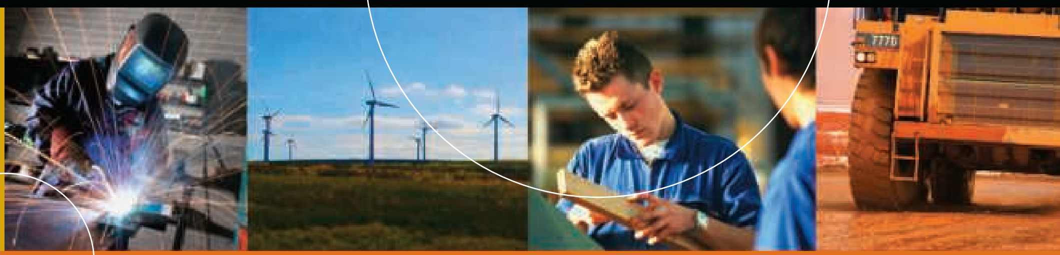
Goldfields-Esperance Region



Summary Report and Workforce Plan

Department of
Education and Training

State
Training
Board

Introduction

In 2007 the Department of Education and Training, in partnership with the Goldfields-Esperance Workforce Development Alliance (GEWDA), commissioned The University of Western Australia to undertake research and prepare a strategic workforce plan for the Goldfields-Esperance region.

The overall aim of the research was to develop a regional analysis of current and future employment demand, and develop strategies to ensure that this demand could be met. More specifically, this involved:

- an assessment of regional economic and demographic dynamics, and the associated implications for labour force demand
- an examination of labour market characteristics within the region
- the development of labour projections for 2008 to 2018 for sectors and occupations
- an assessment of the factors affecting the supply of labour to the region
- the development of a regional strengths, weaknesses, opportunities and threats (SWOT) analysis in relation to employment and training
- the preparation of a workforce development action plan for the Goldfields-Esperance region for 2008 to 2018.

From the research, the background report entitled 'Workforce Futures for the Goldfields-Esperance Region' was produced, incorporating the *Goldfields-Esperance Workforce Plan*.

The development of the plan is a response to serious labour shortages across a range of sectors and occupational groups that threaten to constrain economic growth and prevent the region meeting its full potential.

This document provides a summary of the background report. This document also includes the *Goldfields-Esperance Workforce Plan*. For detailed information on the research, the methods used, or the findings, please see the background report available at stb.wa.gov.au.

The region

The Goldfields-Esperance region has one of the most vibrant and prosperous economies in Western Australia. Between 2001 and 2006, gross regional product increased by more than 30 per cent, largely as a result of activity in the mineral resources sector. Other important industries include agriculture, tourism and manufacturing. The region also has a strong services sector.

The strong economic conditions in the region have led to a serious shortage of skilled and unskilled labour. This has the capacity to constrain growth and prevent the region reaching its full economic potential.

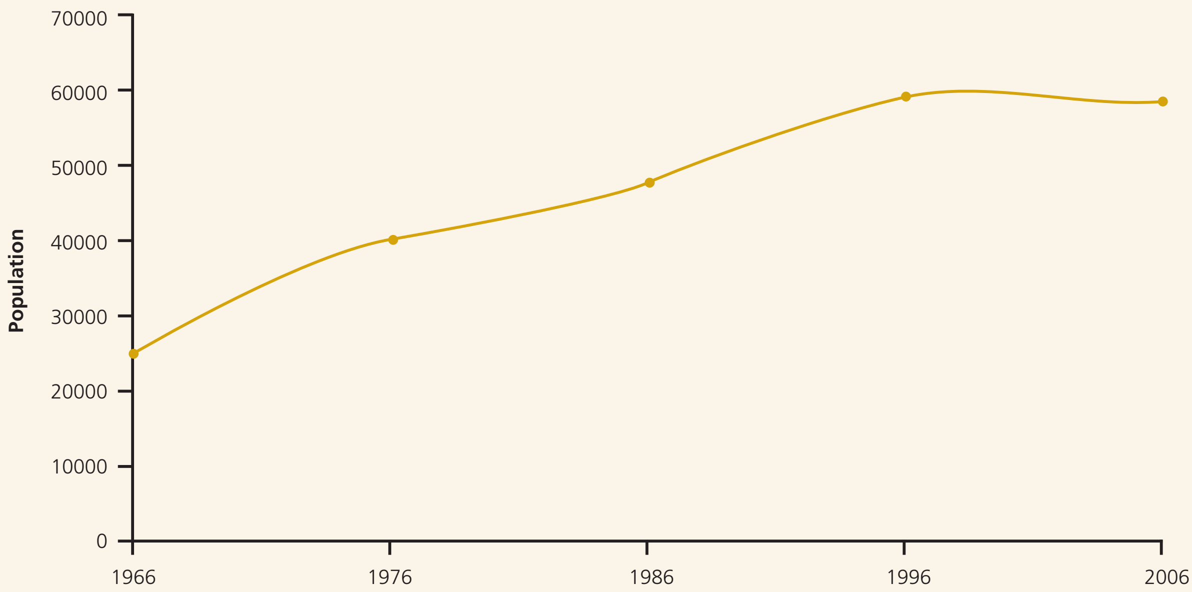
Population

Growth and change

Figure 1 shows that between 1966 and 1996 the number of people living in the Goldfields-Esperance region increased steadily from 26,250 to 57,498. Over the last decade, however, the region experienced a levelling off of the population which, since 2001, has remained steady at a little over 56,200.

The official growth rate between 2001 and 2006 was 0.5 per cent, compared to 7.3 per cent in Western Australia and 5.7 per cent across Australia.

Figure 1: Population change in the Goldfields-Esperance region 1966–2006



(Source: Australian Bureau of Statistics, various issues)

There are a number of reasons for this levelling off in the resident population including:

- an increase in the number of fly-in/ fly-out workers in the region, as opposed to permanent residents
- an increase in semi-permanent or mobile contract workers in the region
- a possible undercount in the Australian Bureau of Statistics (ABS) Census of Population and Housing
- continuing decline in the agricultural sector as a result of farm amalgamation and expansion, and the associated out-migration by farm families (Tonts, 2005).

It is also important to recognise that the region has a long history of distinct phases of population growth and stability. These are outcomes of the cyclical nature of the resources sector (Webb and Webb, 1993).

Age structure

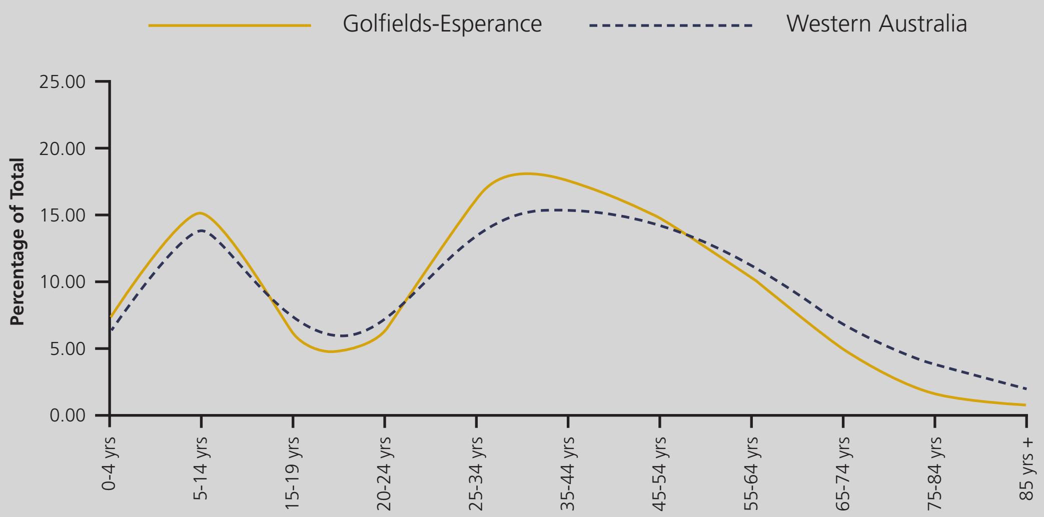
Figure 2 shows the age structure for the region in 2006.
Key differences to the Western Australian age structure include:

- a slight over-representation in the 0–14 year age cohorts and an under-representation in the 15–19 cohort.
- a significant over-representation of the 25–44 year age cohorts and an under-representation in the 54+ cohorts.

The general age structure of the Goldfields-Esperance region is not dissimilar to other rural and remote regions which have a relatively high dependence on natural resource industries (Hugo, 2005).

The under-representation of people in the 15–19 year age cohort is often associated with out-migration as young people seek education and employment opportunities elsewhere (Walmsley et al, 2008; Davies and Tonts, 2007).

Figure 2: Goldfields-Esperance region comparative age demographics 2006



(Source: Australian Bureau of Statistics, 2007)

Gender structure

The gender structure of each of the four sub-regions compared with Western Australia is presented in Figure 3.

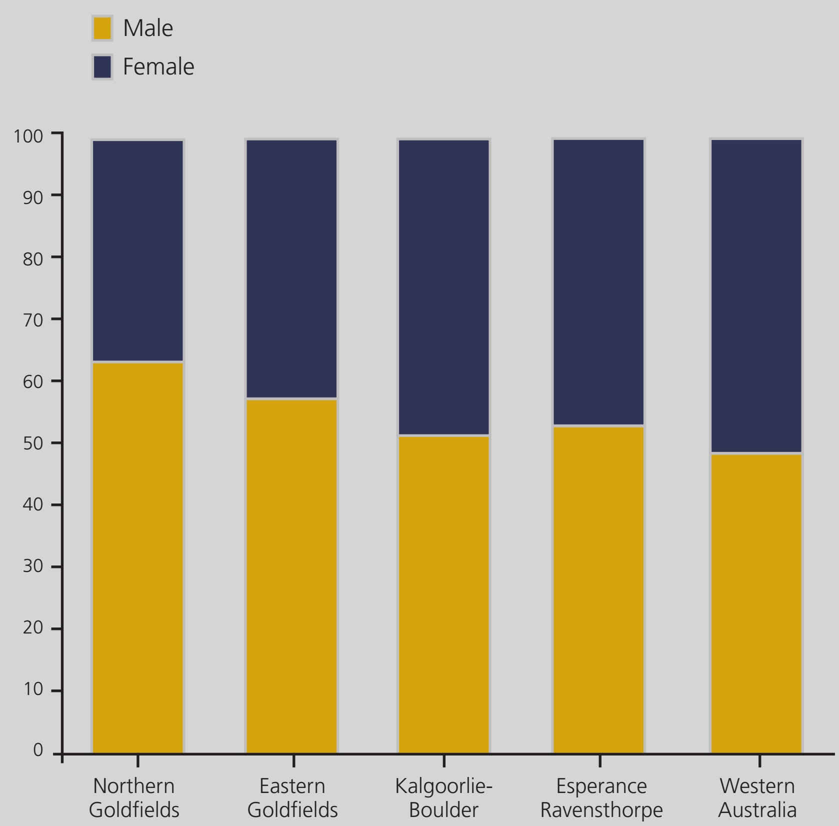
While there were more females than males in the population of Western Australia, the trends were different for the four sub-regions in the Goldfields-Esperance region.

For Kalgoorlie-Boulder and Esperance-Ravensthorpe, the ratio was even for both the male and female populations.

In the Northern Goldfields and Eastern Goldfields, however, the ratio of males to females was much higher.

In many respects this reflects the economic structure of the region, with employment in traditionally male dominated sectors such as mining, manufacturing, agriculture and transport playing an important role in shaping the gender demographics.

Figure 3: Gender structure comparison Goldfields-Esperance sub-regions 2006



(Source: Australian Bureau of Statistics, 2007)

Economy

Gross regional product

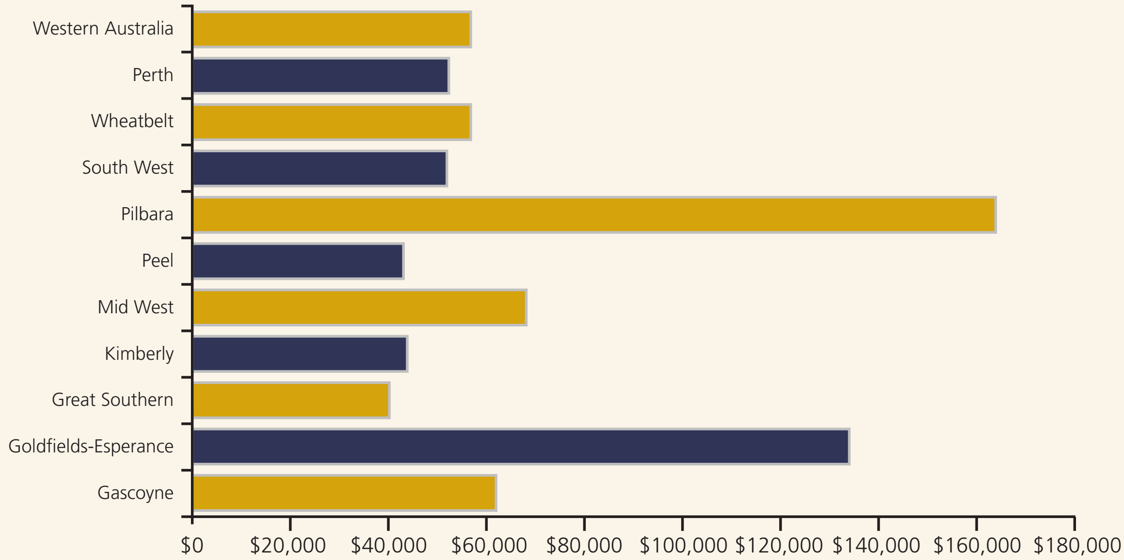
Over recent years, there has been considerable economic expansion in the Goldfields-Esperance region, fuelled largely by strong demand for mineral resources.

This growth is reflected in the substantial increase in gross regional product (GRP) between 2000/01 and 2005/06. During this period, GRP increased from $5.5 billion to $7.3 billion—an increase of 32 per cent.

While the region's percentage contribution to Western Australia decreased, this was largely a result of even faster growth in the Pilbara where the minerals and petroleum industries have grown rapidly over the past decade (Department of Industry and Resources, 2007a).

On a per capita basis, the Goldfields-Esperance region ranked second (behind the Pilbara region) in both 2005 and 2006 (Figure 4). In dollar terms, the per capita GRP for the Goldfields-Esperance region increased from about $90,000 in 2000/01 to over $136,000 in 2005/06.

Figure 4: Gross regional product per capita in regional Western Australia 2005/06



(Source: Department of Local Government and Regional Development, 2007)

Table 1: Value of minerals production by local government area 2006 ($)

Local Government Area	2006('000)	2007('000)	% Change
Coolgardie	3,493,499	3,309,379	-5.3
Leonora	965,700	2,758,558	185.7
Kalgoorlie-Boulder	1,643,669	1,873,787	14.0
Laverton	1,294,996	1,729,337	33.5
Dundas	456,481	497,498	9.0
Menzies	1,546	17,587	1037.6
Ravensthorpe	2,094	2,133	1.9
Esperance	457	563	23.2
Total	7,857,446	10,188,845	29.7

(Source: Department of Industry and Resources, 2007b)

One of the major sources of economic output in the Goldfields-Esperance region is the mineral resources sector.

The industry earned more than $7.8 billion in 2006, rising to $10.2 billion in 2007 (Table 1).

In geographical terms, much of the output was concentrated in the local government areas of Coolgardie and Kalgoorlie-Boulder, which together contributed more than half of the total value of minerals production.

The largest increases in production were concentrated in the Northern Goldfields' local government areas, notably Leonora, Laverton and Menzies.

In the southern part of the region, minerals production was relatively low, although this will increase substantially when BHP Billiton's Ravensthorpe nickel project commences production in 2008.

In 2006 there were 4,527 businesses operating in the region. The majority (47 per cent) of these were located in Kalgoorlie-Boulder.

In terms of sectoral distribution, the largest numbers of firms were in finance and business services, followed by construction, retail trade and mining.

A further 45.5 per cent of businesses were located in Esperance-Ravensthorpe, with the remaining 7.5 per cent located in the Eastern Goldfields and Northern Goldfields.

In the Eastern and Northern Goldfields, dominant sectors included retail trade and mining, while in Esperance-Ravensthorpe agriculture (ie mainly farms) dominated, followed by property and business services, construction and retail trade.

The important characteristic of businesses in the region was the dominance of small and medium enterprises. The majority of businesses were single proprietorship enterprises (ranging from 48 to 52 per cent of the total) that do not employ other workers. Around 25 per cent of businesses employed between one and four workers.

Businesses employing 50 or more workers were very few, although the scale of these in terms of real employment is significant. Important here are large mining, manufacturing and construction firms.

Income

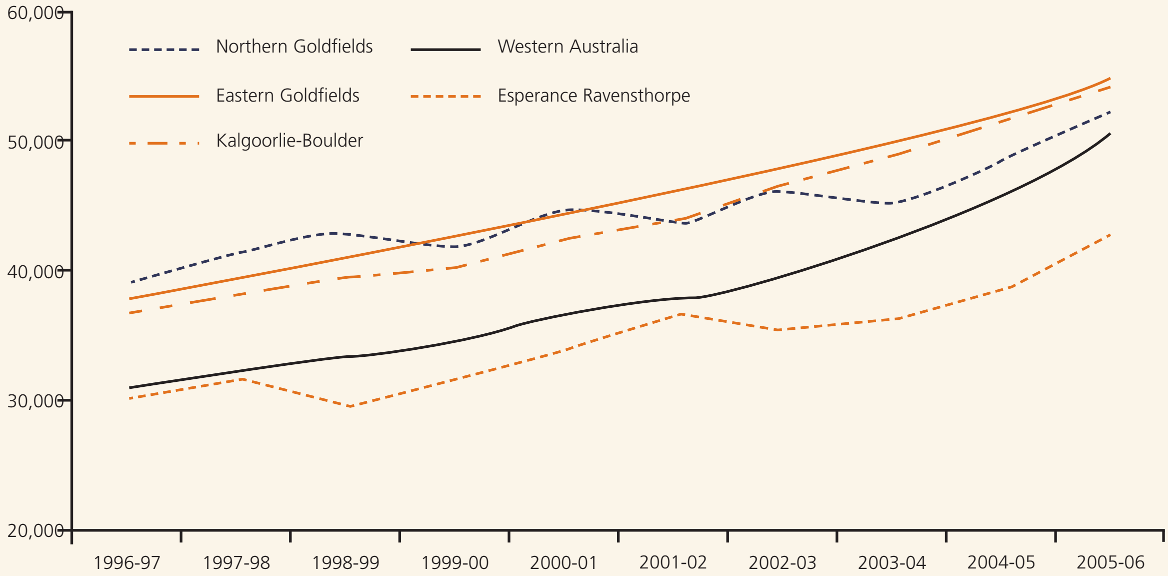
A further indicator of the Goldfields-Esperance region's strong economic performance is the income received by residents.

In terms of labour, the higher than average incomes are particularly important since they act as a major attractor to new workers and play a significant role in retaining those already in the local/regional labour market.

Between 1996/97 and 2005/06, incomes in Kalgoorlie-Boulder, Eastern Goldfields and Northern Goldfields all increased steadily and remained well above the Western Australian average (Figure 5).

Only in Esperance-Ravensthorpe did incomes remain below the State average, largely as a result of volatility in the agricultural sector and the large retiree/semi-retiree population living in a number of the area's coastal settlements.

Figure 5: Mean individual income in the Goldfields-Esperance region 1996/97–2005/06



(Source: Australian Taxation Office, 2007)

Labour market

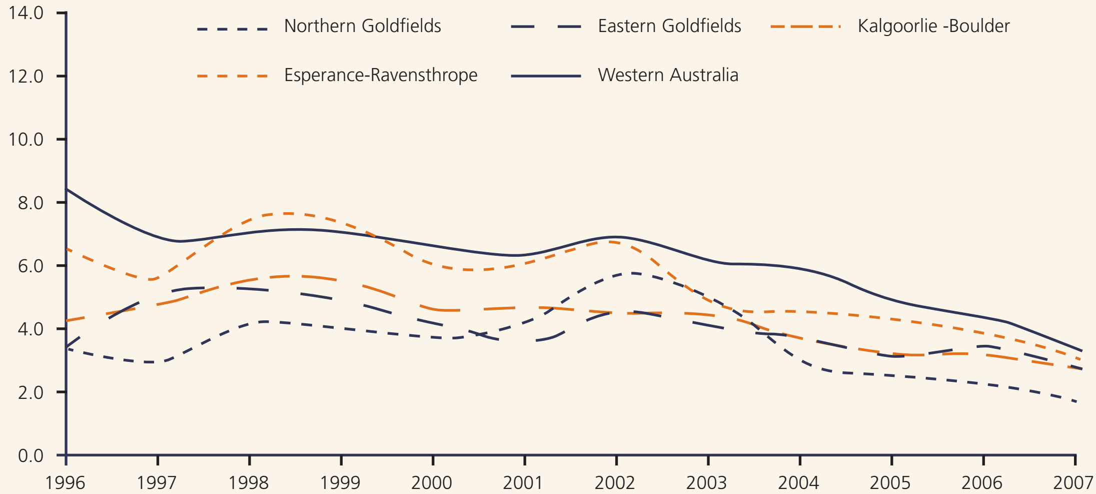
Employment trends

Unemployment

Between 1996 and 2007 levels of unemployment fell across the region (Figure 6). This mirrors trends in Western Australia, although rates of unemployment in the region have been uniformly lower than the State average since the late 1990s.

In part, this is a reflection of the strength of the local economy, with a sharp drop in unemployment in mining areas occurring at around the same time as minerals prices (especially gold and nickel) began to rise. The concomitant increase in exploration and extraction fuelled employment growth and contributed to a falling rate of unemployment.

Figure 6: Unemployment rates in the Goldfields-Esperance region 1996–2007



(Source: DEWR Small Area Labour Markets, various issues)

Participation

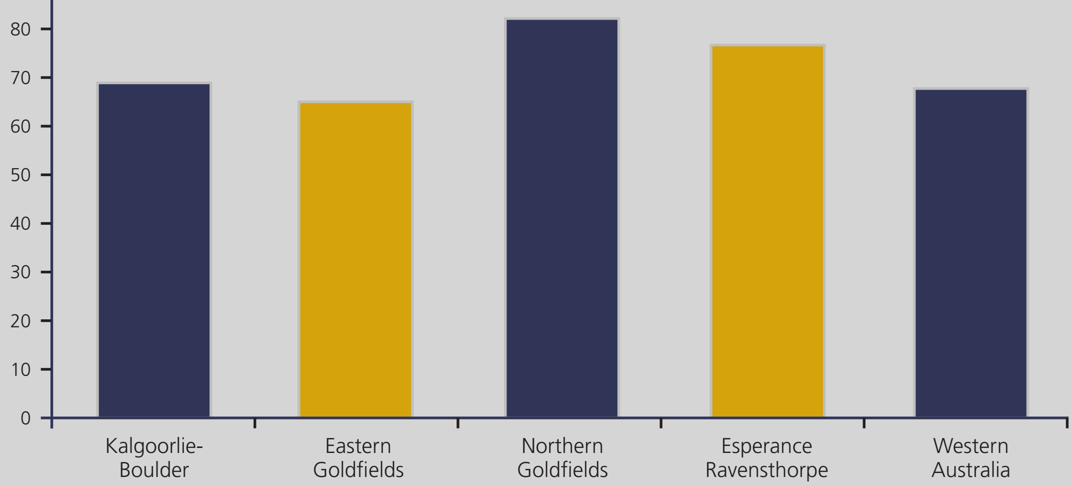
The Goldfields-Esperance region has relatively high rates of labour force participation when compared to Western Australia.

In 2006 the highest participation rate was recorded in the Northern Goldfields at 82 per cent, and while this is much higher than the Western Australian average of 68 per cent, it is typical of other regions with a high proportion of the labour force engaged in the resources sector (Figure 7).

In the Eastern Goldfields mining accounted for nearly 40 per cent of the workforce in 2006. This represents a substantial increase on 2001 when 34.9 per cent of the labour force was engaged in this sector.

Reflecting the transition of many new resource projects into production over the past few years, employment in construction dropped from 9.3 per cent to 7.2 per cent between 2001 and 2006.

Figure 7: Labour force participation rates in the region 2006



(Source: Australian Bureau of Statistics, 2007)

Kalgoorlie-Boulder (69 per cent) and Esperance-Ravensthorpe (76 per cent) were also above the State average.

The only exception was the Eastern Goldfields which was marginally below the Western Australian participation rate.

Sectoral trends

In Kalgoorlie-Boulder the mining sector dominated employment, increasing from 19.4 per cent to 21.8 per cent of the labour force between 2001 and 2006. Other sectors closely linked to mining also accounted for significant proportions of the workforce including:

- manufacturing
- construction
- transport and storage.

Over the same period manufacturing increased from 3.5 per cent to 5.2 per cent of the workforce while retail trade rose from 6.5 per cent to 6.8 per cent. One of the major increases was recorded in health care and social assistance which rose from 3.7 per cent to 7.1 per cent of the labour force.

Almost half of the workforce in the Northern Goldfields was employed by the mining sector between 2001 and 2006. As in Kalgoorlie-Boulder and the Eastern Goldfields, this proportion increased over the period (46.2 per cent to 47.2 per cent). Manufacturing also increased its share of employment from 3.2 per cent to 5.3 per cent.

Other major employment sectors in the Northern Goldfields in 2006 included:

- public administration and safety
- health care and social assistance
- construction.

Employment by sector in Esperance-Ravensthorpe was more varied than that of the north. In 2001 the agriculture, forestry and fishing sectors employed 24.6 per cent of the workforce. Other major employment sectors during the same year were:

- retail trade
- education and training
- health care and social assistance
- construction.

By 2006 the impact of the BHP Billiton Ravensthorpe nickel project was evident, with agriculture, forestry and fishing dropping to 16.9 per cent of the workforce while construction was up to 15.9 per cent. As the nickel project moves from construction to production there will be a shift from employment in the construction sector to mining.

The resources sector

The mineral resources sector in the Goldfields-Esperance region is a major employer. Gold and nickel producers are the largest employers with a total labour force of 14,755 in 2006.

The size of operations in the gold industry varied from very small producers with less than 20 employees to a number of operations with over 1,000 employees. In 2006 there were three nickel producers with more than 1,000 employees and a relatively large number of firms with less than 500.

When considering employment in the resources sector it is important to distinguish between construction and production employment, since the two activities involve quite different occupations and generate different economic multipliers.

During the construction phase, the labour force required can be as much as 400 per cent larger than during the operational phase.

Demand tends to be strongest for occupations such as construction labourers; construction managers; mining engineers; surveyors; carpenters and joiners; electricians; truck drivers; and mobile plant operators.

Once production commences, demand is strong for occupations such as stationary plant operators; mobile plant operators; truck drivers; mining labourers; natural and physical science professions; and engineering technicians.

Clements et al. (2006) suggested that the basic employment multipliers for construction and metallic minerals were 2.93 and 4.13, respectively[1]. In other words, one additional job in the construction industry generates another 1.93 jobs in other industries, giving an economy-wide increase in employment of 1 + 1.93 = 2.93 jobs.

For example, the broader impact of the Ravensthorpe nickel mine during the construction phase can be estimated as 2.93 x 1,400 = 4,102 jobs, with 1,400 of these in the construction sector and 4,102 – 1,400 = 2,702 in other sectors of the economy.

During the production phase the multiplier is 4.13. This suggests that additional employment generated by the project in this phase might be 4.13 x 325 = 1,342 jobs. Of these, 325 are on the project itself and 1,017 are in other components of the economy.

Under this scenario, nickel and gold employment in the Goldfields contributes to around 61,000 jobs in the Western Australian economy.

[1] These are type IIA multipliers for which consumption is endogenous. For a full discussion on various methods of calculating and interpreting multiplier effects, see Armstrong and Taylor (1993).

Occupational trends

In the Goldfields-Esperance region there are higher proportions of employees in the following occupations: technicians and trade workers; machinery operators and drivers; and labourers. This reflects the high levels of employment in sectors such as mining, agriculture, manufacturing and transport.

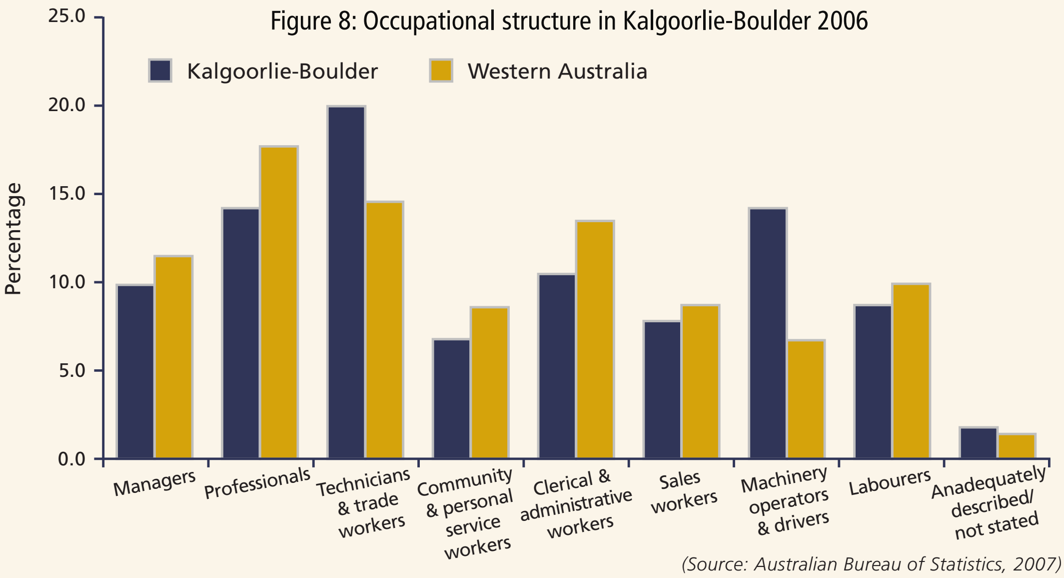
In Kalgoorlie-Boulder, the importance of mining and allied industries contributed to a high proportion of technicians and trade workers (19.8 per cent) and machinery operators and drivers (15.5 per cent). The city's role as a major economic and service hub also resulted in a relatively strong representation of managers and professionals (Figure 8).

In the Eastern Goldfields and the Northern Goldfields (Figures 9 and 10) around 25 per cent of the labour force belonged to the machinery operators and drivers category.

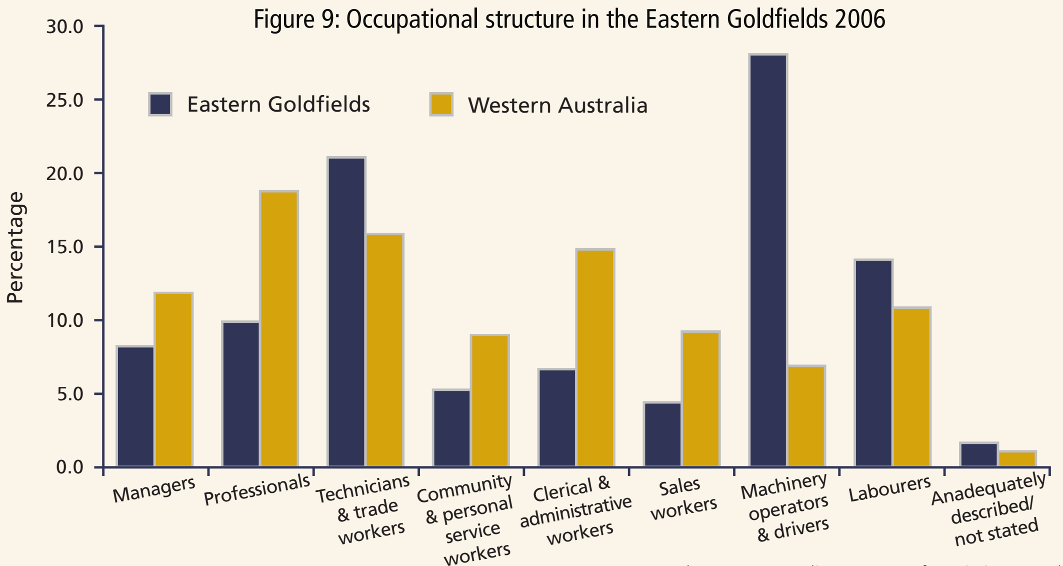
Technicians and trades workers comprised the second major group of workers while labourers comprised the third group.

As in Kalgoorlie-Boulder, these occupational categories reflect the importance of the mining sector and its various support industries.

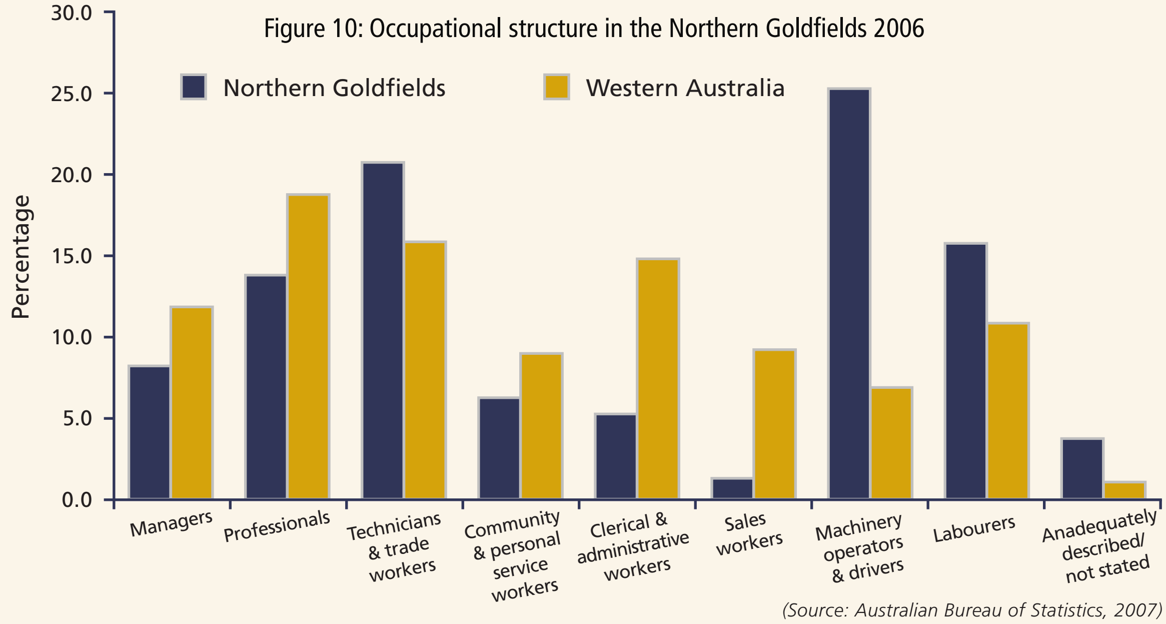
Professional and management occupations were well below the State average as were occupations such as clerical and administrative workers and sales workers.



(Source: Australian Bureau of Statistics, 2007)



(Source: Australian Bureau of Statistics, 2007)



(Source: Australian Bureau of Statistics, 2007)

A different configuration in the occupational structure of the labour force was evident in Esperance-Ravensthorpe (Figure 11).

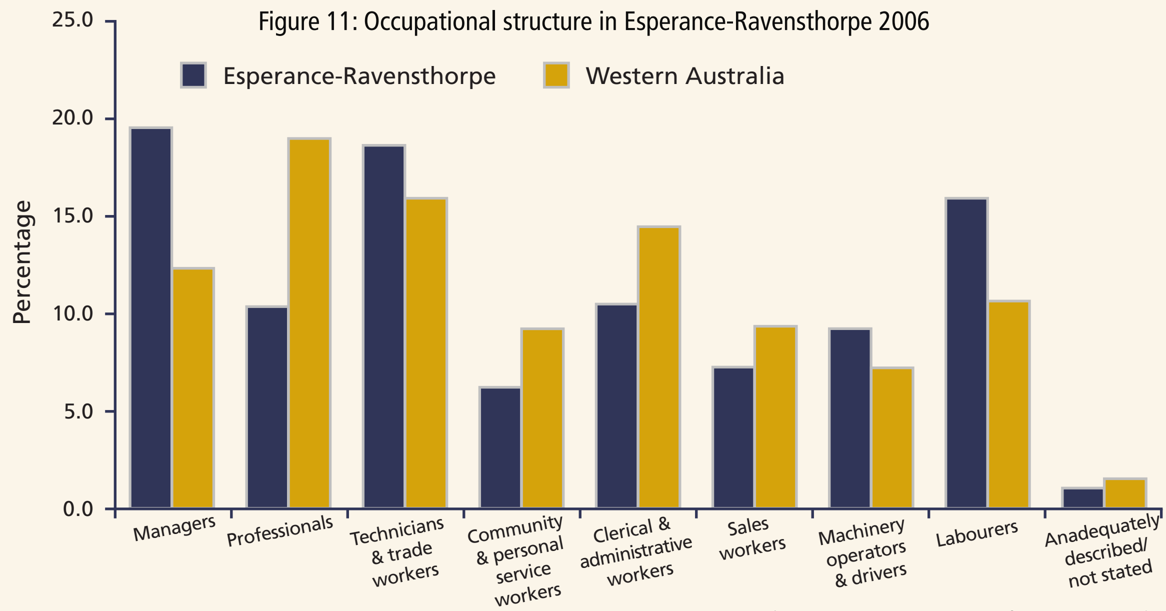
The highest proportion of workers were managers and technicians and trades workers which were well above the Western Australian average for these categories.

The high proportion of people in management occupations was largely because of the influence of farming, where the majority of farmers are classified in the management category in the Australian and New Zealand Standard Classification of Occupations (ABSSNZ, 2006a).

In terms of professionals, the proportion of employees was lower than for Western Australia.

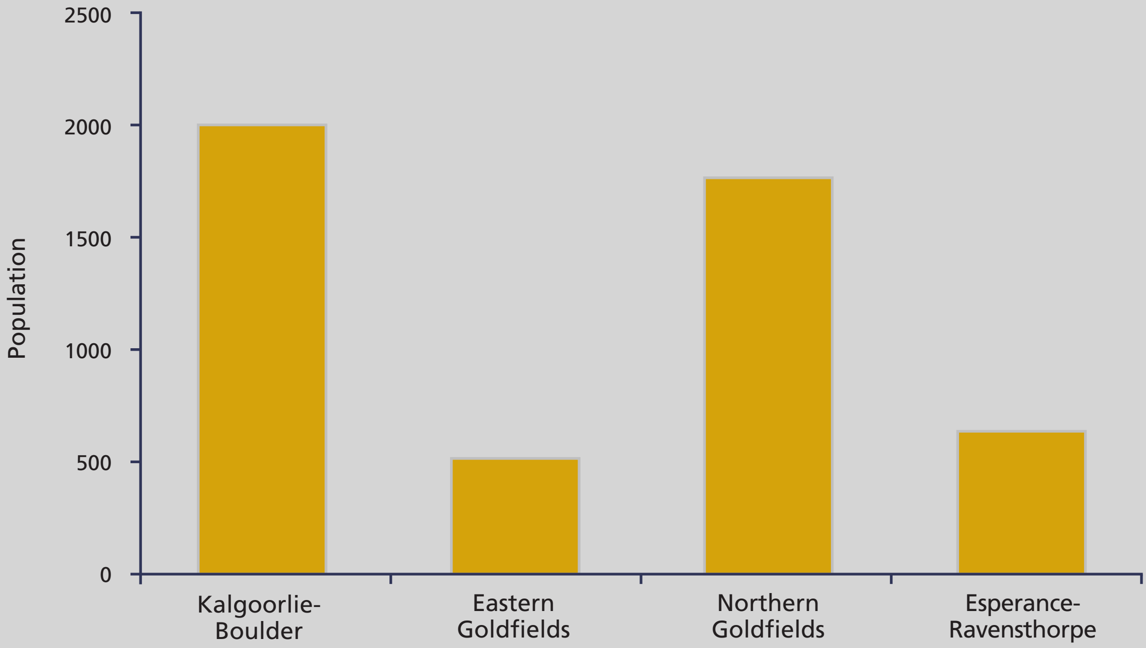
In summary, the occupation structure of the Goldfields-Esperance region reflects the nature of the regional economy with technicians and trades workers, machinery operators and drivers, and labourers the most common categories.

The exception is Esperance-Ravensthorpe where, in addition to these occupations, managers (mainly engaged in farming) was the most common category.



(Source: Australian Bureau of Statistics, 2007)

Figure 12: The Aboriginal population in the Goldfields-Esperance region 2006



(Source: Australian Bureau of Statistics, 2007)

Aboriginal participation

Population

In 2006 there were 4,956 persons who identified themselves as Aboriginal people living in the Goldfields-Esperance region. This represents 8.6 per cent of the total regional population.

The population is distributed unevenly, with the largest number of Aboriginal people in Kalgoorlie-Boulder (2,015 persons or 6.9 per cent of the total population) and the Northern Goldfields (1,769 persons or 30.1 per cent) (Figure 12). The number of Aboriginal people in the Eastern Goldfields (532 persons or 8.9 per cent) and Esperance-Ravensthorpe (640 persons, or 4.1 per cent) was relatively small.

As in much of rural and remote Australia, the age structure of the Aboriginal population in the region demonstrates considerable geographical variability (Figure 13).

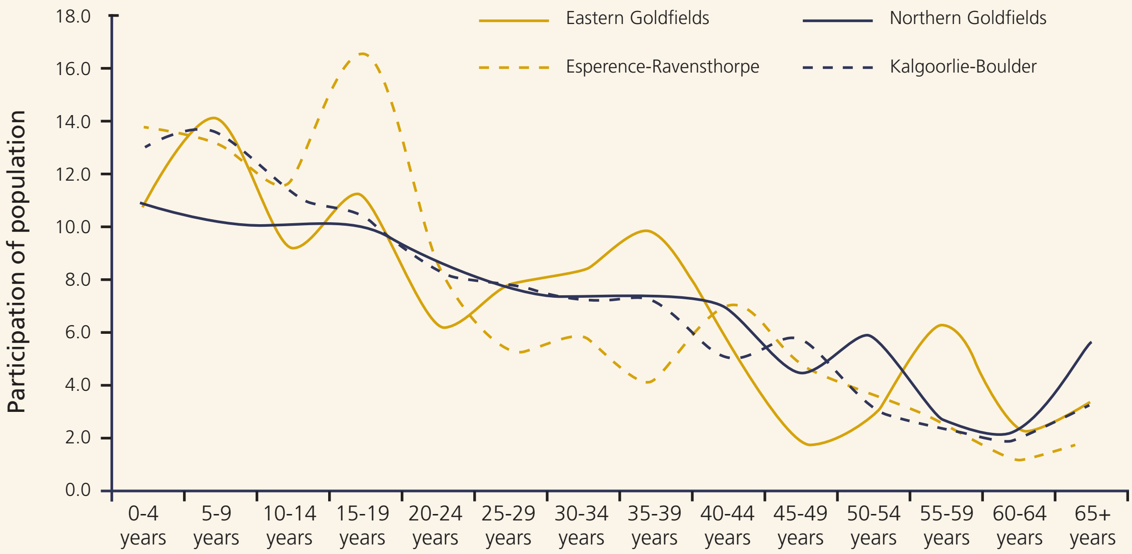
In Kalgoorlie-Boulder and the Northern Goldfields there is a steady decline in the proportion in each age cohort between 0 and 4 years and between 40 and 44 years. Beyond this, the age profile becomes more erratic—a feature typical of many remote Aboriginal communities where death rates are higher than for the non-Aboriginal population (Tonts and Larsen, 2002).

The working age population[2] in the region in 2006 was 2,792 persons comprising:

- 1,216 persons in Kalgoorlie-Boulder
- 279 persons in the Eastern Goldfields
- 1,104 persons in the Northern Goldfields
- 373 persons in Esperance-Ravensthorpe.

[2] Using the Australian Bureau of Statistics classification of 15–65 years.

Figure 13: Age profile of the Aboriginal population in the region 2006



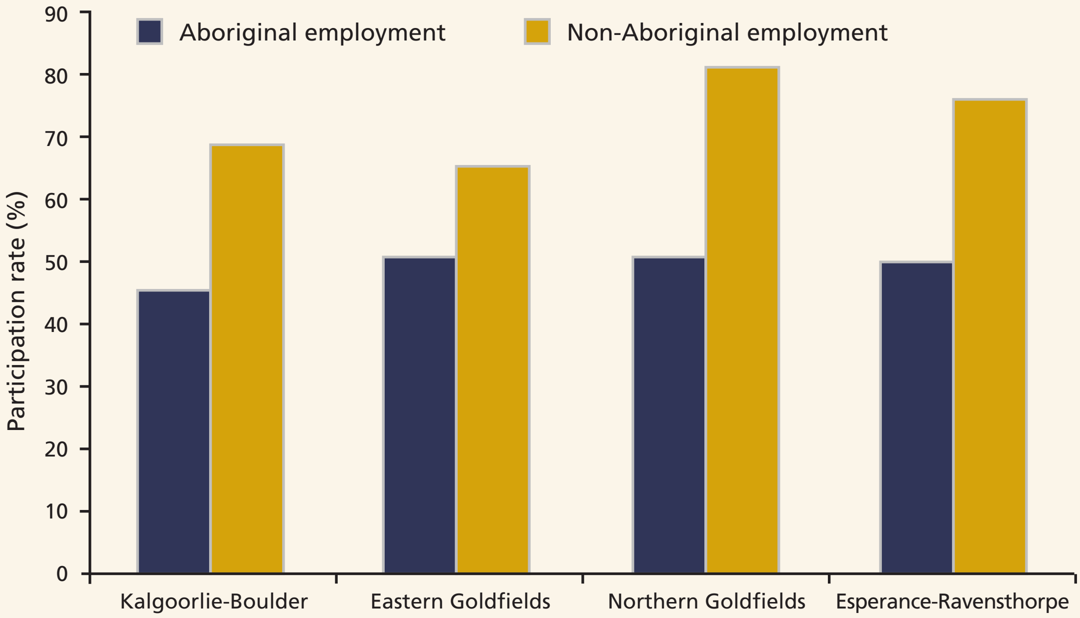
(Source: Australian Bureau of Statistics, 2007)

Participation

Rates of participation in the labour force among Aboriginal people in the Goldfields-Esperance region were considerably lower than for the non-Aboriginal population (Figure 14). The lowest rates of participation were in Kalgoorlie-Boulder where just 45 per cent of Aboriginal people between 15 and 65 year of age were engaged in the labour force compared with 69 per cent in the non-Aboriginal population.

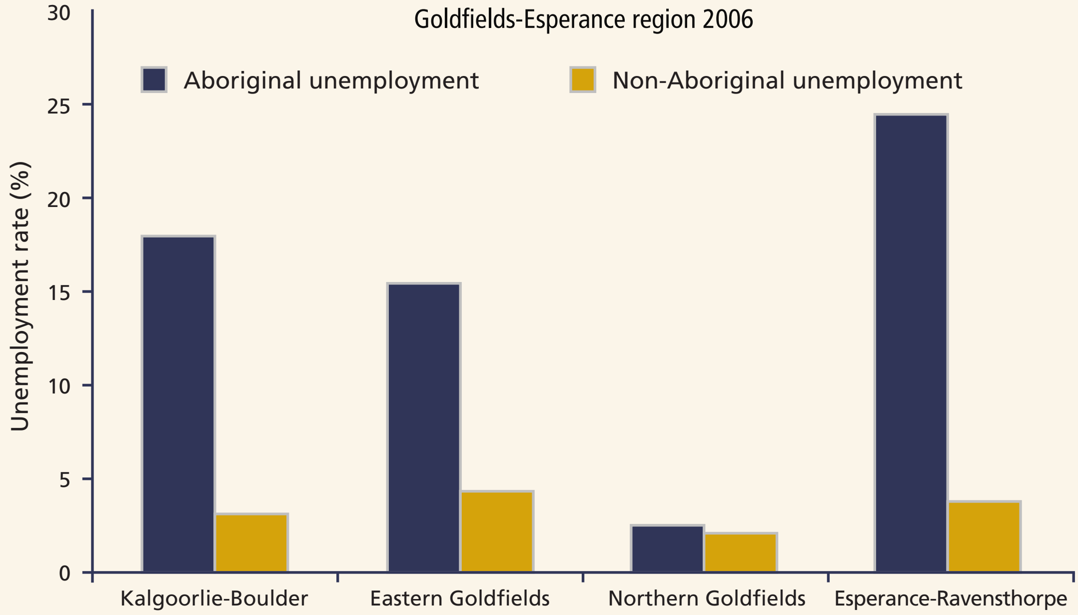
In all other sub-regional areas, Aboriginal participation sat at just over 50 per cent while non-Aboriginal participation varied from 66 per cent (Eastern Goldfields) to 82 per cent (Northern Goldfields).

Figure 14: Aboriginal and non-Aboriginal labour force participation rates in the Goldfields-Esperance region 2006



(Source: Australian Bureau of Statistics, 2007)

Figure 15: Aboriginal and non-Aboriginal unemployment rates in the Goldfields-Esperance region 2006



(Source: Australian Bureau of Statistics, 2007)

Unemployment trends

In the Goldfields-Esperance region, unemployment rates among the Aboriginal population were much higher than the non-Aboriginal population in 2006 (Figure 15).

The Aboriginal unemployment rate was highest in Esperance-Ravensthorpe at 24.2 per cent compared to just 3.3 per cent for the non-Aboriginal population.

High Aboriginal unemployment rates were also characteristic of Kalgoorlie-Boulder (17.9 per cent) and the Eastern Goldfields (15.6 per cent).

The Northern Goldfields had the lowest rate of Aboriginal unemployment at 2.3 per cent, largely as a result of high levels of participation in Community Development Employment Projects.

Community Development Employment Projects

In many parts of rural and remote Australia, Community Development Employment Projects (CDEP) have lowered official unemployment rates by engaging Aboriginal people in various forms of enterprise.

The primary focus of CDEP has been to develop a range of vocational skills as a means of promoting broader socio-economic development (Altman, 2000; Rowse, 2002; Ellis-Smith, 2008).

The focus has depended partly on the inherent geography and resources of each group, and has included development of arts, tourism, pastoralism, agricultural and civil works (Ellis-Smith, 2008).

In 2006 there were over 900 Aboriginal people participating in CDEP programs in the Goldfields-Esperance region. By far the majority of these were in the Northern Goldfields where 683 people were involved in CDEP. Within this sub-region, 500 participants were in the Shire of Ngaanyatjarraku, 75 were in Laverton, and eight were in Menzies. It has been this strong participation in CDEP in the Northern Goldfields that has contributed to the very low Aboriginal unemployment rates.

Low unemployment in this area is affected by this Government-sponsored form of employment, rather than a product of other regional economic processes.

CDEP participation in other parts of the region in 2006 was relatively low, comprising some 127 persons in Kalgoorlie-Boulder and 66 persons in the Eastern Goldfields.

Education and income

In the Goldfields-Esperance region the highest level of schooling completed by Aboriginal people varied considerably across sub-regional areas at the 2006 census. The highest proportion of people who had completed schooling to Year 10 or higher was concentrated in Esperance-Ravensthorpe (72.6 per cent) followed by Eastern Goldfields (58.6 per cent) and Kalgoorlie-Boulder (58.3 per cent). However, within these areas relatively few people had completed schooling to Year 12 with the majority leaving school after Year 10.

In the more remote Northern Goldfields the highest level of schooling attained was very low with only 32.1 per cent having completed Year 10 or higher. Indeed the majority of Aboriginal people in this sub-region had completed Year 8 or lower, with 5.9 per cent having not attended school at all.

The highest proportion of people with a bachelor degree or higher was 2.3 per cent in the Eastern Goldfields, followed by 1.8 per cent in the Northern Goldfields. Advanced diploma and diploma level qualifications were also low across the region. More encouraging is that the proportion of people with certificate level qualifications was higher, ranging from 2.1 per cent in Esperance-Ravensthorpe to 7.3 per cent in the Northern Goldfields.

One of the outcomes of the employment status of Aboriginal people within the region is very low individual incomes.

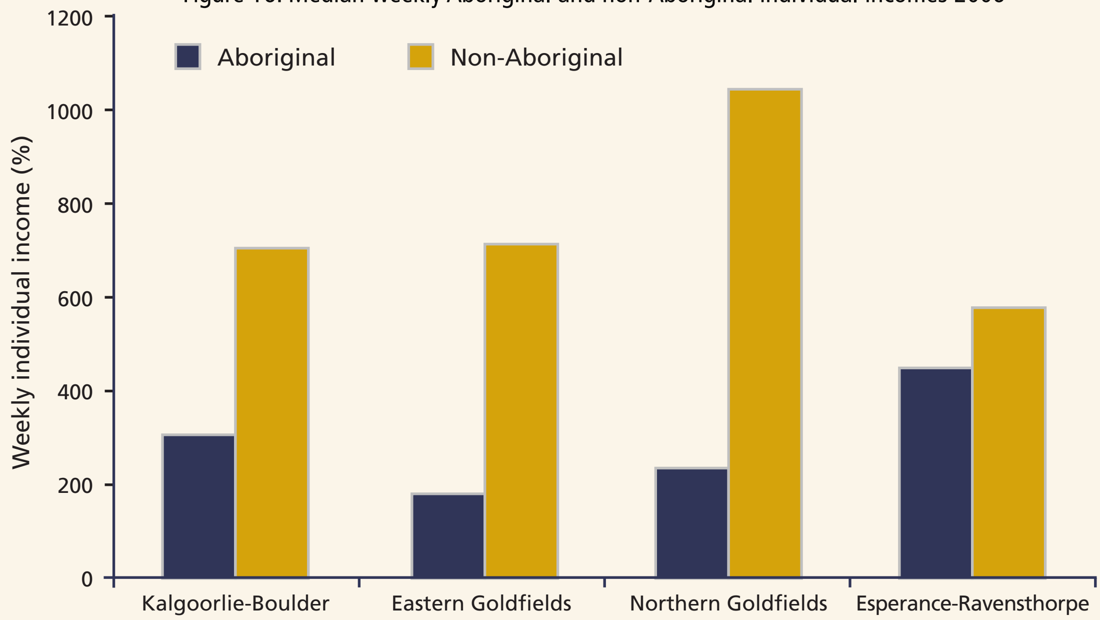
Figure 16 compares Aboriginal and non-Aboriginal median weekly individual incomes across the region in 2006.

In Kalgoorlie-Boulder the median weekly Aboriginal income was $308 which was 43.2 per cent of the median non-Aboriginal weekly income.

The disparity was even greater in the Eastern Goldfields (25 per cent of the non-Aboriginal income) and Northern Goldfields (23 per cent).

In Esperance-Ravensthorpe the median Aboriginal income of $460 was higher than areas to the north at 79 per cent of the non-Aboriginal income.

Figure 16: Median weekly Aboriginal and non-Aboriginal individual incomes 2006



(Source: Australian Bureau of Statistics, 2007)

Future labour demands

Kalgoorlie-Boulder

The next decade is likely to see a substantial expansion in labour demand in Kalgoorlie-Boulder. Continued strong international demand for resources, particularly nickel, is expected to contribute to increasing levels of activity in this sector.

The strong linkages between the resources sector and other industries within Kalgoorlie-Boulder are anticipated to contribute to expanding demand in sectors such as manufacturing, transport, retail trade and a range of services.

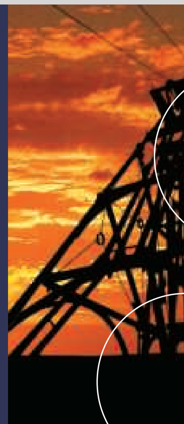
Under the base scenario, total labour demand is expected to increase from 15,126 in 2008 to 16,936 in 2012—an increase of 1,810 (Figure 17). By 2018 total labour force demand is projected to reach 19,625—an increase of 4,499 over the decade, or 3.4 per cent a year.

The high growth scenario sees the labour force increase to 23,755 by 2018 (8,629 additional jobs on the 2008 base) while the low growth scenario has demand rising to 17,255 (2,129 additional jobs on the 2008 base).

The strongest growth will occur in the mining sector, increasing more than 49 per cent between 2008 and 2018. Much of this growth is expected in the period between 2012 and 2018 as continued strong commodity prices and global demand fuel growth in the sector.

Other significant rises are expected in construction; transport; postal and warehousing; and health care and social assistance. Declines are expected in wholesale trade (an industry contracting nationally), agriculture, forestry and fishing, largely on account of the diminishing role of the pastoral industry.

At the specific occupational level, the strongest projected demand is for stationary plant operators, reflecting the considerable demand within the mining sector. The growth for tradespersons and skilled workers is also a noteworthy trend with high demand for occupations such as automotive electricians and mechanics, mechanical engineering trades workers, building and engineering technicians, and electricians.



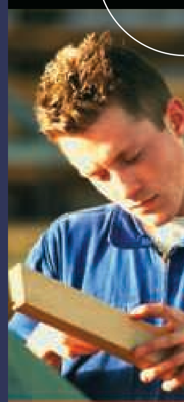
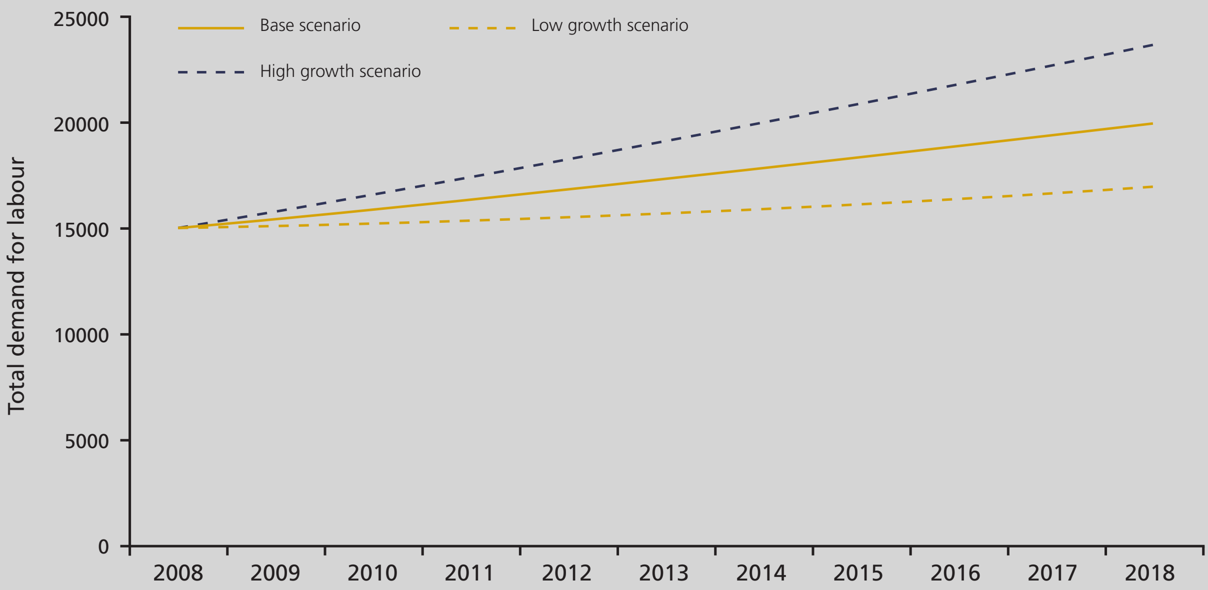


Figure 17: Projected total employment demand Kalgoorlie-Boulder 2008–2018



Underpinning much of the economy is a range of semi-skilled and unskilled occupations, with future demand very high for truck drivers, mining labourers, automobile, bus and rail drivers, and mobile plant operators.

Alongside this is demand in various service and other roles, including demand in the following occupations being particularly prominent sales assistants and salespersons; cleaners and laundry workers; midwifery and nursing professionals; personal carers and assistants; health and welfare support workers; child carers; and school teachers.

Eastern Goldfields

The economy and employment market of the Eastern Goldfields is expected to perform strongly over the next decade. While there are likely to be short term fluctuations in performance over the period, the overall trend is one of employment growth of around four per cent per annum.

Much of the expansion is linked to the continuing strong demand for nickel on international markets.

Under the base scenario, labour demand in the Eastern Goldfields is projected to increase from 3,000 in 2008 to just under 3,400 in 2012 (Figure 18). Should international demand for resources increase in line with expectations, 2018 sees demand at 4,222.

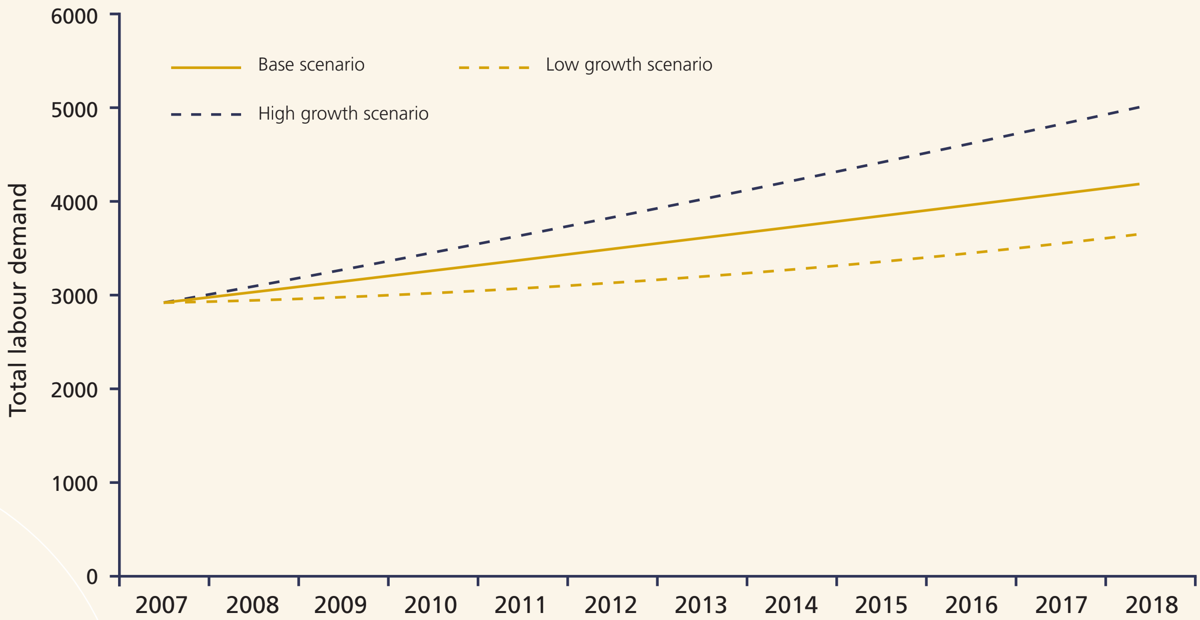
The high growth scenario is based on stronger than present demand for nickel and gold, and sees labour demand rise to 4,943 by 2018—an increase of nearly 2,000 workers on the 2008 levels.

The low growth scenario would see total labour demand rise modestly, peaking at 3,598.

The strongest growth will occur in the mining sector, increasing more than 60 per cent between 2008 and 2018.

Other rises are expected in health care and social assistance (reflecting both local and national expansion in this sector); education and training; and manufacturing and transport.

Figure 18: Projected total employment demand Eastern Goldfields 2008–2018



Decline is expected in the construction, agriculture, forestry and fishing sector, largely on account of restructuring in the pastoral industry, while a modest decrease is expected in accommodation and food services, largely as a result of the increasing concentration of some of these businesses in nearby Kalgoorlie-Boulder.

At the occupational level, demand is strongest in those jobs linked directly to the resources sector. In absolute terms, the largest increase in demand is for stationary plant operators, truck drivers, mobile plant operators, freight handlers and labourers, with those occupations aligned to the mining sector or closely allied industries.

Skilled occupations are likely to be a major driver of growth with strong new demand for mechanical engineering trades workers, electricians, automotive electricians and mechanics, fabrication engineering trades, and physical and natural science professionals.

Growth is also projected for food trades workers and hospitality workers although these are unlikely to be employed in the traditional accommodation and food services sector (eg restaurants, cafes, hotels and motels), instead they are expected to be engaged more directly with the mining industry, often working on site.

Management roles are also projected to increase with notable rises in construction, distribution and production managers, and retail managers.

Northern Goldfields

The past five years have seen the Northern Goldfields experience a resurgence in mineral resource activity. High prices for gold and nickel have seen increased activity in these sectors with the expansion of some existing operations, and the development of new projects.

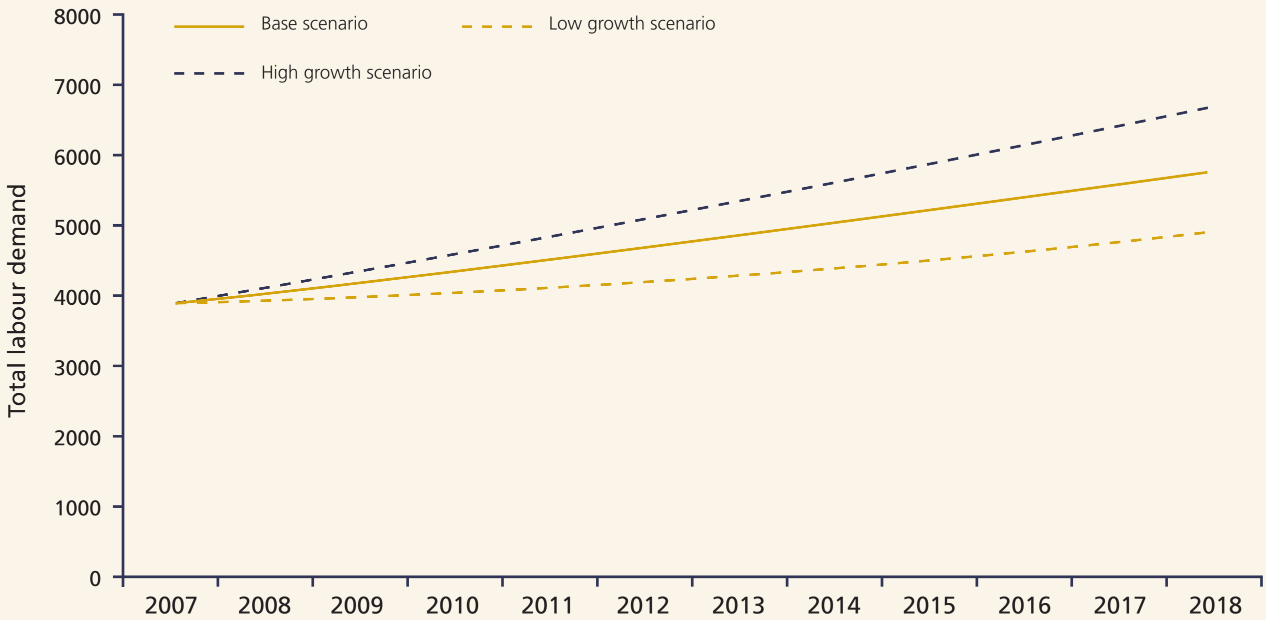
One of the key differences between the labour force of the Northern Goldfields and other parts of the region is the much higher fly-in/fly-out component.

Indeed the majority of workers in the resources sector in the Northern Goldfields are not resident in the region. From a labour market planning point of view, this is important as it means the pool of workers from which the region draws is likely to be somewhat different to Kalgoorlie-Boulders for example.

In overall demand terms, the total number of required workers under the base scenario rises from 3,985 in 2008 to 4,612 in 2012—an increase of 627 employees (Figure 19). By 2018 the labour force is expected to peak at 5,779—a rise over the decade of 1,794 workers. The high growth scenario sees the labour force hit 6,767 in 2018 while the low growth scenario predicts 4,925. Of course projections in this area are extremely difficult given the high dependence on two main commodities and the uncertainty over future commodity prices.

The strongest growth will be in the mining sector, increasing more than 60 per cent between 2008 and 2018. Other significant rises are expected in manufacturing; health care and social assistance; public administration and safety; accommodation and food services; and transport. Decline is expected in the agriculture, forestry and fishing sector, largely on account of declines in pastoralism.

Figure 19: Projected total employment demand Northern Goldfields 2008–2018



In absolute terms, under the base scenario, mining will require the largest supply of additional labour - 1,160 new workers over the decade. Other sectors with high levels of new demand include public administration and safety (191 additional jobs); health care and social assistance (86 additional jobs); construction (76 additional jobs); manufacturing (75 additional jobs); accommodation and food services (55 additional jobs); and retail trade (49 additional jobs).

The occupational growth in the Northern Goldfields is concentrated in those areas of work closely linked to the mining industry. Some of the strongest growth is for stationary plant operators, labourers and truck drivers. In skilled occupations related to mining, demand is centred on mechanical engineering trades workers, engineering professionals, science technicians, fabrication trades workers, and building and engineering technicians.

There is also a need for management and administration expertise with demand expected for general clerks; contract, program and project administrators; office and practice managers; accounting clerks and bookkeepers; and business administration managers.

Outside of the mining sector demand is likely to increase in a range of service areas, notably health and social care. While this is in part driven by the expansion in the minerals sector, it also reflects pre-existing policy settings that are driving increased provision of these services in Aboriginal communities.

Esperance-Ravensthorpe

The Esperance-Ravensthorpe sub-region has a somewhat different set of economic and employment drivers to other parts of the region. While mining is rapidly becoming an important player, employment and economic activity are still driven largely by the broadacre agricultural sector.

Esperance also has an emerging tourism industry and, while this is still relatively small, it is expected to become an increasingly significant part of the local economy over the next decade.

Retirement and lifestyle migration into the town is also a driver of growth. As a regional centre, Esperance also has a range of government services that contributes to demand in relatively specialised occupational groups.

In terms of total demand, under the base scenario the number of jobs is expected to increase from 8,222 in 2008 to 9,141 by 2012—an increase of 918 positions (Figure 20). By 2018 total demand is expected to be 10,917—an increase of 2,695 over the decade. The high growth scenario sees demand rise to 12,794—an increase of 4,571 over the decade—while the low growth scenario would result in demand of 9,291 in 2018.

At the occupational level, demand is spread across a range of different jobs and is less tied to a single sector than in other parts of the region.

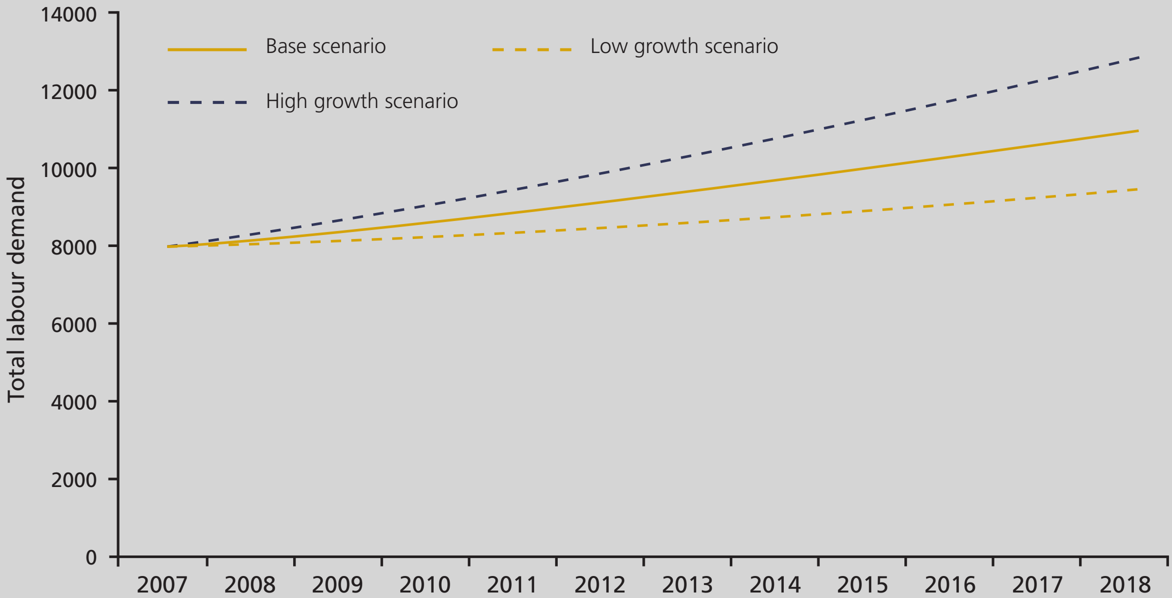
Reflecting the critical role of transport in the region (and the role of the port at Esperance) in supporting a growing population and industry base, the largest increase will be in freight handlers.

The following mining-related occupations are projected to increase rapidly over the next decade: mobile plant operators; stationary plant operators; and truck drivers.

Not all employment in these occupations will be linked to mining, with plant operators and truck drivers working in a range of areas including construction, road building and maintenance, and general freight and transport.

Particularly strong growth is also expected across a range of trades including fabrication engineering trades workers; mechanical engineering trades workers; horticultural trades workers; panelbeaters and vehicle body builders, trimmers and painters; miscellaneous technicians and trades workers; and automotive electricians and mechanics.

Figure 20: Projected total employment demand Esperance-Ravensthorpe 2008–2018



A number of highly skilled occupational areas are expected to increase over the coming decade including natural and physical science professionals; engineering professionals; architects; designers; planners and surveyors; human resource and training professionals; and midwifery and nursing professionals.

Meeting future labour needs

One of the major challenges facing the Goldfields-Esperance region is meeting the current and future demand for labour. In simple terms, there are three main mechanisms for dealing with labour supply:

i) education and training
ii) attraction of new employees (either from other sectors or from other locations)
iii) retention of existing staff.

Attraction and retention

Attracting and retaining employees is one of the major challenges for the Goldfields-Esperance region. Only by attracting new labour and retaining a high proportion of existing labour will the region be able to meet future labour force needs.

Regional perceptions

Across the region there was a view that the Goldfields-Esperance region was perceived as focussed solely on the extraction of minerals with little in the way of significant career opportunities or social and cultural attributes.

Remoteness and isolation were also regularly used to describe wider perceptions of the region.

These were seen as important barriers to attracting staff (and were less of a problem for retention) particularly outside the mining industry.

The region had numerous assets that could be marketed to potential employees and residents. These included safe and vibrant communities; good career pathways; attractive landscapes; coastal living (in the case of Esperance-Ravensthorpe); high levels of transport accessibility and regular flights to Perth; and a strong sense of history and heritage.

Housing

Limited housing options is one of the main barriers to both attracting and retaining staff in the region. There are three interrelated dimensions to this:

i) the availability of housing for rent and purchase
ii) the quality of housing
iii) the cost of housing.

In response, there is a need to:

- increase the rate of land release in the region
- reduce the time required for development assessment and planning approval
- explore options for the provision of low cost accommodation, including shared accommodation for workers, higher density housing and social housing.

Cost of living

The Goldfields-Esperance region is becoming an increasingly expensive place to live. In 1999 the former Department of Commerce and Trade estimated that the cost of living in the region was 7.0 per cent higher than in the Perth metropolitan area.

In part this has been driven by the increasing cost of housing. It has also been driven by rising transport costs associated with the higher price of fuel.

The need for businesses to pay competitive wages also drives a degree of locally concentrated inflationary pressure.

The most acute effects are generally felt by middle and low income earners, meaning many unskilled workers are affected.

Those on fixed award-based incomes also tend to be more affected than those on more flexible wage arrangements.

Salaries

Despite salaries across the region generally being very competitive, there are a number of salary issues affecting the attraction and retention of staff including:

- major income disparities within the region and individual localities.
- small and medium enterprises often in competition with larger employers for staff
- competition with other regions has contributed to a need for salaries to be competitive not only locally but also within a wider geographical context.

In response there is a need to:

- continue to monitor the wage/income differential between the Goldfields-Esperance region and other areas
- explore non-wage forms of remuneration including salary sacrifice and flexible employment options
- continue to approach the State and Australian Governments for modification to the taxation zone allowance to better recognise the needs of the region
- encourage the provision of a more flexible wage system for public sector employees, ensuring a greater degree of parity with local wages and costs of living. Subsidies for air conditioning, water, electricity and gas might also be considered. A limited number of free or subsidised trips each year to the Perth metropolitan area is also likely to encourage greater uptake of remote jobs.

Social services and child care

Social services, such as employment services and welfare services were widely available with the clear exception of the more remote parts of the Northern and Eastern Goldfields. Overall social services were seen as a minor part of the attraction and retention equation.

The situation with child care is quite different. The limited number of child care providers and places is a major problem in the region. Moreover, the cost of child care was generally regarded as excessively high, further adding to the cost of living in the region.

In response, there is a need to:

- increase the number of child care facilities in the region
- increase the number of people with skills and qualifications in child care—local training through Curtin Vocational Training and Education Centre (VTEC) is a clear pathway.

Education and training facilities

One of the major determinants of residential location for both families and young people is the availability and perceived quality of education and training facilities.

While there was a general view that schooling in the region was adequate, there were perceived issues that affected attraction and retention. These include:

- more limited Year 11 and 12 course options than in metropolitan schools
- a perception that young people studying in the region were more likely to receive lower Tertiary Entrance Scores than if studying in a metropolitan school
- limited options for tertiary study, comprising only offerings from the Western Australian School of Mines and the Centre for Regional Education
- high rates of teacher turnover and fewer experienced teachers in the region.

In response, there is a need to:

- promote the range of educational opportunities in the region
- highlight the levels of excellence achieved by local students
- highlight the quality of facilities and teachers in the region
- develop strategies to reduce teacher turnover (Edith Cowan University, 2007).

Career pathways

There is a widely held view that opportunities for career progression in the region are poor. The region is often viewed as a 'stepping stone' in the employment ladder rather than as a place in which to build a career.

In response, there is a need to:

- better promote the career pathways that exist in the private and public sectors
- reward high quality staff through promotion opportunities and accelerated salary progression.

Employment flexibility

There is a growing consensus that employment flexibility is an important component of attraction and retention.

In some sectors, notably mining, 12 hour shifts and relatively inflexible workplace conditions were seen as a barrier to attraction and retention of staff[3]. However, it was also stressed that this is now an entrenched system and is unlikely to change.

Other sectors, however, were able to increase job flexibility through job sharing, part-time work, flexible hours and deferred salary agreements (eg 80 per cent pay over five years with 12 months leave in the fifth year).

Greater employment flexibility can also be a means of offering forms of non-wage remuneration, thereby helping to reduce wage costs.

In promoting more flexible employment opportunities, there is a need to:

- inform employers of the benefits of more flexible workplace arrangements
- provide guidance on how more flexible workplace arrangements might be adopted.

Fly-in/fly-out workers

Fly-in/fly-out labour is a critical means of supplying workers to the resources sector, particularly in the Northern Goldfields. There are, however, challenges associated with fly-in/fly-out work including regular periods of separation from families, isolation and fatigue.

While fly-in/fly-out labour can offer relatively straightforward access to a large pool of labour, Skills DMC (2008) found that it can also have a range of negative implications for employers. Perhaps the most significant of these is extremely high rates of employee turnover in fly-in/fly-out locations.

There is a need to:

- better determine the impact of fly-in/fly-out mining on employers particularly in terms of recruitment and retention costs
- better determine the social and economic impacts associated with fly-in/fly-out mining operations
- put in place continual industry monitoring of the health and wellbeing of the fly-in/fly-out workforce
- determine whether further flight connections with capital cities in other Australian states are a viable and acceptable means of increasing the available labour pool in the region.

[3] This was also seen as impacting negatively on aspects of community life such as participation in sporting clubs and voluntary organisations.

The life cycle

Attraction and retention issues are, in part, linked to the stage of an individual or family in the life cycle. The most mobile parts of the labour force in the region are those workers between the ages of about 20 and 35.

There is a significant outflow of young 15 to 19 year olds and an inflow of workers in their 20s and early 30s.

Out-migration becomes increasingly dominant in the older age groups. The exception is Esperance-Ravensthorpe where relatively high rates of retiree and lifestyle migration are linked to the growth in older age cohorts.

Thus, attraction strategies need to take into account the demographic flows that characterise the region. Ideally, however, strategies should aim to 'stretch' the age profile being targeted where possible, thereby increasing the prospects of attracting workers.

It is also important that any attraction and retention strategy takes into account the different 'generational sensibilities'. There is, for example, a growing body of evidence to suggest that Generation Y (born 1980–1995) has quite different employment and lifestyle aspirations to, say, Generation X (born 1965–1980) or Baby Boomers. Generation Y is often regarded as being more ambitious, more willing to change jobs and less willing to 'serve time' before seeking promotion. Understanding such characteristics helps employers tailor employment packages/strategies to suit the needs of this population.

A somewhat different life cycle issue is the retirement of the Baby Boomer population. This large cohort is currently moving into retirement and many government agencies and industry groups are seeking ways to keep this population engaged in the labour force to some degree. Not only does this population offer considerable experience and capacity for mentoring, it is a valuable source of labour in its own right.

In terms of life cycle issues, and attraction and retention in the Goldfields-Esperance region, there is a need to:

- ensure employers are aware of the different aspirations and needs of various age cohorts
- develop strategies to keep older workers engaged in the labour force through part–time or casual employment options, mentoring arrangements and flexible employment arrangements.

Graduate coordination

There is a need to tackle attraction and retention issues much earlier in the life cycle than is the case at present.

A particular weakness within the region was the failure to engage more strategically with young people based in educational institutions outside of the region.

Research shows that the more engaged young people are with regions, the more likely they are to be willing to work in them (Davies and Tonts, 2007).

While there are a number of institutions that engage students with the region (notably the Rural Clinical School of Western Australia), there are opportunities for stronger linkages to be formed between the region and its employers, the vocational education and training (VET) and university sectors.

There is a need to develop linkages between the region's priority employment areas and relevant departments in metropolitan TAFE**WA** colleges and

universities. Clear linkages can be built in the areas of geosciences, geographical sciences, engineering, environmental management, urban and regional planning, health and welfare, and education.

International migration

Skilled migration is an important source of labour for a growing number of industries in the Goldfields-Esperance region. There are however, a number of issues associated with international migration and migration schemes including:

- lack of knowledge on the part of some Australian registered and offshore migration agents and government migration officials about the real nature of employment and living in the region – the outcome is often misinformation to potential migrants
- difficulties with English as a second language for some new migrants and their families
- socio-cultural differences and misunderstandings between the wider regional population and workforce, and new migrants
- lack of knowledge among some employers about the range of skilled migration schemes available, and their eligibility to participate
- some partners of 457 and other visa holders are ineligible to work while other migrants (not necessarily on visa schemes) have skills that are not recognised in Australia yet could still be valuable to the local economy.

As a consequence, there is a need for:

- local organisations to continue to work with the Australian Government to further tailor migration programs to local needs
- increased awareness by migration agents and government migration officials about employment and living in the region
- ongoing social support and networking opportunities for new migrants in the region
- improved distribution of information to employers, especially small and medium enterprises, about skilled migration schemes.

Education and training

One of the main means of dealing with labour supply issues is through the education and training system.

In discussing the education and training needs of the Goldfields-Esperance region, it is important to recognise that the majority of the region's future workforce is not likely to be educated and trained locally.

High levels of population mobility and turnover suggest that the majority of the workforce is likely to be trained in other parts of Western Australia (and in some cases other parts of Australia or overseas). Accordingly, the education and training needs of the Goldfields-Esperance region must be tackled at both local and State levels.

Vocational education and training

The major provider of local vocational education and training (VET) is Curtin Vocational Training and Education Centre (Curtin VTEC).

Curtin VTEC delivers 92 per cent of all VET in the region (KPMG, 2007).

Curtin VTEC offers courses across a range of subject areas including engineering, automotive, business and management, computing and information technology, and horticulture and agriculture.

Courses are offered in both Kalgoorlie and Esperance, although course offerings in Esperance are more limited.

meeting future labour needs

One of Curtin VTEC's major roles is the support of apprenticeships and traineeships. In terms of apprenticeships, the majority are concentrated in the automotive, electrical, mechanical and fabrication trades. Traineeships are wide spread across a range of courses, including business and management, sales and personal services, and community services. Curtin VTEC also offers an entry level course in workplace readiness which aims to improve literacy, numeracy and other basic workplace skills.

In terms of the labour force needs of the region, the following trends are noteworthy:

- an increase of 18 commencements in certificate III automotive trades between 2005 and 2007
- stable enrolments in certificate III electrical and electronics trades
- an increase of 20 commencements in certificate III fabrication trades
- slight decreases in mechanical engineering trades though a strong overall pattern of enrolment
- modest decreases in Certificate II and Certificate III in Business
- a rise of 13 commencements in hospitality related courses.

Between 2005 and 2007 the total number of trainees and apprentices in training at Curtin VTEC increased by 2.6 per cent for apprenticeships and traineeships combined. This compares to the 16.7 per cent for Western Australia. Apprenticeship commencements alone increased by 23.4 per cent during this period.

Of the 35 skilled or semi-skilled occupations identified as areas of high demand, Curtin VTEC addresses 14 either fully or in part.

In addition to Curtin VTEC there are a number of other providers of vocational education and training. It should be stressed, however, that these private and not-for-profit registered training organisations (RTOs) account for less than 10 per cent of all VET delivery in the region.

Many of these RTOs address critical skill shortage areas in the Goldfields-Esperance region. At present, however, the level of coordination across private and not-for-profit RTOs is limited.

To ensure the adequacy of the local VET system there is a need to upgrade facilities and invest for growth in the sector.

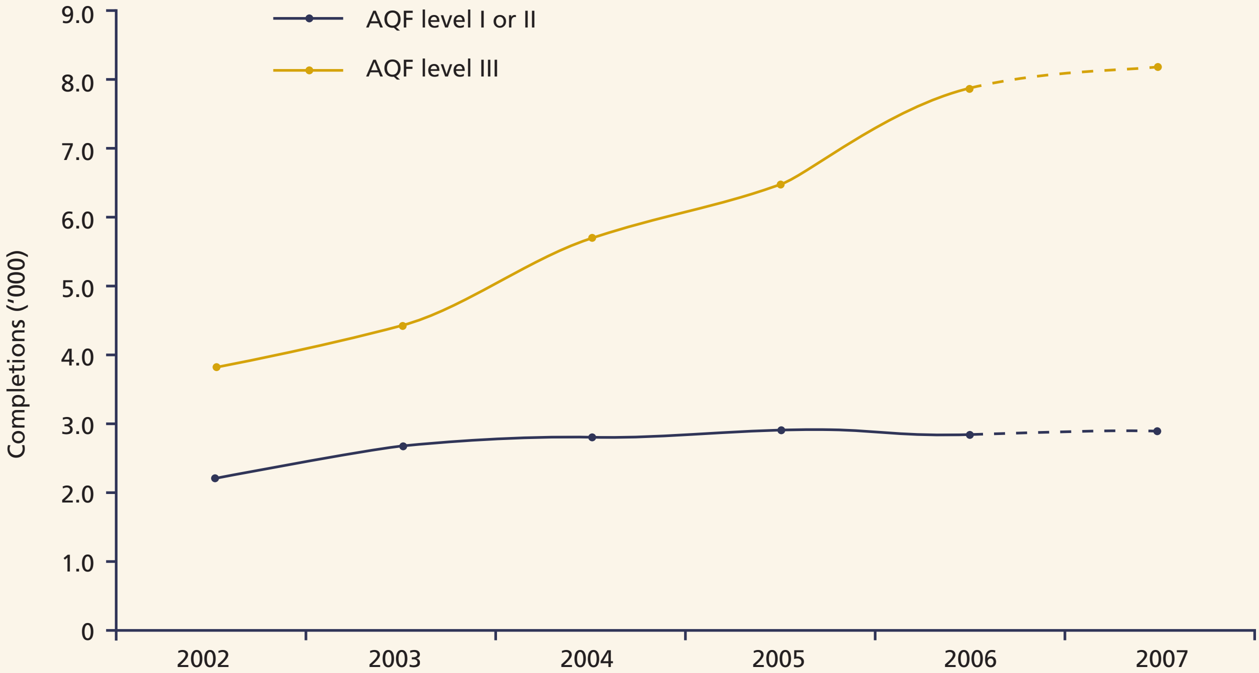
Another significant issue is ensuring that industry remains committed to apprenticeships and fulfils its role in the training system.

Given the relative size of the Goldfields-Esperance population and the extent of projected future demand, local education and training alone will not meet the needs of the region. Indeed the projected growth of total labour demand highlights the need for it to be thoroughly embedded within broader State education and training strategies. From a Statewide perspective, meeting the labour force needs of the region is critical given the contribution of Goldfields-Esperance to export earnings, gross State product, total capital formation and State revenues.

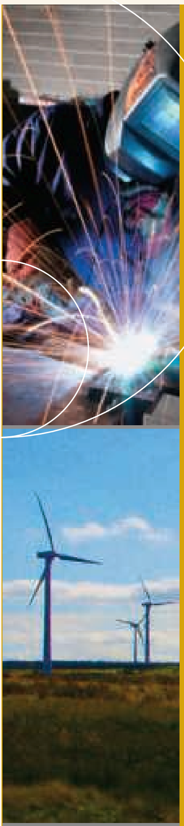
There is every indication that the State Government is responding to the labour needs of both the region and its key economic drivers through adjustments to the education and training system. Between June 2002 and June 2007 the number of apprentices and trainees in Western Australia increased from 21,300 to 34,200 —a rise of 60.6 per cent or 12.1 per cent a year.

The total number of completions from traditional trades has increased steadily since 2002, rising by more than 31 per cent.

Figure 21: Completions of AQF Level I, II and III, Western Australia, 2002-2007[4]



(NCVER, 2007)



This will rise further with growing enrolment numbers over the past few years.

One of the key characteristics of the growth in training has been the number of people at Australian Qualification Framework (AQF) certificate III level (Figure 21). While AQF level I and II completions increased from 2,300 to 2,900 between 2002 and 2007, completions at level III rose from 3,900 to 8,200—an increase of 110.2 per cent. It is important that strong growth is maintained at this higher level if Western Australia is to successfully tackle existing skilled labour shortages, as well as projected new demand in the future.

University level education

The major provider of university level education in the region is Curtin University of Technology. Perhaps the most well known Curtin enterprise in Kalgoorlie is the Western Australian School of Mines which offers a range of degree programs across mine engineering, geology, geophysics, metallurgy, surveying, and spatial sciences (eg geographic information science).

[4] Note that the 2007 statistics are NCVER estimates.

The majority of these degree programs are offered solely in Kalgoorlie while others (eg spatial sciences) are offered in part at the Perth campus. The degrees are highly attuned to the needs of the region's mining sector with industry advisory boards providing input to the curricula.

In addition to degrees taught through the WA School of Mines, Curtin also offers a number of degrees through the Centre for Regional Education. This Centre has nodes in Kalgoorlie and Esperance, offering a bridging course and a number of degree programs.

Through the Centre, it is possible to complete an entire Bachelor of Arts and Bachelor of Education (Primary Education and the conversion course for qualified teachers) in Esperance and Kalgoorlie.

The first year of a Bachelor of Commerce is available in both Esperance and Kalgoorlie while studies in nursing can be undertaken in Kalgoorlie only.

The other major university presence in the region is the Rural Clinical School of Western Australia – a joint venture between The University of Western Australia and The University of Notre Dame. The Rural Clinical School provides education in rural and remote medicine and clinical practice for advanced level medical students.

The school gives students an opportunity to develop experience in rural health, Aboriginal health care and working in remote communities. It is based on the notion that those graduates with some exposure to and familiarity with regional areas might also be willing to live and practise in non-metropolitan areas.

In addition to regional university offerings, non-local university campuses also contribute to the region's skilled labour force. All four public universities in Western Australia, with total enrolments of over 40,000 non-international students, offer courses across a range of disciplines relevant to the Goldfields-Esperance region.

To be allocated places, universities must present a case justifying the additional funding. Increasingly, the justification is based on evidence presented by industry regarding current and future labour force needs. Accordingly, there are considerable opportunities for industry and regional stakeholders to engage with the university sector to campaign for increased support in particular areas of study.

Higher enrolments in education and training in the metropolitan area do not necessarily flow in a geographical sense to other regions. Indeed, there is a strong centralisation tendency within Western Australia that tends to lock many graduates into the metropolitan area (Davies and Tonts, 2007). There is considerable evidence to support the notion that those people with previous exposure to rural and remote life, even for a short time, are generally more willing to live and work in regional areas (Davies and Tonts, 2007). This helps to overcome one of the major barriers to young people migrating into rural and remote areas: a 'fear' or misunderstanding of the unknown.

Given this, it is important that opportunities are available for university students to engage with the region.

Providing opportunities for students to engage in field trips, residential field schools and work placements are all means of increasing engagement with regions and potentially expanding the pool of workers willing to live and work in the region.

Aboriginal employment

As outlined in chapter 5 of the background report, increasing Aboriginal employment should not necessarily be seen as a major means of tackling labour shortages in the Goldfields-Esperance region. Increasing Aboriginal employment would, at best, have a modest impact on labour supply. However, as part of a broader regional development strategy, it should be a priority.

Improving Aboriginal employment opportunities has been demonstrated to have a number of positive benefits including decreased dependency on welfare; improved economic wellbeing; improvement in physical and mental health; and higher levels of social cohesion (Rowse, 2002).

Part of addressing the barriers to employment involves education and training. There are already a number of programs operating in the region that provide certificate I or non-accredited training in areas such as workplace readiness, literacy and numeracy, and business studies. These qualifications do not translate into employment.

To address this problem, a number of stakeholders, including Curtin VTEC and the Goldfields Esperance Development Commission, are currently investigating ways to better match employment needs with education and training, as well as increasing Aboriginal engagement with the VET sector.

A major related issue is the relatively low uptake of apprenticeships and traineeships by Aboriginal people. The recommendations of the Skills Formation Taskforce are aimed at directly addressing this issue.

These include:

- introducing joint TAFE**WA**-industry work readiness programs with employment outcomes that provide the skills and knowledge needed to fill jobs set aside for those who successfully complete the programs
- introducing school-based pathway programs for Aboriginal students to lead them through vocational education and training and pre-vocational skills in Years 8 and 9 to employment-based training in Years 10, 11 and 12
- introducing performance measures for training providers that require the demonstration of direct linkages between training and employment for Aboriginal people
- aligning the training provider funding model with the actual cost of delivering employment focused training for Aboriginal people
- increasing funding for Aboriginal apprenticeships and traineeships to enable group training organisations to provide:
  - pastoral care and work readiness skills for those who have already left school
  - reduced charge–out rates for small businesses.

For the Goldfields-Esperance region it is important that a focused Aboriginal employment strategy is developed that brings together the interests of government agencies, non-government organisations, Aboriginal groups and industry organisations.

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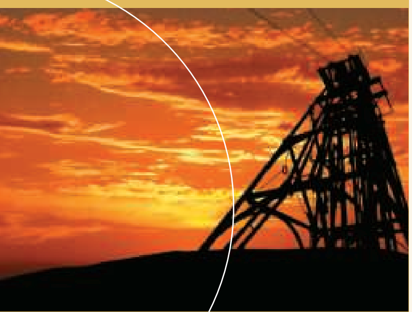


Goldfields-Esperance Workforce Plan

Introduction

This section is the Goldfields-Esperance Workforce Plan. It is based on the data presented in the background report, drawing on evidence from:

- background literature and policy
- an analysis of regional economic and employment dynamics
- modelling of workforce demand at the sectoral and occupational levels
- an assessment of labour supply including education and training; and attraction and retention
- consultations with regional stakeholders
- the regional SWOT analysis.

Scope of the plan

The plan is designed to provide a map enabling regional stakeholders to identify and address key strategic workforce issues. Specifically, the plan is designed to be coordinated and implemented by the Goldfields-Esperance Workforce Development Alliance (GEWDA). Potential stakeholders include but are not limited to:

- State Training Board
- Department of Education and Training
- Goldfields-Esperance Development Commission
- WA and Australian Government agencies with a presence in the region
- local government
- peak industry groups
- not-for-profit organisations in the region
- regional employers
- Curtin VTEC.

The plan contains a series of research and advocacy activities to be coordinated by GEWDA. The plan also outlines a series of action points which should be developed by GEWDA into projects. It is important to note that the plan only includes action points that have been deemed realistic and achievable, and which are based on the evidence collected through this study. It does not focus on major areas of, for example, national macro-economic or employment policy but rather tackles issues that can be addressed within existing policy frameworks or with realistic policy modifications. The plan is divided into three main sections:

1. Attraction and retention
2. Education and training
3. Monitoring and evaluation

The plan includes 26 items which are categorised as: actions; research activities or advocacy activities. Table 2 presents a list of these 26 items.

The plan should not be seen as a static document. The items listed within the workforce plan are developed closely from the findings of the study and are provided to GEWDA only as broad recommendations. GEWDA and potential partners will refine and prioritise the recommendations based on the resources available. It is intended that the plan remains a flexible document which addresses needs and issues as they arise and can be adapted to emerging economic, social and political realities. It is therefore recommended that the plan be updated on a tri-annual basis.

Table 2: Workplan actions, research activities and advocacy activities

Attraction and retention	
Action 1	Online interactive regional employment and living opportunities website
Action 2	Regional branding strategy for employment opportunities
Action 3	Improving migration agents' knowledge and understanding of regional needs and opportunities
Research activity 1	Understanding skilled migration opportunities
Research activity 2	Fostering industry support for regional sport and arts
Research activity 3	Identifying strategies to attract and retain young people
Advocacy activity 1	Housing and land availability and affordability
Advocacy activity 2	Child care availability and affordability
Advocacy activity 3	Regional financial allowances and benefits
Advocacy activity 4	Government investment in social and cultural infrastructure
Education and training	
Action 4	Clear school to training to career pathways
Action 5	Clear training to career pathways for Aboriginal people
Action 6	Enhancing linkages with VET and school-based apprenticeships
Action 7	Enhancing linkages with metropolitan tertiary education and training providers and regional apprenticeships, traineeships and career pathways
Action 8	Improving awareness of opportunities to take on trainees and apprenticeships
Action 9	Mentoring Aboriginal people in training and education
Action 10	Employment strategy for Aboriginal people
Research activity 4	Understanding barriers to participation in VET
Research activity 5	Overcoming barriers to meaningful employment for Aboriginal people
Research activity 6	Feasibility of new training options
Research activity 7	Opportunities for a research centre of excellence in mining related education
Advocacy activity 5	Investment in facilities and infrastructure at Curtin VTEC
Monitoring and evaluation	
Action 11	Evaluation of regional representation efforts
Research activity 8	Monitoring labour force trends
Research activity 9	Understanding the nature of regional labour movements and the flow-on impacts for labour supply, demand, attraction and retention
Research activity 10	Understanding push and pull factors related to labour migration

Goldfields-Esperance Workforce Plan: attraction and retention

Overview of issues

As discussed in section 7.4 of the background report, attracting and retaining employees is one of the major challenges facing the Goldfields-Esperance region. The report concluded that only by attracting new labour, and retaining a high proportion of existing labour, will the region be able to meet future labour force needs.

Key issues that influence attraction and retention in the Goldfields-Esperance region are outlined below.

Regional perceptions

Non-residents tended to view the region as focussed solely on the extraction of minerals, with little in the way of significant career opportunities and limited social and cultural attributes. Non-residents also tended to hold the view that the region was remote and isolated. These views were seen as important barriers to attracting staff, particularly those outside of the mining industry.

Limited housing options

In a number of centres, notably Kalgoorlie-Boulder, Esperance, Ravensthorpe and Hopetoun, housing availability for purchase and rent is extremely limited making it difficult for workers and their families to find appropriate accommodation. The poor quality of available housing deters potential in-migrants.

Cost of living

The very high relative cost of living in the region negatively influences both attraction and retention of skilled labour, particularly for families.

Salaries

There are major income disparities within the region and individual localities. This contributes to difficulties in retaining staff in lower paid jobs, such as cleaners, food preparation assistants and sales assistants. High levels of wage competition has increased turnover in the labour market, presenting major challenges for retention.

Social services and child care

While social services are generally viewed as being adequate in most areas, child care services are severely limited. This negatively influences both attraction and retention of labour.

Education and training facilities

Perceived limitations in senior secondary school and tertiary education options propelled significant out-migration of those seeking such education. Within the region there is a clear pattern of mobility around various stages in the education cycle, with families often leaving the region as children make the transition to secondary school or tertiary study.

Career pathways

One of the barriers to attraction and retention in the region is a view that opportunities for career progression in the region are poor. Employees tended to view the region as a ‘stepping stone’ in the employment ladder rather than as a place in which to build a career.

Employment flexibility

Stakeholders within the region noted a need to better balance work, personal and family commitments. In some sectors, notably mining, 12 hour shifts and relatively inflexible workplace conditions were seen as a barrier to attraction and retention of staff.

Fly-in/fly-out workers

Due to a range of social factors, fly-in/fly out employers have considerable difficulty in retaining staff. Social factors influencing this trend include regular periods of separation from families, isolation and fatigue.

The life cycle

Attraction and retention issues are, in part, linked to the stage of an individual or family in the life cycle. Different generational sensibilities also influence attraction and retention. For example, Generation Y (those aged between approximately 10 and 30 years) is often regarded as being more ambitious, more willing to change jobs, and less willing to 'serve time' before seeking promotion than Generation X (those aged between approximately 30 and 45 years).

International migration

Negative influences on the attraction of migrant labour to the region are:

- a lack of knowledge by some agents and government migration officials about the real nature of employment and living in the region
- a lack of knowledge among some employers about the range of skilled migration schemes available, and their eligibility to participate
- a lack of recognition of the skills of some internationally trained migrants.

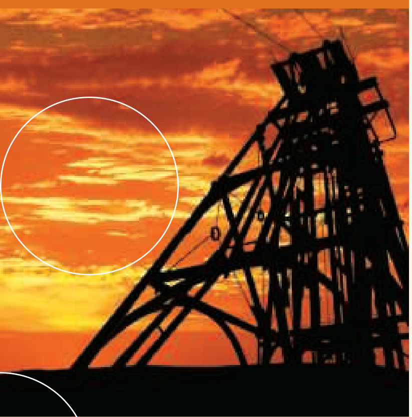
Retention of skilled migrant labour is influenced by socio-cultural differences and misunderstandings between the wider regional population and workforce, and new migrants.

Given the complexity of issues influencing labour attraction and retention in the Goldfields-Esperance region, the solution is not simple. Rather, a series of actions and research and advocacy activities should be undertaken to target different aspects of labour attraction and retention. The following section outlines suggested actions, research and advocacy activities that should be coordinated by GEWDA.

Attraction and retention actions, research and advocacy activities

Action 1	Online interactive regional employment and living opportunities website
Objective	To develop a website which provides current and potential residents with information on employment and training opportunities, social and cultural opportunities, potential developments, and employment and training success stories. The website should have a discussion page for users.
Milestone	Website operating as a live and interactive site. Website linked to other websites of relevance to users.
Potential partners	Kalgoorlie-Boulder Chamber of Commerce and Industry. Goldfields Esperance Development Commission. Local government.
Timeframe	2010

Action 2	Regional branding strategy for employment opportunities
Objective	To develop a 'brand' that represents the diverse and rewarding employment opportunities and careers available in the Goldfields-Esperance region. A strategy to ensure the wide promotion of this 'brand' should be developed concurrently.
Potential partners	Goldfields Esperance Development Commission.
Timeframe	2010



Action 3	**Improving migration agents' knowledge and understanding of regional needs and opportunities**
Objective	To develop and implement a strategy to enhance migration agents' familiarity and knowledge of regional employment needs, and employment and lifestyle opportunities in the region. This could include workshops, guided field visits or information packages.
Potential partners	Goldfields Esperance Development Commission. Local industry and business representative groups. Department of Immigration and Citizenship.
Timeframe	2010
Research activity 1	**Understanding skilled migration opportunities**
Objective	To research opportunities for skilled migration for existing local businesses. The analysis should be based on Australian and New Zealand Standard Industry Classification categories (ABSSNZ,2006b). The research should also specify what type of immigration/visa arrangements would be most suitable. The findings from this research should be incorporated into the website developed in action 1 and disseminated to representative groups for local business and industry.
Potential partners	Goldfields Esperance Development Commission. Chamber of Commerce and Industry. The Chamber of Minerals and Energy. Small Business Development Corporation. Department of Immigration and Citizenship.
Timeframe	2011
Research activity 2	**Fostering industry support for regional sport and arts**
Objective	To research existing and emerging opportunities for private industry to invest in local sport and arts activities. This investigation should include recognition of existing government programs to promote regional sport and arts and how these have changed over the last decade. The investigation should also include information on existing involvement from industry in sporting and arts events in the region. Furthermore the investigation should examine the social and economic impact of large and small scale sporting and art events in the region and identify potential social benefits to industry. Based on the information gathered though this research, a marketing and/or advocacy strategy should be developed to encourage further private investment in sporting and arts activities in the region.
Potential partners	Goldfields-Esperance Development Commission. Department of Culture and the Arts. Department of Sport and Recreation. Country Arts WA. Local government. Local art and theatre groups. Local sporting clubs.
Timeframe	2012
Research activity 3	**Identifying strategies to attract and retain young people**
Objective	To research social, economic and career barriers to in-migration of people aged 20–29 years. This research should focus on young people based in the Perth metropolitan area and also those in other regional centres in Western Australia. Furthermore, the study should focus on young people who have recently completed, or are near completion of, tertiary education and/or skills training.
Potential partners	Goldfields Esperance Development Commission. Department of Education and Training. Various training and education providers.
Timeframe	2012

Advocacy activity 1	Housing and land availability and affordability
Objective	To influence relevant State Government agencies and ministers to improve awareness of the need to increase the rate of residential land release and high quality affordable residential development in the region. Efforts should also focus on raising awareness of the need to improve low cost housing options in the region. They should emphasise the wide reaching social and economic implications of failing to address housing availability, quality and cost to Western Australia, particularly in relation to labour force attraction and retention.
Potential partners	Goldfields Esperance Development Commission. Federal Member for Kalgoorlie. Members of State Parliament.
Timeframe	2011
Advocacy activity 2	**Child care availability and affordability**
Objective	To influence relevant State Government agencies and ministers to improve awareness of the need to increase child care availability and enhance affordability in the region. Efforts should focus on emphasising the implications for labour force attraction and retention and the resultant negative social and economic impacts on the region.
Potential partners	Goldfields Esperance Development Commission. Federal Member for Kalgoorlie. Members of State Parliament.
Timeframe	2011
Advocacy activity 3	**Regional financial allowances and benefits**
Objective	To influence relevant State and Australian Government agencies to heighten awareness of the potential social and economic benefits of implementing a special taxation zone allowance across the region. Efforts should focus on linking such a strategy to improved attraction and retention of skilled labour. Concurrently, campaign efforts should also focus on highlighting the potential benefits of increased living subsidies for public sector employees in the region in terms of labour attraction and retention.
Potential partners	Goldfields Esperance Development Commission. Federal Member for Kalgoorlie. Members of State Parliament. Chamber of Commerce and Industry.
Timeframe	2011
Advocacy activity 4	**Government investment in social and cultural infrastructure**
Objective	To influence relevant State Government agencies to increase Government investment in infrastructure to support social and cultural activities in the region.
Potential partners	Goldfields Esperance Development Commission. Federal Member for Kalgoorlie. Members of State Parliament. Department of Culture and the Arts. Department of Sport and Recreation. Country Arts WA. Curtin VTEC.
Timeframe	2012

Goldfields-Esperance Workforce Plan: education and training

Overview of issues

One of the major challenges facing the Goldfields-Esperance region is meeting the current and future demand for labour. One of the main methods of dealing with labour supply issues is through the education and training system. Importantly, for the Goldfields-Esperance region, the majority of the workforce is trained in other parts of Western Australia (and in some cases other parts of Australia or overseas). Accordingly, the education and training needs of the Goldfields-Esperance region have to be tackled at both local and State levels.

Regional education and training providers do supply considerable services and opportunities to the region. The major provider of local vocational education and training is Curtin VTEC. The major provider of university level education in the region is Curtin University of Technology which has the Western Australian School of Mines based in Kalgoorlie and the Centre for Regional Education with small campuses in Kalgoorlie and Esperance.

Key education and training issues related to labour supply in the Goldfields-Esperance region include the following:

- There are strong linkages between the local education and training system and local industry expertise and the extent to which courses are attuned to local needs are strengths of the system.
- University level offerings in the region are limited and restricted to the activities of the Western Australian School of Mines and Curtin's Centre for Regional Education.
- The level of coordination between private and public RTOs regarding courses offered and structured career pathways is limited.
- There is significant demand for skilled labour in a number of areas which is not being met by local RTOs. Possible courses that could be offered to enhance the supply of locally needed skills include Certificate III in General Plumbing and Gasfitting; Certificates II, III and IV in Mining Operations (Processing); and Certificates II and III in Mining (Geoscience Practices).
- Based on projected labour needs over the next decade there is a requirement for additional education and training options relevant to the occupations of automotive electricians and mechanics; child carers; electricians; fabrication trades workers; mechanical engineering trades workers; and health and welfare support workers.
- Based on projected labour needs over the next decade there is a need to strengthen locally offered education and training in the areas of automotive trades; electrical and electronic trades; fabrication engineering trades; mechanical engineering trades; and carpentry and joinery.
- There are low enrolments in a number of courses which are identified as areas of future critical need within the region. These include general construction; children's services; out of school hours care; teacher's assistant; hospitality; aged care; nursing; and agriculture.
- Enrolment in university courses tends to be cyclical, with enrolments increasing at times of high labour demand and low enrolments during downturns. Given that most degrees are of three to four years duration, the enrolment cycles do not often neatly match the needs of industry and business.

- There are a number of programs in operation in the region that provide training and education options specifically designed to overcome education-related barriers faced by Aboriginal people seeking employment in the region. Largely, these are certificate I or non-accredited training in areas such as workplace readiness, literacy and numeracy, and business studies. This training, however, is usually insufficient to meet the needs of the labour market. Related to this, there is a relatively low uptake of apprenticeships and traineeships by Aboriginal people in the region.

Given the complexity of issues influencing education and training provision and uptake in the Goldfields-Esperance region, proposed below are a series of actions, research and advocacy activities designed to enhance the contribution of existing education and training providers. The following section outlines suggested actions, research and advocacy activities that should be coordinated by GEWDA.

Education and training actions, research and advocacy activities

Action 4	**Clear school to training to career pathways**
Objective	To identify pathways between secondary education and tertiary training and education options through to regional employment opportunities. The purpose of this action should be to educate locally based young people, and their parents or guardians, on the opportunities for accessing high quality education and training in the local area and the related regional careers potential. The information should be disseminated widely in the region through schools and other education and training providers.
Potential partners	Curtin VTEC. Department of Education and Training. Local secondary schools. Other regional training providers.
Timeframe	2009
Action 5	**Clear training to career pathways for Aboriginal people**
Objective	To identify pathways for locally based Aboriginal people who are seeking to participate in the skilled labour force. Pathways should give specific attention to the cultural, educational and financial barriers that are often faced by Aboriginal people in the region (as discussed in section 7.3 of the background report).
Potential partners	Curtin VTEC. Department of Education and Training. Local secondary schools. Other regional training providers. Job network providers.
Timeframe	2009
Action 6	**Enhancing linkages with VET and school-based apprenticeships**
Objective	To enhance existing linkages between VET and school-based apprenticeships to account for current and predicted skills need areas. This action should consider actions 4 and 5 in ensuring that clear pathways between schooling and careers are identified and promoted.
Potential partners	Curtin VTEC. Department of Education and Training. Skills DMC. Local secondary schools. Other regional training providers.
Timeframe	2010

Action 7	Enhancing linkages with metropolitan tertiary education and training providers and regional apprenticeships, traineeships and career pathways
Objective	To enhance linkages with metropolitan based TAFE**WA** and university programs to increase metropolitan based students' engagement with various aspects of life and work in the region. A possible approach to achieving this objective could include encouraging field excursions to the region particularly for those based in the environmental and earth sciences, health science and education.
Potential partners	Goldfields Esperance Development Commission. Curtin VTEC. Centre for Regional Education.
Timeframe	2011
Action 8	Improving awareness of opportunities to take on trainees and apprentices
Objective	To work with local business representative groups to improve employers' knowledge of the Skills Formation Taskforce reforms and the subsequent opportunities to take on trainees and apprentices. A possible approach to achieving this objective could involve summarising the changes made though the Skills Formation Taskforce reforms and highlighting how this could benefit local small to medium enterprises. This information should be added to the website developed in action 1.
Potential partners	Curtin VTEC. Skills DMC. Chamber of Commerce and Industry. The Chamber of Minerals and Energy. Local business representative groups.
Timeframe	2012
Action 9	Mentoring Aboriginal people's participation in training and education
Objective	To facilitate the establishment of a network of Aboriginal mentors and role models for locally based young people who are undertaking training and education. In conjunction with this, information on the training to career pathways developed in action 5 should be provided to participants.
Potential partners	Curtin VTEC. Local secondary schools. Other regional training providers. Local Aboriginal consultation groups.
Timeframe	2010
Action 10	Employment strategy for Aboriginal people
Objective	Using qualitative and quantitative methodologies similar to those used for this study, develop an employment strategy that specifically addresses the social, economic, education and training, and cultural barriers that limit Aboriginal participation in meaningful employment. The Aboriginal people's employment strategy should supplement this plan.
Potential partners	Indigenous Coordination Centre. Department of Indigenous Affairs. Local Aboriginal consultation groups.
Timeframe	2009

Research activity 4	Understanding barriers to participation in VET
Objective	To research the barriers currently being experienced by residents of the Goldfields-Esperance region who wish to undertake skills training through VET. Concurrently, this research should also seek to identify the reasons why unskilled and semi-skilled labour or unemployed people are not willing to participate in current VET offerings. The findings should be produced so they can be used by education providers to improve the accessibility of courses.
Potential partners	Curtin VTEC. Department of Education and Training.
Timeframe	2010

Research activity 5	Overcoming barriers to meaningful employment for Aboriginal people
Objective	To identify the nature and extent of existing barriers to employment for local Aboriginal people including issues such as police clearance requirements, transport issues and socio-cultural issues. This research should also seek to identify appropriate strategies for local enterprises and training providers to facilitate increased participation in meaningful employment for Aboriginal people in the region.
Potential partners	Goldfields Esperance Development Commission. Job network providers. Local Aboriginal consultation groups.
Timeframe	2010

Research activity 6	Feasibility of new training options
Objective	To undertake research to identify the feasibility of Curtin VTEC offering Certificates II, III and IV in Mining Operations (Processing), Certificates II and III in Mining (Geoscience Practices) and Certificate III in General Plumbing and Gasfitting. Furthermore, research should identify the feasibility of Curtin VTEC offering a tailored course in business management related to mining and minerals processing.
Potential partners	Curtin VTEC. Skills DMC.
Timeframe	2009

Research activity 7	Opportunities for a research centre of excellence in mining related education
Objective	To identify feasible models for the development of a centre of excellence in mining related education and training to be based at the Western Australian School of Mines in Kalgoorlie.
Potential partners	Western Australian School of Mines. School of Earth and Geographical Sciences, The University of Western Australia. The Chamber of Minerals and Energy.
Timeframe	2012

Advocacy activity 5	Investment in facilities and infrastructure at Curtin VTEC
Objective	To influence the State Government and relevant industry partners to increase investment in teaching facilities and infrastructure at Curtin VTEC. Efforts should emphasise the important role that local VET has in securing a skilled labour force for the Goldfields-Esperance region.
Potential partners	Curtin VTEC. State Members of Parliament. Industry representative groups
Timeframe	2012

Goldfields-Esperance Workforce Plan: evaluation and monitoring

Overview of issues

The labour market of the Goldfields-Esperance region is shaped by a range of economic, social, political and institutional factors which influence labour supply and demand. The influence of these factors is complex and varies spatially and temporally. Understanding the nature of the labour supply and demand trends is essential for the development of effective strategies to stabilise the regional workforce.

On the demand side, the region has little direct influence over the requirements of labour as this is driven by broader global and national economic trends. Australian Government and State Government policy can also influence labour demand, as can technological development. While the extent to which the region can influence demand is limited, there is more capacity to influence supply.

On the supply side, strategies generally involve tackling participation rates, enhancing the effectiveness of education and training systems, and improving workplace conditions. However, for such strategies to be effective they must be developed from a sound understanding of the often complex conditions influencing the nature of the labour market. As such, it is imperative that ongoing monitoring of labour market trends and evaluation of supply side strategies occurs.

Based on the results of this report, a series of actions and research activities have been identified. These should be coordinated by GEWDA.

Evaluation and monitoring actions and research activities

Action 11	Evaluation of regional representation efforts
Objective	To effect policy to ensure strong regional representation to the Department of Education and Training and State Training Board. This action should reflect the objectives of regional representation and also the limitations inherent in representation roles.
Potential partners	Department of Education and Training.
Timeframe	2009
Research activity 8	**Monitoring labour force trends**
Objective	To conduct tri-annual monitoring of labour force supply and demand issues in the Goldfields-Esperance region. This monitoring should be based on the methodologies developed in the background report. Quantitative information should be collected and processed in such a way as to enable the updating of the electronic database developed as part of this research.
Potential partners	Goldfields Esperance Development Commission.
Timeframe	Tri-annual

Research activity 9	Understanding the nature of regional labour movements and the flow-on impacts for labour supply, demand, attraction and retention
Objective	To conduct research which identifies the nature of labour movements within the region and reveals the flow-on impacts for labour supply, demand, attraction and retention. Implications of labour movements on the social and economic character of localities should also be assessed with particular focus on the labour force attraction and retention processes. The research should largely be conducted by survey and interview, with secondary data sources used to provide a contextual basis for the study. The Goldfields Esperance Development Commission's REMPLAN tool, which draws on a suite of secondary data sources, should be considered as a useful tool to draw such contextual information.
Potential partners	Goldfields Esperance Development Commission.
Timeline	2010

Research activity 10	Understanding push and pull factors related to labour migration
Objective	To conduct research to identify the social and economic factors that attract workers to move to the Goldfields-Esperance region from other areas within Western Australia. The research should also seek to identify those social and economic factors that influence a worker's decision to leave the Goldfields-Esperance region to move to other locations within Western Australia (or Australia). This research should be conducted by surveying workers who elect to move to the region and also those who have left, or are planning to leave the region.
Potential partners	Goldfields Esperance Development Commission.
Timeframe	2012


Goldfields-Esperance Workforce Development Alliance

State Training Board

Kalgoorlie-Boulder Chamber of Commerce and Industry Inc

The Chamber of Minerals and Energy Western Australia

Goldfields Esperance Development Commission

City of Kalgoorlie-Boulder

Shire of Esperance

Industry representatives

Curtin VTEC

Skills DMC

Department of Education and Training

State Training Board

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East Perth Western Australia 6004

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Western Australia 6892

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