EMPLOYMENT PROJECTIONS FOR NSW - UPDATE TO 2010

NSW Board of
Vocational Education and Training

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National Institute of Economics
and Industry Research

In 2000, the Board commissioned the National Institute of Economic and Industry Research (NIEIR) to provide five year employment forecasts for NSW, from 2001 to 2005.

In 2002, NIEIR updated the 2001-2005 employment projections to 2008.

In 2004, NIEIR was commissioned to further update the forecasts to 2010. This update includes economic outlook for Australia and New South Wales, and employment projections for NSW by industry, occupations, gender, full-time / part-time status and region.

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SUMMARY OF NSW EMPLOYMENT PROJECTIONS 2005-2010

State Economic Outlook

NSW is a major contributor to Australia's Gross Domestic Product (GDP) accounting for 34.7% of GDP, with the value of Gross State Product (GSP) increasing from $267 billion to $291 billion (2004 prices) between 2000 and 2004.

After a period of buoyant growth of an average annual rate of 4.4% between 1995 and 2000, NSW growth has slowed down. New South Wales GSP annual growth was 1.1 per cent in 2005. This reflects slowing growth in population and in private consumption expenditure.

NSW GSP growth will remain weak in 2006, with further decline in dwelling investment and slower growth in both public and private expenditure. The NSW economy is expected to improve in the following three years (an average yearly growth of 2.6% between 2007 and 2009) before slowing down again in 2010.

Reflecting the forecasts for the overall economic outlook, employment growth is weaker between 2005 and 2007, averaging around 1.1% per year. Growth is expected to rise to an average annual rate of 1.5% in the later years of the forecast period. Employment projections over this period have built in an extra 40,000 places (mainly part-time employment) in anticipation of the impact of the *Commonwealth Workplace Relations Amendment (Work Choices) Act*, which is likely to increase the level of casualisation and the number of part-time jobs, and lower the average hours worked per person.

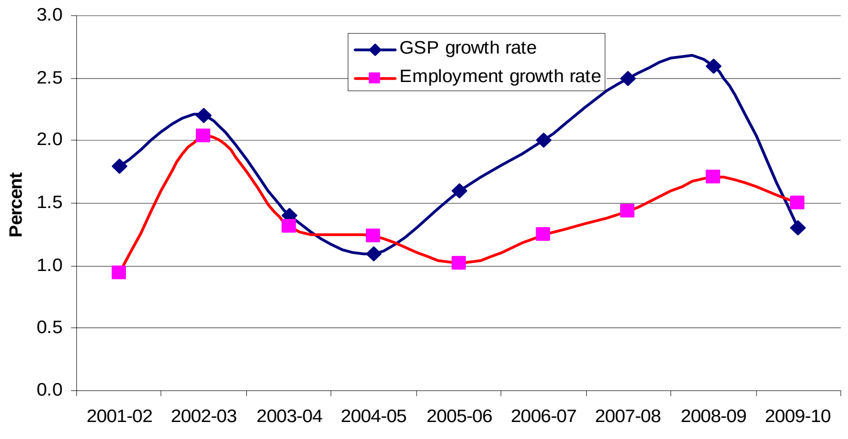


Figure 1

Projected growth rates in GSP and employment, NSW 2001-2010

Industry forecast

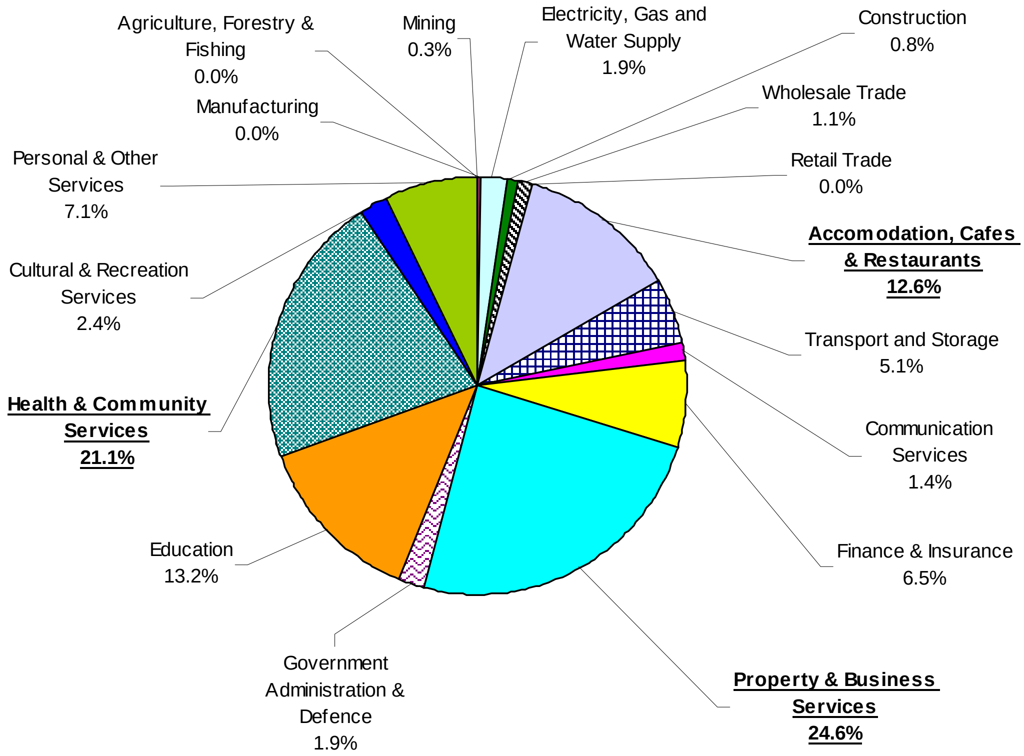
Employment in NSW is forecast to grow at 1.38% per annum between 2005 and 2010 with a net increase of approximately 228,000 positions. This represents an increase of 246,000 positions and a decrease of 18,000 positions over the period. The projected employment growth rate for 2005-2010 is slightly lower than the estimated 1.43% between 2001 and 2004.

The following table shows employment growth for NSW by Australian and New Zealand Standard Industry Classification (ANZSIC) major division. Details of industry forecast for 2005-2010 are at Appendix 1.

Table 1: *Projected employment growth for NSW by industry*

ANZSIC Divisions	Estimated employment level 2005	Projected employment level 2010	change 2005-10	Annual Growth Rate (%) 05-10
Agriculture, Forestry and Fishing	94,616	94,231	-385	-0.08
Mining	20,927	21,650	723	0.68
Manufacturing	332,093	302,412	-29,681	-1.86
Electricity, Gas and Water Supply	23,936	28,867	4,931	3.82
Construction	278,388	280,432	2,044	0.15
Wholesale Trade	151,767	154,643	2,875	0.38
Retail Trade	478,733	477,674	-1,060	-0.04
Accommodation, Cafes and Restaurants	177,065	209,627	32,562	3.43
Transport and Storage	157,196	170,450	13,254	1.63
Communication Services	61,352	64,950	3,598	1.15
Finance and Insurance	154,188	171,138	16,950	2.11
Property and Business Services	401,440	465,218	63,778	2.99
Government Administration and Defence	132,605	137,460	4,855	0.72
Education	214,599	248,803	34,204	3.00
Health and Community Services	317,503	372,173	54,670	3.23
Cultural and Recreation Services	83,859	90,091	6,232	1.44
Personnel and other Services	128,201	146,684	18,483	2.73
Total	**3,208,469**	**3,436,501**	**228,032**	**1.38**

Figure 2 below shows the distribution of projected job growth by industry:



Property and business services accounts for about a quarter (24.6%) of the projected new jobs (63,000 positions). This is again largely attributed to the growth in the computer services sub-sector (24,000 positions), followed by the legal and accounting services sub-sector (18,000 positions). The health and community services industry has the second largest share of projected new jobs (21%), with an annual growth rate of 3.2%. This is attributed to growth in hospitals and nursing homes and other health services* which may generate over 30,000 positions by 2010. Strong demand for community care and child care services has a potential to create 19,000 jobs.

While retail trade will continue to be the largest employing industry in New South Wales, employment levels are forecast to fall across most retail sectors, particularly in clothing and soft goods retailing. Job gains in specialised food retailing will offset the loss, resulting in an insignificant level of overall decline. However, its employment share will decrease by 1 percentage point from 15% in 2005 to 14% in 2010.

By 2010, manufacturing will further contract in its employment share to 9%. In line with previous forecasts, the largest decline will continue to be in the textile, clothing, footwear and leather manufacturing sector. About 7,000 jobs are forecast to go. Overall, employment in the manufacturing industry is expected to fall by 1.9% per year in the forecast period.

* Other health services include services such as pathology, optometry and optical dispensing, health community centres and physiotherapy.

Employment Projections by Occupation

The following table shows employment growth for NSW by Australian Standard Classification of Occupations (ASCO) second edition major group. Details of occupational forecasts for 2005-2010 are at Appendix 2.

Table 2: *Projected employment growth for NSW by occupation*

Occupation Title	Estimated employment level 2005	Projected employment level 2010	Change 05-10	Annual growth rate 05-10	Employment share 2005	Employment share 2010
Managers & Administrators	280,701	304,111	23410	1.61	8.7%	8.8%
Professionals	631,801	717,142	85340	2.57	19.7%	20.9%
Associate Professionals	408,771	470,294	61523	2.84	12.7%	13.7%
Tradespersons & Related Workers	393,042	392,415	-627	-0.03	12.3%	11.4%
Advance Clerical & Service Workers	127,994	121,756	-6238	-0.99	4.0%	3.5%
Intermediate Clerical Sales & Service Workers	518,998	542,768	23771	0.90	16.2%	15.8%
Intermediate Production & Transport Workers	259,713	269,525	9812	0.74	8.1%	7.8%
Elementary Clerical Sales & Service Workers	314,927	341,383	26456	1.63	9.8%	9.9%
Labourers & related Workers	272,522	277,108	4586	0.33	8.5%	8.1%
All occupations	**3,208,469**	**3,436,501**	**228032**	**1.38**	**100.0%**	**100.0%**

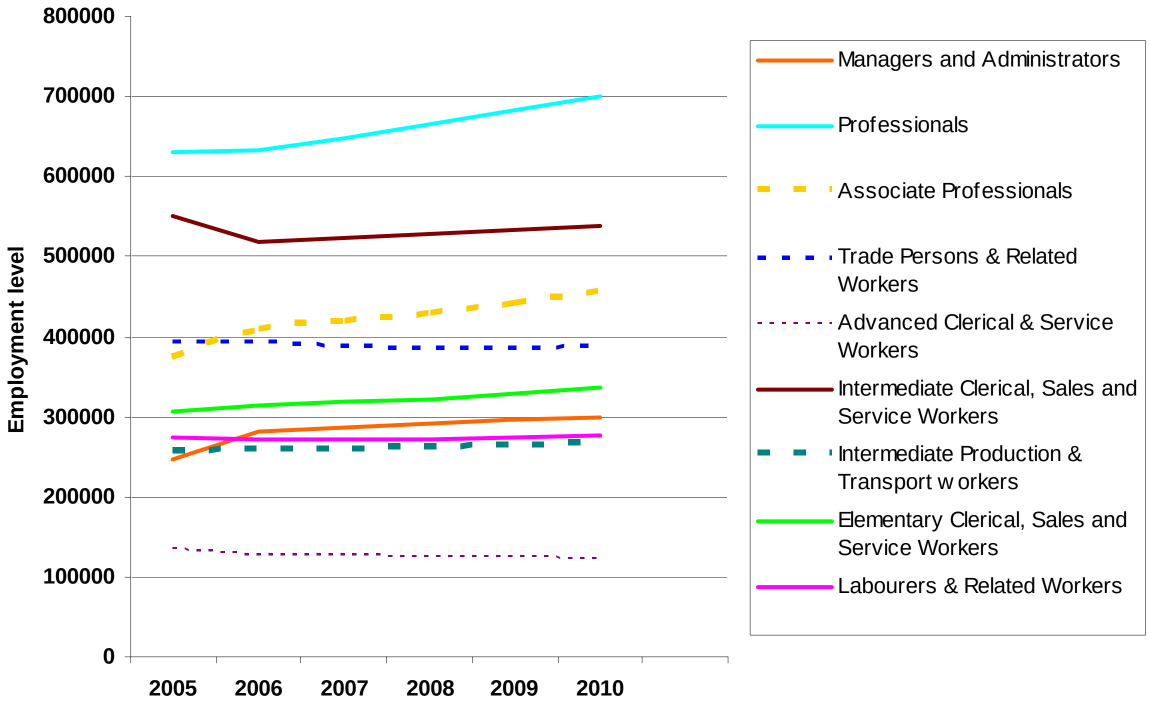
The fastest growing occupational category between 2005-2010 is forecast to be associate professionals, growing at an average of 2.8% per year or a net increase of 61,000 positions over the period. Professionals will experience the second fastest growth rate (2.6% per year) but the highest number of job increase (85,000 positions). By 2010, the leading position of professionals will be further strengthened by increasing its employment share from 19.7% to 20.9%.

Elementary clerical, sales and service workers, and managers and administrators will still experience above average growth at rates of about 1.6% annually and will maintain their employment share.

Job growth for intermediate clerical, sales and service workers, transport and production workers, and labourers and related workers will be below average with a slight decline in employment share by 2010.

Job losses are forecast for advanced clerical & service workers (-1%) and at a less significant level, also for tradespersons and related workers (-0.03%).

Figure 3 below shows the forecast employment trend by Australian Standard of Classification of Occupations (ASCO II) major group.



At the ASCO minor group level, miscellaneous health and welfare associate professionals such as massage therapists, ambulance officers and dental assistants are forecast to have increasing demand and jobs will grow at 6.2% annually, while business and administration associate professionals such as office managers, computing support technicians and project and program administrators are forecast to have the largest numerical increase (around 29,000 new positions).

The growth in professionals is due to growth in demand for computing professionals, accountants, registered nurses, secondary school teachers, welfare and community workers, and business and organisational analysts.

In the category of intermediate production and transport workers, demand for road and rail transport drivers is expected to increase by 2.9% per year, gaining over 15,000 positions in the forecast period. Stationary plant operators, textile related machine operators and miscellaneous machine operators are projected to have a decline in demand at a rate between 5% and 15% per year, translating to the loss of around 8,000 jobs over the period. These and many other occupations in the production category are impacted upon by the increasing trend towards lean manufacturing.

Growth for transport workers reflects the general increase in economic activity and continued increase in trade associated with E-commerce and lower inventory holdings.

Advanced clerical, and service workers are forecast to have a net loss of 6,000 positions, largely due to a very sharp decline in demand for secretaries and personal assistants. Loss of positions for tradespersons and related workers, mainly in the manufacturing, printing and textile industries are forecast to be offset by increased demand for workers in construction related trades.

Employment Projections by skill levels*

The latest forecast still shows that employment growth is likely to be concentrated in high skilled jobs, with a continued hollowing out of mid-level skilled jobs and little growth in occupations at the lowest skill level.

The highest rate of growth (2.8%) is expected to occur among occupations with skill level 2 commensurate with AQF Diploma or Advanced Diploma or at least 3 years of relevant experience, followed by the highest skill level (2.3%). In terms of growth in numbers, the forecast increase for the highest skill category (Level 1) is over 100,000, which account for about 46 per cent of the projected job increase.

Growth for the lower skill levels (level 4 and 5), which is commensurate with completion of an AQF certificate 2 qualification or below, is forecast to be below the state average.

Employment projections for 2005-10 by skill level are shown in the table below.

Table 3: *Employment projections for NSW by skill level*

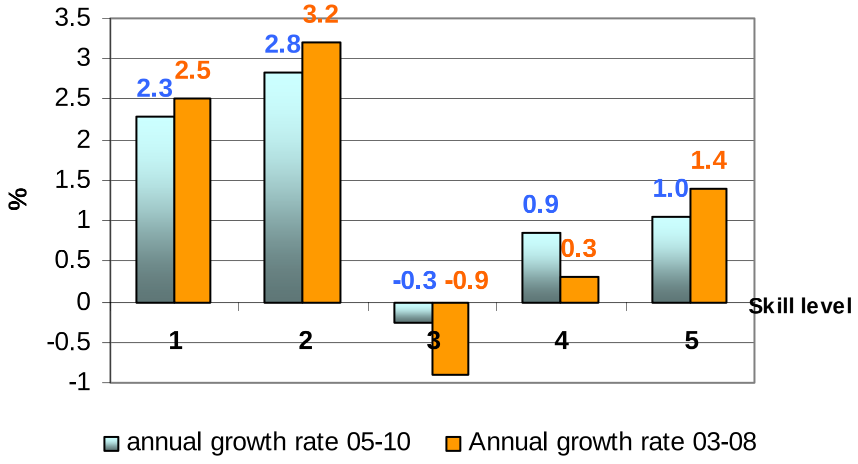
	2005 projections for 2005-2010			
ASCO skill level*	**2005**	**2010**	**Change 05-10**	**Annual Growth rate 05-10 (%)**
1	912,503	1,021,253	108,750	2.28
2	408,771	470,294	615,23	2.84
3	521,036	514,171	-6,865	-0.26
4	778,710	812,293	33,583	0.85
5	587,449	618,490	31,041	1.04
All levels	**3,208,469**	**3,36,501**	**228032**	**1.38**

* Please see Appendix 3 for description of ASCO skill level

The pattern of employment growth across skill levels for 2005-2010 is consistent with the trends projected in the earlier forecast for the period 2003-2008. However, both job growth and decline in the recent forecast are projected to be slower, with the exception of skill level 4.

Demand for mid-level skills (mainly tradespersons) is now forecast to decline at a slower rate of 0.3% per year, compared with 0.9% in the previous forecast for 2003-2008.

Figure 4: *Forecast annual growth rates by skill level, comparison between 2005-2010 projections and 2003-2008 projections*



Employment growth by status by gender

According to NIEIR forecasts, there will be a greater disparity between the growth of full-time and part-time employment for 2005-2010 than the period of 2003-2008. The average annual employment growth rate for part-time jobs is anticipated to be over 5.5 times of the growth rate for full-time jobs (3.3% vs 0.6%). Previously, forecasts for 2003 to 2008 were 2.4% and 0.9% respectively.

Table 4 below shows details of the annual average growth rate between 2005-10 by employment status (full-time / part-time) and by gender:

ASCO Skill level	Female Full time	Male Full time	Female Part time	Male Part time	Total Full time	Total Part time
1	2.7%	0.7%	4.6%	7.4%	1.6%	4.7%
2	2.5%	1.7%	6.6%	7.5%	2.1%	6.3%
3	-2.3%	-0.6%	0.6%	5.7%	-1.0%	2.4%
4	-0.5%	-0.2%	3.0%	3.3%	-0.1%	2.7%
5	10.9%	-0.7%	2.7%	2.7%	0.6%	2.5%
All levels	**1.0%**	**0.2%**	**3.3%**	**4.4%**	**0.6%**	**3.3%**

Although part-time employment has a smaller base, the fast growth rate will see a net increase of 150,000 part-time jobs, almost 2.4 times of the net increase of full-time employment (68,500 positions). It is projected that by 2010, 31% of the total employment in NSW will be part-time jobs, increasing from 28% in 2005.

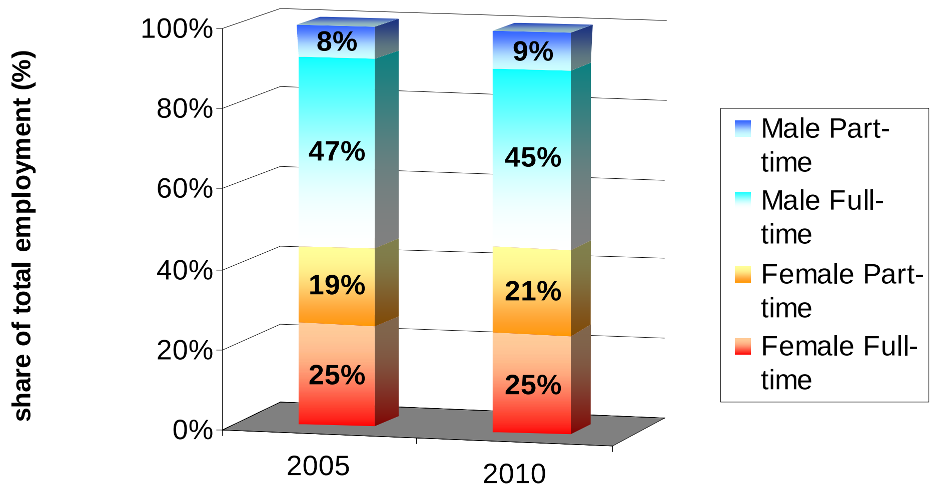
Full time job gains are more likely to occur in high skilled occupations. Projected part-time job growth is fastest in skill level 2 (6.3% per year), followed by the highest skill level (4.7% per year). Such growth is possibly related to the projected increase in demand for professional or associate professionals in computing services, sports and fitness, health and welfare industries and education which are characterised by a significant proportion of personnel working part-time.

As in previous projections, females are expected to fare better than males. NIEIR forecasts that between 2005-2010, female full-time employment will grow at an average annual rate of 1%, compared with 0.2% for males. ABS data has shown that between 2003 and 2005, female unemployment rate was higher than the male rate. However, female full-time employment in NSW still grew stronger at an average annual rate of 1.5%, compared with the male rate of 1%.

On the other hand, male part-time employment is expected to grow at 4.4% a year, exceeding the corresponding female rate of 3.3% by over 1 percentage point. It should be noted that, due to a much smaller base, the actual increase in the number of male part-time jobs will be around 62,700, considerably lower than the increase in female part-time employment (109,000).

Overall, the annual employment growth rate for women is projected to be 2%, compared with 0.9% for men. Female employment will increase by 149,000 and account for 65% of the total job growth, compared with 80,000 for male employment. The female share of total employment will increase from 44.7% to 46%. The reduction in the male share is mainly due to the fall in the full-time employment share.

Figure 5 *Employment share by status and by gender, 2005 and 2010*



Regional forecasts

Job increase is expected to be higher in metropolitan regions than in the non-metropolitan regions*.

Table 5 *Employment growth in the metropolitan and non-metropolitan regions, 2005 and 2010*

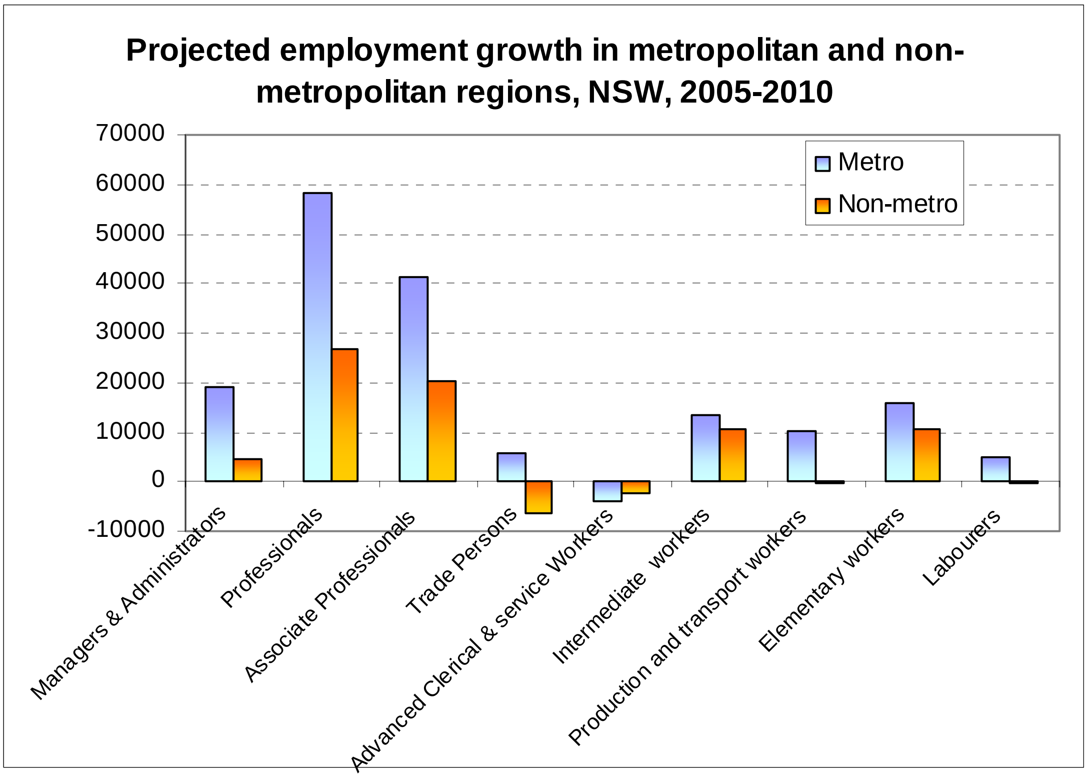
Region	Estimated Employment Level 2005	Projected Employment Level 2010	Change 2005-10	Annual Growth Rate 05-10	Annual Growth Rate 03-08
Metro	1,993,494	2,158,125	164,632	1.60	1.60
Non Metro	1,214,975	1,278,376	63,401	1.00	1.10

Analysis of the growth in metropolitan and non-metropolitan regions by occupational category is shown in Figure 6 below. Managers and administrators, professional and associate professional occupations will experience the greatest job growth in both metropolitan and non-metropolitan regions. The occupations of intermediate workers, production and transport workers and labourers are also projected to grow moderately in both regions.

One of the reasons for faster growth in metropolitan regions is projected higher growth in business services, recreational and cultural activities and personal services in urban areas.

Demand for tradespersons is likely to have a faster decline in non-metropolitan areas than in the Sydney metropolitan area. On the other hand, metropolitan regions will see a slightly higher reduction in the number of elementary workers.

Figure 6



*Metropolitan region is defined as Sydney Statistical Division (SD) and non-metropolitan region is NSW excluding Sydney SD

Job openings

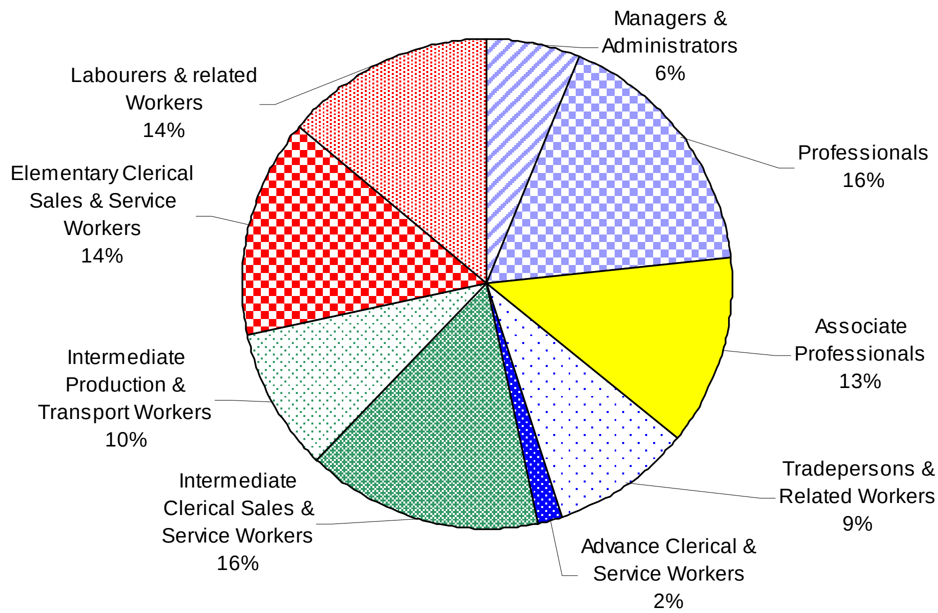
The category of associate professionals is expected to have the highest number of net new job openings (96,700) from 2005 to 2010, while the highest total job openings (taking into account the effect of turnover) will be in the occupational group of professionals (401,500).

Tradespersons, although being forecast to have a decline in demand, will still account for approximately 9.0% of the total job openings, mainly due to job turnover. Approximately 28% of the total job openings in the period will be in lower skilled occupations (elementary clerical, sales and service workers and labourers).

At the ASCO unit level, the maximum number of job opening during 2005-10 are forecast to be for sales assistants (282,100), followed by cleaners (121,100), waiters (82,200), truck drivers (80,400) and kitchen hands (71,000).

Occupations which are not expected to have net job openings during the period are largely in declining trades (such as upholsterers, toolmakers, nurserypersons and printing machinists). Others include bank workers, accounting clerks, mail sorting clerks and keyboard operators).

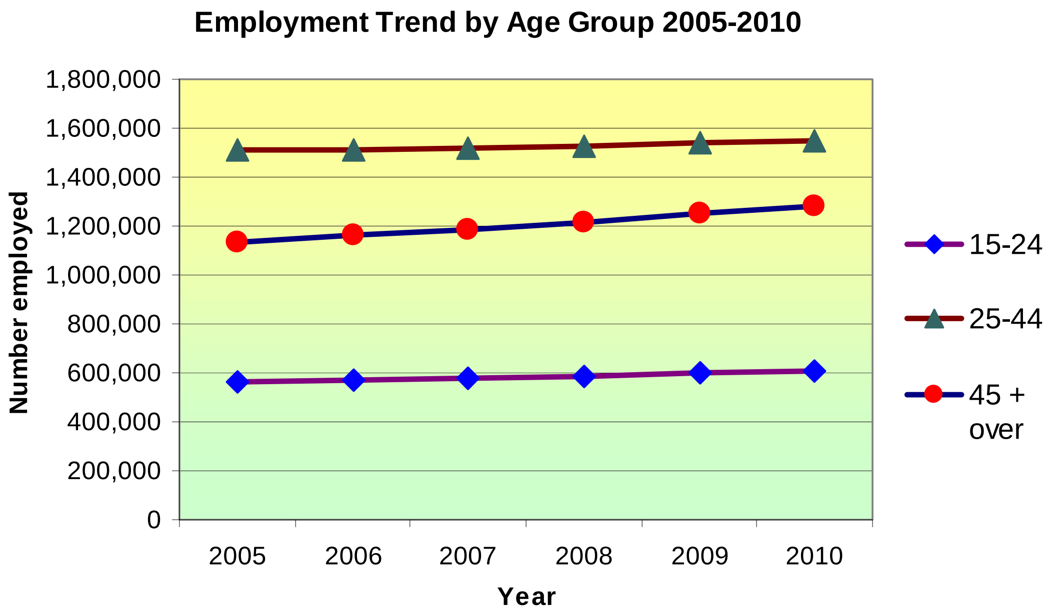
Figure 7 Share of Total Job Openings 2005-2010 by ASCO Major Group



Age forecast

Between 2005 and 2010, employment in the age group of 45 years and above is projected to increase annually at the rate of 2.4% per year, compared with 1.6% for the employment growth for young persons in the age group of 15-24 years. Figure 7.1 shows that the mature age workforce (45 years and above) may increase from 1.13 million in 2005 to 1.28 million in 2010.

Figure 8



Accordingly, the share of mature age workers is expected to increase to 37% by 2010, reflecting the ageing of the workforce. Employment for persons in the age group of 25 to 44 years is forecast to decline marginally at the rate of 0.5% per year between 2005 and 2010, and the employment share of this age group will fall from 47% to 45%.

Figure 9