging with the training system and work with employers to raise awareness of the returns on investment from training and the various forms in which this return can be measured;
- Introduce recognition of prior learning at the commencement of all training, designed to meet the needs of existing workers and mature age employees, along with up-skilling programs for all existing staff to maintain progression;
- Consideration for the piloting in the industry of a mentoring approach where experts are identified and promoted as accessible local businesses to conduct a skills audit and refer operators to relevant training opportunities; and
- Establish industry-led mentoring programs focused on small to medium sized businesses to help them develop sound business and training strategies, having regard for human resource management. Some of these programs are being initiated on a small scale presently.

The *Far West NSW Economic Development Plan* identified two specific strategies to improve education, training and build local capacity, including apprenticeship and trainee programs and school networking with industry. The Commonwealth Government's New Apprenticeship program is recognised as a core strategy in delivering accredited formal training in the tourism sector. The program has in place a number of incentives for employers and individuals. It is important these incentives reflect the principles discussed earlier and keep pace with areas of skills shortages and emerging market sectors. There should therefore be considerations for increases to the financial incentives for businesses to engage apprentices in specific skills shortage and regional categories. Over 40% of the business survey respondents indicated a need to improve to management of apprenticeship and traineeships programs in the region to alleviate skills shortages.

In terms of infrastructure, this strategy has already noted the potential for a university campus, mining training school and expanded TAFE. There could also be consideration for a training facility specifically for the unemployed to build their generic skills. A further consideration could be a teaching hospital similar to the James Cook University model.

8.3.5 Increased Training Investment by the Private Sector

Training providers in the region note a general lack of investment in training by the private sector. This situation is not unique to the Far West Region and more generally relates to a relatively low training culture, dissatisfaction with the training system, particularly amongst smaller businesses, a low appreciation of formal training and its return on investment, and a general favouring of on-the-job training. Strategies to be considered to increase individual contributions to training investment include:

- Cost reduction arrangements such as the recognition of prior learning;
- Alternative delivery arrangements that can lead to cost reductions;
- Flexible delivery arrangements that can lead to better individual access;
- Course design and customisation to increase the attractiveness of training programs;
- Loan schemes that provide fee and income support for VET investment;
- Fee schemes, complemented with scholarships, to tap areas of unmet demand;
- Fee schemes that embody incentives for employer investment;
- Taxation incentives; or
- Superannuation incentives.

The upskilling of staff through training investment in the region is seen as integral to succession planning and retention in the region.

8.3.6 Opportunities for Indigenous Workforce Development

The *Broken Hill Community Working Party Plan 2005* in relation to education highlights the need to continue improving the attainment of all levels of education for Indigenous people. Ensuring a strong representation of Indigenous culture in the education system is also a key aim of the plan. In terms of the mining industry, the Barkandji Training Education & Employment Program aims to get local indigenous people into the mining industry. The indigenous population is significantly underrepresented in training programs and represents a key opportunity. There are efforts underway to improve this situation in Wilcannia. Bemax currently has 7 trainees in the program and is looking to expand in the future. The Sydney University Department of Rural Health provides Indigenous health training programs to provide local employment opportunities for these people to assist their communities. Mobilising the indigenous community offers significant potential across the region, particularly in the key centres of Broken Hill, Menindee and Wilcannia. There are examples of successful new business enterprises, including the leasing of the Wilcannia Caravan Park to the Murdi Paaki community.

8.3.7 Implementing Government and Industry Skills Strategies

There is much work being completed by government and industry to address current skills shortages and future skills needs of regional Australia and the mining sector in particular. These programs generally revolve around creating awareness of training products and services (i.e. educating business), boosting understanding of training and skills needs, and better engaging and matching the needs of the education and training sector, business and the community in terms of workforce development.

The programs include:

- COAG Skills Program;
- Australian Job Network;
- Welfare to work policies;
- New apprenticeships and incentives;
- Australian Technical Training Colleges; and
- National VET Plans.

These programs need to be supported in the region by the Department of Employment and Workplace Relations (DEWR) and the Department of Education, Science & Training (DEST). DEST is currently involved in a roll out of pilot studies and industry engagement for regional areas of Australia and it is recommended the Far West Region form one of the key areas for the pilots given the significance of the labour challenge in the region.

9 Strategy Development

9.1 Strategic Context and Direction

The Far West Region's economic prosperity has traditionally relied on the success of the local mining and resources sector. A weakening of this sector over the past 30-35 years has seen the region's population decline by more than 30%. However, in more recent times, the rate of population decline has stabilised and there is now the prospect of many major developments increasing population and economic growth. Given this situation, the Far West Region requires a strategy to determine the likely growth implications of current and proposed projects, understand how best to manage the impact of future projects and the attraction of support industry by these developments, and appropriately plan for changes to infrastructure, service provision and private investment in the region.

The objective of the *Far West Region Growth and Investment Strategy* is to analyse the current economic and demographic carrying capacities of the region's community and to identify additional capacities and enhancements required to adequately service any projected changes in employment and population occurring from the economic impacts of major projects proposed for the region. The Strategy investigates the following issues:

- Quantify the economic, social and industry impacts of the proposed projects;
- Assess potential increased demand on infrastructure versus regional capacity; and
- Identify infrastructure, resource and skills enhancements to service projected growth.

The Strategy has been developed through a mix of consultation, surveys, desktop research, economic modelling and strategy preparation. The stakeholder consultation process involved direct data collection from major project companies along with discussions with the Outback Development Forum, government, regional economic development stakeholders, political stakeholders, infrastructure providers, lands commissioner, real estate agents, tourism representatives and community groups. The business survey collected additional information and views from the business community regarding its characteristics, business trends and performance, anticipated growth and influencing factors, labour, skills and training issues and challenges and future strategic planning for the region. The stakeholder consultation and business survey processes provided background information used in the development of the Strategy, specifically in terms of identifying key issues and measuring business confidence and sentiment.

Based on direct data collection from the major project companies, the projects planned and/or committed in the Far West Region in the next three years (by 2010) amount to total investment of \$856 million, of which an estimated \$369 million will be spent directly in the region. Some of the projects have operational lives of less than 10 years, including some of the larger projects close to Broken Hill. Therefore, the most critical planning horizon to quantify and assess the economic impacts and subsequently manage growth and change are considered to be the next 5 years. However, the impact analysis of the major projects also clearly demonstrates the strength of the medium-term (5-10 years) prospects for the region. Further, there are indications of increasing exploration activity by the region's mining sector to extend mining reserves and timelines to deliver long-term sustainability. Mining participants in the region indicate resources in the Murray Basin could continue for 50 years on the basis of current production rates and exploration activities. Any other new mining and resource projects and their investment will assist in maintaining growth and return on investment in new infrastructure over the longer-term.

The economic impact of planned and/or committed projects on the regional economy will be significant in the next 5 years. The impact on GRP is projected to range between \$109 and \$236 million by 2010, equating to a 9%-20% increase on the currently estimated GRP of \$1.195 billion. The impact on employment is projected at between 1,055 FTEs (by 2008) and 1,933 FTEs (by 2010), equating to a 10%-19% increase on the existing regional employment base of 10,000 persons. As a result of new employment, the region's population is projected to increase to a maximum of 27,000 persons in the next 2-3 years. The economic, social and growth impacts will be almost wholly experienced in Broken Hill where the projects are located and based.

The facilitation and retention of this additional economic activity in the Far West Region is reliant on a number of critical factors and enablers, most of which must be immediately addressed within the next 12 months as the major projects gear up. The main external risk to the projects is negative movement in global commodity prices and its affect on the mining industry and its development intentions. The strong commodity prices presently being experienced are driving much of the renewed interest in the local resources sector. The internal risks relate to the local carrying capacity of the Far West Region in terms of provision and development of infrastructure and services, land tenure and access, resource availability, and attraction and retention of skilled workers. While Broken Hill previously housed 35,000 persons and supported four operating mines, the nature of current infrastructure and skills need requires new investment and strategic approaches. The most pressing issues for the region are implementing a successful labour attraction strategy to source new employees and families to the region and providing land and housing to cater for these new employees/families.

Based on the analysis and findings presented in this Strategy, the following factors are identified as being critical to maximising economic and social benefits from the current and future development of the region's resources sector and any other projects with an outcome of delivering increased socio-economic prosperity to the region:

- Knowledge development and dissemination;
- Industry and community engagement;
- Build community capacity;
- Support and assist existing business;
- Attract and encourage new businesses;
- Promote economic development and diversification;
- Infrastructure provision and development;
- Land use efficiency and resource protection;
- Attract and retain skilled labour; and
- Investment attraction and financing.

9.2 Knowledge Development and Dissemination

9.2.1 Purpose

Informed decision-making will lead to efficient investment of time and resources delivering maximum benefit to the wider community and mitigate against the negative impacts of development. The outcome would be informed and accurate decision-making.

9.2.2 Issues

Stakeholders, businesses and the community need information to make decisions regarding investment and business operations. However, the dispersed and isolated nature of the Far West Region makes it difficult to collect, develop and disseminate relevant economic, market and investment information. Government has the responsibility for data collection in the region. There are commonly information gaps in regional areas due to a lack of data collection by government, or a lack of specific reporting on a regional basis for many key data sets. It is also difficult and costly to collect information directly from business through regular surveys.

9.2.3 Strategy

The following strategy is recommended in partnership between regional economic development stakeholders, business, industry and the local community:

- Identify information requirements: An investigation should be undertaken into the relevant information required by government for forward planning and business for investment and operations. For investors, this commonly includes information regarding the region, economic and industry structure, social and demographic profile, growth trends and outlook, business operating costs, infrastructure, skills of the local workforce and investment opportunities. For existing business, there are

similar information needs, along with economic performance statistics, benchmarking to other regions and forecasts of industry performance, costs and prices;

- Identify information/knowledge gaps: The key gap areas should be listed through review of existing statistics and data, previous research and studies and consultation with key government agencies and industry bodies. An example of this type of process is the review project of economic development studies in the region;
- Consult and involve key stakeholders: Work directly with agencies, organisations, industry and key stakeholders to identify the potential opportunities for, and mutual benefits of contributing to a data collation and dissemination exercise. This should be an across sector, private/public organisation exercise to ensure the data needs of all stakeholders are identified. This stage needs to ensure that all concerns and aspirations are understood and considered with feedback obtained on proposed issues and/or solutions. Any confidentially issues should be addressed;
- Collaborate with partner organisations to collate required data and information: Implement knowledge and information collation and management process as identified in Task 2. Many of the organizations will be state and commonwealth government departments and industry associations; and
- Collaborate with partner organisations to disseminate relevant information: Ensure relevant stakeholders receive appropriate information to assist in the promotion and development of the Far West Region. There are many examples of subsequent reporting and dissemination techniques, including regional economic reports, facts and figures publications, investment guides and industry capability profiles. A direct output from this strategy would be the dissemination of the business survey results and the economic and profile chapter. Other content could be incorporated into any investment profile. A key point of distribution is the Internet given this will be how many prospective businesses will research the region.

9.3 Industry and Community Engagement

9.3.1 Purpose

Engaging and informing appropriate community, industry and business stakeholders will facilitate information transfer and encourage a broad range of stakeholders to become involved in the regional development process. Successful community engagement supports the development of harmonious communities. The outcome should be a well-informed, cohesive regional community and economy that is ready and prepared to facilitate business and economic development.

9.3.2 Issues

The *Far West NSW Economic Development Plan* recognises the objective of collaborative economic development with key stakeholders working cooperatively and driving prioritised economic and social goals for the region. There are many diverse community groups and settlements across the Far West Region, making it difficult to communicate to some areas, engage the community and develop a shared vision for the future. There are also competing interests between various groups.

9.3.3 Strategy

The following strategy is recommended in partnership between ODF, DSRD, Broken Hill City Council, Central Darling Shire Council and relevant partners:

- Inform key stakeholders: Provide key stakeholders with balanced and objective information regarding the future development issues, opportunities and expectations to assist them in understanding the problem, alternatives, opportunities and/or solutions. Distributing the growth and investment strategy would be a key part of this process. The key stakeholders would include government agencies and infrastructure service providers to emphasise the planning challenge and investment requirements;

- **Involve key stakeholders:** Consult and work with the community and key stakeholders throughout the development process to ensure stakeholder concerns are understood and considered, they have ownership of the process and that adequate strategies are developed to leverage or mitigate against the impacts associated with the expected development. The Economic Development Plan notes the need for a shared and planned approach and the need to pursue greater collaboration of the three tiers of government at all levels; and
- **Collaborate with industry key stakeholders:** Partner with key stakeholders implementation of development and/or mitigation strategies to ensure the prosperous development of the Far West Region. The establishment of the Outback Development Forum is an important part of this process given its representation across key stakeholders. There will now need to be consultation directly with mining companies and industry bodies in terms of delivering on the growth implications outlined in this study. There could be a series of industry meetings with each group outlining the relevant opportunities and challenges.

9.4 Build Community Capacity

9.4.1 Purpose

Building community capacity puts the local community in the driver's seat of the local economy. By developing the skills of local workers, business people and community members they are provided with the tools to make the most of the available opportunities. The outcome would be increased community capacity, a business/investment ready environment and a greater retention of economic impacts from major new projects in the region.

9.4.2 Issues

Building the local carrying capacity of the region is a key aim of this Strategy in that it is a key enabler of the major projects and benefits outlined in this study. The concept forms a key building block in the region's economic development plan. This study has identified significant skills, infrastructure and land needs moving forward to accommodate growth. The study also identifies the opportunities available to business and industry.

9.4.3 Strategy

The following strategy is recommended in partnership between ODF, DSRD, Broken Hill City Council, Central Darling Shire Council, business, industry and the local community:

- **Assess community skills capacity:** Examine and identify community skills gaps and develop training and mentoring programs to up-skill existing community members. The labour, skills and training analysis in this report identifies many skills shortages, skills gaps and recruitment difficulties, along with many strategy approaches to address labour attracting and training issues. For this reason, a predominant share of the future workforce will need to be sourced from outside the region. The Outback Development Forum has a committee focusing on skills development and its work should refer to the labour and skills strategies outlined in this study; and
- **Facilitate community workshops and seminars:** Deliver appropriate training and mentoring programs to the required sector to assist business and community members to find innovative solutions and build their own capacity. This has been identified as an important part of any training strategy in the region to ensure awareness and understanding regarding the benefits of training.

9.5 Support and Assist Existing Business

9.5.1 Purpose

Local businesses are the lifeblood of the local economy and have a marked impact on the economic strength of a region. Providing assistance and support for existing local business builds a more resilient economy, generating greater business confidence. The outcome would be growth and expansion of existing businesses.

9.5.2 Issues

The *Far West NSW Economic Development Plan* recognises the importance of supporting and assisting local business in terms of building community capacity. The Plan includes a range of strategy approaches, including encouraging small business to diversify or value add, identifying local products with export potential, scoping for local product/service niche, developing business confidence and entrepreneurial culture and encourage business partnerships and cooperation.

9.5.3 Strategy

The following strategy is recommended in partnership between ODF, DSRD, Broken Hill City Council, Central Darling Shire Council, business, industry and the local community:

- Consult with local business owners to recognise gaps in business support and to understand the opportunities and impediments they face: Engage with the local business sector to identify opportunities and understand exactly the type and level of support required to meet and capitalise on identified opportunities. All industry sectors are projected to experience positive growth as a result of the major projects in the region, providing opportunity for many downstream industries, including those that directly support the mining and resources sector. In terms of export potential, based on competitive analysis, the key regional sectors are considered to be the mining, agriculture, tourism and cultural sectors. The business survey provides a guide as to the opportunities and challenges businesses face in the region;
- Develop strategies to capitalise on opportunities and mitigate against threats: Conduct business development workshops to identify and develop strategies to increase general business knowledge across the region and provide training to fill identified skills, expertise and knowledge gaps; and
- Build linkages and networks between local businesses throughout the supply chain: Encourage information transfer and networking throughout the supply chain to facilitate local business owners to take advantage of and leverage their local business and operating environment. A specific example of this is the Engineering Alliance. Such opportunities exist in the manufacturing, building and construction sectors to build critical mass.

9.6 Attract and Encourage New Businesses

9.6.1 Purpose

New businesses are an important source of new investment in communities. Attracting new business to a local area generates employment and increases the diversity and prosperity of the local economy. The outcome would be development and attraction of new businesses diversifying the local economy, leading to employment, industry diversification and economic growth.

9.6.2 Issues

The *Far West NSW Economic Development Plan* also recognises the importance of attracting new businesses to the region. The benefits of doing so relate to long-term

growth, diversification, increased employment, critical mass and injection of new ideas and skills into the economy. The projected growth of the region will require increased capacity in a number of key supporting sectors. Not all of this growth can be delivered by local firms and the necessary attraction of employment to the region is likely to require the entrance of major new businesses.

9.6.3 Strategy

The following strategy is recommended in partnership between ODF, DSRD, Broken Hill City Council, Central Darling Shire Council, business, industry and the local community:

- Profile current business base and identify target businesses and their needs: Examine the local business and industry structure to identify existing and potential future gaps in production input and service provision. The key support sectors to mining have been identified in this study, along with the downstream industries most likely to experience economic growth. Target businesses will require the ability to increase capacity and where possible provide further leadership to the region;
- Identify and set aside/provide the specific requirements for target businesses: Identify the impediments to be overcome and incentives to attract the identified input or service need. Important in the selection of target sectors to market is the identification of the critical factors in business location choices (industry turnover, cooperative Council, ease of relocation, etc.). Some of the key pieces of information include information regarding the region, economic and industry structure, social and demographic profile, growth trends and outlook, business operating costs, infrastructure, skills of the local workforce and investment opportunities;
- Market to target sectors: Develop marketing collateral to compliment and support the implementation of the business attraction strategy. This should be undertaken on a regional basis and should be collaborative in its approach. The material should be consistent with other marketing material and highlight the key investment opportunities for new business. The products should be flexible and capable of being tailored to specific business types and industries; and
- Facilitate relocation activities: Provide a consistent point of contact (liaison between industry, State and Local government, training providers, etc) in the region to make it easy to set up business in the Far West Region.

9.7 Promote Economic Development and Diversification

9.7.1 Purpose

Undertake strategic economic development to build local capacity, diversify the economy and better ensure long-term sustainability should there be any downturn in the local mining and resources sector. The outcome would be a more stable regional economy with long-term sustainability, delivering return on investment to new infrastructure.

9.7.2 Issues

Economic development in the Far West Region has traditionally relied on the development of infrastructure, population and services around the use or exploitation of specific resources and natural assets. This is again largely the case in the 3-5 year planning period. Where these natural resources are at, or are close to full exploitation or development, without a specific development impetus, additional economic development can only be achieved through organic growth and expansion. This has in fact been the situation for the Far West Region, particularly over the past 30-40 years with the decline of the local mining and resources sector. There is a need to diversify the economic base of the region to reduce its sensitivity to movements in the mining sector.

9.7.3 Strategy

The following strategy is recommended in partnership between ODF, DSRD, Broken Hill City Council, Central Darling Shire Council, business, industry and the local community:

- Identify specific economic development initiatives: This study, the business survey and the regional economic development plan have identified various economic development opportunities for the region. Some of these initiatives relate to developing downstream industries impacted most by the proposed development, others focus on industry sectors independent of these impacts but important to diversification and long-term sustainability for the region;
- Engage with stakeholders: The implementation of each of the economic development initiatives requires collaboration between regional stakeholders, including government, industry and business. This engagement could be undertaken through the development of sub-committees to oversee specific project opportunities; and
- Review regional economic plan: A regional economic plan has been developed for the region. The Plan identifies the importance of attracting investment (particularly reinvestment) and business opportunities (including the growth and diversification of existing business and the attraction of new business) as central to the implementation of the Plan, along with the attracting and retaining of professionals and skilled people to live and work in the region. This plan should be further developed based upon the target sectors identified above.

9.8 Infrastructure Provision and Development

9.8.1 Purpose

The development and provision of adequate infrastructure enables resource development, encourages growth and development and facilitates quality of life for the local community. The outcome would be sufficient infrastructure (hard and soft) to facilitate investment and retention of economic activity and adequately provide for community needs.

9.8.2 Issues

A chapter of this study has been dedicated to assessing existing infrastructure and its capacity in the region relative to projected regional growth and demand/need. Many infrastructure gaps have been identified that could threaten the delivery of major projects and the maximisation of economic benefits for the region. The issue is a serious one and requires collaboration across a number of stakeholder groups. Importantly, the timing of this collaboration is the next 12 months.

9.8.3 Strategy

The following strategy is recommended in partnership between ODF, DSRD, Broken Hill City Council, Central Darling Shire Council, business, industry and the local community:

- Identify critical infrastructure gaps: Identify the key infrastructure (community services and facilities, transport, etc.) that is required or will be required to meet the future demands of the Far West Region. In summary, this infrastructure includes:
 - 1,000-1,400 additional dwellings by 2008-2010 generally larger in size and of higher standards to meet changing needs
 - Up to 11,900sqm of retail floorspace development in the next 5 years, possibly involving a new shopping centre
 - Up to 7,960sqm of additional commercial office and professional services floorspace in the next 5 years
 - Additional health facilities for acute and chronic services, including the expansion of the Broken Hill Hospital

- Up to 76 independent living units and 124 nursing home beds by 2017 (to be partially met by the planned Excelsior Oval development)
- Up to 161 child care places in the next 3 years, representing around 3-4 additional child care centres
- Increase of approximately 300 school students, requiring reinvestment in schooling facilities and consideration for a private secondary school
- Increased quality and security of water and power supply and upgrades of key road infrastructure
- Possible upgrade of Broken Hill Airport to accommodate larger aircraft
- Work with partners to develop strategies for infrastructure development: Engage and collaborate with key stakeholders to develop strategies and lobbying collateral to facilitate the delivery of identified required service levels. There is already significant work being undertaken by specific organisations in the region related to health, water, electricity and communications. Some of the infrastructure requires involvement from the private sector. Where this occurs, dialogue should commence immediately and investment opportunities released to the market; and
- Develop and implement mitigation/development strategy: Implement identified strategy (funding for infrastructure and facilities, investment attraction, etc.) with the support of partners and well-informed documentation. This may involve lobbying the government, industry, and/or the private sector. The need for this is immediate and discussions should begin as soon as possible with relevant government agencies.

9.9 Land Use Efficiency and Resource Protection

9.9.1 Purpose

Adequate land must be made available to allow for necessary infrastructure development, while the region's natural resources should be protected. The outcome would be the reduction of land tenure constraints and the release of new land for development.

9.9.2 Issues

Land tenure is identified as a significant impediment to the expansion of the urban footprint of Broken Hill, the development of the local mining and resources sector, the expansion of the agricultural and rural sector, the expansion and development of the tourism industry into more remote locations and the development of the smaller population centres across the Far West Region. The issues relate to both Crown Land and Native Title, both of which can be lengthy and costly issues to overcome.

The land use demand analysis highlights the need for further land to be made available for residential subdivision, with this need based on economic and community grounds. The process for this land release would involve revoking existing Crown Land status, extinguishing any Native Title, and extension of any regeneration areas as required. The need for this land will be inside the next 12 months but these processes commonly take in excess of 12 months. The ability to make this land available represents a key enabler to local investment and ensuring the impacts of the mining projects are retained in the region. This requires a fast tracking process between Council, the NSW Department of Lands and other Indigenous stakeholders and organisations as required.

9.9.3 Strategy

The following strategy is recommended in partnership between Broken Hill City Council and the NSW Department of Lands:

- Identify potential land needs: Broken Hill City Council needs to evaluate future land needs and the potential of each residential land strategy discussed in this study. It is this study's recommendation that to meet demands in the next 12 months, new land release is required to allow property developers to enter the market and develop the large-scale supply required at the necessary nature and standard. In the case of industrial land, it is not considered there is a need for additional industrial land to

cater for new development with projected demand capable of being met by the existing vacant industrial zoned land, Council's recent subdivision, and the opportunity for redevelopment and increased land use efficiency outcomes;

- Engage with the NSW Department of Lands: The region's stakeholders need to immediately engage with the Department to discuss Crown Land access and specific requirements to access freehold title on required lands; and
- Develop Draft LEP: Broken Hill City Council is planning the development of a Draft LEP in 2007-2008 to provide a more structured planning process and adhere to the NSW standard LEP template.

9.10 Attract and Retain Skilled Labour

9.10.1 Purpose

Attract and retain skilled professionals in the region, increase the size of the local labour force and community capacity, and improve training access and outcomes. The outcome would be a labour force capacity of existing locals and new persons to the region to deliver major projects and associated development and growth in the region.

9.10.2 Issues

The delivery of the major projects planned for the Far West Region is requisite on the ability to attract and retain labour. Total additional employment is expected to range between approximately 1,055 FTE positions in 2008 (low scenario) and 1,933 FTE positions in 2010 (high scenario). Projected employment need/demand will depend on a combination of factors, including the skills and capacity of the unemployed persons in the local labour force, the ability to attract and retain skilled labour in the region and the proportion of mining employment that will be permanent, contract and FIFO.

The key labour force challenges and social factors relevant to the Far West Region are competition for skilled staff, wage levels, ageing workforce, transient workers, exit of school leavers, sourcing staff, succession planning, training availability, dependence of welfare support, engaging Indigenous workers, private sector investment in training, attitudes of prospective employees and skills and literacy levels.

The supply of skilled labour to the Far West Region is a complex combination of the actual availability of labour, attraction of the job opportunities relative to other competing regions, the effectiveness of the training system to provide appropriately skilled labour, the amount of training undertaken by the private sector, and the skills strategies developed and implemented by government and industry. Regional skills shortages are prevalent across much of Australia. This suggests the need for some form of government intervention to ensure training is effectively targeted, relative to future labour requirements in the region and ensuring implementation of broader policy instruments.

9.10.3 Strategy

The labour force development strategies are outlined in Section 8.3 and relate to increasing the availability of labour, attraction of skilled persons to the region, considering overseas recruitment strategies, improving the effectiveness of the training system, increasing training investment by the private sector, increasing indigenous participation in the workforce, and supporting skills strategies from other levels of government and industry. There is a role for government, business and education and training providers throughout the region in the implementation of these strategies. Additionally, added education and training infrastructure to support these approaches includes a university campus, a mining training school, teaching hospital, expanded TAFE and dedicated training facility for the unemployed.

9.11 Investment Attraction and Financing

9.11.1 Purpose

Direct investment stimulates the local economy and provides opportunities for employment. The outcome would be stronger local business and economic environment with adequate facilities and services.

9.11.2 Issues

An inability to secure adequate funding is a common impediment to project development and implementation in the Far West Region. The impacts of inadequate funding have been significant in the recent past, with the collapse of a number of economic development initiatives and major projects in the region. Funding impediments do not only exist in relation to capital and start-up costs, but in some instances projects have not reached potential because they were unable to attract the required operational funding to support the project from its initial stages.

Many of the infrastructure deficits identified in this study are funded through government budgets. In terms of health, education, roads and utilities, the economic impact assessment demonstrates the extent of future population impacts on top of the state government's present population projections. There is the real risk that budget allocations calculated from the existing population projections will result in a severe shortfall in infrastructure funding for the Far West Region.

Other economic development initiatives and community infrastructure projects proposed or required for the region are suitable for funding from various state and Commonwealth government funding programs. There are a number of programs provided by the Commonwealth Department of Transport and Regional Services and NSW Government departments that can be pursued. There should be strong consideration for increased state government grants for infrastructure projects in the region.

9.11.3 Strategy

The following strategy is recommended in partnership between ODF, DSRD, Broken Hill City Council, Central Darling Shire Council, business, industry and the local community:

- Instigate a working group to identify strategic investment opportunities: Engage with key stakeholders (community, business, industry and government) to identify direct investment opportunities. These are likely to be enabling infrastructure and services such as communications, health, transport, training facilities, etc;
- Promote investment and development opportunities through a central investment website and conduct promotional activities such as developer tours; and
- Provide the required management support for projects: Invest in and provide adequate management support to ensure the development and delivery of identified infrastructure and services. Prepare funding applications as required to various State and Commonwealth government departments.

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Appendix A: Case Studies

North West Queensland

Broken Hill and the Far West Region are similar in many respects to Mount Isa and the North West Queensland Region. Both Broken Hill and Mount Isa record populations of around 20,000 persons and both have developed around base metal mining operations (zinc, lead and silver). The one key difference is that Mount Isa has not experienced the same population decline as that recorded by Broken Hill over the past 30 years.

Mount Isa's mining industry has benefited significantly from strong international demand for minerals and metals from rapidly expanding economies such as China and India. There is over \$1 billion of planned mining investment in the region including several copper and zinc projects. This ultimately means Mount Isa will also face similar growth and investment challenges as currently being faced by the Far West Region.

Mining operations in North West Queensland use a combination of FIFO and permanent resident labour. Despite expansions after decades of production, most new candidates for mining jobs are seeking FIFO positions, which Mount Isa cannot offer without adversely affecting the economic sustainability of the town. Mount Isa is looking to improve its social infrastructure in order to make the city more attractive to reside.

North West Queensland is experiencing similar skills shortages to the Far West Region. The Mount Isa Institute of TAFE has doubled the number of apprentices and trainees since 2004 in an attempt to increase the skills of the local workforce. The TAFE has also initiated programs with the mining company Xstrata to tailor skills to the industry.

The Queensland Government is undertaking the Northern Economic Triangle strategic response to growth in the region. The strategy will plan for further large-scale infrastructure developments to accommodate industry investment needs. Current and planned investments include:

- \$27.48 million initiative to double resource exploration expenditure by 2010;
- Auslink Townsville-Mount Isa Corridor Study for national transport network;
- Significant upgrades to the Flinders Highway and Burke Developmental Road;
- Preparation of the Queensland Power Development Plan 2006–2030 to provide a competitive energy solution in the north and west of Queensland; and
- Queensland Rail \$150 million 10-year upgrade of the Mount Isa-Townsville line.

In terms of transport infrastructure, Mount Isa has developed a larger airport compared with Broken Hill. Daily flights operate between Mount Isa and Brisbane, Townsville and Cairns giving the region significant access by air.

Mount Isa Council has identified the need for an increased supply of industrial land to support mining development. The Northridge Industrial Estate was recently developed by Council to provide further industrial land to assist new industry to establish in the City.

Population growth in Mount Isa has generated increased housing demand. Council is developing a new 180-lot housing estate at Healy Heights and has completed designs for an additional 300 lots for a future housing development.

The Mount Isa Water Board recently completed a \$4m project to upgrade the pipeline capacity to double the flow of water from Mount Isa's second water storage, Lake Julius into Lake Moondarra to cater for future demand for the City and mining operations.

CS Energy has invested \$12m in a recent overhaul of its Mica Creek Power Station and the Queensland Government has announced a study into a possible \$200m upgrade increasing its capacity by a further 100 MW.

Mount Isa, like Broken Hill and the Far West Region, has practiced economic diversification through the development of the local tourism industry.

Central Queensland

Central Queensland is one of the largest coal producing regions in the world and has experienced significant growth. The development of new coal mining operations is placing added pressure on the capacity of these small towns, labour and skills, and export and transport infrastructure. In local terms, the townships of Moranbah, Blackwater and Nebo service the region's coal mining industry. The growth and planning challenges being faced in these areas is described below.

Moranbah is a mining town with a population of 8,000 people located 191 km west of Mackay. Operations surrounding Moranbah include BMA Coal's Goonyella and Peak Downs Mines as well as Anglo Coal's Moranbah North Mine. Moranbah has encountered several major problems in sustaining regional growth. Moranbah is facing a serious shortage of housing. Council was not able to pre-empt the growth and is now trying to catch up to demand. Altitude Corporation is rapidly proceeding with a 143-lot housing estate. Council has also approved a 350 block residential development though the State Government has blocked the proposal and is pushing for a new mine instead on the site. Housing shortages have led to escalating prices with many mining workers now living with their family in Mackay and other major centres and transiting to the mines. Employees of Anglo Coal's Moranbah North mine reside in the Grosvenor Housing Estate. Accommodation is available in single and double storey four bedroom houses or two bedroom duplexes. The mine also owns Grosvenor Village which is a modern single persons village for Drive In Drive Out employees.

Another issue that has led to problems in Moranbah has been a lack of planning and communication between Council and the mining companies looking to expand and open new mines. This has meant infrastructure and service provision is not at a suitable level in regards to doctors, dentists, water resources, shopping facilities, child care and sewerage facilities. Moranbah has been experiencing severe water shortages in recent years with limited supply to coal mining operations. Sun Water is currently undertaking a \$270M pipeline project deliver 16,800ML per annum 220km to a terminal storage at Moranbah though it is not seen as a long term solution. There has been strong interest from businesses looking to move into the region though a lack of water and suitable industrial land has dampened growth. Transfield Services proposes to construct and operate a 120 Megawatt (MW) gas-fired, intermediate power station at Moranbah; a 300 MW gas-fired, peaking power station near Nebo; and a 97 kilometre gas pipeline between these two locations. Transfield's project proposals also include future expansions up to 480MW to provide an anticipated total capacity of 900MW by 2015.

Blackwater is referred to as the Coal Capital of Queensland and has an estimated population of 7,500. The Blackwater Mine is located 24km south of the town with Curragh Queensland Mining Ltd, Cook Resources Mining Pty Ltd, Jellinbah Mine, Kenmare and Yarrabee Coal Company Ltd also operating nearby. Blackwater has experienced similar accommodation shortages Moranbah. Coal mining companies looking to open operations in the future are stockpiling vacant housing to accommodate their workforce. This has meant there is very little available housing in the town.

Nebo is a small mining town 80km south west of Mackay with a population of 500 and eleven coal mines. The proximity to Mackay means that a workforce of people living elsewhere is common. Native title is also an important issue in the Central Queensland region. Processes involved in gaining access to native title land are extensive and time consuming. Council's in the region have been slow to explore opportunities to use native title land and now when the land is required they are not prepared.

Western Australia

The Pilbara in the north west of Western Australia is one of the fastest growing mining regions in the country. Rio Tinto and BHP Billiton are investing billions of dollars on expanding existing mines, opening new mines and improving rail and sea transport infrastructure.

The Pilbara region and Kalgoorlie have recorded similar problems regarding severe housing shortages experienced by other growing mining regions. Karratha and Port Hedland have been identified as having major issues and in need of significant residential development. Regional areas in the state have had trouble getting interest from developers to construct housing to meet demand.

Mining operations in Western Australia have a high proportion of FIFO (to and from Perth) accounting for over 50% of the workforce. This is placing significant pressure on many towns within the state as they are struggling to grow despite a boom in local mining operations. Companies are building dormitory camps for their employees to residence when working at the mines.

Labour and skills shortages in the Western Australian mining industry are acute and could constrain further growth. It is a problem affecting the nation as a whole and there have been moves to increase skilled migration. A technical college will be established in the Pilbara region to help increase skilled workers.

Industrial land in the Pilbara region is in high demand with businesses looking to expand into the region. Development costs in the area are very high meaning private development is not profitable. For this reason the State Government has been releasing developed land because supply is not coming from private sources.

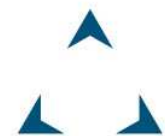
Surat Basin Resource Province

The Surat Basin in Southern Queensland has experienced significant growth in recent years. The region has significant reserves of coal and seam gas that has led to extensive development of new operations. Similar to the Far West Region, prior to these new developments, the Surat Basin had been experiencing a significant downturn due to the drought and lack of investment. The region's local capacity and infrastructure has been placed under significant pressure by the new developments.

A study of the strategies being implemented to address these issues is provided below:

- Transport infrastructure has been inadequate relative to the needs of the new developments. Rail lines operating between the region and the Port of Gladstone have lacked capacity to meet demand. The \$1 billion Surat Basin Railway project is in the pipeline comprising a new 207 km rail line from Wandoan to Banana allowing access to the Port of Gladstone. The project is a joint venture agreement is between Dawson Valley Railway, Industry Funds Management, Queensland Rail and mining companies. The Port of Gladstone is also expanding their capacity by building a new terminal at Wiggins Island to meet higher output with the new rail link.
- The Surat Basin is having to deal with housing issues to meet the increased workforce in the region. There is currently a shortage of suitable housing especially for families. Rents in the region have increased by around 250% over the last few years. Council's in the region are subdividing land parcels in order to increase available land for residential development.
- Labour shortages have been a significant problem in the Surat Basin. Demand for skilled workers in the mining and energy industry has been extremely strong leading to wages increases of more than 30%. Small business has reported difficulties in retaining staff with competition for workers also occurring from overseas. The Surat Basin has a significant agricultural industry though many of these workers are now attending TAFE to be trained and employed in mining.
- A study of the projected population increases in the Surat Basin between 2006 and 2030 has led to several community infrastructure requirements being identified. Areas requiring significant investment in the region include:
 - Primary and secondary schools;
 - TAFE facilities;
 - Hospital beds;
 - Child care places;

- Aged care facilities;
 - Recreational facilities;
 - Sporting fields and facilities; and
 - Emergency services.
- A host of economic development, growth and investment strategies have been formulated for the region to address the above-mentioned issues relating to:
 - Knowledge development and dissemination;
 - Industry and community engagement;
 - Infrastructure provision and development;
 - Building community capacity;
 - Support and assisting existing business;
 - Attract and encourage new businesses; and
 - Leading through direct investment.



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