

**PEEL
Workforce
Development Strategy**

**Prepared for:
Peel Development
Commission
Department of Education
and Training, and
Challenger TAFE**

Prepared by:
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November 2006



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TABLE OF CONTENTS

EXECUTIVE SUMMARY	v
Introduction and Background	v
Peel Now and Tomorrow	v
Consultation Outcomes	vi
Workforce Modelling	vi
Support and Train, Attract and Retain	vii
1. INTRODUCTION AND BACKGROUND	1
2. PROJECT AIMS AND METHODOLOGY	2
3. PEEL NOW AND TOMORROW	3
3.1 Demographic Trends	3
3.2 Economic Activities	6
3.3 The Labour Market	8
3.3.1 Employment	9
3.3.2 Unemployment	11
3.2.3 Skills Base of the Workforce	12
3.4 Provision of Training and Employment Programs	14
3.4.1 Training Delivery	14
3.4.2 Employment Programs and Job-Readiness	20
4. CONSULTATION OUTCOMES	24
4.1 One-on-One Meetings	24
4.2 Stakeholder Workshops	25
4.2.1 Employment, Skills and Training Shortages	25
4.2.2 Disadvantages of the Peel	26
4.2.3 Opportunities for the Peel	26
4.2.4 Strategies for the Future	26
4.3 Online Survey	27
5. SWOT ANALYSIS	34
6. WORKFORCE MODELLING	37
6.1 Model Assumptions	37
Generic Assumptions	37
Industry Demand Assumptions	38
Training Supply Assumptions	38
6.2 Model Steps	39
Step One – Industry Growth Rates	39
Step Two – Moderation of Industry Growth Rates	39

Step Three – Estimated Workforce Size	40
Step Four – ANZSIC and WADT Categories	40
Step Five – Workforce Demand and Training Output	41
Step Six – Moderation of Training Provision	41
Step Seven – Training Recommendations	41
6.3 Matching Supply with Demand	41
6.3.1 Summary of Findings	46
6.3.2 Training Supply by Industry Group	47
6.3.3 Conditions on Supply-Demand Modelling	48
<u>7. SUPPLY AND DEMAND FOR THE WORKFORCE – SUPPORTING AND TRAINING</u>	<u>50</u>
7.1 Supporting	50
7.2 Training	51
<u>8. SUPPLY AND DEMAND FOR THE LIFESTYLE – ATTRACTING AND RETAINING</u>	<u>56</u>
8.1 Attracting People	56
8.2 Retaining People	57
<u>9. ACTION PLAN</u>	<u>60</u>
<u>10. REFERENCES</u>	<u>67</u>
<u>11. ACKNOWLEDGEMENTS</u>	<u>69</u>
<u>12. GLOSSARY OF TERMS AND ACRONYMS</u>	<u>70</u>
<u>APPENDIX ONE DEMOGRAPHIC FEATURES OF PEEL</u>	<u>71</u>
<u>APPENDIX TWO DALE AND PEEL</u>	<u>77</u>
<u>APPENDIX THREE SUPPLY AND DEMAND MODELLING – BACKGROUND DETAILS</u>	<u>79</u>
A3.1 Conditions on Supply-Demand Modelling	80
A3.2 Population Impact on Industry Growth	80
A3.3 Supply-Demand Figures	81

LIST OF TABLES

Table 3.1 Industry Employment Profile Peel Region.....	10
Table 3.2 Proportion of Population with Post-Compulsory Qualifications.....	12
Table 3.3 Total Publicly Funded VET for Peel Region 2005.....	14
Table 3.4 Publicly Funded VET for Peel Region 2005	15
Table 3.5 Mandurah Senior College VET Delivery 2006	17
Table 3.6 Regional Training Delivery Comparison	18
Table 3.7 Training Delivery to the Region and to Residents of the Region.....	19
Table 3.8 Privately Delivered Employment Programs for Job-Readiness.....	20
Table 4.1 Snapshot of Comments	24
Table 5.1 Summary of SWOT Analysis.....	34
Table 6.1 Skills Supply and Projected Labour Demand	42
Table 6.2 Projected Labour Demand and Training Supply (CEs).....	43
Table 6.3 Projected Labour Demand and Training Supply (SCHs)	44
Table 9.1 Peel Workforce Development Strategy Action Plan	60
Table A2.1 Dale and Peel Region Comparative Postcodes.....	78
Table A3.1 Population Growth Impact Weighting	80
Table A3.2 Industry Labour Force Projections Peel 2006-2016.....	82

LIST OF FIGURES

Figure 3.1 Peel Region Comparative Age Demographics 2006	3
Figure 3.2 Peel Projected Population.....	4
Figure 3.3 Peel Population Increase by Age Cohort 2006-2016	4
Figure 3.4 Peel Net Migration 2003.....	5
Figure 3.5 Peel Region Comparative Income 2001	5
Figure 3.6 Peel Region Employment by Industry 2001.....	9
Figure 3.7 Peel Region Comparative Employment Position 2001	10
Figure 3.8 Peel Comparative Qualifications 2001	13
Figure 3.9 Peel Education by Type 2001.....	13
Figure 4.1 Number of Employees.....	27
Figure 4.2 Employee Age Mix.....	28
Figure 4.3 Residential Location of Employees in Relation to Place of Employment.....	28
Figure 4.4 Percentage of Workforce Employed on a Casual or Part-Time Basis.....	29
Figure 4.5 Education Mix of Workforce	29
Figure 4.6 Provision of Staff Training.....	30
Figure 4.7 Number of Employees Compared to 5-10 Years Ago.....	30
Figure 4.8 Perceptions of Main Economic Driver for Employment Expansion	31
Figure 4.9 Recruitment Mechanisms.....	31
Figure 4.10 Recruitment Success	32
Figure 4.11 Target Recruitment Age Group.....	32
Figure 4.12 Areas that Government Should Direct Its Resources	33
Figure 6.1 Projected Industry Labour Force for Peel Region 2006 and 2016.....	40
Figure 6.3 Industry Employment Profile and Student Contact Hours Profiles 2005	45

LIST OF MAPS

Map 3.1 Peel Population Distribution by Age..... 7
Map A1.1 Peel Proportion of Population over 60 years old..... 72
Map A1.2 Peel Proportion of Population with Higher Education Qualifications 73
Map A1.3 Peel Proportion of Population Australian Born 74
Map A1.4 Peel Proportion of Professionals or Managers 75
Map A1.5 Peel Proportion of Population with Incomes over \$1,000/week 76

EXECUTIVE SUMMARY

The Peel 10-year integrated workforce development strategy addresses the supply of, and the demand for, a labour force in the Peel Region. The focus is on two aspects: the provision (training) and the retention of a labour force. A wide-ranging stakeholder consultation process was undertaken, as well as data collection and analysis. The key recommended actions are:

- Better marketing and information provision to prospective new entrants to training in key trades and industry sectors with potentially high growth rates and skills shortages;
- Coordination of efforts to match labour supply with local demand and ongoing improvements to measure training provision, local labour supply and industry demand;
- Identifying issues and developing means by which key workforce cohorts can be attracted to the region; and
- Identifying means by which key workforce cohorts can be retained in the region.

Introduction and Background

- The essence of the challenge facing Peel is that growth is outstripping the capacity of the region to supply appropriately trained labour, particularly to maintain the construction program of necessary infrastructure and to meet the need of the booming service industry.
- While this problem may ease over the next few years, it will always remain an issue in an area like the Peel as it is on the edge, and increasingly part of, a major metropolitan area. This means the Peel is in competition for labour with the entire Perth metropolitan area.
- The Peel region is a highly porous region. Better transport routes will increase the flow of people, particularly north and south through Peel. This will allow more Peel residents to train and work outside of the region.

Peel Now and Tomorrow

- The key demographic and other features in the Peel that compound the skills shortage problem are:
 - The 'missing' age cohort (15-39 year olds) in the population profile;
 - The lack of intra-regional transport;
 - The lack of professionals and those with higher VET qualifications living in the Peel;
 - The persistently higher unemployment rate in the Peel compared with the rest of the State; and
 - The number of retirees in the region.
- The labour market is currently defined by:
 - High growth in residential and other construction, together with large-scale mining projects;

- An unemployment rate that has persistently been 2% higher than the State average; and
- State average proportions of long-term unemployed and disengaged youth.
- According to industry growth projections prepared for this strategy, the region may gain a net of 13,600 new jobs between 2006 and 2016. Key growth will be in:
 - Mining;
 - Manufacturing;
 - Retail trades;
 - Accommodation, café's and restaurants; and
 - Health and community services.
- Training delivery to Peel residents is on a par with the State average Vocational Education and Training (VET) participation rate. Training within the Peel, however, is below comparable jurisdictions. Lack of infrastructure is cited as a barrier.

Consultation Outcomes

- Eighteen one-on one-meetings, two workshops and an online survey complemented the data collection and analysis and literature review undertaken to prepare this strategy. General findings from the consultations were:
 - The labour shortage in the region will restrict future growth;
 - The main shortages are currently in construction and hospitality, although it was noted that Challenger TAFE have recently increased the delivery of hospitality courses in the Peel campus;
 - While there is an immediate need for construction workers and tradespeople, it is necessary to ensure that demand beyond the boom is considered;
 - Lifestyle, especially marine-based leisure, is the region's main competitive advantage
 - The region has a high proportion of small businesses which cannot afford to invest in training;
 - It is critical to improve communication between industry and training providers;
 - There is potential for Peel to attract bio industries and to develop as an education hub;
 - Housing affordability is becoming an issue;
 - Local unemployed have high aspirations but are not job-ready;
 - There is limited data available for planning;
 - Mature age workers offer some potential for occupations such as training;
 - There is strong community awareness of, and interest in, the environment; and
 - Small business training is well catered for through private provision.

Workforce Modelling

- Using available statistical collections and data on projected population and industry growth, together with non-confidential information from the State Government's vocational education and training (VET) enrolment dataset (AVETMISS), a supply-demand model was prepared that provides an indication of likely skills shortages in the Peel to 2016. The model's variables were moderated by qualitative information

collected through direct consultation and a review of existing reports, which helped to further refine industry growth projections.

- In the aggregate, training delivery to Peel clients (i.e., residents) approximately matches projected labour market growth (under the higher growth projections developed for this strategy).
- There are indications that there is some training oversupply and extensive training undersupply in key industry sectors. This is confirmed by stakeholder consultation. The key sectors are:
 - Retail
 - Mining (including engineering and mining operations)
 - Manufacturing (metal trades)
 - Health and community services (particularly aged and childcare); and
 - Personal and other services.

Support and Train, Attract and Retain

- The majority of stakeholders agreed that the following issues were priorities:
 - The need for educators and industry to partner in the marketing and promotion of the trades and other skills shortage areas to potential students;
 - Marketing of the lifestyle advantages and work opportunities in the Peel;
 - Continuing improvement and expansion of education and training infrastructure in the Peel;
 - Strategies to attract and retain people to the region, particularly in the 15-39 year old age cohorts.
- In response, the following four-part strategy has been developed to respond to the labour market demand:
 - Support – to provide information, assistance and opportunities for partnerships between industries, agencies and individuals;
 - Train – to ensure that local education provision matches regional demand for skills;
 - Attract – to entice an appropriately skilled labour force to live and work in the region; and
 - Retain – to ensure the existing and future workforce continue to live and work in the region.
- An Action Plan (see Section 9) summarises the steps that can be taken to address some of the key issues outlined in this strategy.

1. INTRODUCTION AND BACKGROUND

The Peel region incorporates the local governments of Boddington, Mandurah, Murray, Serpentine Jarrahdale and Waroona. Over the last few years it has experienced a number of significant changes. In addition to a rapid population increase, there are major infrastructure projects underway, a shift in local agricultural practices and an increased demand for local housing products. This growth, however, is at risk due to a critical shortage of appropriately skilled labour. Despite this demand, regional unemployment is one of the highest in the State and local youth continue to move out of the region.

The essence of the challenge facing the Peel is that growth is outstripping the capacity of the region to supply appropriately trained labour, particularly to maintain the construction program of necessary infrastructure and to meet the needs of the expanding service industry. While this problem may ease over the next few years, it will always remain an issue in an area like the Peel as it is on the edge, and increasingly part of, a major metropolitan area that will continue to be part of a highly competitive labour market with an increasingly mobile labour force.

As part of a broader effort to address these issues, the Peel Development Commission, in collaboration with the Department of Education and Training (DET) and Challenger TAFE, commissioned the preparation of a regional workforce development strategy. Preparation of the strategy incorporated consideration of local population and economic dynamics, training provision, stakeholder perceptions and future workforce needs.

The strategy focuses on impediments to the supply of appropriately skilled labour and, as such, forms a complement to the work being done on infrastructure provision in the region and other research on land supply, particularly for industrial and commercial activities. The focus is the provision and the retention of labour supply. In order to meet these challenges the strategy is based on supporting, training, attracting and retaining an appropriately skilled workforce. A 10 year implementation time-horizon has been adopted to achieve these aims.

2. PROJECT AIMS AND METHODOLOGY

As detailed in the original project brief, the specific objectives and outcomes of this strategy are to:

- identify existing and future regional skills shortages;
- evaluate the capacity of existing training and education provision to meet current and projected needs;
- analyse the causal factors related to the Peel's skills shortage;
- identify workforce development constraints and opportunities specifically related to the Peel region;
- prepare a 10 year regional workforce development strategy that maximises employment and training opportunities, minimises skills shortages and builds local capacity and partnerships; and
- ensure that key actions are practical, realistic, achievable and have the support of key stakeholders.

To meet these objectives a multi-method approach was adopted that consisted of:

- a policy and literature review;
- one-on-one meetings with stakeholders to gain insight into key employment, training and economic development issues;
- stakeholder workshops to facilitate industry discussion, pinpoint the underlying regional skills shortage causal factors and develop potential strategies and actions;
- an online survey of local businesses;
- analysis of key demographic and economic trends and influences;
- an analysis of existing training and education provision;
- the preparation of a supply-demand model of training provision and labour market demand using stakeholder input, standardised industry growth indicators and weighted criteria; and
- preparation of a 10 year workforce development strategy with an action plan.

The strategy is designed to help match the projected demand for labour over the next 10 years with a supply of locally resident and appropriately skilled people. Projected demand is based on an environmental scan of existing labour market and training provision data, as well as local market intelligence about employment and training. The fundamental assumption for the growth projections is that the economic profile of the Peel will continue to grow according to existing industry trends.

The specifics of each methodology are discussed in more detail under relevant sections. Each provides for a set of re-usable methodologies and research tools. Instructional narrative is provided where appropriate and summarised in a separate document accompanying this report.

3. PEEL NOW AND TOMORROW

When preparing a workforce development strategy for the future, it is critical to understand that the Peel is a porous region and that its systems (its labour market, economic activity, communication flows and so forth) lie both within and outside of the region. As a result, any workforce development strategy must place the region within its broader context.

For example, while aspects of the Peel labour market shortage are specific to the region, they are prevalent at a time when there is a national and international skilled labour crisis. The Peel is therefore competing with a larger regional, State-wide and national market place for labour and capital investment. Practical strategies to train labour for the local market must then focus on the retention (or attraction) of skilled labour, as much as on the training. The high (and growing) regional labour mobility means that the local training providers are training for other labour markets, as much as providers elsewhere are training for the Peel labour market.

To better address these issues, it is necessary to understand key demographic, economic development and training provision characteristics for the region. The following sections provide a snapshot of these qualities, which are used later in the report to inform the employment need supply-demand model and refine key actions, strategies and initiatives. Note that in each case the latest and most reliable data has been used.

3.1 Demographic Trends

The Peel has a current estimated resident population of 96,000. Compared to the State average, the age profile of region is characterised by a higher proportion of people over 55 years of age, and a significantly lower proportion of people aged 15 to 39 (Figure 3.1).

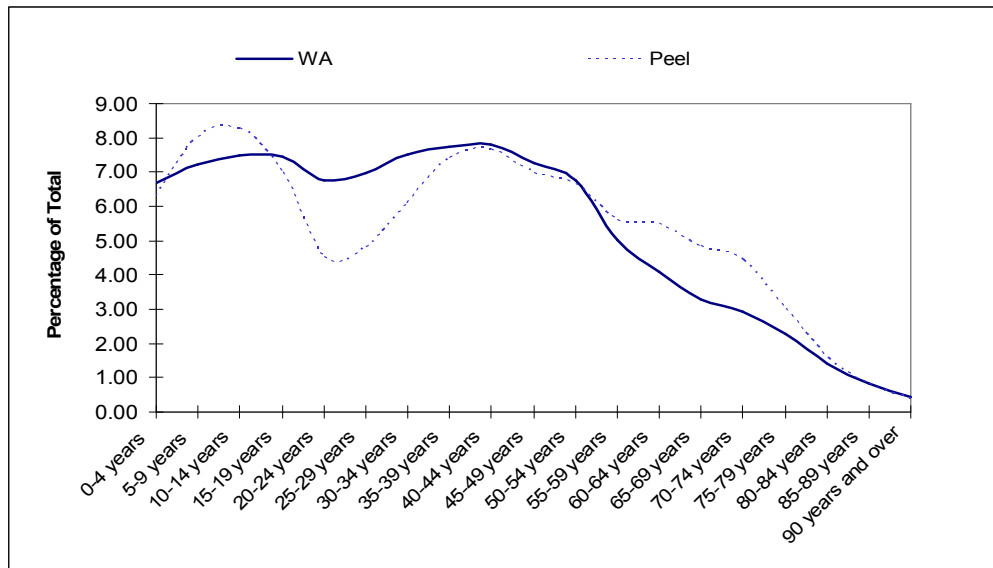


Figure 3.1 Peel Region Comparative Age Demographics 2006

From 2001 to 2006 the population was estimated to have grown by 20,000 people. It is expected that over the next ten years an additional 38,000 people, or 12,500 households, will move into the area. This will take the total population to 134,000 people by 2016 (Figure 3.2).

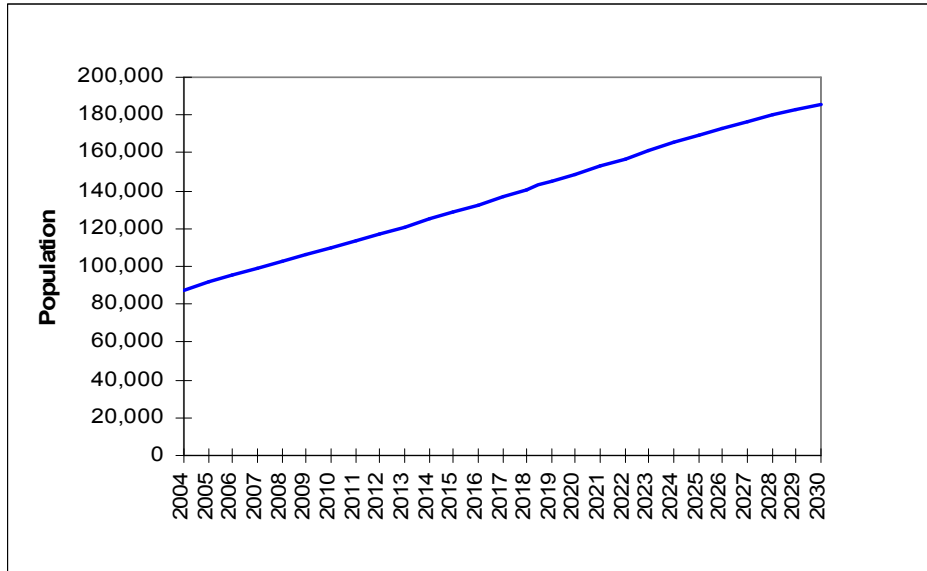


Figure 3.2 Peel Projected Population

As a result of ageing in place and in-migration, it is anticipated that growth will be fuelled by increases in the 15-39 year and 65 plus age groups (WAPC, 2005) (Figure 3.3).

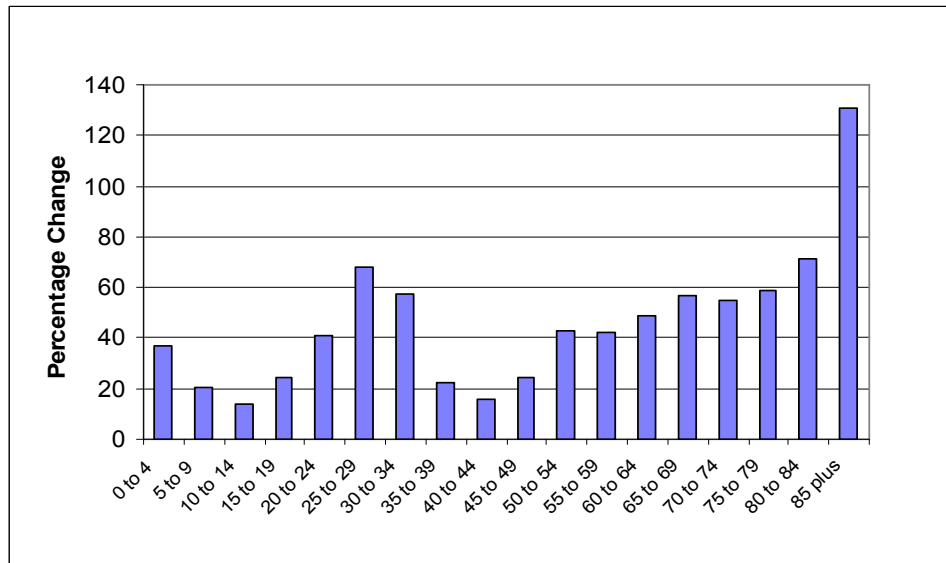


Figure 3.3 Peel Population Increase by Age Cohort 2006-2016

In recent years, the net migration rate into the Peel has been strongest in Mandurah, with Boddington and Waroona experiencing declines (Figure 3.4). The Boddington Gold Mine and Preston Beach developments are expected to significantly alter this trend.

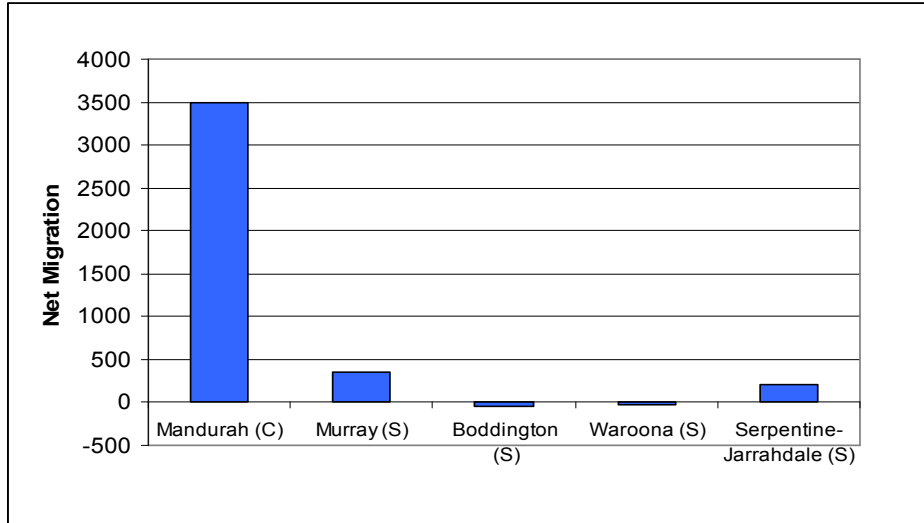


Figure 3.4 Peel Net Migration 2003

Relative to the rest of the State, the Peel has a lower proportion of high income households and higher proportion of low income households. This is partially a reflection of wages and also the higher than average unemployment rate in the region (Figure 3.5).

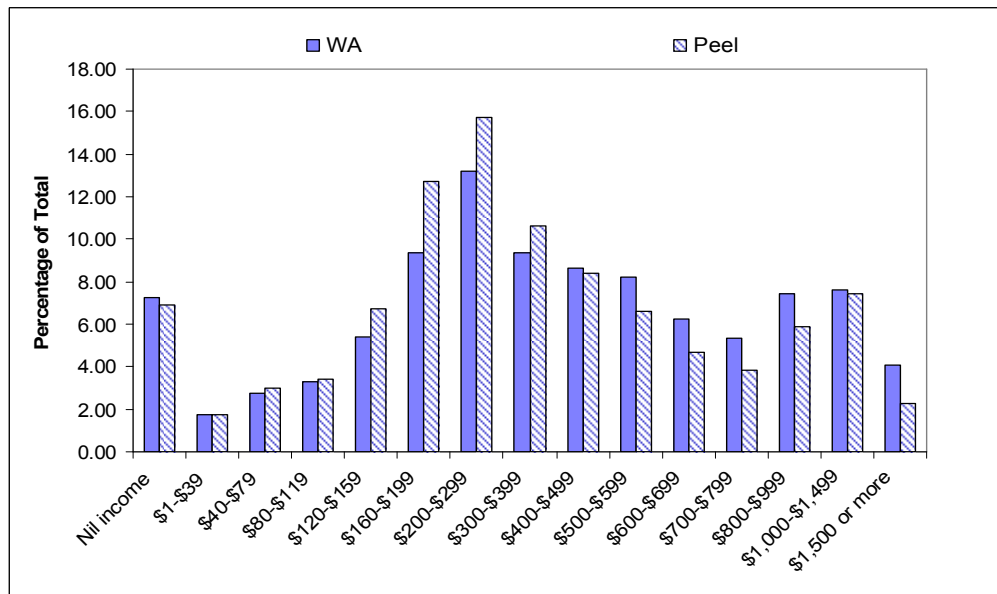


Figure 3.5 Peel Region Comparative Income 2001

Within these demographic, education and employment statistics there is a degree of inter-regional differentiation. For example, those aged between 16 and 30 years and with a vocational education are more likely to reside in Mandurah suburbs and western parts of the Shires of Boddington and Serpentine Jarrahdale (Map 3.1). Other regional variations include concentrations of high income earners, professionals and people with tertiary qualifications in the Mandurah city centre and more picturesque hills areas of the Shires of Murray and Serpentine Jarrahdale (see Appendix One).

It is likely that there will continue to be a geographic differentiation within these sub-regions, with the hills areas and urban centres attracting a higher proportion of professionals, and suburban and regional areas attracting people with vocational education and trade skills. While it is anticipated that the age demographic will shift in the next ten years, there is a need to ensure that the Peel attracts and nurtures skills that are matched to those areas of the economy that are most likely to expand.

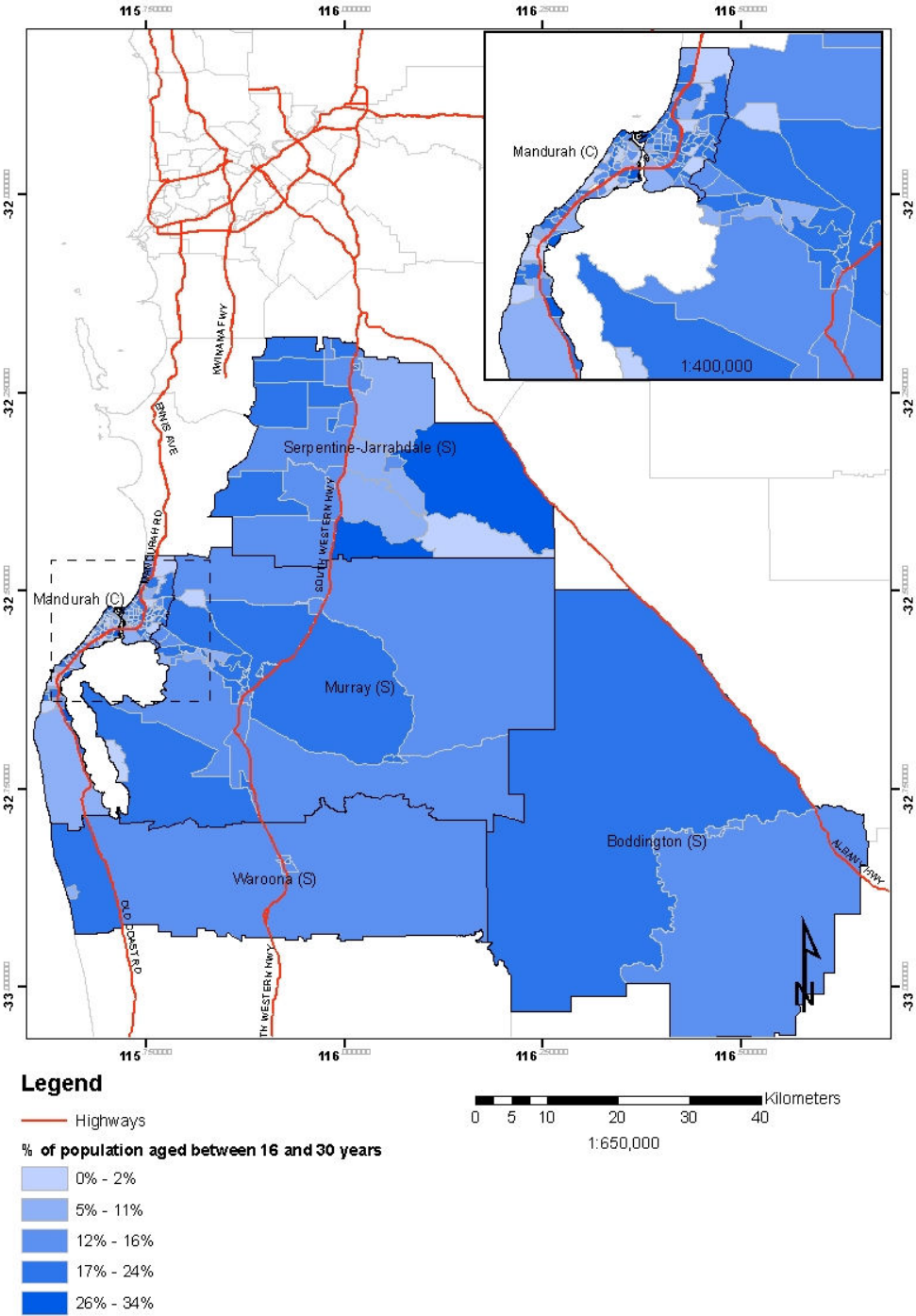
These demographic issues have a number of implications for the existing and future workforce. For example, the comparatively low percentage of 15-39 year olds, high proportion of retirees, lower overall income levels and qualification are factors that in part explain identified labour shortages in the Peel.

3.2 Economic Activities

Agriculture, mining and construction factor heavily in the Peel. In 2001-02, mining alone was worth \$1.91 billion, which was 7.3% of the State's total production (DLGRD, 2003). Overall, business registrations increased by 12% between 2003-04 and 2004-05, with manufacturing, construction, retail, property, business services and personal services the most strongly represented. While tourist visitations to the region have declined in the past five years, overnight stays in the region still approach 500,000. Agriculture output is stable, but still only accounts for 1.8% of the total value of WA's output (PDC, 2005).

Several critical economic factors are considered in this strategy in terms of their impact on current and future labour market demand as well as potential new economic (and consequently training) opportunities. Details on these factors are drawn from existing publications, as well as stakeholder consultation and include:

- In terms of value-adding, the key industries in the region are mining, building and construction, manufacturing and agriculture. Key emerging, or potential future, industries are tourism and hospitality, community services and health, education and communications.
- Economic activity in the Peel region accounts for about 3.5% of Gross State Product and is experiencing a growth rate of some 5.6% (DLGRD, 2004). This is underpinned by a high rate of housing construction, as well as the re-opening of Boddington Gold Mine and upgrade of Alcoa's refineries at Pinjarra and Wagerup. Road and rail construction, and tourist developments in Mandurah and Waroona are also contributing to this growth, along with energy cogeneration projects in conjunction with Alinta Gas.
- Two thirds of employment in manufacturing in the Peel is involved in mineral processing, suggesting that skills are acquired in fields of study classified under one category (manufacturing) and transferred into another classification of employment (mining) (DET, 2005).



Map 3.1 Peel Population Distribution by Age

- In the decade up to the 2001 census, retail employment growth rates doubled.
- Agricultural output in the Peel has grown and diversified to include poultry, pigs, cattle, hay, fruit, vegetables, wine, wool, eggs and flowers (DLGRD, 2003).
- There is a tentative plan for the Jandakot airport to be relocated in the Peel (possibly on the border of the Shires of Murray and Serpentine-Jarrahdale) which would bring with it a cluster of related job opportunities and industries. The proponents of the project estimate 100-400 jobs during construction, 2,000 airport-related jobs by 2025, up to 2,000 post-secondary student studying related courses located at the airport and by 2020 4,500 jobs in the light industrial estate that will evolve around it.
- Significant projects relating to tourism and hospitality are likely to have an impact on labour market demand and training need over the next 10 years. The current tourism focus in the region is on coastal activities around Mandurah but other activities are likely to expand tourism-related activity into other parts of the Peel.
- Each year since 2002, as a ratio of the population there have been approximately 25 new business registrations in the Peel for every 1,000 residents. This compares with the Western Australian average of 28 registrations for every 1,000 people. This disparity is partially a product of the retirement and dormitory accommodation characteristic of the Peel. Nevertheless, new business registrations in the Peel have grown steadily since 2003, predominantly sole traders.
- In its population forecasts for WA, the Department for Planning and Infrastructure assumes that Murray and Serpentine-Jarrahdale, in particular, will continue to grow around Mandurah as the regional centre. If this is the case, it would be expected that the employment profile for the Peel region would shift closer towards the State profile in terms of distribution across industry sectors (DPI, 2005).

These economic features of the Peel region have been used to inform the industry labour demand projections (see Section 6), underpin the training provision analysis and help define appropriate strategies for the future.

3.3 The Labour Market

Despite the fact that Mandurah has been consistently one of the fastest growing LGAs in Australia and that the Peel region is projected to experience a population growth of over 3% per annum for the next 25 years (DPI, 2005), the State Government estimates employment growth in the region will average just 1.7% per annum, which is lower than the State average of 2.1% (State Training Board, 2005). This is a consequence of the distinctive age profile of the population growth (retirees and young families) as well as the 'dormitory town' nature of the northern parts of the region.

Based on 2005 projections by the National Institute of Economic and Industry Research (NIEIR), this growth rate will result in an increase in the workforce size from 33,300 in 2005 (DEWR, 2006) to approximately 39,000 by 2016. These estimates are, however, considered conservative.

An alternative workforce projection based on an annual average growth of 2.0% as well as additional moderation based on known major projects, will result in a total resident workforce by 2016 of over 46,000 (or an additional 13,600 jobs). This estimate is based on evidence relating to projected industry expansion and the likely impact that population growth will have on labour intensive service industries: qualitative variables that have not been factored into

National Institute of Economic and Industry Research (NIEIR) or DPI estimates. Although it should be subject to continuous review, this alternative estimate more accurately reflects the Peel’s role as part of an expanding metropolitan area with its own regional centre (Mandurah).

3.3.1 Employment

Employment in the Peel has undergone significant change over the last 10 years with growth in property and business services, hospitality, construction, community services and health and retail in particular. Overall, the employment profile is more closely correlated with that of Perth than with regional Western Australia (ABS, 2001).

Figures 3.6 and 3.7 compare the latest (verifiable) employment/industry profiles for the Peel and WA. Notably the Peel has a high percentage working in mining, manufacturing, construction and retail compared to the WA average. This labour force is predominately tradespersons, labourers, transport-related, service workers or associated with production.

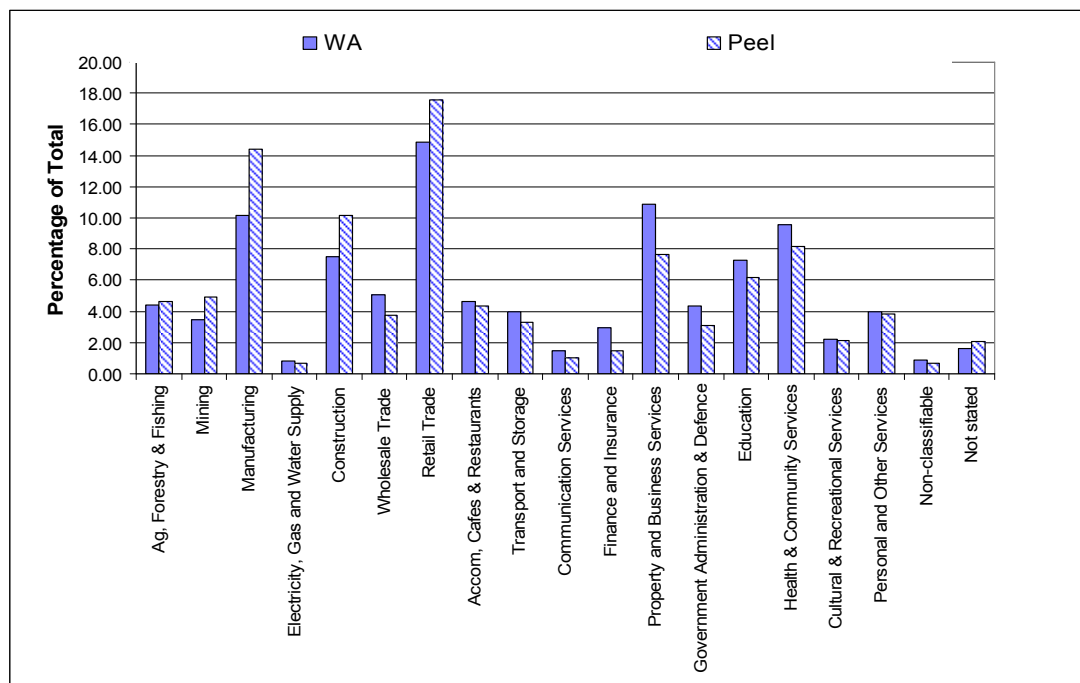


Figure 3.6 Peel Region Employment by Industry 2001

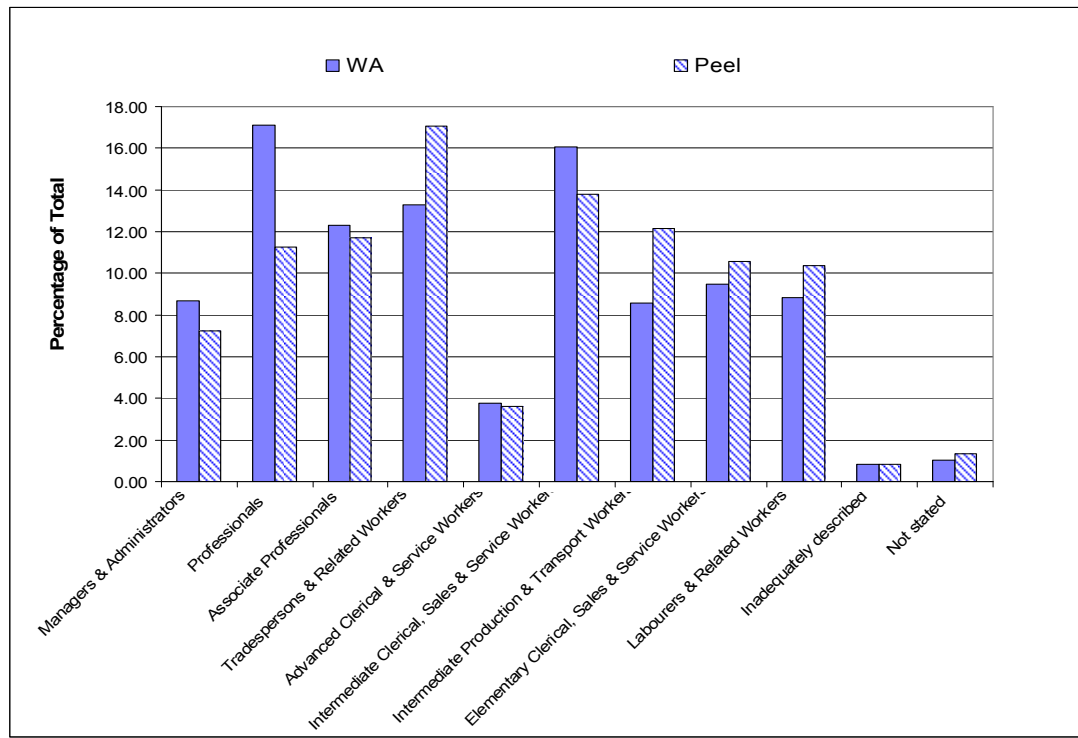


Figure 3.7 Peel Region Comparative Employment Position 2001

Table 3.1 shows the change in employment profile for the Peel between the 1996 and 2001 census years, together with moderated projections for 2016 as outlined in Section 6.

Table 3.1 Industry Employment Profile Peel Region¹

Industry	Industry Share of Total Employment		
	1996	2001	2016
Agriculture, Forestry and Fishing	5.5%	4.8%	3.4%
Mining	6.0%	5.8%	8.3%
Manufacturing	15.6%	14.3%	13.6%
Electricity, Gas and Water Supply	0.6%	0.7%	0.6%
Construction	9.6%	10.2%	8.5%
Wholesale Trade	4.2%	3.7%	3.3%
Retail Trade	15.3%	17.3%	18.7%
Accommodation, Cafes and Restaurants	4.0%	4.3%	4.3%

¹ Note that the data for this, and subsequent tables, has been rounded to one decimal place.

Transport and Storage	3.1%	3.3%	2.8%
Communication Services	1.2%	1.0%	1.1%
Finance and Insurance	1.8%	1.4%	1.1%
Property and Business Services	7.2%	7.5%	7.3%
Government Administration and Defence	3.1%	3.1%	3.1%
Education	6.1%	5.9%	6.1%
Health and Community Services	7.2%	8.1%	9.4%
Cultural and Recreational Services	1.9%	2.1%	2.1%
Personal and Other Services	3.8%	3.8%	3.8%
Non-classifiable economic units / Not stated	3.9%	2.6%	2.6%

(source: ABS, 1996, 2001, State Training Board, 2005 and Geografia projections)

Between 1996 and 2001 there were notable declines in manufacturing, finance and insurance and education. Between 2006 and 2016 it is projected that agriculture, forestry and fishing and wholesale trade will decline (based on current industry growth rates). In terms of increases, most trends between 1996 and 2001 are projected to continue to 2016, with the exception of a modest tailing off in the construction industry.

3.3.2 Unemployment

It is widely acknowledged that unemployment in the Peel has been persistently 2% higher than the State average. This has continued through the present economic boom. Currently the 2% differential amounts to an additional 700-800 unemployed people in the Peel than one would expect if the unemployment rate were at the State average. Given that the proportion of long-term unemployed (as a percentage of all unemployed) is the same in the Peel as for the WA average (ABS, 2006a), the additional 700-800 unemployed would include approximately 460 long-term unemployed (many of which would presumably include several generations of unemployed within households). The Department of Education and Training also state that the proportion of disengaged young people in the region is equivalent to elsewhere in the State (approximately 2% of 15-19 year olds or 120 people – DET, 1999).

In terms of specific features of unemployment in the Peel, data is generally confidential at the disaggregated level (e.g. income support). However, the ABS collects selected statistics at the LGA level (reported by DEWR). Additionally, DEWR make public information relating to the region called Dale, whose borders closely align with those of Peel². By combining the two data sources, it can be concluded that:

- There are 3,126 job seekers in Dale, with the majority receiving Newstart and approximately 20% between the age of 25 and 34 years. Given the boundary differences (DEWR report that Dale takes in a slightly larger area), this equates reasonably closely with the ABS estimate of 2,800 unemployed people in the Peel region.

² For details on the differences, see Appendix Two.

- There are over 3,000 recipients of disability support pensions in Peel, with about 4% of these registered for Job Network.
- There are almost 2,300 recipients of single parent payments (in Dale), with about 15% of these registered with Job Network.
- There are almost 10,000 recipients of the aged pension in Peel (or approximately 10% of the population) compared with 157,000 for Western Australia (or 7.5% of the population).
- Approximately 58% of Newstart recipients in the Peel are long-term unemployed, which is similar to the State average.
- In total there is in the order of 22,000 recipients of income support in the Peel region or roughly one fifth of the regional population.

3.2.3 Skills Base of the Workforce

The Peel region fares poorly with respect to the Western Australian average in terms of the proportion of the population (over 15) with higher level post-compulsory qualifications: from Diploma up to postgraduate degrees. Table 3.2 compares the figures for the Peel, Perth and Western Australia. By way of comparison, the figures for the Greater Geelong area are also provided. Geelong is considered a reasonable comparison with the Peel (it is coastal, has a dominant City – Geelong – is proximate to the capital city, is growing rapidly and has a high proportion of retirees and semi-retirees).

Table 3.2 Proportion of Population with Post-Compulsory Qualifications

Post-compulsory Qualification	Percentage of State Population	Percentage of Perth Population	Percentage of Peel Population	Percentage of Geelong Population
Postgraduate Degree	1.4	1.8	0.36	1.0
Graduate Diploma and Graduate Certificate	1.2	1.4	0.66	1.3
Bachelor Degree	9.4	10.6	4.6	7.9
Advanced Diploma and Diploma	6.4	6.9	4.7	5.8
Certificate	16.8	16.6	18.2	16.6
Inadequately described or not stated	11.1	10.6	10.4	11.2
Total with qualifications	46.3	47.9	38.9	43.9

(source: ABS, 2006)

Figures 3.8 and 3.9 provide comparisons between WA and the Peel, of post-compulsory qualification levels and fields of study. While the proportion of the Peel labour force with tertiary qualifications and Advanced Diplomas is lower than the WA average, there are relatively more people with certificate qualifications. In terms of the field of study, hospitality, engineering and architecture and building are the areas in which the Peel exceeds the State average.

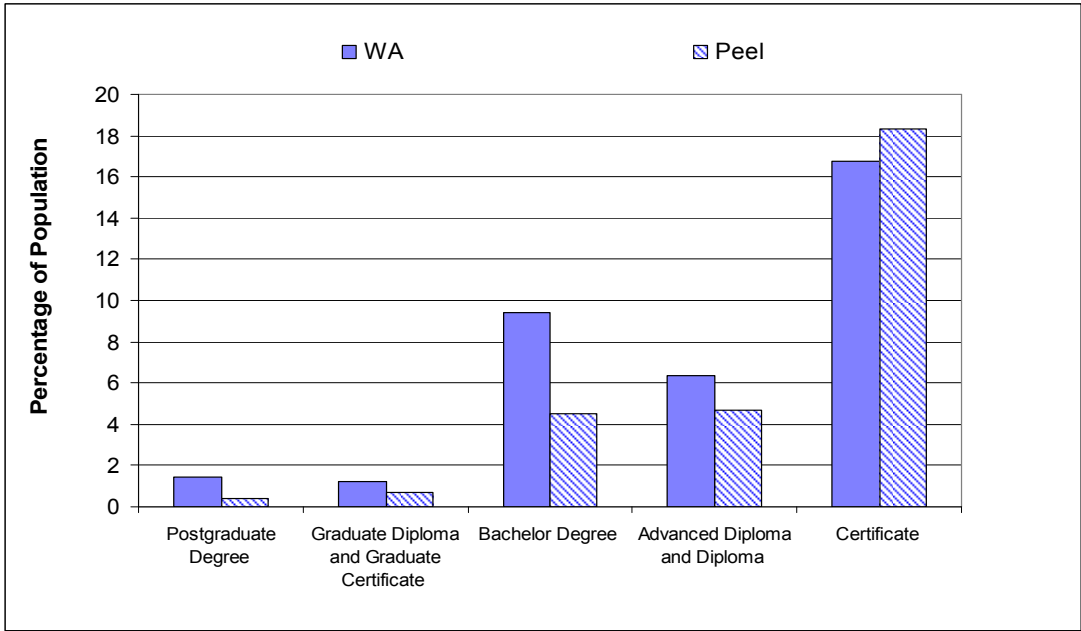


Figure 3.8 Peel Comparative Qualifications 2001

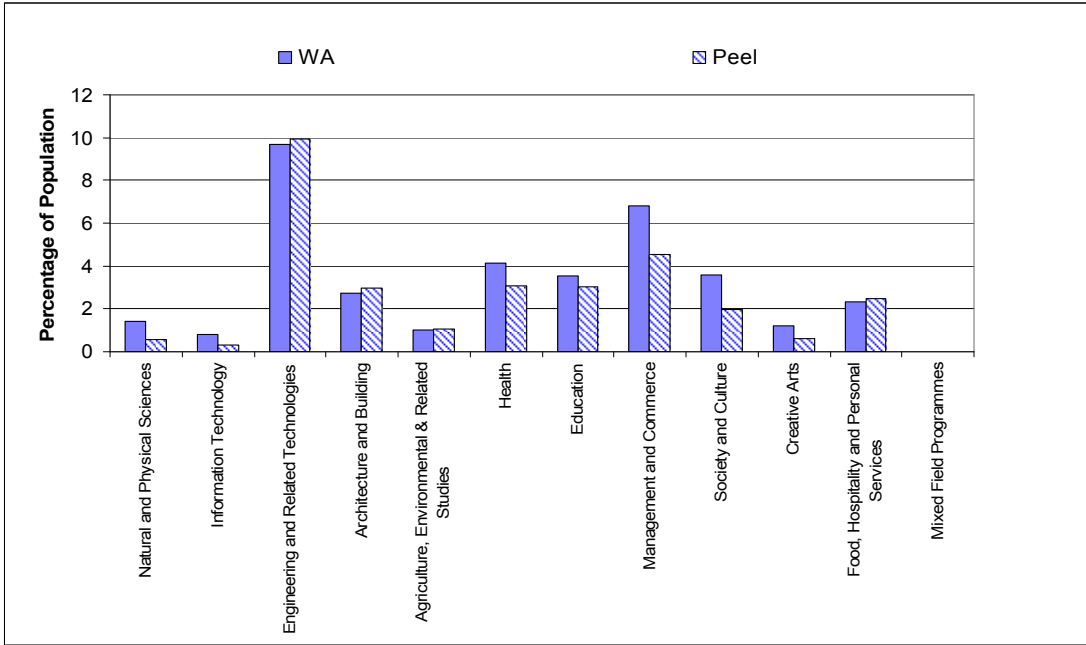


Figure 3.9 Peel Education by Type 2001

As this study focuses on non-tertiary training (i.e., not professional employment), the shortfall in the proportion of Peel residents with Advanced Diplomas and Diplomas compared with Perth and WA is a key point to note. This is factored into the recommendations in Section 7.

3.4 Provision of Training and Employment Programs

The following information on training provision and employment programs in the Peel is drawn from:

- Department of Education and Training AVETMISS enrolments data;
- The State Training Board's State Training Profile 2006-2008;
- ABS regional profiles;
- Unpublished documents from DET;
- Unpublished documents from Peel District Education Office;
- Stakeholder consultations;
- Peel Development Commission working documents; and
- DEWR information provided to Peel Development Commission.

3.4.1 Training Delivery

Total publicly funded VET and Adult and Community Education (ACE) enrolments for 2005 – the latest full year available – was 677,244 Student Contact Hours (SCHs) or 3,824 Course Enrolments (CEs). This was up by 25% from 543,613 SCHs in 2003 (or 3,357 CEs). In 2005, Challenger TAFE delivered 77% of these hours. The State Training Board report that in 2004 total Government and private training expenditure in the region was \$14.86 million, with 37% of this delivered by Challenger TAFE. Private training is reported as largely being non-accredited, opening opportunities for greater collaboration between training providers and industry (State Training Board, 2005).

Additionally, in 2004, there were 262 apprenticeship and 332 traineeship commencements (a total of 594) for Peel residents. In 2005 there were a total of 1,148 apprentices and trainees resident in the Peel and 366 enrolled in the Peel (AVETMISS, 2006).

Table 3.3 provides a snapshot of training delivery in Peel for 2005. For reasons of confidentiality the data has been aggregated up to ANZSIC industry groups. Table 3.4 shows the proportion of enrolments in VET in each WADT3 group for the Peel region.

Table 3.3 Total Publicly Funded VET for Peel Region 2005

ANZSIC Industry Group	CE	SCH
Agriculture, Forestry and Fishing	65	16,600
Mining	112	18,352
Manufacturing	126	43,873
Construction	262	56,528

³ WADT is an industry classification system devised by the Western Australian Department of Education and Training.

ANZSIC Industry Group	CE	SCH
Wholesale Trade	1	120
Retail Trade	169	27,652
Accommodation, Cafes and Restaurants	210	43,045
Transport and Storage	156	23,086
Communication Services	2	60
Finance and Business	6	885
Property and Business Services	1,919	251,739
Government Administration and Defence	122	31,770
Education	224	54,301
Health and Community Services	208	69,983
Cultural and Recreational Services	215	32,650
Personal and Other Services	27	6,600
Grand Total	3,824	677,244

(source: AVETMISS, 2006)

Table 3.4 Publicly Funded VET for Peel Region 2005

WADT Group	% of Total Delivery (CEs)	% of Total Delivery (SCHs)
Recreation, Sports and Entertainment	3.4	3.6
Visual and Performing Arts	2.3	1.3
Design	0.8	3.7
Automotive	1.4	1.3
Building and Construction	5.7	7.6
Surveying and Building	1.2	0.7
Community Service Workers	1.9	5.5
Education and Childcare	0.6	1.5
Health	0.6	1.4
Finance, Insurance Property Services	4.3	2.8
Food Trades and Processing	0.8	1.0
Furniture Manufacture	0.4	0.4
Engineering and Drafting	0.3	0.1
Metal and Mining	1.4	1.6
Animal Care	1.2	1.8
Forestry, Farming and Landcare	3.5	5.5

WADT Group	% of Total Delivery (CEs)	% of Total Delivery (SCHs)
Fishing	1.0	1.0
Horticulture	3.2	3.3
Personal Services	0.6	0.5
Retail	3.5	2.4
Cooking	1.6	1.4
Hospitality	2.9	2.6
Tourism	3.2	4.8
Transport Trade, Storage and Assoc.	2.0	1.0
Electrical Trades	0.05	0.01
Accounting and Business Services	6.0	8.2
Management	1.4	1.2
Office and Clerical	20.6	6.5
Computing	17.6	18.1
Science and Technical Workers	0.0	0.0
Adult Literacy and ESL	2.8	3.5
Targeted Access and Participation	3.8	5.5

(source: AVETMISS, 2006)

Table 3.4 shows that key growth sectors (particularly in the trades) receive low levels of training provision (relative to projected future labour market demand). These are: automotive, health, metal and mining, education and childcare, animal care, personal services and cooking. This data accords with the findings of the stakeholder consultations. DET indicate that VET delivery to 15-19 year olds in Peel is high, relative to the rest of the State, with schools as the primary delivery mechanism. This suggests that schools are contributing in a significant way towards guiding local young people into a diversity of education and training pathways.

According to the Peel District Education Office, Mandurah Senior College delivers the vast majority of VET-in-Schools in the Peel region. It provides an indication of the extent to which VET factors into the education and training of young people. In summary, of the 1,021 students in 2006:

- 471 students (46.1%) are undertaking full Certificates at the College;
- 733 students (71.8%) are studying wholly school assessed subject;
- 249 students (24.4%) are participating in the Enterprise Industry Program.

Table 3.5 summarises 2006 delivery to students at the College. When considering this information, it should be noted that there is a range of enrolment levels (from single units to full courses) and type (from school delivery auspiced by Challenger TAFE to formal TAFE enrolment). Consequently, the total numbers of students graduating does not mean that many students are

graduating into the workforce with a full VET qualification. This information has not been factored into the supply demand modelling as a result.

Table 3.5 Mandurah Senior College VET Delivery 2006

Qualification	RTO	Students
Applied Languages		
Cert II in Applied Language - Indonesian and Japanese	Central TAFE	39
Cert III in Applied Language - Indonesian and Japanese	Central TAFE	40
Automotive		
Cert I (Pre App) Auto Stage 1	Challenger TAFE	31
Cert II Automotive	Challenger TAFE	8
Beauty		
Cert III Beauty	Challenger TAFE	5
Business		
Cert I in Business	Challenger	22
Cert II in Business	Challenger	8
Cert II in Business	YAA	22
<i>Units from Cert II Business for SWL - not complete Cert</i>	<i>Challenger TAFE</i>	<i>Yr 11 281 Yr 12 132</i>
Cert IV in Business (Golf)	Aus Ins Golf Mgt	12
Construction		
Cert I (Pre App) General Construction Stage 1	Challenger TAFE	8
Engineering		
Cert I Engineering	Challenger TAFE	11
Cert II Engineering	Challenger TAFE	2
Hospitality (Food)		
Cert I Hospitality (Kitchen Operations)	Challenger TAFE	19
Cert II Hospitality (Kitchen Operations)	Challenger TAFE	5
ITC		
Cert I IT Information Technology	Challenger TAFE	52
Cert II IT (Applications)	Challenger TAFE	60
Cert III IT (Network Admin)	Challenger TAFE	4
Cert III IT (General)	Challenger TAFE	20

Qualification	RTO	Students
Music		
Cert II in Music Industry (Foundation)	AUSMUSIC	37
Tourism		
Cert II in Tourism (Operations)	Challenger TAFE	88
Seafood Industry		
Cert I in Seafood Industry (Aqua)	Challenger TAFE	8

(source: Peel District Education Office)

Each year about 375 students graduate from Year 12 at Mandurah Senior College alone. On the basis that at least 20% of young people leave the region after finishing compulsory schooling⁴, it can be assumed that up to 300 of the 375 may stay in the region and fill vacancies in the local job market. This accounts for approximately one third of the estimated new vacancies each year in the Peel economy, although, as noted above, training in the fields outlined in Table 3.5 may not be at a sufficient level to provide the skills necessary to fill these vacancies. Additionally, the increase in the compulsory schooling years is likely to increase the demand for VET in schools, placing even greater burden on the infrastructure.

Overall, the VET participation rate in the Peel is 11% and comparable with other parts of Western Australia. Relative to similar jurisdictions in other states, delivery falls short in terms of total SCHs per head of population. Table 3.6 shows publicly funded training delivery for 2004 for selected other regions in Western Australia, Victoria and New South Wales.

Table 3.6 Regional Training Delivery Comparison

Type of Region	Pop.	Employed	Employed (%)	SCHs	SCHs / employed	SCH / pop.	Participation Rate (VET)
Regional	107,398	41,135	38	1,967,599	47.8	18.3	11
Peri-urban	228,666	87,725	38	3,067,367	35.0	13.4	12
Regional town	192,192	66,283	34	2,938,553	44.3	15.3	11
Regional town	128,215	50,896	40	1,438,721	28.3	11.2	9
Regional	141,200	74,153	53	1,834,874	24.7	13.0	11
Regional town	247,907	82,628	33	3,340,393	40.4	13.5	12
Peel	87,791	32,688	37	677,244	20.7	7.7	11

(source: AVETMISS, 2006 – WA, NSW, Victoria)

The figures in Table 3.6 suggest that, despite average participation rates, the total quantum of VET delivery (measured by SCHs) in the Peel is below standard expectations for regional, rapidly growing areas. The Peel region does, however, have a combination of unique features that

⁴ This estimation is based on an assessment of the Peel population age profile – see Section 6.3.1 for further details.

make this comparison difficult. Although some of these regions have similar age profiles as Peel, historically persistent high levels of unemployment and are adjacent to large metropolitan centres, only the Peel has all of these features.

Table 3.7 shows the number of VET course enrolments for Peel residents compared with enrolments in the region. This confirms the findings of Table 3.6 that shows that participation rates are within acceptable national norms. It also indicates that local provision does not fully meet local demand for training, particularly in manufacturing, construction, business (particularly finance and business), education, retail trades, health and personal services where, broadly speaking, one third of Peel residents seek their training outside of the Peel region. The capacity to undertake training outside of the region will be enhanced once the new southern rail line commences operation.

Table 3.7 Training Delivery to the Region and to Residents of the Region

ANZSIC Industry Group	CE in Region	CE to Residents
Agriculture, Forestry and Fishing	65	199
Mining	112	143
Manufacturing	126	618
Electricity, Gas and Water Supply		16
Construction	262	531
Wholesale Trade	1	
Retail Trade	169	385
Accommodation, Cafes and Restaurants	210	300
Transport and Storage	156	195
Communication Services	2	22
Finance and Business	6	35
Property and Business Services	1,919	2,259
Government Administration and Defence	122	82
Education	224	921
Health and Community Services	208	425
Cultural and Recreational Services	215	350
Personal and Other Services	27	129
Total	3,824	6,610

(source: AVETMISS, 2006)

3.4.2 Employment Programs and Job-Readiness

The following table provides an audit of programs and training available for specific groups in the Peel region. It includes bridging courses (for job-readiness), employment agencies and DEWR programs.

Table 3.8 Privately Delivered Employment Programs for Job-Readiness

Target Group	Agency/Program	Course
Youth – school leavers	<ul style="list-style-type: none"> Local Community Partnership (LCP) Employment Directions Network CRS Australia (disability/injury 14-65) Job Network (Mission Australia, Mandurah and Pinjarra) Greencorp (Mission Australia, Mandurah and Pinjarra) 	<ul style="list-style-type: none"> Certificate I (Introduction), Certificate I or Certificate II General Education for Adults Wider Opportunities for Work Pre apprentice courses
Youth – post school	<ul style="list-style-type: none"> LCP Peel Employment Directions Network CRS Australia (disability / injury aged 14-65) SMYL Community Services Job Network (Mission Australia, Mandurah and Pinjarra) Greencorp (Mission Australia, Mandurah and Pinjarra) New Enterprise Initiative Scheme (NEIS) (Business Enterprise Centre and David Wells and Associates) 	<ul style="list-style-type: none"> Wider Opportunities for Work Certificate III General Education for Adults Pre apprentice courses
Disengaged Youth	<ul style="list-style-type: none"> LCP Peel Employment Directions Network CRS Australia (disability/injury 14-65) SMYL Community Services Job Network (Mission Australia, Mandurah and Pinjarra) Job Placement Employment and Training Program (JPET) (Mission Australia, Mandurah and Pinjarra) Greencorp (Mission Australia, Mandurah and Pinjarra) Personal Support Program (Community First, Mandurah) NEIS (Business Enterprise Centre and David Wells and Associates) 	<ul style="list-style-type: none"> Certificate I (Introduction), Certificate I or Certificate II General Education for Adults Pre apprentice courses
Indigenous	<ul style="list-style-type: none"> LCP Peel Employment Directions Network 	<ul style="list-style-type: none"> Gaining Access to Training and Employment

Target Group	Agency/Program	Course
	<ul style="list-style-type: none"> • CRS (disability / injury aged 14-65) • SMYL Community Services • Job Network (Mission Australia, Mandurah and Pinjarra) • Greencorp (Mission Australia, Mandurah and Pinjarra) • NEIS (Business Enterprise Centre and David Wells and Associates) • Community Development Employment Project (CDEP) (PEEDAC Pty Ltd) • Indigenous Employment Centre (PEEDAC Pty Ltd) 	<ul style="list-style-type: none"> • New Opportunities for Women • Wider Opportunities for Work • Certificate II General Education for Adults • Certificate II Indigenous Family Health and Wellbeing • Certificate III General Education for Adults • Certificate I in Tourism (Australian Indigenous Culture) • Certificate III in Tourism (Guiding) • Certificate IV in Tourism (Natural and Cultural Heritage) • Indigenous Youth Mentoring Program
CaLD	<ul style="list-style-type: none"> • LCP Peel • Employment Directions Network • Peel LCP • CRS (disability / injury aged 14-65) • Job Network (Mission Australia, Mandurah and Pinjarra) • NEIS (Business Enterprise Centre and David Wells and Associates) 	<ul style="list-style-type: none"> • Certificate I in English as a Second Language (ESL) • Certificate II in ESL • Gaining Access to Training and Employment • Wider Opportunities for Work • Certificate II General Education for Adults
People with Disabilities	<ul style="list-style-type: none"> • LCP Peel • Employment Directions Network • CRS Specialist agency assisting those with disability/injury to obtain employment – Mandurah office • Job Network (Mission Australia, Mandurah and Pinjarra) • Disability Employment Network (Peel Personnel) • NEIS (Business Enterprise Centre and David Wells and Associates) 	<ul style="list-style-type: none"> • Gaining Access to Training and Employment • Wider Opportunities for Work • Certificate I (Introduction) or Certificate I General Education for Adults • Certificate II General Education for Adults • Certificate III General Education for Adults
Mature age (i.e., over 25 years old)	<ul style="list-style-type: none"> • LCP Peel • Employment Directions Network • CRS (disability / injury aged 14-65) • Job Network (Mission Australia, Mandurah and Pinjarra) • NEIS (Business Enterprise Centre and David Wells and Associates) • Mature Age Workplace Employment 	<ul style="list-style-type: none"> • Certificate I General Education for Adults (Introductory) • Certificate I General Education for Adults • Gaining Access to Training and Employment • New Opportunities for Women • Wider Opportunities for Work

Target Group	Agency/Program	Course
	Strategy (<ul style="list-style-type: none"> • Certificate II General Education for Adults • Certificate III General Education for Adults
Sole parents	<ul style="list-style-type: none"> • LCP Peel • Employment Directions Network • CRS (disability / injury aged 14-65) • Job Network (Mission Australia, Mandurah and Pinjarra) • NEIS (Business Enterprise Centre and David Wells and Associates) 	<ul style="list-style-type: none"> • Gaining Access to Training and Employment (youth focus) • New Opportunities for Women • Wider Opportunities for Work • Certificate II General Education for Adults • Certificate III General Education for Adults
Ex- offenders	<ul style="list-style-type: none"> • LCP Peel • Employment Directions Network • CRS (disability / injury aged 14-65) • LCP Peel • Job Network (Mission Australia, Mandurah and Pinjarra) • NEIS (Business Enterprise Centre and David Wells and Associates) 	<ul style="list-style-type: none"> • Gaining Access to Training and Employment • New Opportunities for Women • Wider Opportunities for Work • Certificate II General Education for Adults • Certificate III General Education for Adults

(source: unpublished documents, DET)

According to stakeholders, and notwithstanding the generally limited public resources available for employment programs, the Peel has a sufficient number and range of programs available to meet local need. There are also new programs and funding opportunities emerging as a result of the State Government recognition of the Peel’s rapid growth (for example, it has been reported that implementation of the Pinjarra-Brunswick Junction Sustainability Strategy will provide funding for training to address employment and training issues arising along the South-West Highway). The key concern is the lack of coordination, rather than the absolute quanta, of delivery.

As noted earlier, the best estimates and advice from DEWR, Bridging the Gap and the District Education Office, indicate that there are:

- approximately 120 disengaged young people in the Peel region, which represents less than 2% of the 15-19 year old age cohort and is well within the historically persistent range for Western Australia (DET, 1999); and
- approximately 1,600 long-term unemployed in the Peel region (making up about 58% of the total pool of unemployed).

Department of Education and Training research (DET, 1999) and ABS figures reveal that these numbers are within expectations. Stakeholder consultations suggested that the number and scale of courses and programs available for addressing these critical groups can meet their needs, subject to more effective coordination.

In terms of Indigenous training, consultations suggest that the key matters to address are employment pathway and job-readiness, particularly aligned with major projects; a need for Indigenous trainers; and Indigenous health workers.

Finally, in relation to small business training, the Mandurah Peel Chamber of Commerce and the Small Business Centre run basic business skills training seminars that include teaching essential skills in financial management and marketing. These are well patronised and ideally suited to small business owners looking to explore staff training.

4. CONSULTATION OUTCOMES

Stakeholder consultation was undertaken to ascertain views on the specific training, employment and labour force issues in the Peel region. The outcomes also helped to refine the assumptions used in the training demand and supply model (see Section 5). The consultation included one-on-one meetings, stakeholder workshops and an online survey of local businesses. The key findings are detailed below.

4.1 One-on-One Meetings

Eighteen one-on-one meetings were held with representatives from a range of government agencies, industry bodies, training providers and businesses. Table 4.1 below provides a snapshot of key comments/issues raised during these discussions.

Table 4.1 Snapshot of Comments

Organisations Consulted	Generic Issues/Comments
<ul style="list-style-type: none"> • Peel Development Commission (x 2) • Challenger TAFE (x2) • Department of Education and Training (x2) • Shire of Boddington • City of Mandurah • Shire of Murray • Shire of Serpentine Jarrahdale • Shire of Waroona • Department for Planning and Infrastructure • Mirvac-Fini • Mission Australia • ABN Training Group • Mandurah Peel Region Chamber of Commerce • Industry Training Broker (Building and Construction) • Hospitality and Tourism Industry Training Council 	<ul style="list-style-type: none"> • There is a significant labour shortage in the region which will restrict future growth • Main shortages are in construction and hospitality • Also a lack of professionals (e.g. engineers, doctors, planners, surveyors, and trainers etc) • While there is an immediate need for construction workers and tradespeople, need to ensure that the likely drop in demand beyond the boom is considered. • Skills and expectations of youth are not matched to industry needs. • Labour market demand is high; student demand for training in key areas is not. • Peel has a dual economy – one focused on resources extraction the other on lifestyle. Not many linkages and often conflicts • Lifestyle, especially marine-based leisure, is the region’s main advantage • Peel businesses may need to consider diversification • Peel has an underdeveloped night economy which is a disincentive for attracting and retaining youth • Peel has a high proportion of lifestyle seekers, many of whom are not entrepreneurs • Region has a high proportion of small businesses which cannot afford to invest in training • Limited value-add opportunities in the region • There needs to be better communication between industry and training providers. • Local tourism economy is underdeveloped • Untapped potential of Indigenous community • Lack of industrial land is a major obstacle, with

Organisations Consulted	Generic Issues/Comments
	<p>business moving to Rockingham as a result</p> <ul style="list-style-type: none"> • Influx of hobby farmers is eroding agricultural production • Consumption in Peel is low- asset rich, cash poor population • Potential for Peel to attract bio industries • Some concern that there is not enough zoned land or facilities for education • Housing affordability is becoming an issue • Local unemployed have high aspirations • Many of unemployed are not job ready • Limited data available for planning • Mature age workers offer some potential • High community awareness of environment • Small business training is well catered for through private provision

4.2 Stakeholder Workshops

Stakeholder workshops were held on the 12th and 13th September, 2006. A total of 30 people attended these sessions. Invitees included training providers, local business representatives, industry bodies, local government, and State Government agencies.

The format included a brief presentation by the project team, followed by group discussion in which participants were asked to document key training/skills shortages, disadvantages/opportunities in the Peel, and strategies/responsibilities for the future. The sections below provide a synopsis of key discussion points.

4.2.1 Employment, Skills and Training Shortages

Consistent with the findings of the 2005 Skills Forum and other discussions, most participants noted that the dominant skills shortages were in hospitality, automotive, manufacturing and the construction industry. The lack of tradespeople, metal workers and people with technical skills (engineering, planning, surveyors etc) were specifically identified as areas of immediate concern. There was also a suggestion that demand for personal services, health care and environmental management skills will increase in the near future.

Several issues were raised in relation to the location of existing training courses especially hospitality, which is currently only fully offered in Bentley and Fremantle. There was a perception that the existing training facilities and infrastructure was not sufficient for future needs in either hospitality or building. There was also a sense that some trades and other vocational options had not been successfully marketed to secondary students by either industry or schools. Others suggested that the marketing had been effective but from a low base and that it would take more time and effort to achieve results.

Overall there was a general consensus for increased communication between various stakeholders and with people living outside of the Peel who may not be aware of the

opportunities of living and working in the Peel. Concern about job readiness in the region was also raised.

4.2.2 Disadvantages of the Peel

Geographic location was seen as one of the main underlying causes of Peel's skills shortages. Distance from Perth-based education institutions and a poorly developed night-time economy was perceived as a dominant reason that youth left the region. These issues are compounded by limited public transport options and increasing fuel costs. This was also seen as a reason that it was difficult to find tradespeople to work in the region as they believed they are not being adequately compensated for travel. Many also felt that the region's economy was unable to compete with the north-west regional wages and tax advantages.

Other major disadvantages included the lack of industrial land; lack of available data to gauge training requirements; the high number of small businesses who have limited capacity to train staff; housing affordability; need for economic diversification and a sense that the 'Peel' did not have a strong collective identity. These disadvantages were seen as a disincentive for industries to locate into the region. There was also a sense that the Peel region could be better marketed to interstate and international migrants and tourists.

Finally, although the centralised PET campus can maximise the efficiency of training delivery, the lack of intra-regional transport means that significant resources need to be committed to ensure 'transport disadvantaged' people living in outlying regions are able to access training locally.

4.2.3 Opportunities for the Peel

Despite these disadvantages, stakeholders also identified a number of opportunities. Foremost were the region's 'lifestyle' advantages. This included natural features, marine-based recreation and a sense of community. Marketing these advantages was seen as a means through which an appropriately skilled workforce could be attracted to the area.

The local mining industry was seen as a major opportunity for the Peel, particularly the expansion of the Boddington Gold Mine and the Wagerup and Pinjarra developments. The proposed development at Preston Beach which will cater for an additional 20-30,000 people was also seen as a positive.

There was a suggestion that the region's tourism economy was underdeveloped. Its proximity to Perth meant it was well located for day-trippers. Overnight stays were, however, seen to be limited by accommodation options (e.g. limited caravan parks). It was also noted that the Peel had a large number of major private and public sector investments and that there was a relative diversity in employment options. The Peel's regional status also meant that it could tap into the Regional Skilled Migrant Scheme.

4.2.4 Strategies for the Future

The workshops identified a number innovative and practical solutions to better enhance the training and skills of the Peel workforce. In each of the following cases more than one stakeholder identified strategic opportunities:

- Marketing the lifestyle advantages of the Peel;
- Development of an identity for the Peel as a centre of education excellence, with a focus on education, environmental and health sciences;
- Providing incentives for tradespeople to move into the area;
- Co-ordinated showcasing of the career benefits of vocational education and trades;
- Offering incentives to employ locally;
- Encouraging people to live and work in the region;
- Establishment of a 'one-stop-shop' to channel training/education information;
- Improved communication between training providers;
- Encouraging succession planning in businesses;
- Promote the quality of housing and development in the region to potential migrants;
- Taking better advantage of the Peel's regional status to attract migrants;
- Establish a welcoming kit for new residents and businesses;
- Expanding training and education facilities;
- Establishing a more appropriate range of local training courses, especially in hospitality;
- Attracting larger firms into the region;
- Making industrial land available;
- Ensure local housing remains affordable;
- Further development of the local night-time economy; and
- Better engagement with young people and unemployed.

4.3 Online Survey

An online survey of business was established at the beginning of the project. A total of 27 responses were received. While not a statistically significant sample, the responses do serve as an insight into local business needs.

One of the issues identified during the one-on-one meetings and stakeholder workshop was that the Peel has a high proportion of small businesses. This was reflected in the survey results (Figure 4.1).

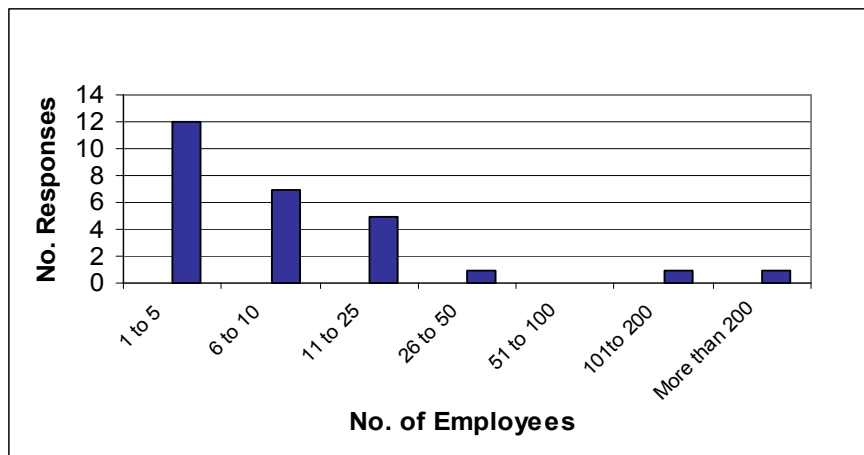


Figure 4.1 Number of Employees

Consistent with other research on the nature of the Peel workforce, the majority of employees were aged between 20 and 40 years and lived within 20 kilometres of their place of employment (Figures 4.2 and 4.3).

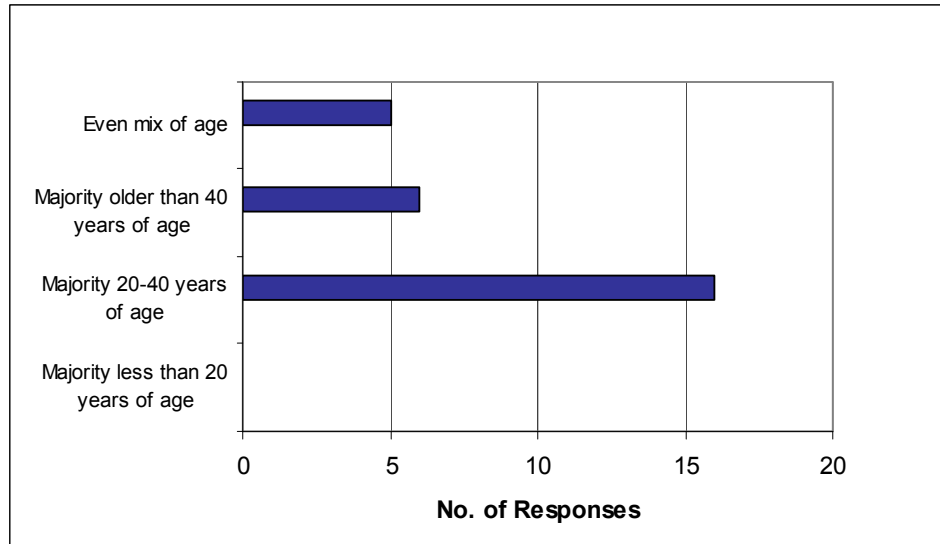


Figure 4.2 Employee Age Mix

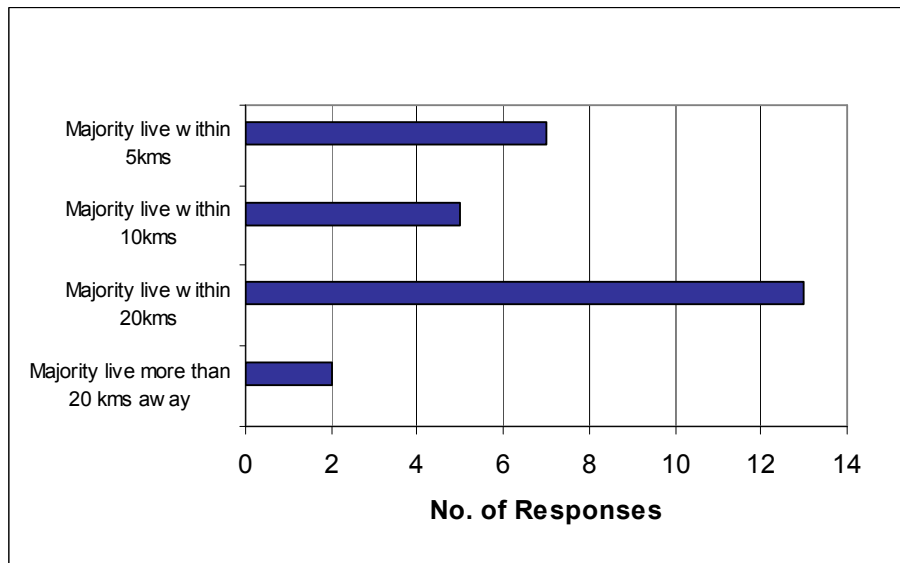


Figure 4.3 Residential Location of Employees in Relation to Place of Employment

This finding confirms that the Peel’s labour shortage is unlikely to be met by commuters in the short-term.

The majority of respondents indicated that only a small percentage of their workforce is employed on a casual or part-time basis (Figure 4.4).

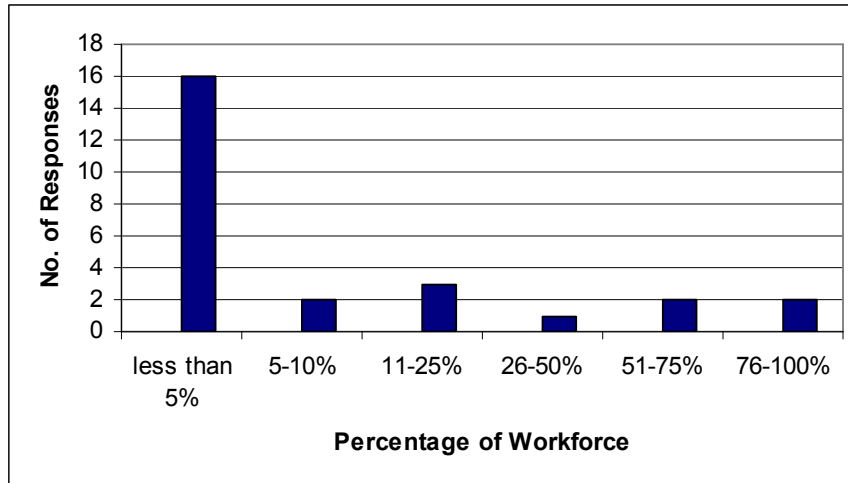


Figure 4.4 Percentage of Workforce Employed on a Casual or Part-Time Basis

Nearly half of respondents indicated that the majority of their employees had vocational training, apprenticeship or on the job training. Interestingly no respondents indicated they had significant numbers of semi-skilled or un-skilled labour (Figure 4.5).



Figure 4.5 Education Mix of Workforce

Sixty-two percent of respondents stated that they provided or subsidised additional staff training (Figure 4.6). This contrasts with the findings of the one-on-one meetings, in which, with the exception of small business training for owners, it was suggested that there was little in the

way of a training culture in small businesses in the region. Examples cited in the survey included industry training programs/short courses, on the job coaching, apprenticeships, career development courses, offers to cover costs of TAFE courses and business administration courses.

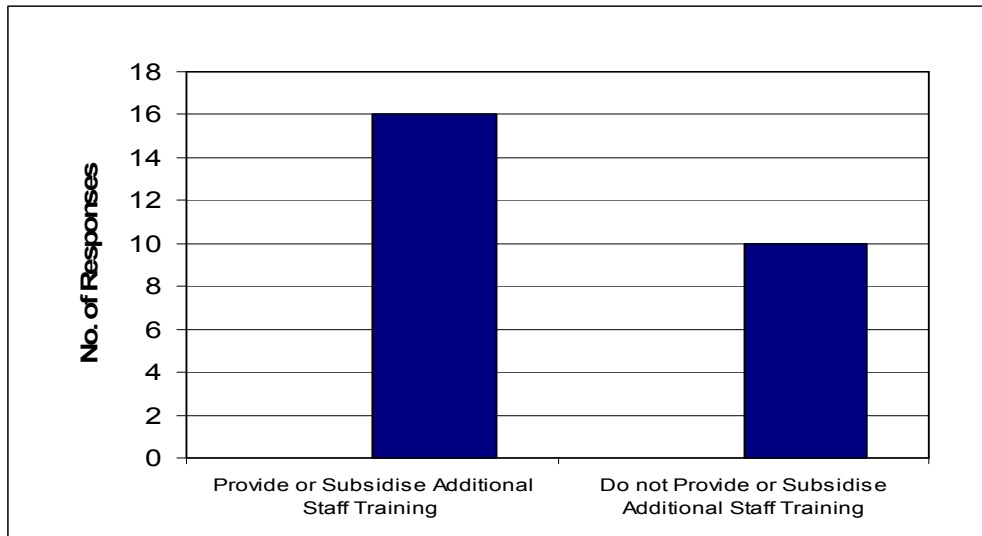


Figure 4.6 Provision of Staff Training

As further evidence that the Peel economy has expanded in the last 5-10 years, 85% of business have increased their number of employees (Figure 4.7).

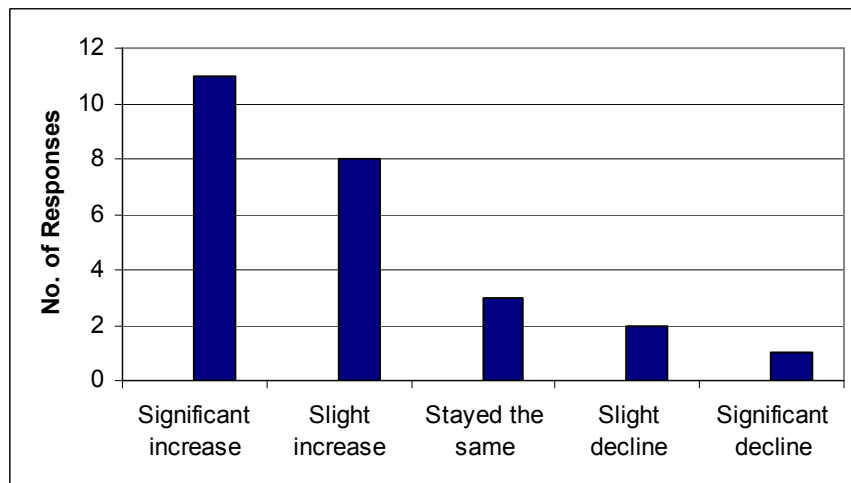


Figure 4.7 Number of Employees Compared to 5-10 Years Ago

When asked what they saw as the critical economic development drivers for their business, 44% of respondents indicated that it was a strong regional economy (Figure 4.8). New housing

and infrastructure rated highly, while commodity prices, industrial relations policy, and the strength of the national economy were considered less significant.

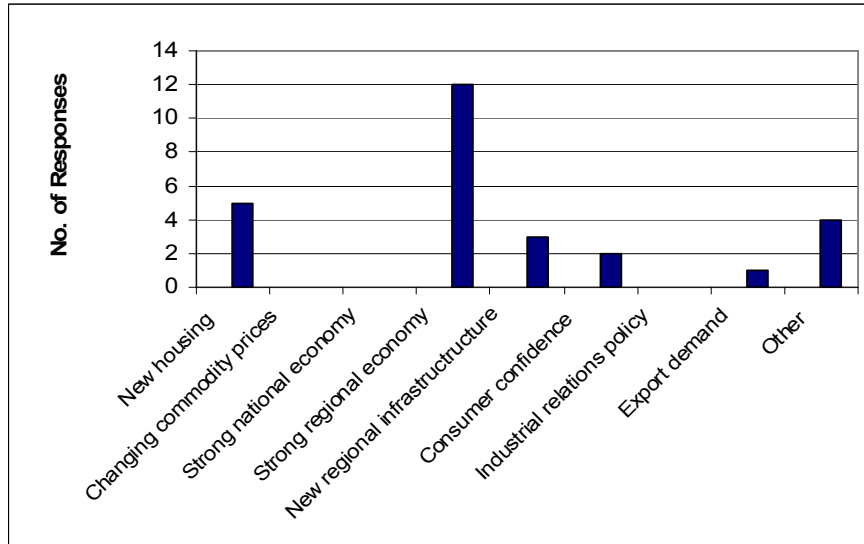


Figure 4.8 Perceptions of Main Economic Driver for Employment Expansion

The main recruitment mechanism was advertisements in local newspapers and word of mouth (Figure 4.9).

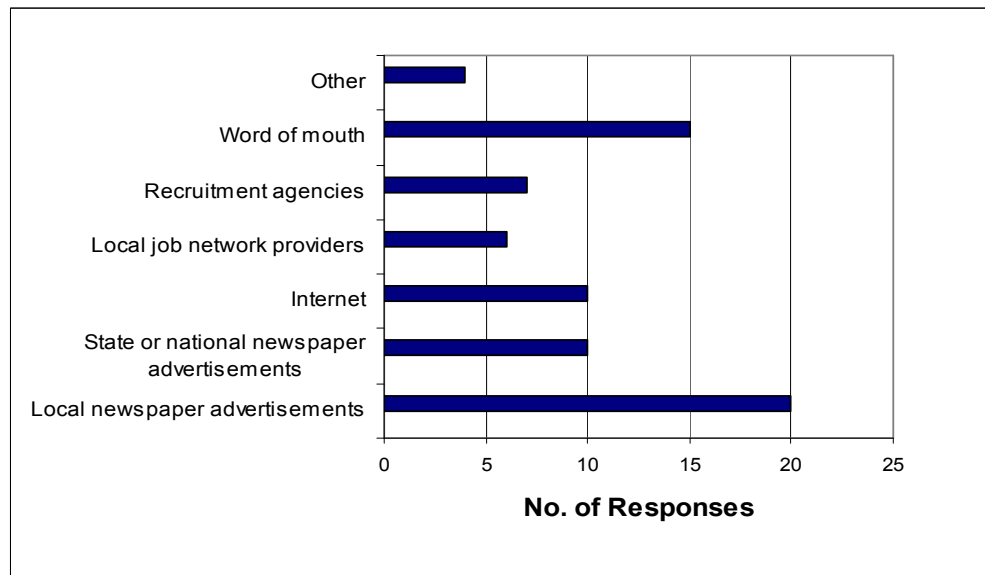


Figure 4.9 Recruitment Mechanisms

Importantly for this study, only 26% of businesses indicated a good or excellent recruitment success rate (Figure 4.10).

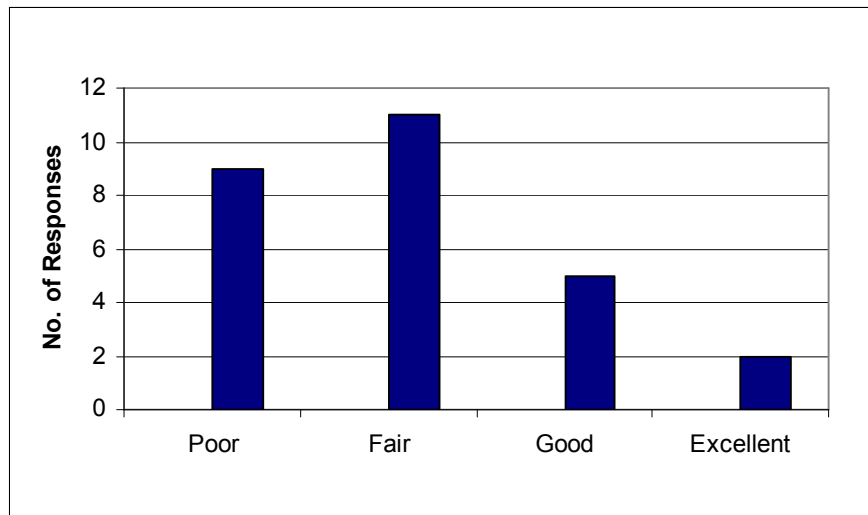


Figure 4.10 Recruitment Success

Over half of the business indicated that future recruitment efforts will target the mid age demographic (20-40 years) and 59% said they would be looking for full-time employees (Figure 4.11).

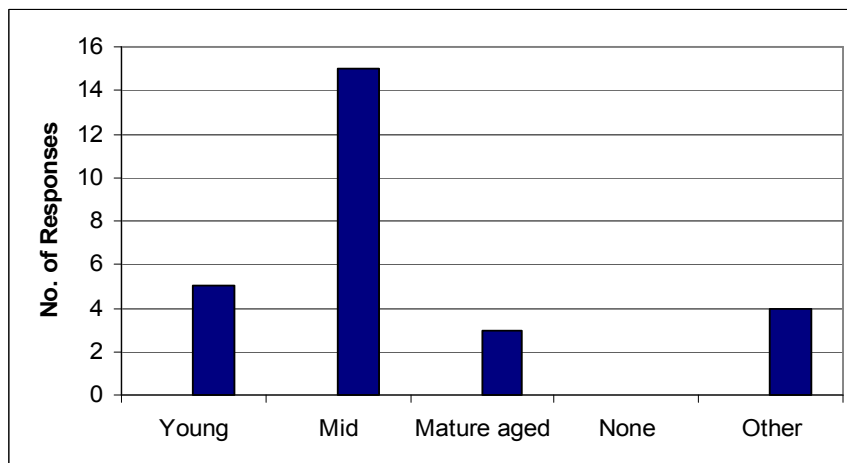


Figure 4.11 Target Recruitment Age Group

When asked where government agencies should concentrate their efforts in relation to workforce development, marketing the Peel and facilitating new training programs rated strongly (Figure 4.12).



Figure 4.12 Areas that Government Should Direct Its Resources

When asked what the main training needs were, respondents indicated a lack of experience, office skills, tradespeople, human resources, baristas, town planning, engineering and environmental science. These comments are consistent with other consultation forums.

5. SWOT ANALYSIS

Strengths, weaknesses, opportunities and threats in relation to employment and training in the region were identified through an assessment of the comments received during the one-on-one meetings, the two stakeholder workshops, demographic analysis, training audit and local economic trends. Table 5.1 provides a summary of those issues relevant to this strategy.

Table 5.1 Summary of SWOT Analysis

SWOT	Employment	Training
Strengths	Proximity to metropolitan Perth, while still being a region, makes Peel an ideal destination for the Regional Skilled Migrant Scheme	Small business training is well catered for through private provision
	The sense of community throughout the Peel is an attractor to new residents, as is the lifestyle and physical environment	The data indicates that there is a significant level of interest in VET amongst Peel residents
	The rail, the road bypass, and the large scale private infrastructure projects are all adding to the advantages of the Peel	The PET campus (the first co-located campus in WA) provides a centralised focus for training delivery
	The region has a strong economic base in terms of primary and secondary industries (mining, agriculture and light manufacturing)	
Weaknesses	The labour shortage in the region will restrict future growth, particularly in construction and hospitality	The lack of people with professional qualifications undermines the capacity to continue to diversify the economy, particularly in small business enterprises
	There is a perceived lack of quality office space for small business	Student demand for training in key skill shortage areas is still low
	There are limited accommodation options for visitors (overnight tourists) to the Peel	Small businesses cannot afford to invest in training
	Low proportion of 15-39 year olds is an underlying cause of the labour shortage	There is a limited culture small business investment in training
		There is a need to roll out more job-readiness training for the unemployed
		Transport and accessibility are an issue and require significant resource commitment from VET providers to deliver training to outlying parts of the region

SWOT	Employment	Training
Opportunities	Lifestyle, especially marine-based leisure, is one of the region's main advantage	There is a high level of interest in, and awareness of, environmental issues in the region (notably amongst students and parents)
	While the local tourism economy is underdeveloped, it is recognised that there is scope for growth	Mature-age workers have the potential to become a 'trainers and educators' labour pool
	There is recognised potential for the Peel to attract bio industries (in marine and environmental science)	The strong demand for VET amongst Peel residents indicates that there is a larger market for local training provision
	There is scope to position the Peel as a centre for training and education excellence	The rail and new bypass will improve access for people to metropolitan education and training opportunities for Peel residents
	Mature age workers, particularly the semi-retired, are a labour force that has not been tapped into to any extent	The 'Peel as an education hub' concept will benefit from greater transport access for residents of the southern metropolitan area to access education and training in the Peel
	The expansion of several mine sites and refineries is a significant opportunity for jobs, multiplier effects, and the employment of apprentices	Alcoa's Regional Enterprise and Learning Centre will provide infrastructure and resources for the region
	The proposed development at Preston Beach, which will cater for an additional 20-30,000 people, was also seen as a positive	
	Proximity to Perth makes the Peel an ideal destination for day-trippers	
	The new road and rail will improve access to employment opportunities in the metropolitan area	
Threats	After the building boom eases, there will be a need to certify construction industry workers, many of whom will be approaching retirement age	Young people have expectations beyond their skill base
	Without greater development of the night-time economy, young people may continue to leave the Peel	The business sector and education and training providers acknowledge the need for improved communication
	Peel's 'dual economy', (affluent, lifestyle/retirement on the coast and mining/resources inland) may generate increasing land use conflict	As noted under opportunities, the new rail and road access may improve access to metropolitan education and training opportunities, thus undermining investment in local

SWOT	Employment	Training
		delivery resources
	The continued growth of Peel has a high proportion of lifestyle seekers, many of whom are not entrepreneurs	
	The lack of industrial land drives manufacturing to Rockingham	
	Hobby farms erode the agricultural sector, particularly in Murray and Serpentine Jarrahdale	
	With the continued growth in the number of retirees, consumption may remain lower than average thus driving down labour market expansion in the long run	
	Housing affordability may become a significant issue	

6. WORKFORCE MODELLING

A supply-demand model was prepared to guide training delivery requirements for the Peel region to 2016. The model provides a measure and comparison of labour market demand and training delivery in the Peel region. It involved:

1. Taking State growth rate projections for each of the 17 ANZSIC industry groups and deriving a weighted growth rate for the Peel region out to 2016 that is based on current industry share of employment in the region (the industry employment profile).
2. Moderating the weighted industry growth rate according to a set of assumptions based on local market intelligence and/or the literature review undertaken during the background research phases.
3. Extrapolating workforce size in the Peel for each group based on these weighted/moderated growth rates.
4. Matching ANZSIC industry groups with WADT categories (as provided by the Department of Education and Training).
5. Comparing estimated workforce demand in Peel with training delivery in the Peel for each WADT category.
6. Moderating the training delivery recommendations based on the proportion of people in the workforce in the Peel with VET qualifications (i.e. making recommendations based on the need for up-skilling of the workforce) and adjusting these recommendations based on the objective of raising qualification levels to increase growth in employment in higher skill Australian Standard Classification of Occupations (ASCO) categories.
7. Deriving indicators to determine over- or under-supply of training provision in the Peel region and making recommendations on training delivery as part of the broader Workforce Development Strategy.

6.1 Model Assumptions

A range of assumptions were made in relation to industry demand for labour and training delivery in the Peel region. These assumptions, which are detailed below, were used to moderate the training supply and demand projections based on the model and subsequent qualitative adjustments.

Generic Assumptions

- The fundamental assumption was that current Western Australian industry growth rates can be used as a baseline set of values for estimating labour market demand in the Peel region. Weightings and moderation would be applied to these values to align them more closely with the Peel region's distinctive economic and demographic features and likely growth trends, including the shift, in some sectors, towards an employment profile more aligned with that of Western Australia (i.e., a more diverse economic base).
- As the industry employment growth rates for the Peel are based on the State averages, the impact of the greater population increases in the Peel must be taken into account when deriving region-specific industry growth rates. To do this, ANZSIC industry groups are classified into categories in which population changes have a 'very low', 'low', 'medium' or 'high' impact (see Appendix Three). The population change differential between the Peel and the State average was then weighted according to this method.

- Matching local training delivery with local industry labour demand is a reasonable proxy for deriving a locally sustainable workforce. However, for the reasons outlined in Appendix Three (part 3.1), there cannot be a direct matching of labour shortage and enrolments in specific courses.
- A minimum of 20% of young people leave the Peel after completing their education.

Industry Demand Assumptions

- The DPI (2005) WA Tomorrow population projections were used as the basis for growth in the region and the subsequent local industry labour demand. While acknowledging that these projections err on the conservative side, they were only moderated in cases where there was an existing, verifiable moderator. For example, the Boddington Gold Mine will have a construction workforce of up to 1,500 until 2008 and then a permanent workforce of approximately 650 people, with some 422 (65%) expected to live in and around Boddington. It was also reported that the Worsley bauxite mine expansion will add about 200 employees, again with an estimated 65% living in or around Boddington. This, in turn, is expected to have a multiplier effect of between 1.3 and 1.7 on the local population. In total this will add approximately 1,380 people to the Shire's population in addition to the DPI projected growth.
- Proposed (speculative) developments such as the relocation of Jandakot airport have not been factored into the model.
- The current building and construction industry boom is projected to continue to 2012. Currently there is a labour shortage in the industry, rather than a skills shortage. This means that there is a need for incentives to attract building and construction industry workers to move to/work in the region. At the same time, the industry recognises that its workforce is ageing and it wants greater participation levels amongst younger people living in the Peel. Consequently, some emphasis is placed on lower level training for new entrants to the workforce.
- After 2012, the industry believes there will be an oversupply of labour and an undersupply of skills as, due to the age of the workforce and the boom, many in the industry are not certified (for example, only one in six bricklayers are certified). Recognition of Prior Learning is seen as a key solution to this problem in the medium to long-term.
- After 2012, service industries will become the key industries in the region: i.e. hospitality and tourism, personal services and community health. It is also acknowledged that the Mandurah Point Peninsula development's new Hospitality Centre of Excellence may reduce the demand for additional hospitality training.

Training Supply Assumptions

- Comprehensive data on training delivery is only available for publicly funded training provision. Where it has been available, data on privately funded training provision has been used to moderate the estimations of future training demand.
- The figures for current training delivery relate to delivery in the Peel, and not for Peel residents. However, some consideration is given to the difference (within each WADT group) between the two sets of data. This provides us with some indication of training demand in the Peel community, but not necessarily training demand in the Peel economy.

- There are two training goals that need to be balanced. Firstly, the requirement for training in higher skill level occupations as they are defined by the ABS's Australian Standard Classification of Occupations (ASCO). This aims to increase the proportion of people with Diplomas and Advanced Diplomas (in order to align the Peel's educational attainment profile with that of the rest of Western Australia). Secondly, the more achievable goal of providing entry level training delivery for local disengaged people, long-term unemployed and other key cohorts.
- Where it was possible to determine whether an industry experienced high levels of employment turnover, some negative weighting was applied to the industry on the basis that training provision would have a lower return on investment to the Peel region. Deriving a comprehensive set of labour churn figures within the Peel constitutes an important step for the next iteration of the strategy.
- With the exception of recommendations made at the State level specifically in relation to the Peel region (as documented in the State Training Board's 2006-2008 profile), State-wide training policy was not used to moderate the projections in any way. This was done on the basis that this strategy was designed to deal with the issues in the Peel region alone.

The following provides details on how the projected growth rates, industry demand and training delivery recommendations were derived⁵.

6.2 Model Steps

Step One – Industry Growth Rates

The Western Australian industry growth rates (sourced from the State Training Board) for the 17 ANZSIC industries were adjusted to take into account the proportion of the labour force working in these industries in the Peel region. This was then used as the base growth rate to be applied to existing industry employment levels in the Peel.

Step Two – Moderation of Industry Growth Rates

A series of moderations were applied to the Peel industry growth rates. These were based on local market intelligence gathered via consultations or through a review of existing data sets relating to major project development commencing in the Peel or research findings relating to skills needs. These weightings included:

- Mapping projected labour demand over time for key economic development activities;
- Classifying and weighting the ANZSIC categories according to whether they undergo a low, medium or high response to population growth and applying a weighted Peel-specific population impact to the industry group growth rates; and
- Identifying industry groups that have high labour turnover in Western Australia and the Peel region (accommodation, cafes and restaurants and retail trade), consequently, reducing the weighting for these industry sectors on the assumption that local training delivery would have a lower return on investment for the region.

⁵ Note that the table summarising the information is provided in Appendix Two.

Step Three – Estimated Workforce Size

Using the weighted and moderated industry growth rates, projections for the estimated workforce size were derived for 2016. A summarised version can be found in Table 6.1 and the full table in Appendix Three.

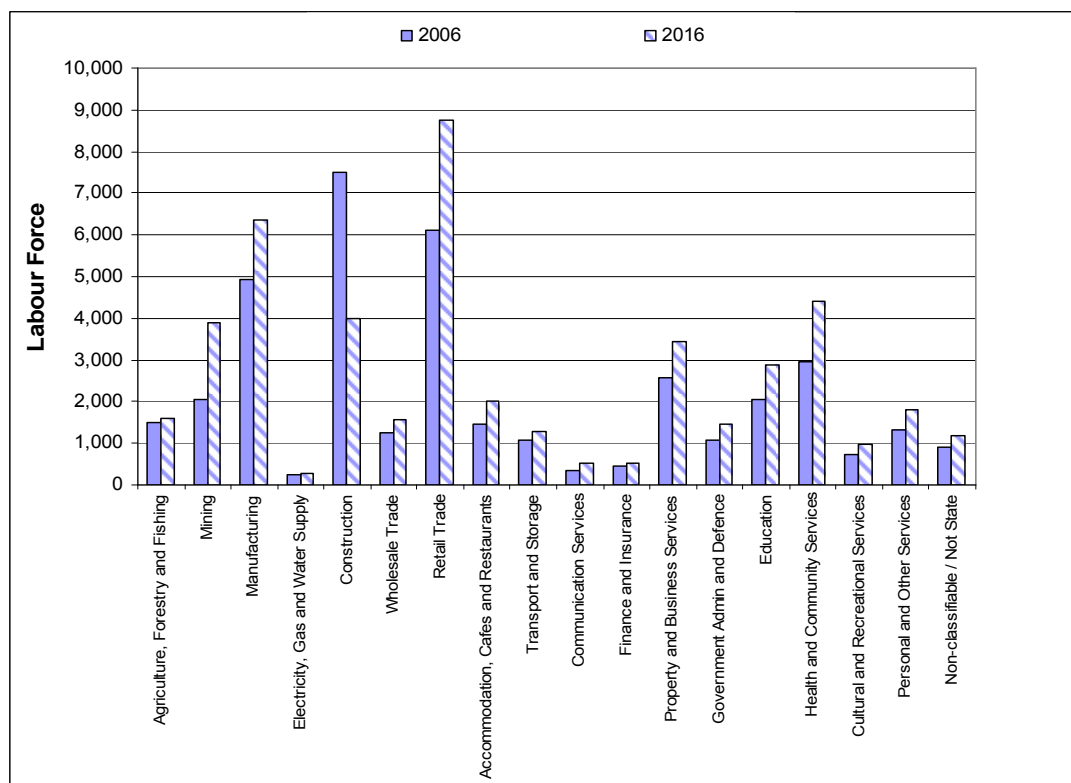


Figure 6.1 Projected Industry Labour Force for Peel Region 2006 and 2016

As indicated in Figure 6.1, key growth is in mining, manufacturing, retail trade, property and business services and health and community services. This does not, however, suggest that training delivery in these industry groups needs to be increased as current supply may already match or exceed demand.

Step Four – ANZSIC and WADT Categories

The Department of Education and Training have prepared a cross-referencing of ANZSIC categories with ANTA and WADT categories. This is used as the key to match industry demand with training delivery. Representatives from the Department made it clear that this cross-referencing should be treated cautiously (for more information relating to the caveats attached to this model, see Appendix Three).

Step Five – Workforce Demand and Training Output

A comparison of workforce demand and training provision was undertaken to determine training under- or over-supply on the basis of weighted and moderated industry demand.

Step Six – Moderation of Training Provision

In addition to the modelled training delivery requirement based on local industry and population growth rates, as derived through Steps One to Five, several qualitative drivers, and their likely impact on training need, were considered. These were:

- New training delivery in the region (e.g., the Australian Technical College);
- Stakeholder views on specific skill needs;
- The current (VET) qualification status of the Peel resident population, specifically, the lower level of residents with Diplomas and Advanced Diplomas;
- The higher training need for higher skill ASCO categories.
- State training policy prescriptions as they may apply to the Peel region; and
- The capacity to 'push' the Peel region's labour market profile closer towards the Western Australian profile, on the basis that the stakeholders are seeking a more diverse and sustainable local economy.

To the extent that it is possible, these were factored into the model. Where this is not possible, the qualitative considerations are used to moderate the output of the model as discussed in Section 7.

Step Seven – Training Recommendations

Training recommendations begin from an analysis of the supply-demand model and then are moderated according to qualitative factors outlined in Step Six (above). These recommendations focus on increasing or decreasing training delivery in order to assist in matching regional labour market demand with training delivery in the Peel region.

6.3 Matching Supply with Demand

Table 6.1⁶ compares projected labour market demand with VET qualifications awarded for Peel residents⁷. It provides one indication of potential future under or oversupply of VET provision. The figures provided show net annual increase in industry employment compared with qualifications awarded in those industries for Peel clients.

Tables 6.2 and 6.3 shows course enrolments and student contact hours, respectively, for Peel clients and for the Peel region. These figures are compared with the industry employment profile for 2005 (the latest available year) and the projected profile for 2016. Data from these tables are also illustrated in Figures 6.2 and 6.3. The information provides alternative ways to compare training supply with projected labour market demand. This analysis suggests that, with respect to training provision, some areas are oversupplied and other undersupplied. Note also that a more complete set of projections can be found in Appendix Three.

⁶ Data is provided to the level of disaggregation allowable under the agreement between TAFEWA and DET.

⁷ Note that this is only a proxy measure of skilled labour supplied as some individuals receive more than one qualification and consequently there is a small proportion of double counting.

Table 6.1 Skills Supply and Projected Labour Demand

Industry Sector	2001	2006	2016	Qualifications Awarded 2005 to Residents	Avg. Annual Net Demand	Difference
Agriculture, Forestry and Fishing	1,468	1,490	1,612	55	12	-43
Mining	1,774	2,058	3,895	10	184	174
Manufacturing	4,375	4,934	6,364	92	143	51
Electricity, Gas and Water Supply	214	236	288	2	5	3
Construction	3,120	7,514	3,992	61	87	26
Wholesale Trade	1,132	1,241	1,565	0	32	32
Retail Trade	5,292	6,114	8,747	118	263	145
Accommodation, Cafes and Restaurants	1,315	1,468	1,999	63	53	-10
Transport and Storage	1,010	1,080	1,300	23	22	-1
Communication Services	306	353	505	8	15	7
Finance and Insurance	428	445	517	9	7	-2
Property and Business Services	2,294	2,565	3,437	324	87	-237
Government Admin and Defence	948	1,077	1,458	29	38	9
Education ⁸	1,805	2,060	2,879	132	82	-50
Health and Community Services	2,478	2,938	4,426	115	149	34
Cultural and Recreational Services	642	719	964	40	25	-15
Personal and Other Services	1,162	1,312	1,790	15	48	33
Non-classifiable / Not Stated	795	896	1,193	0	30	30
Total	30,591	38,491	46,933⁹	1,096	843	-253

⁸ Note that education includes literacy/numeracy and ESL courses.

⁹ Note the large difference in labour force size in 2006 compared with 2001 is due to the mining construction projects underway from 2006 to 2008. These are

Table 6.2 Projected Labour Demand and Training Supply (CEs)

Industry Sector	% Industry Employment Share Peel 2001	% Industry Employment Share Peel 2005	% Industry Employment Share Peel 2016	% of CE in Region 2005	% of CE to Residents 2005
Agriculture, Forestry and Fishing	4.8	4.4	3.4	1.7	3.0
Mining	5.8	6.0	8.3	2.9	2.2
Manufacturing	14.3	14.4	13.6	3.3	9.3
Electricity, Gas and Water Supply	0.7	0.7	0.6	0	0.2
Construction	10.2	9.9	8.5	6.8	8.0
Wholesale Trade	3.7	3.6	3.3	0.03	0.0
Retail Trade	17.3	17.6	18.7	4.4	5.8
Accommodation, Cafes and Restaurants	4.3	4.3	4.3	5.5	4.5
Transport and Storage	3.3	3.2	2.8	4.1	2.9
Communication Services	1.0	1.0	1.1	0.05	0.3
Finance and Insurance	1.4	1.3	1.1	0.2	0.5
Property and Business Services	7.5	7.4	7.3	50.2	34.2
Government Admin and Defence	3.1	3.1	3.1	3.2	1.2
Education	5.9	6.0	6.1	5.9	13.9
Health and Community Services	8.1	8.4	9.4	5.4	6.4
Cultural and Recreational Services	2.1	2.1	2.1	5.6	5.3
Personal and Other Services	3.8	3.8	3.8	0.7	1.9
Non-classifiable / Not Stated	2.6	2.6	2.6		
Total	100.0	100.0	100.0	100.0	100.0

temporary labour forces and total workforce figures drop after 2008 and return to steady growth rates.

Table 6.3 Projected Labour Demand and Training Supply (SCHs)

Industry Sector	% Industry Share Peel 2001	% Industry Share Peel 2005	% Industry Share Peel 2016	% of SCHs in Region 2005	% of SCHs to Residents 2005
Agriculture, Forestry and Fishing	4.8	4.4	3.4	2.5	3.0
Mining	5.8	6.0	8.3	2.7	1.7
Manufacturing	14.3	14.4	13.6	6.5	11.7
Electricity, Gas and Water Supply	0.7	0.7	0.6	0.0	0.2
Construction	10.2	9.9	8.5	8.3	9.9
Wholesale Trade	3.7	3.6	3.3	0.0	0.0
Retail Trade	17.3	17.6	18.7	4.1	6.7
Accommodation, Cafes and Restaurants	4.3	4.3	4.3	6.4	5.0
Transport and Storage	3.3	3.2	2.8	3.4	2.5
Communication Services	1.0	1.0	1.1	0.0	0.4
Finance and Insurance	1.4	1.3	1.1	0.1	0.4
Property and Business Services	7.5	7.4	7.3	37.2	26.4
Government Admin and Defence	3.1	3.1	3.1	4.7	1.9
Education	5.9	6.0	6.1	8.0	10.9
Health and Community Services	8.1	8.4	9.4	10.3	10.6
Cultural and Recreational Services	2.1	2.1	2.1	4.8	6.6
Personal and Other Services	3.8	3.8	3.8	1.0	2.1
Non-classifiable / Not Stated	2.6	2.6	2.6		
Total	100.00	100.00	100.00	100.00	100.00

(note, source for tables 6.1 to 6.3: ABS, 2001; DPI, 2005; AVETMISS, 2006; Geografia projections)

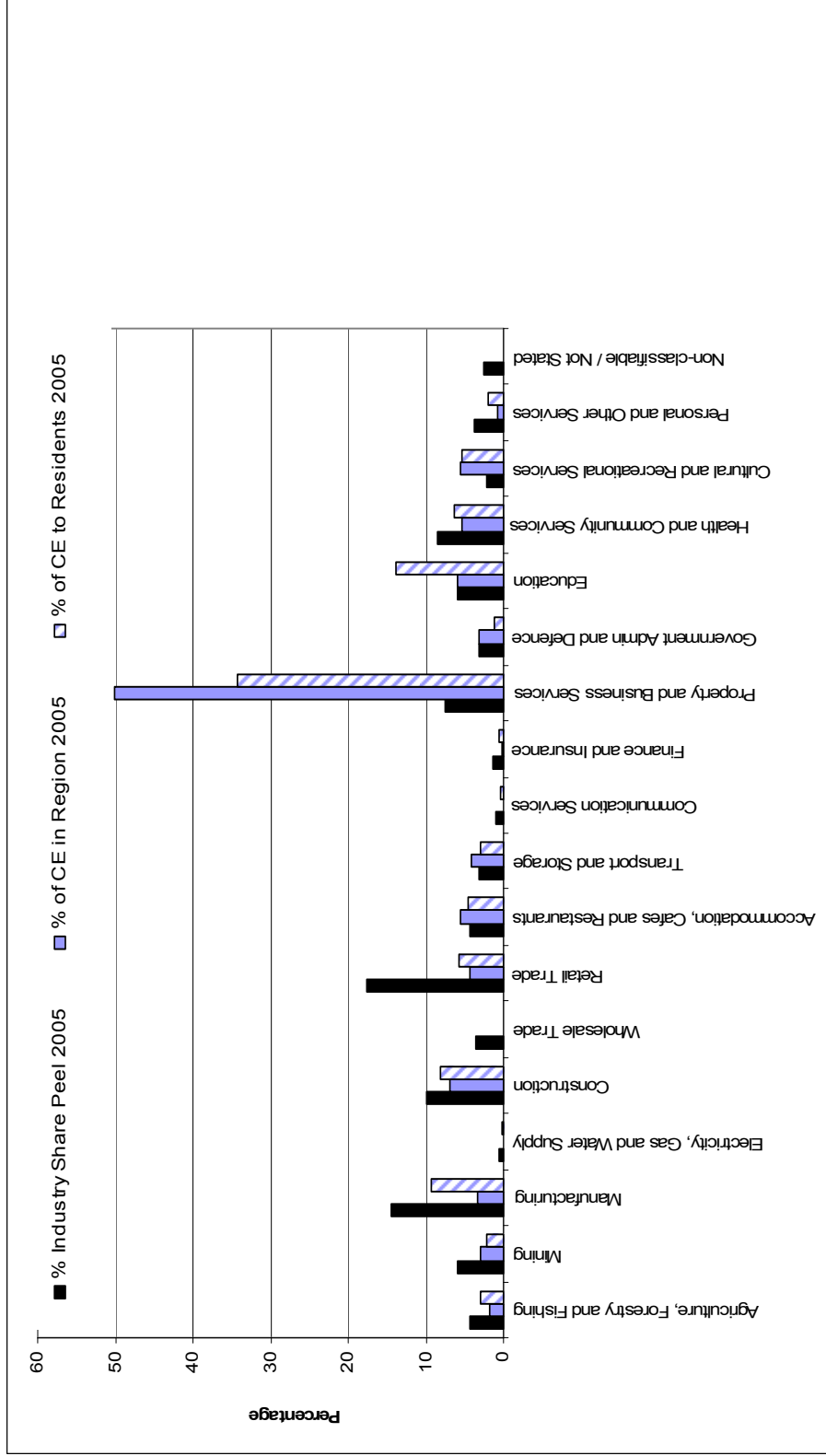


Figure 6.3 Industry Employment Profile and Student Contact Hours Profiles 2005

The information provided in Tables 6.1, 6.2 and 6.3 is one way to map labour market demand against training output and project this out to 2016. 'Qualifications awarded to Peel residents' was selected as the key measure of skills delivery as it provides an indication of the willingness of residents to undertake training and thus a reasonable method for determining to what extent the Peel's labour market demand may be met by people living, studying and working in the region. Nevertheless, it should still be assumed that a minimum of 20% of TAFE enrollees (at least those from 19-30 years old) will leave the region upon completion of their studies.

Also of note is that the manner in which AVETMISS data is provided means that it is not possible to determine the number of qualifications awarded in the Peel region. Finally, as indicated elsewhere in this report, the degree of skills transferability, particularly of generic skills such as customer service, computing, problem solving and time management, means that, for example, training in fields such as property and business services, which appears over-supplied, is invariably applied in other fields of employment.

6.3.1 Summary of Findings

What the data reveals is that, in the aggregate, there are sufficient Peel residents receiving VET qualifications to meet projected labour market demand in Peel *assuming everyone learns, lives and works in Peel*. This is clearly not the case. However, given that there is no accurate out-migration or commuting information available, it is not possible to be certain how many young people, or other people undertaking training, leave the Peel for work.

A proxy measure is derived by calculating the 'shortfall' in people aged 15-39 living in Peel. This is the difference between the actual estimated resident population of people of this age living in Peel and how many there would be if the age profile was the same as for WA. Using ABS data for population, there is a shortfall of approximately 20% in these age cohorts. That is, if the Peel age profile was the same as the WA average, there would be an additional 6,000 people living in Peel aged 15 to 39¹⁰.

Using this information, it can be concluded that, of the approximately 1,000 individuals who received VET qualifications in the Peel in 2005, assuming the majority of them are aged 15-39, at least 20% of them may not live or work in the region, leaving some 800 new qualifications awarded each year to individuals living in the Peel. Estimating how many of those people actually live and work in the Peel is not possible without further studies, however, with the information to hand, it can be said that, each year, there are an equivalent number of new jobs as there are people living in the Peel who receive a VET qualification. That is, aggregate supply of skills meets demand. Clearly this assumption should be treated cautiously and is only an indicative assessment.

Another way to determine how much of the training provision in the Peel may benefit the local labour force is to compare the ratio of course enrolments in the region with course enrolments of Peel residents. In total these add up to 10,434 enrolments, with local delivery accounting for

¹⁰ Given the extensive changes in the Peel over the last 5 years, journey to work data from the 2001 Census is likely to be misleading. Moreover, without confidentialised unit records from the Census, it is not possible to cross-tabulate place of work with place of residence and thus get an accurate sense of commuting.

35% of the total. Notwithstanding that a proportion of training delivery in the region is to non-Peel residents, it may be reasonable to conclude that approximately 35% of qualifications received by residents are delivered in the region. Consequently it is possible that only some 350 Peel VET graduates work in the region, in which case, training provision only meets about 41% of demand (350 graduates per year for a net labour market demand of 843). Again, this is highly speculative and, if anything, it points to the critical need to derive a better measure of how many people are trained in the Peel and then go on to work in the Peel and, determine to what extent people trained in particular fields of study, go on to work in a related industry occupation.

6.3.2 Training Supply by Industry Group

Potential Training Undersupply

Disregarding whether training provision for Peel clients addresses the region's labour market need, the data (in Tables 6.1 and 6.2 and Figure 6.1) shows that key areas with projected VET undersupply to 2016 (assuming no change in training delivery to Peel residents) are:

- Retail
- Mining (including engineering and mining operations)¹¹
- Manufacturing (metal trades) (2006-2016)
- Health and community services (particularly aged and childcare); and
- Personal and other services; and
- Wholesale trades

Undersupply in retail, health and community services and personal and other services is clearly driven by the population growth heightening demand and these findings match stakeholder perceptions. They point to the need for training at higher levels (e.g., Diploma and Advanced Diploma) in these groups. Mining undersupply is largely related to the few major new projects coming on line in the region over the next few years and will require skills in engineering. Manufacturing undersupply is a consequence of insufficient enrolments, rather than any projected significant increase in labour demand (excluding servicing the mining industry). Skills demand is in electrical trades in particular.

Potential Training Oversupply

The data also suggests that key areas with projected VET oversupply to 2016 (again, assuming no change in training delivery to Peel residents) are:

- Property and Business Services;
- Construction (in the longer term);
- Agriculture, Forestry and Fishing;
- Education; and
- Cultural and Recreational Services.

While the data on training provision in property and business services suggests this sector is well catered for in the region, this is a result of anomalous matching of the various industry

¹¹ Note that most of the alignments between ANZSIC industry groups and WADT 'training' groups should be treated cautiously. For example, WADT group metals and mining comes under two ANZSIC groups, 'mining' and 'manufacturing'.

classifications. Entry level enrolments do, however, appear to be high. Agriculture, forestry and fishing are an industry sectors that have undergone structural and technological change that has resulted in significant shifts in the nature of skills requirements. Strategic plans for Murray and Serpentine-Jarrahdale emphasise their intention to maintain both rural lifestyle and rural commercial activities. This will result in growing demand for rural operations training. Additionally, stakeholders (including the State Training Board) report increased demand for training in boating services (which includes automotive training specialising in marine motors) to meet the need of the growing coastal community. In both cases, however, industry growth rates would be highly speculative and cannot be reliably projected at this point.

While an oversupply of training in construction may seem counterintuitive given current labour shortages, this is based on an analysis of endpoints in the projections in which, according to the industry itself, the construction boom (including for major project development in the region) will have remained steady to 2012 and then eased by 2016. As noted earlier, it is from 2012 that RPL and certification for the existing workforce will become more critical to the industry. After 2016, the ageing construction industry workforce will drive up the demand for new entrants.

The figures for education are also misleading and this is due to the nature of occupational classification. While there does appear to be an oversupply of training in languages (which is classified under education and accounts for almost two thirds of training provision under this group), it has been reported by stakeholders that there is a critical shortage of teachers and trainers in the region and literacy and English as a Second Language (ESL) training are also essential. Given that most training for teaching is provided outside of the region, the local market is unlikely to fully benefit and training provision in education needs to be increased.

Finally, cultural and recreational services has traditionally been an industry sector that generates high demand for training from students, and, consequently, labour demand is unlikely to match training output.

Potential Training Balance

There are several industry groups in which current training provision appears to approximately match projected demand. This includes:

- Electricity, gas and water supply;
- Finance and insurance; and
- Transport and storage.

However, given the low enrolment numbers, the dynamism of these sectors and the national growth trends (particularly in logistics and finance), it is likely that the industry demand projections will need to be revisited in the short term and training provision increased.

6.3.3 Conditions on Supply-Demand Modelling

Matching supply of training output with demand for labour input is at the core of centralised workforce development models. While overall there are clear shortfalls in training provision in the Peel, the challenge is to ensure that a realistic measure of both supply and demand is obtainable. To do this, several factors need to be taken into account, including:

- obtaining a reliable (and non-confidential) measure of both privately and publicly funded delivery, ACE and enterprise training;
- the highly (geographically) mobile labour force that characterises inner regional economies like the Peel;
- job mobility between industries for VET graduates;
- skills transferability particularly of generic office-related skills;
- level of skill; and
- normative goals relating to qualification levels as listed in Step Six (see Section 6.2).

As a result, while a supply and demand analysis is included as a critical part of this report, it is integrated into a broader assessment of the Peel region's workforce needs and challenges. These will be taken up in Section 7 when the output of the model is factored into the training recommendations.

7. SUPPLY AND DEMAND FOR THE WORKFORCE – SUPPORTING AND TRAINING

As Section 6.3 indicated, it is critical to the Peel Workforce Development Strategy to address the goal of linking people in the region with the right training and, ultimately, a job in the region: that is, living, learning and working in the region. To do this, research, employment analysis and input from stakeholders has revealed a number of key issues that need to be addressed in relation to training supply and demand and the existing labour pool. Ideally these issues should be addressed through a combination of a reorientation of training provision and support mechanisms for the local workforce and providers.

7.1 Supporting

The consultations and a wealth of previous research make it clear that supporting the pathway for people to enter into training and employment is critical. This is particularly the case for mature age workers, long-term unemployed and young people. Although these cohorts do not provide a sufficient labour pool to meet projected demand, they are still an important part of overall workforce planning. In addition, by addressing the barriers to training and employment for these groups, higher employment rates and more relevant training participation can be achieved.

Currently the core issues are:

- the need to target and then deliver information to the ‘untapped’ labour pool in the Peel (mature aged workers, disengaged youth and students beginning to pursue career options);
- the difficulty in coordinating efforts across the numerous courses, programs and agencies;
- enabling young people in particular to physically access training and employment opportunities, particularly those living outside of the Mandurah area;
- identifying and preparing for newly emerging industries; and
- quantifying the degree to which people live, learn and work in the Peel region and the inter-industry movement of labour.

One concept that received considerable support, and has been tested and applied by DET in the past, is that of a one-stop-shop. The facility would provide targeted training information and advice for young people and their parents, single parents and mature age workforce re-entrants. This may take the form of a mobile training and employment consultant, as has been suggested, or located within a coordinating central body such as the Peel Development Commission. In particular, stakeholder consultations with industry and educators suggest that a one-stop-shop is critical to undertake an on-going ‘marketing’ campaign that raises the awareness of parents and students about the career opportunities in key trades. DET (2000a) has undertaken research in the past that has measured the economic value of trades in comparison with no post-compulsory schooling or a university qualification. This material and other studies like it can be used to underpin the marketing of the trades.

As with the one-stop-shop concept, the establishment of a coordinating body received broad support from stakeholders in view of the extensive, but occasionally disjointed, training and employment programs being run in the region. A coordinating body has the added benefit of

addressing other issues relating to the creation of a culture of learning in the community and the small business sector and for the continuous improvement of the workforce planning process (that is, through better information on what skills the business community see are necessary, how many people train and then work in the region and so forth).

In places like Boddington, Murray and Waroona, transport is a critical issue for accessing training. It is easier for a young person seeking post-compulsory education to move to metropolitan Perth, than to stay in the region and try to access a reasonable range of education options. It is unreasonable to expect that everything would be available in the Peel that is available in Perth, but, at the least, courses that will help provide the skills critical to the region's economy, do need to be accessible.

The likely establishment of a 'distributed delivery'¹² Australian Technical College by 2009 will go some way to addressing these issues, and Challenger TAFE already delivers throughout the region. However, stakeholders still consider transport as a key issue. It has been suggested that a bus service be established to assist in moving young people to and from learning centres. Additionally, E-learning is cited as a mechanism with underdeveloped potential.

The other aspect of this barrier is that stakeholders report that there is insufficient training infrastructure to meet current and future demand in the region. Mandurah Senior College and Challenger TAFE facilities are over-stretched and there is little capacity to introduce new or expanded programs and courses.

Major new developments such as the Boddington Gold Mine and the potential for the relocation of Jandakot Airport to Serpentine Jarrahdale present large-scale opportunities for absorbing existing underemployed labour and attracting new people to the region. A coordinated effort that presents packages (including labour and training) to new, large enterprises and can also map the potential impact of these projects could help to capitalise fully on the benefits. A coordinating body would be best placed to investigate this strategy.

Finally, a better understanding of skills transferability, inter-regional labour mobility and local industry skills demand would improve the workforce planning process. Again, a coordinating body can institute a quantitative information collection process that incorporates local market intelligence. There are already numerous reports prepared that can contribute to these objectives.

7.2 Training

In matching the supply of, and demand for, skilled labour in the Peel various qualitative considerations have been applied to the quantitative model. This has been done in order to better develop an integrated strategy and to be able to drill down from the aggregate industry group level to specific courses (where possible). As indicated in Section 6, the considerations include:

- the imminent rollout of Australian Technical Colleges, which is likely to include training in the Peel region via a distributed service delivery. Given that these colleges are being established by the Commonwealth to address areas of national skills shortages, this will increase the delivery of key skilled labour in the region over the longer term;

¹² This is delivery via small classes in Telecentres and schools, in contrast to a centralised campus.

- local market intelligence on major project development;
- stakeholder views on specific skill needs, particularly in relation to entry level training for young people and the long-term unemployed;
- the current (VET) qualification status of the Peel resident population, specifically, the lower level of residents with Diplomas and Advanced Diplomas and the requirement to increase the delivery of higher level qualifications;
- State training policy prescriptions as they may apply to the Peel region; and
- the higher training need for higher skill ASCO categories. This relates to the capacity to 'push' the Peel region's labour market profile closer towards the Western Australian profile, on the basis that the stakeholders are seeking a more diverse and sustainable local economy.

Overall there are four overarching training-related objectives that are recommended. These are:

1. Establish both short and medium term skills shortage plans to match supply with demand in key industry sectors (building and construction in particular).
2. Coordinate and deliver job-readiness programs for specific population cohorts.
3. Address teacher/trainer shortages, particularly through the local labour pool.
4. Plan for future economic diversity through the provision of 'pre-emptive' training.

Objective One – *establish both short and medium term skills shortage plans to match supply with demand in key industry sectors (building and construction in particular)*

While data on current training provision in the region remains confidential at the disaggregated level, through a combination of the supply-demand model and the qualitative input from complementary data sources and stakeholder consultation, there is sufficient evidence to develop short and medium term training recommendations in key industry sectors: (building and construction, community services and health, education and tourism). These include:

1. An expectation in the building industry that after 2012 there will be an oversupply of labour but an undersupply of skills. This suggests up-skilling programs for existing workers will need to be rolled out in the second half of the 10 year time frame, while in the immediate future, new courses in fields currently undersupplied (such as supervisors and estimators and wet trades¹³). In the longer-term, the building and construction industry see a priority in re-skilling local labour into light manufacturing, commercial, environmental and tourism-oriented construction and applying RPL to the existing workforce (particularly bricklaying and carpentry).
2. Due to the population profile, within community services and health, aged care that requires attention. Currently the majority of delivery is for qualifications for community service workers, although Challenger TAFE report having increased aged care training in recent years, with the major issue being uptake by students, rather than availability.
3. Education received significant attention from stakeholders (both employer groups and training providers). It was noted that there were insufficient teachers and experienced trainers in the region to meet the demand for increased training. This creates a barrier to the creation of a niche education hub (see Objective Four).

¹³ It is acknowledged that the PET campus in the Peel is soon to almost double delivery of wet trades, however the industry believes delivery will still fall short of demand to 2012.

4. Finally, there is capacity for increasing training delivery in fields that may help to nurture newly emerging industry activity in the Peel (particularly in tourism) as well as raise the overall skill level of the Peel labour force. The key in this field is to attract people to the industry and this is what the 'Support' strategy is designed to address.
5. According to stakeholder consultation, there are other industries with current or potential unmet labour market demand including in the environmental sciences and natural resource management.

In relation to adjusting training delivery, the primary challenges are in

- providing sufficient infrastructure to run courses (both Mandurah Senior College and Challenger TAFE note that, despite significant commitment of resources to increase capacity, there is still limited equipment and space to undertake current delivery and little capacity for increasing it); and
- marketing the skills shortages trades to students and parents, requiring a cooperative effort from educators and industry.

Raising the age of compulsory schooling and the national welfare to work reforms are likely to increase the requirement for VET training in the Peel region in order to deliver sufficient SCHs to young people and the unemployed. However, this is not factored into this analysis as it is based on the increased need for training that may result from population and industry growth.

Objective Two – *coordinate and deliver job-readiness programs for specific population cohorts*

In relation to the second objective, mobilising the existing Peel labour pool is an important part of the workforce development strategy, and, in particular, the disengaged, long-term unemployed and single parents. The total numbers of people may not meet the labour market demands in the Peel but they constitute a valuable 'live-local, work-local' source of labour and, consequently, there is a more achievable connection between training provision and filling regional job vacancies. As important is the community development dividends from actions designed to move the unemployment rate and the proportion of long-term unemployed down towards the State averages.

Discussions with stakeholders and the literature indicated that job-readiness and the support initiatives outlined above are the key to the strategy. This means entry level training for new entrants to the workforce, with a focus on the skills shortage areas of building and construction, automotive, tourism and, in the longer term, aged care (although, as noted earlier, courses are available but not subscribed to in sufficient numbers).

For Indigenous people in particular, it has been recommended that there be provision for:

- pre-vocational programs to provide a pathway into employment in mining or mining service industries (such as commercial cookery);
- delivery of training and assessment courses for Indigenous trainers; and
- delivery of training in Aboriginal Health and Community Services Work.

Challenger TAFE has implemented a response to these shortages through training in kitchen and hospitality operations to be rolled out in 2007. These will meet the projected demand

particularly from the mining sector, which will continue beyond the 10-year time frame of this strategy.

In keeping with the reported gaps in skills, these pathways would ideally commence at Certificate II level and lead to higher qualifications.

Objective Three – *address teacher/trainer shortages, particularly through the local labour pool*

One important aspect of retaining the workforce in the Peel is retaining the skills base of the workforce through application of lifelong learning. In a region such as the Peel, with an older age profile, this largely (but not exclusively) equates to mature age up-skilling.

Several Peel stakeholders have noted the large pool of semi-retired, skilled workers (for the most part from 50-64 years old) who have moved to the region and found themselves with too much time on their hands, a willingness to work and little awareness of how to find work in the area. Apart from the concept of one-stop-shops (see Section 7.1), which will address the issue of access to information, another strategy is to capitalise on the experience and skills of this cohort. The Peel Chamber of Commerce, building and construction industry representatives and education providers have noted that the skills shortage crisis has also affected the supply of teachers and trainers. Therefore, there is scope for increasing the number of mature age, semi-retired workers into teaching, particularly through TAFE.

The schools sector report a regional shortage of primary and secondary teachers. Schools in the Peel region are competing with the metropolitan area to retain the teachers they have at a time when the population of 0-14 year olds is increasing at a rapid rate. In the VET sector, by contrast, the shortages are not specific to the Peel region, but to particular fields of study – largely the same fields of study in which there are shortages of graduates for the labour market in general.

Objective Four – *plan for future economic diversity through the provision of ‘pre-emptive’ training*

As the Peel economy has a mix of regional and urban characteristics, the ideal structure would be aligned to the State rather than Perth metropolitan profile. As noted earlier, the purpose of this aspect of the strategy is to help develop a more self-sufficient and sustainable local economy. Key industries in need of growth are:

- health and community services;
- personal and other services;
- property and business services; and
- education (specifically, in the case of VET, teachers assistants).

With the exception of property and business services, the supply-demand model indicates that these industry sectors are currently undersupplied in terms of training provision. Industry groups such as personal services (particularly beauty therapy and hairdressing) are experiencing national shortages. However, using the ‘occupation of employed persons’ data from the ABS Census (and excluding professionals), Peel has a shortfall in people in elementary and intermediate clerical, sales and service, which suggests that training in property and business services can be maintained at current levels. In terms of what skill levels this training should focus on, according to the ABS (1997), these occupations have skill level requirements

at the Certificates I and II level respectively. This complements the recommendation to provide entry level training for young people or re-entrants to the workforce in new fields (aimed at single parents and semi-retired people)¹⁴.

At the same time, the emphasis in the longer term must be on addressing the gap in the workforce in the number of people with Diplomas and Advanced Diplomas (excluding building and construction, in which the workforce requires certification in the longer term and not up-skilling).

Particularly in relation to education, and complementing the broader place-marketing concepts, outlined in Section 8, the consultations emphasised a set of identifiers for the Peel region that include:

- The Environment - environmental awareness is considered high in schools and the community at large. There is an opportunity to capitalise on this through niche education and training delivery of environmental management, estuarine studies, eco-tourism and other associated disciplines at the higher Australian Qualifications Framework (AQF) levels (Diploma and Advanced Diploma).
- The Health Campus Concept -several stakeholders recognise the opportunity for linking growing local community service and health care demand (particularly aged care) in the region, with health care training, currently at relatively low levels in the region.

These identifiers are concepts that stakeholders believe are a competitive edge for the region, particularly in relation to the creation of a niche education hub, which offers programs aimed at local and other students.

¹⁴ Note that this has a flow on effect in an increased demand for childcare and childcare workers.

8. SUPPLY AND DEMAND FOR THE LIFESTYLE – ATTRACTING AND RETAINING

The Peel population is expected to expand by over a third over the next ten years. In-migration in the past has been predominately young families and retirees, and out-migration has been of 15-39 years olds. As noted earlier, there are up to 6,000 fewer 15-39 year olds in Peel than one would expect of a Western Australian region of its size. This, in part, accounts for the existing labour shortages. From a labour market perspective, attracting and retaining people with the appropriate skills and career aspirations will be critical. Without it, a workforce development strategy cannot hope to meaningfully address skills shortage issues in the region. There are a number of strategic initiatives that Peel stakeholders can adopt to ensure that attracting and retaining people who will live, learn and work in the region occurs.

8.1 Attracting People

Regions which new residents can move to and establish themselves are characteristically dynamic and successful. To achieve this, jobs, housing, lifestyle, transport accessibility, and relatively cheap, accessible short-term accommodation are critical to easing the transition.

There are multiple social, economic and environmental reasons why people choose to relocate to a region. Generally, the decision to migrate to a new region is based on a perception that a move will improve their or their families 'life-situation' (Lundholm and Malmberg, 2006). Migration, while having benefits, also has costs (e.g. loss of social network, fiscal costs etc). Therefore, the decision to relocate is strongly influenced by the net social and economic benefit – i.e. the costs of relocation need to be superseded by increases in wages, career prospects or quality of life.

Given the potential costs of relocation, life-course events have a strong influence on migration decisions, with age, education and family structure being a significant determinates. Often the decision to relocate is based on net 'family' benefit rather than net 'individual benefit' (Lee and Roseman, 1999). Options for spouse employment, leisure activities, housing affordability and quality of life therefore become important (Smith, 2004). Household responsibilities also influence decisions with people with school aged children less likely to relocate (Tienda and Wilson, 1992). The range and quality of education availability are therefore critical.

A study by Bell et al (2002) suggests that the probability of migration peaks between the ages of 20 and 30 then declines before increasing again in retirement. The likelihood of migration to a particular location is also affected by social and environmental factors. A study by Knapp and White (1992) suggests crime and anti-social behaviour are disincentives, while according to Crushing (1993) a suitable climate is a major deciding factor particularly with high income households.

According to the ABS, for the past ten years there have been, on average, 372,000 internal migrations per annum, with only Queensland and WA experience net gains. While in WA during the late 1990s and early 2000s there were net losses, in 2005 nearly 31,000 people migrated to WA, producing a net gain of approximately 1,500 people. The majority of new arrivals were from NSW, Victoria and Queensland (ABS, 2006). These trends form part of a broader national migration pattern towards non-metropolitan coastal areas (Kijas, 2002).

Consistent with other studies, according to the ABS the 20-35 year old age cohort was the most likely to move. Also of note is that in 2001, WA recorded the highest percentage of people born overseas (28%), indicating that it is a favoured destination among international migrants, particularly those born in the UK. In the Peel, however, only 20 percent of the population was born overseas which presents both a challenge and an opportunity (ABS, 2001).

Research on migration choices and labour mobility has some significant implications for the Peel region. Overall, the Peel is potentially a prime location for interstate, intrastate and international migration. It has a range of natural features, pristine beaches and water-based activities. As a developed community it has ample primary and secondary schooling. Healthcare, functional leisure facilities, established community and sporting groups and potential spousal employment options are also competitive advantages.

As a non-metropolitan coastal area with a Mediterranean climate the region will continue to attract people seeking a 'sea-change'. A regional location in close proximity to Perth, the Peel can potentially attract skilled international migrants. Also, working in its favour is that the demand for labour (i.e. 20-39 year olds) are those most likely to migrate. Housing is also still relatively affordable compared to most of the metropolitan areas, though there is a potential for increasing prices to become a disincentive.

The main disincentives are the limited range of tertiary institutions, limited social meeting places for 20-39 year olds and a poorly developed night economy. Thus there is some justification for additional tertiary and vocational educational facilities to not only attract skilled labour but to train/re-skill the existing and future workforce. Resources also need to be directed towards expanding the vibrancy of the regions urban centres so that they are more appealing for young adults.

What this analysis highlights is that, overall, the Peel has all the necessary foundations to attract skilled intrastate, interstate and international migrants. The main issue is that the region it is not a well recognised destination by interstate or by international migrants. A marketing campaign that articulates the lifestyle and employment benefits of the Peel is a potential strategy to encouraging appropriately skilled people into the region. This strategy should target both potential interstate and international migrants with attention to those with the appropriate skills and employment experience.

Paralleling efforts to attract skilled labour into the Peel is a requirement to expand the size and diversity of businesses. Currently there are a high proportion of smaller businesses, which, while a critical part of the local economy, are less likely to invest resources into training. Interestingly, it is now recognised that larger firm location decisions are increasingly based on the skills of the local workforce, ancillary infrastructure and services, and the lifestyle options for employees. Thus marketing the Peel, enhancing local education institutions and ensuring that it remains a vibrant place to live and work, will serve to attract both labour and additional business activity. Making available industrial land for these purposes is also a priority.

8.2 Retaining People

Just as lifestyle is an increasing determinate for migration choices, it is also a key determinate in retaining people in any given region. Place making thus becomes essential to not only

attracting people, but retaining them in the long-term and keeping the critical age cohort of young people in the region.

There is a growing body of literature and policy discourse on place making. Central to this literature is the concept of 'sense of place', which can be understood in terms of the identity of a locality, the feeling of belonging and community cohesiveness. Generally, it is believed that the stronger the 'sense of place' the stronger the attachment people have to a place and the less likely they are to migrate.

Fostering a strong 'sense of place' in the Peel is at the forefront of the approach advocated in this strategy to retain the existing (and future) labour force. The benefits can also meet some broader economic development objectives such as stimulating cultural tourism and acting as a mechanism to attract a broader diversity of business activity, particularly larger firms.

There is a range of established place making strategies that can serve to both attract and retain an appropriately skilled workforce in the Peel. The strategies need to serve two key purposes. Firstly, they must provide 'whole of life' opportunities. This means the Peel must have activities for young families, teenagers, young adults, middle aged and retirees. Secondly, they must provide the community with an array of cultural, healthcare, childcare, leisure and educational experiences.

In addition to ensuring that the physical layout of new communities in the Peel is consistent with best planning practice, there are some more tangible community development activities the Peel Development Commission and its partners can encourage. This includes ensuring high quality leisure facilities, a range of education institutions, quality health services, childcare, economic diversity and an adequate number of aged care facilities.

There are also soft infrastructure options available which can further enhance the Peel's sense of place and assist retain a skilled workforce. Derrett (2003), for example, argues that festivals in regional locations complement the natural and built attractions of a region, enhance civic pride, and stimulate economic activity. Equally important to labour retention is participation in community and sporting groups and the extent of social networks. For new arrivals, awareness of, and participation in, these (i.e. the extent to which they are embedded into the local place) will be key determinates in their decision to remain in the Peel.

Currently a number of local governments in the region provide 'welcoming kits' to new arrivals. The idea is that new arrivals are not only welcomed into the community but also made aware of available services and facilities. A more regionally integrated and co-ordinated approach may be adopted in this regard.

From a youth perspective, providing social activities and after-hours meeting places is also crucial. In particular, the Peel has a limited night economy which is part of the reason it has so few 20 – 35 year olds, who prefer the vibrancy of metropolitan inner city living. Housing affordability is also going to be critical to retention of 20-35 year olds.

Given the 'bubble' of 0-14 year olds currently residing in the Peel, encouraging them to stay on after compulsory schooling years, is critical to the Peel's future economic and social prospects.

Currently, there is anecdotal evidence that local youth do not view the Peel as a location in which they can find aspirational employment. Yet, there are a range of options in manufacturing, mining, tourism, construction and retail which are anticipated to expand in the near future. Additional effort is therefore required in raising awareness of the income and career benefits of these industries and their availability in the Peel.

Many of those who do relocate from the Peel do so for education purposes. Creating additional tertiary and vocational education options in the Peel is necessary to cater for an expanding population, to improve local skills and to entice younger generations to remain in the region. This will also act as an additional incentive for in-migration of families.

In sum, retention of new arrivals and existing households in the Peel is a critical strategic direction in addressing the long term potential for a skilled labour shortage. Initiatives need to focus on ensuring that the Peel is a desirable place to both work and live. Efforts focused on enhancing a sense of place, providing ‘whole-of-life’ amenities, additional education facilities, activities for youth and a more vibrant night economy will go a long way towards reducing out-migration.

Research suggests that dynamic regions are the most successful at attracting and retaining people as they provide multiple opportunities for new residents to rapidly fit into the social and economic environment. Peel is quite clearly a dynamic region and has the capacity to offer beneficial lifestyle and employment options to a range of people and families.

9. ACTION PLAN

Table 9.1 Peel Workforce Development Strategy Action Plan

Support – To provide information, assistance and opportunities for partnerships between industries, agencies and individuals				
Action	Objectives	Key Performance Indicator	Report Reference	Timeline
Establish a coordinating body for implementation of strategies and actions	Maintain linkages between providers of programs and courses	Body established	Section 4.1	2006
Establish a one-stop-shop to coordinate the dissemination of training information	To provide a central entity for the collection and dissemination of training information to key population groups and to promote the value of a range of key careers	1. Greater participation rates amongst young people (in trades), unemployed, mature age re-entrants and single parents 2. One stop shop becomes first port of call for information	Section 4.1	2006
Explore funding opportunities for student transport	Transport is a significant barrier to accessing training	Secure funding for pilot 'student bus'	Section 4.2.2 Section 7.1	2007
Implement a continuous improvement program to develop the strategy	Data on (particularly) private programs and training, as well as specific employer requirements is unavailable; industry growth rates for Peel unknown	Improvements to supply-demand model as a predictor of industry demand and training requirement	Section 6.3.1	2006
Explore funding opportunities for increased training infrastructure	Find and secure public and private partners in development of training facilities	Partnership arrangements established with major regional employers	Section 3.4.1 Section 7.2	2006-

Action	Objectives	Key Performance Indicator	Report Reference	Timeline
Undertake a statistically significant survey of employers to derive labour turnover	Determine net replacement rates for industries and/or occupations in the Peel	Next iteration of strategy with improved measure of replacement rate requirements for industry	Section 6.2 Section 6.3.3	Prior to next iteration of strategy
Undertake a survey to determine extent of 'commuting to work'	Improve measure of returns on local training provision and labour market integration into regions outside of the Peel	Next iteration of strategy with improved measure of local training supply for local labour market	Section 6.3.1 Section 6.3.3	Prior to next iteration of strategy
Establish a biannual newsletter to inform stakeholders of training and employment issues and initiatives	To improve communication between key industry stakeholders	Newsletter established	Section 4.1 Section 7.1	2007-2016
Organise regular forums for training providers	To enhance informal relationships between public and private training providers	Forum series established	Section 4.1	2007-
Investigate relocation of Jandakot Airport project	To determine likely impact and scope for local employment strategy	Incorporate airport plans and impact into strategy	Section 7.1	2006
Establish major new projects program	To identify new, large scale industries and approach them with local employment strategy	Establish program	Section 6	2006
Train – to ensure that local education provision matches regional demand for skills				
Action	Objectives	Key Performance Indicator	Report Reference	Timeline
Expand Building and Construction to include higher level training in supervising and estimating; wet trades	Meet current industry demand in residential and in mining construction	Establishment of new courses and enrolments	Section 6.3 Section 7.2	2007-2010

Action	Objectives	Key Performance Indicator	Report Reference	Timeline
Increase effort to award Diploma/Registration for builders	Certification of current labour force	Raise proportion of certified builders in region.	Section 6.3 Section 7.2	2010-
Increase number of entry level courses in Automotive	Increase enrolments in Automotive, in which there is a reported undersupply in heavy duty and automotive mechanics)	Expansion of courses and enrolments to match industry growth	Section 6.3 Section 7.2	2007-
Introduce higher level training in Aged Care and Childcare	Meet growing/ageing population need and expand scope for single parents to re-enter workforce	Expansion of courses and enrolments to match industry growth	Section 7.2	2008-
Introduce entry level training in Metal trades (fabrication, mechanical)	Ongoing skills shortage particularly in manufacturing supply to expanding mining industry	Expansion of courses and enrolments to match industry growth	Section 3.4.1 Section 7.2	2007-
Increase delivery of all levels in Mining (metalliferous)	Meet projected industry demand through local labour pool including through Indigenous employment	Expansion of courses and enrolments to match industry growth and high local employment levels	Section 3.4.1 Section 4.2.3 Section 7.2	2007-
Increase entry level training in Retail	Meet future growth in Retail to service population and tourism	Expansion of courses and enrolments to match industry growth	Section 6.2 Section 7.2	2007-
Introduce higher level training in Personal Services (esp. beauty therapy and hairdressing)	Meet service needs of growing population, as well as respond to national skills shortage in these areas	Expansion of courses and enrolments to match industry growth	Section 7.2	2008-
Introduce Higher level training in Tourism and potentially in Hospitality	Meet needs of expanding tourism sector that is not picked up by new delivery such as the Hospitality Centre of Excellence	Expansion of courses and enrolments to match industry growth	Section 3.2 Section 3.3.1 Section 4.2.1 Section 6.1	2008-

Action	Objectives	Key Performance Indicator	Report Reference	Timeline
Explore scope for increased delivery in Animal Care and Rural Operations	Expanding agistment and related services suggest need for more training in this area. Additionally, PDC and Shires of Murray SJ and Boddington recognise opportunity for growth in agriculture	Survey of new businesses in field	Section 3.4.1 Section 6.3.2	2007-
Introduce Diploma and A/Diploma in Environmental Science and pathways to this in science and technical courses	To support growth of environmental management requirements as well as possible economic niche	Expansion of courses and enrolments to match industry growth	Section 4.2.1 Section 7.2	2008-
Continue to promote and deliver job-readiness training (literacy, ESL, targeted access)	Address low levels of lifelong learning, disengaged youth and long-term unemployed	Move unemployment rate down towards State average	Section 3.4.2 Section 7.2	2007-
Monitor demand for training in aquaculture and boating services	Likely growth in these industries in line with population growth	Future iteration of projections modified	Section 6.3.2	2006-
Monitor demand for training in warehousing	Respond to national trend of increase in demand for employment in transport and storage (logistics)	Future iteration of projections modified	Section 6.3.2	2006-
Explore new opportunities for securing funding for education and training programs	The region is the focus of several strategic planning initiatives and concomitant funding, such as the Pinjarra-Brunswick Junction Sustainability Strategy	Funding identified	Section 3.4.2	2006-

Attract – to entice an appropriately skilled labour force to live and work in the region

Action	Objectives	Key Performance Indicator	Report Reference	Timeline
Develop a marketing campaign to attract appropriately skilled people into the region	To enhance perceptions of the Peel region and attract appropriately skilled people into the region	1. Number of skilled international, interstate and intrastate migrants 2. Improved perceptions of the Peel	Section 4.2.3 Section 4.2.4 Section 8.1	2006-2010
Develop an identify for the Peel as a centre for education excellence with a focus on education, environmental and health sciences	To create a point of distinction for the Peel region that attracts people to live, learn and work in the region	Perception surveys	Section 7.2 Section 8.1	2007-2016
Approach larger firms to relocate to the Peel	To expand the diversity of businesses and increase private sector investment in training	Number of firms employing more than 20 people	Section 4.2.4	2007-
Prioritise the release of land zoned for industrial purposes	To improve the potential for the region to attract industries	1. Extent of land made available for industry 2. Number of firms established on industrial	Section 4.2.4	2008-2010
Establish a Peel Expo to highlight to young people the advantages of the region as a place to live work and recreate	To increase the proportion of young people living and working in the region	1. Expo established on a biennial basis 2. Number of young people living in the region	Section 4.2.4	2007-2016
Work with state and federal agencies to take advantage of the Skilled Migrants Regional Scheme	To increase the number of skilled migrants who choose to reside in the region	Number of newly arrived skilled migrants who reside in the Peel	Section 4.2.3	2008-2016

Action	Objectives	Key Performance Indicator	Report Reference	Timeline
Work with Federal government to enhance the number of people applying for relocation assistance to the Peel	To increase the number of appropriately skilled people relocating to the Peel	Number of people who successfully apply for relocation assistance	Section 4.2.3	2010
Provide a central website for Peel related jobs	To improve awareness of employment availability in the region	Website established and referrals produced as a result	Section 4.2.1 Section 4.2.4 Section 7.1	2008
Commission regular research to keep abreast of Peel's migration patterns	To improve stakeholders understanding and response to regional population dynamics	Baseline research commissioned	Section 6.3.1	2008
Retain – to ensure the existing and future workforce continue to live and work in the region				
Action	Objectives	Key Performance Indicator	Report Reference	Timeline
Develop a support program (e.g. welcoming kit) for newly arrived migrants	To enhance the extent to which new arrivals are able to fit in	1. Program established 2. Migrant retention rates	Section 4.2.4 Section 8.2	2008-2016
Explore options to enhance the region's night economy	To enhance the appeal of the region to young people and tourists	Size of the night time economy	Section 4.2.2 Section 8.2	2008-2016
Increase the drawcard, and number, of regional festivals and events	To build a stronger sense of community and enhance the regional tourism economy	1. Number of regional events 2. Number of attendees	Section 8.2	2008-2016
Explore the feasibility of additional tertiary education facilities in the region	To plan for anticipated population increases, ensure quality local education and retain local youth	Feasibility plan completed	Section 7.2 Section 8.2	2009

Action	Objectives	Key Performance Indicator	Report Reference	Timeline
Lobby for additional state and federal government funding for local recreational and cultural amenities	To enhance the appeal of the region for new residents and improve wellbeing of the existing community	Extent of state and federal government investment of community infrastructure	Section 4.2.2	2008-2016
Better market the advantages of local employment options to Peel's young people	To reduce out-migration rates among local young people	Number of Peel youth who find employment in the region	Section 6.3.1	2009
Devise a program to assist local businesses with succession planning	Reduce business turnover and retain the existing workforce and skills	1. Program established 2. Number of businesses with succession plans	Section 4.2.4	2008-2016
Ensure best planning practice in the development of new subdivisions	To protect the region's unique sense of place and ensure quality subdivisions	Number of new subdivision that attain leading practice industry awards	Section 4.2.4	2012
Develop a regional housing affordability policy	To ensure people can afford to live and work in the Peel	Policy implemented	Section 4.2.2	2009

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11. ACKNOWLEDGEMENTS

The following people and organisations were consulted for this project:

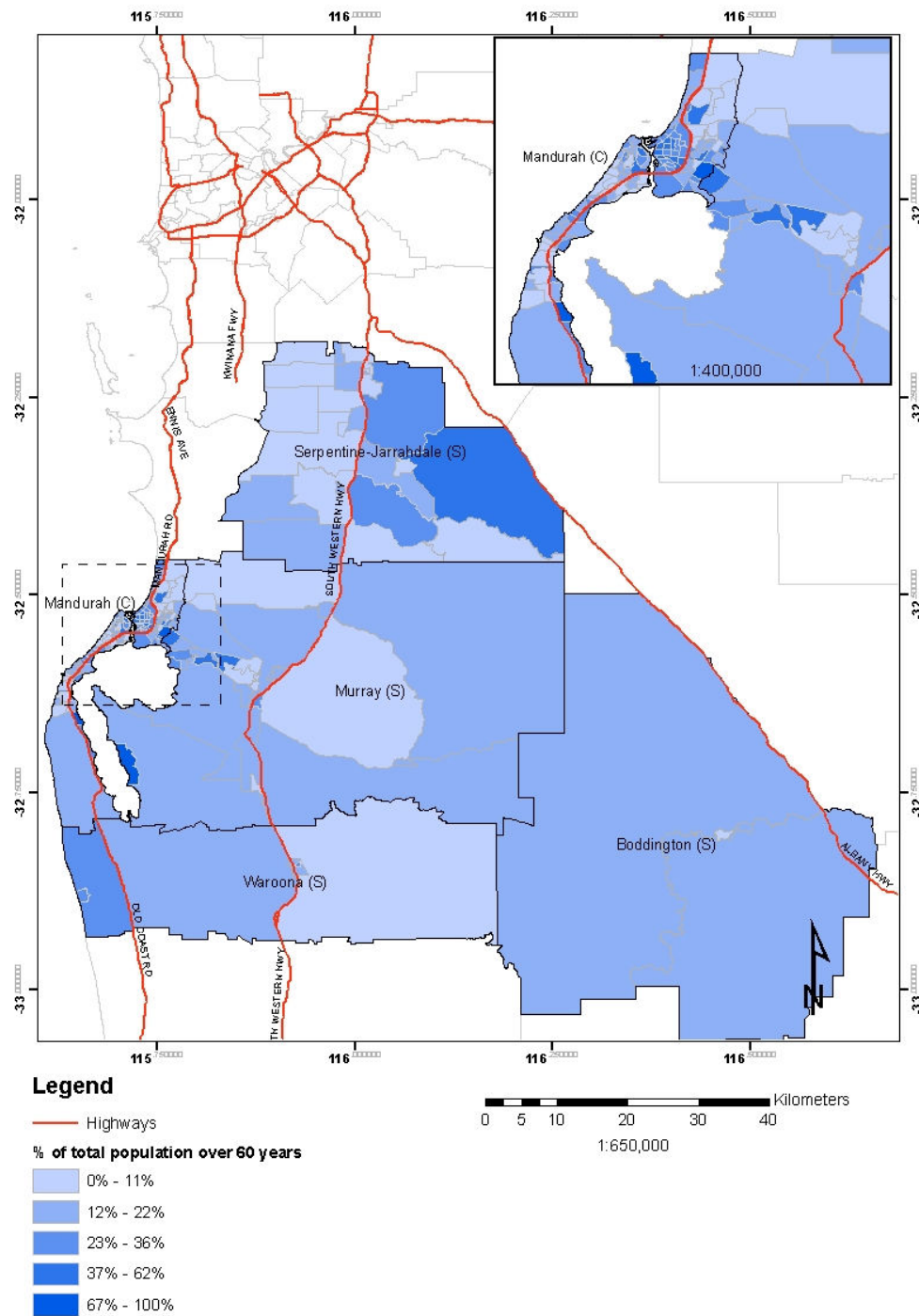
1. Shire of Boddington
2. City of Mandurah
3. Shire of Murray
4. Shire of Serpentine Jarrahdale
5. Shire of Waroona
6. Mandurah Peel Region Chamber of Commerce Inc.
7. Peel Development Commission
8. Department of Education and Training
9. Challenger TAFE
10. Building and Construction Industry Training Council
11. ABN Group Training
12. Department for Planning and Infrastructure
13. Institute for Regional Development
14. Peel District Education Office
15. MacDonald's Mandurah
16. Alcoa Australia
17. Australian Hotels Association
18. Hospitality and Tourism Industry Training Council

12. GLOSSARY OF TERMS AND ACRONYMS

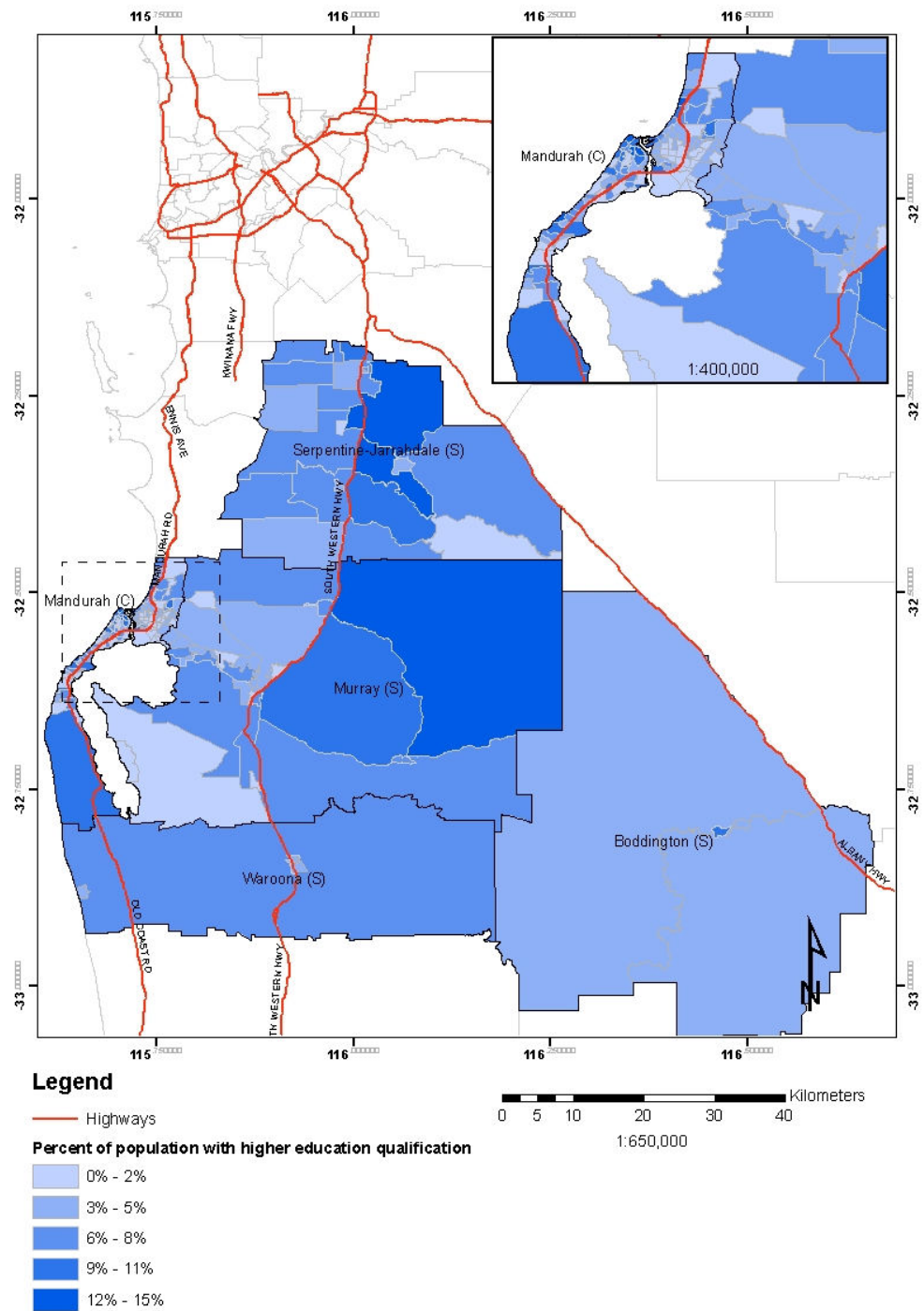
ACE	Adult and Community Education
ANZSIC	Australian and New Zealand Standard Industry Classification
ASCO	Australian Standard Classification of Occupations
AVETMISS	Department of Education and Training VET enrolments data collection
CE	Course Enrolments
Disengaged youth	15-19 year olds not engaged in full-time employment, education or training
Dormitory Town	A suburb that is predominantly residential, in which the local employment market is smaller than the local labour pool. Also known as a commuter town
DPI	Department for Planning and Infrastructure
LGA	Local Government Authority
PET campus	Peel Education and TAFE campus (the co-located school, TAFE and university campus in Mandurah)
RPL	Recognition of Prior Learning
RTO	Registered Training Organisation
SCH	Student Contact Hours
TAFE	Technical and Further Education (College)
VET	Vocational Education and Training

APPENDIX ONE
DEMOGRAPHIC FEATURES OF PEEL

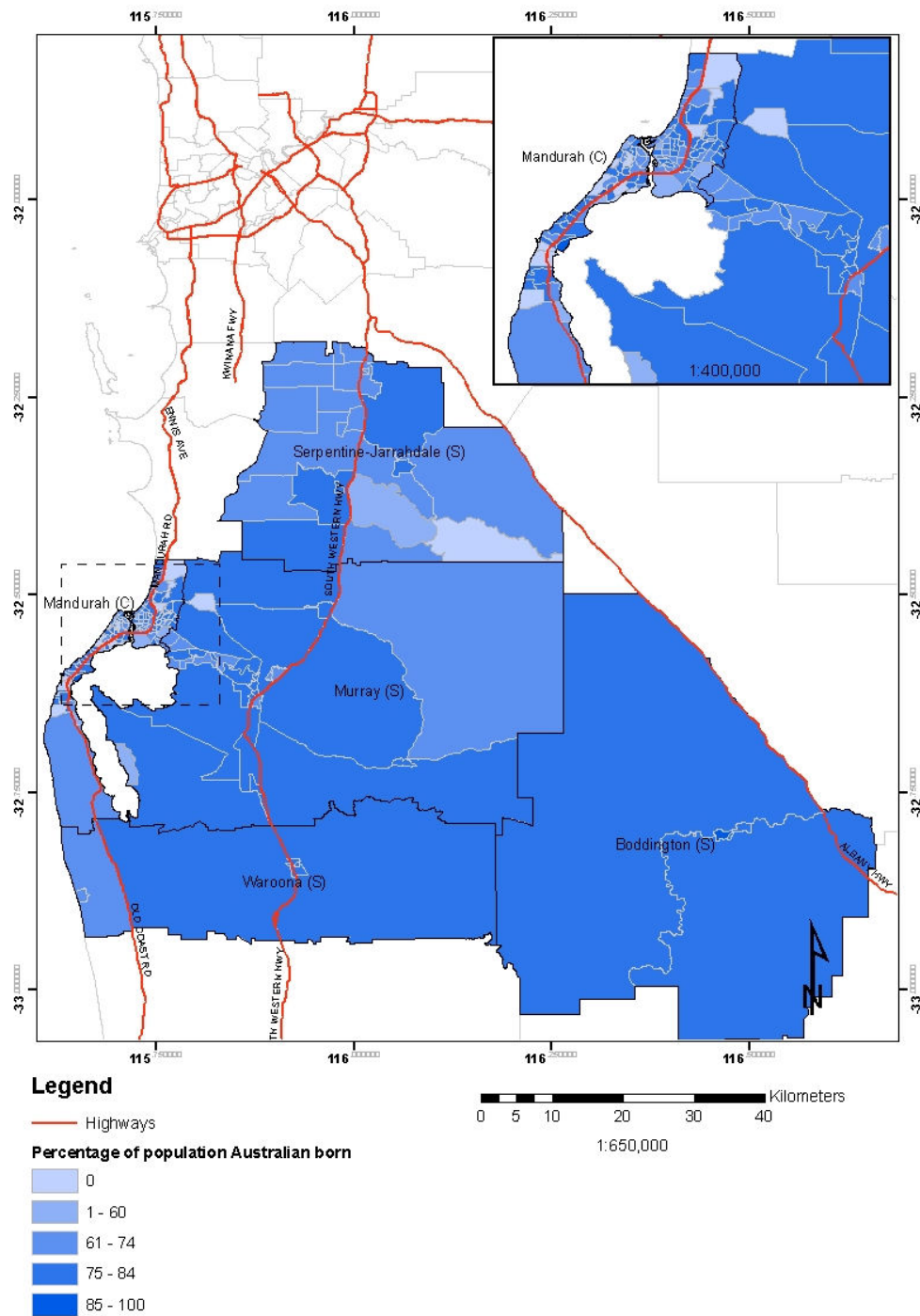




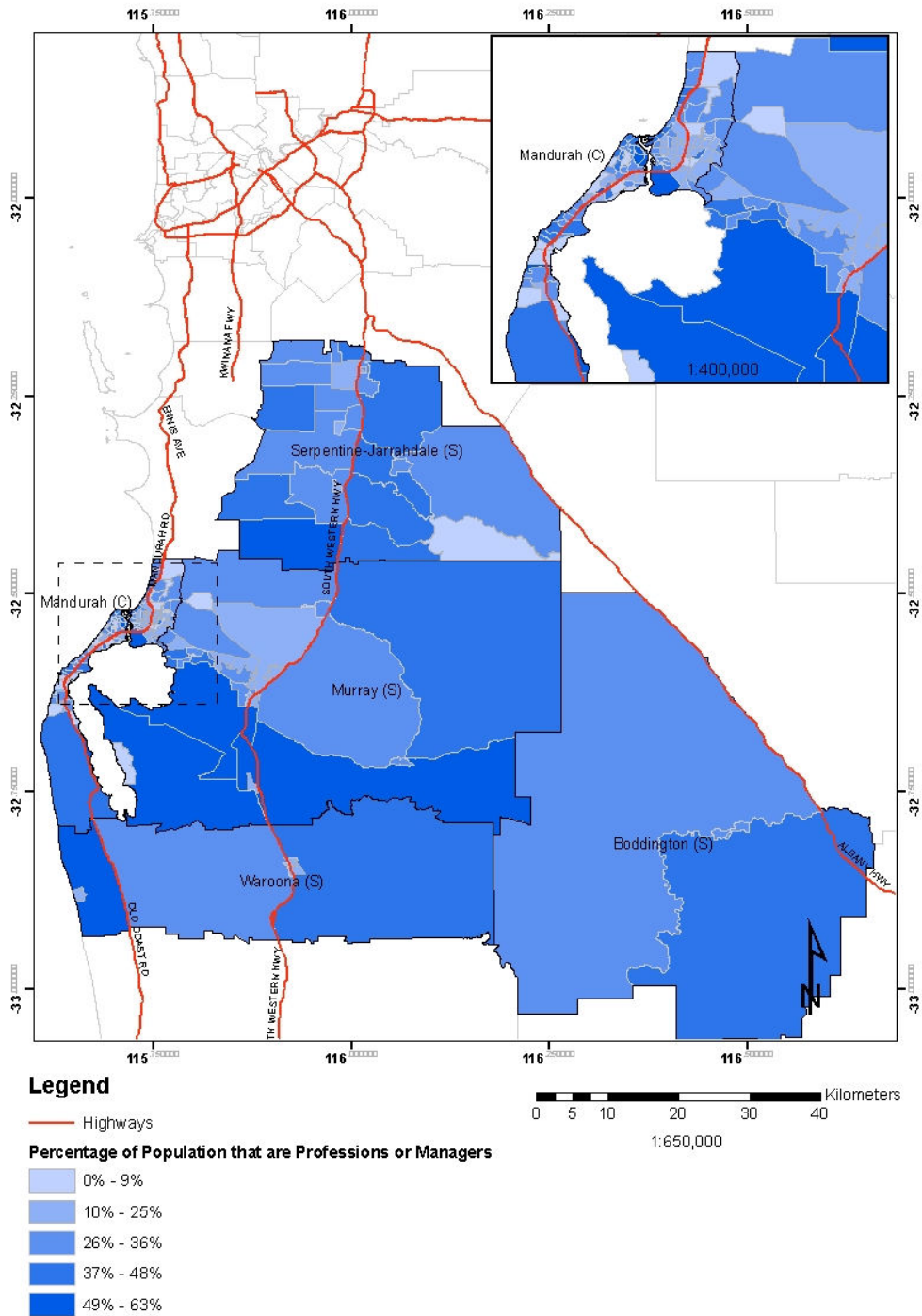
Map A1.1 Peel Proportion of Population over 60 years old



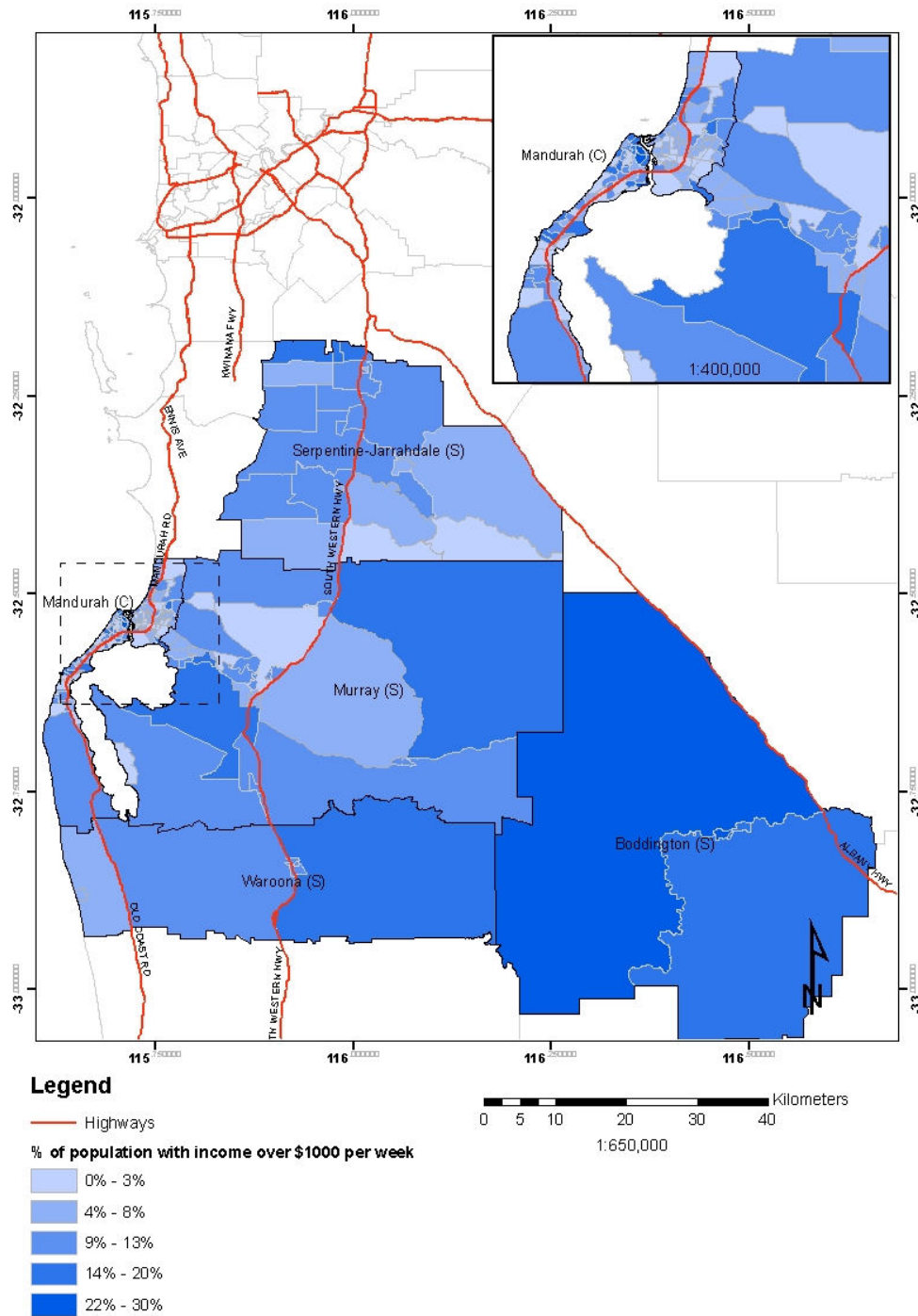
Map A1.2 Peel Proportion of Population with Higher Education Qualifications



Map A1.3 Peel Proportion of Population Australian Born



Map A1.4 Peel Proportion of Professionals or Managers



Map A1.5 Peel Proportion of Population with Incomes over \$1,000/week

APPENDIX TWO
DALE AND PEEL



The following table shows the difference between the Dale region used by DEWR for collecting labour market data and the Peel region.

Table A2.1 Dale and Peel Region Comparative Postcodes

Postcode	Suburb/s ¹⁵	City/Shire	Dale	Peel
6390	Bannister, Crossman, Ranford	Boddington	✓	✓
6210	Mandurah	Mandurah	✓	✓
6213	Dwellingup	Murray	✓	✓
6207	North Dandalup	Murray	✓	✓
6208	Pinjarra, Ravenswood, Yunderup	Murray	✓	✓
6214	Coolup	Murray	✓	✓
6121	Oakford, Oldbury	Serpentine Jarrahdale		✓
6122	Byford, Cardup, Darling Downs, Karrakup	Serpentine Jarrahdale		✓
6123	Mundijong, Whitby	Serpentine Jarrahdale		✓
6124	Jarrahdale	Serpentine Jarrahdale		✓
6125	Hopeland, Mardella, Serpentine	Serpentine Jarrahdale		✓
6126	Keysbrook	Serpentine Jarrahdale		✓
6215	Wagerup	Waroona	✓	✓
6173	Secret Harbour	Rockingham	✓	
6174	Golden Bay	Rockingham	✓	
6175	Singleton	Rockingham	✓	
6176	Karnup	Rockingham	✓	

¹⁵ Note that in some cases suburb boundaries do not align with local government areas. Consequently, this should not be taken as a definitive list of suburbs.

APPENDIX THREE

SUPPLY AND DEMAND MODELLING – BACKGROUND DETAILS



A3.1 Conditions on Supply-Demand Modelling

One of the key reasons why this strategy advocates a set of approaches to workforce planning, rather than just a supply-demand model approach, is that quantitative models of this nature are only as good as the data that is input. There are several reasons why this should only be part of the equation:

1. Outsourcing, multinationals, changing industry structure, fuzzy occupational groupings and skills transferability confuse what the data tells us. This is compounded by the various industry classifications used in the collection of data on training and on employment.
2. Generic skills are not as easily quantifiable but very important for employability, particularly in customer service industries. These can be acquired in courses that are unrelated to the industry in which someone is employed.
3. There is a lag due to the delivery of qualifications in 2-4 year courses.
4. Industry can shift very rapidly.
5. People do not follow linear career paths and decision-making about courses do not necessarily indicate a willingness to take up work in a related field.
6. Labour mobility is high, particularly in regions like Peel. Training locally for the local labour market is no guarantee of filling the vacancy.
7. There may be a conflict between being guided by employers but being focused on students.
8. Employers may not want to match supply with demand. In reporting on skills shortages, some employers may be seeking to ensure supply exceeds demand.

A3.2 Population Impact on Industry Growth

The following table and information summarises the assumptions made about population impact on industry growth.

Table A3.1 Population Growth Impact Weighting

ANZSIC Group	Population Impact	Weighting
Agriculture, Forestry and Fishing	Low	0.35
Mining	Low	0.05
Manufacturing	Low	0.1
Electricity, Gas and Water Supply	Low	0.05
Construction	High	0.5
Wholesale Trade	Medium	0.35
Retail Trade	High	0.5
Accommodation, Cafes and Restaurants	High	0.5
Transport and Storage	Medium	0.35
Communication Services	High	0.5
Finance and Insurance	High	0.5

ANZSIC Group	Population Impact	Weighting
Property and Business Services	High	0.5
Government Admin and Defence	Medium	0.35
Education	High	0.5
Health and Community Services	High	0.5
Cultural and Recreational Services	High	0.5
Personal and Other Services	High	0.5
Non-classifiable / Not Stated	NA	NA

Justifications

Very Low (weighting of 0.05)

- Population growth has no significant impact on industry growth; and
- Industry subject to major technological and structural change resulting in employment decline.

Low (weighting of 0.1)

- decline or low growth in employment from 1996 to 2001 Census;
- no major developments identified; and
- not service-related or meeting local consumption demand so population growth has minimal impact on demand.

Medium (weighting of 0.35)

- growth has been steady between 1996 and 2001 Census;
- Agriculture, forestry and fishing (including aquaculture) is likely to experience growth – as yet unmeasured; and
- no major single developments identified.

High (weighting of 0.5)

- steady or high growth between 1996 and 2001 Census;
- ageing population placing demands on health and community services and personal and other services;
- increase in proportion of young people in school;
- significant major developments identified; and
- objectives of key stakeholders to increase economic activity in key sectors (e.g., Education and Communications).

A3.3 Supply-Demand Figures

Table A3.2 shows the projected industry employment figures for each year out to 2016.

Table A3.2 Industry Labour Force Projections Peel 2006-2016

Industry Sector	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Total Est. weighted increase 2006-2016	% Industry Share 2016
Agriculture, Forestry and Fishing	1,490	1,503	1,523	1,534	1,545	1,556	1,567	1,578	1,590	1,601	1,612	137	3.44
Mining	2,058	2,121	3,058	3,152	3,249	3,349	3,451	3,558	3,667	3,779	3,895	1,900	8.30
Manufacturing	4,934	5,063	5,200	5,333	5,470	5,609	5,753	5,900	6,051	6,206	6,364	1,558	13.56
Electricity, Gas and Water Supply	236	241	246	251	256	261	266	271	277	282	288	57	0.61
Construction	7,514	7,712	7,957	3,390	3,470	3,551	3,635	3,722	3,811	3,901	3,992	680	8.50
Wholesale Trade	1,241	1,271	1,307	1,337	1,368	1,398	1,430	1,463	1,497	1,531	1,565	356	3.33
Retail Trade	6,114	6,347	6,624	6,859	7,101	7,351	7,611	7,882	8,163	8,451	8,747	2,867	18.64
Accommodation, Cafes and Restaurants	1,468	1,514	1,599	1,645	1,691	1,738	1,788	1,839	1,891	1,945	1,999	577	4.26
Transport and Storage	1,080	1,102	1,128	1,148	1,169	1,189	1,211	1,233	1,255	1,277	1,300	242	2.77
Communication Services	353	367	383	396	410	425	440	455	472	488	505	165	1.08
Finance and Insurance	445	453	463	470	476	483	489	496	503	510	517	80	1.10
Property and Business Services	2,565	2,645	2,743	2,822	2,902	2,985	3,070	3,159	3,250	3,343	3,437	954	7.32
Government Admin and Defence	1,077	1,111	1,151	1,186	1,221	1,258	1,296	1,335	1,375	1,416	1,458	416	3.11
Education	2,060	2,134	2,222	2,295	2,370	2,448	2,529	2,613	2,699	2,788	2,879	892	6.13

Industry Sector	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Total Est. weighted increase 2006-2016	% Industry Share 2016
Health and Community Services	2,938	3,066	3,216	3,347	3,483	3,624	3,772	3,927	4,087	4,254	4,426	1,614	9.43
Cultural and Recreational Services	719	741	768	791	813	836	861	885	911	937	964	268	2.05
Personal and Other Services	1,312	1,355	1,408	1,451	1,495	1,540	1,588	1,636	1,687	1,738	1,790	523	3.81
Non-classifiable / Not State	896	923	954	981	1,009	1,037	1,067	1,097	1,128	1,160	1,193	324	2.54
Total	38,500	39,670	41,949	38,388	39,496	40,638	41,824	43,050	44,313	45,607	46,933	13,611	

(source: ABS, 2001, State Training Board, 2005, Geografia projections)